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Master's Thesis

Digital Transformation in HR: Evaluating the Impact of Automation & AI on Employee Roles and Skill Requirements in Global Organizations

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1. Abstract

The thesis deals with the analysis of how automation and AI affect human resources and labor roles in Azerbaijan and in globally to some extent. Human Capital Theory is used as a main framework to evaluate 317 respondents and five interviews with banking, transportation, ERP, railways, and public administration specialists. Outcomes demonstrate that automation reduces regular activities and accelerate strategic HR responsibilities. Digital literacy, analysis of data, adaptability are considered as more crucial. Moreover, the companies suggest activities that increases the learning abilities of workforce to create a protection for the employees. Even while there are global tendencies exist, Azerbaijan possesses it unique issues, such as senior workers who are unwilling to change, people who are not equally tech-savvy and so on. The thesis highlights that policymakers and organizations improve training, occupational standards, and inclusive adaptation techniques to retain worker competitiveness during digital change.

Key words: automation in HR, digital transformation, human resource management, human capital theory, workforce skills

2. Introduction

2.1.Background

Digital transformation is when businesses use digital tools in all aspects of their activities. This is changing how firms run and manage its workers. This transition period has transformed a number of HRM processes from ones that rely on paperwork and manual work to employees that dependent on paperwork and manual work to ones that utilize data and technology (Modak, et al., 2025). Early HRM systems relied heavily on clerical tasks and subjective type of decision-making. With the contribution of the growth of automation and artificial intelligence (AI), software is now able to do straightforward tasks like collecting records, paying employees, and managing benefits without much amount of support from people (Priyana, Budiarti, & Gadzali, 2025). This sort of shift not only makes things more efficient and accurate by reducing down on human error, however, it also provides human resources professionals more time to work on big picture projects and employee development instead of being stuck in paperwork (Modak, et al., 2025). To be short, it aids people to identify and hire the right individuals, provides employees a more personalized experience, and helps employees to make improved decisions with data (Priyana, Budiarti, & Gadzali, 2025).

This transition is being driven by both advances in technology and the needs of businesses. For instance, AI improvements, such as machine learning algorithms for screening procedure of resumes and chatbots for providing answers to employees' questions give human resources tools that can do their tasks in a faster manner and more objectively than they could be otherwise. (Modak, et al., 2025). On the other hand, businesses which are under more pressure to be adaptable, maintain the interests of personnel and obtain more completed tasks in a global market that is continually changing (Modak, et al., 2025) In order to meet these goals, HRM has employed AI and automation. This fact enables them look at a massive amount of data (for example, by analyzing through a lot of candidates to identify the optimal one to hire) and make choices based on rationalized facts. (Modak, et al., 2025). The goal of adding technology is not to replace human resource professionals, however, to aid them do their jobs better. HR personnel is able to focus on complex tasks, including establishing the company's culture, preparing the future workforce, and coaching individuals when they automate daily tasks . Many businesses nowadays think that digital human resource solutions are considerable for making their

employees more adaptable and stronger (Bastida, García, Taín, & Araujo, 2025). Nevertheless, these modifications bring up problems that need to be addresses, which we are going to elaborate about later in the chapter.

2.2.Automation in HRM

Automation is Human Resource Management is employing software and AI-powered systems to perform hr tasks that used to be completed manually. Some of the most significant tasks that are becoming automated are hiring people, onboarding them, keeping track of their performance, and processing their payment. For example, AI-powered application tracking systems may automatically sort resumes and score candidates. This makes hiring much faster and less biased (Modak, et al., 2025). Chatbot assistants are also doing preliminary interviews with candidates and responding HR questions from employees around the clock, which makes HR service delivery more responsive (Modak, et al., 2025). AI-powered digital platforms can provide individualized learning strategies for employees based on their performance data and career pathways in training and development (Modak, et al., 2025). Robotic process automation (RPA) systems are taking over more routine office jobs, such as processing vacation requests, reviewing timesheets, and signing up for benefits. These tools accomplish these repetitious activities much rapidly and accurately. Companies can utilize these technologies to be assured that their hr processes are always the same and that individuals make fewer issues when working with data (Priyana, Budiarti, & Gadzali, 2025).

Automation has modified hrm in a great perspective. AI makes critical hr tasks, including hiring, training, evaluating performance, and compensating employees in a better manner. This process enables hr people move up from basic administrative jobs to more strategic ones that has a huge potential of adding value (Bastida, García, Taín, & Araujo, 2025; Modak, et al., 2025). For example, predictive analytics in hr is able to help companies to plan for the future by figuring out the amount of people that they will need and how likely they are going to leave (Modak, et al., 2025). Automated data analytics may help with diversity and inclusion contributions by exploring patterns (such salary discrepancies or biased promotion rates) that can not be observed without technology too (Modak, et al., 2025). Automation also makes hr work more scalable, which is quite vital for worldwide firms that do business in various time zones and nations. This means that they can handle a lot of employee contracts or hr transactions at the same time. A

recent study of the industry revealed that AI and automation in hrm not only cut down on inefficiencies in a day-to-day operations, however made strategic hr operations better by providing more straightforward solutions to make decisions based on data, as well (Modak, et al., 2025). As a result, the job of the HR professional is evolving: instead of spending time on paperwork, HR workers can act as strategic partners focusing on talent development, employee well-being, and organizational change management (Modak, et al., 2025).

It is crucial to remember that using automation in HRM isn't always easy. Employees typically resist new HR technologies so that they can become afraid of losing their jobs or do not appreciate the activities at the moment (Priyana, Budiarti, & Gadzali, 2025). When new digital HR systems need to work with old IT infrastructure, integration problems can happen. This means that change management needs to be done carefully. Data privacy and security are considered to be significant too. HR systems which are dealing with private datum, and using AI algorithms (for example, to screen or monitor) creates a problem of moral considerations regarding prejudice and openness (Modak, et al., 2025). These issues become a piece of the reason of why we need to examine the process of automation and AI's effects on employee roles. Knowing how these changes affect people can help us to come up with solutions (like reskilling programs or ethical guidelines) to deal with the problems.

2.3.Impact on Skill and Roles

One of the most important things about digital transformation in HR is how it changes the skill and roles that employees need. As more and more boring and repetitive jobs are done by machines, there is greater need for talents that work well with technology, such as data literacy, strong analytical skills, and digital fluency. The World Economic Forum's Future of Jobs report (2023) says that in the next five years, 44% of worker's fundamental skills would need to be updated (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). This is mostly because of new technologies and AI. This fact means that everyone in the firm, not only IT, needs to learn the way of utilizing AI technologies, comprehend what data means, and get adjusted to new digital workflows. Employers are putting more value on people who can think analytically and creatively solve problems. This is due to the fact that these talents are beneficial in a job where AI does everyday chores. (Future of Jobs Report 2023: Up to

a Quarter of Jobs Expected to Change in Next Five Years, 2023). At the same time, firms are saying that they will focus their training efforts on AI and big data capabilities in near future because they are becoming more important (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). In fact, by 2027, approximately 80% of businesses around the world aim to spend on training and learning on the job while also automating more tasks (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). This dual approach emphasizes a crucial principle: automation does not eradicate the necessity for human involvement; rather, automation transforms the knowledge and skills required for individuals. Employees need to learn how to how to manage, understand, and improve automated systems instead of just doing the simple jobs that computers can do (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024).

HR professionals should also be able to utilize data to make strategic decisions. (HR Upskilling Report - 6 crucial challenges and the competencies to overcome them, 2022). However, recent polls show a big skill gap: a 2022 HR upskilling research found that only 41% of HR professionals around the world feel they can effectively use technology and data to add value to a business (HR Upskilling Report - 6 crucial challenges and the competencies to overcome them, 2022). This means that most of them don't have enough digital skills. This gap is important to close because HR's job is becoming more and more about leading digital transformation across the company, from helping people learn new skills to employing AI-powered technologies in talent management in a responsible way. Automation is also changing the jobs of workers. Many clerical and support jobs are being replaced with new ones, such as HR analytics specialists or digital HR strategists, are being created (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). These new jobs focus on managing and understanding technology. On the other hand, professions that focus on technology, such AI specialists and data analysts, are among the fastest expanding (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). AI is making parts of people's employment better, even outside of HR departments. For example, salesman use AI-driven CRMs, and manufacturing workers work with robots. This means that people need to be open to learning new things and adapting to change. Recent literature adds a point that human talents like emotional intelligence will still be considered as vital. This is owing to the fact that these are

areas where humans and technology work best together (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023).

2.4.Human Capital Theory

Human Capital Theory (HCT) can help us understand the changes that automation and AI have made in the workplace. The concept, which economists like Becker (1964) played a vital role in the articulation of the origion, emphasizes the significance of investing in education and training to enhance workforce competencies. Human Capital Theory asserts that in the context of rapid digital transformation of companies, of which decide to invest in the process of uplevelling the skill set of workers, their employees will be more keen at adapting to new innovations within the organizations. (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024). This is particularly important owing to the fact that automation might create some abilities that are useless while adding value to the others . For example, if an AI system takes over normal data processing, personnel need to know how to comprehend what the AI provides them or handle issues (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024).

Individuals who proactively enhance their human capital by seizing opportunities for learning or collaborating with educational institutions generally utilize new technology more proficiently. (Abdullayev & Alakbarov, 2025). For example, the OECD and World Bank have said that developing human capital, especially digital skills, is one of the most important things that will affect how well nations do in the Fourth Industrial Revolution (Abdullayev & Alakbarov, 2025). When companies think of their workers' talent as investments, they are more likely to think about the long-term benefits of having a flexible, tech-savvy workforce instead of just short-term savings from automation. This theoretical framework substantiates the emphasis of the current research: if automation and AI alter skill requirements, the resolution does not reside in opposing technology but in investing in individuals-augmenting their skills to collaborate with intelligent systems, In short Human Capital Theory gives us economic and strategic reasons to look at how automation affects skill development This supports the premise that developing employees' skills is necessary for long term digital transformation

2.5.Global and Azerbaijani Context

Digital transformation in HR is happening all around the world, but how it is used and what it means can be very different in different places and countries. Big companies all around the world have quickly started using AI-powered HR solutions and automation tools to be more efficient and be ahead of the competition. According to surveys, about 75% of businesses around the world are likely to use some kind of AI by 2027. This shows that people are generally confident that these technologies will create more employment than they will take away (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). North America, Europe, and parts of Asia-Pasific have the most developed economies, and many businesses are adopting advanced HR analytics and even trying out generative AI for things like generating job descriptions or judging training content. Professional groups and consulting firms are actively giving HR professionals rules on how to use AI in their work and teaching them how to use digital tools. In the past few years (2020-2025), worldwide organizations like the Society for Human Resource Management (SHRM) and the Chartered Institute of Personnel and Development (CIPD) have added digital skills (including data analysis, using AI technologies, and digital communication tools) are very important for both current HR jobs and getting hired in general (Future of Jobs Report 2023: Up to a Quarter of Jobs Expected to Change in Next Five Years, 2023). This widespread focus suggests that everyone agrees that automation and AI will change jobs and skills

Azerbaijan is good example of a country with a changing economy that is embracing digital transformation while facing its own set of problems. The government of Azerbaijan has made digital development a top priority for the country. This is shown by the founding of the Ministry of Digital Development and Transport and recent strategic initiatives. In January 2025, the President of Azerbaijan adopted the Digital Development Concept of the Republic of Azerbaijan (Limansky & Alexander, 2025). This policy statement aims to use digital technology to balance the interests of state, citizens and the economy (Limansky & Alexander, 2025). The reason is clear: as the country moves away from oil, investing in people and digital skills is important for staying competitive (Abdullayev & Alakbarov, 2025). The International Telecommunication Union (ITU) said in 2024 that Azerbaijan’s digital revolution is happening faster than expected, which is making more people want to hire people with specific digital capabilities. Azerbaijani businesses, especially for banking, telecom and public sectors, have started to use HR tech tools

such electronic HR databases, online recruitment portals, and HR analytics dashboards (Azerconnect receives "HR Awards 2022" award for Best Flexible Working Strategy, 2022). Local organizations have declared certain reports regarding utilization of HR data analytics to enhance decision-making and employing digital technology to optimize hybrid work systems (Azerconnect receives "HR Awards 2022" award for Best Flexible Working Strategy, 2022). Azerbaijan faces challenges, including ensuring that senior staff are not marginalized, bridging the digital skills gap within the workforce, and modernizing antiquated technologies in public administration. The country has post-soviet economy and a population that is mostly young. It possesses abilities to fit in a faster way with current HR needs if it had appropriate infrastructure and training. This study, therefore, will also look at the world trends alongside with the Azerbaijani's unique situation. By comparing Azerbaijan's ongoing projects with the best practices throughout the world, the study can highlight how automation and AI affect hr positions and competencies. This fact will illustrate both similarities and differences in context.

2.6.Problem and Rationale

Even while digital transformation has a lot of potential, this study is motivated by major problem: there isn't enough information, notably in academic literature and developing economies, about how automation AI are changing the roles and skills that employees need in firms. A lot of businesses are starting to use AI in HR, but they don't always have a clear plan for how to get their workers adapt which can cause skill mismatches and make employees unsure of what to do. The literature identifies numerous outstanding concerns. A concern is that those who perform a lot of routine obligations would lose their jobs or must looking for new ones (Priyana, Budiarti, & Gadzali, 2025). Employees may be afraid that automation possess a potential to render their jobs useless, which can lead to opposition to new technologies and reduce morale in the working environment (Singh & Piyush, 2025). Companies are also discovering that their present workers lack the abilities required to perform the more technical or analytical activities that technology leaves behind (HR Upskilling Report - 6 crucial challenges and the competencies to overcome them, 2022). This separate might make it complex for businesses to employ AI solutions effectively. For example, an advanced HR analytics platform is not very helpful if HR workers could not understand the figures. From a management's point of view, there is also confusion regarding the alternative ways to use AI while still being fair, ethical, and keeping the human touch in managing people (Modak, et al., 2025) There exist cases of biased AI algorithms

in the process of recruiting or employee monitoring that are similar to spying, which reveals ethical concerns. This suggests that automation could undeliberately make new difficulties in the workplace if people do not have knowledge of how to use it in an appropriate way or follow the rules (Mamuli, Mukabi, & Kagucia, 2025).

The primary objective of this research is to clarify and provide guidance on these issues by systematically evaluating the effects of automation and AI on jobs and skills. As automation in Human Resource Management becomes increasingly prevalent, it is essential for both researchers and practitioners to determine which competencies should be imparted to employees and how job duties may be enhanced or altered. Businesses can use this information to plan for the shift in advance. For example, they may make a suggestion reskilling programs prior to AI is put into use, change job descriptions, or make rules to deal with moral difficulties (Sharma & Vidushi, 2025). Moreover, there exists a vital level of deficiency in the realm of underdeveloped and transitional economies, such as Azerbaijan, where empirical research on HR digital transformations is very limited. This study also fulfils a dual purpose by highlighting the Azerbaijani context: it contributes to global discourse with data and insights from relatively under-researched territory, while also providing local organizations with research-informed consultations for their digital HR strategy. To summarize, the issue this thesis addresses is not sufficient in the comprehension of the human dimension of digital change in human resources. The reason is the urgent need to be assured that technical progress follows manually with the growth of human capital. This way, workers are not only protected from the negative effects of automation (such being obsolete or unfair), but they are also given the tools they need to succeed in the new digital workplace (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024) .

2.7.Objectives of the Study

This research establishes various objectives to direct its investigation, based on the previously emphasized context and problem. These aims sum up what the study is willing to reveal about the convergence of HR digital transformation, employee roles and skill requirements:

Objective 1: Assessment of the impact of automation and AI on fundamental HR activities and processes inside global businesses, and to analyze how these transformations are reshaping the responsibilities of HR professionals and employees.

Objective 2: To assess the impact of digital transformation on the essential skills required for workers at various levels, identifying which competencies are gaining importance and which are diminishing in relevance.

Objective 3: To examine the implications of these roles and skill alterations via the lens of Human Capital Theory, specifically regarding how enterprises are adjusting by training, upskilling, or redefining positions to safeguard their human capital assets.

Objective 4: To analyze the worldwide trends and challenges of HR digital transformation in relation to the circumstances in Azerbaijan.

Objective 5: Furnishing organizations and policymakers with evidence-based counsel on addressing the impacts of automation and AI on the labor force.

These objectives keep the study focused on both what is changing (the nature of responsibilities and talent) and how to deal with those changes (by using methods based on theory and understanding the situation)

Research question: In accordance with aforementioned objectives, this study is guided by following principal research questions:

How are AI and automation changing the responsibilities of workers in multinational companies?

Digital change in HR is changing the capabilities that employees (both HR professionals and the general workforce) need to have. What new skills do they need to learn, and what out-dated skills are becoming less significant?

The research aims to address the knowledge deficit highlighted in the problem statement by answering these questions and offering practical insights. Each question aligns with one or more research objectives, collectively facilitating a thorough examination on the topic.

2.8.Scope of the Study

This research focuses on major multinational corporations and sophisticated HR technology tools to comprehend contemporary effects on roles and competencies. But it also includes views from emerging markets to make sure that the results aren't just for very developed economies. The scope includes analysis of HR functional areas, such as hiring and selection, training and development, performance management, and employee engagement processes. These are areas in which automation and AI have made great differences. The time span of importance is approximately 2020-2025, and it includes most recent trends, technological changes, and changes in work habits after Covid-19 pandemic. Older seminal ideas, such as Human Capital Theory are included for conceptual footing, however the focus is on current data and interpretations.

It is important to highlight what is not included in the study. The thesis does not intend to examine the technical parameters of AI systems or specific software products; rather than that it analyzes their implications for persons and organizations. Existing legal and regulatory challenges, such as data protection laws or AI governance requirements are elaborated when they are significant, however, a comprehensive legal analysis is unattainable. The focus is on the organizational human aspect, including, the ways of job changing, and how firms could adapt in this process. This inclusion of Azerbaijan serves as a case study, while findings aspire to be generalizable or at the very least, enlightening for other nations at a comparable stage of digital HR implementation. The research technique, elaborated in the subsequent chapter, encompasses a literature review and maybe field research (including surveys or interviews) to collect both quantitative and qualitative data; nevertheless, it excludes the experimental use of AI tools. The study is to produce a structured analysis- ranging from theoretical underpinnings to actionable recommendations - that is pertinent for HR academics, corporate executives, and policymakers concerned with the future of work and human resources in the era of AI and automation. The scope overall provides fair treatment: it is sufficiently broad to cover the major parts of the topic and narrow enough to give a detailed look at how digital transformation in HR has changed the responsibilities, job descriptions and skills needed by employees.

3. Literature Review

3.1.Digital HR Transformation: Automation and AI in HR Functions

Global companies are in the process of digital transformation in human resource management, that includes use of automation and AI in all HR tasks (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024). AI technologies are being used in many HR operations, such as hiring, training and performance management. Latest literature illustrates that AI's role in HRM is multidimensional, transcending mere task automation in order to enhance HR capabilities (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024). Dima et al. (2024) conducted a thorough examination that delineates five principal impacts of AI on HR functions: (1) automation of routine HR tasks, (2) enhanced utilization of HR data via analytics. (3) augmentation of human decision-making through AI insights, (4) reconfiguration of work process and context, and (5) alteration of social relational dimensions of work. Mentioned changes allow HR departments to be more strategic, and data driven. After automation of routine administrative tasks, HR professionals can allocate more time on strategic efforts such as talent management and employee experience design (Potluri & Serikbay, 2025). This change from administrative to strategic is backed up by case studies: AI solutions like predictive analytics and automated resume screening have been proved to make things run more smoothly and provide HR workers with more time on important tasks (Potluri & Serikbay, 2025). So, digital HR transformation isn't only about putting new technology in place; it also means rethinking the roles, workflows, and a value creation of HR.

Organizations must manage this shift in a way that enhances rather than supplants human judgement. Research indicates that AI should enhance the human component in HR instead of replacing (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024). The core idea is having a hybrid HR model where AI does data-heavy and repetitive activities while human HR managers use their judgement, ethics and interpretation skills in order to control the process (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024). Now it is more crucial to make sure that AI is used in HRM in a way that it is moral and responsible, especially in areas such as algorithmic bias or privacy in people analytics. Overall, the research shows that automation and AI are changing HR services by making processes more efficient and allowing decisions to be made based on facts (Dima, Gilbert, Dextras-Gauthier, & Giraud, 2024). However, HR's digital transformation also requires

change management. Companies need to make sure that their employees are willing to use new technologies and spend money on the infrastructure and skills to make AI work. Deloitte says thar future-ready HRM will rely more and more generative AI, autonomous HR systems, workforce intelligence, and digital identity management. These are all trends that HR teams will need to learn new skills and adapt to (Sobczak & Elżbieta, 2025) They will change responsibilities and skills needed for employees in a big way.

3.2.Evolution of Employee Roles and Skill Requirements in the Digital Era

The rise of AI and automation is changing not only HR departments but also the responsibilities of employees and the skills needed in all businesses. Sobczak's recent research consistently indicates that digital transformation results in a dual effect on employment: the development of new roles and the modification of eradication of existing ones. On the other hand, the digital economy is creating new, high-skilled jobs. For instance, there is a growing need for data analysts, AI professionals, digital learning designers, and cybersecurity experts. Mentioned new job areas usually require high level digital skills and offer higher salaries. On the other hand, Automation and AI can accomplish a lot of the same routine, repetitive tasks that people used to do therefore, some low-skill or clerical occupations will experience rapid decline in popularity. (Sundari, Silalahi, Wardani, & Siahaan, 2024). This dynamic is causing concerns about technological unemployment and workforce polarization, as routine jobs disappear and the demand for highly skilled professionals increases (Sobczak & Elżbieta, 2025).

In the digital age, all employees are expected to be learning new skills and many traditional jobs are changing to include digital parts. For example, marketing experts increasingly employ AI-driven analytics, while factory workers now work with IoT-driven robots. According to Sobczak (2025), businesses say that digital transformation is "changing the nature of work". This means that workers need to be able to adapt and keep learning new skills, notably digital and analytical ones. This means that in real life, it is not necessary to keep learning new skills and improving old ones. In technology oriented organizations, workers are expected to use digital tools and data proficiently, but they also need to have critical thinking, problem solving, creativity, and teamwork skills. Frameworks for "21st Century Digital Skills" illustrates that being proficient

with AI extends beyond jus having technical ICT abilities and requires cognitive and socio-emotional skills including creativity, communication skills (Sobczak & Elżbieta, 2025).

A study conducted in 2025 on European labor markets indicated that digital change has led to the elimination of certain jobs and creation of new ones, shows the importance of perpetual skill enhancement, especially in digital and analytical fields (Sobczak & Elżbieta, 2025). Some good things that have emerged from this change are more flexible employment options (such being able to work from home with digital tools) and better access to information through e-learning platforms. But there also bad things may happen, such skills mismatches, which is when people don't have the talents that business require. Workers who do same thing over and over again are at risk of being replaced by technology if they don't get proactive training. This makes it very important for both businesses and people to put money into developing their human capital (which we will talk about further in the Human Capital Theory section). Companies are looking for individuals that are not just good at their jobs but also good at working with AI to understand its results and keep the "human touch" in areas like customer service, leadership, and teamwork. (Sobczak & Elżbieta, 2025)

Many companies have responded to these changes by expanding their learning and development programs to include more digital skills in training and cultures of lifelong learning. The Covid-19 epidemic accelerated this change. For example, a study conducted in Poland revealed that the pandemic encouraged companies to use agile and hybrid learning methods, with HR departments using e-learning techniques on a larger scale (Mikolajczyk & Katarzyna, 2022). According to Polish HR managers in addition to transferring the training online, employees started asking for new skill content, such as how to use remote work tools. However, problems such as information overload and low level of interest in online trainings occured (Mikolajczyk & Katarzyna, 2022). This illustrates the importance of using balanced methods and keep employees motivated while they are learning new skills in a quick way. A growing number of people in different fields and areas agree that workers need to have a mindset of always learning. People who can learn new skills and improve their talents will always be able to find job and be useful. On the other hand, people who cant learn new things risk being left behind in the digital economy. In fact, a shortage of skills has been identified as fundamental obstacle to digital transformation efforts. A study company in Central Asia found that talent deficiencies (combine with cultural opposition

and high expenses) make it very hard to use AI in HRM projects in Kazakhstan (Potluri & Serikbay, 2025). A global industry 4.0 report also says that companies have a big problem with having to retain their workers, which is just a big of a problem as high development costs and cybersecurity issues that made impede down digital adoption (CROITORU, et al., 2024).

To summarize, digital transformation is changing the responsibilities and qualities that are required from employees. Companies that allocate recources on training and redesign occupations to combine people with AI are experiencing better results than their competitors. On the other hand, the non-existence of such investment results with the risk of increasing disparities and talent deficits: digital transformation can "exacerbate… competence-based inequalities," as individuals lacking access to upskilling my find it challenging to secure quality employment (Sobczak & Elżbieta, 2025). These results are consistent with Human Capital Theory's focus on education and skill investment, which we will examine next, along with its criticisms in the present situation.

3.3.Theoretical Framework: Human Capital Theory and Skill Investment

Human Capital Theory serves as effective framework for analyzing organizational and employee responses to the evolving skill requirements mentioned previously. HCT, based on Becker's work from 1964, sees knowledge and skills as types of capital that people and businesses invest in to boost productivity and profits (Becker, 1964). In the context of a digital transformation, HCT posits that as technology modifies skill requirements, rational agents (workers and employers) would engage in education and training to cultivate the necessary competences and so sustain their competitiveness. Most recent studies show that human capital, namely digital skills and expertise, is essential for facilitating digital transformation, as new technologies are only effective when employees have the required competencies and understanding to operate them. Organizations must allocate resources to improve employees' digital competencies and leverage training assistance initiatives to effectively manage digital transformation (Sobczak & Elżbieta, 2025). In principle this kind of investment pays off by making people more productive, coming up with new ideas, and raising wages for people with skills that are in great demand. Much research has shown that there is a favorable link between skill development and

organizational performance. This backs up the HCT view that upskilling is a natural way to deal with changes in technology (Sobczak & Elżbieta, 2025).

Nonetheless, HCT faces criticism, and its implementation in digital era prompts significant inquiries. For a long time, scholars have said that HCT's focus on individuals can make it too simple to see how talents lead to results (Auerbach & Paul, 2024). Critics of HCT say that it often doesn't consider social and external issues that affect education and training. Auerbach and Green's (2024) recent reformulation highlights that HCT has historically neglected that externalities of learning (e.g., the benefit of an individual's training to others within a firm or society) and the social determinants of education demand (such as cultural norms or government policies). In the digital age, digital omissions are important. For example, a person's choice to learn a new programming may depend not only on how much it costs them but also on whether their employer supports training or whether there is a community infrastructure for digital education. HCT also assumes that more education means more productivity, but some critics say in fast-changing tech environments, formal education may not keep up with what businesses need, and credentials may be more like signals (as per credentialism or signaling theory) than real indicators of productivity. The literature also points up hazards such skills becoming obsolete. For example, a worker can spend time learning a certain coding or software skill, only to realize that it is no longer useful in few years since technology is changing so quickly. This makes the simple investment-return model of HCT more complicated.

Another criticism of digital transformation is that HCT typically assumes that everyone has equal access to skill investments, when in fact this is not the case. Digital change can lead to a digital gap, where individuals with excellent beginning education and resources can learn new skills and do well, while others can't easily get training and fall behind. This concern is reiterated, as excessive dependance on individual upskilling may intensify inequality unless accompanied by inclusive policy (Sobczak & Elżbieta, 2025). For instance, if businesses demand their workers to go through regular retraining, workers who are in poorer economic position may not be able to do so, which could lead to bigger wage inequalities. This is a situation that HCT's pure market logic may not be able to handle. Auerbach and Green (2024) assert that HCT's preeminence in discourse has effectively "constrained' our comprehension of the education-economy nexus, frequently marginalizing opposing viewpoints that examine these expansive socio-economic

linkages. In response, they need and others are asking for the analytical framework to be expanded to include ideas like the capability approach (which looks at people's real changes to use their skills) and the idea that continuous learning often needs help from groups (like government or employers) in addition to individual effort (Auerbach & Paul, 2024).

Even though people have said negative opinions about HCT, it is still good way to explain the general trend we see: global companies are increasing their training programs, and workers are getting new certifications and learning opportunities to stay relevant. The thesis of HCT- that investing in human capital is crucial for adapting to change – is highly validated in the context of digital transformation, with substantial research indicating that organizations engaging in staff training for digital qualities are more proficient at conducting latest technology (Sobczak & Elżbieta, 2025). A more sophisticated perspective, consistent with current research, acknowledges that such investment must be informed by principles from organizational behavior, economics and public policy to achieve efficacy.

3.4.Regional Perspectives: Eastern Europe, Central Asia, and Azerbaijan

Sobczak, & Elżbieta's (2025) EU-wide analysis put member states into groups based on how much digital transformation they had done: high, medium, and low. It showed that many Western and Northern European countries "leaders" in digital enterprise transformation, while some Eastern European countries are in the middle or laggard categories. The variations in technology infrastructure, investment level, and human resources are often what cause the gaps. The same study also revealed that nations in Eastern Europe that don't adopt digital technology as much may miss out on some high-skill job development because a higher level of digital transformation is linked to a larger share of jobs in knowledge intensive sectors. This shows how important it is for the region's policies to focus on improving digital skills and innovation to catch up. The European Union's Digital Decade strategy and financing programs, such the Digital Europe Program, have indeed focused on helping CEE countries build their digital infrastructure and skills. To prevent making existing inequities worse, it has been decided that making sure the social sustainability of digital transformation- meaning that all regions and demographics may benefit -should be a top focus (Sobczak & Elżbieta, 2025).

Poland has become a regional leader in adopting digital HR practices, as seen in specific cases. Polish companies, especially those in finance and IT, have started using complex HR Information Systems and AI tools for hiring and analyzing employees (Sobczak & Elżbieta, 2025). The Covid-19 pandemic sped up the pace of making HR operations digital in Poland and other countries. A qualitative study indicated that HR managers instantly switched to hiring and educating people virtually (Mikolajczyk & Katarzyna, 2022). This transformation not only impacted on how HR activities were done (for example, relocating training to Zoom), but it also changed the themes of training. To address new needs companies included new training topics that focused on digital skills and remote work skills (Mikolajczyk & Katarzyna, 2022).

The Polish experience, on the other hand, also showed problems like workers getting tired of too many virtual meetings and necessity to keep people interested in a digital setting. As a result, a lot of Polish businesses are now using gybrid methods and working to build a culture of lifelong learning to keep skill development going (Mikolajczyk & Katarzyna, 2022). This is aligned with Human Capital Theory in practice: Polish companies that see employee development as a long-term investment are more ready to technological changes.

Romania understands that it is very important to adapt digital transformation in order to staying competitive in the economy. Although scholarly literature focused on digital HR in Romania is still developing, comprehensive assessments of Romania's labor market validate tendencies of structural transformation. In Romania, digitalization has let to a rise in ICT-based services and has "forced businesses to rethink their strategies, management, and operational methods," which means they need to be more flexible and adaptable (CROITORU, et al., 2024). Banking sector in Romania went through a full digital revolution. Even tough it is more efficient, it also meant that people had to learn new skills and become used to new ICT tools. Romania has problems that requires solution, such as the need to retrain a large number of people and the digital divide (for example, the differences in digital literacy between urban and rural areas) (CROITORU, et al., 2024).

The research indicated that Kazakh companies are investigating AI technologies for recruiting and human resources analytics, reflecting global trends (Potluri & Serikbay, 2025). The main problems, on the other hand, were: (a) cultural resistance to change from both employees and management, (b) high initial expenditures for modern HR technologies, and (c) big skill gaps in

the workforce that make it hard to put these technologies into use. The skill gap, which is when there aren't enough employees (or even HR experts) with the right digital and analytical skills, was singled out as major problem. Because of this, the government and businesses in Kazakhstan are putting more investment into digital training programs. Kazakhstan's "Digital Kazakhstan" policy includes national efforts to enhance literacy and train more ICT experts. Kazakhstan research support global findings that investment in capital is crucial; without staff upskilling, even well-funded digital transformation initiatives might falter. The study's findings also show that context matters: methods that work in Silicon Walley may not work in Almaty or Astana since the culture and education systems are different. Still, Central Asia is moving toward more use of digital HR solutions as economies become more diverse and fight for talent (Potluri & Serikbay, 2025).

There aren't many academic studies on digital HRM in Azerbaijan yet, but the ones that are accessible show that country is just starting to change. Digital development is a national focus in Azerbaijan (for example, through projects like "Digital Trade Hub" and e-government initiatives" and this digital agenda is slowly making its way into business HR practices. Big companies in Azerbaijan, especially in banking and telecoms, are starting to use HR information systems to look into AI for things like filtering job applications and surveys to find out how engaged employees are (Zavazava & Luckyson, 2024). Local business reports say that Azerbaijan's main goal is to catch up with the best practices in talent management throughout the world and make sure that the workforce has the IT skills needed in contemporary economy. For instance, businesses are working with schools to make sure that their curricula meet the needs of Industry 4.0. This is an example of Human Capital Theory in action, since businesses are investing in skills for the future. However, there are still problems, such as not enough research and development capability and a need for more HR personnel who know how to use technology. The regional point of view illustrates that countries such as Azerbaijan can learn from what Eastern Europe have done and make it work for them.

Azerbaijan has made a lot of progress in the last few years in digitalizing transportation and logistics. The major purpose of these initiatives is to improve the country's transit potential by making transportation faster, clearer and more convenient. First, an electric version of the paperwork used to move cargo has been made. The "Electronic Commodity and Transport

Receipt" (eCMR) system lowers operating expenses and makes it easier to keep track of shipments. Azerbaijan has already signed up for this worldwide endeavor, and test programs are now being put into action. The "Electronic Permit" (e-Permit) system is another key new idea. Azerbaijan has started to collaborate with Turkey and Uzbekistan as part of this system. Electronic permits are now used instead of paper permits during cargo transportation. This makes the process go faster and easier. In some routes only electronic permits will be utilized starting in 2025.

The nation is also building a "Digital Logistics Platform" (DLP). This national platform brings together railways, customs, seaports, and other government agencies into one system. The goal is to streamline all logistics tasks and make management more open. Also, the "Electronic Transit Portal" lets people handle all of their transit transportation applications, contracts, and tariffs in one place online. This gateway makes it easier and faster for different people to share information. Digitalization in railway sector also gets a lot of attention. Here, documents used for international cargo transportation are transferred to electronic format, and modern digital systems are also applied to track cargo along routes.

All these projects accelerate the digital transformation of Azerbaijan in the logistics sector, creating new opportunities to turn the country into an important transit and transport hub in the region.

As a result, global organizations have similar plans for digital HR transformation, but the pace and way they go about it depend on the region. Eastern Europe shows how fast people are able to adopt new technologies, even though there are skill gaps that need to be addressed and policies that need to be in place to support training. Central Asia on the other hand illustrates how cultural, and skill factors can affect tech adoption, and Azerbaijan is an example of a new place where digital HR innovations are being set up.

4. Methodology

4.1.Research design

This study utilized a methodology that included tentative qualitative study, supported by a survey to achieve a thorough comprehension of the subject matter. Utilization of the methodology allows for triangulation of findings, where quantitative and qualitative data can confirm and enhance one another, providing a more comprehensive evidence basis. In this research, the survey and interview elements were gathered together concurrently to obtain both overarching patterns and comprehensive insights. This method makes use of the best parts of the both methods: the survey finds patterns that can be applied to a big group while the interview let us look into specific experiences and situations

4.2.Quantitative data

The quantitative part was an online survey that was set up using Google Form and received 317 valid replies. The poll was sent out through professional networks using a convenience sampling method conducted solely in Azerbaijan which means that each respondents possessed equal chance of participate in the survey. This fact also illustrates a limitation of the research, as well. The survey was shared via my social media accounts and channels to enhance the audience. The poll mostly consisted of closed-ended questions, utilizing Likert scale and multiple choice formats, addressing considerable issues pertaining to automation and AI in human resources management, such modifications in tasks, evolving skill needs, and perceptions of digital transformation.

4.3.Qualitative data

The qualitative aspects comprised semi-structured interviews with five individuals selected from public and private sector entities. Respondents were selected by purposive sampling. It means that they were chosen on purpose since they had certain knowledge that was beneficial to the study. A digital HR project manager from a railway company, a leading specialist from state employment agency, leading specialist from Ministry of Digital Development and Transport, CEO of an ERP solutions firm, and a branch manager from a bank were provided their insights. Since all the participants possess a sufficient amount of knowledge and management in human resources, they are considered as qualified people to declare their experience for the purpose of

this research. As a result of selecting persons from various backgrounds they provided various points of view on how automation and AI will affect job market. Used interviews technique was a semi-structured and it addressed essential subjects, including AI-induced transformations in occupational roles and requisite abilities, while permitting respondents to articulate their perspectives. Interviews lasted about 15-30 minutes. Therefore, qualitative data collection is more a tentative approach. In addition, since the sample size is limited to five expert interviews, which provide diverse but not exhaustive perspectives. The aim was depth of insight rather than saturation.

4.4.Analysis of data

Quantitative Analysis: Survey data was collected from Google Forms and we used descriptive statistics to analyze. To summarize the data and find overall patterns, this meant figuring out the frequencies, percentages, and weights for the survey items. The analysis concentrated on delineating the distribution of responses for each question. The poll results provide a general idea of how digital transformation is changing the roles and skill needs of employees.

Qualitative Analysis: Thematic analysis was used to examine interview transcripts and find major themes in the data. Thematic analysis is a technique in order to recognizing, examining and presenting patterns or themes within qualitative data. According to the methodology established by Braun and Clarke (2006), the researcher initially analyze transcripts, then producing preliminary codes by annotating significant text portions. These codes were repeatedly grouped into larger themes that showed topics that came up repeatedly in the interviews. We looked over themes again to made sure they appropriately reflected the data (Braun & Clarke, 2006). This method produced numerous significant points that illustrate how automation and AI are transforming employee responsibilities and requisite skills.

4.5.Ethical considerations

Ethical integrity was an important aspect of this research design, especially due to the qualitative and human qualities of research. A simple and straightforward informed consent form was administered to all participants before the interviews, where they were informed of the aim of the study, their right to withdraw at any time and the use of their data. Participants were informed

that no personal information was to be reflected in the thesis and other study work and that any recordings would be stored securely and confidentially. All documents contained fake names to secure the identities of participants and no information regarding organizations that might have identified identities was disclosed. Data could be safely stored and processed by meeting GDPR criteria and therefore secured both electronically and physically (British Psychological Society, 2021; European Commission, 2018). Those who participated in the interviews willingly did so at their own will, there was no reward or coercion. As per the guidelines on the ethics of conducting qualitative research, effective steps were established in order to establish a psychologically safe space in which participants would be able to express themselves with honesty and sincerity without fear of repercussions (Creswell and Poth, 2018; Bryman, 2016). The research also obtained verbal and/or written approval of the appropriate individuals within the institutions prior to contacting interviewees, particularly in government agencies. This ensured that nobody was disobeying and telling the truth about what they were doing. Ethical factors were also integrated during the research process not as a formality, but as a way of engaging with participants and their lived lives in a respectful and responsible manner (Tracy, 2010).

5. Results

5.1.Introduction

This chapter relies on the results collected from 317 respondents who contributed to our survey as well as qualitative interviews taken from key persons from Azerbaijan job industry. This part of the study is mainly structured according to five research objectives of this paper mentioned in Chapter 1 in order to maintain the alignment between the research design and the outcomes. The illustration of results is mainly based on descriptive statistics and further supported by charts and tables where applicable.

The survey sample represents diversity in professional backgrounds of respondents. The vast majority of respondents are classified as non-managerial employees (73.8%) and followed by managers in non-HR functions and HR professionals with percentages of 11.7 and 7.3 respectively. 13 respondents, which contains 4.1% of the sample represent executive/top management. The remaining part of the sample contains students and self-employed section. On

the other hand, we also tried to capture the size of companies that our respondents are currently working in. According to survey results, 46.4% of respondents are working in companies that have employee size between 50 and 249. It is closely followed by organizations that contain 1000+ employees with a percentage of 31.9%. The organizations that operate with 299-1000 employees came third with percentage of 13.6 and followed by organizations that have employees fewer than 50 by 8.2% weight. In the case of industry, most represented industries are finance/banking by 31.2 % and services (hospitability, retail, education etc.) by 29%. Manufacturing captured 13.6% of weight while public sector came forth by 13.6%. Lastly, we analyzed which countries or regions our respondents are from. The sample skewed toward Azerbaijan with 91.5%, with limited participation from Eastern Europe, Western Europe and the middle East.

5.2.Analysis and Discussion of Survey Results

Objective 1: Assessment of the impact of automation and AI on fundamental HR activities and processes inside global businesses, and to analyze how these transformations are reshaping the responsibilities of HR professionals and employees.

To assess the impact of automation and AI we asked several questions through survey which one of them tried to analyze which HR functions in organizations currently use Automation and AI. Results of this question are presented in graph 1 below:

HR functions	*Number of answers*	*Weight of answers*
Recruitment & selection	112	35.3%
Employee onboarding	104	32.8%
Training & development	180	56.8%
Performance management	133	42%
Payroll & administration	128	40.4%
Employee engagement surveys	79	24.9%
None	35	11%

Table 1

Since the respondents are allowed to choose all answers that apply and for this reason sum of percentages exceeds 100%. The most crucial finding we observe is that 89% of total respondents state that their organizations are currently using ai and automation in at least one HR function. The most frequently mentioned function was training and development and it is followed by performance management and payroll administration by corresponding percentages of 56.8, 42 and 40.4. This means organizations are using AI on employee learning and upskilling which aligns with global trends that were previously discussed in literature review part.

On the other hand, the question does not specify at which level AI and Automation are applied. For example, employee engagement survey created by generative AI might be considered as use of AI and Automation by our respondents even if the application is relatively limited. For this reason, the following question is trying to analyze if respondents believe that AI and automation tools used in HR functions are effective. As a result, 42.6% of respondents rated it as effective and 6.6% believe that it is very effective. In contrast, 39.4% of total 317 respondents stayed natural while only minority percentage of respondents believe such tools are not quite effective with 7.6% and 3.8% total weights respectively represent ineffective and very ineffective answers. The collected data illustrates that majority of respondents hold a mainly positive perception on AI and automation integrated HR systems. This suggests that according to nearly half of respondents AI and automation is delivering noteworthy benefits. On the other hand, 39.4% result on the neutral indicates that noticeably high percentage of total surveyed sample remains uncertain regarding effectiveness of usage of AI and automation tools in HR systems. This may be interpreted as two ways; either respondents have limited exposure to AI tools or their implementation or the benefits of them are not yet visible to them at organizational level. It is also important to mention that negative proportion of results remained in minority. 11.4% of respondents indicate ineffectiveness regarding potential challenges, low quality implementation, lack of training or lack of alignment between organizational needs and AI tools.

The findings and results under first objective of this paper confirm that AI and Automation are highly present in HR functions such as training and administrative processes, and its introduction led to quite visible shift in employee roles and responsibilities. Together these results imply that although the incorporation of AI and automation into HR functions is generally seen favorably, firms confront two challenges: making sure that efficacy of these tools is proven across various

departments and addressing the uncertainty that led high percentage of respondents remain natural. This finding logically leads to analysis's following part which examines the second objective of this paper that prepared the employees are for digital transformation.

Objective 2: To assess the impact of digital transformation on the essential skills required for workers at various levels, identifying which competencies are gaining importance and which are diminishing in relevance.

The second objective of this paper is aiming to identify importance of gaining new qualifications because of digital transformation as well as how ready the workforce feel themselves to meet the needs of this era.

This paper tried to examine which skills are most important at the era of digital transformation and therefore asked following question: Which skills have become more important in your organization due to digital transformation? The results will be illustrated at the Table 2 below:

Skill	*Number of answers*	*Weight of answers*
Data literacy & analytics	104	32.8%
Digital & IT skills	113	35.6%
Problem solving & critical thinking	168	53%
Creativity & innovation	165	52.1%
Communication & collaboration	159	50.2%
Leadership & change management	113	35.6%
Emotional intelligence	31	9.8%

Table 2

The result of survey indicates that problem solving & critical thinking (53%) and creativity & innovation (52.1%) are most frequent answers and it directly aligns with our previous discussions regarding at the era of transformation routine tasks are transferred to AI and

Automation tools and human force are left with mostly their judgement and control over technology which can also be identified as strategic role.

Second, we examined how prepared employees are for digital transformation and for this reason asked following question: How well-prepared do you feel for digital transformation in your current role? As a result, majority of respondents (61.8%) reported that they feel moderately prepared for digital transformation in their current role. This indicates general sense of readiness but also means that confidence is not at high level. The percentage of respondents who feel themselves very well prepared and well prepared are 3.2% and 19.6% respectively with the total weight of 22.8%, while the respondents who feel themselves slightly prepared (12%) and not prepared at all (3.5) cover 15.5% of total respondents. The results clearly indicate that even though most respondents have some degree of readiness there is still noteworthy skill gap in terms of achieving high degree of confidence. This result leads us to next objective of this paper where we analyze training, reskilling and organizational adaptation.

Objective 3: To examine the implications of these roles and skill alterations via the lens of Human Capital Theory, specifically regarding how enterprises are adjusting by training, upskilling, or redefining positions to safeguard their human capital assets.

For this part, we tried to examine if organizations are currently conducting any training or upskilling programs with following question: Has your organization provided reskilling or upskilling programs to adapt to automation/AI?

As a result, majority of respondents (59.3%) reported that their organization has training programs, but their scope is relatively limited, while 15.5% of respondents indicate the training programs provided are not only present but also comprehensive. On the other hand, 25.2% of respondents reported the absence of such training programs, while their 20.5% believed such programs will be take place in near future. This result indicates that even tough most organizations adopt training programs at some level their scope and coverage are not yet reached the desired level of satisfaction among workforces.

To enhance previous results, we analyzed and specifically asked if respondents think the quality of mentioned programs are at satisfactory level. For this reason, following question asked: If training was provided, how effective was it in preparing employees for digital transformation? The result indicated that nearly half of respondents (45.7%) noted that the programs are effective and 5.4% of respondents rated programs are very effective. This total 51.1% result illustrates training programs are somewhat successful, and this result followed by neutral position with 37.9%. This means that respondents are not yet convinced that the programs have visible positive effect on their upskilling or gaining new skills process. The remaining 11.1% of respondents noted training as inefficient. The findings again support previous results and indicate that while these initiatives by companies are generally seen as positive, overall impact is not yet collectively convincing. The quite large proportion of natural responses indicate that many employees do not experience tangible improvements on their level of readiness due to limited scope, lack of depth or limited relevance to their daily job responsibilities.

The following question aimed to analyze whether organizations treat employee skills as a strategic investment in the digital transformation process. The results were in alignment with previous findings of previous questions. 44.2% and 5% of respondents mentioned they are agree and strongly agree with the mentioned statement respectively while 38.5% of respondents remained natural again. Remaining respondents disagreed with the statement and the similarity of results indicate that in order to convince workforce about whether the investment in digital transformation process is strategic or not, organizations have to convince them regarding their effectiveness first.

Next, we analyzed how important continuous learning for remaining employable in their organization with following question: How important do you think continuous learning and reskilling are for remaining employable in your organization? The majority of respondents indicated that it is important, more specifically 44.8% of respondents believed it is moderately important, 37.2% of total respondents rated it as very important and 9.8% said it is extremely important. Remaining 8.2% of respondents on the other hand answered that it is either slightly important (6.3%) or not important at all (1.9%). The result clearly indicates that nearly all of the workforces believe that continuous learning is one of key factors in employability. However, noticeably large proportion of "moderately important" responses suggest that even though

respondents convinced with its value, they still except to see more organizational support and more structured initiatives to realize full potential impact.

Lastly, we analyzed which type of investment organizations prioritize more; technology investments such as systems, software, automation tools or human capital investments such as training and skill development. As a result, 59.9% of respondents report that their organizations allocate equal focus on both investments, while 28.1% of them observed more investment on human capital investments and remaining 12% reported primary focus on technological investments.

Overall, the results of Objective 3 indicate that most companies understand how important it is to preserve balance between development and technology adoption. However, prior findings also showed that significant percentage of indifferent opinions and restirictions on the reach and efficiency of existing training initiatives. This suggests that even if businesses want to protect their human capital in theory, they still have problems regarding turning these goals into efforts that are completely effective. According to Human Capital Theory, these findings indicate how important it is for businesses to continue to view staff development as strategic investment that goes aligned with technological improvements.

Objective 4: To analyze the worldwide trends and challenges of HR digital transformation in relation to the circumstances in Azerbaijan.

Comparing global trends with Azerbaijan was the fourth goal. According to conducted survey 91.3% of respondents have the residence of Azerbaijan. Therefore, the limited number of respondents from other countries indicated that sample size is not enough to draw a conclusion regarding the fourth objective of this paper. While this can be considered as limitation of this survey results, the scope of this objective is covered in Literature Review part of this paper in “Regional Perspectives: Eastern Europe, Central Asia, and Azerbaijan” part as well as Interview results section of this part.

Objective 5: Furnishing organizations and policymakers with evidence-based counsel on addressing the impacts of automation and AI on the labor force.

Providing organizations and policymakers with evidence-based suggestions is the final goal of this paper. The survey results does not specifically address this objective due to its prescriptive

nature. Therefore, The Discussions and Conclusion chapter will combine the ideas from Objectives 1-4 and develop practical recommendations.

5.3.Interview Results

The interviews conducted yield explicit insights that can be directly correlated with the research objectives. The initial objective was to find out how automation and AI have changed HR tasks and responsibilities. The answers demonstrate that automation has changed not only the way administrative tasks are done but also the process the tasks are completed in organizations. The ERP expert stated that when companies started to utilize ERP systems, employees went from being operational executors to data analysts and process owners. Middle managers, on the other perspective, became change managers. The Unibank spokesperson said that automation in branch operations cut down on regular cashier activities and shifted staff work to more advising and compliance-oriented jobs. They also emphasized that the teams that are responsible for monitoring cybersecurity and finances have grown. The ADY representative said that digital solutions, such as Glori and LMS have modified HR operations by making analytics and continuous development a part of everyday tasks. However, there still some resistance, particularly among the more experienced employees. The representative from the state office made this point even stronger by mentioning about the processes of changes in job requirements and relationships with employers. According to testimonies, AI and automation are not only instruments for making activities more efficient but they also aid to modify the roles of HR professionals.

For the second goal that is about the basic skills required to be employed in the digital world, all participants highlighted the need of learning digital analysis. The state agency and a leading specialist from Ministry of Digital Development and Transportation said that digital literacy, data analytics, cybersecurity, and process automation are becoming more significant, and that being able to adapt and solve problems is also becoming more important. The ERP expert highlighted that knowing the fact that how to use BI tools, ERP modules, and change management is becoming more considerable for professional success. This is because manual and transactional skills are becoming less important. Furthermore, ADY representative emphasized the need of sustaining education in addition to the point of fostering innovation. People from Unibank and Ministry of Digital Development and Transportation also indicated that banking operations

increasingly rely on competencies which are strongly associated with cybersecurity and digital technologies. Such perspectives affirm that digital transformation is in the process of reshaping skills hierarchies that include both technical and interpersonal abilities. On the other hand, it simultaneously reduces the importance of purely manual skills.

The next goal which puts these improvements in the context of Human Capital Theory, is clear in all interviews. The state agency stressed the need for large-scale reskilling and upskilling programs paid for by taxpayers. These programs are meant to protect people's capacity to find job and provide assurance that the workforce stays a valuable asset. The ERP expert stated that vendor certifications, mentoring, and in-house training are all ways that companies may keep their employees' value. The ADY representative added some comments about points of soft skills catalogs. They also mentioned the problems that arise due to the demographics of workforce, which indicates the riskiness level of not reskilling effectively. A representative from Unibank added that ongoing training and programs for adapting are used to make some changes in technology seem as an ordinary activity.

So as to meet the fourth objective, which is related to the channel via which world trends and problems affect Azerbaijan, the interviews indicate two different realities. The ADY representative mentioned the elderly workers are not willing to use modern systems and that several HR departments still collect data manually. This suggests that digital integration is happening more slowly in this country than in more developed countries. The official agency representative highlighted how important regional requalification centers are which are a trait that fits Azerbaijan's geography and economy. At the same time, the focus on working with international frameworks like ESCO and ISCO shows that there are efforts to make local practices more in line with global standards. Overall, it demonstrates that Azerbaijan is a part of global trends but also has to deal with its own problems with institutions and demographics.

Finally, the respondents' cumulative insights significantly support the fifth goal, which is to provide organizations and government advise based on evidence. The findings suggest several actionable points: policymakers should expand investment in reskilling programs and ensure that occupational standards reflect digital competencies, organizations must embed lifelong learning through both formal and informal mechanisms, HR leaders should actively support employees through transparent communication, empathy and structured adaptation strategies; and special

attention should be given to demographic realities, ensuring that older employees are not excluded from transformation processes. The people who were interviewed also made it apparent that digital transformation is not just a technological problem; it is also a socio-cultural one. It requires leadership that motivates human capital in changing environment.

The evidence from these interviews supports the research objectives, automation and AI transforming HR functions and responsibilities. Moreover, digital transformation is enhancing new skills while diminishing obsolete ones, organizations are responding by protecting their human capital through training and reskilling. Also, the Azerbaijani experience illustrates both global trends, and local limitations, and both organizations and policymakers must formulate strategies that ensure workforce adaptability and competitiveness with rapid technological advancement.

6. Conclusion

To sum all these up, the study elaborated above aimed to assess the impact of automation and artificial intelligence on HR functions, formulation of job descriptions, and skill demands, specifically within the Azerbaijani business environment. The outcomes indicate that automation has diminished basic administrative tasks while broadening the strategic role of HR professionals, supporting global trends that prioritize data-driven decision-making and employee development. Within the survey and interviews, some abilities were identified as the main talents, whereas clerical and repetitive activities are considered to losing significance.

From the viewpoint of Human Capital Theory, the research illustrates that these actions by investing in reskilling, upskilling, and lifelong learning, while the extent and efficacy of these initiatives vary in a more crucial manner. Azerbaijan adheres to numerous global tendencies occurring in the world in HR digital transformation; nonetheless, the study identifies issues including labor resistance, disparate levels of digital readiness, and dependence on manual procedures in some sectors.

As promised earlier, this paper tries to counsel Azerbaijani policymakers and organizations using the results of this research. First, organizations must ensure that limited and inconsistent training and upskilling programs must evolve into more structured training programs in order to increase confidence among workforce and meet the demands of current digital era. Second, policymakers and organizations must address the skill gap issue and prepare their workforce not only for technical matters but also soft skills such as creativity and problem solving. Third, government should support digitalization initiatives by funding training programs and encouraging collaboration between public and private sectors by supporting Public Private Partnerships format.

This paper has some limitations including, sample size of research is mainly skewed toward Azerbaijan, and second the sample size is relatively small and does not enough for empirical research and high level statistical analyze.

Considering the limitations of this paper, future research should expand on both sample size and coverage. First, larger sample size will result with more diverse samples and should be conducted in at least regionally to draw reasonable conclusions. Moreover, possible future studies should integrate more advanced analytical practices such as regression analysis to identify the link between different variables of this paper.

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