

TECHNOLOGICAL CHANGES AND THE IMPACT ON WORKING HOURS

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ABSTRACT

The integration of digital technologies into the workplace, especially in China and the US, is changing the way we organise working time. This includes both performance monitoring and flexible working arrangements, enabling more efficient use of working time and increased productivity. The rapid development of technology and its impact on labour potential prompts the search for relevant solutions in terms of flexible working hours. This is the reason for the relevance of our research. The purpose of the research is to determine the impact of digital technologies on the organisation of working time through the prism of monitoring efficiency and productivity; to analyse in detail how digital tools have changed the organisation of working time in certain industries in China and the United States; to characterise technologies that have a significant impact on the organisation of working time; to assess the level of employee satisfaction in response to major technological changes; to determine the role of flexible working hours in improving the efficiency of working time use. To achieve this purpose, the following research methods were used: general philosophical method, descriptive method, method of system analysis, synthesis, dialectical method, comparative method, methods of deduction and induction. These methods

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were used to formulate scientifically significant conclusions and analyse the peculiarities of working time and flexible working in terms of large-scale technological changes.

Key words: *technological changes, flexible working hours, work-life balance, digital technologies, digital tools.*

1. INTRODUCTION

The twenty-first century is a century of large-scale changes and innovations in all spheres of society. Moreover, the labour sector and the so-called ‘traditional’ workplace are undergoing particular changes, becoming more integrated, innovative and technologically advanced. That is why businesses are investing significant financial resources to keep up with the times, remain competitive and meet the trends of changing work schedules and workplace landscapes driven by the latest technologies.¹

It is undeniable that the last decades have completely changed not only the pace at which we work, but also the way we work. There has been a reduction in working days, a shift in emphasis to increasing productivity in a shorter period of time - all of this has contributed to a change in the way we work and the way employees view their jobs, the search for a work-life balance, job satisfaction and the efficiency of working time itself. In turn, modern technologies have had a positive impact on communication between employees and their management of working time,² That is why companies that actively implement new technological advances in their work processes report higher productivity and better time management.

This paper also aims to emphasise the fact that e-commerce and high-speed computing have affected the very way employees work, adding flexible working hours, reducing the time to develop a product or service, and reducing the structure of the dependency pyramid.³

In general, the rapid integration of digital technologies into workplaces around the world has fundamentally changed traditional work practices, reshaping

¹ Yaroshenko, O. M. et al.: Non-fixed working hours in the context of globalisation: the impact of international trends on Ukrainian legislation and employers’ practices, *Revista Juridica Portucalense*, 35 2024, pp. 238-260.

² Brodowicz, M.: The impact of technological advancements on sustainability and predictability in modern societies, <<https://aithor.com/essay-examples/the-impact-of-technological-advancements-on-sustainable-development>>, last accessed 15/10/2025.

³ Brouge, N.: Unlocking the potential of flexible work technology: Tools for managing remote teams, 01.09.2023.

the way work is organised, managed and performed. This digital revolution is particularly evident in countries such as China and the United States, where both the private sector and government see technology as a cornerstone of economic growth and innovation. In general, this is reflected in the following key aspects:

1. Transformation of traditional working methods through the active introduction of artificial intelligence into work processes, process automation, as well as cloud computing and the use of various technological tools for computing.⁴ In general, for many countries, including the United States and China, the development of artificial intelligence technologies has led to the simplification of many processes and operations and the reduction of the need for manual labour, thereby allowing for more efficient performance of tasks. For example, in manufacturing, robotics and AI-driven systems have replaced many manual processes, resulting in shorter production times and fewer errors.⁵ As for other areas of science-related activity, the use of artificial intelligence has allowed us to focus on more complex tasks, while routine repetitive actions have been performed by AI technologies. Accordingly, working time was redistributed and priority areas of work were identified. Cloud computing, in turn, has revolutionised the way businesses store, access and share information. In the United States, the introduction of cloud services such as AWS, Microsoft Azure and Google Cloud has enabled companies to scale their operations quickly and efficiently. In China, platforms such as Alibaba Cloud are playing a similar role, supporting the rapid growth of e-commerce and other digital services.⁶ When it comes to collaboration tools, it is worth paying attention to software such as Zoom, which has gained great popularity since the COVID-19 pandemic, as it has been designed to help maintain the integrity of work processes regardless of the circumstances during the pandemic.
2. Changes in the organisation of working time - manifested in the way that traditional 8-5 or 9-6 schedules are giving way to flexible working conditions, remote work and hybrid work models. This allows employees to choose work schedules that are convenient for them, while focusing on important tasks and not sacrificing their personal lives.⁷

⁴ *ibid*

⁵ Buckley, E.: The role of technology in the rise of flexible working, 03.03.2020.

⁶ Brouge, N.: Unlocking the potential of flexible work technology: Tools for managing remote teams, 01.09.2023.

⁷ Filipenco, D.: Technology's impact on employment: benefits and drawbacks, 04.08.2025.

3. Use of monitoring tools - the above changes and the possibilities of choosing work schedules raise the issue of the importance of monitoring employees' performance, productivity and efficiency in the workplace. Companies are actively using a variety of software that tracks screen activity with keystrokes and generates detailed reports on how employees' time is spent. For example, in China, there is a trend of significant government involvement in data monitoring and analysis, which directly reflects broader trends in government oversight.⁸

In view of the above, the purpose of the research is to determine the impact of digital technologies on working time organisation through the prism of monitoring efficiency and productivity; to analyse in detail how digital tools have changed the organisation of working time in certain industries in China and the United States; to characterise technologies that have a significant impact on the organisation of working time; to assess the level of employee satisfaction in response to major technological changes; to determine the role of flexible working hours in improving the efficiency of working time use.

2. METHODOLOGICAL FRAMEWORK

To achieve the purpose of this paper, methods of scientific knowledge such as the general philosophical method, descriptive method, method of system analysis, synthesis, dialectical method, comparative method, methods of deduction and induction were used.

It should be noted that the general philosophical method is a cross-cutting method of scientific research and can be traced at all stages of our scientific research. The general philosophical research method made it possible to formulate scientifically significant conclusions and understand the long-term prospects of the impact of technological changes on working time and flexible working hours. In addition, the general philosophical method helped to determine the impact of digital technologies on the organisation of working time through the prism of monitoring efficiency and productivity.

The descriptive method, due to its nature, helped to define the concept of flexible working hours. The systemic analysis method allows us to consider the issue of technological change and flexible working from different perspectives, taking into account all its characteristics and current state. This helps to create a holistic picture of the study and identify important aspects that will be necessary in the

⁸ The Role of Technology in Managing Flexible Working Arrangements, 13.06.2024, <<https://labourlaws.co.uk/technology-for-flexible-working-management//>>, last accessed 15/10/2025.

course of further research. Using the method of system analysis, this research analysed how digital tools have changed the organisation of working time in certain industries in China and the United States and described the technologies that have a significant impact on the organisation of working time.

At the same time, the synthesis method was used to assess the level of employee satisfaction in response to major technological changes. As a result, scientifically significant conclusions were drawn regarding the achievements in the area of work-life balance and steps were formulated by employers that could improve this situation.

The dialectical method reveals the peculiarities of the role of flexible working hours in improving the efficiency of working time use through the prism of advantages and disadvantages. In combination with the systemic analysis method, a number of advantages of flexible working arrangements were presented, as well as the disadvantages that exist in parallel. The dialectical method provided a substantiation of the conclusions presented in this paper, which increases their significance and further applicability. And, using the comparative method, the areas of the US and China where the latest technologies are most widely used and where they have the best impact on the organisation of working time were analysed.

Using the method of deduction, a conclusion was reached that the potential long-term impact of digital technologies on flexible working arrangements was identified. Using the method of induction, practical proposals for the prospects of flexible working and actions on the part of employers in terms of supporting the sustainable mental state of their employees were formulated.

This multimedia approach allowed the exploration of the topic in depth and in detail, which made the formulation of practical and theoretically sound conclusions possible.

3. RESULTS AND DISCUSSION

3.1 THE IMPACT OF DIGITAL TECHNOLOGIES ON THE ORGANISATION OF WORKING TIME: MONITORING EFFICIENCY AND PRODUCTIVITY

Digital technologies have had and continue to have a significant impact on the development and evolution of work schedules in various industries in different countries, including the United States of America and China. The implications of these changes vary from industry to industry, reflecting the unique needs and structures of each sector. Therefore, we believe it is useful to describe how digital tools have transformed working time in different industries.

The tech industry, for example, in the United States, has undergone significant changes in terms of changing working hours and introducing flexible working.⁹ This has become possible thanks to modern digital tools, primarily project management software, cloud computing and various real-time communication platforms. Such changes have taken place in a number of companies, such as Apple, Google and Microsoft. In turn, employees are being encouraged to build their own schedule that will bring significant results, rather than working traditional working hours. Modern digital tools provide opportunities for so-called asynchronous collaboration, allowing teams to work in different time zones without the need to synchronise working hours.¹⁰

This is evidence of a focus on efficiency and productivity rather than mere presence in the workplace. That is why a culture of working when they are really productive has begun to spread among employees, and quite often this productivity is outside of 'traditional' office hours.¹¹

Speaking of China, the tech sector is moving closer to the standards of flexible working hours as in international partners. However, it should be noted that at the same time, traditional work schedules also remain, especially in startups and tech giants such as Alibaba. Companies are using modern digital tools, such as DingTalk and WeChat Work, corporate platforms that promote progressive management, effective project and team management, and facilitate both flexible working and remote work. It is also worth noting that traditional work models are still relevant in China, but young people are resisting this. The use of digital tools allows employees to manage their time more effectively within this rigid framework, although this has not yet led to the widespread adoption of truly flexible working hours.¹²

The financial services industry is notorious for its rigidly regimented work schedules, but due to technological changes, even this industry has been transformed to flexible working hours. Investment banks, insurance companies and financial advisory firms in the US are increasingly using digital tools that allow remote and flexible working. Platforms such as Zoom, for example, and spe-

⁹ Yaroshenko, O. M. et al.: The role of lobbying and corrupt practices in shaping labor standards: Issues and solutions, *Revista de Derecho de la Seguridad Social, Laborum*, 39 2024, pp. 201-212.

¹⁰ Brodowicz, M.: The impact of technological advancements on sustainability and predictability in modern societies, <<https://aithor.com/essay-examples/the-impact-of-technological-advancements-on-sustainable-development>>, last accessed 15/10/2025.

¹¹ Tkachenko, V. S.: Challenges regarding the legal regulation of working time in the EU, *Law and Society*, 1(2) 2024, pp. 300-305.

¹² Yaroshenko, O. M. et al.: Child labour in show business in Europe: legal status and protection of the rights of child actors, singers and models, *JUS Rivista di Scienze Giuridiche*, 1 2024.

cialised financial software allow employees to work from different locations and time zones.¹³ It is worth noting that a critical aspect is decision-making in the course of communication with the client, which takes place in real time. That is why overlapping working hours are a common phenomenon, especially in senior positions where tracking market trends or trading is required. At the same time, the financial sector retains the ability for employees to organise their own working hours, especially for those who have less contact with clients or are involved in complex, long-term projects.¹⁴

In China's financial sector, large banks and financial institutions are increasingly using digital platforms such as Alipay, WeChat Pay, and blockchain-based systems to streamline operations and provide remote services. While this has provided some flexibility, the conservative nature of the industry and the regulatory environment means that traditional business hours still dominate. It is important to add that there is also a parallel shift towards longer working hours per se. Accordingly, although flexible working hours are being introduced in China, they are still not a priority in the labour sphere.¹⁵ As a result, we can conclude that digital technologies are generally used to increase productivity rather than to modify the traditional working day towards better job satisfaction for employees.

The manufacturing sector in the United States, for example, has undergone a number of changes due to technological innovations, introducing the latest technologies, the use of artificial intelligence, automation and IoT devices. In general, it is safe to say that the so-called 'smart' manufacturing systems create a springboard for the development and establishment of work processes on an uninterrupted basis, which, accordingly, work outside the 'traditional' working hours.¹⁶ As a result, employees are able to monitor certain production lines remotely using digital technologies and predictive maintenance tools, which has reduced the need for service personnel during off-peak hours. These changes have led to even greater changes in the organisation of working hours, as they have changed the need for employees to be present at all times, instead requiring them to perform only certain tasks during busy hours. Additionally, it should be noted that this flexibility is more applicable to supervisory and

¹³ Buckley, E.: The role of technology in the rise of flexible working, 03.03.2020.

¹⁴ Eurofound: Game-changing technologies: Transforming production and employment in Europe, Luxembourg: Eurofund, 22.01.2020, p. 45.

¹⁵ Brodowicz, M.: The impact of technology on productivity and time management, *Aithor Essays*, <<https://aithor.com/essay-examples/the-impact-of-technology-on-productivity-and-time-management/>>, last accessed 15/10/2025.

¹⁶ Filipenco, D.: Technology's impact on employment: benefits and drawbacks, 04.08.2025.

service functions, while production line workers may still be tied to more traditional shift patterns.¹⁷

As for China's industry, it is a key area for the active introduction of technological innovations and initiatives, which is already happening now and will continue to happen. It is the introduction of artificial intelligence technologies, automated processes and robotics in production that have led to an increase in the productivity of the manufacturing sector.¹⁸ In this regard, it is worth noting that many industries can operate around the clock, with minimal human intervention. Digital tools have made it possible for managers to work more flexibly, similar to the US, but the majority of the manufacturing workforce remains tied to traditional shift work.

The US retail industry has changed dramatically since the emergence of certain e-commerce platforms, such as Shopify and Amazon. It is thanks to technological changes and the latest technology that these companies have been able to streamline their operations and work around the clock, with customer service, order fulfilment and logistics teams often working in shifts throughout the day. This is where the flexible working environment can be observed, where employees can choose shifts that fit their schedule.¹⁹ In addition, the use of artificial intelligence and machine learning for demand forecasting and inventory management has allowed companies to optimise staffing levels, reducing the need for rigid work schedules.

Speaking of China's e-commerce, it is worth mentioning the giants Alibaba and JD.com. Similar to the US experience cited above, the active use of digital tools has allowed these companies to provide 24/7 services, with employees working different shifts, managing various aspects of the business, from customer service to logistics. However, it is also worth noting the fact that frontline workers, those involved in backend operations, have flexible working hours, but warehouse workers and delivery drivers, for example, do not and often face irregular working hours.²⁰

Thus, it should be noted that the integration of various digital technologies has a significant impact on various sectors of the state and the organisation of flexible working hours for employees. As part of this research, the authors found

¹⁷ *ibid*

¹⁸ The Role of Technology in Managing Flexible Working Arrangements, 13.06.2024, <<https://labourlaws.co.uk/technology-for-flexible-working-management/>>, last accessed 15/10/2025.

¹⁹ Tkachenko, V. S.: Legal regulation of working time: Ukrainian realities and European experience, *Juris Europensis Scientia*, 2 2024, pp. 32-36.

²⁰ Eurofound: Game-changing technologies: Transforming production and employment in Europe, Luxembourg: Eurofund, 22.01.2020, p. 45.

it appropriate to analyse in detail which technologies have such a significant impact:

- Working time monitoring software is generally a guarantee of a responsible attitude to work on the part of employees. When such software is installed, it displays the working hours spent on a particular task. As a result, both the employee and the manager can see the time spent, identify inefficiencies, and address them by optimising processes.²¹ In some cases, this software is a mandatory part of an employee's flexible schedule. It should be noted that the data obtained as a result of working time monitoring provide a basis for making informed decisions about employees themselves, projects in progress, and the time required to close important issues related to them. The point is that if certain tasks consistently take longer than the deadlines, managers can adjust them or allocate additional resources.²²
- Project management tools, such as Trello, Notion, Asana, WeChat Work, are aimed at greatly facilitating employee collaboration and communication and are platforms where employees can see workloads, project updates, and share work files. The logical consequence is that the use of such platforms reduces the need for meetings and emails, saving time and increasing productivity.²³ Moreover, such tools allow for progress monitoring, task allocation, and deadline setting, leading to more efficient use of working time. For example, such project management tools in the United States are actively used in firms where remote work or hybrid scheduling is common, such as consulting firms, marketing companies, and technology companies. In China, such tools are most common in the technology, retail, and education sectors.²⁴
- Communication and collaboration tools, such as Microsoft Teams or Ding-Talk, are designed to reduce time spent on email correspondence and provide instant communication for more efficient problem solving. Moreover, such tools can easily integrate with other applications, such as project management, time tracking, and calendar tools, creating an optimal and seamless workflow. This process can provide a number of benefits for all parties, including time savings and reduced need to switch between different appli-

²¹ Wallin, E.: Flexible workplace technology: The future of work, 10.05.2023, <<https://prop-techos.com/tenant-experience/flexible-workplace/>>, 15/10/2025.

²² Llave, O. V.: Digitalisation and working time, <<https://www.eurofound.europa.eu/en/digitalisation-and-working-time/>>, last accessed 15/10/2025.

²³ Filipenco, D.: Technology's impact on employment: benefits and drawbacks, 04.08.2025, <<https://www.developmentaid.org/news-stream/post/173022/technology-impact-on-employment/>>, last accessed 15/10/2025.

²⁴ Eurofound: Game-changing technologies: Transforming production and employment in Europe, Luxembourg: Eurofund, 22.01.2020, p. 45.

cations. Such communication apps are particularly important in times of remote work and flexible working.²⁵

- Automation and artificial intelligence tools - these tools are inherently capable of saving employees time and taking over repetitive tasks. Accordingly, employees focus their attention on strategic issues and creative activities. Taken together, this increases productivity in the company and leads to better performance. Moreover, it should be noted that automated processes and artificial intelligence technologies reduce the likelihood of human error as such and, logically, eliminate the time required to correct it.²⁶ And, of course, one should not forget that automated processes allow companies to significantly scale their existing operational processes without involving human labour.

It is important to note that the integration of digital tools in the workplace has had a significant impact on employees' perceptions of work, affecting both productivity and job satisfaction. In general, employees' perception of technological changes in the workplace is manifested in the following ways:

- The positive side - generally manifested in employees' perception of increasing their own efficiency and productivity in the workplace with the help of the project management software and communication platforms analysed above. Such tools reduce the need for meetings and give more freedom for decision-making to employees who know the intricacies of the work they do. On a positive note, time tracking software often allows employees to choose flexible work schedules and adjust their working hours to their personal needs.²⁷ In other words, the ability to work from home or choose working hours that coincide with personal peak productivity is often seen as a significant advantage. It is also worth remembering that if a team of employees works from different parts of the world, communication platforms bridge the gap between office workers and remote workers or between remote workers alone. That is, such tools strengthen the sense of team cohesion and inclusiveness.²⁸
- On the negative side, the use of digital technologies often leads to increased monitoring and supervision, which makes many employees feel uncomfortable in the workplace. After all, constant monitoring of working hours,

²⁵ Wallin, E.: Flexible workplace technology: The future of work, 10.05.2023.

²⁶ Brouge, N.: Unlocking the potential of flexible work technology: Tools for managing remote teams, 01.09.2023.

²⁷ Brodowicz, M.: The impact of technology on productivity and time management, *Aithor Essays*, <<https://aithor.com/essay-examples/the-impact-of-technology-on-productivity-and-time-management/>>, last accessed 15/10/2025.

²⁸ Wallin, E.: Flexible workplace technology: The future of work, 10.05.2023.

computer activity, and productivity indicators can create a sense of distrust between employees and management, leading to anxiety and stress. It should also be noted that various digital technologies blur the line between work and personal life. In fact, a situation is created where an employee has an additional obligation to always be in touch, using communication tools and various software. This often leads to burnout and reduced job satisfaction.²⁹

Of course, there are always positive and negative aspects, but due to the nature of technology, companies try to improve the positive aspects of the work schedule and reduce the negative ones for the employee. Moreover, there are aspects that have both a positive and negative impact on the employee. For example, when using modern technology during working hours, an employee often focuses on performance and productivity to meet certain company standards. However, this can also lead to a narrow focus on measurable outcomes, which can potentially stifle creativity and innovation. In an environment dominated by metrics, employees may prioritise quantity over quality, leading to a lower level of overall performance.³⁰

While digital tools have undoubtedly transformed the modern workplace by increasing productivity and offering greater flexibility, they also pose significant challenges to employee well-being and job satisfaction. The impact of these tools depends largely on how they are implemented and managed. Companies need to find a balance between using technology to increase productivity and ensuring that these tools do not undermine the well-being of their employees.

3.2. THE ROLE OF FLEXIBLE WORK SCHEDULES IN INCREASING THE EFFICIENCY OF THE USE OF WORKING TIME THROUGH THE PRISM OF ADVANTAGES AND DISADVANTAGES AND THE POTENTIAL LONG-TERM IMPACT OF DIGITAL TECHNOLOGIES ON FLEXIBLE WORK SCHEDULES

Having analysed in the previous section the areas where new and latest technologies can be used to improve working time efficiency, it is important to note that the shift towards flexible working arrangements is now well underway. Traditional work schedules often do not meet the needs of modern employees.

²⁹ Brodowicz, M.: The impact of technology on productivity and time management, *Aithor Essays*, <<https://aithor.com/essay-examples/the-impact-of-technology-on-productivity-and-time-management/>>, last accessed 15/10/2025.

³⁰ Brodowicz, M.: The impact of technology on productivity and time management, *Aithor Essays*, <<https://aithor.com/essay-examples/the-impact-of-technology-on-productivity-and-time-management/>>, last accessed 15/10/2025.

In general, such schedules often lead to increased levels of stress, burnout and work-life imbalance. Therefore, it is quite obvious that progressive companies that value their employees and are interested in their progressive development and the development of their company find flexible schedules as a solution to their problems.³¹ By adopting such working arrangements, companies can promote employee satisfaction and productivity, increase adaptability, which will ultimately lead to improved overall performance and a healthier workplace culture.

In general, flexible working hours allow employees to change their working hours outside of the traditional 8 to 5 or 9 to 6. Employees are free to choose when to start and finish their tasks. This flexible schedule is the basis for a harmonious personal life and professional growth at work. By understanding and implementing flexible working, companies create a dynamic and supportive work environment that meets the diverse needs of their employees, which ultimately contributes to increased engagement and productivity of the workforce.³²

It is worth noting that the main benefits of flexible working are as follows:

- Increased job satisfaction and productivity as such - when employees determine their own working hours, they are more likely to work more efficiently and with better results. A sense of control over one's workplace and working hours builds a sense of trust between the employee and the company they work for. Therefore, it is only logical that an employee becomes even more motivated to achieve their goals.
- Improved emotional and physical well-being - these two states are affected by many factors, including the time spent travelling to the office and frequent traffic jams. Reducing commuting time minimises fatigue and reduces irritability, and flexible working allows you to better manage your personal health, for example, by replacing commuting time with exercise, sleep and medical appointments³³.
- Work-life balance - which is likely to be achieved more quickly when working flexible hours. For example, in the US, flexible work schedules supported by digital technologies have generally improved work-life balance for

³¹ Axiom Global Technologies: Transforming Work Culture: Embracing Flexible Schedules for Enhanced Well-being and Productivity, 28.06.2024.

³² EmpMonitor: The role and impact of technology in the workplace, 09.07.2024.

³³ Axiom Global Technologies: Transforming Work Culture: Embracing Flexible Schedules for Enhanced Well-being and Productivity, 28.06.2024.

many employees³⁴. The ability to work remotely, set flexible schedules, and use time tracking and project management tools has enabled workers to better align their work schedules with their personal needs, reducing stress and increasing job satisfaction. Meanwhile, in China, the gradual introduction of flexible working, particularly in the urban and technology sectors, has only just begun to deliver similar benefits.

- Attracting and retaining professionals, including Generation Z - in the current environment, employees increasingly prefer companies that offer flexible working and remote working options. This is especially true for the younger generation³⁵. Representatives of Generation Z value flexibility, autonomy and the ability to combine work and personal life. Therefore, employers who understand these needs have a better chance of attracting cool professionals to perform work tasks and stand out among other companies that have not yet come to such decisions. And it should not be overlooked that flexible working helps to reduce staff turnover and the associated recruitment costs.

It is important to note that while there are a number of advantages of flexible working arrangements in the context of rapid technological change, it is also worth mentioning the potential disadvantages and challenges that arise in the course of implementing flexible working arrangements. These include, first of all, the following:

- Although there are a large number of platforms for improving communication today, we should not ignore the fact that without proper management of such processes, all efforts will be nullified. We should also not rule out the fact that misunderstandings and delays in information exchange often occur when employees are not physically present together.³⁶
- Shared tasks and team projects can be more difficult to coordinate with dispersed teams. Lack of planned and spontaneous interaction and face-to-face meetings can hinder teamwork and innovation. Yes, web conferencing certainly addresses many of these issues, but such conferences are scheduled in advance based on the availability of each employee's time, which also affects the state of teamwork.

³⁴ CoffeePals: How Do Flexible Work Schedules Impact Employee Experience?, 29.01.2025, <<https://www.coffeepals.com/blog/how-do-flexible-work-schedules-impact-employee-experience/>>, last accessed 15/10/2025.

³⁵ CoffeePals Team: Task-based Working Hours – Organization of Flexible Working Time and Its Impact on Efficiency, 29.01.2025, <<https://www.coffeepals.com/blog/how-do-flexible-work-schedules-impact-employee-experience/>>, last accessed 15/10/2025.

³⁶ CoffeePals: How Do Flexible Work Schedules Impact Employee Experience?, 29.01.2025, <<https://www.coffeepals.com/blog/how-do-flexible-work-schedules-impact-employee-experience/>>, last accessed 15/10/2025.

- Difficulties with self-discipline and time management - often such difficulties are observed among employees working on the principle of flexible working hours and remote work. We cannot rule out the fact that for many people, the office environment is an atmosphere of discipline and order, with tasks clearly structured and deadlines planned. Therefore, when an employee works from home, these factors are blurred, and the simultaneous distractions at home and work-life balance can have a negative impact on productivity.³⁷
- Ensuring fairness and equity - is reflected in equal access to flexible working opportunities for all employees. Certain employees may be more suited to remote work, which can potentially lead to significant inequalities.
- Technological barriers - manifested in insufficient access to the necessary tools and lack of technical support - can reduce productivity and cause frustration among employees.³⁸

Taking into account the analysed advantages and disadvantages, employers have a number of tasks and common problems to solve, which primarily include improving communication strategies by establishing and providing expanded access to various communication platforms. In particular, it is important to hold regular meetings and create clear communication protocols that will facilitate the effective exchange of data to perform important work tasks.³⁹ Also, as part of this communication area, it will be advisable to use shared files and documents and virtual whiteboards with important tasks. To improve the situation with time management, it is important for employers to provide training and additional technological tools to increase productivity. And it is important to invest in reliable technology and provide comprehensive technical support.⁴⁰

Rapid technological developments in different parts of the world, particularly in the US and China, are driving the optimisation of many work processes and the introduction of flexible working hours. And the further technology develops, the more companies will expand the possibilities of flexible working models.⁴¹ The potential long-term impact of digital technologies on flexible

³⁷ EmpMonitor: 08 tips to improve productivity in the workplace, 14.09.2023.

³⁸ CoffeePals: How Do Flexible Work Schedules Impact Employee Experience?, 29.01.2025, <<https://www.coffeepals.com/blog/how-do-flexible-work-schedules-impact-employee-experience/>>, last accessed 15/10/2025.

³⁹ EmpMonitor: Optimizing tech to boost workplace performance, 27.09.2021.

⁴⁰ EmpMonitor: 6 reasons why your business needs digital workforce management, 15.05.2023.

⁴¹ Shagvaliyeva, S.; Yazdanifard, R.: Impact of flexible working hours on work-life balance, *American Journal of Industrial and Business Management*, 4(1) 2014, pp. 20-23.

working arrangements and the logically related emotional state of employees and their job satisfaction is difficult to overestimate and assess, but we can already make some predictions.

In general, it is clear that the positive impact of flexible working on work-life balance is expected to increase.⁴² Thanks to project management tools and communication platforms, asynchronous work has become possible, with employees determining their own hours and choosing their own workplace. Moreover, companies also often mix remote work and work from home to maintain self-discipline at work and efficiency in completing tasks. At the same time, one should not ignore the fact that the boundaries between work and personal life are blurred in general due to the influence of messengers and the need to respond outside of working hours. This can lead to a constant feeling of being 'on call' and increase the risk of burnout. In addition, without clear guidelines, flexible schedules can cause coordination issues between teams, leading to delays and miscommunication. In the longer term, flexibility will expand even further, allowing employees to focus on creative and strategic tasks while mundane processes are handled by the latest technology. However, companies should establish clear policies on flexibility to prevent overworking, such as limiting communication outside of working hours or introducing mandatory offline time.⁴³

Our mental health is already being affected by work and work schedules, so it is only logical that this will continue to happen. It should be noted that due to the introduction of flexible work schedules, the level of stress in many employees is already decreasing, as the time spent on the way to and from work is spent with greater benefit for the employee. Moreover, employees create spaces that are conducive to their mental well-being, whether that means fewer distractions or proximity to family.⁴⁴ On the other hand, it often contributes to feelings of isolation and digital fatigue. This is due to the lack of face-to-face communication and a sense of teamwork. In addition, an over-reliance on virtual meetings and communication tools can lead to 'scale fatigue'. As a result, it can lead to a deterioration in cognitive function, concentration, and overall mental health. That's why companies should devote time to this aspect and

⁴² European Commission: Work-life balance, n.d., <<https://ec.europa.eu/social/main.jsp?catId=1311&langId=en/>>, last accessed 15/10/2025.

⁴³ Deloitte: Report on Implementation of the EU Directives on Work-Life Balance and on Transparent and Predictable Working Conditions across Central Europe. The impact on businesses of the EU Directives, <<https://www2.deloitte.com/pl/pl/pages/doradztwo-prawne/articles/Implementation-of-the-EU-Directives-on-Work-Life-Balance-and-on-Transparent-and-Predictable-Working-Conditions.html/>>, last accessed 15/10/2025.

⁴⁴ *ibid*

organise various webinars and mental health support programmes. Organisations can also introduce regular face-to-face meetings or mixed work schedules to foster a sense of community, helping to combat isolation.⁴⁵

In the context of our research, it is worth noting that the future of digital work is likely to see consolidation of platforms and more intuitive AI-powered solutions that offer better integration. Companies that prioritise the user experience of their digital tools and platforms are likely to enjoy higher employee satisfaction, as employees will spend less time on administrative tasks and more time on creative or productive work.⁴⁶

It is also worth noting that the active implementation of various modern tools and opportunities for flexible working arrangements will significantly increase the loyalty of employees and potential employees, as employees will feel that their employer respects and values their work-life balance. However, it should be noted that an ill-considered introduction of digital tools can have the opposite effect. Overwork, as a result of constant connectivity, can lead to burnout and increased staff turnover. Employees who feel overwhelmed by their digital needs are more likely to leave, even if flexible arrangements are available. In addition, a lack of personal connection or a weak team culture in a fully remote setting can lead to disengagement and exhaustion.

Based on the above, it is clear that companies that want to be competitive need to prioritise and set clear limits on flexible working so that job satisfaction prevails over digital exhaustion. Employers need to foster a sense of team spirit in the long term so that employees do not feel isolated. Optimisation of workflows and digital tools for high-quality user experience remains important. Don't forget about programmes to support employees' mental health. Taken together, the following steps should be enshrined in companies' development strategies, taking into account employee well-being and workforce engagement.

4. CONCLUSION

Digital technologies have had and continue to have a significant impact on the development and modification of working arrangements in various industries in different countries. The technology industry, for example, in the United States, has undergone significant changes in terms of changing working hours and introducing flexible working. A number of companies, such as Apple, Google and Microsoft, have made such changes. In turn, employees are

⁴⁵ European Commission: Work-life balance, n.d., <<https://ec.europa.eu/social/main.jsp?catId=1311&langId=en/>>, last accessed 15/10/2025.

⁴⁶ *ibid*

encouraged to build their own schedule, which will bring significant results, rather than working in a traditional working day. As for China, the tech sector is moving closer to the standards of flexible working hours as those of its international partners. However, it should be noted that at the same time, traditional work schedules also remain, especially in start-ups and tech giants such as Alibaba, for example.

Investment banks, insurance companies and financial advisory firms in the US are increasingly using digital tools that allow them to work remotely and on a flexible schedule. In China's financial sector, large banks and financial institutions are increasingly using digital platforms such as Alipay, WeChat Pay and blockchain-based systems to streamline operations and provide remote services. While this has provided some flexibility, the conservative nature of the industry and the regulatory environment means that traditional working hours still dominate.

Manufacturing in the US has been affected by a number of changes due to technological innovation, with the introduction of new technologies, artificial intelligence, automation and IoT devices. These changes have led to even greater twists in working arrangements, as they have changed the need for employees to be present at all times, instead requiring them to perform only certain tasks during high volume hours. In China, for example, many industries can operate around the clock with minimal human intervention. Digital tools have made it possible for executives to work more flexibly, similar to the US, but the majority of the manufacturing workforce remains tied to traditional shift work.

The US retail sector has changed dramatically with the entry of certain e-commerce platforms, such as Shopify and Amazon. When it comes to Chinese e-commerce, it is worth mentioning the giants Alibaba and JD.com. The active use of digital tools has allowed these companies to provide services 24/7, with employees working different shifts, managing various aspects of the business, from customer service to logistics.

In general, the following technologies have a significant impact on working time management: time tracking software; project management tools such as Trello, Notion, Asana, WeChat Work; communication and collaboration tools such as Microsoft Teams or DingTalk; automation and artificial intelligence tools.

The integration of digital tools in the workplace has had a significant impact on employees' perceptions of work, affecting both productivity and job satisfaction.

Flexible working hours allow employees to change their working hours beyond the traditional 8 to 5 or 9 to 6. Employees are free to choose when to start and finish their tasks. The main key benefits of flexible working include: increased job satisfaction and productivity; improved emotional and physical well-being;

work-life balance; and attracting and retaining professionals, including Generation Z. Alongside the benefits of flexible working arrangements, there are also disadvantages and challenges, including communication issues, difficulties in teamwork and self-discipline and time management, issues of fairness and equity in access to flexible working opportunities for all employees, and technological barriers.

Overall, it is clear that the positive impact of flexible working on work-life balance is expected to increase. Project management tools and communication platforms have made it possible to work asynchronously, allowing employees to determine their own working hours and choose their own workplace. In the longer term, flexibility will be further enhanced, allowing employees to focus on creative and strategic tasks while day-to-day processes are handled by the latest technology. It should be noted that the introduction of flexible working hours has already reduced the stress level of many employees, as the time spent commuting to and from work is spent with greater benefit to the employee.

It is worth noting that companies that prioritise the user experience of their digital tools and platforms are likely to experience higher employee satisfaction, as employees spend less time on administrative tasks and more time on creative or productive work. It is also worth noting that the active implementation of various modern tools and flexible working arrangements significantly increases the loyalty of employees and potential employees, which has a positive impact on the company's development.

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