

Social dialogue in the process of adaptation to changes caused by the use of new technologies and artificial intelligence in the working environment

Social dialogue in the process of adaptation to changes caused by the use of new technologies and artificial intelligence in the working environment

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Abstract

The study, prepared for the Association of Independent Trade Unions of the Czech Republic, summarizes the current knowledge on the impact of new information and communication technologies and artificial intelligence on the labour market. It describes not only the general challenges but also the risks for individual professions and the reconfiguration of the relationship between employers and their employees. It maps the initiatives being implemented in this area by transnational institutions and social partners. Using data from a pan-European Eurobarometer survey, it shows how respondents perceive new technologies and artificial intelligence: whether and in which aspects they are concerned about them. Last but not least, the study analyses the use of ICT by trade unions. As the study is aimed primarily at trade unionists, it also contains a number of examples from practice.

Keywords: information and communication technologies; artificial intelligence; labour market; social dialogue; trade unions

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Abstract

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Introduction

Artificial intelligence (AI) is taking centre stage not only in the public but also among many researchers, following the internet, social networks, robotics, automation and digitalization. Over the past decade, a number of studies and researches have been conducted to map the impact of AI use at both macro and micro levels. It is already clear that AI will have measurable impacts on society as a whole: it will affect employment/unemployment, income equality/inequality in society, accessibility/non-accessibility of healthcare, the education system, culture, the environment, etc.

We encounter AI almost everywhere today and it is likely that in the future we will encounter it everywhere. How will it affect us and what will it bring?

There is no simple answer to this question. As Aghion et al., 2025, aptly note, we cannot now choose whether or not to allow AI into our lives. Artificial intelligence is already part of our lives. Unfortunately, we cannot yet fully predict its impact on the above areas, as well as other aspects of our lives. This needs to be emphasized right at the beginning of this text. Why is that?

- We do not yet know to what extent and in which specific countries and sectors AI will spread. We already use AI. Artificial intelligence helps in healthcare with diagnosis. On the Internet, it can recommend content to users based on their previous searches. It keeps an eye on the stock. It drives autonomous vehicles. However, according to many experts, the use of AI is still limited at the moment (Ghosh et al., 2025, McKinsey, 2023). Yet, as AI spreads and improves, changes in society will understandably become more visible.
- All existing studies and analyses are based on "historical" data or sociological surveys that
 ask the public (stakeholders, entrepreneurs, experts, etc.) how they perceive AI and what
 impacts they observe in different areas of life (Frank et al., 2025, Aghion et al., 2022). If we
 expect AI to be further refined and more widely used, these predictions are obviously very
 inaccurate.
- Level of AI regulation most AI experts agree that AI will need to be regulated legislatively in the future (Aghion et al, 2019). Attempts to legislate AI already exist, but again we cannot demand perfect regulation if we do not know where AI development will go. And any regulation will retrospectively affect the use and spread of AI.

Artificial Intelligence is therefore a technology whose direction and impact is still only being guessed at (Boucher, 2020). It is not surprising that we can encounter both positive expectations like "AI will make our lives significantly easier" and negative expectations like "AI will enslave humanity". Realistically, however, we can expect rather mixed impacts, i.e., in some ways AI will help us a lot, in others it will harm us.

In this context, the author team that compiled this study faced a daunting task. How to elaborate on a given topic and not just conduct a search of existing literature that analyzes the impact of Al on various aspects of our lives with varying degrees of optimism and pessimism? Existing research (and there is a vast body of it) tries to predict the impact of new technologies and artificial intelligence on our lives using various data and methodologies, although- given the current level of knowledge and available data -it is rather like divination from a crystal ball.

Therefore, the structure of the study is apart from a general introduction, focused on the risks and challenges that new information and communication technologies and artificial intelligence bring

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¹ Tak např. Elon Musk, podnikatel a vizionář, označil v roce 2014 umělou inteligenci jako největší existenční hrozbu pro lidstvo (Gibbs, 2014). Bill Gates, podnikatel a spoluzakladatel společnosti Microsoft, se v roce 2017 naopak domníval, že umělá inteligence z nás učiní produktivnější a kreativnější jedince (Elkins, 2017).

to the labour market, while the data used record the perceptions of respondents (how respondents perceive new technologies and artificial intelligence, what impacts they think they will have, whether they are afraid of these impacts, etc.), not the actual impacts of new technologies and artificial intelligence, as these impacts are still uncertain.

The first chapter is devoted to artificial intelligence. It describes how AI works and clearly defines what AI is. Artificial intelligence has been booming lately, but many people associate AI mainly with chatbots², which is only a small (and certainly not the most important) subset of AI. The first chapter introduces definitions and clarifies terms associated with AI, as well as articulating the general risks associated with AI. It also presents the most important initiatives that aim to define the institutional and legal framework for AI.

The second chapter deals with the challenges that new technologies and artificial intelligence bring to the labour market (increasing work intensity, extension of control systems, algorithmic control, etc.). It analyses data from the 2024 Eurobarometer 554 pan-European survey on artificial intelligence and the future of work.

The third chapter describes the initiatives of the social partners in the field of new information and communication technologies, whether these are voluntary initiatives at European level or commitments contained in collective agreements.

The fourth chapter examines how social partners use new information and communication technologies and artificial intelligence in their activities, both in the Czech Republic and in Europe.

1. Artificial intelligence: what lies ahead?

1.1 What is Al?

Before going into more detail about the impact of AI on our lives and the initiatives to minimize its negative impact, let's first get a basic understanding. As with other "innovations", there is still no

² Chatbot je počítačový program, který je schopen přirozeně komunikovat s koncovým uživatelem a pomáhat mu řešit jeho problémy (IMB, 2021).

single definition for AI³ and different authors and institutions use different definitions. Here we will only introduce the most important and useful definitions for this text⁴:

The European Union uses the following definition. This definition is also used by the European social partners in their documents (see Chapter 3).

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

Source: Article 3(1) of the Artificial Intelligence Act (EP and EC, 2024)

The Organisation for Economic Co-operation and Development (OECD) has developed its own definition, on which the OECD AI Principles are based (see below).

An AI system is a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment.

Source: OECD (2024b), revised definition

1.2 How Al works

The following box (Box 1) shows how AI works using a simple example.

Pojem "umělá inteligence" se objevil poprvé už v roce 1955. Tehdy autorský tým v čele s Johnem McCarthym předložil návrh výzkumného projektu s cílem zjistit, zda je možné vytvořit stroj, který by se učil, rozhodoval a řešil problémy podobně jako lidská inteligence (McCarthy et al., 1955). A letní workshop, který se v rámci tohoto projektu konal v roce 1956 na Dartmouth College (v New Hampshire, USA), bývá považován za oficiální zrod oboru umělé inteligence. V průběhu dalších let se definice i vnímání umělé inteligence různě měnilo, během posledních pěti let ale nastal opravdový boom, spojen zejména s tím, že umělá inteligence je schopná vytvářet vlastní výstupy (tzv. generativní umělá inteligence). Historii vývoje umělé inteligence popisují např. Haenlein a Kaplan (2019).

⁴ Přehled definic podává např. Appiahene et al. (2022).

Box 1 How Al works

In our example, we teach AI to recognize photos of cats and dogs. However, one can imagine other tasks, e.g. distinguishing quality products from junk or sorting data according to a particular feature.

1. Data collection

First and foremost, AI needs data to learn from. In our case it will be photos of cats and dogs. We can obtain photos from public photo databases or take them ourselves (e.g., with a photo trap). Of course, the more, the better.

2. Pre-processing of data

The collected data (in this case photographs or pictures of cats and dogs) need to be prepared for analysis. This may include resizing images, removing noise, tweaking colours or other adjustments.

3. Creating a model

We choose the appropriate model or algorithm. There are many different machine learning algorithms (linear or logistic regression, decision trees, multilayer neural networks, etc.) Each algorithm is suitable for a different type of task.

4. Training the model

The computer uses a selected algorithm to analyze the data and learn from it. It is the ability to "learn" and improve its outputs that is attractive and widely used in Al. Al creates a model that can predict or classify new information.

5. Testing the model

We need to test the model. We verify this by testing the model on data that it has not seen during learning, in our case other photos of cats and dogs.

6. Deploying the model

If the model works well, we can use it in practice, for example in an application that automatically sorts photos.

Elaborated in more detail e.g. in Boucher (2020) Source: Based on Perry (2025)

Chart 1 Relationships between the concepts mentioned



Source: McKinsey & Company (2024), own adaptation

Artificial intelligence is based on machine learning (*ML*). Machine learning is an artificial intelligence tool that creates models and algorithms⁵ that allow machines to learn and improve automatically without being explicitly programmed to do so. However, the real advances in machine learning came from deep learning (*DL*). This uses neural networks to mimic the way the human brain works. It works with multiple layers and allows for more complex data analysis and presentation (image recognition, human voice, etc. (see Box 1). However, it needs a huge amount of input data.

⁵ Algoritmus lze definovat jako předem daný postup, který řeší určité úlohy či problémy. V žádném případě se nejedná o nic, s čím bychom se dosud nesetkali, algoritmy využíváme denně, např. při vaření (recept je též algoritmus), řešení matematických rovnic, montáži nábytku atd.

Over the last decade, the ability of AI to understand natural language and generate natural language content has improved significantly. These so-called large language models (*LLMs*), which rely on deep learning techniques, are advanced AI systems capable of "understanding" the complex dependencies, relationships and contextual nuances of natural language. Among other things, chatbots are built on large language models that can interpret user input, respond to user questions and conduct dialogues in a coherent, natural and contextually relevant way.

Both of the above definitions of AI (EU and OECD) mention AI autonomy. AI has varying degrees of autonomy when generating outputs. In other words, AI systems can act and make decisions on their own without being constantly controlled by humans. The degree of autonomy varies between AI systems (EC and EP, 2024).

Box 2 Examples of autonomous and non-autonomous systems

An example of a highly **autonomous** Al **system** is Waymo⁶, a company that develops and designs autonomous vehicles. These vehicles are fully autonomous and need no driver intervention to get passengers to their destination. In some US cities (Austin, San Francisco, Phoenix) they are used as taxis, among other things.

An example of a **non-autonomous** Al **system** is e.g. Netflix and its system of recommending suitable shows⁷. The system delivers personalized recommendations to a specific user based on an analysis of their past behavior and the shows they watch. This means that while the system is able to assist the user in selecting shows, it does not make the decision itself.

1.3 General challenges posed by AI

Based on a brief insight into the Al system, it can be summarized that:

- Artificial intelligence can learn and improve itself.
- But it needs a huge amount of data to learn.
- Artificial intelligence has varying degrees of autonomy and can make its own decisions to the extent that the algorithm allows it to do so.

In this context, there are various challenges that will need to be faced. In its documents, the EU presents high expectations for AI, while at the same time highlighting the risks.

⁶ Webové stránky organizace viz https://waymo.com/

Více informací o tom, jak doporučovací systém Netflixu funguje viz https://help.netflix.com/en/node/100639

Al will change our lives by improving healthcare (e.g. enabling more accurate diagnosis or better prevention of disease), increasing the efficiency of agriculture, contributing to climate change mitigation and adaptation, improving the efficiency of manufacturing systems through predictive maintenance, improving the safety of Europeans, and in many other ways that we can only imagine in passing.

Source: EU (2020)

However, Boucher (2020) points out that in the context of the spread of AI, public debate and the need to inform the public about the benefits and risks of AI is particularly important, so that the public does not reject AI, but at the same time approaches it critically. Boucher also summarizes the major challenges that AI brings and to which it is or will soon be necessary to respond, whether through legislative measures or various "soft" measures. These challenges affect or will affect all areas of our lives, including our working lives.

Missed Opportunities - Investing in AI is a must, but where exactly to invest?

Of course, artificial intelligence has great potential. If the EU is to keep pace with other "Al superpowers" (USA, China), further investment in the development and use of AI is essential, both in private and public resources. But the question is where exactly to direct these investments. Boucher (2020) is concerned in this regard that today there is a lot of attention being paid to chatbots in particular, but they are only a subset of artificial intelligence, and certainly not the most useful or controversial.

Transparency - how to make AI transparent?

The transparency of AI touches on several areas. First, it is the transparency of the algorithms. Machine learning algorithms are often very complex and difficult to translate into a language that can be understood by ordinary users, which is why they are also sometimes referred to as "black boxes" (see Box 3). In addition, some companies use AI for commercial purposes (approving credit applications, tracking customer behaviour) and have no interest in disclosing the specific algorithm. In the case of approval of a loan application, the unsuccessful applicant, for example, has no idea why his or her application was rejected and usually has no opportunity to obtain more detailed information in this regard.

Respect for different views on AI and the need for discussion

According to Boucher (2020), it is necessary to encourage discussion and invite the "opposition", i.e., those who do not believe in AI and are concerned about it. Various surveys show that the public is generally accepting of the spread and use of AI, and that it is more experts and stakeholders who express concerns about AI. However, even these "opposing" views need to be discussed publicly so that the public (stakeholders, interest groups, trade unions, the non-profit sector, etc.) is not just a passive recipient of AI services, but also participates in the rules of its use. This is the only way to avoid the emergence of groups that will start to block and reject AI because they fear the consequences of its use.

Box 3 Artificial intelligence, algorithms and discrimination in mortgage approvals

Wiggin (2025) examined 6,000 mortgage applications. The data is from the USA in 2022. He found that the algorithm systematically scored white applicants as lower risk. White mortgage applicants obtained a loan 95% of the time, while black or Hispanic applicants with the same financial profile obtained a mortgage less than 80% of the time.

The goal of the research was to see how financial institutions are using artificial intelligence algorithms, machine learning and big language models to speed up mortgage origination processes. Of course, these algorithms can significantly reduce the costs associated with verifying an applicant's creditworthiness. On the other hand, these algorithms are not transparent to the applicant, so the applicant has no idea how the data entered (age, income of the applicant, credit history, etc.) is evaluated by the algorithm and what weight is given to each factor. It is therefore a "black box". In this research, the author concludes that the algorithms used by banks are discriminatory and therefore problematic. However, its realignment is entirely in the hands of the banks.

Facts versus fiction - how to distinguish them?

As already mentioned, AI can generate its own outputs (texts, images, videos, etc.), and very realistic ones at that. In this context, we often refer to the term deepfake as a technology that uses machine learning to create realistic but fake videos in which people (often publicly known) say or do something they did not actually say or do8. In practice, it can be extremely difficult to distinguish deepfake videos from reality: they can easily become a tool for manipulation and propaganda.

Overcoming prejudice and discrimination: is AI discriminatory?

Artificial intelligence, as a technology controlled by algorithms and unencumbered by prejudice, may seem like an ideal tool to eliminate prejudice and discrimination. Paradoxically, this is not the case, because some algorithm designers may intentionally or unintentionally create algorithms that discriminate against a particular group, as can be seen, for example, in the example in Box 3, which shows that in the U.S. the success rate of black and Hispanic mortgage applicants was lower than that of white applicants. Of course, the algorithm did not examine the applicant's skin color, but it was able to determine from information such as place of birth, education, or current residence that the applicant was likely to be black or Hispanic. Of course, this can also apply, for example, to the algorithms used by recruiters when hiring job applicants.

⁸ Např. ruská digitální tvůrkyně Антонина Аикса (Antonina Aixa) na svém profilu na Instagramu (@antonina_aixa) pravidelně zveřejňuje videa různých státníků (Donald Trump, Vladimir Putin, Volodymyr Zelenskyj, Kim Čong-un a další), jak spolu podnikají různé společné aktivity: slaví pravoslavné Velikonoce, sázejí rajčata, radují se z úrody, jedou na výlet Transsibiřskou magistálou atd. Jedná se o typická deepfake videa, i když autorka v tomto případě netvrdí, že jsou pravdivá, a vyjadřují jen její přání...

Moreover, the very data from which AI learns is laden with bias and discrimination (Mosene, 2024). This is data created by a "white heterosexual male", i.e., the input data for the artificial intelligence omits those groups of the population that for various reasons have not yet had access to information and communication technologies, or only to a limited extent, which is of course related to region, age, education, gender, etc. This "input" and "output" discrimination is one of the biggest challenges related to AI.

Our values: how to teach AI to respect them?

Our values as concepts or principles that we consider important (relationship to family, to country, to the community in which we live, etc.) change over time. Contemporary Western civilization places great emphasis on human rights, the dignity of every individual, freedom and equality of rights. However, not everyone involved in machine learning and the creation of algorithms for artificial intelligence shares the same values, which are conditioned by history, tradition, religion, economic situation, etc. In this respect, i.e., in terms of the dignity of each individual, face recognition technology can be cited as controversial. It can be used in a meaningful way, for example, to verify identity, but at the same time, of course, a person's face can be used to read ethnicity, age, emotions, health, etc., which is the first step towards discrimination (see above). For example, Microsoft has removed facial recognition capabilities from its Azure AI Face recognition technology that can be used to infer emotional states and other identity attributes that can be subject to stereotyping, discrimination, or unfair denial of service (emotion, gender) if misused. Features related to age, hair colour and facial expression estimation are also limited.

In this context, we then need to address the questions of how to teach AI to respect the values that we want AI to respect (Floridi et al., 2018), while making it flexible enough to change those values to be acceptable to society a hundred years from now¹⁰.

Data protection and informed consent - can we even give it?

Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data¹¹, or GDPR, was published in the Official Journal of the European Union on 27 April 2016. This Regulation requires, among other things, the informed consent of the individual to the collection and processing of his or her personal data.

However, this is complicated when using AI to gather data, as informed consent requires the individual to fully understand what they are agreeing to. Hence, full understanding is related to

⁹ Viz Microsoft, 2025. What is Azure Al Face? ^{21. 2. 2025} Dostupné z: https://learn.microsoft.com/cs-cz/azure/ai-services/computer-vision/overview-identity

¹⁰ V této souvislosti Boucher (2020) poukazuje na to, že hodnoty, které západní společnost vyznávala např. na začátku 20. století (postavení ženy ve společnosti, rasismus, kolonialismus, bohatí versus chudí), by pro nás také dnes byly nepřijatelné.

¹¹ Celý text viz https://eur-lex.europa.eu/legal-content/CS/TXT/?uri=legissum:310401_2

transparency (see above) - if the technology is not transparent or the user does not understand it due to its complexity, it cannot be informed consent. The data is thus obtained illegally (see Box 4).

Box 4 Informed consent and cookies

We encounter cookies many times a day when using the internet. Cookies are short text files that are sent to our browser by the website we visit. They allow the website to record information about our visit. Cookies make our job easier: we don't have to fill in the delivery address every time we make a purchase in the e-shop, because the e-shop remembers it thanks to cookies, the website generates the content we are interested in on our next visit, etc. At the same time, cookies provide the website provider with data about how often we visit the website, how long we stay, what we are most interested in, etc. This gives the website provider access to our personal data, which it can use to better target advertising and other marketing activities.

The processing of cookies by the website operator is generally the processing of personal data, and the user has the right to know how the website operator handles this data. They must also give the website operator informed consent to the processing of their personal data. In this context, the Data Protection Authority issues recommendations¹² on how to deal with cookies and informed consent to their use and what to look out for. In this context, let's be honest: who among us studies how the website operator handles our data and who just clicks "Accept all cookies"?

Moreover, some companies do not even bother to obtain informed consent and consent to the processing of personal data. Flick (2015) highlights a study produced in collaboration between Cornell University (USA) and Facebook. The research was to manipulate the accounts of 700,000 Facebook users to display different proportions of positive and negative messages. The aim of the research was to find out whether users suffer from *emotional contagion*, i.e., whether the amount of positive or negative posts affects the emotional content of their own posts. The problem was that none of the Facebook users knew they were part of this study, i.e., none were informed, let alone consented to the research. The Institutional Review Board of Cornell University, a committee charged with protecting the rights and safety of individuals who participate in university research, was consulted on the issue, but concluded that the data on which the study was based was obtained by Facebook before the Cornell University researchers began analyzing it. Facebook eventually apologized to users and changed its rules for handling user data (Hill, 2014).

¹² Viz Úřad na ochranu osobních údajů, FAQ Cookies, dostupné na https://uoou.gov.cz/verejnost/qa-otazky-a-odpovedi/cookies

Box 5 The case of Clearview Al¹³

Clearview AI is an American company that develops facial recognition software and which provides software primarily to law enforcement agencies. At the same time, it has already been fined in several European countries for violating Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR). The reason for these fines is a large database of photos of people's faces that the company created by collecting photos of people on the internet, obviously without the users' consent. This has prompted a reaction from data protection authorities in various EU countries.

On 10 October 2022, the Italian Data Protection Authority (*Garante per la protezione dei dati personali, GPDP*)¹⁴ fined Clearview AI €20 million and prohibited the company from collecting any further photographs and relevant metadata relating to persons residing on Italian territory. It also ordered the company to delete data, including biometric data, processed by its facial recognition system (EDPB, 2022a).

On 19 October 2022, the French National Commission for Informatics and Liberty (Commission nationale de l'informatique et des libertés, NCIL¹⁵) fined Clearview AI €20 million for illegal processing of personal data, human rights violations and lack of cooperation with NCIL. This fine is the highest ever that NCIL can impose (EDPB, 2022b).

On 16 May 2024, the Dutch Data Protection Authority (Autoriteit Persoonsgegevens, AP^{16}) fined Clearview AI \leq 30.5 million for the illegal use of a database of photographs of human faces. The Authority also stated that the use of Clearview AI's services is prohibited in the Netherlands (EDPB, 2024).

Other European and non-European countries (Australia, Finland, Greece and others) have responded similarly to Clearview Al's activities.

Face verification and classification technology

Of course, face recognition is related to (non)discrimination and the respect of artificial intelligence for our values. Technologies capable of recognizing faces are now used in passport control and smartphone unlocking. This technology can also be used to identify missing persons or persons suspected of committing a crime. On the other hand, they can also discriminate and threaten human

¹³ Webové stránky organizace viz https://www.clearview.ai/

Webové stránky organizace viz https://www.gpdp.it/

¹⁵ Webové stránky organizace viz https://cnil.fr/

¹⁶ Webové stránky organizace viz https://www.autoriteitpersoonsgegevens.nl/

rights. These technologies can be used, for example, by stalkers ¹⁷, when they can identify a harassed person's photo with, for example, their social media profile or security camera footage. Facial recognition technology can be used for aggressive marketing - if a person in a picture is assessed by AI as highly stressed, ill, angry, etc., it can more easily identify a product that the person may be interested in (impulse buying). In general, however, these technologies threaten the anonymity of the individual and may affect his or her personal rights.

Box 6 Autonomous Fury Fighter Jet

Anduril Industries, Inc. is an American defense technology company that specializes in autonomous systems¹⁸. In May 2025, the company unveiled a prototype of the Fury drone, which it is working with the US military to develop. Not only does the aircraft not have a pilot, but it does not even have a cockpit and controls for the pilot. The company says the planes would serve as escorts for a fighter plane flown by a real pilot. Through the use of artificial intelligence, these aircraft are able to detect the enemy faster and react more quickly in the event of an attack, thus protecting the actual pilot (Croxton, 2025).

In response to criticism about the morality of developing such a weapon, a company official said: "There is no moral reason to produce a landmine that cannot distinguish between a school bus full of children and a Russian armored vehicle... We are not choosing between smart weapons and no weapons. We are choosing between smart guns and stupid guns."

However, a number of organizations have expressed concern about the development of autonomous weapons systems. For example, the United Nations and the Red Cross have called for restrictions on the development and operation of autonomous weapons systems (UN, 2023). An organization that has long campaigned to limit the development and use of autonomous weapons systems is Human Rights Watch¹⁹.

Dangerous autonomous weapon systems

Artificial intelligence is also applied in the arms industry. A number of institutions have expressed their concern about so-called autonomous weapons systems²⁰, because such weapons (drones, missiles, etc.) operate with varying degrees of autonomy, and in the extreme case can decide on their own to launch and target an attack, thus deciding the life and death of an individual, without

¹⁷ Persons who systematically and for a long time harass others with unsolicited texts, e-mails, phone calls, unwanted attention, possibly repeatedly follow the selected person.

¹⁸ Webové stránky organizace viz https://www.anduril.com/

¹⁹ Webové stránky organizace viz https://www.hrw.org/

V angličtině se tyto systémy nazývají jako Lethal Autonomous Weapon Systems (LAWS) nebo Autonomous weapon systems (AWS).

any moral principles. Although, as mentioned above, technologies that recognize faces (or buildings or other objects) are quite advanced, they cannot yet be expected to safely distinguish, for example, a civilian from a soldier. Without human input, autonomous weapons systems can escalate any war conflict very quickly.

Competition: will it exist in the future?

Today's society and artificial intelligence are based on data and the ability to use it to our advantage. The more data (e.g., on the income, age, education profile of its customers, their consumption behaviour, etc.) a particular company has, the more competitive advantage it has over other companies in a given market segment. The biggest ICT companies already own huge shares in their market segments (Amazon, Apple, Facebook, Google) and the more customers they have, the more data they get. Of course, these firms are also subject to antitrust legislation and are often targeted by antitrust authorities around the world, but even heavy fines do not threaten their position (Borowska, 2020). A competitive advantage is also gained by those companies that engage in Al in countries where human rights protection is low (China). It is therefore possible that competition legislation may need to be amended in the future.

Will AI benefit everyone?

In the text above, we have described some of the areas that AI is already impacting, and in most of these areas, AI brings both positive impacts (for "humanity", for the economy, for business) and negative impacts. It can already be assumed that the positives and negatives will not affect everyone equally, be it regions (countries), companies, individuals. Countries and large companies that can use AI to their maximum advantage will benefit from AI, as will individuals who know how to work with AI. Conversely, AI is likely to exclude those regions and individuals who do not have access to education and ICT from consuming the benefits. AI can therefore significantly deepen inequality in society.

Excessive AI consumption

Al is still in its infancy, but it is already infiltrating all areas of our lives, and in some cases it can be dangerous because it lacks empathy and does not feel emotions. De Freitas et al. (2024) found that while conversing with a chatbot can eliminate feelings of loneliness, it can also cause addiction and emotional discomfort. A chatbot may show a degree of empathy towards the user (e.g., it can 'remember' what it discussed with the user in the last conversation), but it is still just technology: it may not respond as the user expects, which can cause problems for mentally ill and depressed individuals (Adam, 2025). Another over-reliance on Al denies humanity the opportunity to gain experience: while Al learns, humans rely on Al (Boucher, 2020). Overuse of Al also impairs critical thinking and the ability to make independent decisions (Hao-Ping et al., 2025).

1.4 Artificial intelligence and the future of the professions

In the previous chapter, we introduced the challenges we will have to face in the context of Al. These challenges are of course also relevant to the labour market, whether it is discrimination in hiring/employment, non-transparent algorithms that can affect a worker's performance and earnings without the worker's knowledge of the algorithm, problems with tracking and identifying employees and with the protection of personal data. As far as the labour market is concerned, Al can be expected to have a big impact on the labour market. We do not know much today about whether it will be negative or rather positive²¹. Al is still in its early stages of development and all expert studies examining the impacts on the labour market, unemployment, wages, quality of work, etc., are often contradictory to controversial (Ghosh et al., 2025, OECD, 2024), as it always depends on the research topics (labour productivity, wages, employment/unemployment), the data used (quantitative/qualitative data, region from which the data come) and the methods. It is therefore difficult to use these studies in the Czech reality, also because there is a lack of available data in this area. Therefore, in the following we will only present research based on how respondents currently perceive Al and the dangers it potentially poses to them in relation to employment and the labour market.

In the literature, the term *AI exposure*²² is often used in the context of AI to describe how much specific professions, age and education groups of workers, etc. will be exposed to AI. However, exposure does not necessarily mean that AI will replace specific occupations; it can also be complementary to the workforce and thus increase productivity (Lane, Saint-Martin, 2021).

Existing research shows that for skilled workers (those with more than a high school education), Al is more likely to be complementary, i.e. help increase their labour productivity (OECD, 2024, Brynjolfsson et al., 2023). On the other hand, for workers with lower education and a high proportion of manual work (cleaners, junior medical staff, workers, etc.), it appears that Al does not affect their work at all.²³. Educational attainment is probably the most important factor that will influence Al exposure for different groups of workers, if only because higher educational attainment is often associated with other socio-demographic characteristics (OECD, 2024).

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²¹ Každopádně to není poprvé, co lidstvo čelí strachu z nových technologií. Z historie si můžeme připomenout luddity, anglické textilní dělníky, kteří se v prvním desetiletí 19. století obávali, že jim kvůli nově vynalezeným tkalcovských strojům přijdou o práci. Více informací viz např. Wikipedia, https://cs.wikipedia.org/wiki/Luddit%C3%A9

²² Al expozice se měří různými metodami, zpravidla zkoumáním schopností a dovedností potřebných k výkonu konkrétní profese. Tyto schopnosti a dovednosti se pak porovnávají s tím, co již zvládne Al, resp. které již dokáže nahradit. Více o měření Al expozice viz např. Frank et al. (2025) nebo Felten et al. (2021).

²³ Lower-educated workers who perform routine jobs are also at risk of job losses. However, they are not so much threatened by artificial intelligence as by robotization and digitalization (OECD, 2024).

The OECD (2024) has published research based on how workers with different socio-demographic characteristics perceive AI and how they feel (or do not feel) threatened by it in their jobs in the sense that AI could put them out of work. A summary of the results is shown in Table 1.

Table 1 How different groups of workers perceive the future of their profession "in light of" AI

Group of workers	Risks	Opportunities
Workers with a tertiary (i.e. at least a bachelor's degree or higher) education (scientists, doctors, IT professionals, etc.)	They foresee a significant impact of artificial intelligence on their profession. They are concerned about job instability.	If AI has a positive effect on employment, i.e., it does not replace some professions, then this group will benefit most from AI.
Workers with less than tertiary education	They fear that AI will replace their work, while making AI jobs less accessible to them.	Al can create new jobs or professions for this group of workers.
Men	They see a higher risk in automation, they do not see Al as a threat.	Optimistic, they view their future with Al positively.
Women	They are concerned about poorer access to AI-enabled professions and tools that can impact workplace productivity.	They see the relationship between AI exposure and employment growth as positive. Thanks to the growth in employment, they will be better able to "reach" jobs that are or will be fundamentally influenced by AI and that have been dominated by men.
Young people	Fear of job instability and concerns about discrimination and prejudice in the use of Al (e.g., in recruitment).	In general, they perceive new technologies and their impact on society positively.
Senior staff	They are concerned about less access to Al jobs. They are concerned about Al tools that can impact workplace productivity. They believe that they will not be able, and often not willing, to accept Al at work.	Acquired skills and experience can protect this group of workers in the labour market to a certain extent.
Workers at the peak of their careers	A major impact of AI that can fundamentally affect working life.	They view the relationship between Al exposure and employment growth positively.
Immigrants	Fear of job instability and fear of prejudice.	Optimistic, they view AI positively.

Source: OECD, 2024, own adjustment

1.5 Initiatives to guide the development of AI

As described several times in the previous chapters, AI and its evolution are still an equation (or maybe even a system of equations?) with several unknowns. That is why there are efforts to steer

the development of AI and its use, either by legislation or by various "gentlemen's agreements" and voluntary commitments.

The Council of Europe (*CoE*)has attempted to map these initiatives in the Al Initiatives database²⁴ between 2016 and 2022. Although not an exhaustive list, the database contains 604 documents on Al and its regulation, whether at international, national or corporate level. It also records the activities of research institutions, independent organizations and think tanks. Although the update of the database was completed in 2023, it provides a comprehensive overview of this type of activities and also tries to categorize these initiatives by type of document (binding, non-binding, research report, recommendation), by content (what topics the document covers besides Al, e.g. human rights, sustainable development, transparency, diversity, privacy, etc.), date of creation, etc. According to this database (in terms of the number of documents devoted to Al), Al and its regulation are mainly dealt with by supranational institutions, be it the OECD, UNESCO or the EU, but there are also a growing number of initiatives at the national level (France, Germany, USA), as well as at the corporate level, especially for multinational companies (Deutsche Telekom, SAP, Google, McKinsey, Ipsos).

In terms of international activities in the field of artificial intelligence and its regulation, the first comprehensive and most widespread initiative is the Global Partnership for Artificial Intelligence: OECD Principles for Artificial Intelligence. The **Global Partnership on Artificial Intelligence** (*GPAI*²⁵) was launched in 2020 by Canadian Prime Minister Justin Trudeau and French President Emmanuel Macron. The European Union was among the 15 founders of the initiative. The GPAI aims to bridge theory and practice in the field of AI, to share multidisciplinary research internationally, and to identify and discuss key issues related to AI in order to make AI a credible technology.

In 2024, the GPAI joined with the OECD, which had already formulated Recommendations on AI in 2019 (OECD, 2019). The OECD and GPAI then revised these recommendations and introduced the **OECD AI Principles** in 2024. As the Principles for AI have become the basis for a number of other initiatives (whether national, corporate or social partner initiatives), we will present them in more detail. These are five principles that 38 OECD member countries and 10 non-OECD countries have so far signed up to respect and implement²⁶. Although the principles are formulated in relatively general terms and their detailed implementation in practice is in the hands of national governments, this is an initiative that is unique in its scope. It is also referred to in the National Strategy for Artificial Intelligence of the Czech Republic 2030 (MPO, 2024). In addition, the principles take into account the use of AI in the workplace (see Table 2).

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²⁴ EC, 2016. Al initiatives. Dostupné z: https://www.coe.int/en/web/artificial-intelligence/national-initiatives

²⁵ Více informací o iniciativě viz https://www.gpai.ai/

²⁶ Viz seznam stoupenců iniciativy: https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449#adherents

Table 2 OECD Principles for Artificial Intelligence

Principle	What it includes:
Inclusive growth, sustainable development and prosperity	All stakeholders should engage in responsible and trustworthy governance of Al to achieve positive outcomes for humanity (fostering creativity, promoting inclusion of underrepresented populations, protecting nature and the environment, etc.).
Human rights and democratic values, including justice and privacy	Stakeholders are to respect the rule of law, human rights and democratic and human-centred values (non-discrimination and equality, freedom, dignity, individual autonomy, privacy and data protection, social justice and labour legislation) throughout the life cycle of the AI system. The aim should also be to eliminate the spread of misinformation created not only by artificial intelligence.
Transparency and clarification	 All actors should commit to transparency and responsible disclosure of information on AI systems. For this purpose, they should: provide meaningful and understandable information, promote a general understanding of AI systems, including their limitations, familiarize stakeholders with their interactions with AI systems, including in the workplace, provide clear and easily understandable information about the data/input sources, factors, processes and/or logic that led to the prediction, content, recommendation or decision, enable those affected by a particular AI system to understand the output produced by the AI, provide information that enables those who are threatened by a particular AI system to challenge the output of the AI.
System robustness, safety and security	Al systems should be robust, secure and protected throughout their lifecycle so that they function properly under conditions of normal use, foreseeable use or misuse or other adverse conditions and do not pose unreasonable security risks. Artificial intelligence systems should include: • mechanisms in place to ensure that if Al systems risk causing undue harm or exhibit undesirable behaviour, they can be safely overridden, repaired and/or decommissioned if necessary. • mechanisms are in place that, if technically implemented, would strengthen the integrity of information while ensuring respect for freedom of expression.
Responsibility	 Al actors should be responsible for the proper functioning of Al systems and for adhering to the above principles based on their roles, context and in accordance with the state of the art. For this purpose, Al actors should ensure traceability, including in relation to data, processes and decisions made during the Al system lifecycle, in order to analyse the Al system outputs and responses to queries, in context and in line with the state of the art.

continuation of the table

Principle	What it includes:
	Based on their roles, context and capability, AI actors should continuously apply a systematic approach to risk management at each stage of the AI system lifecycle and adopt responsible business behaviour to address the risks associated with AI systems, including through collaboration between different AI actors, AI knowledge and resource providers, AI system users and other stakeholders. Risks include those related to prejudice and bias, human rights, including safety, security and privacy, as well as labour and intellectual property rights.

Source: OECD (2024a), own adaptation (shortened)

The OECD also adds "guidance" on how to implement these principles through appropriate policies. These policies are defined by the OECD as follows:

- Investing in AI: individual governments should invest in long-term multidisciplinary research, development and deployment of AI. These investments could be supported from public sources, but private investment should also be appropriately supported. Investments should be directed mainly to open source²⁷ solutions and solutions using publicly available and legal data, ensuring privacy protection.
- Supporting an AI-enabled ecosystem: developing trustworthy AI requires a supportive ecosystem. Governments should therefore (in collaboration with the private sector) support and provide infrastructure and information technology for sharing knowledge about AI, for sharing data, source codes, algorithms, etc. This means in particular promoting affordable high-speed broadband, data storage technologies and increasing the computing power of information technology. In the private sector, support for ecosystems should serve SMEs in particular to promote competition and innovation. However, all technologies must respect privacy, intellectual property, data protection, etc.
- Shaping a supportive, interoperable governance and policy environment for AI includes, in
 particular, building the institutional, legislative and regulatory framework for AI. These
 frameworks should be flexible and adaptable enough to keep pace with the development of AI,
 but at the same time ensure security and transparency throughout the AI lifecycle, especially
 during the experimentation and commercialisation phase of AI systems.
- Building human capacity and preparing for labour market transformation: All is expected to significantly change the labour market, as in some cases human labour will be replaced by Al. The labour market needs to be prepared for this process; if not, the impact of Allon some groups of workers could have huge social costs. The transformation of the labour market should be carried out in cooperation with social partners, educational institutions and employment service

²⁷ Open source technologie mají otevřený zdrojový kód, takže kdokoliv ho může dále studovat, měnit a šířit. Umožňuje jim to samotný tvůrce (tedy majitel autorských práv). Z angličtiny (open source = otevřený zdroj).

institutions. The fact that new labour law legislative standards are likely to need to be introduced should also be taken into account.

• International cooperation and trustworthy AI: International cooperation in promoting the above principles is a must, with particular attention and support for developing countries.

The above OECD Principles for Artificial Intelligence are followed by Regulation 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonized rules on artificial intelligence and amending Regulation (EC) No. 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828, abbreviated as the *Artificial Intelligence Act (AI Act)*. This is the first ever legal framework for artificial intelligence in Europe. The Artificial Intelligence Act came into force on 1 August 2024 and implementation into national legislative systems should take place by 2 August 2026. The AI Act establishes a classification of AI systems according to the level of risk posed by each technology and sets out the corresponding requirements and obligations for them. The aim of the AI Act is to promote innovation and the spread of AI technologies, while also protecting the fundamental human rights and security of EU citizens.

The AI Act defines four levels of risk for AI systems: minimal risk, limited risk, high risk and unacceptable risk.

Unacceptable risks include, in particular, the use of artificial intelligence to recognize emotions in the workplace or in educational establishments, the use of AI for manipulation and propaganda, biometric remote identification, biometric categorization to infer certain traits (nationality, minority membership), etc. These technologies and their use are to be banned.

Al-based security features in critical infrastructures (e.g., transport), the failure of which could endanger the life and health of citizens, Al-based product security components (Al used in robotic operations), the use of Al in migration and asylum management, Al tools used for labour recruitment and employment, etc. are considered **high-risk**. These systems can be used under clearly defined circumstances: the manufacturer (operator) provides detailed documentation and information about the system and its use, ensures human supervision and cybersecurity, etc.

The limited risk is mainly related to the transparency of AI, where the manufacturer or promoter must sufficiently inform the user about the technology. This applies to chatbots, for example, where users should be aware that they are communicating with a machine, not a human.

Minimal or zero risk applies to all other AI systems. This group of AI-based technologies is not regulated in any way.

2. Work in the era of AI and robotics: subjective views of the Czech population on changes in the quality of working life, concerns and opportunities

2.1 Eurobarometer 554: Artificial intelligence and the future of work

Digital transformation, artificial intelligence and robotics are fundamentally changing the face of work today. While technological advances bring new opportunities to improve efficiency and safety at work, they also raise uncertainties related to quality of working life, intensification of work and loss of autonomy for workers. Czech society is reacting cautiously to these changes - fears of job loss, worsening working conditions or weakening of the human factor are present across different socio-demographic and occupational groups²⁸. Eurobarometer 554 data show that perceptions of the impact of technology on work are ambivalent, reflecting both specific experiences and the broader institutional and cultural context. These subjective concerns should also be addressed at the level of social dialogue, which should be sensitive to workers' perceptions of risks and insecurities. Topics such as transparency of algorithmic control, privacy protection or the right to human oversight of automated decision-making must therefore become a firm part of collective bargaining. The following text focuses on the subjective perception of these changes by Czech employees and analyses their attitudes, fears and expectations regarding the use of digital technologies and AI in the workplace. The text will be based primarily on an analysis of available data from the European Eurobarometer 554 survey: Artificial Intelligence and the future of work²⁹.

In general, the data show **mixed**, **ambivalent attitudes** across Europe **towards the impact of AI** and digital technologies (Zalc, 2025). While 55% of EU citizens expect AI to have a positive impact on everyday life over the next 20 years, 35% are more concerned about the negative impact (Zalc, 2025). So far, Europe is more economically optimistic about the use of AI, with 62% of EU respondents believing **that AI will have a positive impact on the economy**. But at the same time, EU citizens are very concerned about jobs. Two-thirds expect more jobs to be lost than created because of AI. Half of Europeans agree that AI can support scientific discovery and help solve major problems such as climate change or major diseases. Only 16% disagree. Respondents across the EU therefore see the use of **AI as a tool to address global challenges.** There is a general consensus on regulation; 84% of Europeans believe,

V textu a grafech budou většinou představovány postoje a názorové orientace jednotlivých skupin respondentů, které se výrazněji odchylují od průměru. Neprezentujeme tedy vždy všechny kategorie konkrétních charakteristik např. vzdělání, ale jen ty, které považuje pro daný jev za důležité.

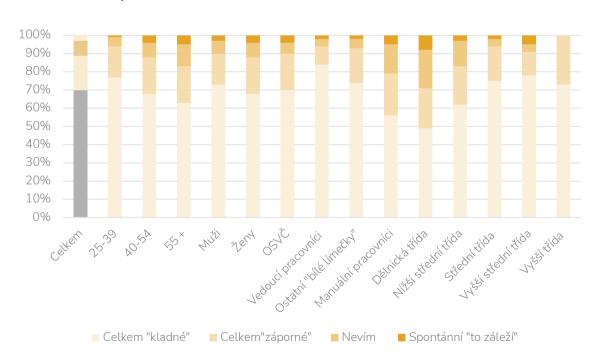
²⁹ EUROBAROMETR 554: Artificial Intelligence and the future of work. Realizováno v dubnu a květnu 2024. Dostupné z: https://europa.eu/eurobarometer/surveys/detail/3222

that AI and robots must be carefully managed and controlled. This indicator points to a relatively high level of mistrust towards digital and AI systems in a pan-European context (Zalc, 2025).

2.2 Societal impacts of the use of digital technologies and AI and changes in quality of life

Czechs are slightly more skeptical about the use and positive benefits of AI than the European average. The negative impact of emerging technological trends on quality of life was reported by 30% of respondents in the Czech Republic, but only 24% of respondents in the EU-27 average. As many as 39% of respondents in the Czech Republic are convinced of the **negative impact of AI and digitalization on society as a whole**. In the EU-27, only 33% of respondents report negative impacts. Respondents in the Czech Republic are the least critical of the impact of digital technologies and AI on their current work. Only one-fifth rate this influence negatively, 70% positively and 10% of respondents were unable to comment.

Chart 2 What is the impact of the latest digital technologies and artificial intelligence on your current workplace? Distribution of responses for selected groups of respondents (gender, age, work status, class)



Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

Total, 25-39, 40-54, 55+, Male, Female, Self-employed, Managers, Other white collar workers, Manual workers, Working class, Lower middle class, Middle class, Upper middle class, Upper class

Total "positive"

Total "negative"

I don't know
Spontaneous "it depends"

Looking in more detail at how assessments of the impact of digitalization and AI differ, it is generally true that older people aged 55 and over rate the impact of digitalization and AI on society more negatively than younger people. On the contrary, people with higher education and parents living in households with children perceive these trends more positively. Compared to the average, Prague (70% of positive responses) is a significant outlier, with the Moravian-Silesian Region at the opposite pole (28% of positive responses).

We find a similar pattern in the sorting by socio-demographic characteristics for the **impact of digitalization and AI on the respondent's current job**. Here, however, regional differences are not as pronounced as when considering the societal impact.

When specifically asked how respondents perceive the use of robots and AI in the workplace (QB5.), we receive more negative ratings than when digitalization was evaluated. Compared to the EU27 average, however, citizens' views are more optimistic. The use of robots and AI in the workplace was rated negatively by 29% of respondents in the Czech Republic and positively by 67%, with even 18% of respondents in the Czech Republic perceiving a definitely positive impact, which is 7 percentage points higher than the EU-27 average. The pattern of opinion is similar to that of the 2017 survey, i.e. Czechs are relatively stable in their attitude towards the evaluation of technological trends. In a more detailed classification, there is again more skepticism on the part of women than men, on the part of older people aged 55 and over compared with young people up to the age of 39. An above-average positive assessment of the impact of robotics and AI on the workplace was found in Prague, where only 15% of respondents reported a negative perception. On the other hand, in the Moravian-Silesian Region, almost half of the respondents perceive the impact of robotics and AI on the workplace. The Northeast region is in a similar position (39% negative ratings).

2.3 Digitalized tasks replacing human labour: fears of job losses

In this part of the text we will get acquainted with the attitudes of the Czech population towards the risks associated with specific digitized activities in the work process. For some attitudes we can even see trends, i.e. a comparison with 2017^{30} . However, the comparison has limits due to the user uptake of AI (AI chatbots, etc.) among the general population only in the last three years.

In general, Czechs are rather afraid of robotization and artificial intelligence. However, they are not out of line with the European average. 59% of respondents in the Czech Republic agreed with the statement that robots and artificial intelligence are taking jobs away from people, which is 7 percentage points lower than the EU-27 average. Respondents with a university education, the self-employed and workers in managerial positions are the least concerned about this. Conversely,

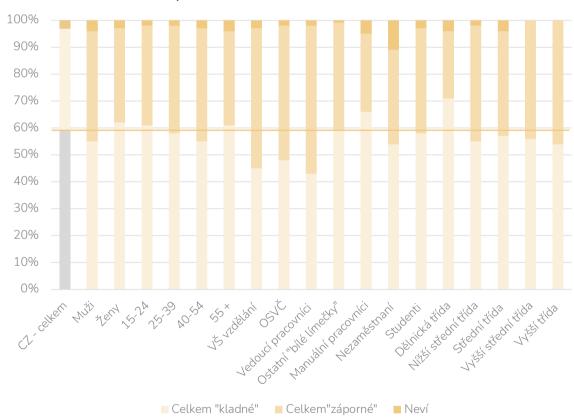
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Jedná se o šetření Special Eurobarometer 460: Attitudes towards the impact of digitisation and automation on daily life z roku 2017, více viz https://europa.eu/eurobarometer/surveys/detail/2160

workers in blue-collar occupations, older people aged 55 and over, and women are the most likely to believe that AI and robots will take people's jobs (see Chart 3).

These differences between the different groups are related to the different levels of exposure of jobs to automation and digitalization. Labour professions, routine manual work or some administrative positions are among the areas most vulnerable to automation according to expert studies. On the other hand, highly skilled occupations that require creativity, complex decision-making, interpersonal communication or expertise are considered less vulnerable. College-educated workers therefore see the introduction of AI more as an opportunity to increase efficiency or automate routine parts of their work, while manual workers perceive the threat of direct replacement of their positions.

Chart 3 Agree/disagree with the statement: "Robots and artificial intelligence are taking people's jobs." Distribution of responses for selected groups of respondents (gender, age, education, work status, class)



CZ -total, Men, Women, 25-39, 40-54, 55+, University education, Self-employed, Managers, Other white collar workers, Manual workers, Unemployed, Students, Working class, Lower middle class, Middle class, Upper middle class, Upper class

Total "positive"

Total "negative"

I otal "negative I don't know

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

Uncertainty about retraining and adapting to new labour market demands can be another factor of concern. Older people and workers with less education often worry that they will lack the skills needed to work in an environment where AI will be a common part of work processes. Fears about the need for lifelong learning, technological change and uncertainty about future employability may further exacerbate these concerns. In addition, in some regions with a higher concentration of industrial production and a less diversified economy, there are concerns about greater social impacts if more automation were to take place.

The Eurobarometer data also offers an opportunity to reflect on whether the opportunities presented by the introduction of robotics and the use of AI outweigh the potential negatives associated with the loss of jobs as we know them today. About two-thirds of respondents in the Czech Republic believe that more jobs will be lost than created as a result of the use of robots and artificial intelligence. This pessimism may also be related to a lack of information on the concrete benefits of AI, lower confidence in the ability of the state or employers to manage the transition to new technologies, and fears of widening social inequalities.

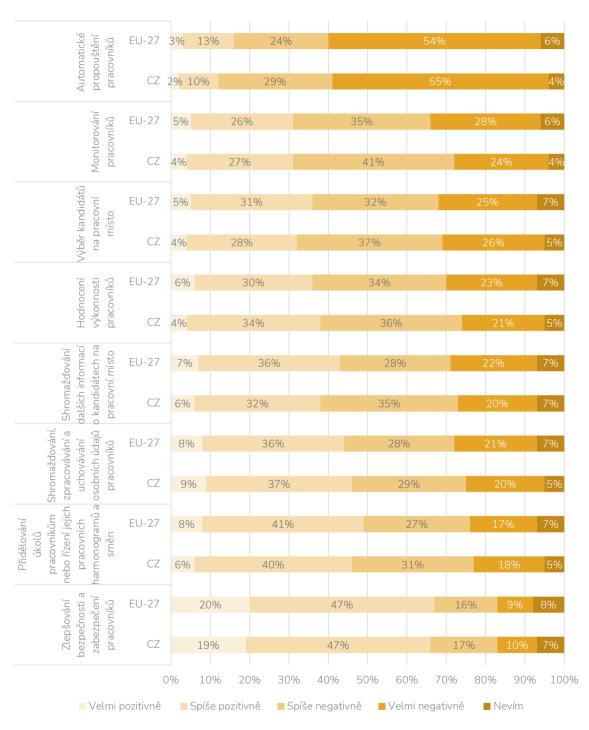
The fear of job loss is not unfounded - artificial intelligence and robots are already taking over specific work activities that were previously performed by humans. Automation is gaining ground, for example in manufacturing, where robots handle assembly work with high precision, but also in administration, where AI systems replace routine tasks such as data processing or handling customer requests. There is thus a real shift of some types of work from human hands to technology, which provides a tangible basis for the perceived threat to jobs. The concerns are already based on very concrete experience of how AI and digital tools are used in practice. The Eurobarometer 554 surveyed which activities that have started to be digitized or taken over by AI are evaluated positively by the public and which ones rather negatively. This involved evaluating activities ranging from data processing, to candidate selection decisions, to performance monitoring or even automated dismissals (see Figure 4).

Comparable data from the Czech Republic and EU-27 countries show that the use of technology is most positively perceived where it clearly improves safety and protects workers' health. In the Czech Republic, 66% of respondents rate the use of AI and digital tools to improve worker safety and security positively - almost identical to the EU average (67%). A similarly relatively positive reception can be observed in shift management and task allocation, where the positive rating in the Czech Republic reaches 46%. In these areas, technology can contribute to better work organization, reduce workload or minimize human error, and is therefore seen by employees as an enabler rather than a threat. In the EU-27, 49% of respondents were positive about these activities.

However, the situation is different where technology directly affects employee rights, privacy or job security. For example, only 31% of employees in the Czech Republic perceive employee monitoring positively, while 65% perceive it negatively. Similarly, confidence is low in the areas of employee assessment, candidate data collection or automated selection decisions. The most

significant rejection concerns automatic redundancies, which are considered positive by only 12% of respondents (16% in the EU), while 84% of people in the Czech Republic consider it a negative step. Opposition to the introduction of automatic dismissal practices is similarly strong across the different socio-demographic groups of respondents. This shows a strong distrust of technology in decision-making processes that directly affect the livelihood security and dignity of employees.

Chart 4 In general, how positive or negative do you feel about the use of digital technologies, including AI, in the workplace for each of the following activities?



Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024. Improving worker safety and security

Assigning tasks to workers or managing their work schedules and shifts Collection, processing and storage of employees' personal data

Collecting further information on job candidates

Staff performance evaluation
Selection of candidates for the post
Worker monitoring
Automatic redundancy

□ Very positive □ Rather positive □ Rather negative □ Very negative □ I don't know

Regarding the differences between the different socio-demographic and opinion groups of respondents, we focused mainly on those forms of digitized and automated activities that are perceived negatively. All age groups in the Czech Republic except young people under 25 do not approve of AI monitoring of employees with similar intensity. In the youngest age group surveyed, just under half of respondents were against monitoring employees using digital technologies, i.e., 18 percentage points less than the average for the Czech Republic. Further differences are found by employment/employment status. Logically, there was a greater tolerance towards automated control and monitoring possibilities among persons who could possibly use them, i.e., self-employed persons and managers. On the contrary, we exceptionally do not find differences of opinion between manual workers and white-collar workers, who are more critical of automated monitoring (68% and 73%, respectively, perceived it negatively). We did not observe large differences in individual sectors of the national economy and, surprisingly, not even across regions, where Prague usually stands out with a more positive assessment of technological change.

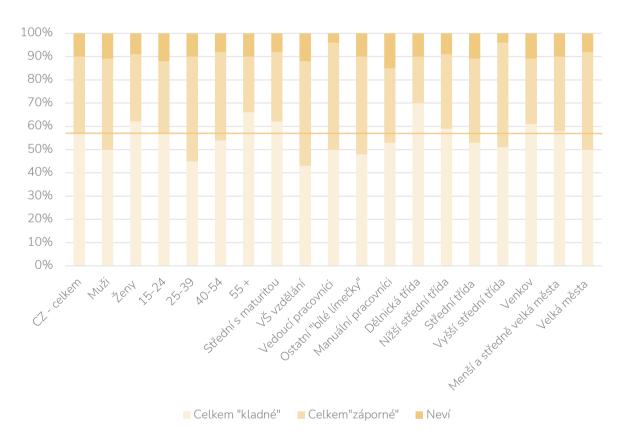
2.4 Increasing work intensity, work stress and alienation

The introduction of robotics and artificial intelligence into work systems is also often perceived negatively due to the increased intensification of work and the de-skilling of working relationships (Global Deal, 2024). According to Eurobarometer 554 data, three-quarters of respondents (in the Czech Republic) believe that robots and artificial intelligence are increasing the pace at which workers perform tasks. An overwhelming majority of respondents also believe that these technological solutions have a negative impact on communication and interpersonal relationships in the workplace.

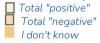
The depersonalization of relationships in working life can be seen as a logical consequence of ongoing digitalization, robotics and the introduction of artificial intelligence. These changes are leading to a fundamental transformation of the organization of work - increasingly, algorithmic management systems, teleworking technologies and hybrid models are being applied, where work is no longer fixed to a specific physical location. Changes are also evident in the manufacturing industry. The traditional Fordist model of work organization, based on a strict division of labour and mass production, has now been overcome in many sectors. Increasingly, production is being handled by automated and AI-driven systems, leading to industrial halls often operating with minimal staff in empty production halls. Perhaps this is why we find high proportions of workers in the Eurobarometer data agreeing with the statement that robots and artificial intelligence have a negative impact on communication between colleagues in both manufacturing and

service industries, as well as in the public sector (Chart 5). Negative impacts on communication between colleagues are perceived more by workers in small companies/organizations than by workers in medium and large companies. In terms of occupational classification, we find above-average proportions of agreement with the statement among workers. Similarly, women and people over 55 are more likely to rate the negative impact of technology on communication in work teams. On the other hand, people aged 25-39, those with a university degree and those living in large cities are less skeptical (Graphs 5 and 6). The specifics of Prague most favourable to the use of new technologies are shown in Chart 5.

Chart 5 Agree/disagree with the statement: "Robots and artificial intelligence have a negative impact on communication between colleagues." Distribution of responses for selected groups of respondents (gender, age, education, work status, size of location)



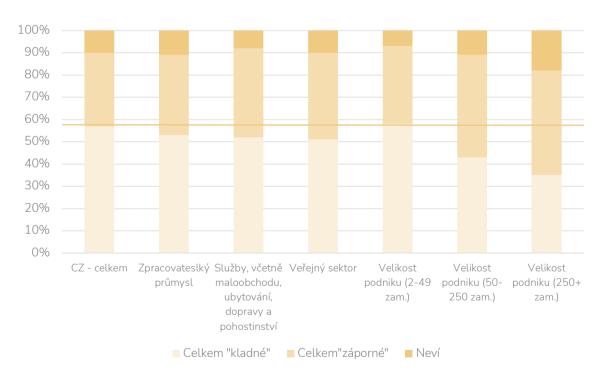
Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.
CZ -total, Male, Female, 15-24, 25-39, 40-54, 55+, High school graduate, University degree, Managers, Other white collar workers, Manual workers, Working class, Lower middle class, Middle class, Upper middle class, Rural, Small and mediumsized towns, Large towns



Concerns about work intensification and alienation are consistent with a number of academic studies that point to the fact that automation, digital surveillance and the use of AI can lead to increased demands on work performance, accelerated work pace and greater pressure to complete tasks in less time (Niazi et all, 2023; Moore et al., 2018). For example, technology enables detailed monitoring of employee performance, accurate measurement of productivity or setting dynamic work goals, which can lead to the so-called **technological work-intensification effect** (Berg et al., 2022).

In addition, it is often mentioned that the automation of some forms of communication (e.g., automated shift scheduling, chatbots, automated performance reviews) can limit personal contact between employees and between employees and supervisors. This can undermine interpersonal relationships, trust in the workplace and overall job satisfaction (Schildt, 2020).

Chart 6 Agree/disagree with the statement: "Robots and artificial intelligence have a negative impact on communication between colleagues." Distribution of responses for selected groups of respondents (sectoral affiliation, company size)



Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

CZ Total, Manufacturing, Services including retail trade, accommodation, transport and food services, Public sector, Enterprise size (2-49 employees), Enterprise size (50-250 employees), Enterprise size (250+ employees),

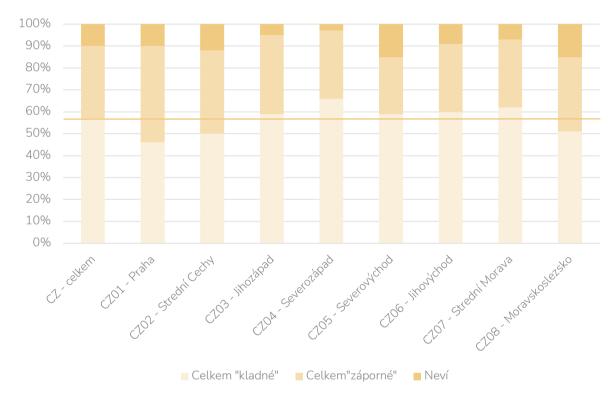
Total "positive"

Total "negative"
I don't know

For this reason, many experts have long warned that the impacts of AI and robotics are not only reducible to the loss or creation of jobs, but also significantly affect the **quality of working life** itself.

Digital workplace job demands, such as hyperconnectivity³¹, technology overload³², fear of missing opportunities³³, and challenges in the digital workplace³⁴, contribute to harmful impacts on workers' health. Studies on this topic highlight the need to identify and understand the demands of the digital workplace in order to protect the mental health and well-being of digital workers (Marsh, Vallejos and Spence, 2024).

Chart 7 Agree/disagree with the statement: "Robots and artificial intelligence have a negative impact on communication between colleagues." Distribution of responses by regional



affiliation

³¹ Hyperkonektivita = tlak na neustálou dostupnost a připojení prostřednictvím digitálních zařízení, který stírá hranice mezi pracovním a soukromým životem.

³² Technologické zahlcení = pocit zahlcení množstvím informací, oznámení a úkolů generovaných digitálními technologiemi.

³³ Strach z promeškání (fear of missing out, FOMO) = úzkost z toho, že kvůli neustálému připojení a informačnímu přetížení přijdeme o informace, příležitosti nebo aktualizace.

³⁴ Problémy na digitálním pracovišti = problémy s použitelností, přístupností nebo funkčností digitálních nástrojů, které mají dopad na efektivitu a produktivitu pracovníka.

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

CZ -total, Prague, Central Bohemia, Southwest, Northwest, Northeast, Southeast, Central Moravia, Moravia-Silesia

Total "positive"

Total "negative"

I don't know

2.5 Control over systems - cybersecurity and the need for regulation

Al systems, which today intervene in human resource management, production planning, employee monitoring, or hiring and performance evaluation decisions, present not only opportunities for more effective management but also new safety and ethical risks (ILO, 2022; Binns, 2018). To maintain trust in Al systems in the work environment, not only security against cyber-attacks, but also transparent and precise control of algorithmic decisions is crucial (see Chapter 1).

The vast majority of the 554 Eurobarometer respondents (83%) declare the need for careful management and control of technologies where AI and the use of robots is involved. This need is articulated with more or less the same intensity across socio-demographic categories. However, it can be stated that self-employed persons and employees in managerial positions share this need above average. On the contrary, the youngest generation aged up to 24 years and students reported less need for control and management of AI technologies and robots.

In addition to external threats (leakage of sensitive data, misuse of personal data, etc.), there are also significant internal risks associated with the operation of the AI systems themselves. Without adequate controls, decision-making errors, discrimination, data distortion or unwanted automation of decisions can occur, fundamentally affecting working conditions and labour rights (Raji et al., 2020). In particular, the aforementioned *black boxes* are a problem, where it is not clear on what parameters AI makes decisions about hiring, assigning tasks, monitoring performance or dismissing employees (Kellogg et al., 2020; Pasquale, 2015).

Eurobarometer data show that the implementation of specific processes related to the use of digital technologies, including artificial intelligence, is still less developed in the Czech Republic compared to the European average. For example, while only 17% of workers in the Czech Republic have experience with managing work schedules, the European average is around 29%. Similar differences can be found in the allocation of tasks to workers through digital technologies and AI (14% in the Czech Republic vs. 22% in the EU-27). 24% of respondents in the EU-27 have experience of AI or other digital processes monitoring employee activity. In the Czech Republic, one in five workers has such experience. Recruitment using digital technologies and AI is also less common in the Czech Republic (11%) than in the EU-27 (18%). In the Czech Republic, specific processes and activities related to digitalization and artificial intelligence are used to a lesser extent than in the EU-27, which is reflected in the extent of employee experience in enforcing security measures during their implementation. While approximately 30% of workers in the EU have experience of this aspect, only 21% in the Czech Republic do. The lower level of use of these

technologies naturally reduces the current need for wider application of safety measures in workplaces.

Table 3 Experience with specific digital technology tasks (%)

Action	Region	Yes	No	Doesn't apply	l don't know	Total
Enforcement of security measures	CZECH REPUBLIC	21	72	1	6	100
	EU-27	30	63	4	3	100
Managing work schedules	CZECH REPUBLIC	17	77	1	5	100
	EU-27	29	63	5	3	100
Monitoring the activities of staff	CZECH REPUBLIC	20	74	1	5	100
	EU-27	24	68	5	3	100
Assigning tasks to staff	CZECH REPUBLIC	14	81	1	4	100
	EU-27	22	70	5	3	100
Performance evaluation, including sanctions or rewards	CZECH REPUBLIC	15	80	1	4	100
Sanctions of rewards	EU-27	21	71	5	3	100
Recruitment	CZECH REPUBLIC	11	82	1	6	100
	EU-27	18	73	5	4	100

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024, Country fact sheet Czech Republic, available from: https://europa.eu/eurobarometer/surveys/detail/3222

The Eurobarometer questions also focused on initiatives and practices that employers should adopt to reduce the risks associated with the use of Al. Respondents across the EU-27, but also in the Czech Republic, perceive that it is important to prevent risks. In the Czech Republic, respondents place the greatest emphasis on protecting the privacy of workers (important to 83% of workers). Three-quarters of respondents also consider it important to involve workers and their representatives in the design and adoption of new technologies. The same proportion considers it important to promote greater transparency in the use of digital technology in personnel decisions. One of the other important strategies for the effective and less risky use of Al is to ban fully automated decision-making processes that take place without any human supervision or intervention. The above aspects should be consistently included by unions in the key topics of collective bargaining.

It is also necessary to set clear rules. More and more experts and institutions (European Commission, OECD, ILO) are therefore calling for transparent rules for the development, implementation and auditing of AI systems in the workplace (see Chapter 1).

Table 4 Importance of risk mitigating control strategies in the use of AI and digital technologies (%)

		Important	Unimportant	l don't know	Total
Worker privacy protection	CZECH REPUBLIC	83	14	3	100
	EU-27	82	14	4	100
Involving workers and their representatives in the design and adoption of new	CZECH REPUBLIC	72	22	6	100
technologies	EU-27	77	17	6	100
Promoting greater transparency in the use of digital technologies in personnel	CZECH REPUBLIC	73	21	6	100
decision-making	EU-27	75	18	7	100
Banning fully automated decision-making	CZECH REPUBLIC	68	24	8	100
processes	EU-27	74	19	7	100
Restrictions on automated monitoring of employees	CZECH REPUBLIC	69	25	6	100
employees	EU-27	72	22	6	100

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024, Country fact sheet Czech Republic, available from: https://europa.eu/eurobarometer/surveys/detail/3222

The asymmetry of power between employers and employees may lead to employers using algorithmic management to monitor workers' behaviour in detail, tracking their productivity, breaks, work pace or even biometric data (see Chapter 1). This can lead to increased stress, feelings of constant surveillance, and impaired quality of work life (Wood et al., 2019; Moore et al., 2018). Although 69% of respondents in the Czech Republic perceived the limitation of automated monitoring of employees as important, one quarter of them probably do not perceive automated monitoring as threatening or non-standard and therefore do not consider its limitation important (see Table 3).

2.6 The potential of artificial intelligence and robotics: benefits despite risks

Despite the many risk factors described here, the use of artificial intelligence and robotics in work processes brings many significant benefits, which are reflected in increased productivity, quality of output, work safety and streamlined decision-making processes.

The majority of respondents in the Czech Republic (70%) believe that robots and artificial intelligence are a good thing for society because they help people in their work or perform everyday household tasks. In the EU-27, the share is slightly lower (63%). Compared to 2017³⁵, however, there has been a 12 percentage point drop in the Czech Republic, indicating a deterioration in the situation - respondents are already less optimistic about Al and robots.

One of the main benefits of using AI systems and robotics in work processes is increased efficiency and productivity. AI systems can process large volumes of data many times faster than humans and provide support in areas such as market analysis, predictive maintenance or supply chain management. Robotization of manual activities enables continuous, fatigue-free operation and contributes to consistent production quality, which is particularly applicable in the automotive and pharmaceutical industries. At the same time, it can lead to the replacement of some jobs, especially in routine occupations (Acemoglu & Restrepo, 2020; Bogue, 2018).

The majority of Czech respondents (72%) agree that AI is necessary because it can perform jobs that are considered boring or repetitive. Support for this view is highest among younger people aged 25-39 (78%) and managers (84%), while older respondents (55+) and the self-employed are less likely to agree (68%). In terms of political orientation, agreement is stronger among right-leaning respondents (78%) than among left-leaning respondents (69%). There is also a lower proportion of positive responses among employees of large companies with more than 250 employees (64%), which may be related to concerns about the impact of automation on jobs.

Another key advantage is increased safety at work. Robots can be deployed in hazardous or harmful environments - for example, in chemical handling, mines or waste disposal - thereby reducing the risk of occupational accidents (Kuok Ho, 2024; Pishgar et al., 2021). Similarly, autonomous vehicles or drones contribute to reducing accidents in the logistics and construction industries (Bogue, 2018).

Al also enables personalization and better customer service. In sectors such as retail, banking and healthcare, intelligent systems help to better understand clients' needs and offer them targeted solutions.

38 |

³⁵ Viz šetření Special Eurobarometer 460: Attitudes towards the impact of digitisation and automation on daily life z roku 2017, více viz https://europa.eu/eurobarometer/surveys/detail/2160

Decision support is also an important benefit of Al. Machine learning and advanced analytics enable scenario modelling, the discovery of hidden trends and rapid response to changes in the environment. This contributes to more agile business management and more accurate planning (Brynjolfsson and McAfee, 2017). The majority of respondents in the Czech Republic agree that robots and Al can be used to make accurate decisions in the workplace - 60% of respondents agreed. The EU-27 average is 7 percentage points lower. Self-employed workers (66%) and managers (71%) show the highest level of agreement, while the lowest level of agreement is seen among manual workers (57%). Differences between age groups are minimal, with people aged 25-39 and respondents with a university degree being slightly more optimistic.

2.7 Subjective perception of qualification readiness in the process of adaptation to the digital world of work

Digital transformation is fundamentally changing the nature of work and increasing the demands on the digital competencies of the workforce. In addition to objective capabilities, how individuals subjectively assess their readiness to use digital technologies at work plays a key role. This subjective aspect can significantly affect their willingness to learn, adapt and actively seek opportunities to upgrade their skills.

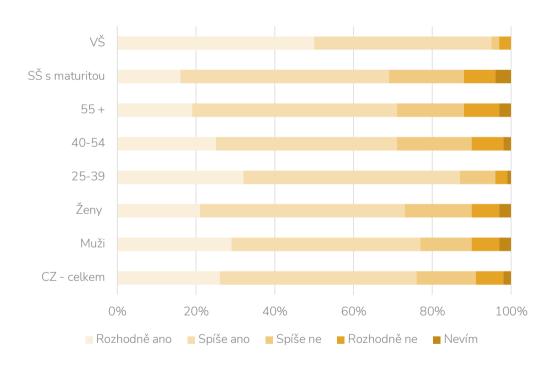
Data analysis shows that 76% of respondents in the Czech Republic believe that their digital skills are sufficient for their current job. This share is around the EU-27 average. However, there are significant differences between the different groups of respondents. Those with a university education are significantly more likely to rate their digital competences and qualifications as sufficient for their current job, with 50% saying they definitely have sufficient competences and a further 45% expressing a lower level of agreement. In terms of age, the most confident group in this respect is the 25-39 age group, i.e., younger and lower middle-aged workers (see Figure 8). Another group of respondents with high self-confidence are self-employed (95%) and managers (86%), while manual workers (60%) and workingclass respondents (48%) are significantly more critical of their abilities. Those with negative attitudes towards digitalization are also significantly morelikely to believe that their skills are insufficient - 47% disagreed with the statement "My digital skills are sufficient for the job" (see Table 5).

Lower levels of subjective self-confidence in digital skills among some groups are consistent with labour market predictions. For example, according to the OECD (2019a), those with less education, older workers and employees in routine or manual jobs are most at risk of digital automation, yet they are among the least likely to participate in further training programmes. This situation points to a deeper structural problem: the traditional model of education and professional development is failing in an era of rapid technological change.

This fact is illustrated by the Eurobarometer 544 data presented here, where one of the questions on subjectively perceived sufficiency of qualifications focuses on the hypothetical situation of

finding a new job in the next twelve months. The data show that when it comes to looking for a new job, respondents are already more critical of their competences in the field of digital technologies in most of the groups of respondents surveyed. In total, 69% of respondents said they considered themselves sufficiently qualified to use digital technologies if they were to find a job or change jobs in the next 12 months. In addition to manual workers in blue-collar occupations who generally rate their digital skills lower than others, even for the needs of their current job, specifically when they need to change jobs, respondents aged 40 and over also showed greater concern. Here, more than one third do not believe that their digital competences are sufficient when looking for a new job (Table 6). Similarly, there is a fairly significant difference for public sector workers, where 81% of respondents are confident in their job in terms of using digital technologies, but only 71% of respondents are confident in their job if they have to look for a new job.

Chart 8 Level of agreement with the statement: "Do you consider yourself sufficiently skilled in using digital technology to do your job?" Distribution of responses for selected groups of respondents (gender, age, education)



Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

University, High school with a high school diploma, 55+, 40-54, 25-39, Women, Men, CZ-total

Definitely yes

Rather yes

Rather no

Definitely no

Don't know

Table 5 Level of agreement with the statement: "Do you consider yourself sufficiently skilled in using digital technology to do your job?" Distribution of responses for selected groups (%)

	T		Work	status			Social	class	
	Total Czech Republic	SELF- EMPLOYED	Senior staff	Other "white collars"	Manual workers	Worker's class	Lower middle class	Middle class	Upper middle class
Absolutely yes	26	30	42	23	16	11	19	26	51
Rather yes	50	56	42	54	44	37	49	53	42
YES	76	86	84	77	60	48	68	79	93
Rather not	15	9	8	15	23	25	20	14	5
Absolutely not	7	5	7	5	11	23	3	6	2
{I>NO <i}< td=""><td>22</td><td>14</td><td>15</td><td>20</td><td>34</td><td>48</td><td>23</td><td>20</td><td>7</td></i}<>	22	14	15	20	34	48	23	20	7
I don't know	2	-	1	3	6	4	9	1	-
		Sector		•	to the use of Al in general				
	Total Czech Republic	Manufacturi ng industry	Logistics	Services, including retail, accommodati on, transport and hospitality	Public sector	Positive	Negative		
Absolutely yes	26	19	17	27	33	3	8		
Rather yes	50	49	59	50	48	54	39		
YES	76	68	76	77	81	86	47	1	
Rather not	15	18	12	14	14	9	32		
Absolutely not	7	9	8	8	4	4	15		
{I>NO <i}< td=""><td>22</td><td>27</td><td>20</td><td>22</td><td>18</td><td>13</td><td>47</td><td></td><td></td></i}<>	22	27	20	22	18	13	47		
I don't know	2	5	4	1	1	1	6		

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024. Question QB2.2.

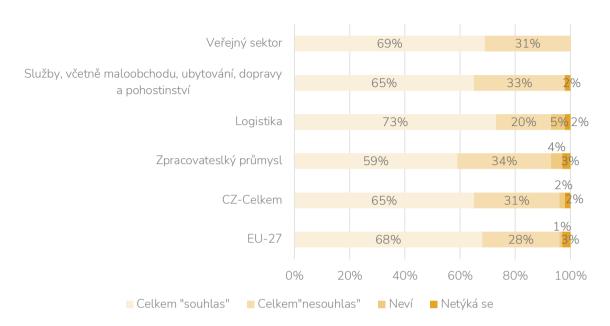
Experts are therefore increasingly calling for a fundamental change in the approach to education - from one-off training to a system of lifelong learning. The concept of *life-long learning* is based on the idea that learning must become a normal part of an individual's career (OECD, 2018). This includes accessible and flexible forms of education, the development of soft and technical skills, but also support in overcoming subjective feelings of inadequacy that can lead to passivity and technological resistance (ILO, 2021).

Thus, the subjective assessment of one's own readiness is not only a reflection of real abilities, but also of cultural and psychological factors. People who believe that they cannot 'master' new technologies often do not even enter education, thereby increasing their vulnerability in the labour market (Brown et al., 2012). An effective training policy must therefore take into account motivation, self-perception and confidence in adaptability in addition to the courses and training on offer. It is not enough to just provide the tools - you also need to work with user acceptance and subjective experience. The transformation towards a "learning society" thus requires not only structural changes in the education system, but also the cultivation of an environment that fosters growth, confidence and a willingness to learn across generations and class positions. In this regard, unions could offer targeted support to their members and work in partnership with the employer to decide on effective training strategies.

So far, employees are relatively satisfied with the approach of employers in terms of the sufficiency of tools or training provided to effectively use the latest digital technologies, including Al. About two-thirds of workers in the Czech Republic agreed with the statement that their employer provides them with the necessary tools and training to use digital technologies and Al systems in their current job. This share is more or less comparable to the EU-27 average. In general, employees with higher education outside manual occupations living in larger cities have better access to digital learning. Women (62%) report fewer opportunities for digital learning from their employer than men (68%).

Employers in the manufacturing industry also offer fewer opportunities for training in digital technologies and the use of AI (see Chart 9). For example, while 73% of employees in the logistics industry reported sufficient training, only 59% of employees in the manufacturing industry did so.

Chart 9 Do you agree that your employer provides you with the tools or training to effectively use the latest digital technologies, including AI?



Public sector, Services, including retail, accommodation, transport and hospitality, Logistics, Manufacturing industry, Total Czech Republic, EU-27

☐ Total "yes"
☐ Total "no"
☐ I don't know
☐ Does not apply

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

Table 6 Level of agreement with the statement "Do you consider yourself sufficiently qualified to use digital technologies in your future job if you were to find a job or change jobs in the next 12 months?" (v %)

	Total		Wor	k status			Social c	lass	
	Czech Republic	SELF- EMPLOYED	Senior staff	Other "white collars"	Manual workers	Worker's class	Lower middle class	Middle class	Upper middle class
Absolutely yes	23	37	36	19	13	15	16	24	35
Rather yes	46	39	43	52	39	33	45	50	42
YES	69	76	79	71	52	48	61	74	77
Rather not	20	13	12	18	29	33	25	17	16
Absolutely not	7	8	8	7	12	15	4	7	6
{l>NO <l}< td=""><td>27</td><td>21</td><td>20</td><td>25</td><td>41</td><td>48</td><td>29</td><td>24</td><td>22</td></l}<>	27	21	20	25	41	48	29	24	22
I don't know	4	3	1	4	7	4	10	2	1
			S		Age				

	Total Czech Republic	Manufacturing industry	Logistics	Services, including retail, accommodation, transport and hospitality	Public sector	15–24	25–39	40–54	55 and older
Absolutely yes	23	16	17	25	30	26	30	18	18
Rather yes	46	46	59	43	41	49	52	42	44
YES	69	62	76	68	71	75	82	60	62
Rather not	20	24	12	19	19	22	13	26	19
Absolutely not	7	10	10	9	6	-	4	11	11
{I>NO <i}< td=""><td>27</td><td>34</td><td>22</td><td>28</td><td>25</td><td>22</td><td>17</td><td>37</td><td>30</td></i}<>	27	34	22	28	25	22	17	37	30
I don't know	4	4	2	4	4	3	1	3	8

Source: Eurobarometer 554: Artificial Intelligence and the Future of Work, 2024.

2.8 The direction of unions in response to a changing labour market driven by new technologies and AI

Social dialogue will always look like the shape of work. The changes brought about by globalization and technological advances in digitalization, robotics, AI, etc. are reflected in changes in working patterns, organizational systems, value orientations and in the expectations of workers themselves. In this context, the general discourse and the distribution of forces on the side of employees and employers is changing. These changes are then always responded to with a certain delay by labour legislation, which is subject to continuous change and adaptation under the pressure of a certain historical epoch and political compromises.

Rotila (2019) points out that labour law, despite its relatively recent emergence in response to the Industrial Revolution and capitalist industrialization, still displays its institutional rigidity in the face of new forms of work (e.g. platform economy, freelancing, hybrid forms of employment).

Unions often react defensively and rarely proactively to the need for these changes. Institutional inertia persists; union decision-making structures are often occupied by an older generation that clings to notions of a 'golden age' of social dialogue from the post-war compromise era, making it impossible to adapt to new social realities (Gumbrell-McCormick & Hyman, 2013; Hyman, 2001).

Trade unions today thus face challenges arising not only from labour market changes but also from the institutionalized nature of labour law itself. It is very unrealistic to expect that labour law will not change. On the contrary, flexible but fair arrangements should be sought that reflect unequal power positions or social justice for different labour market actors. We deliberately no longer write only employees and employers, as the current labour market is blurring previously defined

boundaries and the entry of new power players such as digital labour platforms with disembodied algorithmic labour management.

However, it can be argued that as long as human labour exists, the historical role of trade unions as a key player in balancing power within labour relations can be maintained. But it is important that unions not only respond to change, but also actively use new technologies and forms of organization to expand their influence and mobilization capacity. This approach also implies an innovation of the ideological framework that is open to new forms of solidarity and participation (Benassi & Vlandas, 2016). Currently, at least within the country, unions are not effective in areas with high levels of labour isolation and among freelancers. The trade union movement, already weakened by the individualism fostered by the current form of the market economy, must now also cope with the onset of precarisation. The precariat that unions should target, and as Standing (2011) has described it, is a new class of workers with no affiliation to the working class, but on which unions were built.

In contrast, trade union participation in social dialogue should be proactive in terms of facilitating the introduction of AI and helping to manage a transition period where a fair and inclusive labour market is promoted and the negative impacts of AI in the workplace are mitigated. At a time when labour markets are undergoing fundamental change, developing effective social dialogue is key to meeting the challenges and seizing the opportunities that AI brings. Social dialogue is an effective tool for developing meaningful laws, policies and practices at national, regional and sectoral levels.

Examples of possible reflections on meaningful social partner intervention include changes in the status of the self-employed (self-employed) as a result of new mechanisms linking labour supply and demand (e.g. through digital labour platforms), new models of work organization and new ways of managing and controlling work performance, often through algorithms. Thus, the working conditions of self-employed workers are in many cases beginning to approach dependent work, but without adequate protection under labour law.

Moreover, algorithmic management of work, common e.g. in delivery/courier services or clickworkers³⁶, limits workers' autonomy and makes individual and collective bargaining over wages or working hours impossible (Rosenblat & Stark, 2016; De Stefano, 2016).

Thus, self-employed workers often find themselves in the position of "hybrid workers" - legally independent but de facto subordinate. Moreover, their working conditions are negatively affected by global competition in the labour market, the non-transparent ownership structure of digital

³⁶ Clickworker, doslova "klikací pracovník" je pracovník, který se živí "klikáním", resp. zpravidla jednoduchými aktivitami na PC (kategorizace dat, klasifikace klíčových slov, eliminace závadného obsahu na sociálních sítích atd.). Clickworker zpravidla pracuje pro některou z digitálních pracovních platforem zaměřených na tento typ práce, přičemž pracovní podmínky lze často označit jako prekérní. Více o clickworkerech a digitálních pracovních platformách viz např. KROUPA, Aleš, Jana VÁŇOVÁ & Soňa VEVERKOVÁ, 2023. České digitální pracovní

platformy. Praha: RILSA. Dostupné z: https://katalog.vupsv.cz/fulltext/vz_532.pdf

labour platforms, and the absence of institutional protection mechanisms to ensure their collective representation. This combination leads to structural uncertainty and power imbalances in the relationship between the individual and the platform (Woodcock & Graham, 2020).

This situation calls for a review of the legal status of self-employed workers, especially with regard to the distinction between actual and dependent independence. The European Union is responding to these challenges by, among others, proposing Directive (EU) 2024/2831 of the European Parliament and of the Council of 23 October 2024 on improving working conditions at work through the platform³⁷. In addition, it is clear from practice that some groups of self-employed persons clearly articulate the requirement for the possibility of collective representation of interests. Unions should not ignore this demand, even though it will mean accepting major strategic changes and possibly structural reorganization. This could be a major investment in the future.

The situation where trade unions are forced by external changes to reconsider their attitudes towards a certain group of workers is currently very topical in relation to the rapidly increasing share of foreign workers in the Czech labour market. It is clear that trade unions are beginning to see foreign workers as a relevant target group that needs to be protected and treated equally without discrimination. A survey of trade union representatives conducted by Czech Priorities in its project "Building the capacity of trade unions to address the needs of Ukrainian refugees and support their ethical employment"38 shows that approximately two-thirds of trade union officials believe that trade unions should seek to have foreign workers become members, one-fifth held the opposite view, and 16% of respondents were unable to comment on the topic.

In the context of new forms of employment and new forms of work organization and performance in today's rapidly changing technological era, it is necessary for unions to take into account not only the broadening spectrum of the target worker population, but also to adapt the topics of collective bargaining. Protecting working conditions and ensuring decent work for all new jobs and jobs that are subject to changing demands is key. However, social dialogue can also play an important role in ensuring that people remain a decisive force in AI development in the future. Educational intervention at all levels of the education system is also an important aspect. Social dialogue should be a certain safeguard when implementing AI in work processes at the level of companies/organizations. Workers and employers can work together to help develop the most effective policies for the use and oversight of AI to shape the future of work not only as management and technology vendors envision it, but also as employees envision it.

³⁷ Celý text směrnice viz https://eur-lex.europa.eu/legal-content/CS/TXT/?uri=CELEX:32024L2831

³⁸ Odbory a zahraniční pracovníci: anketa mezi odborovými zástupci nebyla publikována a je dostupná na vyžádání u Českých priorit.

3.1 European social partners' initiatives

Several social partners in Europe are reacting to the new situation and undertaking a number of activities to mitigate the negative impacts of AI on the labour market, workers and individual professions. It should be noted, however, that most of these activities so far are aimed at raising awareness and influencing policy, while there are few concrete commitments in collective agreements. At the European level, two initiatives dealing with AI are worth mentioning, which should be implemented at national levels, ideally through collective agreements, either at senior or company level.

The first initiative is the European Social Partners Framework Agreement on Digitalization, signed on behalf of employers by the Confederation of European Business, BusinessEurope, the European Craft Association, European Association of Craft, Small and Medium-Sized Enterprises, SMEunited European Centre of Employers and Enterprises providing Public Services, CEEP and, on behalf of the trade unions, European Trade Union Confederation, ETUC. This is an autonomous framework agreement as a joint commitment of the European cross-sectoral social partners to optimize the benefits and risks of digitalization in the world of work. This agreement is therefore focused not only on artificial intelligence, but on digitalization in general. One of the areas is dedicated to artificial intelligence, which is supposed to be subordinate to humans. The transparency of artificial intelligence, compliance with occupational health and safety, compliance with laws and ethical standards, including the protection of personal data, are emphasized. This Framework Agreement is an autonomous initiative and the result of negotiations between the European social partners under the Sixth Work Programme 2019 to 2021. The Parties to this Agreement invite their member organizations in EU countries to implement this Agreement at national level. The implementation of the agreement was monitored from 2021-2023.

The first major activity in the field of artificial intelligence is the *Joint Declaration on Employment* aspects of Artificial Intelligence³⁹, signed in 2024. The contractual partners are the social partners in the banking sector, on behalf of the employers the European Banking Federation (EBF^{40}), the European Association of Co-operative Banks ($EACB^{41}$) and the European Savings and Retail Banks

³⁹ Celý text viz https://www.ebf.eu/wp-content/uploads/2024/05/Joint-Declaration-on-Employment-Aspects-of-Artificial-Intelligence.pdf

⁴⁰ Webové stránky organizace viz https://www.ebf.eu/

⁴¹ Webové stránky viz https://www.eacb.coop/

Group (*ESBG*⁴²). UNI Europa is the contractual partner for the trade unions⁴³. The Joint Statement of the Social Partners in Banking is the latest and most comprehensive document to date on artificial intelligence and how it can be set up for employees and their working conditions. Banking is a sector in which artificial intelligence is widespread (calculation of customer creditworthiness, personalization of services, detection of bank fraud, etc.), so the social partners stress that its use should respect human dignity, health and safety at work, protection of employee privacy, transparency for both employees and customers. At the same time, the employer should enable AI training for employees. Emphasis is also placed on the artificial intelligence used in the recruitment of new employees: if the recruitment of new employees is subject to artificial intelligence, its algorithm should be transparent and non-discriminatory.

3.2 Artificial intelligence and ICT in collective agreements

Although collective agreements still deal little with AI and new technologies, it is possible to find collective agreements at least abroad that contain some provisions on AI and new technologies. A sample of collective agreements with the issues under review is available on the websites set up by UNI Global Union and the Friedrich Ebert Stiftung (FES)⁴⁴. These pages track the commitments in collective agreements in terms of the eight themes listed in the table.

One of the few studies on the potential for collective bargaining in the areas of AI and digitalization was commissioned by the European trade union UNI Europe in cooperation with the FES (Brunnerová et al., 2024). In this study, the research team mapped key areas of collective bargaining in the context of the use of AI and algorithmic management. Among the participating trade unions in the selected EU countries, unions focus on the following key areas with a direct impact on workers' rights and working conditions:

- The right to challenge an automated decision: this applies, for example, to a refusal to assign a shift, termination of the employment relationship or a change in working conditions based on an algorithm decision. Collective bargaining agreements may provide for an employer's obligation to allow human review of these decisions.
- Access to data experts: workers or unions should be able to turn to an independent expert to help them understand how the algorithm works and assess its impact on working conditions.

⁴² Webové stránky instituce viz https://www.wsbi-esbg.org/

⁴³ Webové stránky organizace viz https://www.uni-europa.org/

⁴⁴ Viz databáze Artificial Intelligence (AI) & Algorithmic Management (AM) in Collective Bargaining Agreements (CBAs). Dostupné z: https://www.uni-europa.org/news/a-database-of-ai-and-algorithmic-management-in-collective-bargaining-agreements/

- Transparency of the AI systems used: employers should make it mandatory to inform employees
 about what algorithmic systems they use, what data they collect and for what purposes. This
 includes, for example, productivity tracking systems or shift planning. An important area is the
 right to disconnection.
- Negotiating work schedules and performance appraisals: algorithms often determine not only
 work schedules but also how work efficiency is evaluated. Collective agreements should define
 the right of employees to fair treatment, protection against biased evaluation and the possibility
 of controlling algorithmic parameters.

From the above, it is clear that the spectrum of concerns and perceived risks as mapped by the Eurobarometer 554 survey data (see Chapter 2) is already largely reflected by trade unions and that trade unions, especially those at European level, are aware of the fundamental risks associated with the use of AI and digitalized tasks in work processes. Thus, the following universal recommendations have been defined for trade union activity across the EU (Braunner et al., 2024):

- Increasing the competences of trade union representatives: trade unions should systematically build professional capacity to negotiate AI - for example through training, seminars or cooperation with universities and research institutions.
- Legal advice and technical expertise: it is essential to increase unions' access to legal and technical experts to help them understand technology and formulate effective negotiating strategies.
- International sharing of good practice: given the international nature of digital platforms and technologies, there is a need to build networks between trade unions in different countries, sharing contractual provisions, strategies and examples of successful interventions.
- Proactive approach: instead of taking a reactive approach after AI systems have been implemented, unions should be actively involved in the implementation process and negotiate terms and conditions before implementation.

3.3 New technologies and AI in collective agreements: examples from practice

Table 7 below shows the topics and numbers of collective agreements published in the UNI Global Union and Friedrich Ebert Stiftung databases.

Table 7 Topics and numbers of collective agreements published in the UNI Global Union and Friedrich Ebert Stiftung database

Тор	pic	Number of collective agreements
1.	Training on new artificial intelligence tools	20
2.	Trade union involvement in the introduction of new technologies	15
3.	Working hours and right to disconnect	13
4.	Other topics	12
5.	Privacy legislation	10
6.	Trade unions and data protection	10
7.	Monitoring and supervision of employees	2
8.	Artificial intelligence and recruitment	1

Source: Artificial Intelligence (AI) & Algorithmic Management (AM) in Collective Bargaining Agreements (CBAs). Dostupné z: https://www.uni-europa.org/news/a-database-of-ai-and-algorithmic-management-in-collective-bargaining-agreements

For illustrative purposes, we have selected 15 collective agreements from this database where commitments with the theme of union involvement in the introduction of new technologies appear. In the analysis, we were particularly interested in the types of commitments, the level of collective agreement (sector, region, company) and the countries in which they were negotiated.

Right to digital and work disconnection

This type of commitment is very widespread. It guarantees workers the right to be digitally disconnected outside of fixed working hours, so that their privacy and rest periods are respected. Under these commitments, employers should not communicate with workers outside of their working hours except in exceptional circumstances. It is also stressed that disconnection contributes to workers' health, reduces technological fatigue and stress, and helps maintain worklife balance. In Spain, for example, there are 6 collective agreements on this topic, including one company collective agreement and 5 collective agreements at a higher level (sector, region).

The right to privacy and the use of digital devices in the workplace

Digital devices provided to employers are intended solely for professional purposes with a general prohibition on personal use. However, the employer must always have access to the content in order to check compliance with the worker's duties, taking into account the dignity of the worker. Some collective agreements allow for exceptional personal use if necessary. Employers should develop rules for the use of digital privacy-guaranteeing devices with the participation of worker representatives at all times. In Spain, three collective agreements, one company and two sectoral, cover this topic.

Right to privacy in video and audio recording

Where CCTV systems, as well as audio recording systems, are installed in the employer's premises for the purpose of controlling staff, the employer must inform the employees or their legal representative in advance. These systems must not be installed in areas intended for rest or recreation, such as changing rooms, toilets or dining rooms. In Spain, this provision contains one collective agreement.

Right to privacy regarding the use of geolocation information systems

In work that requires the use of geolocation systems (e.g., in the case of couriers), the employer must explain to workers the characteristics of these systems and provide them with relevant information on the rights of both parties to access, correct, process and delete data recorded by the system. The data collected may only be processed for the purpose of controlling employees within the scope of applicable law. In Spain, one collective agreement contains this provision.

The right to information about artificial intelligence algorithms and systems

Employers must inform employees or their legal representatives about the use of AI algorithms or systems for human resources decisions where such decisions may affect working conditions or the existence of the employment relationship itself. Employees or their representatives shall be provided with information on the parameters, data, rules and guidelines used by AI systems, in particular for the organization of courier activities. The use of AI must be auditable, safe and transparent. Some collective agreements classify schemes according to risk, i.e., the extent to which they threaten the employee's position and the disadvantages to the employee of using them. In Spain, this provision is contained in 5 collective agreements, of which one is company-based and 4 are higher-level (sectoral, regional). In Germany, there are three collective agreements covering this topic: two company and one sectoral collective agreements. In Italy, there is one collective agreement on this subject, at sectoral level.

Digital transformation and its impact on employment and working conditions

Employers undertake to inform workers' representatives of relevant technological changes. They will support lifelong learning and the improvement of workers' digital skills, while introducing

measures to reduce gender and age gaps in the use of digital skills. At the same time, the contracts contain commitments to set up digitalization committees, which employers must inform about the development of IT systems and their potential impact on employees' work, work intensity, health, working hours and environment. In Spain, this commitment is contained in four higher-level collective agreements (sectoral or regional), in Germany in two company collective agreements and in Italy in one sectoral collective agreement. A sectoral collective agreement with this commitment also exists in Finland.

Digital skills development and training

Commitments include supporting investment in and updating of digital skills. Employers commit to provide the necessary training to adapt to the changes in the workplace resulting from the digital transformation. The importance of continuous training to improve the digital skills of the workforce is highlighted. Higher-level collective agreements containing this commitment are in place in Spain (3) and Italy (1).

Human control over AI and ethical principles of its use

When employers implement AI systems, the principle of human control must be respected and the use of AI must be safe and transparent. AI systems should never replace the final human decision. The contracts set out ethical principles for the use of AI, including transparency, explainability of results, non-discrimination and quality assurance of data and algorithms. The aim is to promote confidence in the use of such systems and reduce concerns. Collective agreements with this commitment are in place in Germany (1 company and 1 sectoral), Spain (2 sectoral) and Italy (1 sectoral).

Employee health and well-being in a digital environment

Commitments include reducing technological fatigue and stress, improving the work environment and quality of work through digital disconnection. Furthermore, collective agreements address the assessment of new risks such as working with robots, artificial intelligence and technological stress. Health and safety and the burden of working with IT systems are also included. These commitments are contained in one company and three sectoral collective agreements in Spain, one sectoral collective agreement in Finland and one company collective agreement in Germany.

Out-of-office hours communication rules and exceptions

Collective agreements set out specific rules on when communication outside working hours is allowed and when it is not necessary to respond. Employees have the right not to respond to any communication (email, WhatsApp, phone, etc.) after hours unless there are circumstances of force majeure that would constitute serious, imminent or obvious business harm requiring an immediate response. In such urgent cases, the employer should preferably contact the workers by telephone. Excluded from this right are workers who work on call, are currently available to the employer and

are compensated for this. Collective agreements with these commitments are only in place in Spain (1 company collective agreement and two sectoral collective agreements.

4. Trade union organization at enterprise level and the use of new technologies

The use of modern technologies for easier and more effective communication with the trade union membership follows society-wide trends. As some surveys, such as EUROBAROMETR⁴⁵, show, European society is generally receptive to the use of digital technologies, especially in the Czech Republic (CZ), which creates a suitable ground for the use of digitalization and new technologies in trade union activities and work with the membership. According to the survey, a high proportion of respondents (73% in the EU and 78% in the Czech Republic) say that digitalization of everyday services makes life easier. The same proportion (83%) of respondents, both in the EU and the Czech Republic, consider digitalization as such to be important for connecting online with people, friends or family. Given the well-known fact that the membership of trade unions in the Czech Republic is not only ageing (cf. Kroupa et al., 2004 and Kroupa et al., 2024), certain differences in access to modern technologies between trade unionists and the population can be assumed. In the aforementioned EUROBAROMETR survey, both at European level and in the Czech Republic, men are more likely than women to consider digital technologies important in many areas of their lives or to agree that digital technologies make their lives easier. Another difference was unsurprisingly noted in terms of age. Younger respondents are more likely to believe that digital technologies are and will be important in the future, and that they make life easier, while respondents over 55 are less likely to hold this view. There was also a difference in perceived importance across educational groups. Respondents with higher educational attainment tend to value help and attach more importance to new technologies than respondents with lower educational attainment (see Chapters 1 and 2 for more details).

As mentioned above, despite all the differences, society is positive towards new technologies. At the same time, however, it seems that at least Czech trade union organizations are not able to make sufficient use of this potential. Indeed, the trade unionists' view of the use of new technologies in their organization provides a different picture. 42.5%⁴⁶ of them stated that the organization uses

⁴⁵ Šetření EUROBAROMETR č. 551 s názvem The digital decade bylo realizován v březnu a dubnu roku 2024 na objednávku Evropské komise. Šetření proběhlo mezi obyvateli EU-27 staršími 15 let. Dostupné z: https://europa.eu/eurobarometer/surveys/detail/3174

⁴⁶ Šetření "Increasing capacity of trade Unions in the Czech Republic: DW-SD-CZECH-REP1165" v rámci projektu z programového rámce Sociální dialog – program Důstojná práce – Česká republika z programu Norských fondů 2014 – 2021. Projekt byl řešen Výzkumným ústavem práce a sociálních věcí, v. v. i., v letech 2022–2024, více informací viz https://www.rilsa.cz/projekty/posileni-kapacity-odborovych-svazu-v-ceske-republice/

new technologies to communicate with members sufficiently, 21.2% of respondents confirmed the use of new technologies to communicate within the core organization but rated their use insufficient, and a full 36.4% of respondents stated that the union does not use new technologies to communicate with members⁴⁷. How union members rate their use of technology such as Twitter, Facebook, WhatsApp and other apps and programmes is reflected in how satisfied union members are with their communication with their leadership. It turns out that if the respondents, union members, consider the use of modern technologies within the union to be sufficient, then a high level of satisfaction with the union's activities such as communication with the membership, advocacy of employees' interests in negotiating wages and working conditions or in organizational changes or recruitment of new members, etc., can be expected. Similarly, a positive evaluation of the use of modern technologies is related to a positive evaluation of the trade union official, especially in terms of his authority, authenticity, communication skills, qualifications and competences. From the above we see that all the findings are quite logically directed towards the union leaders and their position vis-à-vis both the members and the management. For as Pedler (1973) states, the functionary fulfils three roles in relation to the members. The first is the role of the Initiator, who identifies the problem, formulates a proposal for its solution and, if necessary, takes the lead to solve the problem. The second role is that of a respondent who is aware of and takes into account the interests of the members and tries to promote these interests as far as possible. The third role is that of a representative, where the official acts as a spokesperson for the entire membership base.

Adequate communication obviously further contributes to the ability of the union leadership to not only motivate employees to join, but also to retain existing employees. When respondents, union members, are asked if they have ever considered leaving their union, their positive answer is always closely related to their dissatisfaction with the level of communication and information provided by the union.

We will try to show a more detailed view of what motivates or hinders the use of new technologies in trade union practice in the next parts of the study, where we will present the results of surveys conducted among trade unions in recent years.

However, in order for a grassroots organization to develop adequate communication with its membership, certain conditions must be met, including in particular sufficient staff and material capacity. In the case of staff capacity, this means competent union leadership with sufficient time allocation for the work, and in the case of material capacity, sufficient material or technological equipment. However, the fulfilment of these two conditions is not common among basic organizations.

The costs associated with the release of an officer are too great a burden for most organizations given the volume of contributions collected, which are often the only source of funding for the

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⁴⁷ Tamtéž.

organization. The payment of the costs associated with the release of an officer, usually the chairman, becomes one of the subjects of collective bargaining with the aim of sharing some of the costs with the employer. A certain idea, although not entirely representative, of the ability of trade unions to collectively negotiate an employer's commitment to share the costs associated with the dismissal of the chairman in accordance with the Labour Code is provided by TREXIMA's annual survey

on working conditions negotiated in collective agreements⁴⁸. According to this publication, in 2024, 58% of company collective agreements in the private sector contained a commitment by the employer to pay the agreed salary compensation to the released official. The obligation to pay only the insurance premium for the dismissed officer was agreed in about 20% of the company collective agreements.

Commitments regarding the share of costs associated with the dismissal of a trade union official are also contained in higher-level collective agreements (HLCAs) negotiated by trade union and employer associations. Approximately 6.7% of the HLCAs contained an obligation for employers to pay the premiums for the released officers in 2024 (TREXIMA, 2024).

Organizations in the public services and administration, which unlike the private sector have limited financial capacity to reimburse salary costs or insurance premiums, also contribute to the cost of vacating officials. Nevertheless, in 2024, 33.7% of company collective agreements contained an obligation for the employer to pay the dismissed official the agreed salary compensation. The obligation to pay only the insurance premium for the released officer is agreed in about 3.3% of company collective agreements.

Other commitments concerning the material capacities of trade unions are also negotiated in enterprise collective agreements in the private and public sectors. These include the use of the employer's premises (private 89.7%, public 93.5%), employer's contribution to the activities of the parent organization (private 39.2%, public 26.4%), room facilities (internet, photocopier, telephone, etc.) (private 71.7%, public 84.5%), reimbursement of the costs of supporting the activities of the parent organization (private 36.2%, public 19.6%), other conditions (private 24.2%, public 15.3%).

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Informace o pracovních podmínkách sjednaných v kolektivních smlouvách (IPP) je šetření, které je v gesci MPSV. Šetření realizuje firma TREXIMA. Více viz http://www.kolektivnismlouvy.cz. Kolektivní smlouvy pocházejí převážně z odborových svazů sdružených v největší odborové centrále Českomoravská konfederace odborových svazů (ČMKOS). V roce 2024 poskytlo informaci o kolektivních smlouvách 28 svazů, kde 23 z nich bylo členem ČMKOS, přičemž počet členů, odborových svazů, sdružených v této centrále je 30. Vedle této centrály existují i další centrály a samostatné odborové svazy a organizace, o jejichž kolektivních smlouvách nepodává výše popsaný informační systém žádné informace.

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In order to explore the use of new technologies in trade unions in more detail, we used interviews from the 2024 project Supporting Trade Unions to Increase Collective Agreement Coverage⁴⁹. Nine in-depth interviews, usually lasting more than an hour, were conducted with representatives of the main trade union organizations in various sectors of the national economy. The interviews were anonymized, see Table 8 for an overview.

⁴⁹ Projekt č. IP70317 financovaný z institucionální podpory na rozvoj VO RILSA v letech 2023 a 2024.

Table 8 Summary of respondents by sector and employer size

Respondent no.	Sector	Number of employees
1	Healthcare	3 600
2	Manufacture of machinery and equipment	3 400
3	Healthcare	3 600
4	Metallurgy and foundry	6 800
5	Manufacture of rubber and plastic products	5 400
6	Banking	2 200
7	Residential social care	-
8	Manufacture of machinery and equipment	3 200
9	Manufacture of electrical equipment	-

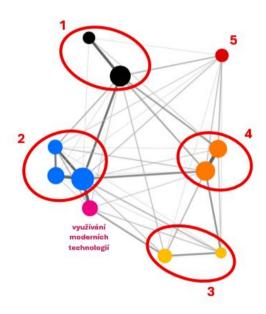
The interviews were conducted in grassroots organizations that are, one might say, among the successful ones, representing a signed company collective bargaining agreement, in most cases a relaxed officer, a growing or at least stabilized membership base, and more or less fair, non-conflicting relations with the employer.

During the interview, the respondents, officials of company trade unions, were asked to reflect on the key points that shape the activities of the trade union in the company, i.e. cooperation with the employer, motivation of members to join the union, recruitment or stabilization of the membership base, staffing capacity of the trade union, and their own motivation to participate in the leadership of the organization. Last but not least, the researchers were also interested in the form of communication with the membership base, or the use of modern technologies and communication methods. It is information on this topic that has been used for the purposes of this study.

The interviews were transcribed, coded and evaluated using ATLAS.ti. Following the model of Miles and Huberman (1994), the interviews were analyzed in terms of predefined variables characterizing both the use of new technologies and modern communication methods and factors that influence communication, i.e., the base organization's relationship with the employer, the base organization's staffing capacity, negotiated commitments in the collective bargaining agreement, the status of the officer at the company, etc.). The interviews were further analyzed in terms of the overall theme of the interview, which was the position of the trade union at the company, and different configurations of the phenomenon under study were sought. According to the authors, the combination of both approaches allows for a better insight into the issue under study. There is a combination of an analytical approach, where the interviews are divided into parts by means of codes, between which a connection and regularity is sought, with a holistic approach, where the interviews are viewed as individual units and certain similarities and configurations of events or phenomena contained in them are sought.

As we can see in the figure below, the use of modern technology in trade unions is a complex phenomenon that is influenced by and also affects other factors such as working with the membership base, material and personnel capacity, or the position and capacity of the union official in the enterprise.

 $\label{thm:continuous} \begin{tabular}{ll} Figure 1 Frequency of occurrence and relative position of the topics in the qualitative interviews with basic trade union officials in relation to the use of modern technologies \\ \end{tabular}$



use of modern technologies

Note: Figure ⁵⁰ shows the frequency of occurrence of each theme characterized by the size of the point, as well as the proximity of themes to each other characterized by the distance and thickness of the connection of the points in the qualitative interviews with basic trade union officials. The individual themes are clustered according to their similarities in these clusters: **1. position of the base organization in the enterprise** (the organization's relationship with the employer, the organization's position in the enterprise), **2. organization's membership base** (the organization's communication with members, motivation for joining the organization, recruitment strategies), **3. organization's material and personnel capacities** (personnel capacities, material and financial capacities), **4. base organization's functionary** (the functionary's capacities, the functionary's position in the enterprise), **5. collective agreement**

Source: Own. The chart is based on the analysis of 9 in-depth interviews with the leadership of the basic trade unions conducted within the framework of the project No. IP70317 funded by the institutional support for the development of the RILSA in 2023 and 2024.

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⁵⁰ Graf vznikl na základě analýzy 9 hloubkových rozhovorů s vedením základních odborových organizací pořízených v rámci projektu č. IP70317 financovaného z institucionální podpory na rozvoj RILSA v letech 2023 a 2024.

The use of new technologies in trade unions, as described above, is closely linked to membership, i.e. communication with existing members and recruitment of new members (see figure above). According to the interviews, the core trade union organizations use a wide range of applications and programmes for this purpose, including artificial intelligence. Common communication tools such as email, Facebook and Whatsapp groups or Instagram are used for communication by most of the organizations surveyed.

A massive development in the use of information technology occurred during the COVID-19 pandemic, when, as well as corporate communication, the communication of trade unions and their members moved to the online space. Important at this point was also the employer's willingness to agree with the union on the use of the company's information and communication technologies, including, for example, the use of the company intranet, through which the union administers, for example, the use of its own recreational facilities or the drawing of other benefits.

"Within our organization we use Facebook, which is a closed group that is for members only. That's where they get all the information. It started with emails. Basically, I had a problem within my employer and cyber protection because I send out over 900 emails, which of course the employer's email client started to evaluate as a cyber attack... But now we have Facebook, we're dealing with websites, we want Instagram, which like I started to use as an individual. But I try to keep it strictly separate, like, my networks that are under my name, because I think within that brand it's necessary that it's always sort of under that organization so that those people can identify with it correctly." (Respondent 3)

The motivation to use new media is mainly the possibility of faster and more flexible communication with the membership, which allows for improving the information service for members. The use of new technologies also leads secondarily to the stabilization of the membership base and at the same time strengthens the interest in membership.

"Our employees, i.e., members, are already so trained that when a round of collective bargaining ends, they have the minutes in their emails and in a password-protected section on the website where only members have access within an hour... When you then ask other chairmen at training sessions, they either don't disclose the course of collective bargaining or they put it on the bulletin board two or three days later. This means - bulletin board again. And nowadays, do you want to read three days old news? Nobody really cares about that, do they? That's why I'm a big critic of these bulletin boards, because it doesn't work anymore, you have to get the information to people in a timely manner. And that's actually one of the main reasons why we are able to reach these people, because we are transparent and we inform quickly. I will never subscribe to the idea that during collective bargaining you are not supposed to give members information about how collective bargaining is going... And you'd be surprised how many of these union members there are who just post on the bulletin board that collective bargaining started at/on... And then two and a half months later, they post on that same bulletin board that a collective agreement has been reached, if you want to see it, come by the office." (Respondent 8)

Among the monitored basic trade union organizations, there are also those that are turning away from new media and technologies, sometimes after bad experiences (attacks and assaults by the administrator of the Facebook group, members' disinterest in following the organization's website, etc.) or simply because the membership, or part of it, is used to being informed through traditional bulletin boards, but in some cases these are already equipped with modern elements, such as the QR code that takes the employee to the website via the mobile phone.

A number of organizations use freely available applications, such as the forms offered by the Google browser, to prepare questionnaires among their membership to monitor their members' demands, which form the basis for collective bargaining.

In addition to communication with the membership base, another important area of the use of modern digital technologies is administrative and record-keeping activities related to the membership base. This includes membership registration, benefits drawdown, email communication with members and, last but not least, analytical activities for the purpose of working with the membership base, addressing different target groups of members, etc. For this purpose, membership organizations are increasingly using the professional information software Trewis⁵¹.

Another big motivation for introducing new technologies, including administrative systems, is to reach out to young employees, potential union members. The emphasis on reaching out to the younger generation and their potential recruitment is highlighted, for example, by the European Trade Union Confederation (ETUC) in its recommendations for recruiting the younger generation (ETUC, 2019). The recruitment of young members is seen as crucial by the European Trade Union Central Committee, and if this does not happen, the union could gradually cease to be an influential organization. The key recommendations of the ETUC include knowing the potential membership base and using forms and tools of communication appropriate to the specific target group, i.e. young workers. Trade unions are therefore encouraged to expand their contributions to new social media, engage in podcasting or use artificial intelligence, which interviews showed some organizations are doing well.

"Yes, we have Facebook, we have Instagram of course, now we want to start making some podcasts just for the young ones, because for the young ones Facebook is already "for the old ones", right... So we have to adapt like that. Well, of course we have a website and we are trying to modernize it somehow, the trade union as such, to make it interesting for the young people ..." (Respondent 7)

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⁵¹ The information system Trewis was developed in 2015 by the Independent Trade Union of Workers in the Food Industry and Related Sectors of Bohemia and Moravia (a member of ČMKOS) as a system for registering the membership base and company collective agreements. Today, the software is offered to other trade unions for a fee.

4.1 Where do trade unions get funding for the operation and implementation of modern information and communication technologies?

In terms of the aforementioned material capacities, the basic trade unions obtain the necessary resources for financing technology either from the employer's activity contribution, from membership fees, from property income or from external sources (grants, including foreign grants). The interviews also recorded cases of trade unions giving each other gratuitous help, even from abroad. Many organizations do these things themselves, aided by a great deal of enthusiasm from officers and rank and file members, but often to the detriment of the union work itself.

"We have some fellow trade unionists from Turkey, Romania, I don't know... working on our website. But now we want to move it here too, we always sort of team up with some trade unionists as part of a "charity" to reduce the costs. But that's where we're already running into the communication issue. They're far away and when we need to redo something quickly, it's more complicated ...' (Respondent 7)

"We do everything ourselves, we always find someone among our members... Who knows how to do it, so the Facebook, Instagram is the responsibility of the vice-chair. And now we want the website from one of our members again. We managed to get a two-year grant of 3 million within the framework of a project, which helped us a lot too, so that we can now somehow finance these projects and get it going and modernize it a bit... and pay for training, because I still think that the people who are the leaders should be constantly educating themselves ..." (Respondent 7)

"We have the means to pay for it, but that's the easy part. And we have always tried to make the most out of the minimum, so we mostly learn everything ourselves, for example, we learned to create a website, operate it ourselves in the committee, we also do AI ourselves, although we put a request, but the price was crazy, they literally asked for a quarter of a million, then 25,000 monthly for operating it, and then when I started looking into it, I found out that they just wanted to overcharge, so we're on our own. Once we have some funds entrusted to us by our members, we don't have any other funds and we should take care of them as economically as possible, so we try to learn that first and then if we don't succeed, we go down the road of paying for it because you can always pay for it. But so far we are doing well and it is in our power to do it ourselves... And we're interested in learning something, so we do our own graphics, but we're not really IT geeks... But it's just, if you're interested, and nowadays there are videos and tutorials on YouTube and TikTok and I don't know, all sorts of things." (Respondent 8)

"And now that you have artificial intelligence, which can help you and teach you a lot, why not try to learn it yourself and then spend the money. So we did indeed, we paid for the "pro version" of GTP4, there you pay some 550 crowns a month, it's not big money. And you're discovering those features. Well, we found out that the company that offered us a quarter of a million was actually just trying to rip us off. Because it's nothing complicated. You create a chatbot, it's even that simple, you write there in Czech what it should be able to do, what it

should look like, it throws up a picture, basic characteristics, then you upload its files, which are its knowledge and the chatbot works. So it's simple. Why pay a quarter of a million for it?" (Respondent 8)

4.2 How not to fall asleep in time: artificial intelligence in trade union practice

The most progressive corporate unions significantly incorporate work with AI into union activity as we are used to from the private sector. One of the interviewed trade unions, for example, runs chatbots focused on labour law and the other on occupational safety.

"We have already created some chatbots, even if only in the paid version, we are now looking for a way to get it into the non-paid version among members. But we have two chatbots, one is a virtual union lawyer and the other is a virtual union safety officer. We uploaded some knowledge. And for example the safety officer, we tested it now, it can do that you measure a shelf with a mobile phone, take a picture of it and ask him what is wrong in terms of OSH and he will list what is wrong there. So the person in question doesn't even have to immediately "bother" the chairman or the safety officer on the committee... Simply a technology that has a future for union activities. Or a union lawyer. A lot of people are dealing with something, and the system is set up now so that the first thing our member has to do is call me, and I have to let the lawyer at the regional office know that the member has a question. He'll contact her. And that's takes several days. But today is a different story. It's about the speed of information. And the virtual lawyer can answer 70, 80 percent of them right now, at night, on Sunday...So we have uploaded the Labour Code in an annotated version, we have uploaded the most common laws that people use. That means the Insolvency Act, the Building Act... The most common things that are freely downloadable from the internet, we have imprinted that on the chatbot and now we are in the testing phase." (Respondent 8)

In the previous lines, we have seen how information technology is used in social services, healthcare, banking and industry. The next survey, conducted in May-July 2023 as part of the project Increasing capacity of trade Unions in the Czech Republic⁵² will allow us to look at the views on the use of modern technologies among trade unionists, mostly administrative workers in the public sector, in the cultural sector. The aim of the survey was to reach as many members of trade unions active in culture as possible. The leaders of these associations were therefore contacted by e-mail and asked to send an e-mail with a link to an electronic form created by the survey organizer to their members asking them to fill it in. The letter was sent to a total of 17 trade unions: 8 trade unions of the Confederation of Arts and Culture (KUK), 8 trade unions of the Czech-Moravian

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Projekt, Increasing capacity of trade Unions in the Czech Republic: DW-SD-CZECH-REP1165" z programového rámce Sociální dialog – program Důstojná práce – Česká republika z programu Norských fondů 2014–2021. Projekt byl řešen Výzkumným ústavem práce a sociálních věcí, v. v. i., v letech 2022–2024, více informací viz https://www.rilsa.cz/projekty/posileni-kapacity-odborovych-svazu-v-ceske-republice/

Confederation of Trade Unions (ČMKOS) and 1 trade union of the Association of Independent Trade Unions of the Czech Republic (ASO). For the purposes of the evaluation, 174 completed questionnaires were collected from four unions (OS of Workers of Culture and Nature Protection, OS of Library Workers, OS of the Union of Interpreters and Translators, OS of Workers of Cultural Facilities), whose members responded to the survey questions, although the e-mail was sent, as stated, to a total of 17 unions.

Respondents were asked to answer, among other things, two questions about the use of modern technology in trade union activities. Firstly, they were asked to rate how important it is for them that the trade union uses new technologies and modern forms of communication such as social networks to communicate with the membership, and secondly, respondents were asked to indicate how satisfied they are with their use.

The discrepancy between importance and satisfaction with the activity presented, if it exists, represents a potential for a change of emphasis by the union leadership on the activity in question. In the case of the use of information and communication technologies, no significant difference between importance and satisfaction was registered by the respondents. The proportion of those who consider the use of modern technology in trade union activities to be important was 63.9%, while the satisfaction level was 1.9 percentage points lower, at 62.0%. The difference of 1.9 percentage points is therefore insignificant even compared to other items, where, for example, the difference between the importance attached to negotiating adequate wage conditions (91.1%) and the significantly lower satisfaction with this union activity (55.1%) was 36 percentage points among respondents. The importance of and satisfaction with the use of modern technology is not concentrated in the observed associations operating in the culture among respondents in any particular age group, nor is it characteristic of men or women.

From the interviews and the survey, it appears that new information and communication technologies can already be found in Czech trade union organizations and that some organizations are well ahead in the use of these technologies and are experimenting with artificial intelligence. Czech trade unions have so far not been very successful in implementing the recommendations of European trade union centres in the field of information technology. According to the survey results mentioned above, some 36% of respondents said that the union does not use new technologies to communicate with members and if it does (21%), it is not as their members would like.

4.3 How are unions abroad using new technologies?

Information on the use of new information and communication technologies among trade union organizations in the form of examples of so-called good practice is available mainly in foreign publications or on websites. Information of this nature is lacking in the Czech environment. A number of international publications and websites report on how new technologies and artificial intelligence are helping unions to work with members or prospective members. These sources generally describe the following uses of modern technology.

Digitalization of internal processes including the use of artificial intelligence

A number of processes relating to the recording and management of the membership base, including the provision of information to members, have been largely digitalized in trade unions with the advent of ICT. A new element is the use of AI to process administration more efficiently. In Belgium, the Christian Trade Union Confederation of Belgium ACV-CVS⁵³ (Algemeen Christelijk Vakverbond, ACV, Confédération des syndicats chrétiens, CVS) uses artificial intelligence to automatically sort through hundreds of emails from members, streamlining internal workflow and allowing the organization's leadership to focus on more important things. The UK trade union Prospect⁵⁴ is using generative AI to reduce the time needed to prepare letters, workshop materials, and create scriptsand training materials.

Artificial intelligence is also used as an interactive element on organizations' websites or as part of an app to help navigate legislation. Specifically, it is a conversational interface that allows users to interact with the AI based on text input and responses in their native language. An example is the Slovenian GastarbAiter app⁵⁵, a digital tool developed to help foreigners working in Slovenia to quickly navigate labour law. The application uses artificial intelligence from OpenAI ⁵⁶. The application can answer questions about employment rights in a simple form in up to 130 languages (Duffková et al.,2024).

Website

The website is an important platform for sharing information and organizing the membership base, including the union's presentation. Ideally, they are written in plain, easy-to-understand language and available in several languages. For example, on the website of the UK Union of Shop, Distributive and Allied Workers (USDAW⁵⁷), instructional videos can be found in several languages: Romanian, Czech, Polish, Hungarian and Lithuanian. These videos are used in training sessions, e.g. for contact with newcomers. On the union's website, prospective members can also download a recruitment leaflet in several languages, including Czech (USDAW, 2025).

The site can also be multilingual or contain frequently asked questions and answers (FAQs) in different languages. An example of a multilingual website is the International Transport Workers'

⁵³ Webové stránky organizace viz https://www.acvcsc.be/

⁵⁴ Webové stránky organizace viz https://prospect.org.uk/

⁵⁵ Více informací o aplikaci viz https://agencija101.si/en/project/gastarbaiter/ (v anglickém jazyce)

⁵⁶ OpenAl je nezisková organizace pro výzkum umělé inteligence, která se zaměřuje na vývoj open-source přátelské Al. Webové stránky organizace viz https://openai.com/

⁵⁷ Webové stránky organizace viz https://www.usdaw.org.uk/

Federation (*ITF*) website⁵⁸. Another example is the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF⁵⁹).

The advantage of the website is the fast and efficient provision of information, accessibility for everyone, not just members. The disadvantage is the necessity of regular updating of the pages and the need for certain competences to create and then operate them.

Social networks

Social networks are often used as a platform for organizing different social groups (young people, professionals or foreign workers). For example, the Finnish Confederation of Trade Unions for Professional and Managerial Workers (Korkeakoulutettujen työmarkkinakeskusjärjestö Akava, AKAVA 60) targets highly skilled workers on Facebook, YouTube and the X network. Other organizations use multiple platforms such as Instagram, TikTok and YouTube for short videos with information on, for example, the stay of foreigners or information promoting financial literacy. For example, the Italian trade union Unione Sindacale di Base (USB⁶¹) uses YouTube videos on its migrant website⁶², which it also shares on Facebook, to inform about events and rights for seasonal and tribal workers or migrants. The Italian Federation of Agricultural and Food Industry Workers -Italian General Confederation of Labour (Federazione Lavoratori Agricoli e dell'Industria Alimentare - Confederazione Generale Italiana del Lavoro, FLAI-CGIL⁶³), a trade union organization targeting agricultural and food industry workers, is pursuing a strategy of "union in the streets" (sindacato di strada). This strategy is aimed at getting unions actively involved in the lives of workers and addressing their problems on the job or wherever workers are, such as farms, vineyards, shops. As part of its actions, it mobilizes seasonal agricultural workers, often migrants, through WhatsApp groups with registration and location-based information, informing members of their rights on the job - working in the field, vineyard, orchard.

The advantage of social networks is the possibility of higher targeting of information to different social groups according to age, interests, location, etc. Furthermore, fast content updates, better content distribution, i.e., more virality through sharing and the possibility of immediate response, the possibility of communicating with the audience in real time. The disadvantage is that not everyone uses social networks, managing profiles is time-consuming and social networks are risky in terms of information noise.

⁵⁸ Webové stránky organizace viz https://www.itfglobal.org/en

⁵⁹ Webové stránky organizace viz https://www.iuf.org/

⁶⁰ Webové stránky organizace viz https://akava.fi/

⁶¹ Webové stránky organizace viz http://www.usb.it

⁶² Viz http://www.immigranti.usb.it

⁶³ Webové stránky organizace viz https://www.flai.it/

Mobile applications

As mentioned above, among the successful apps created by the trade unions is the GastarbAiter app, which was created in cooperation between the Slovenian Job Counselling Centre (Delavska svetovalnica⁶⁴) and the Pr agency Agencija 101⁶⁵. The app uses artificial intelligence from OpenAI, which has processed over 240,000 Slovenian labour laws, which can answer questions about employment rights. This is not legal advice, but an initial orientation - specific help will then be provided by lawyers from the Delavska svetovalnica. The app is available for free via Google Play on the web or as a mobile app for Android and iOS.

Finnish trade unions use the Hermes mobile app ⁶⁶, developed by the Finnish trade union Teollisuusliitto⁶⁷ in cooperation with the technology company HiQ Finland⁶⁸. The application was designed primarily for seasonal workers from abroad, where language barriers complicate orientation in labour law, and informs about new developments in labour legislation. The app is used by both employees and employers, and the app allows offline access, which is important in remote areas. It is anonymous, does not require registration and does not record any data. In May 2024, it offered assistance in 9 languages.

The aforementioned Belgian trade union confederation ACV-CSC offers a wide range of services for its members in addition to the ACV-CSC app. The app can be downloaded for free on Google Play. The app allows you to set up personalized content, i.e., news, services relevant to the sector and the user's occupation. The application includes calculators for calculating net pay, length of notice by length of service, calculating leave entitlement, entitlement to sick pay or annual bonuses etc. The application contains contacts to the branches and the Confederation's headquarters, to which questions about the user's employment or working conditions can be sent directly from the application. The app also allows Confederation members to take advantage of discounts at selected shops and services.

Compared to the previous applications, the WeClock⁶⁹ application has a different use.It is a so-called trekking application that focuses on tracking working hours, breaks at work, agency employees' movements between clients and the use of other work applications outside the operational applications. According to the creators of the app, the data collected and analyzed can be used to capture time when a worker is actually at work but is not paid for various reasons. The app is used by members of the UNI Global Union, as well as by staff in the UK trade union *Prospect*,

⁶⁴ Webové stránky organizace viz https://delavskasvetovalnica.si/

⁶⁵ Webové stránky organizace viz https://agencija101.si/

⁶⁶ Webové stránky aplikace viz https://www.teollisuusliitto.fi/en/industrial-union/organised-sectors/hermes/

⁶⁷ Webové stránky organizace viz https://www.teollisuusliitto.fi/

⁶⁸ Webové stránky organizace viz https://hiq.fi/

⁶⁹ Webové stránky aplikace viz https://weclock.it/

where the app is used by workers in the audiovisual sector. In particular, staff involved in the production of films and videos use the app to track the time between shoots when various preparatory work takes place, but this time is not usually paid to the staff. The app can be downloaded from Google Play for Android and iOS.

The advantage of apps is that they are often free, anonymous and available in several languages, and can serve both employees and employers. They make it easier for employees to contact their unions. The disadvantage is the high upfront investment in development, the need for updates and maintenance, which of course requires qualified personnel.

The use of various applications that collect data on employees naturally raises ethical questions about the use of this data. The aforementioned Belgian trade union confederation ACV-CSC is a pioneer in the use of AI and is one of the few trade unions to have developed its own policy for the use of AI based on the principle of a responsible and thoughtful approach to the integration of new technologies into union work and the protection of member data. The ACV-CSC is thus guided in its handling of AI by four core ethical principles, which were developed through extensive consultation within the union. The following principles are intended to ensure the safe and effective use of AI, for both staff and ACV-CSC members (Van Baelen, 2025):

- Human control of results. This means that any AI output must be verified by ACV-CSC staff
 who are responsible for the final results. AI-generated information is considered a useful first
 draft, but requires human oversight and vetting before it can be trusted.
- Safety and privacy are paramount. ACV-CSC is selective in its choice of AI tools, using only those that ensure data security. For this reason, HQ recommends Microsoft Copilot over ChatGPT for its employees because it offers better protection for sensitive information.
- Openness about the use of AI. The ACV-CSC is transparent about its use of AI, whether it is communicating with its members or developing internal systems. The goal is to be transparent in the use of AI without overwhelming people with technical details.
- **Judicious use of AI**. Given the significant energy requirements, AI should only be used where it brings clear benefits. If traditional tools can do the job just as well, then Confederation prefers those tools over AI.

ACV-CSC's policy on the use of AI is regularly reviewed and updated based on staff experience of using AI in practice. It is a continuous process of improvement and refinement. The ACV-CSC encourages other unions to talk to their members about what's important to them, keep their AI principles clear and practical, and ensure that guidelines help, not hinder, AI work. It is also important to be prepared for updates, as technology is evolving rapidly, and timely response is an advantage.

Conclusion

The Eurobarometer data showed that employees are not afraid of technology itself, but rather of its concrete use in practice, especially in the context of lack of regulation, non-transparency and absence of human supervision. Negative attitudes are not a manifestation of resistance to innovation, but a warning against unilateral implementation of technologies without regard to their impact on working conditions. The concerns are rational and reflect the experience that digitalization can be a tool for efficiency but also for control, impersonal management or loss of autonomy.

In this context a fundamental question arises: how to minimize the negative impacts of digitization while promoting its benefits? Trade unions should actively engage in the processes of introducing new technologies and work to ensure that digitalization is fair and transparent. They should promote collective bargaining on how AI is used, especially in areas such as monitoring, evaluation or dismissal. Collective agreements should include provisions on the protection of employees from automated decision-making without human review, on the right to information on the functioning of algorithms or on limits on employee monitoring.

Technology should be introduced as a complement to human labour, not as a substitute. Instead of widespread automation, employers should invest in retraining and support for job mobility, especially for workers whose jobs are most vulnerable to technology. The common goal should be a "digital transition" that is socially sustainable, participatory and focused on improving the quality of work - not just making it cheaper or faster.

The boom in the use of information and communication technologies occurred during the COVID-19 pandemic, when communication moved online. This, of course, also applied to trade unionists who routinely use e-mail. Websites are also common. Some trade unionists are setting up Facebook and Whatsapp groups. Some unions use Google Forms to collect collective bargaining demands and Trewis software for administrative support. Even so, it must be said that Czech trade unions do not fully exploit the potential of new technologies: more than a third of Czech trade unionists do not use information and communication technologies to communicate with their members. This is the quickest (and most transparent) way to keep the membership informed (e.g. about the progress of collective bargaining).

Literature

ACEMOGLU, Daron & Pascual RESTREPO, 2020. Robots and Jobs: Evidence from US Labor Markets. *Journal of Political Economy*. 128(6). DOI: https://doi.org/10.1086/705716

ADAM, David, 2025. Supportive? Addictive? Abusive? How AI companions affect our mental health. *Nature.com*, 6. 5. 2025. Dostupné z: https://www.nature.com/articles/d41586-025-01349-9

AGHION, Philippe, Céline ANTONIN, Simon BUNEL & Xavier JARAVEL, 2022. The Effects of Automation on Labor Demand: A Survey of the Recent Literature. In. YAN ING, Lili & Gene GROSSMAN (eds.). Robots and Al: A New Economic Era. New York: Routledge. DOI: https://doi.org/10.4324/9781003275534

APPIAHENE, Peter, Emmanuel Adjei DOMFEH & Bernard ANDOH, 2022. Definitions of Artificial Intelligence: A review. *Authorea*. 8. 3. 2022.

DOI: https://doi.org/10.22541/au.164670471.11415616/v1

BENASSI, Chiara & VLANDAS Tim, 2015. Union inclusiveness and temporary agency workers: The role of power resources and union ideology. *European Journal of Industrial Relations*, 22(1), 5–22. DOI: https://doi.org/10.1177/0959680115589485

BERG, Janine, Francis GREEN, Laura NURSKI & David SPENCER, 2022. Risks to job quality from digital technologies: are industrial relations in Europe ready for the challenge? Working Paper 16/2022, Bruegel. Dostupné z: https://www.bruegel.org/system/files/2022-11/WP%2016.pdf

BOGUE, Robert, 2018. What are the prospects for robots in the construction industry?, *Industrial Robot*, 45(1), 1–6. DOI: https://doi.org/10.1108/IR-11-2017-0194

BOROWSKA, Kasia, 2020. The Monopoly On Technology And How To Defeat It. *Forbes*, 15. 12. 2020. Dostupné z: https://www.forbes.com/sites/kasiaborowska/2020/12/15/the-monopoly-on-technology-and-how-to-defeat-it/

BOUCHER, Philip, 2020. Artificial intelligence: How does it work, why does it matter, and what can we do about it? Brussels: European Union. DOI: https://doi.org/10.2861/44572

BRYNJOLFSSON, Erik, Danielle LI & Lindsey R. RAYMOND, 2023. Generative AI at Work. NBER Working Paper, 31161.

Dostupné z: https://www.nber.org/system/files/working_papers/w31161/w31161.pdf

BRYNJOLFSSON, Erik & MCAFEE, Andrew, 2017. *Machine, platform, crowd: Harnessing our digital future*. New York: WW Norton & Company, 2017.

CoE, 2016. Al initiatives. Dostupné z: https://www.coe.int/en/web/artificial-intelligence/national-initiatives

CROXTON, Will, 2025. Anduril CEO unveils the Fury unmanned fighter jet. *CBSNews*, 18. 5. 2025. Dostupné z: https://www.cbsnews.com/news/anduril-ceo-unveils-the-fury-unmanned-fighter-jet-60-minutes/

BINNS, Reuben, 2018. Fairness in Machine Learning: Lessons from Political Philosophy. Proceedings of the 2018 Conference on Fairness, Accountability, and Transparency (FAT). DOI: https://doi.org/10.48550/arXiv.1712.03586

BROWN, Phillip, Hugh LAUDER & David ASHTON, 2012. The Global Auction: The Broken Promises of Education, Jobs, and Incomes.

DOI: https://doi.org/10.1093/acprof:oso/9780199731688.001.0001

BRUNNEROVÁ, Simona, Daniela CECCON, Barbora HOLUBOVÁ, Marta KAHANCOVÁ, Katarína LUKÁČOVÁ & Gabriele MEDASET, 2024. Collective bargaining practices on AI and algorithmic management in European services sectors. Friedrich ebert stiftung.

Dostupné z: https://library.fes.de/pdf-files/bueros/bruessel/21074.pdf

DE STEFANO, Valerio, 2015. The Rise of the 'Just-in-Time Workforce': On-Demand Work, Crowd Work and Labour Protection in the 'Gig-Economy'. *Bocconi Legal Studies Research Paper*, No. 2682602. DOI: http://dx.doi.org/10.2139/ssrn.2682602

DE FREITAS, Julian, Ahmet UĞURALP, Zeliha UĞURALP & Stefano PUNTONI, 2024. AI Companions Reduce Loneliness. *Harvard Business School Working Paper*, 24-078. Dostupné z: https://www.hbs.edu/ris/Publication%20Files/24-078_a3d2e2c7-eca1-4767-8543-122e818bf2e5.pdf

DUFFKOVÁ, Barbora, Jan KLEŇHA & Alexandre REZNIKOW, 2024. Odborové organizování zahraničních pracovníků: Zahraniční praxe. Praha: České priority.

Dostupné z: https://www.ceskepriority.cz/files/zahranicni-praxe.pdf

EDPB, 2024. Dutch Supervisory Authority imposes a fine on Clearview because of illegal data collection for facial recognition. European Data Protection Board, 3. 9. 2022. Dostupné z: https://www.edpb.europa.eu/news/national-news/2024/dutch-supervisory-authority-imposes-fine-clearview-because-illegal-data_en

EDPB, 2022a. Facial recognition: Italian SA fines Clearview AI EUR 20 million. European Data Protection Board, 10. 3. 2022. Dostupné z: https://www.edpb.europa.eu/news/national-news/2022/facial-recognition-italian-sa-fines-clearview-ai-eur-20-million_en

EDPB, 2022b. The French SA fines Clearview AI EUR 20 million. European Data Protection Board, 20. 10. 2022. Dostupné z: https://www.edpb.europa.eu/news/national-news/2022/french-sa-fines-clearview-ai-eur-20-million_en

ELKINS, Kathleen, 2017. Bill Gates: A. I. will make our lives 'more productive and creative. *CNBC.com*, 27. 9. 2018. Dostupné z: https://www.cnbc.com/2017/09/27/bill-gates-says-ai-will-make-our-lives-better.html

EP, 2024. Artificial intelligence act. European Parliamentary Research Service PE 698.792. Dostupné z: https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698792/EPRS_BRI@2021)698792_EN.pdf

EP a EK, 2024. Nařízení Evropského parlamentu a Rady (EU) 2024/1689 ze dne 13. června 2024, kterým se stanoví harmonizovaná pravidla pro umělou inteligenci a mění nařízení (ES) č. 300/2008, (EU) č. 167/2013, (EU) č. 168/2013, (EU) 2l018/858, (EU) 2018/1139 a (EU) 2019/2144 a směrnice 2014/90/EU, (EU) 2016/797 a (EU) 2020/1828 (akt o umělé inteligenci). Dostupné z: https://eur-lex.europa.eu/legal-content/CS/TXT/?uri=CELEX:32024R1689

ETUC, 2021. Recommendations for enganing young people in trde unions. Dostupné z: https://www.etuc.org/sites/default/files/publication/file/2021-03/ETUC-Youth%20guide_EN.pdf

ETUC, 2019. The Future of youth. Brusel: ETUC.

Dostupné z: https://www.etuc.org/sites/default/files/circular/file/2019-05/CES-Brochure%20The%20Future%20of%20Youth-UK%20def-Basse%20def.pdf

EU, 2020. Bílá kniha o umělé inteligenci – evropský přístup k excelenci a důvěře. COM(2020) 65. Dostupné z: https://eur-lex.europa.eu/legal-ontent/CS/TXT/HTML/?uri=CELEX:52020DC0065

FELTEN, Edward, Manav RAJ & Robert SEAMANS, 2021. Occupational, industry, and geographic exposure to artificial intelligence: A novel dataset and its potential uses. *Strategic Management Journal*, 42(12), 2195–2217. DOI: https://doi.org/10.1002/smj.3286

FLICK, Catherine, 2015. Informed consent and the Facebook emotional manipulation study. *Research Ethics*, 12(1), 14–28. DOI: https://doi.org/10.1177/1747016115599568

FLORIDI, Luciano, Josh COWLS, Monica BELTRAMETTI, Raja CHATILA, Patrice CHAZERAND, Virginia DIGNUM, Christoph LUETGE, Robert MADELIN, Ugo PAGALLO, Francesca ROSSI, Burkhard SCHAFER, Peggy VALCKE & Effy VAYENA, 2018). Al4People – An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations. *Minds & Machines* 28, 689–707. DOI: https://doi.org/10.1007/s11023-018-9482-5

FRANK, Morgan, Yong-Yeol AHN & Esteban MORO, 2025. Al exposure predicts unemployment risk: A new approach to technology-driven job loss, *PNAS Nexus*, 4(4).

DOI: https://doi.org/10.1093/pnasnexus/pgaf107

GIBBS, Samuel, 2014. Elon Musk: artificial intelligence is our biggest existential threat. *The Guardian*, 27. 10. 2014. Dostupné z: https://www.theguardian.com/technology/2014/oct/27/elon-musk-artificial-intelligence-ai-biggest-existential-threat

GHOSH, Dona, Rajarshi GHOSH, Sahana Roy CHOWDHURY & Boudhayan GANGULY, 2025. Alexposure and labour market: a systematic literature review on estimations, validations, and perceptions. *Management Review Quarterly*, 75, 677–704. DOI: https://doi.org/10.1007/s11301-023-00393-x

Global Deal, 2024. Social Dialog and the Use of Artificail Intelligence in the Workplace. GlobalDeal. Dostupné z: https://oecd.ai/en/wonk/global-deal

GUMBRELL-MCCORMICK, Rebecca & Richard HYMAN, 2013. *Trade Unions in Western Europe: Hard Times, Hard Choices.* Oxford: Oxford Academic.

DOI: https://doi.org/10.1093/acprof:oso/9780199644414.001.0001

HAENLEIN, Michael & Andreas KAPLAN, 2019. A Brief History of Artificial Intelligence: On the Past, Present, and Future of Artificial Intelligence. *California Management Review* 61(4). 5–14. DOI: https://doi.org/10.1177/0008125619864925

HAO-PING Hank Lee, Advait SARKAR, Lev TANKELEVITCH, Ian DROSOS, Sean RINTEL, Richard BANKS & Nicholas WILSON, 2025). The Impact of Generative AI on Critical Thinking: Self-Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers. In. *Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (CHI '25)*. Association for Computing Machinery, New York, NY, USA, Article 1121, 1–22.

DOI: https://doi.org/10.1145/3706598.3713778

HILL, Kashmir, 2014. Facebook Added 'Research' To User Agreement 4 Months After Emotion Manipulation Study. *Forbes*, 30. 6. 2014.

Dostupné z: https://www.forbes.com/sites/kashmirhill/2014/06/30/facebook-only-got-permission-to-do-research-on-users-after-emotion-manipulation-study/

HYMAN, Richard, 2001. *Understanding European Trade Unionism: Between Market, Class and Society.* London: SAGE Publications Ltd. DOI: https://doi.org/10.4135/9781446217139

IBM, 2021. What is a chatbot? IBM, 15. 10. 2021.

Dostupné z: https://www.ibm.com/think/topics/chatbots

ILO, 2022. The Algorithmic Management of work and its implications in different contexts. International Labour Organization. Dostupné z: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40ed_emp/documents/publication/wcms_849220.pdf

ILO, 2021. Shaping skills and lifelong learning for the future of work. International Labour Organization. Dostupné z: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_813696.pdf

KELLOGG, Katherine C., Melissa A. VALENTINE & Angèle CHRISTIN, 2020. Algorithms at work: The new contested terrain of control. *Academy of Management Annals*, 14(1), 366–410. DOI: https://doi.org/10.5465/annals.2018.0174

KROUPA, Aleš, Renata KYZLINKOVÁ, Štěpánka LEHMANN, Jana VÁŇOVÁ & Soňa VEVERKOVÁ, 2024. *Možnosti zvyšování kapacit odborových organizací v České republice*. Praha: RILSA. Dostupné z: https://katalog.vupsv.cz/fulltext/vz_559.pdf

KROUPA, Aleš, Jaroslav HÁLA & Soňa VEVERKOVÁ, 2008. Kapacita sociálního dialogu ve vybraných sektorech České republiky se zřetelem k potřebám transferu výsledků evropského sociálního dialogu. In. *Proměny reprezentace zájmů po vstupu do Evropské unie*. Praha: Sociologické nakladatelství – SLON.

KROUPA, Aleš, Jaroslav HÁLA, Zdenka MANSFELDOVÁ, Pavel ŠIMONÍK & Renata VAŠKOVÁ, 2004. Odbory, zaměstnavatelé, sociální partneři – odborová organizovanost v ČR a hlavní faktory jejího vývoje. Praha: VÚPSV, v. v. i. Dostupné z: https://katalog.vupsv.cz/Fulltext/MS-odbor.pdf

KUOK HO, Daniel Tang, 2024. Artificial Intelligence in Occupational Health and Safety Risk Management of Construction, Mining, and Oil and Gas Sectors: Advances and Prospects. *Journal of Engineering Research and Reports*, 26, 241–253.

DOI: https://doi.org/10.9734/jerr/2024/v26i61177

LANE, Marguerita & Anne SAINT-MARTIN, 2021. The impact of Artificial Intelligence on the labour market: What do we know so far? OECD Working Paper, No. 256. Dostupné z: https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/01/the-impact-of-artificial-intelligence-on-the-labour-market_a4b9cac2/7c895724-en.pdf

MARSH, Elizabeth, Elvira PEREZ VALLEJOS & Alexa SPENCE, 2024. Digital workplace technology intensity: qualitative insights on employee wellbeing impacts of digital workplace job demands. Frontiers in Organizational Psychology, 2. DOI: https://doi.org/10.3389/forgp.2024.1392997

McCARTHY, John, Marvin MINSKY, Nathaniel ROCHESTER & Claude SHANNON, 1955. A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence.

Dostupné z: http://jmc.stanford.edu/articles/dartmouth/dartmouth.pdf

McKINSEY & COMPANY, 2024. What is AI (artificial intelligence)? April 2024. Dostupné z: https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-ai

McKINSEY & COMPANY, 2023. The economic potential of generative AI: The next productivity frontier. June 2023. Dostupné z: https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier#introduction

MILES, Matthew, Michael HUBERMAN, 1994. *Qualitative Data Analysis, An Expanded Sourcebook.* London: SAGE.

MOORE, Phoebe, Martin UPCHURCH & Xanthe WHITTAKER (eds.), 2018. Humans and Machines at Work: Monitoring, Surveillance and Automation in Contemporary Capitalism. Palgrave Macmillan. DOI: https://doi.org/10.1007/978-3-319-58232-0

MOSENE, Katharina, 2024. One step forward, two steps back: Why Artificial Intelligence is currently mainly predicting the past. In. *Digital Society Blog Zenodo*.

DOI: https://doi.org/10.5281/zenodo.13934923

MPO, 2024. Národní strategie umělé inteligence České republiky 2030. Ministerstvo průmyslu a obchodu České republiky (aktualizovaná verze). Ministerstvo průmyslu a obchodu České republiky. Dostupné z: https://mpo.gov.cz/assets/cz/rozcestnik/pro-media/tiskove-zpravy/2024/8/AL_strategie_1.pdf

NIAZI, Aiman, Mumtaz Ali MEMON, Naukhez SARWAR, Asfia OBAID, Muhammad Zeeshan MIRZA & Kainaat AMJAD, 2023. Work intensification: A systematic review of studies from 1989 to 2022. WORK, 77(3), 769–787. DOI: https://doi.org/10.3233/WOR-230193

OECD, 2024. Who will be the workers most affected by AI? A closer look at the impact of AI on women, low-skilled workers and other groups. *OECD Arificial intelligence papers*, No. 26. Dostupné z: https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/10/who-will-be-the-workers-most-affected-by-ai_fb7fcccd/14dc6f89-en.pdf

OECD, 2024a. Recommendation of the Council on Artificial Intelligence. 3. 5. 2024. Dostupné z: https://legalinstruments.oecd.org/en/instruments/oecd-legal-0449

OECD, 2024b. Explanatory memorandum on the updated OECD definition of an AI systems. *OECD Artificial intelligence papers*. No. 8. Dostupné z: https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/03/explanatory-memorandum-on-the-updated-oecd-definition-of-an-ai-system_3c815e51/623da898-en.pdf

OECD, 2019. Recommendation of the Council on Artificial Intelligence.

Dostupné z: https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449

OECD, 2019a. *OECD Skills Outlook 2019: Thriving in a Digital World*. Publishing Paris: OECD. DOI: https://doi.org/10.1787/df80bc12-en

OECD, 2018. The future of education and skills: Education 2030. OECD. Dostupné z: https://www.oecd.org/content/dam/oecd/en/publications/reports/2018/06/the-future-of-education-and-skills_5424dd26/54ac7020-en.pdf

OSN, 2023. United Nations, UN Secretary-General, President of International Committee of Red Cross Jointly Call for States to Establish New Prohibitions, Restrictions on Autonomous Weapon Systems. Press release of United Nations, 5. 10. 2023.

Dostupné z: https://press.un.org/en/2023/sg2264.doc.htm

PASQUALE, Frank, 2015. The Black Box Society: The Secret Algorithms That Control Money and Information. Harvard University Press, 2015. Dostupné z: http://www.jstor.org/stable/j.ctt13x0hch

PEDLER, M., J., 1973. Shop stewards as leaders, *Industrial relations Journal*, 4(4), 43–60. DOI: https://onlinelibrary.wiley.com/doi/10.1111/j.1468-2338.1973.tb00148.x

PERRY, Christian, 2025. Al Algorithms: Everything You Need to Know. *UndetectableTM Al blog*, 4. 4. 2025. Dostupné z: https://undetectable.ai/blog/ai-algorithms/

PISHGAR, Maryam, Salah Fuad ISSA, Margaret SIETSEMA, Preethi PRATAP & Houshang DARABI, 2021. REDECA: A Novel Framework to Review Artificial Intelligence and Its Applications in Occupational Safety and Health. *International Journal of Environmental Research and Public Health*, 18(13), 6705. DOI: https://doi.org/10.3390/ijerph18136705

RAJI Inioluwa Deborah, Andrew SMART, Rebecca N. WHITE, Margaret MITCHELL, Timnit GEBRU, Ben HUTCHINSON, Jamila SMITH-LOUD, Daniel THERON & Parker BARNESR, 2020. Closing the AI Accountability Gap: Defining an End-to-End Framework for Internal Algorithmic Auditing. *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAT)*. DOI: https://doi.org/10.48550/arXiv.2001.00973

ROSENBLAT, Alex & Luke STAR, 2016. Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers. *International Journal of Communication*, 10, 3758–3784.

ROTILA, Viorel. 2019. The Future of Social Dialogue in the Age of Artificial Intelligence. *Postmodern Openings*, 10(3), 151–189. DOI: https://doi.org/10.18662/po/87

SCHILDT, Henri A., 2020. The Data Imperative: How Digitalization Is Reshaping Management, Organizing, and Work. Oxford University Press.

DOI: https://doi.org/10.1093/oso/9780198840817.001.0001

STADING, Guy, 2011. The Precariat: The New Dangerous Class. London: Bloomsbury Academic.

TREXIMA, 2024. Analýza o rozsahu a obsahu kolektivního vyjednávání na podnikové úrovni a kolektivním vyjednávání vyššího stupně za rok 2024. Praha: ČMKOS.

Dostupné z: https://www.cmkos.cz/hotothur/2024/10/Zprava-o-KV-2024.pdf

USDAW, 2025. Šest dobrých důvodů, proč byste měl/a vstoupit do svazu USDAW. Dostupné z: https://usdawlive.b-cdn.net/live/media/pealeege/six-good-reasons-czech-0425.pdf

VAN BAELEN, Johan, 2025. How we developed ACV-CSC's AI policy – and what it is helping us do using AI. Dostupné z: https://www.agileunions.ai/p/acv-csc-s-ai-policy-case-study

WIGGIN, Teke, 2025. Weaponizing the Workplace: How Algorithmic Management Shaped Amazon's Antiunion Campaign in Bessemer, Alabama. *Socius*, 11.

DOI: https://doi.org/10.1177/23780231251318389

WOOD, Alex, Mark, GRAHAM, Vili, LEHDONVIRTA & Isis, HJORTH, 2019. Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, 33(1), 56–75. DOI: https://doi.org/10.1177/0950017018785616

ZALC, Julien, 2025. *Artificial Intelligence: European opinion divided*. Verian, 26. 2. 2025. Dostupné z: https://www.veriangroup.com/news-and-insights/artificial-intelligence-and-the-future-of-work

List of abbreviations and terms used

Abbreviation used	Name in original language	Name in the Czech language / English language
ACV-CVS	Algemeen Christelijk Vakverbond (v nizozemštině)	Křesťanská odborová konfederace (Belgie)/
	Confédération des syndicats chrétiens (ve francouzštině)	Christian Trade Union Confederation (Belgium)
Al	artificial intelligence	umělá inteligence
Al Act	Artificial Intelligence Act (Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828)	Akt o umělé inteligenci (Nařízení Evropského parlamentu a Rady EU 2024/1689 ze dne 13. června 2024, kterým se stanoví harmonizovaná pravidla pro umělou inteligenci a mění nařízení (ES) č. 300/2008, (EU) č. 167/2013, (EU) č. 168/2013, (EU) 2018/858, (EU) 2018/1139 a (EU) 2019/2144 a směrnice 2014/90/EU, (EU) 2016/797 a (EU) 2020/1828)
AKAVA	Korkeakoulutettujen työmarkkinakeskusjärjestö Akava	Konfederace odborových svazů pro odborné a manažerské pracovníky (Finsko) / Confederation of Trade Unions for Professional and Managerial Workers (Finland)
АР	Autoriteit Persoonsgegevens	Úřad pro ochranu osobních údajů (Nizozemí)/ Data Protection Authority (Netherlands)
ASO	_	Asociace samostatných odborů České republiky/ Association of Independent Trade Unions of the Czech Republic
AWS	autonomous weapon systems	autonomní zbraňové systémy
BusinessEurope	Confederation of European Business	Konfederace evropského podnikání
CEEP	European Centre of Employers and Enterprises providing Public Services	Evropské centrum zaměstnavatelů a podniků poskytujících veřejné služby

CoE	Council of Europe	Rada Evropy
ČMKOS	_	Českomoravská konfederace odborových svazů/ Czech-Moravian Confederation of Trade Unions
ČR	-	Česká republika/ Czech Republic

table cont.

Abbreviation used	Name in original language	Name in the Czech language/ English language
DL	deep learning	hluboké učení
EACB	European Association of Co-operative Banks	Evropská asociace družstevních bank
EBF	European Banking Federation	Evropská bankovní federace
EDPB	European Data Protection Board	Evropský sbor pro ochranu osobních údajů
ESBG	European Savings and Retail Banks Group	Skupina evropských spořitelen a retailových bank
ETUC	European Trade Union Confederation	Evropská odborová konfederace
EU	European Union	Evropská unie
EU-27	European union with 27 member countries	Evropská unie s 27 členskými zeměmi
FAQ	frequently asked questions	často kladené otázky
FES	Friedrich Ebert Stiftung	Nadace Friedricha Eberta/ Friedrich Ebert Foundation
FLAI-CGIL	Federazione Lavoratori Agricoli e dell'Industria Alimentare - Confederazione Generale Italiana del Lavoro	Federazione Lavoratori Agricoli e dell'Industria Alimentare - Confederazione Generale Italiana del Lavoro (Itálie)
FOMO	fear of missing out	strach z promeškání
GAI	generative artificial intelligence	generativní umělá inteligence
GDPR	General data protection regulation	Obecné nařízení o ochraně osobních údajů
GPAI	Global Partnership on Artificial Intelligence	Iniciativa Globální partnerství pro umělou inteligenci
GPDP	Garante per la protezione dei dati personali	Úřad pro ochranu osobních údajů (Itálie)/ Personal Data Protection Authority (Italy)
ICT	information and communication technology	informační a komunikační technologie
ILO	International Labour Organization	Mezinárodní organizace práce

table cont.

Abbreviation used	Name in original language	Name in the Czech language / English language
ITF	International Transport Workers' Federation	Mezinárodní federace pracovníků v dopravě
IUF	International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations	Mezinárodní svaz pracovníků v potravinářství, zemědělství, hotelnictví, restauracích, cateringu, tabáku a souvisejících odvětvích
KSVS	-	kolektivní smlouva vyššího stupně/ higher-level collective agreement
KUK	_	Konfederace umění a kultury/ Confederation of Arts and Culture
LAWS	lethal autonomous weapon systems	smrtící autonomní zbraňové systémy
LLMs	large language models	velké jazykové modely
ML	machine learning	strojové učení
MPSV	_	Ministerstvo práce a sociálních věcí České republiky/ Ministry of Labour and Social Affairs of the Czech Republic
NCIL	Commission nationale de l'informatique et des libertés	Národní komise pro informatiku a svobodu (Francie)/ National Commission for Information Technology and Civil Liberties (France)
OECD	Organisation for Economic Co- operation and Development	Organizace pro hospodářskou spolupráci a rozvoj
OECD AI Principles	_	Principy umělé inteligence OECD
OS	_	odborový svaz/ trade union
OSN	United nations	Organizace spojených národů
OSVČ	_	osoba samostatně výdělečně činná/ self-employed person
p. b.		procentní bod/ percentage point

RILSA	Research Institute for Labour and Social Affairs	Výzkumný institut práce a sociálních věcí, v. v. i.
SMEunited	European Association of Craft, Small and Medium-Sized Enterprises	Evropská asociace řemesel, malých a středních podniků
UNESCO	United Nations Educational, Scientific and Cultural Organization	Organizace OSN pro výchovu, vědu a kulturu

table cont.

Abbreviation used	Name in original language	Name in the Czech language / English language
USB	Unione Sindacale di Base	
USDAW	Union of Shop, Distributive and Allied Workers	Odborový svaz pracovníků v obchodě a distribuci a příbuzných oborech

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