

## The Role of Lifelong Learning in Labour Market Competitiveness

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### Abstract

*Technological advancements and global economic shifts increasingly necessitate lifelong learning to adapt to dynamic labor market conditions. This study aims to investigate the role of lifelong learning in enhancing labor market competitiveness, professional development, and societal progress, while integrating the principles of the circular economy to highlight sustainable education practices. The research focuses on how continuous skill development fosters resilience and adaptability among workers and supports resource efficiency and sustainability goals. A mixed-methods approach was employed, combining primary and secondary data. The primary research included qualitative interviews with individuals who successfully transitioned through retraining, as well as a quantitative survey targeting employed adults. These methods provided comprehensive insights into the motivations, challenges, and outcomes of lifelong learning. Secondary research involved an extensive literature review and analysis of relevant statistical data to contextualize the findings. The results emphasize the critical importance of lifelong learning in mitigating barriers to employability, such as skill obsolescence and labor market disruptions. The study reveals that integrating circular economy principles into education fosters resource-conscious decision-making and equips workers with the competencies required for sustainable development. Despite obstacles like limited time and financial constraints, participants consistently reported enhanced professional value, increased employability, and greater personal fulfillment through lifelong learning. The added value of this research lies in its interdisciplinary approach, bridging human resource development and sustainability. By linking lifelong learning with the circular economy, the study provides actionable insights for policymakers, educators, and businesses aiming to create a resilient, innovative, and sustainable workforce. This alignment supports not only individual career advancement but also broader societal and environmental goals, contributing to long-term economic growth and stability.*

**Keywords:** *Lifelong Learning, Labor Market, Circular Economy, Professional Development, Sustainable Education.*

### Introduction

The focus of this research is on the quality of the skilled workforce, the existence and creation of which is essential for the efficient and effective operation of a business enterprise. The changing needs of the labour market constantly challenge both workers and employers. The labour market is constantly changing due to technological advances and economic changes and workers need to adapt to new challenges and opportunities. As Németh, Kálmán, and Malatyinszki (2024) emphasize, economic changes, including those reflected in Hungary's financial security dynamics, are intrinsically linked to shifts in labour market requirements. The learning process does not end with the completion of school education or the acquisition of a vocational qualification. Technological progress and economic change require repeated and regular access to training and career changes. Individual learning pathways are constantly adapting to the dynamically changing demands of the labour market. In recent decades, lifelong learning has become an increasingly important concept in labour market competition and social development. In this context,

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lifelong learning is not only an option, but an indispensable tool for survival in the competitive labour market.

For companies, the availability of a well-educated workforce is of paramount importance, which has enhanced the concept of knowledge and lifelong learning. According to the current modern concept of Human Resource Management, the strategic objective is to maintain and improve the quality of human resources and to remain competitive in today's knowledge-based economy. The problem of unemployment is a major challenge both in Hungary and in the European Union. Economic recessions, technological changes, geopolitical situations and economic restructuring are all factors that contribute to the rise in unemployment. With the emergence of Industry 4.0 and the rapid development and use of "AI" (Artificial Intelligence) systems, professionals expect a radical transformation of the labour market, similar to previous industrial revolutions. To meet these challenges, lifelong learning can play a significant role in helping workers re-enter the labour market, acquire new skills and adapt to the workplace. Analysing and understanding the link between lifelong learning and unemployment is of utmost importance in the dynamic environment of the modern labour market. The problem of unemployment has been around for decades and has a major impact on individuals, families and societies. Lifelong learning offers workers the opportunity to continuously improve their skills and knowledge, to adapt to changing to the working environment. However, there are a number of challenges and problems with this approach.

Our aim is to answer the question of how the so-called lifelong learning influences the labour market utility and value of a worker and how economically active workers think about continuous training and retraining to increase their own value. Lifelong learning has been recognized as a critical element for sustainable development, particularly in urban environments where the dynamics of work and skills rapidly change (Kálmán et al., 2024a). How the world of work relates to adult learning and what expectations workers have of themselves and their employers in terms of training and development. For instance, the integration of adult learning policies is also influenced by broader societal and institutional frameworks, which vary significantly across regions (Kálmán et al., 2024b). How they view the concept of lifelong learning. Our aim is to further investigate which forms of learning are followed and preferred by trainees in the acquisition of new skills: formal, non-formal or informal. How are they able to manage their time in a mostly rigid work-life balance. What motivations drive adults to learn at different stages of their lives. This may be professional development, career advancement, personal interest or other factors. Is it easy or difficult for them to access learning opportunities? What challenges do adults face in lifelong learning? These include balancing work and family commitments, lack of time and money, and lack of resources for learning. It is necessary to examine the policies and programmes established at state and institutional level. Do adults of different ages have different approaches to lifelong learning? Is it possible to measure the positive effects of lifelong learning on adults' lives, such as better employability, higher income, better health or personal satisfaction?

### *The Knowledge Society and Lifelong Learning*

Today's world is a knowledge-based society, where the most important resource of the economy is knowledge itself and its continuous updating. The rapid and constant changes in the world are increasingly challenging for both individuals and society. Modern economic organisations are undergoing a major transformation, particularly in terms of the growth and acceleration of the demand for knowledge and skills. This process requires a continuous expansion of knowledge expected of workers. In today's society, the population is divided into two main groups: those who are employed and have little leisure time, and those who are unemployed and have more leisure time. For both groups, participation in training is essential. Those in employment can keep their jobs by continuously improving their skills, while for the unemployed, improving their knowledge and skills can open the way to employment. Today, the first qualification acquired is no longer always enough to keep you employable in the labour market. Changes in the economy, technology and organisational structures require new types of skills that go beyond traditional physical and mental job-related knowledge. Often, even more important than specific professional knowledge is the need for prospective employees to have the right work culture, to be disciplined and punctual, and to be adaptable and committed. It is also essential to acquire flexible and adaptable knowledge and the ability to adapt to new situations. Developing thinking skills, effective problem identification and solving, and a responsible and proactive attitude are also essential. Key skills include effective communication, teamwork,

creativity, stress management, openness, willingness to compromise and flexibility. Nowadays, physical jobs also require a range of competences that were once more typical of intellectual jobs, such as foreign language communication and IT skills. Physical stamina, the ability to work under pressure and to cooperate with colleagues also improve labour market prospects. Employers benefit from workers' ability to adapt to new circumstances and to keep learning. People who follow the principles of lifelong learning have higher problem-solving skills, creativity, better learning and appreciation of their environment, more effective communication and cooperation, and greater autonomy and responsibility. Continuous learning helps individuals to deal with difficult situations in a prepared way and is not only a priority when the job is threatened. In this way, learning becomes an organic process where knowledge deepens and builds on each other, individual interest and the labour market situation shape the direction of learning in parallel, and intrinsic motivation provides a sufficient basis for effective learning and adaptation (Csehné Papp & Kraicné Szokoly, 2020). The principles of the circular economy, which emphasize resource efficiency and sustainable consumption patterns, align with the goals of lifelong learning by fostering adaptability and promoting skills essential for sustainability (Rahmat et al., 2024). In line with this, Bai et al. (2023) highlight the importance of government environmental target constraints in driving low-carbon development pathways, emphasizing the necessity of strategic frameworks that integrate education, sustainability, and policy measures to achieve long-term economic and environmental goals.

### *The Emergence of Lifelong Learning*

The concept of lifelong learning is not new, and historically there has always been a need for adults to acquire new knowledge. The term "lifelong learning", a central concept in andragogy, was first used in 1960 at the World Conference on Adult Education in Montreal. At that time, it was pointed out that everyone should be prepared for the possibility that in many cases during their lifetime they may find themselves in a situation where they need to change careers and that the initial qualification they acquired at school will no longer be sufficient for the rest of their lives. Human knowledge is never complete and learning must be continuous. Rapid technological progress and automation in the workplace create uncertainty, making continuous training and retraining increasingly important. Constant change is a psychological challenge for people and adult learning can help us not only to accept but also to adapt to these changes. Education plays a key role in facilitating societal transitions, such as moving toward sustainability, as highlighted by Kálmán, Malatyinszki, Zugor, and Szőke (2024c). A learning society can only be created if the principle of lifelong learning is accepted throughout society. Lifelong learning is key to a successful transition towards a knowledge-based economy and society, as education is a key determinant of labour market adaptability. Moreover, initiatives like the integration of sustainable tourism through geoparks underline the value of education in fostering sustainable development, as argued by Kálmán, Dávid, and Malatyinszki (2024d). Those with higher education are better and faster able to adapt to changing environments and new challenges than those with lower education. This justifies the importance of education and training in adulthood.

The term lifelong learning can be traced back to different concepts of lifelong education. In the 1970s, these concepts were developed by international organisations, notably the Council of Europe, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the Organisation for Economic Co-operation and Development (OECD), all of which published their lifelong learning education policies in the first half of the 1970s. The Council of Europe (1971) developed the concept of Education Permanente, which referred to a flexible system of learning modules. UNESCO, with its concept of lifelong education, focused on the development of a learning society based on democratic and human values. Emphasising personal skills and attitudes, this concept called for a global right to learning. The OECD (1973) proposed the concept of repetitive education, which pursued economic goals, suggesting that individuals alternate periods of education and income-earning. UNESCO, the OECD and the European Union, as new international players in this field, developed the concept of lifelong learning. The common feature of all these concepts was that they focused on the learning processes of individuals rather than on education systems. As a result, self-organised learning processes have become increasingly important. Similarly, formal, non-formal and informal learning became important. In addition to the old basic skills (reading, writing and arithmetic), these concepts require so-called new basic skills (IT skills, language skills

and social skills). By shifting the focus from education systems to individual learning, individuals will become masters of their own competences and should be able to acquire competences continuously throughout their lives and in all kinds of settings.

### *Lifelong Learning, Key Objectives of The National Strategy*

The European Union has provided structural funds for the period 2014-2020 on condition that Member States develop a national policy framework strategy to support lifelong learning policies. Lifelong learning covers the whole life cycle from early in an individual's life to post-employment and focuses on the learning process and the needs and skills of learners. The strategy aims at adapting education and training systems to lifelong learning, expanding learning opportunities beyond formal settings, and supporting continuous skills and competence development and lifelong learning systems. The Lifelong Learning Framework Strategy serves the dual purpose of providing a compass for the education and training sector and related policy areas, and a strategic framework for the development of human resources.

### *The Strategy Is Structured Around Three Core Elements*

- Increasing participation in lifelong learning and improving access to training opportunities.
- Strengthening the integration of lifelong learning principles within education, training systems, and adult learning programs to ensure adaptability and relevance.
- Enhancing the visibility and recognition of the value and outcomes of learning, emphasizing its impact on personal, professional, and societal development (Eurydice, 2023).

The framework strategy does not directly lead to regulatory action, but it is important that legislative and structural measures in sectoral policies are consistent with the principles and development objectives set out in the strategy's areas of intervention. The Framework Strategy has been implemented primarily through the European Social Fund-funded 2014-2020 Operational Programme for Economic Innovation (GINOP) and the Operational Programme for Human Resources (EFOP).

The Ministry of the Interior is responsible for social inclusion, while the Ministry of Culture and Innovation is responsible for LLL measures related to culture, education, employment, entrepreneurship, ICT and vocational training, higher education and adult education." (Eurydice, 2023)

### Labour market changes and skills needs

#### The impact of Digitalisation and Industry 4.0

First of all, let's clarify the concept of "Industry 4.0", the term that frames the changes: it is the umbrella term for the fourth industrial revolution, a period of ever closer integration of information technology and automation, as well as manufacturing methods. The term 'manufacturing methods' covers new types of relationships, from design to new production processes (rapid prototyping), robotisation, logistics inside and outside the factory, and quality. However, the operation of machines, which are increasingly taking over production tasks from human resources, requires several factors." (Bánki, et al., 2019, p.: 2) "M2M", or machine-to-machine communication, is a key technology that enables machines to take control of complex processes efficiently and communicate with each other without human intervention. As a result, robots on production lines, for example, can autonomously supply and service each other with the necessary parts without external intervention, or even stop the entire production process in the event of a malfunction.

This change is leading to the use of artificial intelligence. The way we think about AI is influenced by the widely divergent news and even major concerns about the subject. Often, AI is understood as the ability of computers to think and learn in a logical, coherent way. It is important to note that, thanks to the continuous increase in computational power, AI is capable of solving more complex, previously unknown tasks not

only because of their programming, but also autonomously. And their capabilities will increase as manufacturing technology develops, since, if we look at Moore's Law - which is no longer real from a certain point of view - its general formulation is that the number of transistors in integrated circuits doubles every year and a half. This is made possible by the rapid development of production technology. Taking this time interval into account, the normalised cost per transistor is reduced.

In the words of Judit Nagy: "Industry 4.0 is a phenomenon that builds on technological tools, through a set of activities, exploiting the opportunities offered by digitalisation, to raise process transparency to a high level, integrate the corporate value chain and supply network, and bring customer value creation to a new level by making customised and smart products available." (Nagy, EY 2019, p. 15) With the rapid development of artificial intelligence, it is feared that many jobs will be lost or transformed. However, the application of new technologies will create new jobs and new skills will be needed. We can no longer learn just one skill and apply it to our work for the rest of our lives. The Future of Jobs Report 2023, published by the World Economic Forum<sup>2</sup> (WEF), summarises the views of 803 companies, covering macro and technological trends for the period 2023-2027, their impact on jobs and skills, and the workforce transformation strategies that companies plan to adopt. Technology uptake will continue to be a key driver for businesses over the next five years remains a key driver of transformation, with 75% of the companies surveyed planning to introduce AI into their operations within the next five years. According to the study, the impact of technology on jobs is expected to be net positive over the next five years. Big Data<sup>3</sup>, climate and environmental management technologies, encryption and cybersecurity are expected to be the main drivers of job growth. Agricultural technologies, digital platforms and applications, e-commerce and digital commerce, and artificial intelligence are all expected to cause significant labour market disruption and a significant proportion of companies expect job losses within their own organisation, offset by job growth elsewhere. However, employers expect a structural labour market change of 23% of jobs over the next five years. The biggest losses are expected in administrative jobs and traditional factory and trade jobs, including cashiers, ticket takers, data entry, accounting, bookkeeping and payroll clerks, and administrative and executive secretaries, mainly due to digitisation and automation (World Economic Forum, 2023).

### *Workers' Competitiveness*

Human capital is a key factor for economic growth and business competitiveness, affecting both the number and the skills of the workforce and thus influencing the economy. The 2023 World Economic Forum (WEF) ranking of 115 indicators ranks Hungary 47th globally out of 141 countries, after the Czech Republic, Poland and Slovakia, and 24th among EU Member States. The study points to a lag in domestic innovation and says companies need to improve their innovation capacity. Currently, most companies continue to rely on cheap labour for production and are unable or unwilling to come up with innovative solutions. However, to increase competitiveness, it is no longer enough to increase employment, but also to increase the number of high value-added jobs. This can be achieved by building a knowledge-based society. In this context, it is clear that higher value-added businesses require a highly skilled workforce. At present, the focus in Hungary is mainly on assembly and manufacturing, and to increase profitability and efficiency, it is necessary to open up to innovation. One of the most pressing problems for Hungary is the lack of innovation capacity. The research, development and innovation (R&D&I) infrastructure is far from weak by international standards, but the results achieved have not been effectively translated into practice. The skills of the workforce do not allow for the widespread adoption of high technologies, resulting in a high technological backwardness of capital-poor, mainly domestically-owned enterprises. The country is not able to generate an adequate supply of labour in terms of quantity and quality, and its ability to retain and attract labour is weak. This can be explained not only by relatively low wages, but also by outdated equipment and outdated work processes (World Economic Forum, 2023).

It is important to develop digital competences in society, to promote lifelong learning and to support training in enterprises. Without these, the workforce will not be able to keep pace with technological advances, which are a key element of economic development (Klaus & Saadia, 2022).

### *Relationship Between Employment and Education*

The labour market situation not only depends on the actual balance between labour supply and demand, but also depends to a large extent on the skills, job-seeking ability and potential learning capacity of workers. The educational attainment of the population education and employment status show clear trends that highlight the importance of education in the labour market. It is statistically proven that higher levels of education reduce the risk of unemployment, so increasing educational attainment is one possible way to reduce unemployment. Citizens with higher education and long-term employment are more inclined to self-education and lifelong learning, and regardless of their age, they often take advantage of adult education opportunities (Zachár, 2009). There may be several reasons for this, including the fact that higher educated respondents are more aware that continuous learning increases their labour market opportunities and that they need the adult learning institutions' offerings to realise their career plans. According to the KSH (update: 24.02.2023) time series data on the economic activity of the population aged 15-64, the economically active population for 2022 is 4 760 thousand persons, of which 53-47% are men and women. Compared to the previous year, the economically active population will increase by 0.7%. The economically inactive population aged 15-64 for the same period is 1 408 thousand, of which 39.5% are men and 60.5% women. The data show that the economically inactive population in Hungary has been decreasing over the last decade. The Hungarian employment rate in the 15-64 age group (74.4%) in 2022 is above the EU average (69.9%). The employment rate in Hungary has increased above the EU average, resulting in an employment rate in Hungary above the EU average since 2014. Time-series statistics from the National Employment Service also show that between 2000 and 2023, the number of jobseekers registered by educational attainment rate is lowest among those with tertiary education, averaging 5.3% and rising slightly, while it is highest among those with no education and those with 8 general education, averaging 41.7% and remaining almost constant with small fluctuations. In the labour market, the situation of people with lower qualifications is the least favourable, as they are the ones who find employment mainly through temporary contracts and most often through public employment schemes. According to the KSH (update 06.11.2023), income inequality according to the Gini coefficient and the S80/S20 indicators, the preliminary figure for 2022 is 4.5, which indicates a slightly fluctuating but rising level. Thus, income inequality in Hungary will continue to rise, as the income of the top 20% of the population is 4.5 times that of the poorest 20%.

After reviewing statistical data, it can be concluded that the so-called structural unemployment is prevalent in Hungary. "This is the mismatch between the demand structure of the labour force, such as skills or regional structure, and the supply structure, and frictional unemployment, which occurs because, in order to employ the available labour force, supply and demand have to meet (even if they are structurally matched) - and this takes time. The state has a key role to play in dealing with both forms of unemployment: social policy and education policy in dealing with structural unemployment, and bureaucracy, legal and institutional conditions in dealing with frictional unemployment." (Chikán, 2008, p. 294). This may have several components, on the one hand, the worker is not willing to move from his/her place of residence to another region for additional job opportunities. A possible reason for this is that in the more economically active areas of Hungary, house prices have become very high relative to incomes. On the other hand, some of the workers do not have the qualifications, experience and skills needed to fill the vacancies. According to the Digital Economy and Society Index (DESI 2022) published by the European Commission, 49% of the Hungarian population has at least basic digital and IT skills, which is significantly lower than the EU average of 54%. 3.1% of those with tertiary education have studied ICT4. The EU average is 3.9%. The share of ICT professionals is still relatively low (European Commission, 2023). The lifelong learning strategies presented here and the principles of sustainable tourism and waste management outlined by Kabil et al. (2024) share common foundations with the objectives of the circular economy—supporting sustainable development through continuous learning and the efficient reuse of resources. However, the employment figures presented above are further complicated by the number of workers employed in the black and grey economy in Hungary. Based on the research, various news portals, citing data from official inspections, estimate the proportion of undeclared workers at approximately 14%, which, based on the number of employed, means 600,000 undeclared workers.

### *Ageing and the Labour Market*

In developed regions, demographic ageing, i.e. the increase in the proportion of older people in the population, is one of the most significant socio-demographic changes. Based on population censuses, this dynamic process is expected to continue in the coming decades, regardless of the indicators used to measure it. "In Hungary, the proportion of the population aged 65 and over increased from 13% in 1990 to 19% in 2017 and is projected to reach 29% by 2070." (Monostori, Óri, & Spéder, 2021, p. 127) Major structural changes in the composition of society are expected. Older age groups, including ageing workers, will represent an increasing share of the population. Current trends suggest that this age group will remain more active and healthier. In contrast, the proportion of children and young people, as well as young people of working age, is declining. In the future, the trend of population decline in Hungary is projected to continue, taking into account the migration balance. The United Nations Active Ageing Index (AAI) is used to measure the contribution of older people to society and the economy in different countries.

In European terms, Hungary is one of the countries where the achievement of active ageing is significantly below the EU average. According to 2016 statistics, there is a 10% gap in labour market participation compared to the European average, although there have been positive changes in recent years, mainly due to the increase in the retirement age. This has been reflected in particular in the increase in the employment rate of women aged 55-64. At the same time, employment levels after retirement age are among the lowest in the EU. This highlights the constraints posed by the combination of the supply of older workers, the rigid retirement age and age discrimination in the workplace. Research shows that there are significant gaps, particularly in voluntary work. In general, especially at older ages, Hungarians are most likely to help their family members in the form of unpaid work (Monostori, Óri, & Spéder, 2021).

One of the main objectives of the European Employment Strategy is to support so-called active ageing, which includes raising the retirement age, maintaining the employment of older workers and increasing the number of jobs. In addition, the strategy stresses the importance of putting into practice and promoting lifelong learning. Continuous learning, including maintaining physical and mental fitness and updating professional skills, should enable older workers to remain active in the labour market for as long as possible. In addition, it is important to create the right incentives to maintain employment, which requires a change in employers' attitudes and proactivity. The economic and social changes in ageing societies have a major impact on gerontology, the education of older people and the development of learning habits. Older people are becoming increasingly important players in the adult education market and their position in the labour market is also changing, which presents a number of new challenges in terms of teaching, training and methodology.

### *Disadvantaged Groups*

Human capital theories, linked to an economic approach to learning and education, underpin the importance of adult education and training in the context of lifelong learning. According to human capital theory, people invest in their own productivity through education and training opportunities, which not only increases productivity itself, but also the market value of the labour force, thereby increasing the future there is the potential for higher income. In this approach, it is not only formal education that counts, but any investment that improves human productive capacity can be considered an investment in human capital. One of the aims of lifelong learning is to promote equal opportunities, giving disadvantaged people the chance for social advancement and mobility. However, the problem is that certain social groups are less involved in learning processes, while others are over-represented. It is therefore of paramount importance that adult education within the school system fills the skills gaps, helps the integration of disadvantaged groups and offers programmes that improve the labour market opportunities of participants. Adult learning should provide opportunities for further learning, contributing to equal education and vocational education and training equal opportunities and the development of less developed regions. This is particularly important for those who have not had the opportunity to obtain an adequate education and training and are filling in the gaps in their knowledge and skills as adults. At the same time, it can be a challenge for adults who have previously failed at school to start their education again with negative experiences. Currently, adult education in the school system in Hungary is often provided, more

often at basic level, to groups from multiple disadvantaged groups in society. These groups may include, inter alia, those who have not completed primary education, who have not continued their education at secondary level, who have dropped out of secondary education, who live in areas of high unemployment, who are often young people, who live in foster care or children's homes, who have behavioural problems or who are marginalised young people and members of the Roma community. Several factors can contribute to a person being disadvantaged in the labour market. This may include people with disabilities, people with lower education levels or people who are geographically disadvantaged. In addition, there are those who, although not disadvantaged in principle, have been excluded from the labour market through some event. Those who are disadvantaged in terms of employment policy are those who have fewer labour market opportunities than the average. Disadvantage typically implies inequalities in training and life chances. The lack of motivation to learn and the associated loss of skills can lead to failure and self-esteem problems, which in the long term lead to under-skilling and employment difficulties. Unemployment, especially for longer periods, can lead to a lack of social integration and ultimately social exclusion (Halmos, 2005). There are many factors that influence the success of companies, both within and beyond their sphere of influence. These include the decisions of the owner and/or management, the strategy of the company, the responsiveness to the immediate market environment, corporate culture, the training of employees and their awareness of their development. Generally speaking, the most important determinant is whether the organisation has the necessary expertise to operate efficiently, profitably and in the long term. Using a questionnaire survey scale measure, respondents said their employers support them in gaining new skills, with 59% of responses at the top end of the scale, 29% neutral and 16% saying their employers prefer not to support them in developing them.

Companies' competence needs vary widely and depend to a large extent on the specific industries, areas of activity and the company's own strategy and objectives. The mix of competences can vary between companies and is adapted to different positions, roles and areas. Companies often define the competences they seek according to the needs of specific jobs and projects. The idea that the knowledge, experience and behavioural characteristics required to perform a job are considered together as competences is becoming more widespread. In the literature review I observed that different authors have different approaches to the concept of competence and its definitions. Competences are broadly considered to be a set of individual attributes that are important for functioning effectively in the work environment and for successfully performing a variety of tasks, thus contributing to an employee's excellent performance and achieving the best expected results. Within this, professional competence does not stand in isolation, but is closely related to personal and interpersonal competences. "Competence is often used as a synonym for knowledge. Others call competence what distinguishes a competent person from an unskilled one or an excellent one from an average one." (Karoliny, 2008, p. 79)

Nowadays, there is a widespread perception that the knowledge, experience and behavioural characteristics required to perform a job are considered together as competences.

In human resource management, the identification of personal criteria influencing work performance has become possible thanks to the methods developed by work psychology, which provides the operational basis for organisational competence management, which has evolved into a key tool in human resource management. The method used to define competences definitions, the common starting point is that a trait is only considered a competence if it plays an important role in the achievement of excellent performance by the employee. The biggest challenge for companies is the rapid change in technology and the market environment in which they strive to achieve excellence. Organisations need employees who are capable of outstanding performance, thus ensuring the employer's market advantage (Tóthné Téglás, 2020). According to the Future of Jobs 2023 survey, the following competences are among the most important for responding companies in the future. According to the report, the importance of cognitive and creative skills is the fastest growing need, reflecting the increasing importance of complex problem solving in the workplace, and technological literacy is the third fastest growing core skill. In terms of the rate of growth in the importance of skills identified by businesses, self-efficacy skills are the fastest growing need for the importance of working with others, lifelong learning, flexibility is the fastest growing need for the importance of social attitudes, agility is the fastest growing need for the importance of motivation and self-



awareness (World Economic Forum, 2023). It is essential that the acquisition of new competences and basic skills is made available to all through appropriate educational strategies, as without this, a modern illiteracy, defined by the scientific community as functional illiteracy, can develop. An example of this is adults who cannot use computers and cannot access the information they need to do their jobs.

### *Expectations in the Light of Change*

Companies' expectations of their employees can vary depending on different factors, such as the size of the company, the sector, the company culture and other aspects. Based on our personal experience in a multinational financial organisation over the last decade, the main expectations of employees are

- managing complex workflows,
- participation in teamwork,
- a forward-looking approach,
- a responsible attitude,
- openness to learning and the ability to continuously develop and improve.

As robotisation becomes more widespread, it is essential that workers have the skills to adapt to these changes and are motivated to learn new skills. It is important to prepare workers for this, but the current school system may not be adequate to meet future training needs. School has a vital role to play in equipping students with the cognitive skills that will enable them to acquire the knowledge they will need to meet the expectations and requirements of employers when they enter the labour market. Today's technological changes and related processes are also changing the competences required. There is a clear trend towards a gradual decline in the number of unskilled jobs requiring manual work. Advances in automation and robotisation are transforming the world of work, ensuring continuous and efficient productivity, leading to a redistribution of human labour. As a result, the workers who are most at risk are those who lack appropriate qualifications or the capacity for learning and personal development. The human-machine divide is constantly shifting, with organisations estimating that today 34% of all business-related tasks are performed by machines, and the remaining 66% by humans. It is estimated that in the next five years, nearly half (47%) of business tasks will be automated (World Economic Forum, 2023, p. 6). There is a significant discrepancy between the requirements set by employers and what is actually expected. While companies are adapting flexibly to rapidly changing economic conditions and introducing efficient cost management, for example through the use of part-time or contract labour, they are expecting higher skills and better performance from their lower-skilled employees. According to the World Economic Forum, Future of Jobs 2023, there is a declining demand for certain skills (literacy, numeracy, maths, active listening), while basic skills such as analytical thinking and innovation, active learning, complex problem solving, systems analysis and evaluation are already in increasing demand.

### *Education, Innovation and Competitiveness*

The impact of education on the general economic situation of the country and the welfare of the population is widely discussed in the literature, based on our research. In terms of quantifying the impact of educational indicators on economic development, statistical analysis and economic, mathematical modelling are the most commonly used methodological tools. Based on the literature review, several general areas of research can be identified, in particular: education as a factor of economic growth and development, education as an element of innovative development, education as a factor of competitiveness, and education as a factor of sustainability and sustainable development. Today, in most developing and developed countries, the knowledge society is seen as one of the most prominent means of economic growth. Today, technology and information from data are economic drivers alongside raw materials. To collect, store and process it, we need constantly updated knowledge and technology. In addition to lifelong learning, the quality of

education also plays a key role in the acquisition of knowledge, as one of its aims is to develop learning skills. There is a significant need to develop these skills in primary, secondary and tertiary education and in vocational training. For economic and social actors, the objectives of training and innovation are different. can mean a higher quality of life. At the level of workers, there is a direct correlation between accumulated knowledge and income. A well-educated professional can find a job more easily, earn a more competitive wage and improve his or her standard of living. The more knowledge and experience a worker has, in theory, the better his/her chances in the labour market. This process is beneficial for the national economy in many ways. On the one hand, unemployment rates are falling, which means less public spending on unemployment benefits. On the other hand, the proportion of well-educated workers is rising, who contribute a stable income to public spending through their tax payments. According to world-renowned American competitiveness economist Michael E. Porter: "The stronger a country's innovation performance and the higher the overall knowledge level of its population, the greater the chances that its economy will be competitive and successful. However, this potential can only become a reality with adequate public development strategies. In the absence of such strategies, knowledge and skills not only remain untapped, but may also decline over time (Porter, 1990).

### *Adult Learning*

"Adult learning encompasses both formal education and training, non-formal learning, and a broad spectrum of informal and incidental learning that is accessible in a multicultural learning society where approaches based on theory and practice are recognised." (Forrai & Juhász, 2009, p. 12) According to the literature, adult learning includes the acquisition of any knowledge, skill or attitude in adulthood, whether in an institutional or non-formal setting. This process can be formal, non-formal or informal, where learning takes place either directly or incidentally. While it is important to recognise the wide range of learning opportunities, it should be stressed that as people age, non-formal forms of education and informal learning methods are increasingly replacing traditional formal education systems.

### *Adult Education*

We have found that the fields of adult education and training do not always use clear, well-defined concepts. Adult education and training is the training of people who have reached the age of majority. For adult persons who are no longer of compulsory school age, the Act LXXVII of 2013 on Adult Education and the Act CCIV of 2011 on National Higher Education may apply, depending on the level of education that the person chooses to enter. The concept of adult education is defined in Act LXXVII of 2013 on Adult Education. "In order to enable members of society to meet the challenges of economic, cultural and technological development, to integrate effectively into the world of work, to succeed in life and to improve the quality of life through adult learning and training, it is necessary to improve the organisation, quality and monitoring of vocational, linguistic and assisted training." (Act LXXVII of 2013, 2013, p. 1)

### *Strategic Goals and Challenges in Adult Learning*

"Recent analyses tend to highlight three trends when discussing the strategic importance of adult learning: (1) the accelerating pace of labour market change brought about by new technologies; (2) the strong growth in demand for skilled labour; and (3) the need to improve the efficiency of the workforce." (Dr Henczi, 2021, p. 8) The development of learning and working competences is at the heart of adult learning, as highlighted by the modern economy and the situation created by Covid19. The transformation of the adult learning system and the development of new technologies and social and personal competences are essential to meet labour market expectations. These competences are essential for successful life management and social inclusion. Adult learning needs to give priority to the development of learning and working competences, which are essential success factors in a rapidly changing economic and social environment. The importance of adult learning continues to grow in the light of green and digital transformation and social and economic challenges. As a service, adult learning should aim to promote social cohesion and equip adults with the necessary skills and knowledge, while the current low level of funding is a major challenge.

### *Areas and Functions of Adult Learning*

Adult learning is a diverse field, serving different purposes in the lives and careers of individuals. This sector provides opportunities ranging from primary education, through continuing vocational training, to programmes to promote employment. Adult learning can be grouped into several areas, the most common categories formally used in the literature are:

- First education and/or vocational training relevant to your individual career path
- Ongoing vocational training and the promotion of higher vocational qualifications in line with the individual's career goals (in many cases with the support and according to the needs of the employer)
- Employment training courses aimed at providing unemployed people and people with non-marketable vocational qualifications with new skills and qualifications that can be used in the current labour market.
- Supplementary training to increase the success of vocational training and employment

### *The Role of Adult Education in the Life of Hungarian Companies*

Over the past few decades, theoretical and practical vocational training and education for different age groups within the school system has been a key element of technological development. These training courses, which lasted until young adulthood, set the professional direction of individuals and in the long term met the societal needs of the time. Today, however, professional knowledge can quickly become obsolete, making continuous learning and training essential. A number of recent studies have drawn attention to the importance of adult learning and the challenges it poses. In Hungary, adult learning takes several forms, such as informal, formal and non-formal education. This includes labour market training, vocational training, in-house training and other non-classified training opportunities. The concept of lifelong learning has become increasingly widespread in Europe and in our country. For this to be successful, it will be necessary to reduce the training differences between institutions, to ensure equal opportunities for learners from different backgrounds. It is important for people to be less afraid of change and learning new skills, and more flexible in accepting new jobs, skills and places to live. Equal opportunities must not only exist as a theoretical concept, but must also be put into practice, and early school leaving rates must be reduced. All workers need to be aware that previously acquired skills are becoming obsolete faster than ever before, and they need to keep their knowledge up to date. In addition, the prestige of the manual trades must be raised in the face of a shortage of skilled workers in the economy. Participation in adult training after completion of traditional schooling should be promoted and those concerned should be informed of the opportunities available. The situation of the labour market in Hungary varies considerably from region to region. Some regions are characterised by steady growth and permanent labour shortages, while others have high unemployment rates and a significant number of unskilled workers. In this situation, greater worker flexibility and the use of targeted training programmes can help to alleviate the problems of sectors facing labour shortages.

### *Linking the World of Work and Adult Learning*

Based on the literature review, it became clear that work and adult learning and training are mutually reinforcing, intertwined processes. Excellent examples of this are non-formal and informal learning modes, which are becoming particularly dominant in the workplace. In Hungary, as in Western European countries, the working-age labour force has been declining in recent years. A key economic goal is to get more people with the skills needed to get and secure a better job. The rapidly changing technological environment poses particular challenges for lower skilled workers. Over the coming decades, new jobs will emerge that are unknown today, while many traditional roles will disappear. Therefore, training or retraining workers to meet new technological and market requirements is crucial. A well-designed and implemented training

programme is essential to maintain a company's competitiveness and the investment in training the workforce will pay off in the long run (Tarodiné Dr. Cseszka, 2014).

### *Learning At Work*

Over the past two decades, the business environment for companies has expanded significantly as a result of globalisation, the pace of technological development has accelerated and knowledge is rapidly becoming obsolete. This makes it a priority for companies to recruit and retain the right workforce to ensure successful and smooth operations. Educational institutions are also struggling to keep pace with these changes and graduates are regularly returning to universities to learn new skills or update their existing knowledge. This trend is confirmed by the feedback from the respondents to the survey. Training and development of the workforce is key for companies, so it is often the case that workers are temporarily taken off work for training or development purposes. The need for companies to minimise the time away from work is an important requirement for companies, and this is increasingly giving value to on-the-job and on-the-job training (OJT) rather than traditional forms of training. The results of the questionnaire data collection show that 96% of respondents have attended some form of external or internal in-house training (56% occasionally, 40% regularly). This allows knowledge development tailored to the specific needs of the organisation, rather than generic training programmes. Corporate training programmes should be designed to be consistent with the organisation's strategy. For dynamic companies, the concept of the corporate university can be an effective training solution.

### *Corporate Knowledge Management*

"The term knowledge management entered the vocabulary of Hungarian management science more than a decade ago, and then slowly seeped into the professional vocabulary of companies. A few years earlier, management gurus in Western countries started to take a new approach to the application of a toolkit that had been well-established for many decades. Building on a systems approach and embedded in a new structure, they proposed the introduction of a previously unused management and business model into corporate practice, which they came to know as the knowledge management system." (Blahó, Czakó, & Poór, 2021, p. 404) Most companies set training priorities based on their own vision, mission and strategy. For multinational companies, it is common that problems arise in global learning processes due to different cultures, in particular due to differences in understanding resulting from different cultures and the different dominance of the ownership culture. In companies' practice, knowledge identification seems to be less prioritised than other system elements. Often, information is applied superficially and job descriptions, competency maps or other databases are used to lay the foundations. Research integrity is critical in ensuring the credibility of academic contributions. Recent studies have highlighted the risks posed by hijacked journals, which undermine publishing ethics and the trustworthiness of academic discourse (Dadkhah et al., 2023). Companies often compare themselves with their competitors, seeing this as a form of external feedback to assess their own performance. Knowledge acquisition is a very critical and diverse area, with many methods and resources available. Examples include learning processes, recruitment, training, on-the-job training, hiring consultants, company databases, legal and regulatory requirements, knowledge acquisition, know-how, patents and licences, company takeovers, knowledge theft and other methods.

The methods used to develop knowledge are mostly positive. Commonly used techniques include education, the creation of development groups, various idea fairs, talent pools, training and career plans, management succession planning, language training, the creation of professional communities, corporate universities, in-house training and internal courses, conferences, training, mentoring with experienced professionals, scholarship programmes, cooperation with higher education institutions, the collection of new ideas and others. However, there are also cases where central (parent company) ideas do not match local needs. Physical distance and differences in culture, outlook and values can also make it difficult to define objectives in this area. Knowledge management or corporate training and development, referred to in some literature as corporate university, is used interchangeably in the following definitions:

- "knowledge management is mostly formalised within the organisation
- its operations are closely linked to the corporate strategy
- helping employees and groups of employees to develop individually and as a group, and thus the organisation as a whole
- supports the organisation to become a learning organisation, facilitates knowledge exchange and access to knowledge" (Kováts, 2003, Vol. 34, p. 27)

### *The Relationship Between Adult Learning and Time Management*

In examining the concept and forms of adult learning, emphasis should be placed on the links between learning and time management. The time structure of an adult person can be divided into three main elements: working time, non-working time and leisure time. Working time, the most regulated and least flexible, can influence the other periods. Time outside of work is more flexible, providing opportunities for activities tailored to individual needs, such as shopping or housework. Leisure time is the least restricted, with the most personal interest-based activities. Within this time structure, it is possible for adults to find a place to learn, which can be particularly difficult for those who have not received formal education for decades. Before embarking on a longer learning process, it is important to think about and adjust the timetable as necessary. Long-term learning, often at the expense of leisure time, requires strong and sustained motivation. This view is supported by the questionnaire research, where a large majority of respondents identified the lack of free time for learning as a constraint. Individual responsibility is a key element of adult learning. The acquisition of new knowledge and skills requires individual willpower and a motivated approach to training. Learning can take place in formal, informal and non-formal settings (Csoma, Falussy, Mayer, & Singer, 2003, pp. 85-106).

### *Formal Learning*

The type of learning that takes place in an organised educational setting, with entry and exit criteria, usually ranges from primary to tertiary education.

- *Non-Formal Learning*

This form of learning is supported by an institution, but does not rely on pre-defined entry and exit criteria, and is not led by traditional trainers or teachers, but is a free choice for participants.

- *Informal Learning*

Any voluntary learning activity that does not take place in an institutional or school setting, regardless of the area of life it is related to or where it takes place. Two main types of learning can be distinguished: on the one hand, unconscious, involuntary and unorganised, mostly random, so-called spontaneous learning processes. On the other hand, conscious, voluntary and well-organised learning methods, which we call autonomous learning. Autonomous learning can include self-designed goals, but often also serves as an effective complement to formal or non-formal learning processes. Learning in adulthood is an essential part of the lifelong learning process, which is crucial in today's fast-changing world. The concept of lifelong learning has been widely recognised since the 1970s. It is often identified only with adult learning, but in fact encompasses many different forms of learning. According to a 2004 KSH study, "In developed market economies, education and training is less and less completed with the exit from the school system and the acquisition of a vocational qualification. Continuous technological development makes it necessary to repeatedly enter training, to regularly undergo further training and to change occupations in line with the changing economic structure. The lifelong learning process of the individual serves to adapt the workforce to the changing needs of the economy. As the importance of lifelong learning has grown, the concept of learning has changed and expanded. Whereas previously it was confined to school education, lifelong

learning encompasses all planned learning activities, whether formal, non-formal or informal, aimed at acquiring knowledge and developing skills and competences." (Csernyák, Janák, & Zaláné Olbrich, 2004, p. 5)

## Methodology

Both primary and secondary research methods were employed to compile this study. The secondary research involved a comprehensive review of existing literature on the topic and the analysis of statistical data obtained from government-provided databases. The primary research included a small number of qualitative interviews conducted with up to four individuals who had successfully retrained or upgraded their skills, thereby maintaining their value in the labour market. The interviewees were selected from a professional environment, all possessing tertiary qualifications and typically more than fifteen years of work experience. Additionally, a quantitative questionnaire was utilized to gather insights from a broader group of currently employed individuals, exploring their perceptions of lifelong learning and its impact on employability and access to employment opportunities.

For our primary research, we conducted a quantitative questionnaire survey on-line using Microsoft Forms (see Appendix 1, Questionnaire, Adult Learning). The questionnaire included pre-defined single-choice and multiple-choice response options, as well as Likert scale responses, where respondents could indicate their preferred value on a linear scale of 1 to 5. In the survey, our aim is to find answers to the question of how the so-called lifelong learning influences the labour market utility and value of a worker and how economically active workers think about continuous training and retraining to increase their own value. What expectations workers have of themselves and their employers in terms of training and development. How they view the concept of lifelong learning.

The aim was to investigate which forms of learning are followed and preferred by trainees in the acquisition of new skills, Formal, Non-formal or Informal. How they are able to manage their time, in a mostly rigid work-life balance. What motivations drive adults to learn at different stages of their lives. This could be professional development, career advancement, personal interest or other factors. They have easy or difficult access to learning opportunities. The availability of online courses and other digital resources can be key here. What challenges do adults face in lifelong learning? These include balancing work and family commitments, lack of time and money, and lack of resources for learning.

The questionnaire was mainly filled in by people in the immediate circle of acquaintances, the data collection took place between 11.01.2024-01.24. Those who completed the questionnaire responded fairly quickly and motivated. The total number of respondents reached 113, of which one case was excluded due to its irrelevant data content. The survey data are not based on a representative sample. Based on the responses received, the basic statistical characteristics of respondents were as follows. In terms of gender composition, 44.6% of respondents are Women and 55.4% are Men, with a weighted age distribution in the 36-45 and 46-55 age groups, with 72.3% of respondents falling into these two age groups. In terms of their distribution by municipality, the urban environment is predominant, with 81.2% of respondents in the Capital, County and City categories, and 18.8% in the Village/Community category. Their marital status, typically married or in a relationship, is 83.9%. In addition, 92.7% (104 people) of respondents are actively working full-time, 8 people are not currently working for other reasons. This is positive for the survey, as I wanted to assess the attitudes of people who are actively working towards learning and training. The age data also showed that the majority of the respondents had a longer working life of many years, 76.8% (86 persons) over 15 years of age, of which 40.2% (45 persons) have 25 years of employment. There is a significant predominance of people with an intellectual occupation among the respondents, at 87.5%.

Hypotheses:

Lifelong learning is a cornerstone for fostering employability, enhancing market competitiveness, driving economic growth, and improving the quality of life. The hypotheses presented below explore these dimensions in greater detail, highlighting how continuous education impacts individuals, organizations, and society.

Hypothesis 1: Workers who actively engage in lifelong learning are more likely to secure or maintain employment compared to those who do not. By continuously updating their skills and knowledge, these individuals adapt more effectively to the evolving demands of the labour market, thereby enhancing their employability.

Hypothesis 2: Lifelong learning enhances a worker's competitiveness in the labour market, as employers view continuous skill development as a positive and valuable trait. Workers who participate in lifelong learning demonstrate adaptability and commitment, making them more desirable in a competitive workforce.

Hypothesis 3: Lifelong learning contributes to societal economic growth by fostering a well-educated and skilled workforce. A knowledgeable workforce drives innovation and productivity, acting as a catalyst for sustainable economic development.

Hypothesis 4: Lifelong learning enhances individuals' quality of life by offering opportunities for personal growth, the exploration of new interests, and professional development. It enables individuals to achieve greater satisfaction and resilience in both their personal and professional lives.

#### *Demographic Characteristics and Access to Training Opportunities*

The survey results reveal that the majority of respondents (64.3%, 72 individuals) hold a university or college degree, indicating a significant skew toward individuals with higher education. This demographic characteristic is further reflected in their learning habits and access to training opportunities. Notably, 67.8% (76 respondents) reported speaking one or more foreign languages, a skill often associated with higher levels of education. The hypothesis that foreign language proficiency enhances access to training was partially supported, as foreign language speakers reported a slightly higher average score of 4.04 on a Likert scale (1 = not important, 5 = very important), compared to 3.52 for non-speakers. However, the frequency distribution showed that both groups most frequently rated their access as 4, while non-speakers were more likely to provide scores below 3.

#### *Willingness to Learn and Participation in Training*

Lifelong learning and continuous self-improvement are highly valued among respondents, with an average score of 4.8 on the importance of personal development. Almost all participants (99.1%) rated continuous learning as important or very important. Despite this, there is a notable gap between the perceived importance of training and actual participation. While 40.1% of respondents participate in training regularly, the majority (55.4%) do so only occasionally, and 4.4% reported no participation at all. This indicates a potential area for improvement in translating the high value placed on learning into more frequent engagement.

Currently, 66% (74 respondents) are enrolled in some form of training, with 31.2% (35 respondents) participating in two or more courses. Popular training formats include vocational or in-service training, language training, individual learning (online or offline), workplace training, and leisure courses such as cooking or gardening. Formal education was less common, with only 0.6% pursuing their first tertiary qualification and 12.5% working toward a second degree. These findings underscore the dominance of non-formal and informal learning opportunities among respondents.

#### *Future Training Plans and Time Commitment*

Looking ahead, 76.8% (86 respondents) expressed plans to engage in training within the next 1-2 years, with 40% intending to participate in more than two courses. Among these, non-formal and informal training formats remain the most popular. However, a smaller group (15 respondents) plans to pursue higher education qualifications, including six individuals aiming for their first tertiary degree, three for their second, and six for their third.

In terms of weekly time spent on learning over the past year, nearly half of the respondents (49.1%) reported dedicating 1-4 hours, while 16% spent 4-8 hours, and 8% exceeded 8 hours. Conversely, 21.4% studied for less than an hour, and 5.4% did not engage in learning activities at all. This variation highlights differing levels of commitment to personal and professional development.

### *Labour Market Competitiveness and Employee Value*

The survey examined how self-development impacts labor market competitiveness and employee value, focusing on participants' satisfaction with the time spent on personal growth, their perceived competitiveness, and the role of learning in enhancing professional value. The findings provide a comprehensive understanding of the connections between education, training, and labor market performance. Respondents expressed moderate satisfaction with the time dedicated to self-improvement over the past 1-3 years, giving an average rating of 3.7 on a five-point Likert scale. The most frequent responses reflected satisfaction, with many participants rating their efforts as "satisfied" or "fully satisfied." However, a significant proportion of neutral responses suggests that some individuals may not be fully content with their progress or feel they could invest more time in personal development. In terms of labor market competitiveness, the average rating was slightly higher at 3.8. A substantial number of respondents felt confident in their competitive position, with many indicating they were either "competitive" or "very competitive." However, a notable share of neutral or hesitant responses highlights a degree of uncertainty among participants about their market standing. Men rated their competitiveness slightly higher than women, and single respondents expressed greater confidence than those in relationships. Additionally, individuals living in the capital perceived themselves as more competitive than those in other areas, reflecting the potential influence of geographical factors on professional self-assessment.

Education level significantly influenced perceptions of competitiveness. University and college graduates reported the highest average ratings, followed by high school diploma holders and vocational school graduates. Foreign language proficiency also played a critical role, with speakers of one or more foreign languages rating their competitiveness higher than non-speakers. Regular training participation further correlated with increased confidence in labor market positioning, while non-participants consistently reported lower ratings. The survey also explored the perceived value of learning in enhancing employee competitiveness. Respondents overwhelmingly agreed that continuous education strengthens professional value, with an average rating of 4.47 on a Likert scale. Most participants felt that acquiring new knowledge and skills significantly improves their marketability and contributes to long-term success. This aligns with broader research emphasizing the importance of lifelong learning in addressing dynamic labor market needs and achieving sustainable development goals.

The findings confirm the hypothesis that education, training, and skill acquisition are crucial for maintaining and enhancing labor market competitiveness. Respondents consistently recognized the importance of continuous development in improving their professional value, even though gaps remain in the time and effort dedicated to such endeavors. These insights underline the need for accessible and flexible learning opportunities to help individuals bridge the gap between aspirations and actionable progress.

### *Challenges and Difficulties in Learning*

The learning process, whether in formal education, independent study, or on-the-job training, often involves significant challenges that can impact both the learning experience and the success of training programs. Identifying these barriers is essential to improving educational strategies and supporting individuals in achieving their learning goals.

Respondents were asked about the difficulties they faced in their previous studies. The results highlighted key challenges, with the most significant being limited free time, selected by 66.07% of respondents. This was followed by financial constraints (27.67%) and lack of motivation (23.21%). Other barriers included lack of information about opportunities, family circumstances, lack of confidence, and fear of new situations or exams. These findings underscore the need for flexible learning options and support systems to mitigate these obstacles.



Interestingly, despite the reported challenges, a large majority of respondents expressed a willingness to engage in training during their spare time, provided that the cost of training was covered by their employer. In this scenario, 92.86% indicated their readiness to participate, demonstrating the importance of employer support. When asked if they would cover training costs themselves, 83.04% of respondents were still willing to participate, showcasing their strong commitment to self-development despite financial burdens.

### *Motivation and Self-Evaluation*

Learning and skill acquisition are often driven by a mix of personal and professional motivations. Respondents identified personal development as the most significant motivational factor, reflecting a strong desire for self-fulfillment and growth. This was closely followed by professional development, indicating aspirations to enhance career-related knowledge and competencies. The third most common motivator was interest in a specific topic, such as hobbies, highlighting the role of passion and personal enrichment in learning.

Better job opportunities also emerged as a critical motivational factor, emphasizing the career-related benefits of acquiring new skills and qualifications. These findings illustrate the multifaceted reasons people pursue education and training, balancing personal interests with professional advancement.

The survey further examined how skill acquisition impacts individuals' self-esteem and sense of security. Respondents gave an average score of 4.56 out of 5, with 60.71% rating the impact as the highest possible score. This consensus underscores the significant positive influence of adult learning on self-evaluation and confidence. The low variance in responses indicates a high degree of agreement among participants, reinforcing the universal benefits of continuous skill development.

### **Summary**

The paper examined the importance of lifelong learning for employability and maintaining value in the labour market, a key aspect of today's rapidly changing labour market. The research analysed the dynamic changes that are affecting the labour market as a result of technological advances and changing economic structures, and explored strategies and approaches that individuals can take to respond to these challenges. The study underlined that lifelong learning is not only an option, but an indispensable tool for successful participation in the labour market. Through re-skilling and continuous training workers are able to adapt to new technological and economic requirements, thus increasing their labour market value and employability. The results of the survey and interviews showed that although there are barriers - such as access to training, lack of motivation or variation in the quality of training - the majority of individuals interviewed were positive about the impact of lifelong learning on their personal and professional development. They stressed the need for an agile approach and continuous improvement, which enables them to keep up with the ever-changing needs of the labour market.

Hypothesis 1: That workers who adopt a lifelong learning approach are more likely to find or keep a job than others is strongly supported by the data and trends presented. In a rapidly changing economic and technological environment, the labour market requires workers to be increasingly flexible and adaptable. Lifelong learning fosters these skills, enabling workers to keep up to date with the professional knowledge and skills that are essential to maintain job stability and employability.

Proposal: raising awareness and emphasising the importance of lifelong learning among workers is a priority. This could include information campaigns, workplace workshops and even sharing success stories.

Hypothesis 2: That workers who engage in continuous learning are more competitive in the labour market because employers value this attitude, supported by the survey data and the interviews. In an ever-changing economic environment, companies are increasingly looking for workers who are able to adapt to new challenges and continuously improve their knowledge and skills. Lifelong learners not only stay up-to-date in their profession, but also make a better impression on current and prospective employers by being proactive and open to change.

Proposal: corporate culture should support lifelong learning as a value. This can be promoted through recognition and reward systems and positive assessment of continuous learning and personal development.

Hypothesis 3: that lifelong learning can contribute to the economic growth of a society by ensuring a well-educated workforce that contributes to innovation and productivity growth, can be confirmed by Hungarian and international examples. Continuous training and knowledge updating enables workers to adapt to market changes and learn new technologies and methods, thus increasing their efficiency and capacity for innovation in the workplace.

Proposition 1: Analysing labour market information, continuously monitoring, analysing and communicating labour market trends and needs can help educational institutions and workers to identify key training areas and skills, and continuously adapting public policy to meet future requirements.

Hypothesis 4: That lifelong learning can improve the quality of life of individuals by providing opportunities to explore new hobbies and interests and to develop personal development is strongly supported by psychological and educational research. Lifelong learning not only affects labour market competitiveness and professional knowledge, but also promotes personal growth and well-being. Learning new skills, developing new competences and exploring new interests can contribute to increased self-confidence, improved mental health and enhanced social relationships, as confirmed by the respondents to the questionnaire survey.

Proposal: personal development plans, individuals should be encouraged to draw up personal development plans that identify their learning goals, new hobbies and interests in which they would like to deepen their knowledge or discover new things. Integrating mental health support and wellbeing programmes into the learning environment can help individuals to lead fuller and more balanced lives.

Both the lifelong learning strategies discussed by Molnár et al. (2024) and the sustainable agricultural innovations emphasized by Bacsi and Hollósy (2019) reflect the principles of the circular economy, which focus on efficient resource reuse, environmental sustainability, and enhanced adaptability. The paper concludes that lifelong learning is key to addressing the challenges of the modern labour market. Cooperation between workers, employers and government actors is essential to design effective training programmes and to ensure equal access to learning opportunities. The paper stresses that continuous learning and adaptation is important not only for individual career paths, but also for maintaining society's economic competitiveness and capacity to innovate.

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