AI for SMEs
A Concept for the Implementation of AI in SMEs

HANSE-PARLAMENT
Network for Small and Medium Enterprises

OFFENSIVE MITTELSTAND
Gemeinsam für gute Unternehmen

WIR

VILNIAUS PREKYBOS, PRAMONĖS IR AMATŲ RŪMAI

ESTONIAN CHAMBER OF COMMERCE AND INDUSTRY

IPOSZ
IPARTESTÜLETEK ORSZÁGOS SZÖVETSÉGE

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Co-funded by the European Union

Authors

Annette Icks, Oliver Kruse, Christian Wildt,

Contributors

Dr. Max Hogeforster, Alina Yakovenko, Piret Potisepp, Audronė Masandukaitė, Bogumiła Frąckowiak, Tamás Rettich, Anastasia Nezgovorova, Deimantė Vilčinskaitė

Copyright

Co-funded by
the European Union

Table of Contents

Co-funded by the European Union

Co-funded by
the European Union

Co-funded by
the European Union

Part I – AI Research Report

Introduction

AI technologies are developing rapidly. AI is widely regarded as the next cross-cutting technology due to its potential to transform entire industries and enable the discovery of innovative new business models and products. In 2022, the publication of the AI language model ChatGPT-3 brought generative AI to the attention of the general public and raised their awareness of the potential and risks of the technology.

The use of AI is increasingly becoming a key factor in the economic success or failure of a company. Large companies in particular have recognised this. The number of companies using AI has doubled worldwide since 2017 (McKinsey 2024). Managers worldwide assume that generative AI will bring about significant changes in their companies in the near future (Deloitte 2024). However, EU countries have a lot of catching up to do compared to the US and China (European Court of Auditors 2024).

The current hype around AI could be the perfect catalyst to promote the introduction of AI in Europe. The growing interest in AI can help to drive forward realisable strategies in SMEs too. However, this would require further incentives, awareness-raising campaigns and supporting political measures and impetus for the introduction of AI.

This concept first categorises the status of AI use in companies in Estonia, Germany, Lithuania, Poland and Hungary. Based on the empirical results of quantitative and qualitative company surveys in the countries analysed, the expectations and challenges that small and medium-sized enterprises associate with AI are then described and the needs of SMEs are addressed. Existing barriers and deficits are to be reduced and eliminated through appropriate training. Good practice examples are used to familiarise SMEs with the potential of AI for their own companies. To this end, the report discusses support measures as well as transfer channels that should facilitate access to SMEs.

Co-funded by
the European Union

AI use in the EU

Within the individual EU countries, the use of AI[1] by companies varies considerably. The wide range of AI applications is also evident in the companies of the five project partner countries. While around one in eight companies in Germany uses at least one AI application, which is above the EU average, this figure is around 5% in Estonia and Lithuania and only 3.7% in Poland and Hungary.

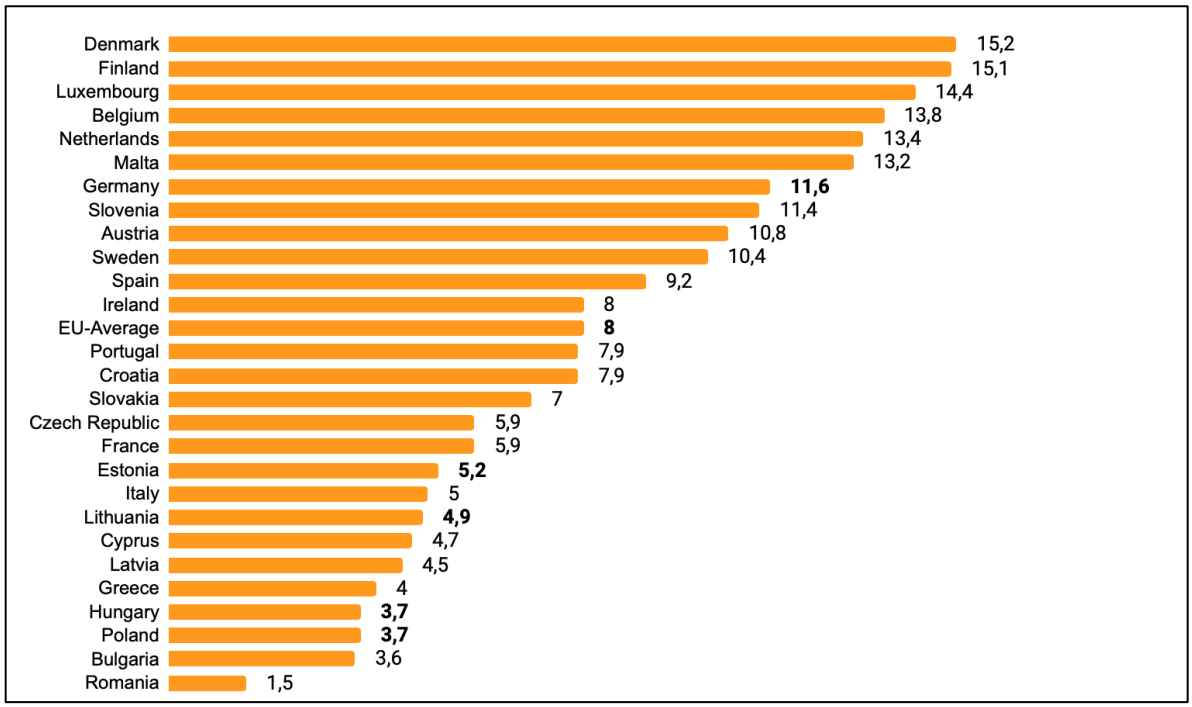

Figure 1: Use of AI in a country comparison in %.

Source: Eurostat 2024

The different levels of AI use in the countries included in the study may be related to the varying degrees of dependence of the individual economies on automation, but also to the different phases in the development of AI ecosystems (EU Court of Auditors 2024). However, the different use of AI in the individual EU countries is likely to be primarily due to the different employee size structures of the countries analysed, as there is a positive correlation between company size and AI use. The comparatively high proportion of AI-using companies in Germany, as well as in Denmark and Luxembourg, can be explained by the comparatively high average number of employees per SME, among other factors: With an average of 6.8 employees, SMEs in Germany had the most employees of all EU-27 countries in 2022 (EU-27: 3.5) (IfM 2024).

[1] We define the use of AI as text mining, speech recognition, machine processing of natural language, image recognition, machine learning, AI-based process optimisation, autonomous control with environment recognition

Co-funded by the European Union

In fact, the smaller the company, the less intensively AI is used in all member states (Eurostat database 2024). While many large companies recognise the importance and potential of AI and implement AI technology in their company, small and medium-sized enterprises are more hesitant to implement AI applications.

Country	Companies that use AI technology 2023 - (in %)		
	Large companies (250 and larger)	SMEs (50 to 249 employees)	Small companies (10 to 49 employees)
Germany	35,4	16,8	9,7
Estonia	23,6	8,1	4,1
Lithuania	21,3	8,8	3,4
Poland	24,4	6,5	2,2
Hungary	17,4	5,5	3,0
European Union (EU27)	**30,4**	**13,0**	**6,4**

Table 1 AI utilisation - share of all companies in the same size category in %

Source: Eurostat database 2024

Although the implementation of AI poses similar challenges for all companies regardless of their employee size class, the prerequisites for successful implementation are more difficult for SMEs than for large companies due to their structural characteristics (Meub, L.; Pröger, T. 2023).

One major reason for the better performance of large companies is that they have more resources, such as greater financial and time resources. Purely economic reasons are also important: For example, large companies - unlike small companies - can allocate their costs for AI investments to a larger production volume.

However, large companies are also more likely to recognise the great potential of AI processes and attribute greater relevance to them (Löher et al. 2022). In this respect, it can be assumed that large companies are more willing to invest in technological trends than smaller ones. At the same time, the adequate use of AI processes in business processes requires a high level of technical and application-related understanding, which requires appropriately trained personnel. Studies show that AI processes are used significantly more frequently if the company employs its own IT specialists. However, this is predominantly not the case in small

Co-funded by the European Union

companies: the vast majority do not have their own IT staff, which makes access to specialist knowledge and therefore the identification of potential fields of application more difficult (Löher et al. 2022, EU Court of Auditors 2024).

Country	Companies with ICT specialists 2022 in %		
	Large companies (more than 250 employees)	SMEs (50 to 249 employees)	Small companies (10 to 49 employees)
Germany	79,0	47,0	15,0
Estonia	73,0	37,0	12,0
Lithuania	79,0	36,0	11,0
Poland	88,0	50,0	25,0
Hungary	88,0	57,0	25,0
European Union (EU27)	**78,0**	**44,0**	**15,0**

Table 2 Companies employing ICT specialists - share of all companies in the same size category in %

Source: Eurostat database: Digital skills - Employment of ICT professionals [isoc_ske_itspen2], last update: 05.01.2023.

Just under one in five SMEs in Europe employs skilled workers with a strong knowledge of information and communication technology (ICT). Nevertheless, significantly more ICT specialists are still employed in large companies than in SMEs. This applies equally to companies in all project partner countries. However, there are already differences in size within the SME group: around every second medium-sized company in Germany, Estonia, Lithuania, Poland and Hungary has staff with ICT skills, while the figure is significantly lower among small companies (IfM 2024 statistics).

SMEs have an ambivalent view of AI, similar to that of digitalisation: on the one hand, AI is seen as a general problem solver. On the other hand, there is great uncertainty about the explicit benefits of AI in the company. These sometimes false expectations on the one hand and fears and uncertainties on the other can be reduced through better communication of knowledge about AI and its potential and opportunities for companies. At the same time, low-threshold solutions to legal and technological hurdles should be offered, as they face greater

Co-funded by the European Union

challenges when using the technology due to financial constraints and limited access to expertise (Deloitte 2024)

However, companies that do not introduce AI run the risk of losing their competitiveness. In several industries, the potential of AI applications has not yet been fully recognised, which often goes hand in hand with the attitude that there is no need for innovation given the economic success to date. This lack of awareness is hindering the adoption of AI as companies fail to recognise how AI can help address critical business challenges or improve operational efficiency (OECD 2024).

AI for SMEs

Advantages of AI

SMEs and especially micro-SMEs can be much more efficient and productive with the help of AI. Businesses can make better use of their resources, automate routine tasks, and cut down on mistakes by using AI. AI can do things like enter data, manage schedules, and answer simple customer service questions. This automation gives workers more time to work on more important and creative jobs that need human input. Many businesses have problems with human error, which can cause mistakes that are expensive and take a long time to fix. On the other hand, AI systems are made to do things very accurately. A lot less error can be made by small businesses if they use AI for jobs like accounting, managing inventory, and quality control. Customers and business partners will have more confidence in you because of this. That makes operations more reliable.

AI helps small businesses to get the most out of their people and assets. For example, AI can look at data to guess how much demand there will be for a product, which helps to better handle inventory. It makes sure there are sufficient products to meet customer needs without having excess inventory, which can waste money and space. AI can also help with managing employees by predicting busy times and offering the best times for staff to work. This way, the company can always have enough workers without spending too much on them.

AI systems can quickly handle and look at a huge amount of data. Businesses can make better choices more quickly with this feature. AI can give you real-time information about things like sales trends, customer tastes, and the state of the market. Managers can make faster decisions based on data that helps the business stay competitive with this knowledge. This quickness in making choices can be especially helpful in a market that moves quickly, where being the first to act can give you a big edge.

Co-funded by
the European Union

AI frees up workers to do more important and productive work by taking over boring and repetitive tasks. Employees will have more time to do things that are good for the business, like coming up with new items, giving better customer service, or looking into new markets. This not only increases output, but it also improves job happiness, since people are more likely to be happy with their jobs when they are doing interesting and important work.

AI not only makes businesses more efficient and productive, but it also cuts costs by a large amount for SMEs. AI lowers the need for a lot of manual labour, which means lower payroll costs. AI does this by automating tasks like customer service through chatbots, processing invoices, and managing supplies. Also, this technology lowers the chance of costly mistakes being made by people. AI can also for example look at patterns of energy use and offer ways to cut back, which can lead to lower utility bills.

AI can be also very important for SMEs, to improve the customer experience. AI can personalise relationships with customers through chatbots that can help and answer questions right away, 24 hours a day, 7 days a week. AI can make customers feel valuable and understood by making suggestions and promotions that are specific to each person's tastes by looking at their data. AI also helps to improve service processes, which means that problems and questions are answered faster. This level of personalised and quick service not only makes customers happier, but it also makes them more loyal, which leads to return business and good word-of-mouth, both of which are important for small businesses to grow.

AI also makes it much easier for small businesses to make decisions. AI can quickly and correctly look at huge amounts of data, giving real-time information about things like sales trends, customer preferences, and the state of the market. This lets managers make choices that are based on facts and figures, which are very important for staying competitive. AI helps businesses better predict market changes and consumer demands by finding patterns and guessing what will happen. With this much information, small businesses can quickly react to problems and chances, making smart choices that help them grow and be successful.

Needs of SMEs

There is no doubt that the importance of AI for the economy and society will continue to grow. The question is to what extent SMEs are up to this challenge. We wanted to know specifically:

- whether and, if so, to what extent the potential of AI applications is recognised by SMEs,
- what challenges they have to overcome during implementation and
- what support could help them to cope?

Co-funded by
the European Union

To answer these questions, we asked SMEs in the partner countries Estonia, Germany, Lithuania, Poland and Hungary for their opinion in the first quarter of 2024 using a standardised questionnaire. Ultimately, 190 SMEs were included in the evaluation.

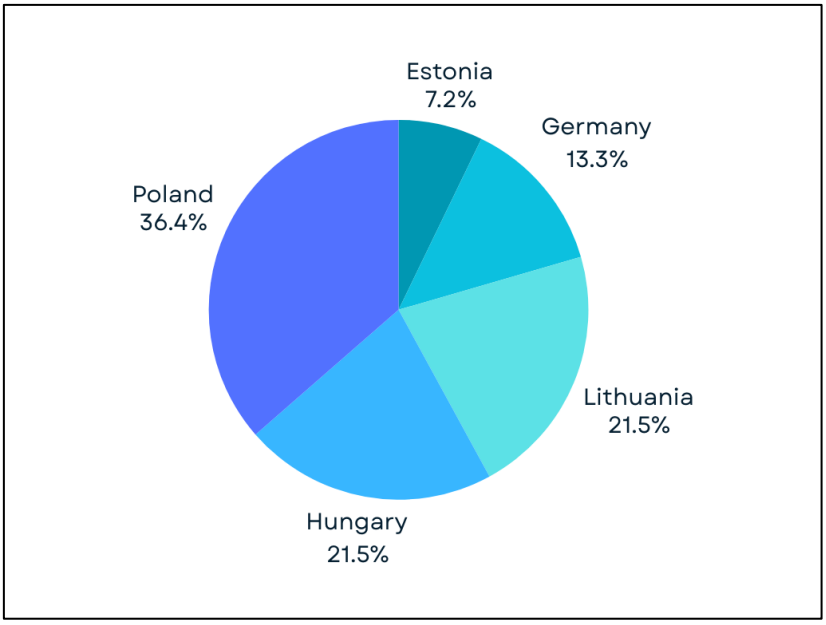

Figure 2: Location of the SMEs surveyed (in %)

As some rather complex issues can only be captured to a limited extent using a standardised questionnaire, additional interviews were conducted in April and May 2024 with experts from intermediary organisations such as trade associations, chambers or consulting organisations. These expert interviews were conducted on the basis of an interview guide in order to give the discussions a concrete structure and to direct the interviewees to the topics that were central to answering the research questions.

On the one hand, the company survey makes it possible to obtain generalisable statements on a solid empirical basis thanks to the large number of participants. On the other hand, the discussions at association level allow a deeper understanding of the topic to be gained.

General Understanding of AI

There is no doubt that the use of AI in companies plays a decisive role in maintaining and improving competitiveness. Nevertheless, SMEs are rather reluctant to utilise intelligently controlled machines and manufacturing processes. However, one reason for the reluctance to implement AI applications is not so much a lack of understanding of AI. The survey results show that the majority of companies have a similar understanding of AI in terms of data analysis, the use of robotics, the use of algorithms and recognising correlations. Differences can be seen in the area of independent decision-making. German companies in particular

Co-funded by
the European Union

associate this application with AI. Estonian companies associate AI primarily with apps and smartphones.

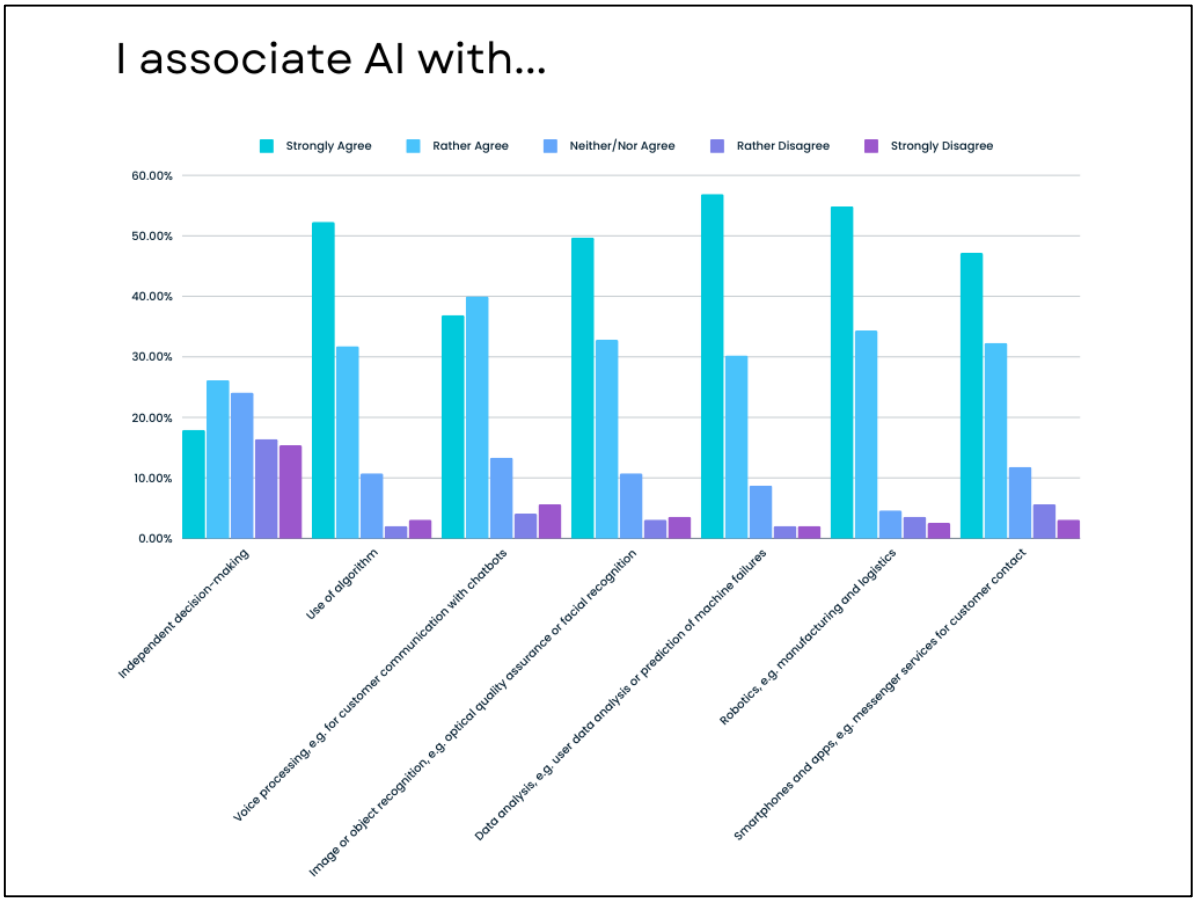

Figure 3: Understanding of AI by SMEs in the partner countries (in %).

The survey results also make it clear that most companies recognise the importance of AI and are already using it in some cases. One in five companies currently uses AI technology in their organisation. Estonia and Lithuania are particularly active in the use of AI. Even among those that are not yet using AI, more than four in ten companies are planning to do so in the future. AI technologies are most frequently used in marketing and sales as well as in customer service.

Co-funded by
the European Union

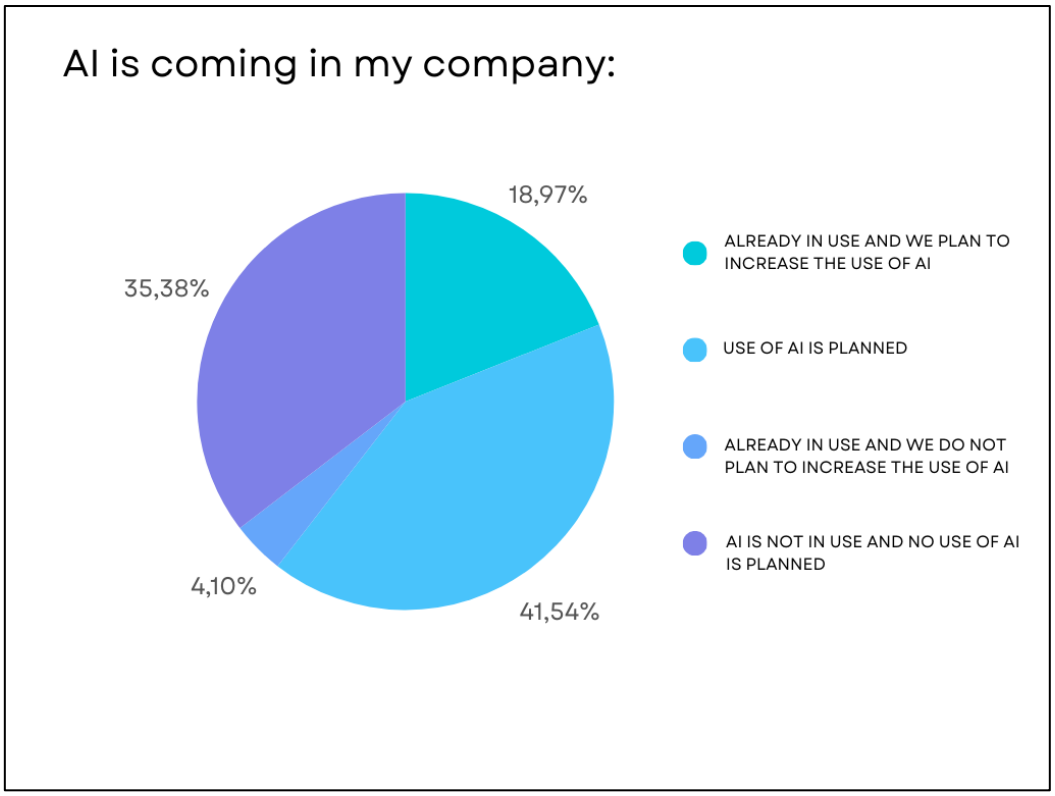

Figure 4: Use of AI technologies in SMEs of the partner countries (in %).

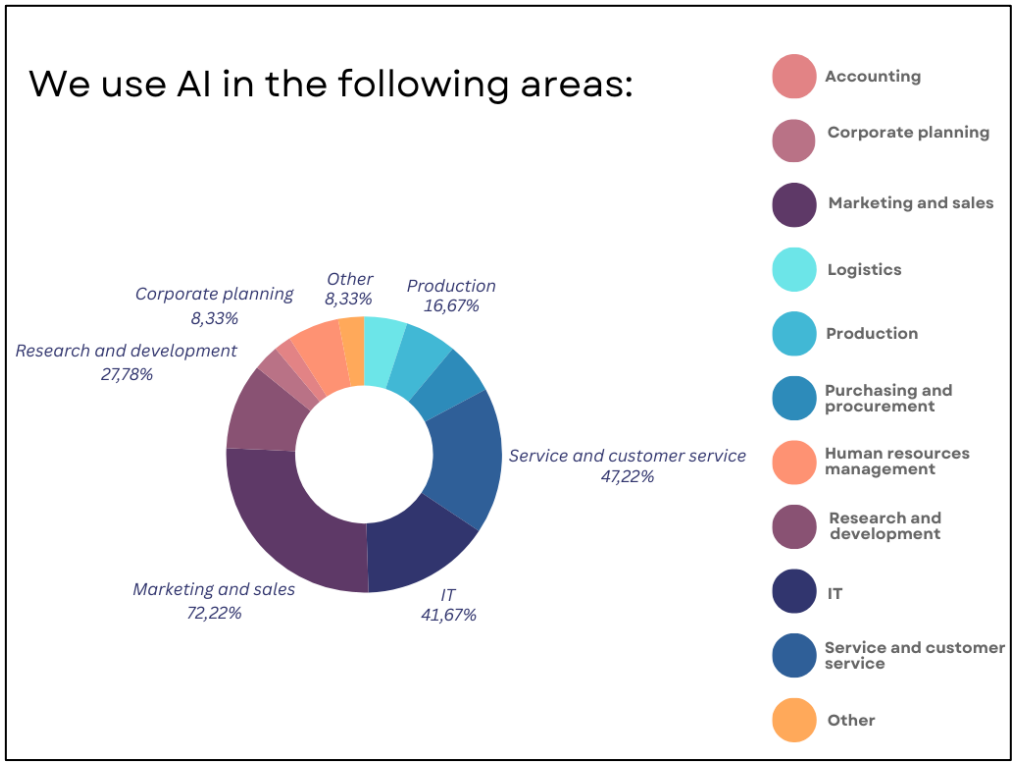

Figure 5: Areas of AI use by SMEs in the partner countries (in %).

Co-funded by the European Union

In Hungary and especially Poland, the number of companies using AI in their organisations is significantly lower. However, while more than six out of ten Hungarian companies are planning to use AI in the future, only 20% of Polish companies will use AI in the future.

Looking at all the companies surveyed, the results show that a good third of companies do not see any need to use AI in their organisation. This is particularly true for Polish companies, at a good 60%. While companies in other countries mainly cited a lack of expertise and skills as the reason for not using AI, the main reason for Polish companies is that they see no reason to use AI.

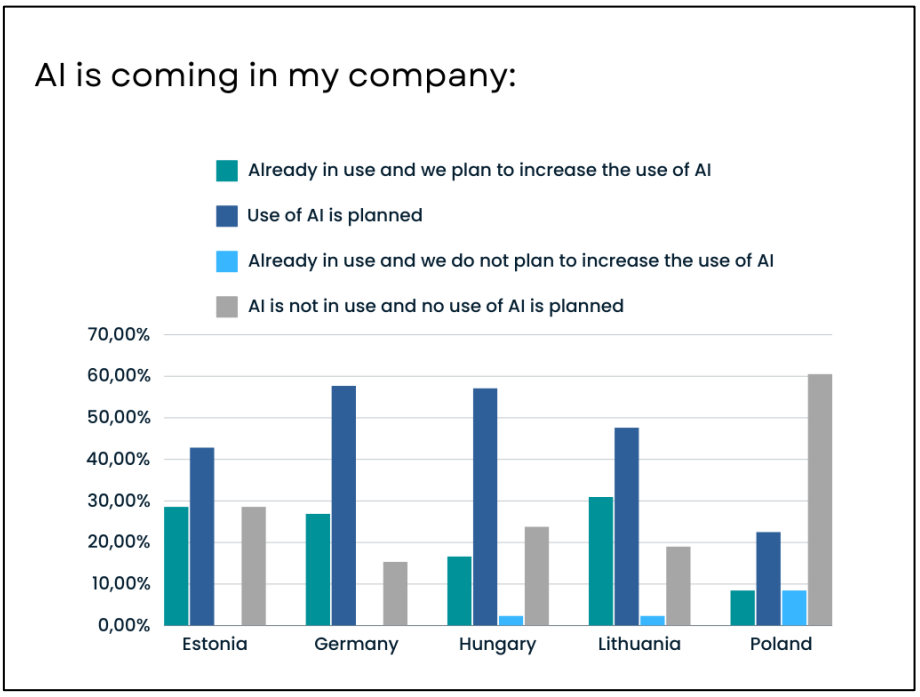

Figure 6: The readiness to use AI by SMEs in a country comparison (in %).

The results suggest that although many companies have a rough understanding of AI, they are clearly not sufficiently aware of the potential associated with the use of AI.

There can be many reasons for the non-utilisation of AI. On the one hand, company structure characteristics can explain the low utilisation of AI: Polish and Hungarian SMEs tend to be smaller and have fewer employees on average than the companies in the other countries included in the study. The positive correlation between company size and AI was already highlighted at the beginning of the report. Large companies have specialised departments or staff units that deal strategically with the use of AI. Small companies tend to take a short-term rather than a long-term strategic approach.

Co-funded by
the European Union

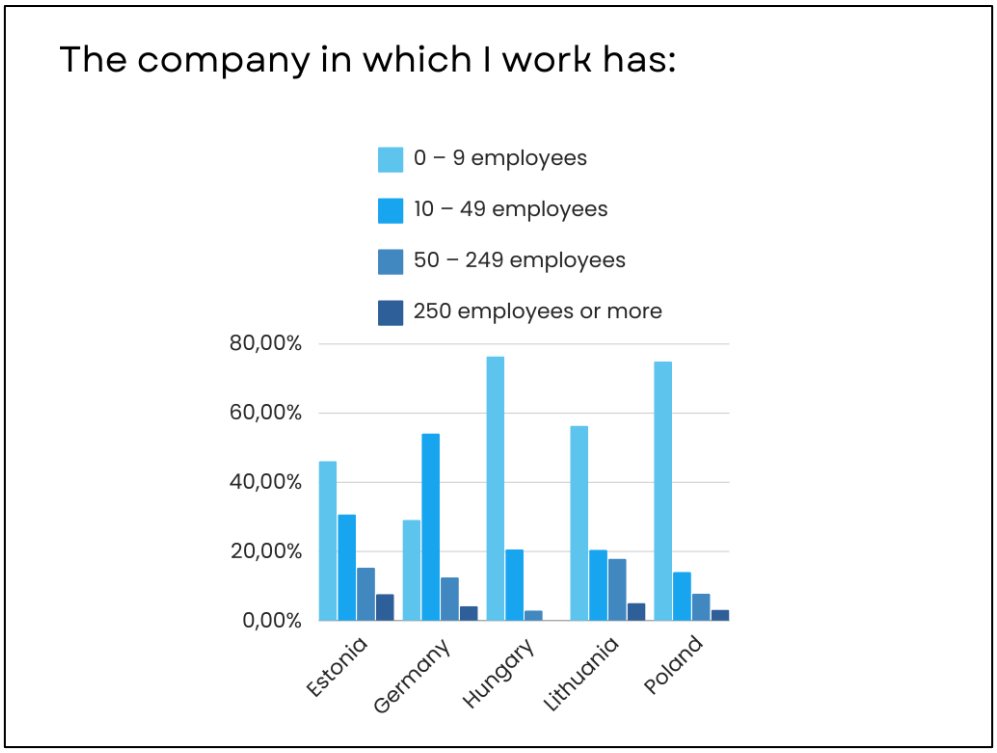

Figure 7: Size of the SMEs surveyed (in %).

It is also possible that the Polish companies surveyed come from more rural regions, where AI is less widespread than in more urban regions, and therefore lack positive examples from other AI-using companies.

The general rejection of many Polish companies, but also some companies from other countries, could also be due to a lack of acceptance of AI. On the one hand, this may stem from a lack of understanding of AI, but also from fears and uncertainties caused by the introduction of AI.

If one assumes that the use of AI will be necessary in the future in order to maintain competitiveness, a special approach and motivation to use AI seems necessary here.

The Challenges

When companies are asked about the specific reasons for not using AI, almost all companies apart from Poland cite a lack of knowledge about AI. Although this obstacle is also relevant for a good one in three Polish companies, they rate the fact that the benefits of AI are not or hardly recognisable to them as more important. This may be due to the fact that AI is diffuse. As a rule, it is not tangible like a new machine, but unfolds its effect in technical methods and devices. This makes it difficult for many to access this new technology.

Co-funded by
the European Union

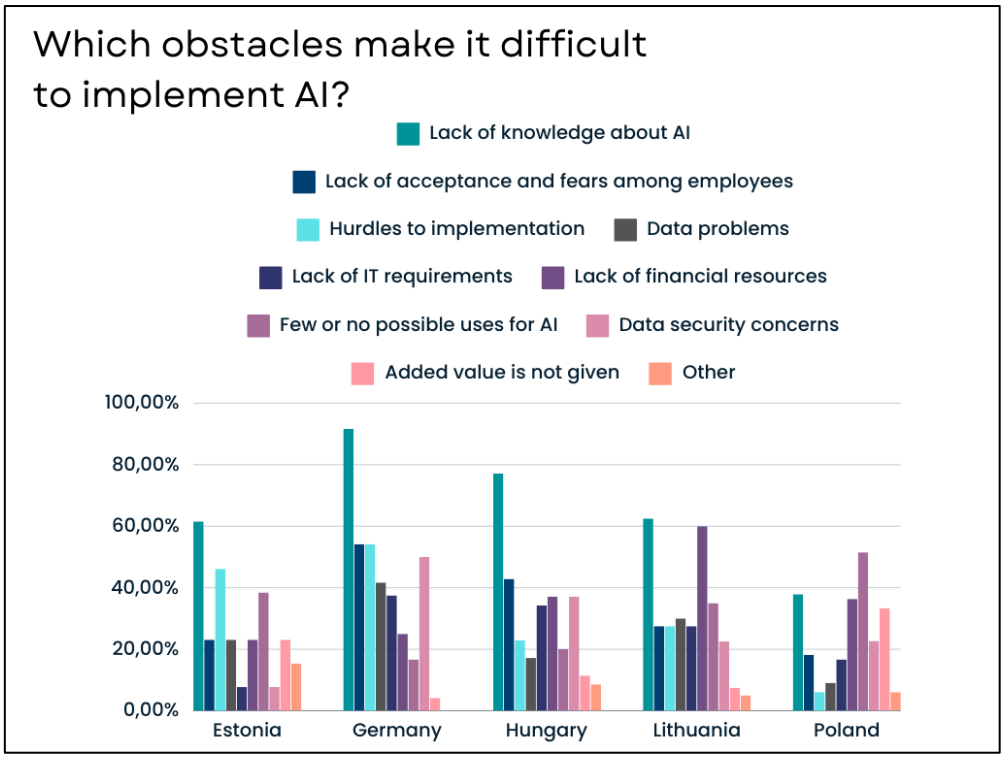

Figure 8: Barriers to using AI by SMEs in the partner countries (in %).

By contrast, companies from the other countries included in the survey primarily cite specific barriers to the implementation of AI, such as a lack of expertise and knowledge. Many SMEs assume that specialised and technical knowledge is required to implement AI. They don't have the 'grip'. They only have a vague idea of what AI can do and where it can be used sensibly. This often leads them to abandon the idea of implementing AI.

Lithuania points to the cost aspect, where there is a lack of financial resources for the implementation of AI. In general, SMEs in particular find it difficult to weigh up the costs and benefits of implementing AI. On the one hand, the development of AI systems, the implementation and, if necessary, the further development and maintenance of AI - depending on the complexity and the resources required - incur high costs. On the other hand, these costs must be considered in relation to the expected added value of the AI solutions in order to make a well-founded investment decision. SMEs often lack the relevant knowledge in this area. In addition, many companies only associate AI with very advanced and expensive technologies that are generally only used by large companies. This puts many SMEs off.

Another obstacle that was mentioned comparatively frequently in Germany and Hungary is the lack of employee acceptance. If employees are unwilling to accept a new technology and use it in the work process, this reduces or prevents the successful use of AI applications in the company.

Co-funded by the European Union

The survey results reveal a great need for support. We wanted to know in which areas the companies surveyed need to take action.

Need for action

The companies surveyed see the greatest need for action in communicating specific potential and the concrete benefits for the company. Ultimately, the questions are what makes sense for me and where should I start? Application examples are particularly suitable for this. The more practical the AI applications are described, the more likely they are to be able to transfer the benefits of AI to their own company. Companies not only want to be informed about the benefits of AI, but also about the associated risks.

For Germany and Estonia risks in connection with data protection and data security were particularly important. Companies feel insecure here: On the one hand, they ask themselves whether and to what extent company data is safe from possible external attacks and what protective measures can be taken. Can they rely on third parties (manufacturers, clouds, messenger services) to protect their data? This involves questions about who has access to the data and in what contexts it is used and by whom. Should companies and individuals demand basic content-related information from the manufacturer/service provider on how their data is handled? Have the necessary measures been taken to secure the data for the AI application (access rights, sufficient encryption, protection against technical defects (such as power failure), deletion periods, etc.)?

However, the internal protection of personal data is also important. Is everyone involved aware of what data is collected, kept available internally and processed in the company, how the systems learn and what the data is used for (data transparency)? How should the company deal with behaviour and performance monitoring, for example? In other words, does the AI application give managers and employees a sufficient degree of control over their own personal data?

The companies, especially those from Estonia, Lithuania and Germany, see a need for further action on how AI can be integrated into the corporate strategy and what effects AI can have on corporate management. Processes are often not clearly defined in SMEs. This makes it difficult to identify activities that can be automated or supported by AI-based tools.

Co-funded by
the European Union

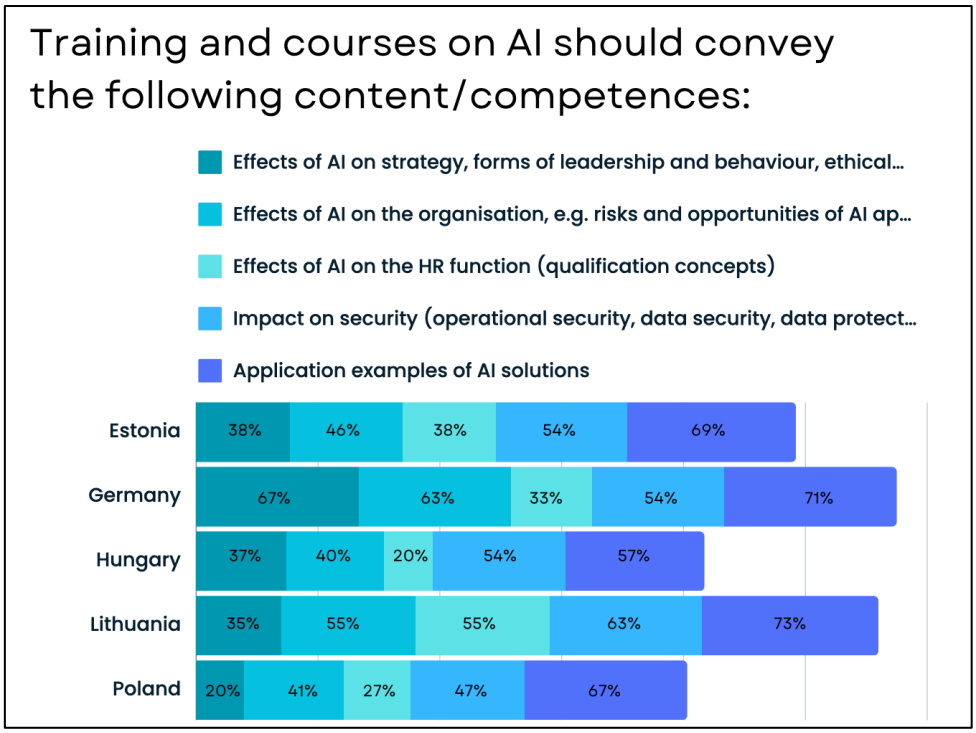

Figure 9: Assessing the relevance of AI effects and impacts for SMEs (in %).

In this context, ethical aspects associated with the use of AI should also play a role. As guidelines for dealing with generative AI in the company are largely not yet in place, SMEs often find themselves in a legally uncertain area. Which data can also be used by others, e.g. if the data is stored on platforms? Users should be aware, for example, that the anonymised data of a vehicle is used to optimise driving performance and to optimally adjust the vehicle technology. In addition, the data collected could be compared with data from other manufacturers and analysed for statistical purposes. It is possible that data could be used for contexts for which it was not collected and re-linked for other purposes.

The surveys of the counsellors revealed a need for further action in addition to those mentioned. For example, the topic of networking plays a major role for advisors. AI can realise its full potential above all when large amounts of data are available. Utilising large amounts of data can make products smart, i.e. internet-enabled. SMEs generally do not have access to the volumes of data that large companies work with. This makes machine learning of specialised AI applications - for which large amounts of data are a prerequisite - more difficult for SMEs. Since access to third-party data and its availability are essential for further development, SMEs should be given access to data in other ways (Wangermann, T., 2020). One possibility is data cooperation, where SMEs in particular can benefit greatly from new technical developments, especially decentralised training approaches in AI and the production of synthetic data. Many SMEs are unaware of the possibilities or are hesitant because they are not sufficiently aware of the benefits and the risks are seen as difficult to manage. In order to create legal certainty, rules for data pools must be developed that clarify access and usage

Co-funded by the European Union

rights and make them verifiable while complying with applicable data protection law (Heumann, S.; Jentzsch 2019).

Cooperation with other SMEs could be useful here. However, SMEs could also be subject to financial, time and technical restrictions in other areas compared to large companies and can create added value through cooperation with other SMEs and tackle the topic of AI together.

Contents of the training programme

The need for action described by the companies is also reflected in the desired training measures. First and foremost, the training should convey a general understanding of AI. Obviously, most companies still have gaps in their knowledge. On the one hand, the training should scrutinise their own understanding of the term: What is AI anyway, what types of AI are there, which technologies are differentiated, and are these perhaps already being used in your own company?

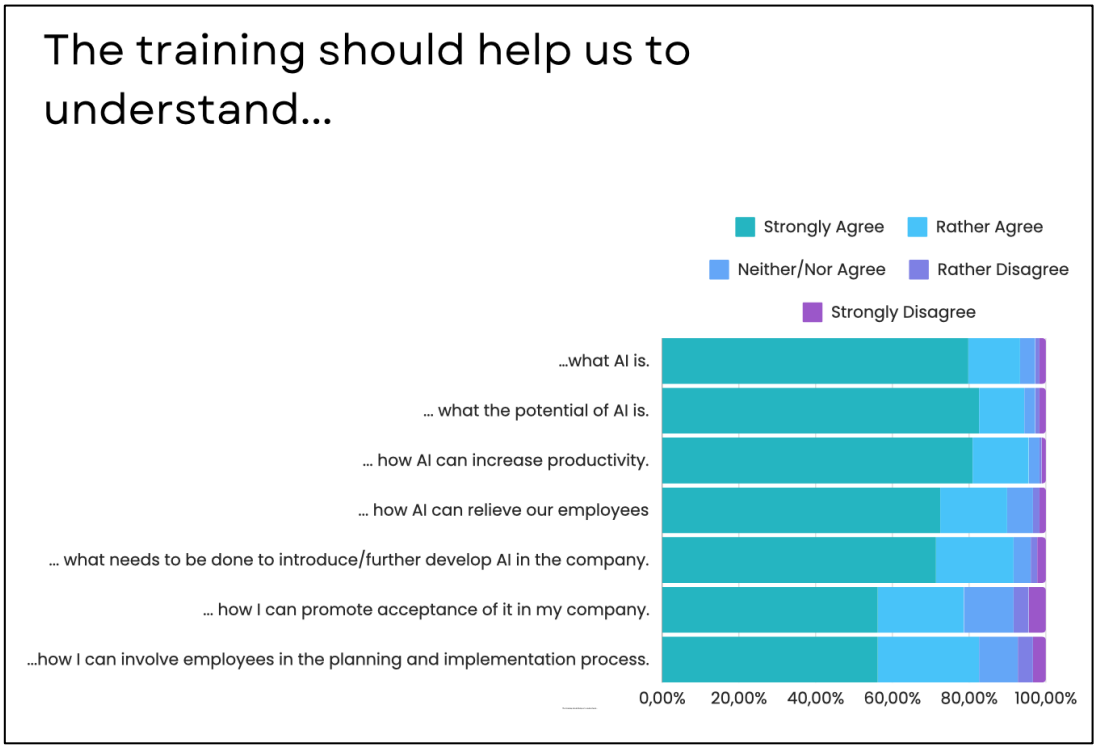

Figure 10: Requirements and expectations about the content of AI trainings (in %).

Above all, however, companies want AI training to convey the specific added value of using AI-based tools. On the one hand, this is about the potential of AI, especially with regard to possible increases in productivity. To this end, companies should be supported in analysing their own value creation structure and operational functional areas to determine where intelligent technologies could be used. Small companies in particular are dependent on an investment paying off quickly. They have fewer financial resources, so the economic benefits of introducing AI must be made clear. To this end, questions should be answered such as: Do the AI

Co-funded by the European Union

applications generate an attractive return on investment (ROI) directly and in the short term or will they have a more positive effect in the medium and long term (such as new customer segments, etc.)? At the same time, however, companies must be made aware that AI projects can miss their economic targets and still generate great value, as a great deal of knowledge about data and process behaviour has been gathered on the way to the application. Only if they have a sufficiently good understanding of the economic opportunities and risks can they make a good decision.

It was also important for the companies to learn about the technical implementation of AI. Questions such as: "How can you implement AI in your company? What technical requirements are necessary for this? How can I continue to develop within the company in order to stay up to date?" were to be answered in the training course.

The introduction of AI technologies always affects employees. These are not (yet) the focus of all the companies surveyed. However, Germany and Lithuania, and to some extent Estonia, expect the training to provide information on how AI can reduce the workload of their employees, but also how I can involve employees in the planning and implementation process - also to increase their acceptance of new technologies.

Skills and competences of the trainer

A training course is only as good as the trainer. In this respect, it was important for us to find out what skills and competences the companies expect from him. Predictably, the AI trainer should have the necessary expertise and experience in dealing with AI. Compared to the other countries, it was important for Polish and Hungarian companies that the trainer had relevant industry knowledge.

Co-funded by
the European Union

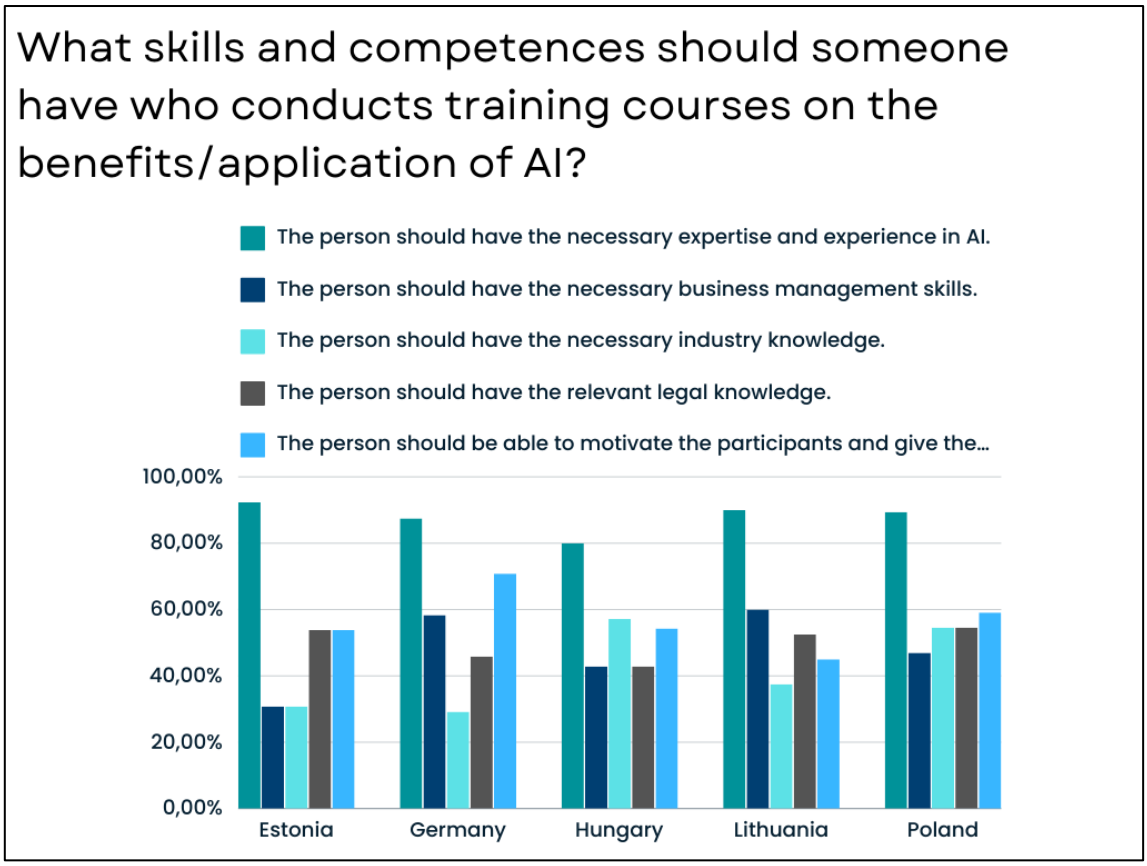

Figure 11: Expected competencies and skills of an AI trainer (in %).

Germany and Lithuania, on the other hand, consider the teaching of general business fundamentals to be more important and expect the trainer to have the relevant knowledge. All respondents were in comparative agreement that the trainer should have good legal knowledge - if only to be able to provide companies with comprehensive and in-depth information on the topics of "data protection and data security", which are important to them. In addition to technical expertise, the trainer should also be able to motivate the training participants for the topic. As the learning success can be reduced if the participants are over- or underchallenged, the trainer should also take the participants on board based on their level of knowledge.

Time and cost of a training course

The companies' expectations of the training programme are high: the training should impart knowledge about AI and its potential and opportunities for companies. In addition, low-threshold solutions to legal and technological hurdles should be offered. At the same time, the companies surveyed have limited resources. This raises the question of how much they are willing to pay to attend a training programme and how much time they would invest in the measures.

Co-funded by the European Union

Two thirds of Polish companies would only invest 50 euros in AI training programmes. The same applies to just under half of Hungarian companies. The low willingness to pay corresponds with the relatively low interest in the operational implementation of AI, at least among Polish companies. Six out of ten Estonian companies, on the other hand, would be prepared to pay up to 200 euros. German companies are willing to dig much deeper into their pockets - more than four out of ten companies can imagine paying between 200 and 500 euros. One in four companies would even pay up to 1,000 euros.

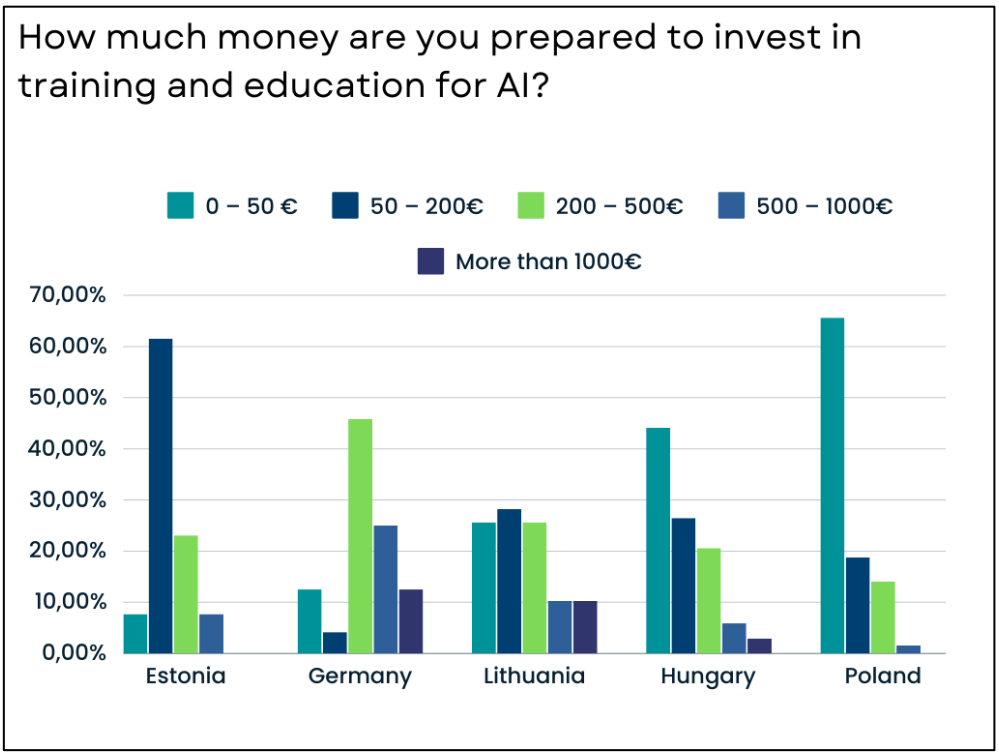

Figure 12: The financial willingness of SMEs to invest in AI education and training (in %).

The willingness to pay is also reflected in the amount of time that companies are willing to spend on training. Just under half of Hungarian companies consider a maximum of 4 hours to be sufficient for AI training. This is quite a short time when you consider the content to be taught. Nevertheless, almost one in three Hungarian companies would be prepared to take part in a training course lasting up to eight hours.

In the other countries, the willingness to invest more time is higher. The majority of Estonian companies and a good third of German companies favour 1 to 2 days. However, a quarter of German companies would also invest up to 40 hours.

Co-funded by
the European Union

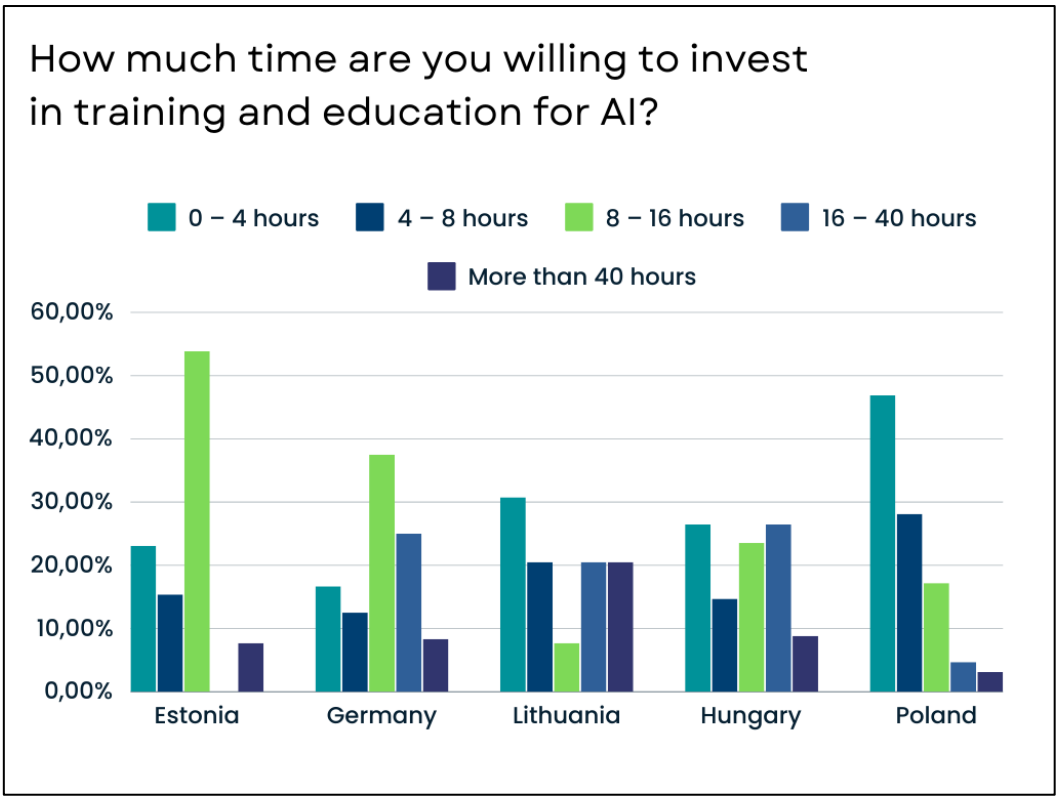

Figure 13: Time resources that SMEs are willing to invest in AI education and training (in %).

The Hungarian and Lithuanian companies show a wide range from a maximum of four hours to more than 40 hours. One in five Lithuanian companies would even be prepared to take part in AI training for more than a week (more than 40 hours).

General Support Measures

The use of AI in SMEs is not a sure-fire success. Micro and small companies in particular are limited in their ability to develop AI applications tailored to their operational needs themselves. This was already evident in the development of strategic concepts in connection with digitalisation (Icks et al 2017; Löher et al., 2022). Compared to large companies, SMEs still have a lot of catching up to do. A supportive environment is needed to close this gap. This includes training, financial and technical support, competence centres that illustrate practical applications, idea providers, strategic and technological advisors, projects and programmes, as well as framework conditions such as technological infrastructure.

Training measures

Training measures can be an important first step in sensitising SMEs and showing them the numerous potentials associated with the use of AI. On the one hand, the training measures should be tailored to the prior knowledge of the participants so that nobody feels over- or underchallenged. On the other hand, it makes sense to orientate the training courses to the

Co-funded by the European Union

phases of AI introduction. This would also have the advantage that individual training and qualification measures would fit into the time and financial budget of SMEs.

- Training before the launch

The primary aim here should be to sensitise SMEs to AI. Firstly, companies should be made aware that they are very likely already using AI in their organisation. Smartphones are customised for their owners, navigation devices scan drivers' driving habits, social media and messenger services are used by almost all companies, albeit not systematically. Good examples of the systematic use of AI can be used to demonstrate the potential and operational benefits of AI. ChatGPT could be a good starting point for reducing potential reservations about AI. The ease of use and the opportunity to try out how the system works in a playful way can reduce the fear of AI.

- Training during planning

Once companies have decided to implement AI solutions in their organisation, company-related, technical, financial and legal consulting aspects should be addressed. First of all, it should be explained what I want to achieve with the use of AI, where do I use AI and which areas of the company are involved in the implementation. The cost calculation is also of interest. But how do I involve employees, how do I gain their acceptance and what data protection, and security aspects need to be taken into account?

- Training during use

This phase should focus on the continuous further development of the AI systems. Where is there further potential for optimisation? What further training measures do employees need?

Financial support

SMEs often do not have the financial means to implement AI technologies in their company. Investing in AI is uncertain and, unlike buying a machine, less tangible. To raise awareness and increase the willingness to invest in AI, the German government provides financial support to SMEs. For example, the Federal Ministry for Economic Affairs and Climate (BMWK) offers SMEs grants and interest subsidies to make it easier for them to finance research and innovation projects (Central Innovation Programme for SMEs (ZIM)) (BMWK 2024) https://www.bmwk.de/Redaktion/DE/Dossier/Innovationspolitik/forschung-und-innovation-in-kmu-foerdern.html. The Federal Ministry of Education and Research (BMBF 2024) has also launched an action plan for AI, which, among other things, strengthens the transfer of AI from research to application. There are already more than 1,000 application examples in Germany. The aim is to install or promote further programmes and projects (BMBF 2024). The

Co-funded by
the European Union

Kreditanstalt für Wiederaufbau (KFW) offers further financial support in the form of grants and loans https://www.kfw.de/inlandsfoerderung/Unternehmen/Innovation-und-Digitalisierung/Digitalisierung/?wt_mc=72087781840_510994468997&wt_kw=p_7208778184 0_digital fördermittel&wt_cc1=innovation&wt_cc3=72087781840_kwd-1959157759833_510994468997&gad_source=1).

In Poland, there are various financial support programs designed to help SMEs adopt and implement AI technologies. These support mechanisms include grants, loans, and tax incentives offered by both national and European Union funds. There are some of the key financial support options available for SMEs in Poland to engage in AI-driven initiatives. Smart Growth Operational Programme (POIR): one of Poland's key funding programs, POIR supports innovative projects, including AI development and implementation. SMEs can receive grants for R&D activities related to AI, automation, and data analytics (https://www.poir.gov.pl/en/). National Centre for Research and Development (NCBR): NCBR offers financial support for research and innovation projects, including AI technologies (https://www.gov.pl/web/ncbr-en). PARP (Polish Agency for Enterprise Development): PARP offers various support programs for SMEs, including grants, loans, and consulting services aimed at fostering digital transformation and AI adoption (https://en.parp.gov.pl).

Hungary is actively supporting the adoption of AI by SMEs through a combination of national and EU-funded programs. One of the major initiatives is the HUF 181 billion (approximately EUR 474 million) EU-funded program to foster SME innovation, which includes substantial support for AI adoption. Out of this, HUF 75 billion is allocated specifically for boosting innovation at micro and small businesses, including AI-related projects. The program focuses on sectors such as healthcare, agriculture, and manufacturing, where AI applications are highly encouraged. Under Hungary's AI Strategy (2020-2030) (https://ai-hungary.com/api/v1/companies/15/files/146074/view), an AI Corporate Experimental Fund was created to support companies in the early stages of AI experimentation. The fund helps reduce the costs and risks associated with developing AI solutions up to the proof-of-concept phase. The National AI Laboratory is another initiative that fosters collaboration between SMEs, research institutions, and the industry to promote AI development through grants and research funding (https://mi.nemzetilabor.hu).

In 2024, SMEs in Lithuania have access to several financial support schemes to help with the adoption of AI and other digital technologies. The Ministry of the Economy and Innovation of Lithuania plays a key role in supporting SMEs through simplified processes, such as the SME declaration tool, which allows companies to easily prove eligibility for financial support for AI-related initiatives. For instance, the newly digitized SME declaration tool simplifies the process of proving SME status, which is necessary for accessing state support, including financial

Co-funded by the European Union

instruments related to AI adoption. Financial intermediaries like SEB Bank and others are involved in providing loans, offering up to €364 million to support Lithuanian businesses. In addition to EU-backed programs, Lithuania's OECD collaboration aims to improve the business environment by enhancing access to finance and promoting innovation (https://www.oecd.org/en/countries/lithuania.html). This also supports the digital transformation efforts of SMEs, making Lithuania a growing hub for AI integration across industries.

Estonia continues to enhance its support for SMEs adopting AI technologies through various funding mechanisms. EU Structural Funds & Recovery and Resilience Facility (RRF) allocates €58 million specifically for the digitalization of small and medium-sized enterprises, targeting AI adoption and technological upgrades (https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility_en). This funding supports initiatives such as developing industrial data clouds, conducting feasibility studies, and training employees. The grants can reach up to €750,000 for projects that increase digital capabilities within SMEs. Enterprise Estonia (EAS) provided various grants and support mechanisms aimed at fostering innovation among Estonian SMEs. These include funding for technological advancements, with a strong emphasis on AI and robotics integration. EAS also supports SMEs through the European Digital Innovation Hubs (EDIH), which offer free services and expertise to help companies develop AI solutions (https://european-digital-innovation-hubs.ec.europa.eu/home).

Technological Infrastructure

SMEs need support in accessing tools and platforms. There are now so many tools that it is difficult for SMEs to maintain an overview and decide which one is most suitable. This is where intermediary organisations can give SMEs an initial overview with a brief description of useful tools. The same applies to cloud providers; which cloud solution offers me the flexibility and scalability I need for my chosen AI solution? For a better assessment of cloud solutions, the BMWK has created Trusted Cloud, a platform where companies can find out about secure cloud providers (BMWK 2024) https://www.bmwk.de/Redaktion/DE/Artikel/Digitale-Welt/trusted-cloud.html

However, the technological infrastructure also includes reliable and powerful data centres. With the establishment of four AI service centres, the BMBF is therefore pursuing the goal of providing users from science and industry with high-performance computing infrastructure in order to significantly increase the availability of AI computing power in Germany and thus enable research institutions and companies, especially SMEs, to use, understand and further develop AI applications and integrate them into their processes. To this end, the AI service

Co-funded by the European Union

centres conduct cutting-edge research in the field of AI and promote the transfer of AI into practice through low-threshold and agile services (BMBF 2024) https://www.bmbf.de/bmbf/shareddocs/kurzmeldungen/de/2022/11/foerderung-von-4-ki-zentren-gestartet.html .

Gaia-X, a European cloud initiative backed by the German government, promotes a secure and sovereign data infrastructure that adheres to European regulations, ensuring SMEs can confidently deploy AI solutions in compliance with GDPR. The German government continues to support AI adoption among SMEs through initiatives like Mittelstand-Digital and AI Innovation Hubs, which provide free consultation, training, and AI deployment strategies tailored for small businesses. These programs help SMEs integrate AI into their operations, particularly in areas like automation, supply chain management, and customer service (https://european-digital-innovation-hubs.ec.europa.eu/home).

Advice and mentoring programmes

The use of AI requires expertise in very different areas. SMEs often find it difficult to find the right consultant for their needs. This is where networks or mentoring programmes can help. One example is the coaching programme of the New Quality of Work Initiative (INQA), an initiative of the Federal Ministry of Labour and Social Affairs, which aims to make SMEs fit for the future by promoting consulting (INQA 2024). (https://www.inqa.de/DE/angebote/inqa-coaching/uebersicht.html) Another example is the "Go Digital" programme (BMWK 2024) funded by the Federal Ministry of Economics (BMWK) https://www.bmwk.de/Redaktion/DE/Artikel/Digitale-Welt/foerderprogramm-go-digital.html or the Mittelstand Digital Centres, which offer competent and provider-neutral contact points for information, awareness-raising and training throughout Germany (Mittelstand Digital 2024) https://digitalzentrum-berlin.de/ki-tools-fuer-den-arbeitsalltag.

The AI Federal Association (KI-Bundesverband) offers a mentorship program aimed at SMEs looking to adopt AI technologies. The association connects SMEs with AI mentors, including experts from AI startups and researchers, to foster practical AI implementation (https://ki-verband.de/en/).

In Poland PARP (Polish Agency for Enterprise Development) is helping businesses create personalized AI strategies and providing mentoring services (https://en.parp.gov.pl). PFR (Polish Development Fund) continues to provide mentoring and training programs tailored to the needs of SMEs. It supports companies in developing AI competencies and understanding AI applications in their business (https://pfr.pl).

Co-funded by the European Union

Hungary offers various mentoring programs and initiatives aimed at helping SMEs integrate and leverage AI technologies. Hungary's Digital Innovation Hub provides support to SMEs in their digital transformation, including AI adoption. As part of the EU's DIH network, it offers access to AI experts, training, and funding for digital innovation projects (https://european-digital-innovation-hubs.ec.europa.eu/news/pioneering-digital-transformation-hungary-edihs-leading-way-nations-smes).

The Estonian Digital Innovation Hub offers various training programs designed to help SMEs adopt digital technologies, including AI. The hub provides access to expertise, resources, and collaborative opportunities (https://aire-edih.eu).

The Lithuanian Artificial Intelligence Association (LAIA) promotes AI education and collaboration among businesses and educational institutions. Tailored training programs focused on applying AI in sectors such as healthcare, manufacturing, and finance. (https://lithuania.ai).

Community and networking

Acceptance for the use of AI is all the greater if companies learn about good application possibilities from other companies and can share challenges and experiences and thus learn from each other. Conferences, meet-ups and other networking events can facilitate the exchange of experiences. With over 30 regional and thematic centres, small and medium-sized enterprises and skilled trades businesses can experience the benefits of digitalisation and, from this year onwards, increasingly of AI through practical examples, demonstrators, information events and mutual exchange. (BMWK 2024 https://www.mittelstand-digital.de/MD/Redaktion/DE/Artikel/Mittelstand-4-0/mittelstand-40-kompetenzzentren.html).

One of the promising networking opportunities is AI Campus Berlin. It is a prominent hub for artificial intelligence innovation, collaboration, and community building, specifically aimed at fostering AI development among SMEs, start-ups, researchers, and industry experts. Regularly hosts events, workshops, and hackathons focused on AI, where SMEs can learn, share experiences, and connect with peers and experts. Campus offers networking with AI mentors who provide guidance and support to SMEs in their AI journeys (https://www.merantix-aicampus.com/community).

The AI Federal Association promotes AI development in Germany and connects various stakeholders, including SMEs, start-ups, and research institutions. It provides a platform for networking among businesses, start-ups, researchers, and other stakeholders in the AI field, facilitates the exchange of knowledge, best practices, and experiences related to AI

Co-funded by the European Union

technologies and applications. They provide membership network, events and conferences, mentoring programs, workshops etc. (https://ki-verband.de/en/).

The European AI Alliance is an initiative launched by the European Commission to foster collaboration among stakeholders in the AI ecosystem across Europe. The Alliance brings together a wide range of stakeholders, including businesses, industry associations, researchers, civil society organizations, and public authorities, to ensure comprehensive representation and input on AI-related matters. The Alliance serves as a platform for stakeholders to contribute to the development of AI policies and regulatory frameworks at the European level, ensuring that diverse viewpoints are considered. It provides access to reports, studies, and guidelines on various AI topics, helping members stay informed about current trends, challenges, and innovations in the field (https://futurium.ec.europa.eu/en/european-ai-alliance).

In Germany, various local and regional AI meetup groups offer informal yet valuable networking opportunities for SMEs interested in adopting and leveraging artificial intelligence. These groups serve as platforms for knowledge exchange, collaboration, and staying updated on the latest AI trends.

The Digital Hub Initiative, organized by the Federal Ministry for Economic Affairs and Climate Action (BMWK), is an initiative aimed at promoting digital transformation and AI adoption in Germany, with a specific focus on SMEs. This initiative creates regional innovation hubs that foster collaboration between startups, SMEs, corporates, research institutions, and investors, particularly in AI and other digital technologies. The hubs serve as networking platforms where SMEs can connect with tech startups, corporates, universities, and research centers, creating opportunities for collaboration on digital transformation and AI projects. Regular events such as conferences, hackathons, and innovation competitions provide informal and formal networking opportunities for businesses and digital experts (https://www.de-hub.de).

Conclusion

Today, no one doubts the fact that AI is one of the leading catalysts for the development of new industries and markets, which transforms and modernizes entire business paradigms. Even though many companies have long recognized the importance and significance of AI, the results of the study demonstrated that not all companies continue to actively implement AI technologies, which can be explained by various reasons. In addition to the mentioned correlation between the size and location of the company and the active use of AI, companies face various barriers, among which the most prevalent are insufficient awareness of the capabilities and technologies of AI, fear and insecurity among employees, lack of technological

Co-funded by
the European Union

and financial resources, data protection and many others. All this shows the need to develop a comprehensive and flexible approach to integrating enterprises into the AI environment, taking into account their interests, needs, capabilities, and limitations. For many enterprises, the most difficult challenge is to develop an AI implementation strategy, to understand in which areas AI (marketing, logistics, production, HR, sales, etc.) can bring new opportunities and potential, and which of them imply certain limitations that require more careful actions to implement AI. Organizing AI trainings can become a benchmark for many companies to increase their awareness of the capabilities of AI technologies, applied digital solutions, and most importantly, they will help them navigate and build their own AI implementation plan, considering such aspects as motivation and acceptance by employees, corporate strategy and organizational culture, and many others. Despite the operational workload of small and medium-sized enterprises, many of them are ready to spend time and financial resources on AI trainings and education. Today, the understanding that it is the development of AI that will form new business conditions and the organization of the social landscape contributes to the emergence of many supporting programs (financial, technological, educational, networking) both at European and national levels. Many programs focus on providing access to AI infrastructure, including cloud services, AI tools, and high-performance computing platforms. European and national bodies support collaboration by creating ecosystems where SMEs can connect with larger corporations, research institutions, and AI experts. Mentorship and networking opportunities foster innovation and help SMEs to scale. Thus, the future of SMEs with AI integration is set to be transformative, reshaping how these businesses operate, innovate, and compete. AI is expected to become a foundational tool for SMEs, driving growth and helping them adapt to an increasingly digital and automated world. But first, there is a need to build a roadmap for SMEs that will lead them to digital transformation results.

Co-funded by
the European Union

Part II – AI Implementation in SMEs

AI in HR Management

Recruiting

For small businesses to succeed, they need to hire the right people. But it can be hard and take a lot of time to find and hire the right people. AI can make a big difference here. Recruitment can be made faster, more efficient, and more accurate with the help of AI-powered tools.

AI-Powered Candidate Screening and Matching

One of the best things about using AI to hire people is that it can quickly and precisely screen and match candidates. Going through hundreds of papers is a common part of traditional hiring methods, which can be time-consuming and prone to mistakes. Software with AI can do this for you automatically. It looks through resumes and applications for certain keywords, skills, and work experience that fit what the job needs. So, only the best candidates are chosen, which saves time and makes sure the right person gets the job.

For instance, if your small business needs a marketing expert, AI can quickly find people who have worked on marketing efforts, managed social media, and analysed data. This means you can spend more time on the best applicants and less time on the ones that aren't right for the job.

Predictive Analytics for Hiring

AI does more than just look over resumes. It can also use prediction analytics to make better choices about who to hire. Predictive analytics looks at data to guess what will happen in the future. This means using information about past employees, performance, and other things to figure out which candidates are most likely to do well in a certain job.

AI can, for example, look at data from your best workers to find traits and qualifications they all have in common. It can then use this data to judge new applicants and guess how well they might do in your business. This helps you make better hiring choices, lowers the risk of hiring the wrong person, and keeps employees longer.

Enhancing the Candidate Experience

AI can also make the hiring process better for the people who are applying. Chatbots, for instance, can talk to job candidates right away, answering their questions and letting them

Co-funded by
the European Union

know how their application is going. This immediate interaction can improve a candidate's experience with your company by making them feel important and keeping them up to date.

In addition, AI can help set up interviews by finding times that work for both the interviewer and the individual. Setting up talks usually involves a lot of back and forth. This gets rid of that, making the process smoother and faster.

Reducing Bias in Hiring

Unconscious bias can be a big problem in hiring, which can lead to unfair hiring practices. This kind of bias can be lessened by AI that only looks at a candidate's skills and experience and not their personality. AI encourages a more diverse and open hiring process by using objective criteria to screen and rate candidates.

Streamlining Administrative Tasks

A lot of administrative work goes into hiring people, like sending emails and keeping potential databases up to date. These jobs can be done automatically by AI, which will free up your HR team to work on more important tasks. AI can, for instance, send rejection emails or set up follow-up interviews automatically, making sure that contact is always consistent and professional.

Analytics and Reporting

Recruitment tools that use AI also have powerful statistics and reporting tools. They can keep track of things like the number of applications they get, where those applications come from, and the success rate of the different ways they hire people. This information helps small businesses understand their hiring process better and find ways to make it better.

In conclusion, AI can completely change the way small businesses hire people by automatically screening and matching candidates, using predictive analytics to help them make better hiring decisions, improving the experience of candidates, lowering bias, speeding up administrative tasks, and giving them useful analytics and reports. By using AI in the hiring process, you can find the best people faster, for less money, and with less effort. This makes your staff stronger and gives your small business an edge in the market.

Onboarding

For SMEs, onboarding new workers is a key step in making sure that they fit in well and start working quickly. AI can make the onboarding process much better by personalising it and making it more efficient and effective.

Personalized Onboarding Experiences Through AI

Co-funded by
the European Union

When they start a new job, each individual has different needs and preferences. AI can help make personalised training experiences that meet the needs of each person. For example, systems that are powered by AI can learn about a new employee's job, experience, and personal tastes. AI can tailor the training process to the needs of each new employee based on this information.

For instance, an AI system can make a personalised onboarding plan with the right training sessions, meetings with key team members, and the right resources. This makes sure that new employees get the help and information they need to quickly get up to speed and feel at home at work.

AI-Driven Training Programs

Training is an important part of onboarding, and AI can make it more interesting and useful. Training programmes that are run by AI can change based on how and how fast each new employee learns. For example, if a new employee is having trouble with a certain subject, the AI system can give them more information and practice problems. If the worker does a good job, on the other hand, the system can move them on to more difficult topics.

These training programmes that are run by AI can have engaging parts like quizzes, simulations, and feedback in real time. This keeps the training sessions interesting and helps new workers remember what they are learning. AI can also keep track of each employee's progress, making sure they finish all the training lessons they need to and spotting areas where they might need more help.

Streamlining Administrative Tasks

During onboarding, people have to do a lot of administrative work, like filling out paperwork, setting up IT accounts, and making sure they follow company rules. A lot of these tasks can be done automatically by AI, which makes HR staff's jobs easier and speeds up the hiring process. AI-powered chatbots, for instance, can help new employees fill out the necessary forms, answer common questions, and make sure that all necessary papers are turned in on time.

Mentorship and Social Integration

There are also ways that AI can help new staff fit in with their coworkers. New hires can be paired with mentors or friends based on roles or hobbies they share. This helps new workers get to know their team and the culture of the company better and build relationships with them.

AI can also suggest social events, team-building exercises, or chances to network that are a good fit for the new employee. This makes people feel like they fit and makes it easier for new employees to get used to their new surroundings.

Co-funded by
the European Union

Feedback and Continuous Improvement

AI can use polls and sentiment analysis to find out what new employees think about their onboarding. This feedback is helpful for figuring out what works well and what needs work in the training process. The HR department can use this data to improve the training process for new employees in the future.

Providing On-Demand Information

As they learn how to do their new jobs, new workers often have a lot of questions. AI-powered systems can give new hires information and help whenever they need it, so they don't have to wait for HR staff to answer their questions. New employees feel more independent and surer of themselves in their new jobs when they can get information right away.

To sum up, AI can change the way small businesses get new employees by creating personalised experiences, offering adaptive training programmes, streamlining routine tasks, making it easier for people to get along with each other, and giving constant feedback. SMEs can make sure that new employees feel welcome, supported, and ready to contribute right away by using AI in the hiring process. This not only makes the onboarding process better, but it also makes the employees more engaged and effective.

Payroll

Payroll management is an important job for small businesses, especially micro-businesses. Making sure that workers are paid correctly and on time is important for keeping them happy and following the law. The payment process can be made much better by AI by making it faster, more accurate, and more reliable.

Automated Payroll Processing

One of the best things about AI in salary is that it can automate tasks. Usually, handling payroll involves doing a lot of the same things over and over, like adding up hours worked, taking out taxes, and sending out pay checks. AI can do these things automatically, which makes them much easier and takes a lot less time. Payroll systems that use AI can instantly gather and process information about attendance and time worked, figure out wages, deduct necessary amounts, and send out pay checks or direct deposits.

For instance, instead of entering employee hours and figuring out pay by hand, an AI system can instantly get this information from tools that track time, apply the right pay rates, and process the payroll. This makes sure that workers are paid correctly and on time without having to do a lot of work by hand.

Error Reduction in Payroll Management

Co-funded by
the European Union

When payroll goes wrong, it can cause big problems, like unhappy employees and even legal issues. AI helps cut down on these mistakes by making sure that numbers are correct and that payroll rules are always followed. AI systems don't make mistakes because they follow set algorithms and rules. This isn't possible when people enter data and do math by hand.

For example, AI can easily use the right tax rates, deductions for benefits, and calculations for overtime based on the most recent rules and company policies. This accuracy makes sure that workers get the right amount of money every pay period by lowering the chance of overpayments or underpayments.

Compliance and Regulatory Updates

It can be hard for small businesses to keep up with the changing wage rules and tax laws. AI-powered payroll systems can keep up with the latest legal requirements automatically, making sure that your payroll processes stay legal. This function is especially helpful for small businesses that might not have an HR department to keep an eye on changes to the rules and put them into action.

Data Security and Privacy

Payroll data is very private because it includes things like social security numbers, bank account information, and information about salaries. AI can make data safer by using advanced encryption methods and safe ways to store data. AI systems can also keep an eye out for odd behaviour or possible security holes, adding another level of safety for private payroll data.

Cost Savings

Small businesses can save a lot of money by automating accounting tasks with AI. Businesses can save money on management costs and avoid fines for not following the rules or making payroll mistakes by automating tasks that used to be done by hand and reducing the number of mistakes that happen. AI-powered payroll systems can also grow with your business, so you don't have to spend a lot more on payroll management tools as your business does.

Employee Self-Service Portals

Self-service portals made possible by AI can also make the payroll process better for workers. Employees can use these platforms to get their pay stubs, tax forms, and to change their personal information without having to go through HR. This convenience not only saves time for HR staff but also gives workers more control over their payroll information.

Predictive Analytics for Payroll

AI can use predictive analytics to guess how much payroll costs will be, which helps small businesses better control their budgets. AI can guess how much payroll will cost in the future

Co-funded by
the European Union

by looking at past payroll data. This can be done by considering things like yearly hiring patterns, planned promotions, or changes in the size of the workforce. Businesses can better plan their funds and avoid having to pay extra for payroll because of this foresight.

In short, AI can change the way small businesses handle payments by automating tasks, cutting down on mistakes, making sure they follow the rules, protecting data better, and saving money. The whole payment process is streamlined by AI-powered payroll systems, which makes them more reliable and efficient. By using AI in payroll, SMEs can focus on their main business tasks, knowing that their payroll tasks are correct, in line with regulations, and safe. This is good for the business and makes things better for the staff as a whole.

Workforce management

SMEs need to be able to manage their employees well to make sure processes run smoothly and employees are happy. By making scheduling, shift management, and staff planning more efficient and accurate, AI can make a big difference in how well workers are managed.

AI for Scheduling and Shift Management

Meeting the needs of the business and workers' availability while making schedules is one of the hardest parts of managing a workforce. This process can be made easier by AI, which can automatically make schedules and handle shifts. AI-powered tools can look at employees' schedules, tastes, and the needs of the business to make the best ones. To make sure that the right number of staff members are scheduled at the right times, these tools look at things like employee skills, labour rules, and busy business times.

For instance, if your small business has a store, AI can figure out when it will be busy based on past sales data and make sure that more staff is planned for those times. On the other hand, when business is slow, the AI can schedule fewer workers, which saves money on labour costs without lowering the level of service. This automation cuts down on the work that needs to be done by hand to make plans, which also keeps conflicts and overstaffing to a minimum.

Predictive Analytics for Workforce Planning

AI can also use predictive data to help plan the work force better. Predictive analytics looks at past data to guess what will happen and what people will need in the future. In terms of managing workers, this means that AI can guess how many people will be needed based on things like yearly patterns, sales projections, and the rate at which employees leave their jobs. Small and medium-sized businesses (SMEs) can make sure they always have the right amount of employees with the right skills by planning ahead for these needs.

Co-funded by
the European Union

For example, an AI system can look at past data to guess when your business might need more staff because of higher demand, like during the holidays or during special sales. It can also show you trends in employee turnover, which helps you plan activities like hiring and training to keep a good staff.

Employee Performance and Productivity Tracking

AI can keep an eye on workers' performance and output in real time, which gives managers useful information. AI can tell which workers are doing a good job and which ones might need more help or training by looking at data from different sources, like attendance and time records, sales performance, and customer feedback. This data helps managers make smart choices about promotions, rewards, and training chances, which keeps workers motivated and recognises their hard work.

Enhancing Employee Engagement

AI can also help make employees happier and more engaged at work. AI-powered platforms can, for instance, do regular surveys and sentiment analysis on employees to find out how they're feeling and if there are any problems that are hurting the workforce. This real-time feedback lets managers quickly address issues and start projects to make the workplace better and make sure employees are happy.

Workforce Flexibility

AI can help employees be more flexible by letting managers set flexible schedules and oversee remote workers. AI can handle schedules, keep track of work hours, and make sure that workers stay productive no matter where they are for small businesses that offer flexible or remote work options. This can help you find and keep good workers, since being able to work from home or set your own hours is becoming more and more desirable.

Cost Management

Controlling labour prices is also an important part of managing a workforce well. AI can help by figuring out the best number of employees and cutting down on the cost of overtime. AI makes sure that companies only pay for the workers they need by correctly predicting their staffing needs and automatically making changes to schedules.

To sum up, AI can change how small businesses handle their employees by automating scheduling and shift management, using predictive analytics to plan the workforce, keeping track of employee performance, making workers more engaged, letting them be more flexible, and keeping costs down. With these skills, managing employees is easier and more efficient, so small and medium-sized businesses can focus on their main business tasks. Small and

Co-funded by
the European Union

medium-sized businesses can make sure they have the right people in the right jobs at the right times by using AI to handle their workforce. This will increase productivity and help the business succeed as a whole.

Good Practice Examples

Recruiting – An example of AI-based creation of job advertisements from Germany

A master carpenter was looking for a specialist with many years of professional experience for his company. Together with the management consultant, the necessary job advert was to be formulated using ChatGPT. In a first attempt, the master carpenter asked the system for a job advert without providing the tool with any further information. The result that ChatGPT delivered was therefore unsatisfactory. For example, the required qualifications or professional experience were not mentioned in the job advert. The company then "fed" the system with relevant information from the company, such as company data, desired qualifications and other characteristics. The result of the job advert now created by ChatGPT fitted the company's profile very well and was adopted one-to-one. The master carpenter stated that this saved him at least half a day's work.

The company gained two important insights after using AI: Firstly, by using ChatGPT, it was able to reduce its fears of AI and reduce its uncertainty about using it. The other important realisation was that the results of AI tools can only be as good as the information available to the system. In this respect, it was important for him to learn more about which instructions should be sent to an AI system in order to initiate a certain action or response.

An example of AI-based creation of recruiting from Poland

Talent Alpha is a SaaS Platform that is transforming the way organizations around the globe measure and manage Tech Talent by creating a digital representation of their talent genome. It also easily allows them to scale up and down their IT workforce using the Human Cloud. The platform gives total visibility into the technical and soft skills available to an organization including permanent staff, potential candidates, contract workers or on-demand Tech Talent available on the Human Cloud. The platform is a Golden Source of Data, collecting information from multiple data-sources and visualizing it in a clear and easy to manage way. Talent Alpha addresses challenges connected with managing remote teams, understanding and indexing skills in a dispersed organization, enabling data-driven workforce decisions as well as matching Specialists with the right projects and opportunities. Talent Alpha is becoming the platform of choice for managers running internal and external recruitment processes, planning reskilling and upskilling initiatives as well as managing diversed teams.

https://talent-alpha.com/

Co-funded by
the European Union

An example of AI-based creation of recruiting from Hungary

Randstad is indeed a well-known recruitment firm operating in Hungary, offering a range of services tailored to meet the needs of various industries. Here are some highlights about Randstad's presence in Hungary.

Their tech recruitment division focuses on sourcing top talent in the technology sector, utilizing advanced sourcing strategies and in-depth market analysis to find the right candidates for clients. Randstad employs AI-driven tools to enhance the recruitment process, improving efficiency in candidate sourcing and matching. This technology helps recruiters identify high-quality candidates more quickly.

https://www.randstad.hu/

An example of AI-based HR-solutions from Lithuania

OPTAS makes scheduling easy for management and workers. UI-friendly software solution empowers managers to create complex Labour Law compliant employee schedules more easy and quickly. OPTAS also helps to save not only money and time but also helps to make employees more satisfied with their workplace.

https://www.optas.lt/retail-scheduling-software

An example of AI-based HR-solutions from Estonia

1) EachHire

Provider of AI powered cloud-based platform for candidate sourcing. The platform uses built-in AI talent search engine that is integrated with Google search and GPT technology to discover talent based on the job requirements. Its smart AI assistant evaluates and matches candidates profile for interview ready.

https://www.eachhire.com/

2) iVCV

iVCV is an AI-based HR tool designed to revolutionize the hiring process for businesses. It provides features such as video interviews, which allow companies to assess candidates' skills and personalities more effectively. iVCV generates detailed reports on each candidate, giving businesses valuable insights to make informed hiring decisions. With this platform, organizations can save time and resources, optimising their recruitment efforts and finding the most suitable talent to fulfil their requirements.

https://ivcv.eu/

Co-funded by
the European Union

AI for Data Analysis and decision-making

Identifying new market opportunities

Finding new market options is important for SMEs to grow and stay competitive. AI can make this process a lot better by giving deep insights into things like market trends, customer segmentation, and targeting. AI can help SEMs to make smart choices that will help their businesses succeed.

Market Trend Analysis Using AI

One of the best things about AI for data analysis is that it can quickly and correctly look at huge amounts of data. AI can look at data from a lot of different places, like market research, social media, industry reports, and news stories, to find new patterns and trends. SMEs can use this market trend research to learn about the current market and guess how it will change in the future.

AI can look at social media trends to find out what goods or services are becoming more popular, for instance. It can also keep an eye on what competitors are doing, like when they release new products or run marketing efforts, to see how they're affecting the market. SMEs can stay ahead of the competition and change their strategies to meet changing customer tastes by keeping up with these trends.

Customer Segmentation and Targeting

AI is very good at customer segmentation, which is the process of separating a company's customers into separate groups based on things like demographics, buying habits, and tastes. AI can look at information about a customer from many places of contact, like online interactions, purchase history, and feedback, to make full profiles of that customer.

With these profiles, AI can find groups of very valuable customers and make sure that marketing efforts are aimed at the right ones. For example, if AI finds a group of customers who often buy eco-friendly products, the company can use that information to make targeted marketing efforts that promote their eco-friendly products. This personalised method makes it more likely that the customer will be interested and buy, which leads to more sales and customer loyalty.

Predictive Analytics for Identifying Opportunities

AI can use predictive analytics to guess what market chances will come up in the future. AI can guess what will happen in the market and with customers by looking at past data and

Co-funded by
the European Union

finding patterns. SMEs can plan ahead and make goods or services that will meet expected demand.

For instance, if AI predicts that people will become more health-conscious, a small business in the food industry can start making healthier goods or market healthy products more aggressively. Through this, businesses can generate new ideas and then can become leaders in new trends and get a piece of the market before their competitors do by guessing what the market will want.

Enhancing Product Development

AI can also help to make new products by looking at market data and customer comments. Businesses can make goods that better meet market needs if they know what customers want and need. AI can find holes in the market where customers' wants aren't being met, which opens the door for new ideas.

AI can look at product reviews and customer feedback, for example, to find features or issues that a lot of people want. Then, a SME can use this information to make goods better or come up with new ones that solve these problems. This method to product development based on data makes sure that new products meet customer needs, which raises their chances of being successful.

Optimizing Marketing Strategies

AI can improve marketing plans by looking at information about how well campaigns are doing and how customers are interacting with them. Businesses can make better use of their resources and get the most out of their marketing efforts if they know which ones work best.

For instance, AI can look at how well different marketing platforms, like paid ads, social media, and email campaigns, work to see which ones bring in the most leads or sales compared to their costs. Small and medium-sized businesses can use this information to focus on the best methods for marketing and make sure their messages are clear and relevant to the people they want to reach.

Real-Time Market Insights

AI gives businesses real-time information about the market, which helps them make quick choices. SMEs don't have to wait for market studies to come out on a regular basis. Instead, they can get up-to-date information on market trends, customer behaviour, and what their competitors are doing. Businesses can quickly adapt to changes in the market and take advantage of new possibilities as they come up because of this.

Co-funded by
the European Union

For example, if AI notices a quick rise in demand for a product, a company can either make more of it or change how it markets itself to take advantage of the trend. Also, if AI sees a new competitor joining the market, the business can come up with ways to set itself apart and stay ahead of the competition.

Reducing Risk in Market Expansion

There are a lot of risks that come with expanding into new markets, like not knowing what the local customers want and how the market works. These risks can be lessened by AI that gives detailed market research and insights. AI helps businesses make smart choices about entering and growing markets by looking at data on things like consumer behaviour, culture trends, and the economy.

For instance, a small business that wants to grow into a new area can use AI to study the local consumer tastes and business environments of its competitors. This knowledge helps the company make its products fit local tastes and spot possible problems, which raises the chances of entering the market successfully.

Put it all together, one can say that AI makes it much easier for small businesses to find new business chances by analysing market trends, targeting and segmenting customers, using predictive analytics, and getting real-time market insights. SMEs can make choices based on data that improve product development, marketing strategies, and efforts to grow their markets by using AI. Making sure businesses can stay competitive and change with the times so they can take advantage of new growth possibilities is important. SMEs can come up with new ideas and do well in a business world that is changing quickly by using AI for data analysis and decision-making.

Risk Management

SMEs, need to be able to handle risks well in order to stay in business and grow. Risks can come from many places, such as unknown finances, scams, and problems with operations. AI can help a lot with finding, evaluating, and reducing these risks, giving small businesses the tools they need to run safely and efficiently.

AI for Financial Risk Assessment

Assessing financial risk is one of the most important ways that AI can help with risk management. Changes in the market, credit risks, or unplanned costs can all cause financial risks. AI systems can look through huge amounts of financial data to find risks and send out early alarms.

Co-funded by
the European Union

AI can, for example, keep an eye on market trends and economic signs to see when your business might face a downturn. AI can predict cash flow problems by looking at past financial data and the current state of the market. This lets you take action before the problem happens. This could mean making changes to your spending, getting more money, or cutting costs that aren't necessary.

AI can also decide if a new customer is creditworthy by looking at their past financial records, how they make payments, and other relevant data. This gives small businesses more information to help them decide if they should give credit to customers, which lowers the chance of bad debts.

Fraud Detection and Prevention

For SMEs, fraud is a big problem that can cost them a lot of money and hurt their image. By looking at trends and finding strange behaviours that could be signs of fraud, AI can help find and stop fraud.

AI systems can keep an eye on transactions in real time and flag activities that seem fishy so that they can be looked into further. For instance, if an employee suddenly buys something very expensive or moves money to an account they don't know, the AI system can let management know that there may be scam. This lets quick action be taken to stop more loses.

In addition, AI can learn from past scam cases to get better at finding it. AI systems can find new patterns and trends in fraudulent behaviour by looking at data from past events. This makes them better at finding and stopping fraud all the time.

Operational Risk Management

The help of AI can also be used to handle operational risks like broken equipment, problems in the supply chain, and online threats. By looking at data from sensors and repair records, AI can figure out when things will break down. This lets companies do preventative maintenance, which cuts down on downtime and keeps them from having to pay for expensive fixes.

In supply chain management, AI can look at data from different sources to find problems that might happen, like supplier delays or problems with international politics. This lets SMEs make backup plans and keep their businesses running.

Another important area where AI can help control risk is cybersecurity. AI systems can watch network traffic for signs of cyberattacks, like login attempts that don't seem normal or data breaches. AI helps businesses protect their private information and keep their cybersecurity strong by finding these threats early.

Regulatory Compliance

Co-funded by
the European Union

Small businesses need to follow the rules to stay out of trouble with the law and keep their good name. AI can help make sure that businesses follow the rules by keeping an eye on changes to laws and rules and figuring out how they will affect the company.

For example, AI can look at new rules about data privacy, labour laws, or environmental standards and suggest changes that need to be made to policies and practices. This proactive method makes sure that small businesses keep up with the latest rules and avoid fines or other legal problems.

Enhancing Decision-Making with Risk Analysis

AI can help people make better decisions by analysing risks in great depth and planning for different outcomes. By modelling different situations, AI helps businesses figure out what the best course of action is and how different choices might affect them.

For instance, if a SME wants to enter a new market, AI can look at the risks that come with that, such as the cost of doing so, the state of the market, and the number of competitors. So, the company can compare the possible risks with the possible benefits and make an educated choice.

Insurance and Risk Mitigation

It is also possible for AI to help improve insurance coverage and lower risks. AI systems can look at a company's risk profile and suggest the right insurance plans to protect it from possible problems. This makes sure that small and medium-sized businesses are protected against unplanned events.

Aside from that, AI can help businesses use risk mitigation methods by finding weak spots and suggesting ways to fix them. For example, AI might suggest that to lower operational risks, cybersecurity measures be improved, suppliers be made more diverse, or money be spent on training employees.

Predictive Analytics for Risk Management

Businesses can plan for and avoid possible risks with the help of predictive analytics, which is a strong risk management tool. AI can predict future risks and give useful information by looking at past data and finding patterns.

For instance, predictive analytics can predict changes in demand, which helps companies better control their inventory levels and avoid running out of stock or having too much of it. It can also tell when employees are going to leave, which helps companies plan ahead for hiring and training needs.

Co-funded by
the European Union

In conclusion, AI makes small businesses' risk management a lot better by giving them tools for evaluating financial risk, finding and stopping fraud, managing operating risk, following the rules, helping with decisions, making insurance more efficient, and using predictive analytics. SMEs can use AI to effectively find and reduce risks, which will help their business stay stable and grow. Not only does this keep the business safe from possible dangers, it also gives it an edge in today's fast-paced market. SMEs can work with more confidence and safety when they use AI for risk management, which sets them up for long-term success.

Good Practice Examples

An example of AI-based Data Analytics tools from Germany

Bundesdruckerei GmbH offers public authorities and companies in the regulated private sector solutions for data analytics and AI, ranging from consulting services to complete solutions for digitalization projects. They provide with the service on the use of modern and innovative technologies, develop complete systems, data links and AI models based on clients' requirements. They offer big data processing, data analytics and trusted AI with a user-friendly application interface. All of this is implemented using agile methods and paying particular attention to user-friendliness, traceability and data protection.

Bundesdruckerei GmbH supplies everything from a single source: from a strategy to implementation and operation. A service portfolio is modular and can be custom-configured to meet your specific requirements. In this way, they help the customers to develop and implement data analytics and AI solutions with bespoke evaluation and automation components. Depending on the method selected, this can be AI or classical analytics. The process for projects and application cases is both iterative and explorative.

https://www.bundesdruckerei-gmbh.de/de

An example of AI-based Data Analytics tools from Estonia

Tallinn-based AI-powered analytics platform heybooster develops an AI-based platform that offers data analysis tools. It was created to help the marketing team discover revenue growth opportunities and budget-wasting issues by checking data, sending critical changes, assigning projects, and collecting data from various channels for quick results.

https://www.heybooster.ai/about-us

An example of AI-based Data Analytics tools from Lithuania

Insurance technology company Balcia has initiated a collaboration with the Swiss company kasko2go, introducing an Artificial Intelligence (AI)-based risk calculation program. This allows for more precise risk assessment for certain automobiles and their drivers, introducing a new

Co-funded by
the European Union

approach to car insurance. Modern technology and artificial intelligence allow us to analyze extensive data quickly and accurately. Using the innovative kasko2go risk assessment system, they offer data-driven and forward-looking insurance services. When assessing risks, kasko2go considers more than 800 additional parameters. These include crash test results, the characteristics of the car's safety systems, accident information, traffic conditions in the driver's neighbourhood, and many other factors. All of this, with kasko2go's innovative AI approaches, allows Balcia to create customer-centric strategies.

https://join.balcia.com/

An example of AI-based Data Analytics tools from Poland

Capgemini Poland is a leading provider of cloud and big data solutions, with teams of Data Engineers and Data Architects specialized in system architecture, data platforms, product development, and migration of legacy systems to cloud. We focus on data democratization, the integration of new data sources, and ensuring data quality and consistency, as well as big data platforms for different business sectors. The Data Science Capability Unit engages with modern AI tools to bring the clients machine learning and Data Science services, including anomaly detection, natural language processing, and computer vision.

Capgemini Poland partners with the BMW Group to create a cloud-native analytics platform that evaluates real-time IoT data, monitoring vehicles throughout the distribution process. The platform was constructed with flexibility in mind, allowing adaptation to different regulatory and legal requirements as it is rolled out internationally. The platform includes reporting and monitoring dashboards that drive faster decision-making and build data assets that can be used across the business. This solution increases transparency across the vehicle distribution process chain, allowing for service and maintenance prediction, and improves the predictability and quality of the vehicle delivery process.

https://www.capgemini.com/pl-pl/get-to-know-data-ai-in-poland/

An example of AI-based Data Analytics tools from Hungary

Budapest Data & Analytics Hub is the data expert team of Deloitte Hungary. They deliver projects with cutting edge technologies and services for the clients in the enterprise sector across various industries. From ideas to complete solution, they can help you to reach full analytics potential. Their consultants have expertise in defining strategic goals, roadmaps, and value driven use cases, but also a deep technological knowledge and years of experience in project delivery to implement the solutions clients need.

They are part of Deloitte’s Central European region, which ensures a close collaboration between Data & Analytics teams in 18 countries.

Co-funded by
the European Union

There are services:

- Defining a Data Driven Strategy
- Implementation of state-of-the-art cloud and visualization technologies
- Gaining insights and value from existing data sources
- Design, implementation, and development of custom data visualizations
- Building first class data analytics processes and competencies
- Implementation of Artificial Intelligence solutions

https://www2.deloitte.com/hu/en.html

Co-funded by
the European Union

AI in Marketing and Sales

Data Collection

SMEs need to gather data as part of their marketing and sales. Businesses can make focused marketing plans that increase sales and keep customers coming back by learning about their likes and dislikes and how they act. AI can make collecting data a lot better by quickly and correctly collecting and analysing huge amounts of customer data. This helps small and medium-sized businesses learn useful things and make smart choices.

AI for Gathering and Analyzing Customer Data

Collection of customer data from websites, social media, and online deals can be done automatically by tools that use AI. These tools can gather information about a customer's age, gender, previous purchases, browsing habits, and how they respond to marketing efforts. This huge collection of data gives a very clear picture of what customers like and how they act.

AI can keep track of things like how people use a website, what goods they look at, and how long they stay on each page. Businesses can use this data to figure out which goods or services get the most interest and to find any problems in the customer journey. By looking at this data, AI can find areas in which activities could be optimized, like making the style of websites more appealing or writing more accurate descriptions of products to make the user experience better.

Insights from Consumer Behaviour

AI's ability to look at how people act and give us useful information is one of its most powerful features. AI can find patterns and trends in customer data, which can tell you a lot about what customers like and how they usually buy things. Businesses can then change their marketing plans to better meet the wants of their customers.

AI can look at past purchases to see, for example, which items are often bought together. Businesses can use this information to make cross-selling and upselling strategies that work, like suggesting related goods to customers while they shop. AI can also find seasonal patterns in how people buy things, which helps businesses plan their marketing efforts and inventory management.

Predictive Analytics for Customer Behaviour

AI can use predictive analytics to guess how customers will act in the future by looking at how they have behaved in the past. AI can guess what customers will buy next, when they might buy it, and how much they will spend by looking at their past history of exchanges and

Co-funded by
the European Union

transactions. This kind of planning lets companies make marketing messages and deals that are more relevant to each customer.

For example, if AI says that a customer is likely to buy a certain product in the next month, the company can give them targeted ads or reminders to get them to buy. This personalised method makes it more likely that a customer will convert and makes them happier.

Customer Segmentation

AI can also help with customer segmentation, which is the process of putting customers into separate groups based on certain traits. AI can find groups of customers who have similar wants and needs by looking at data on demographics, buying habits, and participation in marketing efforts. Businesses can make specific marketing plans for each group using this division.

AI could, for instance, find a group of customers who often buy eco-friendly goods. Then, the company can make ads that especially target this group to show off their range of eco-friendly products. Businesses can get customers more involved and boost sales by sending them useful messages.

Enhancing Customer Profiles

AI can improve customer profiles by adding new information to them all the time. AI can collect and analyse data about customers as they connect with a business through different channels. This data can be used to keep customer profiles up to date and correct. Businesses can keep a full picture of their customers with this dynamic profiling, which makes sure that their marketing stays current and effective.

AI can change a customer's character to reflect this change, for instance if they start to be interested in a new type of product. Then, the company can change its marketing plans to include sales for the new type of product. This will increase the chances of getting the customer's attention and making a sale.

Real-Time Data Analysis

AI makes it possible to look at customer data in real time, which lets businesses react quickly to changes in market conditions and customer tastes. Real-time data analysis lets companies see how their customers are interacting with them right now and change their marketing strategies promptly.

For example, if AI notices that people are suddenly more interested in a certain product, the company can quickly start focused sales or get more of the product to meet the demand. This flexibility helps companies stay ahead of the competition and take advantage of new chances.

Co-funded by
the European Union

Data-Driven Decision Making

AI gives businesses the power to make choices based on data by giving them accurate and timely information. AI can help businesses figure out what works and what doesn't in their marketing by looking at data about their customers. With this knowledge, businesses can better decide how to use their resources and make their marketing strategies work better.

AI can, for instance, look at how well different marketing platforms, like paid ads, social media, and email, work to see which ones bring in the most leads and sales. Businesses can focus on the best channels and make their marketing messages more relevant to their target group once they have this information.

Improving Customer Experience

AI-powered data collection and research can make the experience of customers a lot better. Businesses can give each customer a unique experience that meets their needs and standards by learning about their likes and dislikes and how they act. This personalisation makes customers more loyal and likely to buy from you again.

AI can make email marketing more personal by suggesting goods based on what a customer has bought and looked at in the past. This personalised method makes customers feel like they are important and understood, which makes them more engaged and happier.

In short, AI can change the way small businesses collect and analyse data by simplifying the collection of customer data, giving businesses new insights into how customers behave, and making predictive analytics possible. AI makes it easier to divide customers into groups, keeps customer records up to date in real time, and helps people make decisions based on data. Businesses can use AI to make personalised marketing plans that make the customer experience better and increase sales. SMEs can stay competitive, better understand their customers, and make choices that will lead to long-term success by using AI to collect data.

Marketing Campaigns

For SMEs to grow and be successful, they need marketing strategies. AI can make marketing campaigns much more effective by allowing personalisation, maximising marketing spend, and giving useful insights that can be used to improve strategies. Here are some ways AI can change the way small businesses sell themselves.

Personalization and Targeting of Campaigns

AI makes it possible for marketing efforts to be very personalised, which is very important for getting people to purchase a product. AI lets businesses send personalised marketing

Co-funded by
the European Union

messages to each customer based on their likes, dislikes, behaviours, and contacts with the business in the past. This way, businesses don't have to use a one-size-fits-all method.

AI can look at a customer's browsing history, past sales, and how they responded to past marketing efforts, for example, to make personalised email campaigns. In these emails, you can suggest products, offer deals, and send content that is related to the customer's interests. This personalised method makes customers feel like they are important, which makes them more likely to engage with you and buy from you.

Additionally, AI can divide customers into separate groups based on different factors, including their demographics, buying habits, and level of interaction. Businesses can send customised marketing messages to specific groups of customers this way, making sure that each group gets the most relevant and appealing offers.

AI for Optimizing Marketing Spend

One of the hardest things for small and medium-sized businesses is making good use of their marketing funds. AI can make the best use of marketing budgets by looking at how well different marketing platforms and strategies work. This makes sure that resources are used effectively.

AI can keep track of and look at data from different marketing platforms, like search engines, display ads, social media, and emails, to find the ones that give you the best return on investment (ROI). For example, if AI figures out that ads on social media are more likely to lead to sales than ads on search engines, companies can spend more on social media campaigns. This strategy is based on data and makes sure that marketing dollars are spent where they will have the most impact, maximising ROI and reducing inefficiency.

Dynamic Content Creation

AI can help make marketing efforts to be more effective through the creation of dynamic content. A more personalised experience is provided by dynamic material that changes based on the viewer's profile, behaviour, and preferences. AI can, for instance, make personalised suggestions about products to buy or change the material of a website so that it fits the interests of each visitor.

This feature can also be used for advertising. AI can make ads that change based on the user's location, demographics, and past browsing habits. People are more likely to be interested in and click on these ads, which will increase the number of clicks and sales.

Predictive Analytics for Campaign Planning

Co-funded by
the European Union

The strong tool of predictive analytics looks at past data to guess what will happen and how things will change in the future. Predictive analytics can be used by AI to better plan marketing efforts. AI can tell which tactics are likely to work and which ones might not by looking at data from past campaigns.

AI can figure out, for instance, the best times to start campaigns, the kinds of messages that will connect with different groups of customers, and the sites that will get the most attention. This kind of foresight lets companies plan their projects in a way that makes them more likely to succeed and less likely to fail.

Automated A/B Testing

A/B testing lets you see which version of a marketing product works better by comparing two of them. AI can speed up and handle A/B testing by looking at how different emails, ads, or landing pages are doing right now.

AI can, for example, test several versions of an email subject line at the same time to see which one gets the most opens. AI can easily pick the version that works best based on the results and use it with more people. This ongoing tweaking makes sure that marketing materials always do their best, which leads to better outcomes.

Customer Journey Mapping

AI may create a map of the customer journey, which shows how customers connect with a brand at different points of contact. Businesses can find key moments of impact and improve their marketing efforts by understanding the customer journey.

AI can, for example, follow a user from the time they first learn about a product or service to the time they buy it and even after they've bought it. This tracking helps companies figure out where customers leave or stop being interested, so they can fix these problems and make the whole experience better. Businesses can boost conversion rates and build long-term loyalty by making the customer trip better.

Enhanced Customer Retargeting

Retargeting is a strategy for getting in touch with customers who have connected with a brand before but haven't done what the brand wants them to do, like buying something. AI can help with remarketing by figuring out the best ways to get these customers to interact with you again.

AI can, for instance, look at the actions of customers who left items in their shopping carts and send them targeted ads or emails to get them to finish their buy. Businesses can get back lost

Co-funded by
the European Union

sales and boost their conversion rates by figuring out why people leave and sending them personalised messages.

Sentiment Analysis

AI can perform sentiment analysis about a brand or campaign by analysing customer comments, social media interactions, and online reviews. Businesses can use this information to learn more about how customers feel about their goods or services and find ways to make them better.

For instance, if AI finds that people don't like a recent marketing campaign, companies can quickly change their message or deal with any problems that customers have brought up. This real-time feedback process makes sure that marketing stays in line with what customers want and can change based on how they feel.

In short, AI can completely change small businesses' marketing campaigns by letting them personalise and target their ads, making dynamic content, using predictive analytics, automating A/B testing, mapping customer journeys, improving customer retargeting, and analysing sentiment. These features let companies make marketing efforts that are more effective and interesting, which leads to better results and higher ROI. For small businesses to stay competitive, connect with their customers more deeply, and reach their business goals, they need to use AI in their marketing efforts.

Social Media

SMEs can reach and interact with their customers through social media. AI can greatly improve managing and watching social media, which makes it easier for businesses to keep up with their online presence, figure out how their customers feel, and interact with their audience in a useful way. Here's how AI can change the way small businesses use social media.

AI for Social Media Management and Monitoring

It can take a lot of time to manage multiple social media accounts, especially for small businesses that don't have a lot of money or staff. AI can make this process easier by taking care of different parts of social media management automatically. AI-powered tools can plan posts, track engagement, and look at how well social media efforts are doing.

For example, AI can plan posts automatically for the best times, when your audience is most likely to be online, so that they get the most attention and engagement. It can also suggest articles, images, or videos that are important to your brand's message and the interests of your audience. This automation saves time and makes sure that your social media profile is consistent and interesting.

Co-funded by
the European Union

AI can also keep an eye on what's happening on social media in real time, keeping track of when your brand, goods, or relevant keywords are mentioned. Businesses can keep up with talks about their brand and quickly answer customer questions or comments thanks to this real-time monitoring. You can build stronger ties with your audience and make customers happier if you keep them interested.

Sentiment Analysis and Customer Engagement

For good social media management, you need to know how your customers feel about your business. AI can do sentiment analysis, which looks at posts, comments, and reviews on social media to figure out how people feel about your business in general. This research helps businesses figure out how the public sees them and where they can improve.

AI can, for instance, look at the comments on your social media posts and tell you if they are good, negative, or neutral. If AI notices a rise in negative mood, it can let you know to look into the problems that are making people unhappy and fix them. On the other hand, if AI finds positive emotion, you can use this feedback to show off what customers love about your brand in your marketing.

AI can also make customers more interested by finding ways for them to connect. AI can tell when a customer asks a question or talks about your brand in a post, so your team knows right away to answer. This kind of proactive engagement shows customers that you care about their wants and value what they have to say, which builds trust and loyalty.

Content Personalization

AI can make your social media posts more relevant to different groups of people by personalising them. AI can make material suggestions that are more relevant to certain groups of people by looking at data on their likes, dislikes, behaviours, and interactions.

For instance, if AI figures out that a segment of your audience is really interested in sustainability, it might suggest that you share articles, videos, or news about eco-friendly goods and practices. This targeted method makes sure that your content is interesting and relevant, which increases the chances that people will like, share, and comment on it.

Trend Analysis and Insights

AI can look at social media trends to tell you what topics, hashtags, or types of material are popular right now. By making sure that their social media approach is in line with the newest conversations and trends, this trend analysis helps businesses stay current.

If AI finds a popular topic in your industry, for example, you can quickly make and share content that follows this trend, which will make you more visible and get more people to interact with

Co-funded by
the European Union

you. AI can also track how well your posts do to see what kinds of content your audience responds to the most. This lets you improve your approach over time.

Crisis Management

AI can be very helpful in handling crises by keeping an eye on social media for possible problems and sending out early warnings. AI can tell your team right away if it finds a sudden rise in negative mentions or a post that goes viral and could hurt your brand's image. This lets you act quickly and deal with the problem before it gets worse.

Crisis management that is planned ahead of time helps protect your brand's image and keep customers trusting you. With the help of AI, you can better spot and prepare for possible disasters.

Influencer Identification and Collaboration

AI can help you find influencers who are a good fit for your brand and have a big effect on the people you want to reach. AI can help you discover influencers who can effectively promote your goods or services by looking at data on social media engagement, follower demographics, and content relevance.

Working with the right influencers can help you reach more people and build your reputation, since people who follow them are more likely to believe what they say. AI can also keep an eye on how influencer efforts are doing and give information about engagement rates and ROI.

Competitor Analysis

AI can keep an eye on what your rivals are doing on social media, giving you useful information about their plans and how well they're doing. AI helps you figure out what works for your competitors by looking at their posts, engagement data, and how people respond to them. This lets you find ways to make your brand stand out.

AI can tell you, for example, what kinds of content or campaigns your rivals' users are most interested in. This lets you use similar strategies or find holes in theirs that you can fill. This information about your competitors helps you stay ahead in the market and make your social media plan better all the time.

Automated Reporting

AI can give you full reports on how well you're doing on social media, including metrics like reach, engagement, follower growth, and conversion rates. These reports help you figure out how well your social media efforts are working and where you can make changes.

Co-funded by
the European Union

For example, AI can show you which posts got the most engagement, when your audience is most busy, and what kind of people follow you the most. With this information, you can make choices based on data that will help you improve your social media strategy and get better results.

In a nutshell, AI can change how small businesses manage their social media by automating tasks, analysing sentiment, personalising content, spotting trends, handling crises, finding influencers, keeping an eye on rivals, and making reports. Businesses can improve their social media profile, connect with their audience more effectively, and stay competitive in the ever-changing social media landscape by using AI. When small businesses use AI to handle their social media, they can connect with their customers in more meaningful ways, which helps their marketing and sales efforts grow and be successful.

Good Practice Examples

Marketing – An example of social media content generation with AI form Germany

An electrical company is trying to use AI to increase its visibility and awareness on the internet by increasing its LinkedIn presence. The company uses ChatGPT for this purpose. It asked the system to formulate 12 LinkedIn posts. In order to generate the most accurate texts possible, the AI system was provided with precise and relevant company information. In addition, concrete specifications were made as to which results were expected. From this, the AI generated 12 specific texts relating to the company, which are posted on LinkedIn at weekly intervals.

Marketing and Sales – An example of streamlining marketing and sales activities with AI from Estonia

The marketing agency uses AI primarily for market research, in which the AI collects and analyses data. The Perplexity and Gemini analysis tools are primarily used for this purpose. These not only analyse the data, but also provide answers as to how companies can improve their marketing. In addition, they also provide links to statistics and sources so that the company can check the information obtained. The automation tool Zapier is also used. It is used by the company to support the development of sales funnels in order to better align the collected data with a target group. For example, users' browsing histories and purchase histories are analysed. In order to suggest interesting products to them. Data from newsletter subscribers is also analysed. This data can be sent to other advertising platforms such as Meta in order to address a similar target group and find new subscribers with a similar profile.

Marketing – An example of creating marketing materials with AI from Lithuania

Co-funded by
the European Union

The company uses AI mainly for the creation of marketing materials and website texts as well as for internal use. AI is also used to initiate a brainstorming process and collect information. But AI also supports the idea generation process by triggering creative thought processes and, in some cases, generating creative answers. The company can save a lot of time by using AI tools. Nevertheless, the company is aware that AI-generated content usually only forms the basis on which the company further penetrates, edits and adapts the content and thus develops new products and services. AI thus helps the company to kick-start the creative process and research ideas. But it does not create the end product, as the company's employees understand the business specifics and cultural nuances better than AI.

Marketing – An example of AI optimization of text for search engines from Germany

The company, which is active in the healthcare sector, uses AI with the aim of creating good texts for the company's website as well as for various search engines in order to increase the company's visibility. First, ChatGPT was asked with simple input requests which methods are used to create Wikipedia articles. ChatGPT was then used to create a text for the homepage. In addition, ChatGPT was asked to optimise the text for search engines so that the website would rank higher in the search results and users would be more likely to return to this page. With Open AI, SEO marketing for website optimisation can be replaced as a cost-effective option.

An example of social media content generation with AI form Poland

One of the best examples of AI-driven social media content generation in Poland is the work done by **K2**—a digital marketing agency that utilizes AI tools to create engaging content for brands. K2 uses AI algorithms to analyse audience behaviour and preferences, enabling the generation of personalized content tailored to specific demographics. The agency employs AI to monitor social media trends and engagement metrics, allowing for dynamic content adjustment and optimization based on what resonates most with users. K2 integrates AI tools that automate the scheduling and posting of content across various platforms, ensuring consistent engagement while freeing up time for creative strategy. This approach not only enhances content effectiveness but also allows brands to engage their audiences in a more meaningful way, making K2 a notable example of AI application in social media content generation in Poland.

https://www.k2.pl/en

An example of creating a virtual assistant from Hungary

This best practice example illustrates the development and use of a customized AI assistant that adapts to the specific needs of a company and its management. This AI assistant is

Co-funded by
the European Union

designed to integrate seamlessly with a company's existing brand, personal communication style, and knowledge base, delivering a highly personalized and efficient support tool for various business operations.

The AI assistant is equipped with a robust body of knowledge that is tailored to the individual needs of a company manager or executive. It has the capability to conduct strategic research and analysis, providing insights that can help guide decision-making at the highest level. It also assists in content creation, including the development of creative materials and social media content that aligns perfectly with the brand image and communication style of the company.

Another key function of the assistant is its ability to help with database processing, ensuring that information is managed efficiently. Moreover, it serves as a powerful tool for supporting personal branding by keeping a record of all the manager's public appearances, publications, events, and other content. This record is cross-referenced with external mentions, allowing the assistant to track who refers to the manager's content, which further strengthens personal branding efforts. All these tasks are carried out in a communication style that reflects the company's established tone, using specific expressions, phrases, and technical terms that enhance the brand's consistency across all media.

The implementation of this AI assistant is straightforward. The client simply registers for the service and is guided through the process of filling the assistant with the necessary knowledge. This includes defining the knowledge base that the assistant will work from, specifying key online sources it needs to monitor and manage, and setting the communication style and tonality that reflects the brand's voice. Once the setup is complete, the manager can interact with the assistant through a simple chat interface, allowing the AI to take on various tasks as needed.

The impact of this tool is multifaceted. It enables managers and companies to maintain a consistent brand image across all communication channels effortlessly. By automating tasks such as content creation, research, and database management, the AI frees up significant time for executives, allowing them to focus on higher-level strategic initiatives. The personalized nature of the assistant also ensures that all output aligns perfectly with the company's brand and the manager's personal communication style.

One potential hurdle in the implementation of this AI assistant is the initial setup. Companies need to invest time in thoroughly populating the assistant's knowledge base and clearly defining the communication style. Additionally, there might be a learning curve for users unfamiliar with AI tools. However, once set up, the system is designed to be intuitive and user-friendly, minimizing long-term challenges.

Co-funded by
the European Union

The benefits of this AI assistant are extensive. It provides time-saving automation for routine tasks, ensures brand consistency across all communications, and enhances the company's ability to engage with its audience through personalized content. By maintaining an accurate record of the manager's public engagements and external references, it also strengthens personal branding efforts, allowing executives to build a cohesive professional identity. Overall, this AI assistant offers a powerful tool for enhancing both operational efficiency and brand presence in the market.

Co-funded by
the European Union

AI for process optimization and automation

Automating repetitive tasks

Automating tasks that are done over and over can be very helpful for small businesses. Businesses can save time, cut down on mistakes, and free up workers to work on more important tasks by using AI to do these jobs.

Streamlining Administrative Tasks

Administrative work is one of the parts of having a business that takes the most time. These tasks include setting up meetings, answering emails, and doing paperwork. By automating different administrative chores, AI can make these tasks easier to do. For instance, virtual assistants that are powered by AI can set up meetings, send reminders, and handle calendars. Routine jobs can be done by these assistants with little help from a person, making sure that things run smoothly and quickly.

AI can also handle emails by sorting and prioritising them, answering common questions, and marking important emails as ones that need to be followed up on. This automation makes things easier for workers, so they can focus on jobs that need their creativity and judgement.

Document Management

It can take a lot of time to keep track of papers like contracts, reports, and compliance records. AI can make managing documents easier by automatically sorting, saving, and finding documents based on rules that have already been set. This keeps important papers in order and makes them easy to find, which cuts down on the time spent looking for information.

AI can also automate the process of reviewing and signing off on papers, making sure that all the necessary approvals are given quickly and easily. AI can, for example, send documents to the right people, keep track of their review state, and send reminders for approvals that are still due.

Quality Control

AI can automate quality control processes in manufacturing and production settings by checking goods for flaws and making sure they meet quality standards. AI-powered systems can look at pictures or data from production lines, finding any differences from the norm and marking them as things that need more research.

This automation makes quality control more accurate and consistent, which lowers the chance that customers will get bad goods. Also, businesses can find and fix quality problems early on, which cuts down on waste and raises the total quality of the product.

Co-funded by
the European Union

Data entry

SMEs need to enter data all the time, but it can be hard to do. For keeping business records, handling customer information, and making sure things run smoothly, it's important to enter data correctly. However, entering data by hand can be error-prone and take a lot of time. AI can completely change data entry by automating tasks, cutting down on mistakes, and giving up time for more important tasks.

AI for Reducing Manual Data Entry Errors

When people enter data by hand, they can make mistakes like typing mistakes, copying, and forgetting to include information. Because of these mistakes, records may not be correct, finances may not match up, and bad business choices may be made. By streamlining the data entry process, AI can cut down on these mistakes by a large amount.

Systems that are driven by AI use complex algorithms to accurately get and enter data. Optical Character Recognition technology, for instance, lets AI read and change different kinds of documents—like scanned paper documents, PDFs, or images—into data that can be searched and changed. This technology can correctly read data from forms, invoices, and receipts, so mistakes that happen when data is entered by hand are less likely to happen.

AI can also check data in real time to make sure that the information being entered fits criteria and formats that have already been set. If mistakes are found, the system can either mark them so that someone can look them over or fix them on its own. This process of constant validation helps keep data correct and honest.

Customer Information Management

Keeping correct information on customers is important for providing great service and making marketing more targeted. AI can make it easier to add and change customer information. AI can, for instance, take information from emails, chat messages, or online forms that you exchange with customers and update their accounts automatically in your CRM system. This makes sure that records of customers are always up-to-date and full, which makes contact and marketing more effective.

Real-Time Data Processing

AI makes real-time data processing possible, which means that data can be added and changed right away. Businesses that need up-to-date information to make decisions will benefit the most from this feature. Real-time data entry, for instance, lets you keep track of sales, handle inventory, and keep records of all interactions with customers right up to the minute.

Co-funded by
the European Union

Because it happens right away, businesses always have access to the most up-to-date information, which lets them adapt to changes and make quick choices.

Customizable Solutions

Data entry tools that use AI can be changed to fit the needs of different small businesses. No matter what part of a business needs to be automated—financial data, customer information, product management, or something else—AI systems can be changed to fit the needs of the business. This adaptability makes sure that AI solutions give each business the most value and efficiency.

To sum up, AI can completely change the way small businesses enter data by handling tasks, cutting down on mistakes, making data safer, and raising efficiency and output. Businesses can make sure their records are correct and up to date by using AI for data entry. This helps them make better choices and run their businesses more efficiently. This automation not only saves time and makes administrative tasks easier for workers, but it also frees up small businesses to focus on activities that lead to growth and success. SMEs that want to improve their processes and stay competitive in today's fast-paced business world must start using AI for data entry.

Product Innovation

SMEs need to come up with new products in order to grow and stay competitive. AI can completely change how products are made and designed, making research and development (R&D) better and fostering new ideas. SMEs can stay ahead of the competition, make better products faster, and better meet customer wants by using AI.

Design Optimization

AI can look at huge amounts of data to find the best design factors and suggest ways to make things better. For example, AI can look at different versions of a design and guess how well they will work by using past data and computer simulations. In turn, this helps designers improve their ideas and make goods that are better at what they do and look better too.

For instance, AI can help make products more comfortable and easier to use by looking at data about how people interact with them and offering changes that make the products better. In the same way, AI can improve the process of choosing materials by comparing the costs and properties of different materials. This way, the finished product will meet performance standards and stay within budget.

Rapid Prototyping

Co-funded by
the European Union

Making real prototypes can take a lot of time and cost a lot of money. By making virtual prototypes and models, AI can speed up the prototyping process. Because these virtual models can be tried and improved quickly, there is no need for many physical prototypes.

AI can use computer-aided design (CAD) software to make 3D models of goods that are very detailed. After that, these models can be put through virtual stress tests, thermal analysis, and other exercises to see how well they work. SMEs can find and fix possible problems quickly with this iteration method, which saves them time and resources.

Personalized Products

AI makes it possible to make customised goods that meet the needs of each customer. AI can find trends and preferences by looking at customer data. This lets businesses make goods that are more relevant to their target audience.

AI can look for example at things like customer reviews and past purchases to figure out which features or design elements people like best. This information can be used to make personalised versions of products or suggest changes that can be made during the buying process. This amount of customisation makes customers happier, which can lead to more sales and loyalty.

Data-Driven Insights

For R&D, you have to look at big sets of data to find patterns, trends, and connections. AI can do this analysis automatically, giving researchers quick and correct information they can use. AI can look at market data to find new trends and customer wants, which can then be used to guide the creation of new products that take advantage of these chances.

In the pharmaceutical business for example, AI can look at biological data to find possible drug candidates and guess how well they will work. This speeds up the process of finding new drugs and raises the chances of success.

Automating Routine Tasks

R&D jobs like data entry, literature reviews, and experiment documentation are often done over and over again and take a lot of time. These jobs can be done automatically by AI, which frees up workers to work on more difficult and creative projects.

AI can, for instance, search scientific literature and pull out important information automatically. This makes sure that researchers can get the newest information and keep up with the latest changes in their area. AI can also automatically record information about experiments, making sure that notes are correct and up to date.

Facilitating Collaboration

Co-funded by
the European Union

AI can help R&D teams work together better by giving them tools for communicating, sharing data, and managing projects. AI-powered platforms, for example, can make real-time collaboration easier by letting team members share data, insights, and changes without any problems.

AI can also help people from different fields work together by combining data from those fields and giving a full picture of research projects. This encourages new ideas by letting experts use a range of skills and points of view.

Accelerating Innovation Cycles

AI can speed up the innovation process by predicting how R&D projects will turn out and suggesting the most interesting areas to explore. AI can figure out which projects are most likely to succeed by looking at past data and current study trends. It can then suggest how resources should be allocated based on these findings.

AI can, for instance, guess how likely it is that different product ideas will be successful by looking at data from past projects and the market. This helps companies focus their efforts and put money into the most potential ideas, which lowers the risk of failure and speeds up the time it takes to get a product to market.

Cost Reduction

AI can help lower the costs of coming up with new products by making the best use of resources and reducing inefficiency. AI can look at the costs of things like materials, labour, and production methods to find ways to cut costs without lowering quality.

AI can improve industrial processes by figuring out when maintenance is needed and reducing downtime. This keeps machines running smoothly and lowers the costs of fixing and fixing up machines that break down without warning.

Predictive Maintenance

AI can also help make new products by letting repair be planned ahead of time. AI can figure out when equipment is likely to break down and suggest repairs before they happen by looking at data from sensors and IoT devices. This proactive method cuts down on downtime and makes machines last longer, which keeps production running smoothly.

AI can, for example, keep an eye on how well production equipment is working and spot signs of damage. Businesses can avoid expensive downtime and keep up high levels of productivity by planning maintenance based on these predictions.

Customer Feedback Integration

Co-funded by
the European Union

AI can look at real-time customer feedback to see how goods are doing in the market and find ways to make them better. Businesses can use this continuous feedback loop to make decisions based on data and improve their goods based on what customers want and need.

AI is capable of analysing things like customer polls, online reviews, and social media comments to find themes and feelings that people have in common. This information can be used to make sure that product updates, feature additions, and new product creation meet customer needs.

To sum up, AI can help small businesses come up with new products by making product design and development better, speeding up research and development, and letting them make quick prototypes and customise them. AI-powered insights, automation, and teamwork tools shorten the time it takes to come up with new ideas, cut costs, and raise the chances of success. SMEs can stay competitive in the market, make better products faster, and better meet customer wants by using AI to help them come up with new products. Small and medium-sized businesses can drive innovation, improve their processes, and achieve long-term success by embracing AI.

Good Practice Examples

Process optimisation and automation – An example of AI supported planning in food production from Germany

The example considered here is a company that produces antipasti. Production has been subject to strong fluctuations for years. When major customers such as large food chains placed orders due to special sales promotions, the company had to deliver quickly. This led to conflicts within the company. While the sales department celebrated the large order, the production manager was concerned about whether sufficient resources and capacities were available. Machine running times had to be extended and overtime ordered at short notice, negotiations with suppliers had to be held at short notice to increase the quantity of pre-products supplied and logistics had to be reorganised. In this situation, the company considered what it could do to better forecast these recurring situations and thus better absorb them.

Firstly, the company's management team was made aware that AI tools could alleviate production and delivery bottlenecks. Together with a consultant, they considered this:

- What is the data situation in the company?
- Which internal and external data is available and in what form
- How can we use this data?

Co-funded by
the European Union

As the company has always collected both internal data and data on global developments, such as the yield of harvests in the countries of its supplier companies or the price development of supplier products, the company had a good data situation. This provided a good basis for feeding AI tools with the relevant data and linking them together. In addition, cross-process information that influences the purchasing behaviour of consumers was also taken into account. One aspect, for example, is the weather - as soon as the weather improves, people start barbecuing and also buy antipasti. Other aspects are public holidays, school holidays, etc.

The AI tools learn how to handle this data, analyse it and link it to forecast specific production requirements. This makes it easier for food producers and retailers to predict when major sales promotions will take place or when consumer behaviour will change.

However, the data-processed results are not yet sufficient for the successful use of AI systems. Employees must be involved at an early stage, as a lack of acceptance jeopardises implementation. This is because the use of software can also mean that a benchmark between individual areas/shifts and branches is now possible. There is greater scrutiny of which production line, which product is produced when and in what quality. This transparency - also of performance - can lead to defensive behaviour on the part of employees. In the company described, this was resolved by offering employees additional benefits.

Process optimisation and automation – An example of AI optimisation of courier services from Poland

To increase the efficiency of courier journeys, the InPost AI system collects multiple data points along a given route, such as updates from traffic cameras, road utilisation, road conditions, vehicle capacity, weather conditions, delivery locations and parcel sizes, and is used to generate routes in real-time delivery scenarios. These algorithms are dynamic, continuously learning and evolving based on new data, refining their recommendations over time.

This saves the company costs, e.g. by improving fuel efficiency, shortening journey times and optimising vehicle utilisation, and increases customer satisfaction through faster delivery and shipment tracking.

Also, InPost parcel lockers offer a convenient option for sending and receiving packages. The company provides label-free shipping and package tracking options. Customer service is supported by artificial intelligence (AI). The InPost app allows users to remotely open a locker and access a shipment archive. AI can analyse order history and, based on this, recommend similar offers to customers via email. The option to ask questions online allows users to receive quick responses without the need to call and wait on a helpline. A new feature for sending packages via chat is also expected to be introduced soon.

Co-funded by
the European Union

Automating repetitive tasks – An example from Lithuania

Tedious and repetitive tasks tire employees and lead to errors. The use of AI can make these work processes easier for employees or even completely eliminate them by automating them. Companies use AI for serial letters and similar tasks, for example.

Process optimisation and automation – An example of AI optimisation from Lithuania

By leveraging advanced services in the field, including AI and machine learning, optimization, RPA, and more, «twoday» help reduce errors, improve operations, boost productivity, save time, and cut down costs. AI algorithms and machine learning models provide invaluable insights, steering decision-making towards better outcomes.

To maximize the value of process optimization, twoday offers a comprehensive approach that includes process discovery, mapping, categorization, and implementation of changes. By evaluating efforts, standardizing processes, and reflecting on problem-solving, they ensure a continuous improvement cycle.

https://www.twoday.lt/

Novel artificial intelligence and robotics solutions – an example from Estonia

As the first company in the Estonian food industry, Nõo Meat Factory, together with the Institute of Computer Science at the University of Tartu, started testing novel artificial intelligence and robotics solutions that would help optimise production and improve product quality control (link to the article is here: AIRE - University of Tartu to help Nõo Meat Factory use artificial intelligence in production (aire-edih.eu)).

The cooperation project between the Nõo Meat Factory and the Institute of Computer Science at the University of Tartu was selected in the AI & Robotics Estonia (AIRE) partner network. Together, possibilities for using artificial intelligence to perform quality control on the production line will be identified. Participation in a demonstration project will allow manufacturing companies to test artificial intelligence and robotics solutions before investing, thereby encouraging further investment in the technology. Project results are expected by the end of the year.

“For the food industry, the digitalisation of production is inevitable if we want to expand into foreign markets, optimise costs and make production more efficient,” said Ragnar Loova, CEO of Nõo Meat Factory, about the desire to test artificial intelligence. According to him, Nõo Meat Factory has invested more and more in innovation and automation in recent years to come up with innovative products and more sustainable packaging. This has been driven by the

Co-funded by
the European Union

economic situation, environmental requirements and consumer opportunities and expectations.

According to Ardi Tampuu, Lecturer of Artifical Intelligence at the Institute of Computer Science, machine learning technologies are mature enough to be used in industry to monitor processes and detect errors. “I believe that thanks to open-source models, machine learning solutions will soon be as accessible as websites. It is just a matter of slightly adapting existing tools based on use cases and packaging them correctly for the user,” said Tampuu. According to him, the demo project is a good way to demonstrate the availability of the technology.

AI & Robotics Estonia or AIRE is co-funded by the EU Digital Europe Programme and the Ministry of Economic Affairs and Communications.

Nõo Meat Factory is the largest and most innovative meat factory based on domestic capital. The company employs more than 200 people, making it one of the most important employers and promoters of local community life in South Estonia. In 2021, Nõo Meat Factory received the title of Family Business of the Year at the Estonian Best Companies competition organised by Enterprise Estonia, the Estonian Chamber of Commerce and Industry, and the Estonian Employers’ Confederation.

Product Innovation – AI for Digital Desing an Example from Poland

Triflex is a chemical company specializing in liquid materials. It provides sealing solutions for balconies, multi-story car parks, and underground garages. The company offers maintenance and operational solutions, as well as special projects.

Triflex employs digital tools in the form of a design assistant targeted at both contractors and architects. In the application, clients have the opportunity to receive a realistic visualization of their projects. The website also features a digital search tool that allows users to find the system that best matches their chosen project.

https://www.triflex.com/pl/narzedzia-triflex

Product Innovation – AI for Medical Diagnostics an Example from Poland

Infermedica develops AI-based systems to support medical diagnostics. Their flagship product, Symptom Checker, analyzes patients' health data, including symptoms and medical history, to suggest possible diagnoses and recommend a doctor's visit. The system is also integrated with telemedicine platforms.

The artificial intelligence at Infermedica is based on machine learning, text analysis, and natural language processing (NLP).

www.infermedica.com/pl

Co-funded by
the European Union

Process optimisation and automation – An example of AI optimisation from Hungary

LogiNet Systems is a Hungarian-owned digital software development agency specialized in e-commerce business planning, development, and integration with outstanding AI technological knowledge.

Example: Automatic data upload for Unicatalog startup.

Company activity: browse promotions and set up action alerts in Unicatalog's app, Action Hunter.

Projects designed after consultations:

- Automatic segmentation of customers.
- Loading promotional catalogues with AI-based image processing.

Results:

- Uploading of products has increased 4x faster.
- Due to this, the previous team of 5 people was replaced by 1 person.
- Costs have been reduced by 75%.
- The work is no longer data entry, but data verification.
- The accuracy of the data in the application has improved significantly.

https://www.loginet.hu/en/services/ai-business-process-optimization-solutions

Co-funded by
the European Union

AI for customer service and support

Chat Bots

Customer service is important for all businesses, but it's especially important for SMEs that want to build and keep good customer relationships. AI-powered chatbots can change the way customer service is done by providing help 24 hours a day, seven days a week, improving interactions with customers, and providing many other benefits that are specific to the needs of small businesses.

AI Chatbots for 24/7 Customer Support

Having the ability to help customers around the clock is one of the best things about AI robots. Chatbots can work non-stop without getting tired, unlike human workers who need breaks and can only work certain hours. This makes sure that people can always get help, even when the business isn't open.

One example is that if a customer has a question about a product late at night, a robot can answer them right away. This quick reaction makes customers happier and makes sure that all questions are answered quickly, no matter when they are asked. SMEs can compete with bigger companies that have more customer service resources if they offer help 24 hours a day, seven days a week.

Enhancing Customer Interaction

AI robots can make interactions with customers a lot better by responding quickly, correctly, and in a way that is unique to each customer. Chatbots can understand and answer customer questions by using natural language processing (NLP) and machine learning techniques to figure out what they mean.

For example, if a customer has a problem with a product or service, a robot can walk them through the steps to fix it. It can also help people find their way around a website, make a purchase, or find specific information. This amount of help makes things easier and more enjoyable for the customer, which makes them happier and more loyal.

Personalized Customer Experience

AI robots can give each customer a more personalised experience by responding in a way that is based on information from past conversations. For instance, if a customer asks a chatbot a lot about certain goods or services, it can give them more information about those topics when they talk to it again.

Co-funded by
the European Union

Chatbots can also use information about their customers to make personalised suggestions. For example, if a customer has already bought running shoes, the chatbot can offer other items that would go well with them, such as running socks or fitness gear. Customers will feel valued and understood when they are personalised, which makes them more likely to buy from you again.

Handling High Volumes of Inquiries

During busy times or special sales, customer service teams may get too many questions to answer. Conversational AI chatbots can handle a lot of customer interactions at once, so no one has to wait for an answer.

During a holiday sale, for example, a SME might get hundreds of questions about what products are available, how long they take to ship, and how to get discounts. A chatbot can handle these questions quickly and effectively, giving immediate answers and freeing up human agents to deal with more difficult or sensitive problems.

Consistent and Accurate Information

For trust and confidence to grow, customer service must be consistent. AI chatbots get their information from a central collection of knowledge, so it is always correct. This makes sure that all customers, no matter who they talk to, get the same high-quality answers.

For example, if a customer asks about return policies, the robot can give them the exact information they need based on the most recent company rules. This lowers the chance of misunderstandings or false information, which makes the whole experience better for the customer.

Cost-Effective Solution

It can be expensive for small businesses with limited funds to hire and train a big customer service team. AI chatbots are a cheaper option because they can handle routine tasks and questions on their own. This means that businesses don't have to hire as many people and can better use their resources.

Using a chatbot can also cut down on operational costs related to customer service, like the cost of running a call centre and paying human workers extra hours. Chatbots help small businesses keep up high levels of customer service without spending a lot of money by answering a lot of questions automatically.

Seamless Integration with Other Systems

Co-funded by
the European Union

AI chatbots can work with other business systems like e-commerce platforms, CRM software, and software for managing goods. With this integration, chatbots can get to real-time data and give people correct information.

If a customer asks about the state of their order, for example, the chatbot can get the most up-to-date information from the inventory management system and let them know. This real-time access makes sure that customers get correct answers quickly, which improves their experience generally.

Learning and Improvement Over Time

AI chatbots use machine learning techniques to keep learning and getting better. Chatbots can find patterns and improve their responses by looking at interactions and comments. This process of continuous learning makes sure that robots get better over time, which means they can serve customers better.

For example, if the robot notices that customers ask a lot about a certain topic, it can change the way it answers those questions to better address those concerns. Because they are flexible, chatbots are a good long-term investment for small businesses that want to improve their customer service.

Handling Multiple Languages

Language barriers can make customer service hard for small businesses that work in different areas. AI chatbots can understand more than one language, so they can help people in the language they prefer. This openness makes things easier to get to and makes sure that all customers get the help they need.

A robot can, for instance, change between English, Spanish, and French based on what the customer wants. SMEs can better serve customers around the world and grow into new markets when they can speak more than one language.

To summarise, AI robots can help small businesses with customer service and support in many ways. They offer help 24 hours a day, seven days a week, improve interactions with customers, make situations more personal, handle a lot of questions, and give consistent, correct information. Chatbots are also a cheap option that works well with other business systems and is always learning and getting better. Businesses of all sizes can improve their customer service, make customers happier, and compete better in the market by using AI robots. When small businesses use AI for customer service, they can build stronger ties with customers and be successful in the long run.

Co-funded by
the European Union

AI tools for customer service agents

AI chatbots can answer a lot of customer questions on their own, but AI tools can also make human customer service workers much better at what they do. SMEs can be more productive, accurate, and improve customer satisfaction with these tools. AI can change how customer service works through contributing to the work of staff members, by assisting them in real time, and making it easier to find information.

AI for Assisting Human Agents

Human agents can be assisted by AI tools that give them the knowledge and help they need to better solve customer problems. These tools can help with complicated questions that need a human touch. They also make sure that workers have all the tools they need to give great service.

AI can look at customer data, for instance, to give agents a full picture of the customer's background, preferences, and past interactions. This knowledge helps agents figure out what the question is about and give more appropriate answers. AI can also suggest appropriate answers or actions based on the nature of the question, which cuts down on the time agents need to spend looking for information.

Real-Time Assistance

One of the best things about AI tools for customer service reps is that they let them help people right away. AI can watch live conversations with customers and give workers advice in real time, which helps them solve problems more quickly and correctly.

For example, when a customer calls for technical help, AI can give the agent step-by-step instructions on how to fix the problem based on what the customer says. This real-time advice makes sure that agents can give correct answers without having to look at multiple sources or take the problem to a higher level of support.

Information Retrieval

Quickly answering customer questions requires quickly getting the information you need. AI tools can speed up this process by quickly getting the information they need from different sources and knowledge bases. This feature is especially helpful for small businesses that may not have a lot of money or time to wait for an answer.

For instance, AI can sort and look through a lot of documents, manuals, and frequently asked questions (FAQs) to find the exact information that is needed to answer a customer's question. This quick access to information cuts down on the time workers have to spend looking for answers, so they can focus on providing great service.

Co-funded by
the European Union

Predictive Analytics for Customer Support

The predictive analytics part of AI can guess what customers will want and solve problems before they happen. AI can predict common problems and get agents ready with answers before they happen by looking at past data and finding patterns. This proactive method cuts down on the number of customer questions and helps agents solve problems faster.

For instance, if AI notices that a lot of customers are having the same technical problem after updating their software, it can let workers know about it and give them a standard way to fix it. This makes sure that workers are ready to quickly answer all the related questions.

Training and Development

AI tools can also help train and grow people who work in customer service. Over time, AI can help agents get better at their jobs by looking at exchanges and giving them feedback. This process of continuous learning makes sure that workers always know the most up-to-date information and the best ways to do things.

AI can look at things like call recordings or chat transcripts to find out where workers can improve, like their technical knowledge or how well they communicate. AI can suggest specific training programmes or tools to help agents improve their skills based on this analysis.

Workload Management

AI can help handle work by sending questions to agents based on their skills and availability. This makes sure that the most experienced agents answer customer questions, which speeds up the resolution process and makes customers happier.

For instance, AI can send questions about technical help to agents who are good at that, and questions about billing to agents who are good with money. This smart planning makes the best use of resources and makes sure that customers get help quickly and correctly.

Language Translation

Language hurdles can make customer service very hard for small businesses that do business in other countries. AI tools can translate languages in real time, so customer service reps can help people in more than one language. This openness makes the experience better for customers and lets companies service people all over the world.

As an example, if an agent gets a question in a language they don't know, AI can translate it and suggest an answer in the customer's language. This real-time translation feature makes sure that differences in language don't get in the way of good connection.

Emotional Intelligence and Sentiment Analysis

Co-funded by
the European Union

By looking at how customers feel and giving clues about their emotional state, AI tools can help customer service representatives to become more emotionally intelligent. With this feature, agents can change how they talk to customers based on how they're feeling, which makes the whole exchange better.

For instance, if AI can tell from the way a customer talks and sounds that they are angry, it can tell the helper to be more understanding and reassuring. Being aware of how a customer feels helps build trust and rapport, which leads to better satisfaction.

Automation of Routine Tasks

AI can take care of boring jobs like keeping track of conversations, updating customer records, and sending follow-up emails. This automation makes it easier for workers to do administrative tasks, so they can focus on more difficult and useful tasks.

For instance, once a customer question is answered, AI can add information about the exchange to the customer's profile and send a confirmation email. This makes sure that records are correct and up to date without workers having to enter information by hand.

To sum up, AI tools can make customer service reps for small businesses much better at what they do. AI changes how customer service works by adding to the work of human agents, helping in real time, making it easier to find information, using predictive analytics, helping with training and development, handling workloads, translating languages, and improving emotional intelligence. These tools help workers answer questions faster and more correctly, which makes customers happier and more loyal. Small businesses can provide better customer service, make the best use of their resources, and be successful in the long run in a competitive market by using AI for customer service.

Gathering customer insights

SMEs need to know what their customers want and need in order to build strong relationships with them and improve their businesses. AI can be very helpful for businesses by collecting and analysing data about their customers, which can make them happier and more loyal. SMEs can make decisions that improve their products, services, and general customer experience by using AI to look at feedback from customers.

AI for Analyzing Customer Feedback

Getting feedback from customers is one of the best ways to learn more about them. Customers give feedback in many ways, such as through polls, reviews, comments on social media, and talking to customer service directly. AI can quickly look over this feedback and find important themes and feelings that a person reading it might miss.

Co-funded by
the European Union

Text Analysis and Natural Language Processing

Natural language processing (NLP) and text analysis are two AI tools that are used to understand and sort customer input. AI can, for instance, look at survey answers to find themes and feelings that people share. It can tell if feedback is good, negative, or neutral, and it can also show exactly what customers are happy or unhappy with.

For example, if a lot of customers complain about slow arrival times, AI can mark this as a problem that keeps happening. This lets small businesses deal with the issue right away and make changes to improve the efficiency of shipping. Businesses can figure out what needs instant attention by looking for patterns in the feedback they get from customers.

Voice of the Customer Programs

Voice of the Customer (VoC) programmes can be improved by the use of AI to automatically gather and analyse customer input. The goal of VoC programmes is to collect structured customer feedback and use it to improve the whole business. AI tools can make these programmes run more smoothly by collecting feedback from many places and giving full reports.

AI can combine feedback from different sources, like customer surveys, online reviews, and help tickets, into a single dashboard. Businesses can keep an eye on important measures like Net Promoter Score (NPS) and Customer Satisfaction (CSAT) scores and see how they change over time with this centralised view. When small businesses know how their customers feel, they can make smart choices about how to improve their products and services.

Proactive Customer Engagement

AI can also help businesses be more proactive with their customers by predicting their needs and dealing with possible problems before they get worse. AI can figure out when a customer might need help or support by looking at their past behaviour and interactions.

For instance, if AI notices that a customer has been having repeated problems with a product, it can make the customer service team reach out to them right away. This proactive method shows that you care about your customers and can keep small problems from becoming big complaints. Businesses can build trust and stronger ties with their customers by actively involving them.

Enhancing Product and Service Offerings

Often, customer feedback can help you figure out how to make goods and services better. AI can pull out these insights and make suggestions for how to improve offers that can be put into

Co-funded by
the European Union

action. This process of continuous growth makes sure that companies keep up with what their customers want and need.

For example, AI can look at customer feedback about the release of a new product and figure out which features customers like or dislike. By adding improvements that address customer pain points, the company can then use this knowledge to make the product better. SMEs can make goods and services that really meet customer needs by iterating based on what they learn from customers.

Customer Journey Mapping

By looking at data from different touchpoints, AI can help businesses to map the customer path. By understanding the customer journey, you can see how customers connect with your brand and find places where you can make things better.

For instance, AI can keep track of all interactions with a customer from the first contact to the purchase and any help needed after the purchase. Businesses can improve the general experience for customers by figuring out the points where they are having trouble or are happy. This all-around view makes sure that all parts of the customer experience are thought about and made better.

Concluding, AI is very important for small businesses that want to collect and think about customer data. By using AI companies can learn a lot about what their customers want and need. These insights allow for direct participation, and the constant enhancement of goods and services. SMEs can improve customer happiness and loyalty by using AI to learn more about them. This leads to long-term success and growth.

Good Practice Examples

Chatbots – An example of AI supported customer service via chatbots from Hungary

In addition to the existing telephone customer service, the company introduced three chatbots. These serve to provide customers with better support in the event of technical problems or problems with services or products. To this end, all agents can access a single knowledge database with the help of the chatbots. In addition, the bots were trained to access various knowledge platforms and to communicate with different targets and target groups.

Chatbots – An example of Advanced Chatbot for B2B Platform from Poland

LIKI is an advanced chatbot utilizing technologies based on Large Language Models (LLM) that optimizes search results through intelligent analysis of user conversations. This solution contributes to increased customer service efficiency and personalization of user experiences.

Co-funded by
the European Union

The chatbot employs advanced machine learning algorithms and natural language processing (NLP) to analyse and understand queries posed by users in natural language. Based on this analysis, the chatbot can adjust search results and product or service recommendations, making them more relevant and tailored to individual user needs and preferences.

The development of this chatbot begins with collecting and analysing large datasets regarding user interactions to train LLM models based on real usage scenarios. This process also includes continuous testing and adjustment of algorithms to ensure the highest possible accuracy and effectiveness of the chatbot's responses.

https://ai4msp.pl/ai-use-case/zaawansowany-chatbot-na-platformie-b2b/

AI for customer service and support – An example of AI improved customer service from Estonia

On the LHV Pank Facebook page message app, all questions from clients are now answered by the chatbot Uku. Uku is an innovative virtual assistant, based on machine learning, who is capable of answering simple and frequently asked questions. For instance, the chatbot is well-versed in the locations of LHV's automated teller machines or when interbank transactions are performed. Now, LHV's client support agents have more time to answer more complicated questions and go into greater depth with problems that need to be solved.

LHV is the first bank in Estonia to trust online communication to a chatbot; it is also one of the more developed technologies in Estonia attempting to answer more complicated and open questions.

The chatbot is an innovative client service solution where questions can be posed in a manner similar to chatting with a human. The solution uses different machine learning algorithms and technologies to provide the best possible answers to clients.

AI for public service and support – An example of AI improved customer service from Estonia

The idea of Bürokratt is to allow citizens to have access to any public service needed (and potentially to relevant private services of interest) through one single communication channel and from any device thanks to one virtual assistant. Bürokratt is meant to be an interoperable network of public sector agencies attached to national information communication systems, as well as those provided by the private sector, that will be made accessible via one single chatbot. This chatbot will use voice-based communication and other channels, such as instant messages, and will provide a seamless access point. The solution will be mainly based on Natural Language Processing adding "Machine Learning processing chains" with different algorithms and it is being trained using two third-party solutions - the RASA NLP/Chatbot

Co-funded by the European Union

framework3 and the BookStack platform4. It will be built inside the national cloud, using the state authentication service. This will ensure user data protection when processing data through all Estonian public administrations.

https://www.kratid.ee/en/burokratt

Chatbots – An example of AI Assistance with banking transactions from Poland

mBank introduced a chatbot that assists customers in online banking. The chatbot uses natural language processing (NLP) technology and is capable of answering customer inquiries about their accounts, executing financial transactions, and helping to resolve issues.

Technologies: Natural language processing (NLP) and learning algorithms that enable conversation in natural language.

https://www.mbank.pl

PKO BP uses AI in its mobile application IKO to analyze transactions and detect potential fraud. The algorithms learn user behaviour patterns and identify unusual transactions based on this, allowing the bank to quickly respond to potential threats. Technologies: Machine learning-based systems that analyze data in real-time, providing immediate alerts.

www.pkobp.pl

AI for customer service and support – An example of AI improved customer post service from Poland

InPost parcel lockers offer a convenient option for sending and receiving packages. The company provides label-free shipping and package tracking options. Customer service is supported by artificial intelligence (AI). The InPost app allows users to remotely open a locker and access a shipment archive. AI can analyze order history and, based on this, recommend similar offers to customers via email. The option to ask questions online allows users to receive quick responses without the need to call and wait on a helpline. A new feature for sending packages via chat is also expected to be introduced soon.

https://inpost.pl/aktualnosci-inpost-wykorzystuje-sztuczna-inteligencje-do-obslugi-klienta

AI for customer service and support – An example of AI improved customer administrative service from Poland

mObywatel – an application created by the Scientific and Academic Computer Network (NASK)

In the app, users have a profile that contains personal data, such as their PESEL number. The app includes digital versions of various important documents such as the national ID card,

Co-funded by the European Union

driver's license, and student, school, and retiree IDs. It also provides information on fines and demerit points for traffic violations.

Moreover, users can view prescriptions issued by doctors and use the prescription code to purchase medications. The app also offers information about specific countries for those traveling abroad. Plans are underway to introduce new AI-powered features, such as a chat function. Instead of typing queries into a search engine, citizens would be able to do this directly through the app, and the chatbot could even assist with preparing official applications.

https://info.mobywatel.gov.pl/

AI for customer service and support – An example of AI improved customer service from Germany

Fressnapf, Europe's largest pet food retailer, is a very good example of how a chatbot can be used successfully in customer service. Following the product launch of the new, technically complex GPS tracker for dogs, Fressnapf was confronted with a strikingly high volume of service requests in 2021. As the product thrives on customer satisfaction, but during the coronavirus crisis there were not enough employees available to handle the service volume due to numerous restrictions, another solution had to be found.Fressnapf decided to introduce an AI chatbot, as it is able to answer any number of enquiries at the same time, even in phases of steep growth, without compromising on the quality of the answers. Based on the customer enquiries collected by the chatbot, Fressnapf can now also gather real-time insights into customer feedback and the problem areas associated with the product.

https://www.moin.ai/case-studies/ki-chatbot-fur-schnellen-und-exzellenten-first-level-support

AI for customer service and support – An example of AI improved customer administrative service from Lithuania

During this year's presidential elections, the officials from the Central Electoral Commission (Vyriausia rinkimų komisija – VRK) were not the only ones answering a variety of questions from voters, candidates, parties, and commissions across Lithuania. A couple of months ago, a smart AI-driven chatbot was deployed for VRK so it could assist with incoming queries as well. VRK reported that the top ten most popular questions asked even included the question of who to vote for. The VRK chatbot, which was launched on 18 March, has had almost 5000 visitors, 4422 conversations and 9852 messages during this period.

Once developed and deployed, the VRK chatbot was able to reduce the workload of VRK staff due to its 24/7 availability, its capacity to quickly generate answers, and its large knowledge base.

Co-funded by
the European Union

https://tilde.ai/ai-chatbot-for-vrk/

Co-funded by
the European Union

AI for supply chain management

Intelligent invoice management

SMEs need to keep track of their bills. But processing bills by hand can take a long time and be prone to mistakes, which can cause money problems or even fraud. Intelligent invoice management driven by AI can completely change this part of supply chain management by automating tasks, cutting down on mistakes, and making things safer. AI can make a difference in these ways.

AI for Automating Invoice Processing

In traditional invoice handling, data entry, verification, and approval are all done by hand, which can take a lot of time and be inefficient. AI can automate these jobs, which makes them much faster and more accurate.

Data Extraction and Entry

Optical Character Recognition (OCR) technology can be used by AI to automatically scan bills and pull-out data. This means that information like the invoice number, date, information about the seller, and amount can be recorded without any help from a person. Because of this technology, people don't have to enter data by hand as much, which saves time and cuts down on mistakes.

For instance, when a small business gets an invoice, AI can scan it, pull out the important information, and put it right into the accounting system. This smooth process makes sure that invoices are processed quickly and correctly, which helps businesses better control their money.

Verification and Validation

Invoice data can also be checked and confirmed automatically by AI. AI checks the extracted data against purchase orders, delivery receipts, and contract terms to make sure the invoice details are right and match what was agreed upon.

AI can point out problems like when the amount on a statement doesn't match the amount on a purchase order so that they can be looked into further. This computerised process checks that only correct and valid invoices are accepted for payment. This lowers the chance of overpayments or duplicate payments.

Approval Workflow

Co-funded by
the European Union

AI can speed up the process of approving invoices by sending them instantly to the right people to be reviewed and approved based on rules that have already been set. This makes sure that invoices are always handled quickly and correctly, without any delays or bottlenecks.

AI can send invoices over a certain amount to top management to be approved, while department heads can approve invoices under that amount. This automation makes sure that the right people look over the right bills. This speeds up the approval process and makes sure that everyone is responsible.

Error Detection

AI can find mistakes in billing data by comparing it to data from the past and rules that have already been set. For example, AI can flag an invoice for further research if the amount on it is very different from other invoices from the same supplier. This proactive error spotting helps keep the business from making mistakes before they hurt it.

Fraud Prevention

AI is also very useful for stopping fraud because it can spot odd behaviours and trends. So, AI can look at billing data to find oddities like duplicate invoices, amounts that are too high, or suppliers that aren't authorised. AI helps businesses to protect their money and to avoid fraud by pointing out these possible signs of fraud.

AI can tell the finance team to look into something if it finds multiple bills with the same amount and date but different invoice numbers. Because of this amount of care, fraud is less likely to happen, and only real invoices are processed and paid.

Data Security and Compliance Monitoring

Advanced encryption and access control can be used by AI systems to keep invoice data safe from hacks and people who shouldn't have access to it. AI helps businesses protect the integrity and privacy of their data by making sure that private financial data is saved and sent safely.

AI can also keep an eye on how invoices are processed to make sure they are processed in line with internal and legal rules. For instance, AI can make sure that bills have all the information they need to be tax-compliant, like tax ID numbers and legal disclaimers. This tracking of compliance helps companies stay out of trouble with the law and avoid fines.

Improving Cash Flow Management and Payment Scheduling

Managing invoices well is important for keeping cash flow healthy, which is important for small businesses to stay in business. AI can help with managing cash flow by finding the best payment plans and giving information about how well a business is doing.

Co-funded by
the European Union

AI can look at invoice data and figure out the best payment schedules based on expected cash flow and the terms of the seller. For instance, AI can find discounts that sellers offer for paying early and suggest that you take advantage of these chances to save money. On the other hand, AI can suggest delaying payments when cash flow is tight, which helps businesses better handle their money.

Financial Insights

AI can make real-time dashboards and reports that show metrics about invoice handling, like how many invoices are still open, how much have been paid, and the average time it takes to process an invoice. Businesses can use these insights to keep an eye on their finances, find problems, and make smart choices that will boost their cash flow and efficiency.

Scalability and Flexibility

Invoice management systems that use AI can be expanded and changed to fit the needs of small businesses of all kinds. As a company grows and more bills come in, AI systems can handle it without slowing down. This makes sure that small and medium-sized businesses can keep using AI technology even as they grow.

Integration with Existing Systems

AI tools for managing invoices can work with accounting and enterprise resource planning (ERP) systems that are already in place. With this integration, invoice data can easily move between systems, which cuts down on manual data entry and boosts total efficiency.

AI can, for instance, instantly synchronise invoice data with accounting software, which means that real-time financial records are kept. This connection gets rid of the need to reconcile by hand and makes sure that all financial data is always correct and up to date.

In conclusion, AI-powered intelligent invoice management has many benefits for SMEs. These benefits include automating invoice processes, lowering errors and fraud, improving security and compliance, managing cash flow better, and being scalable and flexible. When small businesses use AI to handle their invoices, they can streamline their finances, save time and money, and focus on growing their businesses. Small and medium-sized businesses can improve their supply chain management, become more efficient, and ensure their long-term success in a competitive market by using AI technology.

Sales forecasting

For small businesses, forecasting sales is an important part of managing their supply chains. Businesses can plan for demand, keep track of inventory, and make smart strategic choices when they have accurate sales forecasts. Predictive analytics are used in AI-powered sales

Co-funded by
the European Union

forecasts to give more accurate and useful information. This helps small businesses stay competitive and adapt to changes in the market.

Predictive Analytics for Demand Planning

Predictive analytics looks at past data, uses statistical methods, and uses machine learning to guess what will happen in the future. Predictive analytics can look at past sales data, market trends, and outside factors to correctly predict what people will want to buy in the future.

Historical Data Analysis

AI systems can look at sales data from years ago to find patterns and trends. Businesses can use this research to figure out seasonal changes, sales high points, and other cyclical trends that affect demand. For instance, an AI system might figure out that sales of a certain item always go up around the holidays. With this knowledge, companies can plan their inventory and staffing levels to meet the demand they expect.

Market Trends and External Factors

AI can also look at things like the economy, customer behaviour, and industry trends that happen outside of a business that affect sales. AI can give a full picture of the things that affect demand by combining data from different sources. For example, if an economic downturn is predicted, AI can change sales predictions to account for how people might spend their money differently.

Customer Behavior Analysis

AI can look at how customers act and what they buy to guess what sales will happen in the future. AI can find trends and preferences that help with planning for demand by looking at data from interactions with customers, their online activities, and their buy histories. For instance, if customers often buy certain items together, AI can guess that there will be more demand for those combos and suggest the right amount of inventory to keep on hand.

Improving Accuracy of Sales Forecasts

For supply chain management to work well, sales estimates must be accurate. AI makes sales plans more accurate by using complex algorithms and real-time data analysis to make predictions that are accurate and on time.

Machine Learning Algorithms

Machine learning systems can keep making sales predictions more accurate by taking in new data and learning from it. These programmes can find patterns and connections in data that

Co-funded by
the European Union

are too complicated for other methods to see. AI can, for example, pick up on small changes in how people act or new market trends that show how demand is changing.

Real-Time Data Integration

AI can take real-time information from many places, like sales deals, website traffic, and social media activity, and use it to constantly improve sales predictions. Businesses can quickly adapt to changes in demand because they have access to the most up-to-date information thanks to this real-time research.

For instance, if there is a quick rise in online searches for a product, which means that more people are interested, AI can change the sales forecast to reflect this. Businesses can increase production or change inventory levels to meet expected demand thanks to this timely information.

Scenario Analysis

AI can use scenario analysis to guess how different factors will affect sales. Businesses can figure out how changes in price, promotions, or market factors might affect demand by simulating different situations. Businesses can use this analysis to make smart choices about pricing, marketing efforts, and other things that affect sales.

AI can, for example, simulate how a discount offer might affect the number of sales and the amount of money made. This case analysis helps companies figure out the best way to set their prices to make the most money and boost sales.

Optimized Inventory Management

Businesses can better manage their inventory levels when they have accurate sales forecasts. This lowers the risk of running out of stock or having too much of it. Businesses can keep costs down and make sure goods are available when customers need them by making sure their inventory levels match what they think customers will want.

AI can tell which goods are likely to sell out quickly, for instance, and suggest that more of those items be kept in stock. On the other hand, AI can find goods that don't sell quickly and suggest lowering stock levels to avoid having too much inventory.

Enhanced Production Planning

Accurate sales forecasts help with better production planning, making sure that the methods used in production are in line with what people are likely to want. Businesses can avoid production bottlenecks, cut down on wait times, and work more efficiently overall with this alignment.

Co-funded by
the European Union

For example, if AI sees that demand for a certain product is going to go up, companies can start making more of it ahead of time to meet the demand. This proactive method helps businesses keep customers happy by making sure they can quickly fill orders.

Improved Financial Planning

For budgeting and planning finances, sales figures are very important. Businesses can better plan their funds, use their resources, and set realistic revenue goals when they can accurately predict future sales.

For instance, sales forecasts that are driven by AI can give accurate estimates of how much money different product lines or market segments will bring in. Businesses can use these projections to make accurate budgets, get funds, and make smart investments that will help them grow.

Strategic Decision-Making

Sales forecasting driven by AI gives businesses useful information that helps them make strategic decisions. Businesses can find growth chances, enter new markets, and make new products if they know how demand will change in the future.

For example, if AI predicts that there will be a lot of demand for eco-friendly goods, a company may decide to add more of those products to its line. This business choice fits with current market trends and sets the company up for success in a growing market segment.

Reducing Operational Costs

Businesses can cut costs by maximising resource usage and minimising waste when they have accurate sales forecasts. Businesses can run more quickly and save money by making sure that production, inventory, and staffing are all in line with what they think customers will want.

AI can, for example, tell when demand will be low and suggest that production plans be changed or staffing levels be lowered to account for it. This proactive method helps companies keep costs low and make as much money as possible.

In conclusion, AI-powered sales forecasting has many benefits for small and medium-sized businesses, such as using predictive analytics to plan for demand, making sales forecasts more accurate, and managing supplies more efficiently. Businesses can improve their production planning, financial planning, strategic decision-making, and running costs by using AI. Small businesses can better manage their supply chains, adapt to changes in the market, and be successful in the long run in a competitive environment with the help of AI-driven sales

Co-funded by
the European Union

forecasting. When small businesses use AI to predict sales, they can learn useful things, grow, and stay ahead of the competition.

Inventory management

SMEs need to be able to handle their inventory well. When businesses manage their stock levels well, they can meet customer needs without having too much stock, which wastes money, or too little stock, which can mean lost sales chances. AI-powered inventory management can greatly improve general efficiency, lower waste, and make stock levels much more optimal.

AI for Optimizing Stock Levels

AI can look at huge amounts of data to correctly predict demand and suggest the best amount of stock to keep on hand. AI can guess what will happen with sales in the future by looking at past data, current market trends, and other things that affect sales.

Demand Forecasting

One of the best things about AI for managing goods is that it can very accurately predict what people will want to buy. AI can figure out which goods will be in high demand and when by looking at sales data, market trends, and seasonal patterns. This makes sure that stores keep enough stock on hand to meet customer needs without having too much.

AI can figure out, for instance, that some goods sell more during certain times of the year, like the holidays or back-to-school times. AI helps businesses get ready for these trends by predicting them and changing their inventory levels to make sure they have enough stock to meet higher demand.

Automated Reordering

AI can simplify the reordering process by keeping an eye on inventory levels in real time and sending out purchase orders when stock drops below a certain level. This machinery makes sure that companies never run out of important goods and can keep meeting customer needs without stopping.

One example is that if a popular item's stock level goes below a certain level, the AI system can place an order with the supplier to get more of it. This cuts down on the need to track and buy things by hand, which saves time and lowers the risk of running out of stock.

Reducing Waste and Overstocking

Co-funded by
the European Union

Overstocking can waste money and time, especially when it comes to things that go bad quickly or have a short shelf life. Businesses don't have to worry about overstocking because AI can correctly predict demand and suggest the right amount of stock to keep on hand.

Inventory Optimization

AI can make the best use of goods by looking at sales data and finding items that don't move quickly. Businesses can get rid of extra inventory by figuring out which things aren't selling as well as they should. This could mean lowering prices, grouping goods together, or changing how you market things that aren't selling quickly to get people to buy them.

For instance, if AI notices that a certain product has been sitting in the warehouse for a long time, it can suggest sales efforts to get rid of the stock. This proactive method helps companies cut down on waste and make room in their warehouses for more popular items.

Shelf Life Management

Managing shelf life is very important for businesses that sell things that go bad quickly. AI can keep track of how old material is and sell items that are getting close to their expiration dates first. This makes sure that the older stock sells first, which cuts down on waste and keeps customers' products as fresh as possible.

AI can tell store managers, for example, to get people to buy things that are about to go bad by telling them to offer deals or putting them in special marketing materials. This helps make sure that goods are sold before they go bad, which cuts down on losses from spoiling.

Enhancing Supplier Relationships

AI can also help businesses get along better with their sellers by giving them information about the best times and amounts to order. Businesses can get better terms and make sure deliveries happen on time by giving correct demand forecasts to their suppliers.

Supplier Performance Analysis

AI can figure out how well a company is doing by keeping track of things like delivery times, correct orders, and product quality. It helps companies find reliable providers and choose which ones to work with by giving them accurate information.

For instance, if a supplier always delivers late or gives bad products, AI can bring these problems to light so that companies can fix them or look for other suppliers. This makes the supply line more reliable and helps keep product quality standards high.

Dynamic Pricing and Promotions

Co-funded by
the European Union

Based on product levels and predictions of demand, AI can help businesses to figure out the best prices and deals. AI can suggest dynamic pricing strategies that make the most money and keep excess stock to a minimum by looking at market factors and customer behaviour.

AI can change prices right away based on things like supply and demand, as well as the prices of competitors. For instance, if a product is in high demand but getting low, AI can raise the price to make the most money. On the other hand, if there is too much product, AI can suggest lowering prices to get people to buy.

AI can also suggest targeted sales to increase sales of certain goods. AI can figure out which deals are most likely to work for different groups of customers by looking at customer data and buying habits.

AI can suggest things like giving discounts to people who have bought similar items before or making group deals to get people to buy things that aren't selling very quickly. Businesses can get rid of extra stock and make more money with these focused promotions.

Real-Time Inventory Tracking and Centralized Inventory Management

AI lets you see in real time how much product is in different places, like stores, warehouses, and online channels. Businesses can always make better decisions when they have accurate information about their stock levels thanks to this real-time tracking.

Therefore, AI can bring together inventory data from different sources into one place, giving everyone in the supply chain a clear picture of how much stock is available. This centralised method helps companies keep track of their goods better and avoid mistakes.

AI can combine information from point-of-sale systems, warehouse management systems, and e-commerce platforms, for instance, to give a full picture of goods. This makes sure that companies can correctly keep track of their stock levels and make smart choices about reordering, allocating, and distributing goods.

Enhancing Customer Satisfaction

Businesses that handle their inventory well can meet customer needs quickly, which makes customers happier and more loyal. AI helps companies to keep the right amount of stock on hand so that goods are always available for customers when they need them.

Avoiding Stockouts

AI helps businesses avoid running out of stock by correctly predicting demand and automatically reordering. Running out of stock can cost businesses sales and make customers unhappy. Making sure that popular items are always in stock makes the shopping experience better for customers and encourages them to come back.

Co-funded by
the European Union

Personalized Inventory Management

AI can also make inventory management more personalised by suggesting goods based on what each customer likes and has bought in the past. This makes sure that stores stock things that people are likely to want, which increases the chances of making a sale.

AI can look at customer data to find trends and preferences, which helps stores stock goods that are interesting to customers. Businesses can better meet the needs of their customers and make more money with this personalised method.

In conclusion, AI-powered inventory management has many benefits for small and medium-sized businesses. These benefits include maximising stock levels, lowering waste and overstocking, improving relationships with suppliers, implementing dynamic pricing and promotions, tracking inventory in real time, and making customers happier. Businesses can improve their ability to meet customer needs, save time and money, and simplify their inventory management by using AI. When small businesses use AI to manage their inventory, they can work more efficiently, make choices based on data, and be successful in the long run in a competitive market.

Real-time risk monitoring

For small businesses to keep their supply chains strong and flexible, they need to keep an eye on risks in real time. Real-time risk tracking systems that are powered by AI can find and reduce supply chain risks, make the supply chain more resilient, and give businesses important information that helps them deal with uncertainty.

Risks in the supply chain can come from numerous sources, such as problems with suppliers, problems with logistics, natural disasters, and events in politics. AI can help SMEs to find these risks right away and take steps to lessen their effects.

Supplier Risk Analysis

AI can keep an eye on and analyse data from sources to find risks that might happen. AI can give a full picture of a supplier's dependability by looking at things like their financial security, how well they deliver, and how well they follow the rules.

For instance, AI can look at news stories, financial records, and social media posts about a supplier to find signs of trouble with their finances or operations. If AI notices that a key source is having financial problems, it can let the business know so that it can look for other suppliers or stock up on supplies to avoid problems.

Logistical Risk Monitoring

Co-funded by
the European Union

Logistics data, like shipping routes, transportation timetables, and customs rules, can be tracked by AI to find possible supply chain risks. This kind of tracking helps companies plan for and deal with logistical problems before they affect operations.

For example, AI can look at weather forecasts to figure out when shipping lines might be delayed and suggest other routes or ways to get things done. This proactive method makes sure that goods are delivered on time, which lowers the chance that there will be problems in the supply chain.

Geopolitical and Environmental Risk Assessment

AI can keep an eye on environmental and geopolitical events that could have an impact on the supply line. AI can look at data from many places, like government reports, news outlets, and aerial images, and figure out what risks might be there and how to reduce them.

For instance, if AI finds political unrest in an area where a supplier is based, it can let the business know about possible problems and suggest backup plans, like switching suppliers or stocking up on more items. In the same way, AI can keep an eye on natural events like hurricanes and earthquakes and send out early warnings to help businesses get ready and act quickly.

Enhancing Supply Chain Resilience

For small businesses to be able to handle problems and keep running, they need to build a strong supply chain. AI can make the supply chain more resilient by giving real-time information, helping people make decisions, and letting them use tactics that can change.

Real-Time Data Integration

AI can combine real-time data from many places, like sensors, IoT devices, and enterprise resource planning systems, to give a full picture of the supply chain. Businesses can quickly make smart choices when they have access to up-to-date information thanks to this integration.

AI can, for instance, keep an eye on inventory levels, work schedules, and the status of transportation all at the same time. Businesses can find possible bottlenecks, make the best use of their resources, and make sure the supply chain runs smoothly thanks to this visibility.

Dynamic Risk Mitigation Strategies

Dynamic risk reduction can be assisted by AI that suggests flexible plans based on real-time data and predictive analytics. Businesses can quickly adapt to changing conditions and lessen the effects of delays with this feature.

Co-funded by
the European Union

For example, if AI predicts that a supplier problem will cause a shortage of a key part, it can suggest other ways to get the part, change the schedule for production, or put things that can be made with available materials first. These flexible methods help companies keep going and meet customer needs even when things go wrong.

Scenario Planning and Simulation

AI can plan and run simulations to figure out how different risk situations might affect the supply chain. By simulating different situations, businesses can see how well their risk-reduction plans are working and make any changes that are needed.

Like, AI can pretend that a big supplier problem happens and see how it changes inventory levels, production schedules, and deliveries to customers. Businesses can use this research to find their weak spots, make backup plans, and make sure they are ready for any possible risks.

Proactive Risk Management

AI makes proactive risk management possible by giving early signs and insights that can be used. Businesses can take steps to lessen the effects of risks by spotting them before they happen.

For instance, AI can look at past data and find patterns that could mean there are risks, like a source that is often late or a product that consistently has quality problems. Businesses can keep their supply chains strong and less likely to break down by carefully managing these risks.

Enhancing Collaboration and Communication through Centralized Risk Management Platform

Managing supply chain risks requires people to work together and to talk to each other well. AI can help people work together better by giving them a central place to share knowledge and plan responses.

AI can create a central location for managing risks, letting companies share information, ideas, and plans with everyone in the supply chain. This tool makes it easy to communicate and work together in real time, making sure that everyone is on the same page and up to date.

For instance, if a possible risk is found, the AI platform can let the right people know, like production teams, suppliers, and transportation providers. This coordinated reaction helps businesses deal with risks better and keep their operations running.

Supplier Collaboration

Co-funded by
the European Union

Additionally, AI can improve working together with providers by making possible risks clearer and helping both parties to reduce those risks. Businesses can work together to deal with risks and make sure the supply chain is strong by sharing data and ideas with their suppliers.

AI can give suppliers real-time information about things like predicted demand, production schedules, and stock amounts, for example. This knowledge helps suppliers better plan their operations so that they are in line with the company's plans to reduce risk.

Continuous Improvement and Learning

AI helps learning and continuous growth by looking at past risk events and finding ways to make things better. Over time, this ongoing study helps companies improve how they handle risks and make their supply chains stronger.

Post-Event Analysis

AI can look at how people responded to a risk event and find ways to make things better. Businesses can learn from the event and improve their risk management by looking at how well their mitigation methods worked and how bad the event was.

For instance, if a problem in the supply chain causes orders to customers to be late, AI can figure out why this happened and suggest changes that will stop it from happening again. Businesses will be better prepared for future risks thanks to this process of ongoing learning.

Adaptive Learning Algorithms

AI uses adaptive learning systems that keep getting better as they get new information and feedback. These algorithms make sure that methods for managing risk keep working and can adapt to new situations.

For example, AI can improve its risk predictions and suggestions as it gets more information about how well suppliers are doing, problems with logistics, and events in geopolitics. This ability to change helps companies stay ahead of possible risks and keep their supply chains strong.

In conclusion, real-time risk tracking powered by AI has many benefits for small and medium-sized businesses. These benefits include finding and reducing supply chain risks, making the supply chain more resilient, supporting proactive risk management, and making it easier for people to work together and keep getting better. Businesses can better deal with uncertainty, keep operations running smoothly, and ensure long-term success in a competitive market by using AI for real-time risk tracking. Small businesses can build a strong and flexible supply chain that can handle problems and adjust to new circumstances by using AI technology.

Co-funded by
the European Union

Good Practice Examples

Application example for artificial intelligence in logistics in Germany

HHLA container transporters always follow the same routes in the port terminal. AI optimizes the routes and calculates how parked containers make the best use of the space. At Burchardkai terminal, AI predicts which mode of transport is most likely to be used to deliver the boxes. As part of the COOKIE project “Container Services Optimized by Artificial Intelligence” AI is to detect damage to containers more quickly. At HHLA subsidiary Metrans, digital twins allow the automated inspection of more than 100 different conditions and damage to freight wagons. The HHLA rail subsidiary Metrans wants to use artificial intelligence in train dispatch to automatically check more than 100 different conditions and damage to freight wagons. This will identify damage more quickly and trains will be back on the rails sooner. The more efficient use of technology and the associated conservation of resources will, of course, also contribute to the desired climate neutrality in the end.

https://hhla.de/en/innovation/artificial-intelligence-in-logistics

An examples of AI improved supply chain from Poland

The company Procter & Gamble uses AI algorithms to analyze historical sales data, current market trends, and external factors. This allows it to accurately predict future demand for its products, enabling better production planning and inventory management.

P&G also uses machine learning to optimize transport schedules. Such dynamic route planning reduces driver downtime.

Another example is the courier company UPS, which implemented the AI-based ORION (On-Road Integrated Optimization and Navigation) system to optimize routes. Analyzing data on traffic, weather conditions, and other factors, ORION daily sets efficient routes for 66,000 UPS vehicles. This way, the company saves millions of dollars on fuel annually.

Artificial intelligence also improves demand forecasting, inventory management, production planning, warehouse automation, and customer service. AI algorithms analyze data from various sources, detecting trends and relationships invisible to the naked eye. This allows for good decision-making in a dynamically changing supply chain environment.

https://pl.pg.com/

An examples of AI improved supply chain from Estonia

DigiLogistika Keskus (Digital Logistics Centre of Excellence), a visionary organization founded and led by Mering Heiti . With over 30 years of experience in logistics and information systems,

Co-funded by
the European Union

Mering has been instrumental in transforming Estonia's logistics infrastructure into a model of efficiency and innovation. His work began with the development of a wagon information system for Estonian Railways and has since evolved into a broader effort to digitize logistics processes across Europe through initiatives like the Single Window Estonian project.

https://www.dlk.ee/

An examples of AI improved supply chain from Lithuania

One of the standout cases of AI in supply chain management in Lithuania is the Maxima Group. As one of the largest retail chains in the Baltic region, Maxima has implemented AI technologies to optimize its supply chain operations significantly.

Key Highlights:

- Demand Forecasting: Maxima employs AI algorithms to analyze sales data and predict future demand more accurately. This helps the company optimize inventory levels and reduce stockouts.
- Inventory Management: The use of AI tools allows for better tracking of inventory across their various stores, leading to improved stock management and reduced waste.
- Supply Chain Optimization: By leveraging AI for logistics planning, Maxima can optimize transportation routes and schedules, which reduces costs and improves delivery efficiency.
- Customer Insights: AI analytics are used to understand customer preferences and shopping patterns, enabling more tailored product offerings and promotions.

https://www.maximagrupe.eu/en/

An examples of AI improved supply chain from Hungary

One of the best examples of AI in supply chain management in Hungary is **MOL Group**, a leading oil and gas company. MOL Group utilizes AI for predictive analytics to forecast demand for fuel and other products, allowing for more accurate planning and inventory management. AI-driven algorithms optimize transportation routes and schedules for product distribution, reducing fuel consumption and improving delivery efficiency. By analyzing large sets of data, MOL Group can streamline operations and make data-driven decisions that enhance overall supply chain performance.

https://molgroup.info/en

Co-funded by the European Union

AI for Financial Management

Financial Forecasting

Financial forecasting is an important part of small businesses' financial management. Businesses can plan their budgets, make good strategic choices, and allocate resources efficiently when they have accurate financial forecasts. Advanced algorithms and predictive analytics are used in AI-powered financial forecasts to give more accurate and useful information. By automating data gathering, analysis, and projection, AI can make budgeting and forecasting a lot better. This technology not only saves time but also makes financial forecasts more accurate, which helps small businesses better plan their money.

Automated Data Collection and Integration

One of the best things about AI for financial forecasting is that it can easily gather and combine data from different sources. AI can get financial data from accounting software, bank statements, sales records, and other sources that are important. This makes sure that the forecasting process is built on complete and up-to-date data.

AI can, for instance, take transaction data from bank statements and match it with items in the accounting system which correspond. This smooth connection makes sure that all financial information is recorded correctly and is easy to access for analysis.

Revenue and Expense Forecasting

Predictive analytics looks at past data, uses statistical methods, and uses machine learning to guess what will happen in the future with money. Predictive analytics can look at past market trends, financial performance, and other things that affect forecasting to make accurate predictions.

AI can look at past data on income and expenses to guess how well a business will do in the future. By looking for patterns and trends in old data, AI can very accurately predict how much money will be made and spent in the future. This helps companies make budgets and financial plans that are reasonable.

For example, AI can look at sales data to guess how much money a business will make each month, taking into account things like yearly changes, market trends, and marketing campaigns. In the same way, AI can guess how much money you will spend in the future by looking at how much you have spent in the past and how much you think costs will change, like when suppliers raise prices or when energy rates change.

Cash Flow Forecasting

Co-funded by
the European Union

SMEs need to be able to handle their cash flow well in order to stay in business. AI can help with cash flow projections by figuring out how much money will come in and go out in the future based on past data and current financial trends. This accurate planning helps companies keep enough cash on hand and avoid liquidity problems.

AI can predict cash flow by looking at things like expected payments from customers, future invoices from suppliers, payroll costs, and other financial obligations. Businesses can plan for possible shortfalls and take proactive steps to keep financial stability with this full picture of cash flow.

Scenario Planning and Sensitivity Analysis

AI can do scenario planning and sensitivity analysis to figure out how different factors might affect a company's financial performance. This study helps companies to figure out what would happen to their finances if they changed some important factors, like the amount of sales or the way costs are structured.

AI can run different "what-if" scenarios to figure out how different business choices will affect money. AI can help businesses figure out how much it will cost them to enter a new market, release a new product, or change their pricing plans, among other things. This kind of planning for different outcomes helps companies make smart choices and lower their risks.

AI can also do sensitivity analysis to see what happens to financial forecasts when certain factors change. For example, companies can look at how a 10% rise in the cost of raw materials might affect their profit margins or how a 5% drop in sales volume might affect their revenue goals. This examination tell a lot about how stable financial plans are and helps businesses get ready for possible changes.

Strategic Decision-Making and Resource Allocation

For making smart decisions, you need accurate financial forecasts. Financial forecasting powered by AI gives companies the information they need to make and carry out good strategic plans.

Businesses can better use their resources when AI accurately predicts their income, costs, and cash flow. This makes sure that resources are put where they're needed most, like product development, marketing, or plans for growth.

For instance, if AI predicts that the next quarter will bring in more money than projected, companies can put more money into growth projects like hiring new employees or buying new technology. On the other hand, if AI projects that sales will go down, businesses can take steps to save money to keep their finances stable.

Co-funded by
the European Union

Performance Monitoring

AI can keep an eye on how money is doing in real time by comparing actual results to predictions. Businesses can keep an eye on their progress and make changes as needed to stay on track with their financial goals thanks to this constant tracking.

To illustrate, if real sales don't meet planned goals, AI can notify management so they can look into the reasons and take corrective actions. Businesses will be able to adapt to changing economic conditions if they take this proactive method.

Capital Investment Planning

AI can help with long-term financial planning by making predictions for more than one year that take into account many economic and market factors. This long-term view helps companies come up with long-term plans for growth and get ready for the difficulties that lie ahead. This can help with planning capital investments by AI predicting how big investments, like buying new equipment or making buildings bigger, will affect money in the long run. Businesses can use this research to figure out the possible return on investment and make smart choices about capital expenditures.

For instance, if a company wants to build a new factory, AI can predict how that will affect their income, costs, and cash flow over the next five years. This in-depth study helps companies make smart investment choices that help them reach their long-term financial goals.

Early Warning Systems

AI can help with risk management by finding possible financial risks and suggesting ways to lower them. AI can tell ahead of time about possible cash flow problems, market downturns, and other money problems by looking at past data and current financial trends.

When AI finds signs of trouble in the financial world, like falling sales, rising costs, or bad cash flow, it can act as an early warning system. Because of these early warnings, companies can deal with possible problems before they get worse.

For instance, if AI projects that a business will have a big cash flow shortfall in the next few months, the business can take steps to get more money, change the terms of its payments to suppliers, or find ways to cut costs. Businesses can keep their finances stable and avoid crises with this proactive method.

To sum up, AI-powered financial forecasting has many benefits for SMEs. These benefits include automatic data collection and integration, predictive analytics for predicting income and expenses, cash flow forecasting, scenario planning, and sensitivity analysis. Businesses can make better strategy decisions, use their resources more wisely, keep an eye on their finances,

Co-funded by
the European Union

help with long-term planning, and handle financial risks by using AI. SMEs can make data-driven choices, stay financially stable, and achieve long-term success in a competitive market by using AI for financial forecasting.

Fraud Detection

Finding fraud is an important part of small businesses' financial management. Fraud is bad for business because it can cost them a lot of money and hurt their image. SMEs can find and stop fraud with the help of AI-powered fraud detection systems that use advanced methods like real-time monitoring, finding outliers, and more.

AI for Anomaly Detection and Pattern Recognition

Finding patterns or behaviours that aren't normal is what anomaly identification is all about. AI is very good at this because it can look at huge amounts of data and find trends that could mean fraud.

AI systems can look at past transaction data to get a sense of what normal behaviour is. After this standard is set, AI can find changes that might be signs of fraud. For instance, if an employee does a lot of high-value deals all of a sudden, which is different from how they usually do things, AI can flag this as suspicious.

AI can find strange things in expense reports, like claims that are made twice or expenses that are way too high for a certain group. It helps companies look into possible fraud and fix problems quickly by finding these problems.

Machine Learning Algorithms

Algorithms that use machine learning can keep learning and getting better at finding scams. These algorithms get better at telling the difference between normal and strange behaviour as they handle more data.

AI can look for trends in fraudulent transactions, for instance, and use this information to find new cases of fraud. This kind of learning makes sure that systems that look for theft stay useful even as fraudsters change how they do it.

Real-Time Monitoring and Transaction Monitoring

Monitoring in real time is necessary to stop a scam before it does a lot of damage. AI can keep an eye on all financial transactions all the time, so businesses can quickly stop any activities that seem fishy.

Co-funded by
the European Union

AI can keep an eye on real-time financial deals and look for signs of fraud in each one. This means keeping an eye on credit card transactions, bank transfers, and online payments for any strange trends.

If AI notices a sudden rise in transactions from a new location or a series of transactions just below the fraud alert level, for example, it can send out an immediate alert so that the matter can be looked into further. Businesses can catch fraud early and avoid big losses with this real-time tracking.

Alert Systems

Fraud monitoring systems that use AI can send real-time alerts when they see something fishy going on. These alerts can be changed to fit the risk tolerance and fraud prevention rules of the business.

For instance, AI can instantly alert financial managers when strange transactions happen, like when large amounts of money are withdrawn, when many transactions happen quickly one after the other, or when transactions involve high-risk countries. This lets companies stop theft right away by doing things like freezing accounts or stopping transactions.

Behavioral Analytics and User Behavior Analysis

Behavioural analytics looks at how people use a website to spot possible scams. AI can keep track of how people use different platforms and find strange patterns that could mean scams.

AI can look at things like how often people log in, how many times they make transactions, and what devices they use. By making a profile of how each person usually acts, AI can spot changes that could mean someone is getting in without permission or doing something fraudulent.

As an example, AI can notice if a user logs in all of a sudden from a different place and makes a lot of high-value transactions. Businesses can check the user's name and stop fraud with this real-time detection.

Account Takeover Detection

Account takeovers, in which thieves get into user accounts without permission, are a popular type of fraud. AI can spot account takeovers by keeping an eye out for strange login attempts, changes to account settings, or strange patterns of transactions.

For example, if AI sees multiple failed attempts to log in followed by a successful login from a device that isn't known to the business, it can warn them of a possible account takeover. Businesses can protect the account and stop fraudulent activities when this happens early on.

Co-funded by
the European Union

Enhanced Security Measures and Two-Factor Authentication (2FA)

Using multiple layers of fraud detection methods, AI can make security better. This all-around method helps businesses stay safe from different kinds of fraud.

AI can be added to two-factor login systems to make them even safer. Businesses can lower the risk of hackers getting in by making users prove who they are in a second way, like with a fingerprint scan or a text message code.

For instance, if AI finds a transaction that is likely to go wrong, it can ask the user to finish a second verification step before moving forward. This extra security step helps keep sensitive financial information safe and stops fraud.

Risk Scoring

AI can give transactions risk scores based on things like the amount of the transaction, where it takes place, and how the person acts. Deals with a lot of risk can be marked so that they are looked over more closely or extra security steps are taken.

Any deal having a lot of money from a country with a high-risk level might get a high-risk score. AI can quickly send this transaction to a person to review, which makes sure that any fraud is found before the transaction is finalised.

Compliance and Regulatory Adherence and Regulatory Compliance Monitoring

When it comes to preventing fraud, AI can help companies follow the rules set by regulators and the industry. AI helps companies stay out of trouble and keep their good name by making sure that their fraud detection methods follow the rules set by law and government.

AI can keep an eye on deals to make sure they follow laws against money laundering and other financial laws. This helps businesses to meet their legal obligations by looking at transaction data and finding actions that don't seem right.

AI can, for instance, spot transactions that involve large amounts of cash deposits, regular moves to offshore accounts, or other actions that are often linked to laundering money. This kind of proactive tracking makes sure that companies follow against money laundering rules and stay out of trouble with the law.

Audit Trails

AI can keep detailed records of all transactions and behaviours that look for fraud. These audit trails make it clear how possible theft was found and dealt with, which supports openness and responsibility.

Co-funded by
the European Union

AI can make a report about a transaction, the things that caused the alert, and the steps that were taken if it turns out to be fraudulent and is blocked. This paperwork helps companies show that they are serious about preventing scams and following the rules.

Basically, AI-powered fraud detection has many benefits for small businesses, such as finding strange things, keeping an eye on things in real time, using behavioural analytics, making security better, and making sure they follow the rules. Utilising AI, companies can better spot and stop fraudulent activities, keeping their money and image safe. AI technology gives small businesses the tools they need to find and stop scams in real time, keeping the financial world safe and stable. Businesses can stay ahead of fraudsters, cut down on costs, and keep customer trust by using AI to find fraud.

Investment Analysis

Small businesses need to do investment research to make smart choices about where to put their money. AI can make financial analysis a lot better by giving smarter tools for managing portfolios, figuring out risk, and other important tasks.

Choosing the right mix of investments to reach financial goals while minimising risk is an important part of handling a portfolio well. AI can help small businesses make the best investment decisions by looking at huge amounts of data and giving them useful information.

Asset Allocation

AI can look at past data, market trends, and economic factors to figure out the best ways to divide up assets. AI can suggest a diverse portfolio that balances risk and return by looking at different types of assets, like stocks, bonds, and real estate.

A small business that wants steady growth with a moderate level of risk might be told to invest in a mix of blue-chip stocks, government bonds, and industrial real estate. Diversifying the portfolio in this way helps protect it from market volatility and makes it more stable in the long run.

Performance Monitoring

AI can keep an eye on investments in real time and give businesses the most up-to-date information on their stock. Small and medium-sized businesses can make quick changes to their investments when market conditions change thanks to this real-time tracking.

For example, if AI notices that a certain stock isn't doing well because the market is bad, it can suggest moving money to investments that are more likely to do well. This proactive method keeps the portfolio in line with the financial goals of the business.

Co-funded by
the European Union

Automated Rebalancing

AI can automatically rebalance financial portfolios so that they keep the right mix of assets. AI helps businesses control risk and make sure their investments stay on track by changing the mix of assets in the portfolio on a regular basis.

For instance, if the value of the stocks in the portfolio goes up a lot, AI may suggest selling some of them and putting the money from the sales into bonds or other asset classes to keep the goal allocation. This automatic rebalancing makes sure that the portfolio stays in line with the company's financial goals and risk tolerance.

Risk Modelling

An important part of financial analysis is figuring out how to measure and deal with risk. AI gives small businesses improved tools for assessing risks that help them think about possible risks and make smart investment decisions. AI can make complex risk models that look at how different risk factors might affect investing. AI can help businesses understand the risks that come with their investment choices by modelling different situations.

In this case, AI can simulate how changes in interest rates, economic downturns, or events in geopolitics will affect the portfolio. This research helps companies find weak spots and come up with ways to lower the risks that might happen.

Stress Testing

AI can put financial portfolios through "stress tests" to see how well they hold up in bad situations. AI helps businesses figure out how their investments might be affected by extreme market events like financial crises or sharp drops in asset values.

AI can model the effects of a sudden market crash on the portfolio, showing how much value could be lost and which assets are most likely to be damaged. This stress testing helps companies get ready for sudden changes in the market and make backup plans.

Credit Risk Assessment

Credit risk assessment is very important for companies that buy corporate bonds or other fixed-income assets. AI can look at financial records, credit ratings, and market data to figure out how creditworthy an issuer is and find places where default might happen.

AI can, for example, look at a company's cash flow, debt amounts, and financial health to see if it can pay its debts. This evaluation helps companies decide if they want to buy corporate bonds and how to best handle financial risk.

Sentiment Analysis

Co-funded by
the European Union

AI can figure out how investors feel and what the market trends are by reading news stories, social media posts, and market data. This study tells us a lot about how the way the market thinks and feels might affect how well investments do.

For instance, if AI notices a change in how people feel about a certain company or industry, it can warn the company about possible risks and suggest that the portfolio be changed. Businesses can stay ahead of market trends and make smart investment decisions with this method.

Identifying Growth Sectors

AI can use predictive analytics to find new investment possibilities and make suggestions based on what it learns from data.

AI can look at market data, economic indicators, and business trends to find areas that have a lot of room to grow. Businesses can spend in areas with good future prospects with the help of AI, which finds new industries and trends.

For example, AI could find that biotechnology, green energy, or artificial intelligence are all areas with a lot of room to grow. Businesses can take advantage of new trends and make more money in the long run by spending in these growth areas.

Stock Selection

AI can look at a huge number of financial indicators, including price-to-earnings ratios, dividend yields, and earnings growth, to find stocks that are cheap but have a lot of room to grow. This method is based on data, which helps businesses choose the right stock.

AI can suggest buying in companies that are doing well financially, have a competitive edge, and see a bright future for the market, for example. Businesses can build a strong and profitable investment portfolio with this targeted stock pick.

Real-Time Market Analysis and Market Trends and Indicators

AI can analyse the market in real time, which helps businesses keep up with the latest changes and make smart investment choices.

AI can keep an eye on important market trends and signs, like interest rates, inflation rates, and economic growth, to give us information about how the market is doing. This real-time research helps companies figure out how investments are affected by the economy as a whole.

For example, if AI notices that inflation is going up, it might suggest that the portfolio be changed to include assets that have done well in the past when inflation was high, like real

Co-funded by
the European Union

estate or commodities. Businesses can handle changing market conditions and keep their investments safe with this proactive method.

Technical Analysis

AI can do technical analysis, which looks at past price patterns, trade volumes, and market signals to guess how prices will move in the future. This analysis gives us useful information for trading and investing in the short run.

AI can find economic patterns, like moving averages or levels of support and resistance, to guess how the prices of stocks and other assets might move in the future. Businesses can use this technical analysis to make smart buying decisions and get the best returns on their investments.

Enhancing Investment Strategies and Customized Investment Strategies

AI can improve investment strategies by giving businesses data-driven insights and suggestions that are in line with their risk tolerance and financial goals.

AI can make investment plans that are unique to a business based on its financial goals, time frame, and willingness to take risks. This custom method makes sure that the investment plan fits the needs and goals of the business.

For example, if a small business wants to grow over the long term with a modest level of risk, AI can suggest a portfolio with a mix of growth stocks, assets that bring in money, and safe investments. Businesses can reach their financial goals and effectively manage risk with this custom approach.

Performance Optimization

AI can keep improving the success of investments by looking at market conditions, portfolio returns, and risk metrics. This ongoing optimisation keeps the portfolio in line with the company's financial goals and lets it change to how the market is changing.

For example, AI can find assets that aren't doing well and suggest moving money to businesses that are doing better. This performance optimisation helps companies get the best results and be financially successful in the long run.

To sum up, AI-powered investment analysis has many benefits for small and medium-sized businesses. These benefits include better portfolio management, more advanced risk assessment tools, the ability to predict investment chances, and real-time market analysis. Using AI, businesses can make smarter decisions about investments, improve their investment plans, and make their portfolios work better. Small and medium-sized businesses can reach

Co-funded by
the European Union

their financial goals, take advantage of new possibilities, and stay ahead of the competition in the market by using AI for investment analysis.

Good Practice Examples

An example of AI-based financial management from Germany

1) One of the best examples of AI-based financial management from Germany is N26, a mobile banking platform. N26 uses AI to provide users with insights into their spending habits, helping them manage their finances more effectively. The app analyzes transactions and categorizes expenses, allowing users to see where their money is going. The platform offers features like "Spaces," which allows users to set aside money for specific goals. AI algorithms help suggest savings strategies based on user behavior and spending patterns. The bank uses AI-driven chatbots to handle customer inquiries efficiently, providing quick responses and support, which improves the overall customer experience.

   https://n26.com/de-de

2) FinCompare uses AI algorithms to help small and medium-sized enterprises (SMEs) find the best financing options available to them, analyzing their financial data to match them with suitable lenders. The platform leverages AI to assess creditworthiness and risk, enabling faster decision-making for loan applications and helping SMEs secure funding more efficiently. FinCompare provides tailored financial advice and product recommendations based on the unique needs and financial situations of each SME, enhancing their financial management capabilities. The platform analyzes market trends and financial data to offer insights that help SMEs make informed decisions about their financing strategies and growth opportunities.

https://fincompare.de/

AI for Financial Management – An Example of AI supported access to EU funding projects and financing tools from Lithuania

Participating in tenders for European funding projects is associated with considerable bureaucratic effort. Finding and completing the necessary documents requires a considerable amount of time and expertise. However, SMEs are more limited in their time capacities than large companies and therefore have a competitive disadvantage when participating in EU-funded projects.

Co-funded by
the European Union

The "Getfunded.it" platform[2] aims to compensate for this competitive disadvantage by simplifying access to funding for SMEs. The platform uses AI algorithms to analyse company profiles in order to match them with suitable funding programmes and suggest funding opportunities tailored to the company. The AI-supported tools support SMEs in completing the application forms, which saves time and avoids errors. The AI tools also notify SMEs of upcoming deadlines and missing documents so that applications can be submitted on time and in full. This makes it easier for SMEs to access customised financing instruments and compensate for competitive disadvantages due to their size.

AI for fraud prevention– An AI-based example from Hungary

SEON is a prominent Hungarian company specializing in fraud prevention and identity verification solutions. SEON uses advanced machine learning algorithms to analyze user behavior and transaction patterns, helping businesses identify and prevent fraudulent activities in real time. Their platform offers customizable risk assessment tools, allowing businesses to tailor fraud detection processes to their specific needs and industry requirements. SEON provides an intuitive dashboard that allows businesses to monitor transactions, view analytics, and manage risk effectively. The platform can be easily integrated with existing systems and applications, making it accessible for various types of businesses, from startups to large enterprises. SEON is particularly focused on helping small and medium-sized enterprises (SMEs) access robust fraud prevention tools that are often used by larger corporations, thereby enhancing their security.

https://seon.io/

An example of AI-based investment platform from Poland

Robo.cash is a fully automated investment platform launched in February 2017. Today, it is open for investors throughout the European Union, UK and Switzerland. Robo.cash is a peer-to-peer lending platform that uses AI algorithms to assess borrower risk and automate investment decisions, making it easier for users to invest their money. The platform leverages AI to analyze market trends and borrower behavior, providing investors with insights that help them make informed decisions about their investments. Robo.cash employs AI for real-time risk assessment, enabling the platform to evaluate the creditworthiness of borrowers quickly and accurately.

https://robo.cash/

An example of AI-based financial management from Estonia

[2] Cf. https://www.getfunded.lt/

Co-funded by the European Union

LHV uses AI algorithms to enhance credit scoring and risk assessment processes, allowing for more accurate evaluations of loan applications and financial products. The platform offers tools that leverage AI to analyze users' spending patterns, providing personalized insights and recommendations to help customers manage their finances more effectively. LHV employs AI to monitor transactions for unusual activities, enhancing security and minimizing the risk of fraud in financial operations. By utilizing AI chatbots and virtual assistants, LHV improves customer service, providing quick responses to inquiries and facilitating smoother interactions. LHV Group’s integration of AI in financial management has positioned it as a leading player in the Estonian fintech sector, offering innovative solutions that enhance both efficiency and customer experience.

https://www.lhv.ee/en/about

Co-funded by
the European Union

AI for Compliance and Legal

The integration of AI into legal processes is transforming the way SMEs manage compliance, contracts, and regulatory requirements. As legal frameworks grow increasingly complex, SMEs often face significant challenges in keeping pace with changing regulations, ensuring compliance, and effectively managing legal documentation. AI offers innovative solutions to these challenges by automating routine tasks, enhancing accuracy, and providing real-time insights into legal operations.

AI-powered tools are capable of monitoring regulatory changes, analysing contracts, and identifying potential risks, enabling SMEs to streamline their legal processes while maintaining compliance. By leveraging natural language processing and advanced algorithms, AI simplifies the interpretation of legal texts, supports contract lifecycle management, and ensures adherence to industry standards. Furthermore, AI enhances risk management by proactively identifying legal risks and suggesting mitigation strategies, helping businesses avoid costly penalties and disputes.

For SMEs, the adoption of AI in legal processes is not just a matter of efficiency-it is a strategic necessity to remain competitive in an increasingly regulated business environment. Whether through automated compliance checks, personalized training programs, or secure document management, AI empowers SMEs to navigate the complexities of legal operations with greater confidence and precision.

Regulatory Compliance

SMEs must follow the rules in order to do business properly and morally. Not following the rules can lead to fines, legal trouble, and damage to a company's image. AI can make regulatory compliance much better by keeping an eye on changes to regulations, making sure processes are compliant, and giving other important support. Regulations are always changing, and it can be hard for SMEs to keep up. AI can help by constantly checking for changes to laws and making sure that businesses know about new and changed rules.

Automated Monitoring

AI can instantly check websites for updates from government agencies, trade groups, and regulatory bodies. This makes sure that companies are quickly informed of any changes that might affect how they run.

AI can keep track of changes made by groups like the European Medicines Agency (EMA), the European Chemicals Agency (ECHA), and the European Food Safety Authority (EFSA), as

Co-funded by
the European Union

well as national laws from individual EU member state. As rules change, AI helps businesses stay on top of them and avoid compliance gaps by sending them tips in real time.

Natural Language Processing

Regulatory papers can be read and understood by AI systems that have natural language processing built in. With this ability, AI can find important rules and figure out what they mean for the business.

For example, if a new law about data privacy is made, AI can read the text to figure out the most important rules and when they need to be followed. This study helps companies figure out how the rule will affect them and what they need to do to follow the rules.

Regulatory Impact Analysis

Regulatory effect analysis is a way for AI to figure out how new rules will affect different parts of a business. AI helps businesses prioritise compliance efforts and make good use of their resources by figuring out how different changes might affect their operations, funds, and processes.

For instance, if a new environmental law says that the way trash is thrown away needs to change, AI can figure out how much it will cost and how it will affect operations. This research helps companies plan and budget for compliance, making sure they meet rules without stopping their operations.

Ensuring Compliance in Operations and Automating Compliance Processes

Making sure compliance in day-to-day activities is a must for keeping up with regulations. AI can help small businesses by automating compliance tasks, doing checks, and keeping an eye on things in real time.

A lot of compliance tasks, like data collecting, reporting, and documentation, can be done automatically by AI. This automation makes sure that compliance tasks are done correctly and consistently, and it also makes administrative work easier for workers.

For example, AI can automatically make compliance reports by gathering and analysing data from different sources that is useful. This makes sure that reports are turned in on time and in the right style, which lowers the chance of not following the rules because of mistakes made by hand.

Compliance Audits

Co-funded by
the European Union

AI can check for compliance by looking at working data and seeing how it matches up with rules. This process of constant auditing helps find gaps in compliance and places where things could be better.

AI can, for instance, check the safety processes in a factory by looking at data from cameras and sensors. If AI finds that safety rules aren't being followed, it can let management know so that the problem can be fixed. This proactive method helps companies stay in line with the rules and avoid breaking them.

Real-Time Monitoring

AI can keep an eye on compliance-related actions in real time, making sure that companies always follow the rules. AI can keep track of compliance data and give immediate feedback by connecting to different systems and devices.

For example, AI can keep an eye on who accesses and uses data to make sure that privacy rules are followed. If AI finds unauthorised access or data breaches, it can send out alerts and start taking steps to protect itself. This real-time tracking helps companies quickly fix any possible compliance problems and lower their risks.

Personalized Training Programs

AI can improve safety training and education by making learning more personalised and keeping track of employees' progress. This makes sure that all workers know what the rules are and what they need to do to stay in line with them.

AI can make customised training plans for employees based on their roles, responsibilities, and amount of knowledge. AI makes sure that employees get useful and effective training by adapting training material to each person's needs.

AI can, for instance, create a personalised training programme for new employees that goes over the rules and processes that are important for their jobs. Targeted training like this helps workers know what they need to do from the start to be compliant.

Compliance Knowledge Assessments

AI can use quizzes, tests, and simulations to see how much workers know about compliance requirements. These tests help figure out what people don't know and where they need more training.

For example, AI can give workers regular compliance quizzes and keep track of how well they do. If AI notices that workers are having trouble with certain topics, it can suggest more training materials to fill in the holes. This process of continuous learning makes sure that workers are always up to date on what the rules are.

Co-funded by
the European Union

Enhancing Risk Management and Risk Identification

AI can help with risk management by finding possible legal risks and suggesting ways to lower them. This proactive method helps companies stay in line with the rules and stay out of trouble.

AI can look at practical data to find possible compliance risks, like unsafe practices, weak data security, or strange financial activity. AI helps businesses deal with these risks before they happen by finding them early.

For instance, AI can look at how employees act and find patterns that might mean they aren't following the rules, like accessing restricted places too often or downloading too much data. AI helps businesses look into and fix possible legal problems by pointing out these behaviours.

Mitigation Strategies

AI can suggest ways to reduce compliance risks that have been discovered. Changes to the process, more training, or better monitoring may be some of these tactics.

For example, if AI finds that weak passwords could lead to data breaches, it can suggest that stricter password rules and multi-factor security be put in place. These steps help businesses be more compliant and lower their chance of breaking the law.

Automated Documentation and Secure Storage

For proof of compliance, it is important to keep correct records and paperwork. AI can automate processes for keeping records and make sure that all papers related to compliance are kept safely and in the right order.

AI can create and update compliance documents like audit reports, policies, and processes on its own. This automation makes sure that papers are correct, up to date, and easy to find for audits or inspections.

AI can, for instance, make an environmental compliance report by gathering information about energy use, trash disposal, and emissions. As new data comes in, this report can be updated automatically. This way, companies always have the most up-to-date information.

AI can make sure that papers related to compliance are stored safely and can't be accessed by people who aren't supposed to. With the help of encryption and access controls, AI helps companies keep their compliance records safe and private.

For example, AI can store compliance documents in a safe cloud-based system that only authorised staff can view. This safe keeping makes sure that private data is kept safe and can be easily accessed when needed.

Co-funded by
the European Union

In conclusion, regulatory compliance powered by AI has many benefits for SMEs. These benefits include keeping an eye on changes to regulations, making sure that operations are in line with regulations, automating compliance processes, conducting audits, offering real-time monitoring, improving training and education, lowering risk, and keeping accurate records and documentation. Businesses can stay up to date on changes to regulations, stay in compliance, and avoid legal fines by using AI. SMEs can follow the rules more easily and legally if they use AI technology. This helps them build trust with stakeholders and be successful in the long run in a regulatory world that is hard to understand.

Contract Management

Contract management is an important job for small businesses because it makes sure that agreements with partners, clients, and sellers are handled quickly and legally. Advanced contract analysis, automatic contract lifecycle management, and other new ideas can help AI change the way contracts are managed.

AI for Contract Analysis

Contract analysis is the process of looking over and making sense of the terms and conditions of agreements to make sure they meet the needs of the business and are legal. AI can make this process a lot better by giving us more detailed information and making human review much faster and easier.

With natural language processing, AI systems can read and understand contract language, pulling out key information and pointing out important terms. With this feature, AI can quickly and correctly look over contracts, pointing out possible risks and obligations.

AI can, for instance, look through a contract and find parts that talk about payment terms, delivery dates, responsibility limits, and how to end the contract. This in-depth study helps companies understand their rights and responsibilities, making sure that everyone follows the terms of the contract.

Risk Identification

By looking at the language and framework of a contract, AI can find possible risks in it. AI can find risky clauses in contracts by comparing them to industry standards and law requirements. For example, it can spot indemnity clauses that are too broad or penalty terms that are too harsh.

For example, if AI finds a clause that makes late deliveries very expensive, it can let the business know that they need to arrange better terms. Businesses can avoid bad contract terms and protect their own interests by proactively identifying risks.

Co-funded by
the European Union

Compliance Verification

AI can check that contracts follow the rules and laws that apply, which makes sure that companies do what they're supposed to do legally. AI helps businesses stay in compliance and avoid legal disputes by comparing contract words with legal requirements.

AI can make sure, for example, that a contract for processing data has all the data protection terms that are needed to follow the General Data Protection Regulation (GDPR). This proof of compliance helps companies follow the law and stay out of trouble.

Automated Contract Lifecycle Management

AI can be used in automated contract lifecycle management to handle all stages of a contract's life, from its creation and discussion to its execution and renewal. This automation speeds up the contracting process, makes it easier for administrators to do their jobs, and makes sure that contracts are handled well and efficiently.

Contract Creation and Drafting

AI can help people write contracts by giving them templates and offering words that are legal and follow best practices. This system makes sure that contracts are made quickly and correctly, so a lot of hand-drafting isn't needed.

AI can make a standard contract template for a supplier deal, complete with standard clauses for payment terms, delivery schedules, and how to settle disagreements. These forms can be changed to fit the needs of each business, making sure that contracts are complete and legal.

Negotiation Support

AI can help negotiate contracts by looking at suggested changes and making suggestions. AI helps businesses deal better and come to agreements that are good for both sides by figuring out how suggested changes will affect things.

For example, if a supplier wants to extend the payment terms, AI can figure out how that will affect the budget and suggest whether the offer should be accepted, rejected, or countered. Businesses can make smart choices and protect their own interests during contract talks with this help with negotiations.

Execution and Monitoring

AI can handle electronic signatures and keep track of the state of contract approvals, which can make the execution of contracts easier and faster. This technology makes sure that contracts are carried out quickly and correctly, cutting down on delays and the work that needs to be done by hand.

Co-funded by
the European Union

AI can, for instance, remind people who need to sign a contract automatically and keep track of the progress of signatures in real time. This makes sure that contracts are carried out quickly and without any unnecessary delays, so companies can keep their promises.

Performance Monitoring

AI can track key metrics and goals to keep an eye on how well contracts are being carried out. This real-time monitoring makes sure that everyone does what they're supposed to do and that contracts are carried out as planned.

AI can keep track of things like delivery dates, payment due dates, and service level agreements to make sure that partners and providers keep their promises. If AI finds any problems, it can let the company know so they can fix the problem. This makes sure that contracts are managed well.

Renewal and Termination Management

AI can handle contract updates and terminations by reminding people at the right time and doing the work automatically. This makes sure that companies don't miss important dates and can make smart choices about whether to continue or end contracts.

AI can send automatic alerts when a contract's renewal date is coming up, which forces the business to look over the terms and decide whether to renew, renegotiate, or end the agreement. Businesses can keep control of their contractual ties with this kind of proactive management.

Document Management and Storage

AI can improve the management and storage of documentation by keeping all documents related to contracts in order and safe. This makes sure that contracts are easy to find and safe from people who shouldn't be able to see them.

Centralized Repository

AI can make a central database of all contracts and organise them by things like the type of contract, the date it was signed, and the people involved. This centralised method makes sure that companies can quickly find and get contracts when they need them.

For instance, if a company needs to look over all of its supplier deals, AI can quickly get them from the central repository. This effective management of documents saves time and makes sure that important papers are easy to find.

Security and Access Control

Co-funded by
the European Union

AI can make contract papers safer by encrypting them and controlling who can see them. This keeps private contract information safe by making sure that only authorised personnel can access it. This keeps the business safe from data breaches and unauthorised access.

AI can, for example, limit who can see certain contracts based on their user jobs and permissions. This way, only the right people can see private agreements. Businesses can keep the privacy and integrity of their contract documents safe with this security step.

Audit and Compliance Reporting

By looking at contract data and keeping track of compliance metrics, AI can make audit and compliance reports. This reporting makes sure that companies follow through on their legal and contractual duties and can show proof of this during audits.

AI can make compliance records that keep track of how well contract terms, government rules, and industry standards are being followed. These reports make it easy for businesses to show that they are following the law and their contracts by giving a clear record of their compliance actions.

AI can, for instance, make a report on data processing agreements that shows how each one meets GDPR standards. This paperwork helps companies get ready for checks by regulators and makes sure they follow the rules.

AI can keep a full record of all the actions that happen with a contract, including changes, approvals, and tracking of performance. These audit trails make things clear and accountable, which helps companies with their efforts to comply.

For example, if changes are made to a contract while it is being negotiated, AI can keep track of the changes and show who agreed to them and when. This audit trail makes sure that all actions related to the contract are clear and can be looked over if necessary.

To sum up, AI-powered contract management has many benefits for SMEs. These benefits include advanced contract analysis, automated contract lifecycle management, efficient document management, and better compliance reports. Businesses can speed up contract processes, lower their management workload, make sure they follow the rules, and protect their own interests by using AI. SMEs can manage their contracts well, lower risks, and be successful in the long run in a competitive market by using AI technology for contract management.

Good Practice Examples

AI for Compliance and Legal – An example of AI simplification of legal texts from Germany

Co-funded by
the European Union

Lawyers often use the AI tool Claude.ai, which summarises long legal documents in language that is easy for the client to understand. Before these documents are sent to clients, they are critically reviewed by the lawyer, as the explanation of the law and legal background is sometimes too creative, especially in the case of very complex texts. Nevertheless, it saves a lot of time to start with an AI-generated abstract.

Claude.ai can process large amounts of information, brainstorm ideas, generate texts and codes and perform complex cognitive tasks that go beyond simple pattern recognition or text generation. The software helps people to understand difficult topics, thereby simplifying their work.

LegalOS. LegalOS provides a platform that uses AI to streamline legal processes, focusing on contract management and compliance checks.

Key Features:

Contract Analysis: The AI analyzes contracts for compliance with regulations such as GDPR and local laws, identifying potential risks and suggesting necessary amendments.

Document Automation: LegalOS automates the creation of legal documents, ensuring they meet current legal standards and internal policies, which saves time and reduces errors.

Regulatory Updates: The platform can continuously monitor changes in regulations, alerting users to necessary adjustments in their compliance practices.

User-Friendly Interface: It offers an intuitive interface that allows legal teams to easily manage and review documents, making the tool accessible even for those without extensive technical expertise.

https://www.getflank.ai/

Educational conferences – an example from Estonia

Tallinn University and Tartu University organize various courses on the topic of artificial intelligence. The nearest one for example will be held in *3rd to 4th October in Tallinn University* (*Tallinn University SOGOLAS Global Forum invites you to the conference* ***"The Death of Law? Machines, Technology and Algorithms Deciding"; link is here: https://globalforum.tlu.ee/the-death-of-law-machines/).***

Digitalization and artificial intelligence are deeply changing the landscape of our way of life, including the field of law. As a matter of fact, rules are replaced by algorithms, making them a sort of preventive measures or a device against a possible deviant behaviour. Algorithms and legal provisions guided by them do not seem to allow for non-compliance, thus making the

Co-funded by the European Union

question about their application or disapplication obsolete. A law made in this way by algorithms will no longer address *citizens*, that is free persons insofar as they essentially have the capacity of disobeying the rules or reinterpreting them, but only subjects whose free will and faculty of judgement is denied.

The development of computer science has raised the claim of an artificial intelligence that might be able to replace human operations. All these three developments put our practice and concept of law in question. With the rise of artificial intelligence and the increasing dominance of technology, there is a growing concern about the erosion of empathy, free will, and the very essence of human subjectivity. Universality as general causality is replacing universality as general acceptability.

This landscape pushes towards a radical transformation of our practice of law towards a destination that might plausibly be labelled as “death of law”. This conference seeks to assess the meaning and consequences of such possible “death of law” and whether this “death” really is the final destination of our legal culture and world. How much “disenchantment” of the world (Weber), an iron cage as the ruling of machines and algebraic formulae, how much “nudity” of the humans (Agamben), reduced just to manipulable bunches of genes and cells, can the law tolerate? The conference will face this issue with contributions of distinguished scholars from Europe and America such as **Gerald Postema, Guliano Amato, Roger Brownsword, Francisco J. Ansuátegui Roig, Marjolein Lanzing, Jaan Aru, Marina Lalatta Costerbosa** and others.

AI for Compliance and Legal – An example from Hungary

Legal Tech Hungary refers to the growing ecosystem of legal technology companies and startups in Hungary that leverage technology to improve legal services and compliance.

Some notable players in this space include:

- Nubium - Focuses on AI-driven legal solutions for contract analysis and compliance.
- DLA Piper - While an international firm, they utilize advanced technology tools for efficient legal services in Hungary.
- DocuSign - Provides electronic signature and contract management solutions that enhance compliance.
- Lawtech - A platform designed to simplify legal processes and enhance access to legal resources.

Co-funded by the European Union

https://investcee.hu/legaltech-consulting/

AI for Compliance and Legal – An example from Poland

"Kancelaria doradców prawnych" (law firms or legal advisory offices) in Poland increasingly incorporate AI to enhance their services and improve efficiency. AI tools can quickly review contracts for compliance with regulations and identify potential risks or unfavorable clauses. This speeds up the contract review process and reduces human error. Law firms use AI to automate the creation of legal documents, ensuring that they comply with legal standards and client needs. This saves time and reduces costs. AI-driven platforms can analyze vast amounts of legal data and case law, helping lawyers find relevant precedents and streamline their research processes.

https://kancelariawloclawek.pl/

AI for Compliance and Legal – An example from Lithuania

A standout example of AI in compliance and legal processes for SMEs in Lithuania is Legal Tech startups that offer comprehensive solutions tailored to small businesses.

Dokobit is a Lithuanian startup that provides electronic signature and document management solutions. Their platform leverages AI to assist SMEs with compliance and legal documentation.

https://dokobit.com/

Conclusion/Outlook

The AI into SMEs represents a transformative opportunity to enhance efficiency, reduce costs, and improve decision-making processes across various business functions. From HR management and marketing to supply chain optimization, financial forecasting, and legal compliance, AI offers scalable solutions tailored to the specific needs of SMEs. This concept has demonstrated that AI is not merely a tool for large corporations but is increasingly accessible to smaller businesses, enabling them to compete effectively in an ever-changing economic landscape.

AI adoption by SMEs fosters innovation, streamlines processes, and enables better resource allocation. For example, AI helps automate repetitive tasks, freeing employees to focus on more strategic and creative initiatives. It improves data analysis capabilities, allowing businesses to make informed decisions based on real-time insights. AI also enhances customer service through chatbots, personalized interactions, and predictive analytics, while in financial management, it supports fraud detection, forecasting, and automated invoice

Co-funded by
the European Union

processing. Despite its advantages, SMEs face several barriers to AI adoption, such as financial constraints, lack of technical expertise, and employee acceptance. Many businesses remain hesitant due to uncertainty about the concrete benefits of AI and concerns over data security and privacy.

Governments, institutions, and intermediary organizations are stepping in to address these challenges by providing training programs, financial incentives, and technological infrastructure to facilitate AI adoption. Examples include grants, mentorship programs, and access to AI tools and platforms. Furthermore, good practice examples from SMEs across Europe demonstrate how AI-driven solutions in areas such as recruitment, marketing, supply chain management, and customer service can generate tangible results, reduce costs, and improve operational efficiency.

Looking ahead, the future of AI for SMEs is promising, with emerging trends set to make AI even more accessible and impactful. Generative AI tools, such as ChatGPT, will enable SMEs to create tailored marketing content, automate customer interactions, and streamline internal communications. AI-powered collaboration platforms will enhance teamwork within SMEs, ensuring seamless data sharing and project management across departments. As AI development progresses, the cost of implementing these technologies will decrease, making them more accessible to micro-SMEs and startups. Open-source AI tools and cloud-based platforms will play a key role in democratizing AI adoption.

The focus on ethical AI and robust data protection will grow, ensuring that SMEs can adopt AI solutions without compromising customer trust or regulatory compliance. AI providers will increasingly offer transparent and secure solutions tailored to SMEs' needs. Additionally, AI will support SMEs in achieving sustainability goals, such as optimizing energy consumption, reducing waste, and improving supply chain efficiency. AI-driven insights will help businesses align their operations with environmental regulations and consumer preferences for sustainable practices.

As AI becomes integral to business operations, SMEs will increasingly invest in training programs to upskill their workforce. AI trainers and mentors will play a critical role in helping employees understand and leverage AI tools effectively. This will ensure that SMEs can maximize the benefits of AI while fostering a culture of innovation and adaptability.

The integration of AI into SMEs is no longer optional-it is a strategic imperative to remain competitive in a rapidly evolving business landscape. SMEs must take proactive steps to embrace AI and leverage its transformative potential. To begin, SMEs should identify specific areas where AI can create immediate value, such as automating repetitive tasks or enhancing

Co-funded by
the European Union

customer service. Once initial successes are achieved, businesses can scale their AI initiatives to other areas.

Understanding AI's capabilities and limitations is crucial for successful implementation. SMEs should invest in training programs for employees and engage with AI mentors to build internal expertise. Collaboration with other businesses and organizations can provide valuable insights and resources, while participation in AI-focused networks, conferences, and mentorship programs can facilitate knowledge sharing and innovation.

Financial support measures, such as grants, subsidies, and loans provided by governments and institutions, can make AI implementation more affordable and reduce financial risks. SMEs should explore these resources to offset the costs of AI adoption. Ethical considerations, including data privacy and transparency, must be prioritized to build trust with customers and comply with regulations. Choosing AI solutions that align with these values is essential.

AI adoption is not a one-time investment-it requires continuous learning, adaptation, and optimization. SMEs should view AI as a long-term strategy for growth and innovation. By embracing AI, SMEs can overcome operational challenges, unlock new opportunities, and create value for their customers and stakeholders.

AI is set to become a foundational tool for SMEs, driving efficiency, innovation, and competitiveness in an increasingly digital world. The future of AI for SMEs is transformative, and businesses that take steps to integrate AI into their operations today will be well-positioned to thrive in the years to come. It is time for SMEs to take action, leverage the available support measures, and embark on their AI journey. The path may require effort and investment, but the rewards-enhanced productivity, improved decision-making, and sustained growth-are well worth it. AI is not just a tool for large corporations; it is a catalyst for SMEs to innovate, compete, and succeed in the digital era.

Co-funded by
the European Union