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AI-DRIVEN TRANSFORMATION OF HR MANAGERS ROLE IN TRAINING OF EMPLOYEES

Final qualifying work of the 4th year student of the bachelor's program, International Management, Volkova Vera Vladimirovna

(Signature)

Scientific advisor:
Associate professor
of the Department of Strategic
and International Management
Christodoulou Ioannis

(Signature)

Nowellers-

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INTRODUCTION

People are using Artificial Intelligence (AI) more and more nowadays for different purposes. According to Forbes, within five days of its launch, ChatGPT had one million users, and between 2023 and 2030, AI is predicted to increase at a pace of 37.3% annually (Haan and Watts, 2023). AI is causing a significant change that affects not only technological fields but also healthcare, education, business, finance, criminal justice, and everyday life, and it is truly a social and technological phenomenon (Cheng, Varshney K and Liu, 2021). It is important to note that artificial intelligence has emerged as one of the 21st century's most significant technical revolutions in recent years. According to Makridakis (2017), like the digital revolution, which began in 1995, the Artificial Intelligence revolution is expected to peak in the next 20 years and likely have an even bigger influence than the combined effects of the industrial and digital revolutions. Moreover, the neural network ChatGPT has demonstrated by example that anyone can use AI in everyday tasks. For instance, OpenAI's freely available GPT-3, which exemplifies the state of the art today, generates cohesive and fluid language on a wide variety of subjects (Sokolova and Arkhipov, 2023).

Today world is experiencing a tectonic shift in the development of generative Artificial Intelligence, and it will have a significant impact on all business processes. Algorithms are integrated into apps that facilitate organizational processes as part of enterprise cognitive computing, which involves using artificial intelligence to enhance company operations (Tarafdar, Beath and Ross, 2019). Organizations are increasingly relying on Artificial Intelligence to improve operations and boost efficiency in the quickly changing business landscape of today. Using Enterprise Central Component (ECC) applications to automate routine and repetitive processes can greatly increase the speed at which information is analyzed, as well as improve the quality and reliability of the outputs (Tarafdar, Beath and Ross, 2019). According to a Forbes Advisor poll, a sizable 64% of companies think that Artificial Intelligence would help them become more productive overall (Haan and Watts, 2023). This illustrates the increasing belief in AI's ability to revolutionize corporate processes. Artificial Intelligence can also be applied in Human Resource management (HRM). According to Personio, during the next five years, 60% of corporate executives intend to improve their HR department through greater automation and Artificial Intelligence (Personio, 2023). Furthermore, an astounding 61% believe that AI will eventually replace HR professionals, particularly in light of recent developments in generative AI technologies like ChatGPT (Personio, 2023). Moreover, according to 66% of corporate executives, automation and Artificial Intelligence have a great deal of promise to solve issues like the requirement for the HR department to be more productive and efficient (Personio, 2023). The rapid application of AI in many industries proves their advantage, which should be applied in professional education. To provide quick and efficient training, deep learning networks have been considered a key area for instructional efforts (Sokolova and Arkhipov, 2023). It is worth noting the fact of application of neural networks in the system of training as an innovative method of rapid information processing, expanding the toolkit of training methods (graphics, sound, visualization), forming individual training programs, increasing the adaptability of training programs and reducing the time and labor intensity of training (Sokolova and Arkhipov, 2023).

Artificial Intelligence has the potential to transform the way businesses find, hire, and train new employees as well as evaluate and investigate opportunities for professional growth (Sucharita, 2024). Artificial Intelligence has great potential in a number of important areas in Human Resource (HR), including staff development and training. AI integration into training programs has emerged as a strategic requirement as businesses aim to upskill their employees and maintain their competitiveness. Moreover, using AI in training and development could cut down on HR participation and training duration (Sucharita, 2024). According to Guenole (2018), the most promising field is AI labeling of educational materials. The swift advancement of robotics and Artificial Intelligence has fundamentally changed how Human Resource Management is handled digitally (Chaplaev, Mazhiev and Idigova, 2023). In order to maintain the high pace of business development, new, modern technologies in the field of Human Resource Management are needed to quickly respond to the changing conditions of the external environment. HR specialists can take on the responsibility of handling routine tasks, while digital technologies can automate the process of solving production problems, providing a significant relief for business managers (Chaplaev, Mazhiev and Idigova, 2023).

The particular attention should be paid to how the digitalization of HR departments with AI affects the responsibilities and functions that HR professionals have in companies. AI technologies, such as natural language processing (NLP), machine learning, and generative AI, have revolutionized the way of approaching employee learning (Deloitte, 2016). Artificial Intelligence analyze a lot of data to find learning needs, gives custom content, and tracks progress closely. Since AI systems are flexible and rely on machine learning, the courses and material have been tailored to the requirements of the learners (Chen, Chen and Lin, 2020). Also, AI simulations and VR give real-like learning, make it more fun and help remember better (Xu and Xiao, 2020). However, big challenges come with this, including big costs for technologies, need for experts, and big changes. Also, worry for data safety, unfair AI, and moral concerns need thought and plans (Cheng, Varshney and Liu, 2021).

Although there is an increasing number of research on AI's integration into HR practices, there remains a lack of understanding on the specific effects AI-driven changes have on the changing role of HR managers related to training employees in small and medium-sized enterprises (SMEs), in which HR managers plays a crucial role in employee training. Current research mainly concentrates on big companies and frequently disregards the distinct challenges and advantages encountered by small and medium-sized enterprises. While there have been several publications on the topic of Artificial Intelligence, Hansen and Bøgh (2021) noted that the majority of these articles have been directed towards larger businesses. Moreover, the exploration of HR professionals' experiences in smaller organizations, especially in various cultural and organizational contexts, is insufficient. This literature gap indicates the necessity for a detailed examination of the subtle impacts of AI technologies on HR training role in small and mediumsized businesses, including both the advantages and challenges faced. Therefore, more empirical studies are needed to understand the transformation of HR managers role when it comes to using AI for training programs. Clossing this gap may provide HR managers with valuable insights and practical expertise to navigate the evolving landscape of AI-based training methods in many cultural and organizational contexts. While AI shows potential for transforming HR practices, its effects on the role of HR managers in SMEs, especially regarding employee training, remain unclear. By filling this research gap, small and medium-sized enterprises can receive improved guidelines in managing challenges and realizing the advantages of integrating AI in HR, leading to stronger and more resilient organizations in the end.

The goal of this study is to explore how AI-driven changes are affecting the role of HR managers in training of employees in small and medium-sized enterprises (SMEs). This research seeks to delve into the experiences of HR professionals in small and medium-sized enterprises in relation to the use of AI-driven technologies in employee training, offering valuable insights into the opportunities, challenges, and implications for HR practices within various cultural and organizational settings. The research question is: How do AI-driven technologies transforms the role of Human Resource managers in training employees in small and medium-sized enterprises

The research objectives are:

- Define Artificial Intelligence terminology and its impact;
- Review role of Human Resource Management and AI integration;
- Review HR managers' role in training;
- Review Artificial Intelligence applications in employee training;
- Explore how Artificial Intelligence transforms Human Resource managers role in training in small and medium-sized enterprises (SMEs);

• Compare Human Resource managers' experiences with AI-driven employee training in Russia and Europe.

This research is based on qualitative research methods, using in-depth semi-structured interviews. This method was selected to delve deeply into the individual views and encounters of HR experts on the implementation of AI in their training initiatives. The benefit of qualitative research is that it may explain aspects of human behavior that may be difficult to quantify (Foley and Timonen, 2015).

The structure of this research is intended to offer a coherent and organized transition from theory to real-world applications. The research consists of introduction, literature review, research methodology, empirical part and conclusion and implications. The research introduction outlines the relevance of the research, research gap, research goal, objectives of the study, research process and methodology, and the structure of the research. The literature review was conducted to establish the context and pinpoint gaps. This is then followed by a thorough explanation of the research methodology, guaranteeing consistency and the ability to replicate the study. Next, the observational results are outlined and examined. Ultimately, the study ends with conclusions, theoretical contribution, managerial implications, limitations, and suggestions for future studies.

1. LITERATURE REVIEW

This part covers existing research and studies in Artificial Intelligence, Human Resource Management, and employee training. In this part literature review is conducted in order to get systematized existing literature as well as to have a deeper comprehension of studies carried out inside the concepts, ethics and impact of Artificial Intelligence, the role of Human Resource Management and how it has been changed, the role of Artificial Intelligence in Human Resource Management, as well as the role of HR managers in employee training and how AI can be applicable in it.

1.1 Artificial Intelligence: foundational concepts, ethics and impact

Artificial Intelligence, which originated in the fifties of the previous century as an experimental science, is now at the stage of its rapid development and has already accumulated a sufficient arsenal of means and methods of its use (Anyoha, 2017). "The science and engineering of making intelligent machines" is how John McCarthy defines Artificial Intelligence (Manning, 2020). John McCarthy first used the term Artificial Intelligence in 1956 at the Dartmouth College first AI conference (Kok, 2009). The event marked the beginning of a field of study that would later transform technology. The main goal of Artificial Intelligence research can be considered the development of such software products, methods and models that will allow artificial devices to implement purposeful behavior and intelligent thinking. The development of computer systems that can mimic human cognitive functions, such as learning, problem-solving, and decisionmaking, is referred to as Artificial Intelligence. This technology goes beyond basic computation and seeks to give machines intelligence-like capabilities so they can adapt, learn, and develop on their own (Kok, 2009). Artificial Intelligence can be described as an intelligent agent, because machines can act like humans by mimicking human intelligence, and this is made possible by feeding machines large amounts of data that are validated and trained using machine learning models (Takyar, n.d.). It can also be expressed as the ability of a system to correctly understand the input data, learn from it and apply it to achieve specific goals and objectives through adaptive implementation.

In order to comprehend the genesis of the field of Artificial Intelligence, one must look into the contributions of philosophers and experts like Marvin Minsky and John McCarthy (Mariani and Dwivedi, 2024). John McCarthy is the originator of the term Artificial Intelligence (Britannica, 2023). These scientists founded in 1959 a laboratory computer science and Artificial Intelligence laboratory within the Massachusetts Institute of Technology (Haenlein and Kaplan,

2019). It was John McCarthy who formulated the fundamental principles of Artificial Intelligence, defining what was then called top-down Artificial Intelligence (Kangude and Raut, 2012). The essence of the approach was that Artificial Intelligence systems should mimic the high-level psychological processes of an intelligent being, such as logical thinking, logical inference, speech, creativity (Kangude and Raut, 2012). Marvin Minsky formulated a completely opposite approach to the definition of Artificial Intelligence, which has come to be called bottom-up Artificial Intelligence (Kangude and Raut, 2012). It is based on artificial neural networks (NN), which model various processes of the human mind at the logical level. Newer definitions of AI place emphasis on other features, such its capacity for learning or its capacity for emulation—that is, how it is built to replicate human abilities and capabilities (Castelvecchi, 2016). Even yet, there isn't a single, widely accepted definition of Artificial Intelligence.

A specific area of Artificial Intelligence, called machine learning, focuses on developing algorithms to enable computers to analyze, interpret, and make decisions using data (Russell and Norvig, 2016). Machine learning algorithms are designed in way that they will learn and improve over time. Moreover, they are not programmed to perform a specific task. Learning from data is the aim and objective of machine learning, which is used to educate machines how to handle data more effectively (Mahesh, 2020). Machine learning needs to be given experience - in other words, it needs data. The more data fed into the system, the faster and more accurate the learning. The more accurate of interaction, the more successful the task will be and the greater the predictive accuracy. Big data allows us to reveal the possibilities of machine learning more fully (Li, 2022).

Several kinds of machine learning exist, which are: supervised learning, unsupervised learning reinforcement learning and deep learning. According to Russel and Norvig (2016), without further instruction, unsupervised learning detects patterns in a stream of data and forecasts future events, while in supervised learning, the input data must first be labeled by a human. There are two basic types of supervised learning: regression, which needs the software to infer a numeric function from numeric input, and classification, which requires the program to predict which category the input belongs in. Within the field of machine learning, reinforcement learning teaches an agent how to make decisions by letting it interact with its surroundings and giving it feedback in the form of rewards or penalties (Luger, 1998). It is frequently utilized in many different applications, including gaming, robotics, and recommendation systems. Reinforcement learning describes goal-oriented algorithms that are trained to maximize along a certain dimension over a number of steps (Mahesh, 2020). For instance, they can be trained to maximum the points gained over a number of moves in a game.

Neural networks (NN) have structures and functionalities mirroring human brains leading to a computational model (Russell and Norvig, 2016). They have layers where connected nodes are arranged. Input signals are received by every node, processed by it through an activation function and then transmitted as output signals to other neighboring nodes within the network (Domingos, 2015). A form of machine learning known as deep learning uses multiple-layered artificial neural networks to teach itself hierarchical data representations (Schmidhuber, 2015). Program performance in several significant. Deep learning has greatly expanded the use of artificial intelligence in subfields including computer vision, speech recognition, natural language processing, and picture categorization (Ciresan, Meier and Schmidhuber, 2012).

Another area of Artificial Intelligence called natural language processing (NLP) focuses on how computers and human language communicate (Russell and Norvig, 2016). Originally, NLP was different from text information retrieval, which quickly indexes and searches vast amounts of text using highly scalable statistics-based algorithms (Nadkarni, Ohno-Machado and Chapman, 2011). Natural language processing is a very broad field having a lot of tasks and uses like speech recognition, text analysis, mining sentiments, machine translation, question answering among others, transformer models, word embeddings. The application of NLP techniques is seen in different fields such as virtual assistants or chatbots as well as healthcare, finance, etc., which makes it a very important area for research and development in Artificial Intelligence. One of the examples of NLP is generative pre-trained transformers (GPT). Large language models called GPT are built using the semantic connections between words in sentences as their foundation (Smith, 2023). Chatbots are automated systems that respond to simple text queries and task requests using GPT models.

On this way several problems arise, the most significant of which is that the solution's method remains unknown until the outcome is determined. Humans solve problems of this kind using their knowledge, whereas a computer usually lacks a sufficient level of initial competence. All of this suggests that the main challenge of Artificial Intelligence is to develop competence transfer mechanisms, or training of artificial devices. At the same time, it is important to realize that the results of solving of this kind of tasks, as well as the course of their solution should be "transparent" for a human and allow for explanations.

The problem of Artificial Intelligence ethics is widely discussed topic. Artificial Intelligence is being used more and more, and hazards and unexpected outcomes have been noted (Russell and Norvig, 2016). The ethics of AI imply a spectrum of questions around what is right and wrong when it comes to its development, deployment, and application. These involve a

multitude of dimensions, such as equity, responsibility, openness, confidentiality, security, and effect on the community. The algorithms used in machine learning need a lot of data. The methods employed to get this data have sparked questions around copyright, spying, and privacy.

One of the key issues in Artificial Intelligence ethics is algorithmic bias and fairness. Developers should ensure that AI systems exhibit impartiality and fairness, devoid of bias or discrimination towards certain persons or groups. An algorithm may lead to discrimination if it is biased and used to generate judgments that have the potential to cause significant harm to individuals (Berdahl et al., 2023). Another ethical consideration is transparency. When it comes to AI systems, transparency is focused on a key concept where these systems are opened up, made clear and interpretable to users and other individuals involved (Sample, 2017). This has got to do with providing distinct accounts on decision-making processes by these systems, data used in such processes as well as general operations entailed therein.

Without doubt, transparency plays significant roles including but not limited to ensuring that the users of AI-based mechanisms have confidence in them. At the same time, it need to allow users to evaluate the extent of reliability associated with such technologies against their fairness levels concerning probable consequences. Moreover, AI systems should be accountable. Creating frameworks for holding individuals and groups responsible for Artificial Intelligence system outcomes in matters involving harm or violation (Sample, 2017). Two crucial requirements for the safety and privacy of AI systems are the respect for privacy rights and the safe handling of sensitive data (Iphofen and Kritikos, 2021). Individuals' personal information can be kept away from unlawful access or dishonest handling when such strong measures as anonymization of data, its encryption, and user consent mechanisms are in place.

The rapid growth of technology is being sped up by Artificial Intelligence, which is changing not only how economies and businesses operate but also how people interact with one another in the digital age (Loureiro, Guerreiro and Tussyadiah, 2021). Renowned Human Resources researcher Josh Bersin (2018) highlights that many executive decisions are instinctive, and the use of AI can enhance their ability to make optimal decisions. Artificial Intelligence technologies help people to make the most optimal managerial decisions, their effectiveness as managers is greatly enhanced. According to Feuerriegel et al. (2024), Artificial Intelligence facilitates management decision-making by enhancing resource allocation, promoting more informed, strategic choices, and integrating smoothly with managerial abilities. The use of Al has reduced costs and increased efficiency, all of which are advantageous for societal progress, economic expansion, and human well-being (Vinuesa et al., 2020). Today, experts call informed

decision making one of the main advantages of Artificial Intelligence. A person is based on subjective feelings, not always following the rules, and Artificial Intelligence violate the established order of decision-making, and therefore it is more impartial and objective (Angerschmid et al., 2022). For business, this situation is beneficial, as heads of departments can create innovative and modern environment in enterprises.

In conclusion, machine learning has now enabled computers to analyze data and make decisions; also, various types such as supervised, unsupervised, and reinforcement learning are involved. The effectiveness of AI has been improved by the neural network-driven deep learning. Computers interact more easily with human beings using virtual assistants employing natural language processing. However, Artificial Intelligence is embroiled in a number of ethical issues that include algorithmic bias, whilst interfering with transparency. Contrariwise, if ethical issues are not considered, society would benefit greatly from reduced costs enhanced productivity through better management decision-making process if Artificial Intelligence was introduced.

1.2 Evolution and role of Human Resource Management

Human Resource Management (HRM) has its roots in the emergence of industrial social work in the 1890 (Mariani and Dwivedi, 2024). There was a shift from a unidirectional management system to a more technical management system, which led to an increase in professionalism. Michael Jucious provided one of the most well-known definitions of Human Resource Management. He defined HRM, also known as personnel management, as "the field of management that involves planning, organizing, directing, and controlling the functions of procuring, developing, maintaining, and motivating a labor force" (Shull, 1994). While according to Storey (1995), HRM is a unique approach to employment management that uses a variety of strategies to deploy a highly trained and dedicated staff in an effort to gain a competitive edge. One of the main objectives of HRM is to recognize the value of employees as human capital. HRM makes strategic investments in employees and attends to their needs. Human Resource Management includes hiring, selection, training, rewarding, including employees in communication and growth, fostering teamwork, and managing performance (Beardwell and Claydon, 2017).

Organizations can increase the value of their competitive advantage by acquiring, expanding and merging not only human capital but also organizational and physical resources and this can be achieved when organizations really work on Human Resource Management practices. In organization, Human Resource Management is the logical and strategic approach to managing

people successfully. In order to support the strategic goals of the business, it aims to maximize employee performance. According to Tiwari and Saxena (2012), due to the ability to transform other resources—such as cash, equipment, labor, and materials—into outputs (goods or services), Human Resources are the key to gaining a competitive edge.

Human Resource Management practices include a variety of activities focused on efficiently managing the human capital of an organization with the intention of reaching its strategic objectives as well as goals. Depending on the size, industry, culture, and strategic aims of the business, these practices may change. Moreover, different countries have different HRM practices, and both internal and external circumstances can have an impact on HRM practices (Tiwari and Saxena, 2012). External factors such as legal regulations, economic conditions, and technological advancements, alongside internal factors like organizational culture and strategic objectives, have a major influence on HRM practices. For example, in sectors depending greatly on technology, HR management strategies might focus on enhancing skills and adjusting to new technologies. Moreover, the rise of globalized companies has resulted in a heightened emphasis on HRM practices that cater to different cultures. Multinational corporations frequently adjust their HRM strategies to comply with the cultural norms and labor regulations of the various countries where they do business (Rosenzweig and Nohria, 1994). This includes recognizing and valuing cultural variances in aspects like communication methods, expectations for work-life balance, and hierarchical hierarchies.

Whether there is a single collection of rules or procedures that constitutes a generally accepted method of managing people is one of the unanswered topics in HRM study (Chandler and McEvoy, 2000). Pfeffer (1994) identified 16 so called "best" practices, but later they were unified just to 7 practices, which include extensive training, security of employment, selective hiring, high compensation based on the business performance, team working and self-managed teams, information sharing and decrease in the status disparity. While Redman and Matthews (1998) identified another set of practices, which has included extensive remuneration systems, meticulous recruitment and selection, teamwork, training and learning, involvement of employees and evaluations of performance connected to contingent incentive schemes. Because Human Resources are often underused and because HRM methods may have an impact on employee abilities and motivation, Bailey made a case for the implementation of encouraging HRM strategies (Bailey, 1993).

An important person in a corporation who is in charge of managing the whole Human Resources department is the HR manager. Among other duties relating to Human Resource, their roles entail overseeing such areas of the employee lifecycle as staffing, compensation, directing and designing training and performance evaluations. Six roles of HR managers were defined by Ulrich et al. (2012), which are strategic positioner (supports the creation and application of corporate strategy), credible activist (completes tasks and makes wise business selections), capability builder (assists in developing and making sure that competencies align with organizational principles), change agent (fosters organizational ability, surmounts opposition to change, and guarantees the required resources), Human Resource integrator (starts HR procedures and incorporate them with business goals), technology advocator (uses social media to assist others and has a positive impact on information management).

Digital technologies have caused constant and quick changes in an organization's external environment, which has raised the relevance of HRM and formed the demands of modern businesses in terms of the duties and objectives of its HR managers (Torrington, 2009). The strategic role of HR managers includes performance, staffing and change-management objectives, while their operational role includes administration and reputational objectives (Torrington, 2009). HR managers contribute to the organization's strategic objectives by forming performance objectives from HR practices. They do so by designing and implementing systems for performance evaluation meant to monitor and improve employee performance. Strategic staffing, future talent needs forecasting and recruitment strategies development for attracting and retaining best talents fall under the responsibilities of HR managers (Christensen Hughes and Rog, 2008). Human Resource managers also play a vital role during transitional periods in organizations through communication facilitation, training as well as employee support. In addition, HR managers control various Human Resource issues on a daily basis such as filing system records for staff members, handling payrolls and benefits, and checking if labor regulations are being followed (Mahapatro, 2021). It is their duty as well to form guidelines concerning HR processes which would make for good administration that is effective. Moreover, HR managers also manage the organization's employer brand and reputation, developing employer branding initiatives that bring in top talent and make the organization a preferred employer (Cascio and Graham, 2016). In digital era one more objective arises such as digital HRM. Promoting, implementing, and overseeing the effects of digital technologies is necessary to fulfill HRM's operational responsibilities while cutting costs, stepping up oversight, and improving employee accessibility (Chytiri, 2019).

Table 1. Roles and objectives of HR managers bellow outlines strategic elements like staffing, performance, change management, and digital HRM, as well as operational aspects such as administration and reputational objectives.

HR manager's role **Objectives** Description Forecast future talent needs and develop recruitment Staffing objectives strategies to attract and retain the best talents. Design and implement systems for performance Performance objectives evaluation to monitor and improve employee performance. Strategic role Facilitate communication, training, and employee Change-management support during transitional objectives periods in the organization. Incorporate digital technologies into HR Digital HRM objectives practices to enhance efficiency, communication, and decision-making. Maintain filing systems for staff records, handle payrolls Administration objectives and benefits, ensure compliance with labor regulations. Operational role Manage the organization's employer brand and Reputational objectives reputation, develop employer branding initiatives.

Source: [Compiled by the author]

HR makes a direct contribution to increasing the efficiency and competitiveness of the organization. With the help of digitalization, new trends in HRM appears. First of all, in the conditions of digital transformation of the economy the role of personnel as the main strategic resource is increasing. The role of personnel as the main strategic resource and source of competitive advantages of enterprises is increasing. This determines the need to develop effective solutions in the field of HR-management, allowing combining the economic goals of business and social well-being of employees (Ellerby and Morel, 2023). Secondly, a modern HR system is designed to solve a whole set of economic problems: from optimizing personnel costs, to increasing its productivity and ensuring maximum return on investment in human capital. As the

analysis has shown, HR has a wide range of tools to improve the efficiency of Human Resources, which has a direct impact on the financial performance of organizations. Thirdly, no less important are the social objectives of HR in the field of ensuring the rights and guarantees of employees, formation of a favorable organizational environment and culture, as well as development of professional and personal skills. Their solution also makes a strategic contribution to sustainable business development by increasing motivation, loyalty and engagement of personnel. Fourth, the active development of new technologies (digitalization, Artificial Intelligence, big data, etc.) has a transformative effect on the evolution of the Human Resource Management system (Rožman, Tominc and Štrukelj, 2023). Huge, ever ever-increasing volumes of information dictates the need to use them, and the tools of traditional analysis appear in these conditions insufficient and in some cases not effective at all (McKinsey, 2023).

In conclusion, HRM has greatly changed, moving from its beginnings in industrial social work to become an essential strategic and operational role in enterprises. HR managers are essential in leading HRM practices, handling both strategic tasks like aligning HR practices with organizational goals and managing change, as well as operational duties like HR administration and employer branding. Ideas such as the significance of HR's strategic role and the importance of engaging employees have influenced the development of HRM, highlighting its contribution to meeting organizational goals and securing a competitive edge. Experts have recognized top HR strategies, and HR professionals need to adjust to contemporary obstacles, such as incorporating digital technologies for efficient operational tasks. In today's fast-paced business environment, HRM plays a key role in maximizing Human Resources, promoting a favorable work atmosphere, and maintaining organizational achievements.

1.3 The role of Artificial Intelligence in Human Resource Management

Automation of HR departments began few years before pandemic and made another shift. Pandemic has significantly accelerated the process of HR modernization, especially in view of mass transition to remote work (Li, 2022). The fast transition to working from home for many employees worldwide required HR departments to quickly adjust and come up with new ideas. The HR processes that were originally used had to be redesigned to fit the needs of remote work environments.

Artificial Intelligence is becoming a strong tool in boosting Human Resources and opening up new opportunities at work. The significant impact AI can have on improving HR practices is

immense, providing innovative solutions that can simplify procedures, enhance decision-making, and improve overall employee satisfaction. AI allows organizations to incorporate new technologies across various tasks, from automating routine processes to making more precise hiring choices, making it a crucial component of the HR role (Thomas, 2023). Automation and digitalization have changed how tasks are done and the responsibilities of jobs, leading companies to reconsider their HR plans. AI, as part of this digital progress, can help with various HR issues. HR teams are now required to do more than just handle administrative tasks and play a key role in achieving a company's objectives. This involves concentrating on finding new talent, keeping employees engaged, providing training and advancement opportunities, and planning the workforce strategically. Nonetheless, the large amount of data produced by these activities has made it harder for HR experts to make prompt and effective decisions (IBM, 2023).

Artificial Intelligence technologies can be merged with HR functions to offer innovative solutions to employee HR-related problems (Maskey, 2022). The integration of AI is not merely a technological advancement but a transformative journey that elevates HR to a strategic cornerstone of organizational success (Peterson, 2019). By embracing AI and navigating its ethical challenges, HR professionals and organizational leaders can harness its potential to create a future where the human element, combined with Artificial Intelligence, leads to more effective HR practices and ultimately, a more productive and satisfied workforce (Peterson, 2019). Peterson (2019) further described its usefulness to employees, HR professionals as well as the organization and concluded that AI replaces the routine work in HR department with less human intervention. In addition, Yawalkar (2019) reported how AI helps to reduce workload and improve workplace efficiency. Moreover, Ganatra and Pandya (2023) stated that the possible revolution in human resource management procedures inside firms might come from the incorporation of AI into HR processes.

Generally, AI has transformed HR significantly by providing a lot of opportunities for increased efficiency and improved outcomes. AI-enabled data use cases include candidate competency assessments, interview scheduling, candidate engagement, employee self-service tools, virtual assistants, onboarding, employee career planning, candidate sourcing, and initial screenings (Epeyc, 2021). For talent to come to a company, it needs to continuously improve its candidate engagement process, while it is important not to delay the hiring process.

AI can make HR more efficient in many ways like screening resumes, scheduling interviews, and even facilitating new hires. It allows HR professionals to focus on employee engagement as regards talent development and retention strategies rather than being occupied with routine tasks. AI can also aid in candidate sourcing by examining social media profiles and networks to pinpoint potential candidates meeting job criteria (Thomas, 2023). AI platforms can

further assist in evaluating employee performance, predicting attrition rates, and providing HR professionals with predictive analytics for workforce strategies. Artificial Intelligence is becoming an increasingly important part of enterprise hiring and training, as such tools make recruiting and working with candidates easier. In the new decade, enterprises should look to analytics to improve the experience in job posting. Enterprises should clearly understand the site is running and how many applicants it brings in. Artificial Intelligence and machine learning based systems track the effectiveness, reach and ranking of applicants.

In recruiting, AI is crucial for assessing candidates' non-cognitive qualities like soft skills and cultural compatibility (Forbes, 2023). AI in talent acquisition allows faster and more accurate applicant evaluations. Machine learning can scan many resumes to find excellent applicants, reducing the time required to fill available positions. AI also enhances HR operations by enhancing the employee experience through chat-bots and virtual HR assistants, providing swift responses to common queries (Maskey, 2022). AI-based analytics in HR enable leaders to base decisions on workforce planning, employee engagement, and talent retention on data. These tools offer a proactive and strategic method for managing HR, helping organizations deal with issues before they escalate. AI is taking over many recruiting processes. For example, Sever.AI will be able to evaluate a resume, contact an interested person and conduct a business conversation, and analyze a video interview (Li, 2022). It only takes 5 seconds to process one questionnaire, while a human takes at least an hour. On VCV, a platform for candidate screening, tools are presented: testing with anti-cheating protection, automated responses to each response, and video interviews video interviews, which saves 40% of working time and can increase number of interviews by 4 times (VCV, n.d.).

Existing generative AI models are being used to assist HR professionals in all tasks related to writing texts, for example, recruitment is used in generating position descriptions, interview questions, candidate letters, and other things related to candidate communications. The examples of the use of generative models by HR specialists in day-to-day activities are writing job descriptions, helping to prepare presentations, helping to create cover letters and recommendations for employees (Mehrotra and Khanna, 2022). Moreover, Sber uses Artificial Intelligence for recruiting and hiring candidates and tracks employee performance, provides recommendations on how to improve it. Search for employees not by filters, but search for similar employees (for example, you need an employee similar to Ivan Ivanov), as in many cases this is more convenient (Tadviser, n.d.). The AI can engage an HR professional to interact with the individual. A chat-bot can help each employee receive professional guidance and mentoring. It also allows HR to know about the ROI of each employee's career growth.

Moreover, Kelly (2023) stipulates that AI begins to be instrumental in virtual interviewing which is being used by organizations for better connection with jobseekers at a lower cost. Additionally, AI can be used to generate unbiased, AI-driven learning programs and digital assistants dedicated to facilitating onboarding. Through automated, targeted programs and modules, new hires can be introduced to the culture, values, and mission of the company. Implementing AI in HR processes lightens the load for HR teams and speeds up the onboarding journey for new hires. With AI taking over document processing, everything from forms to training plans becomes more efficient and personalized. Integrating AI into the onboarding process helps employers streamline transitions and enhance employee satisfaction. Employee onboarding plays a crucial role in ensuring new hires effectively assimilate into an organization's culture, values, and operations (Kivinen, 2023). By customizing learning, using virtual helpers, adding games, providing smart content, tracking progress, and using future predictions, companies can improve their new employee training. This will result in more engaged, productive, and lasting employees. By utilizing AI-based assessment tools, candidates can be evaluated against more granular criteria giving employers a more holistic view of potential hires. Moreover, AI-powered applicant tracking systems (ATS) are capable of quickly finding and prioritizing qualified candidates—thus reducing the hiring process time to a great extent (World Economic Forum, 2016). AI has capabilities which can transform Human Resource department into an automated process that can give insights on onboarding that matters most while giving these professionals tools they need.

Additionally, AI can improve employee training by offering tailored learning experiences and pinpointing and addressing skill shortages in the workforce. AI-powered chatbots are becoming more common in HR units to manage basic queries and offer immediate assistance to staff, handling common questions, handling leave requests, explaining HR policies, and assisting employees in self-service portals. In the field of personnel training there are also many tools available. One of the simplest is the use of chatbots, which provide information and conduct knowledge checks through surveys by means of surveys. For example, the company Leena Ai has developed its own chatbot, which is aimed at staff development and training, incorporating machine learning, Artificial Intelligence and natural language processing language (McKinsey, 2023). However, there are also more complex systems. For example, WPP employees use video tutorials with Artificial Intelligence as an instructor (WPP, 1999-2024). It looks and behaves like a real person, lectures in three different languages, and addresses each of more than 50,000 students by name. Creating 20 video with the use of technology dipfake (deep fake) cost \$100 thousand, and the cost of creating a video with real actors would be ten times more (WPP, 1999-2024). Artificial Intelligence can also be used to verify the knowledge obtained. Nornickel is

already implementing a system of automatic control over the fulfillment of tasks, which analyze the work of employees during testing (Nornickel, 2024).

There are different opportunities and advantages of using tools based on AI-based tools. It offers increased efficiency and productivity of core business employees and HR specialists. It helps to reduce routine work and will allow HR specialists to focus more on strategic tasks, such as improving the speed and quality of recruitment through Artificial Intelligence. Moreover, AI helps to improve decision-making processes in HR management. For example, using workforce development and hiring data to make decisions about promotion or hiring (Rožman, Tominc and Štrukelj, 2023). Gaining employee experience through the use of internal services based on Artificial Intelligence is another advantage. This may include a system of recommendations for training and development employees. Artificial Intelligence promises to change the rules of the game for HR departments by optimizing processes so that HR can work more efficiently. However, it should be noted, that there are risks associated with Artificial Intelligence (Rožman, Tominc and Štrukelj, 2023).

The remote model allows to expand the available talent pool for HR beyond the geographical location of offices. An important trend in recent years has been digital transformation of the system of training and continuous development of personnel based on online technologies (Marler and Boudreau, 2017). Distance education platforms such as Coursera, Universalism, Lectorium and others are actively used for continuous improvement of the qualification of employees. This trend will only gain momentum, forming a flexible model of HR training. In light of the above, it can be emphasized that the use of the latest technologies is a key trend in HR development in the coming years. It makes it possible to multiply the speed and quality of work with personnel, freeing up resources for solving strategic tasks.

Automating tasks allows HR managers to focus on strategic aspects like employee engagement and talent development. AI enhances HR practices through sentiment analysis of employee feedback, comments, and social media posts to gauge sentiment and address potential issues (Bhatt and Muduli, 2022). AI aids talent retention and succession planning by analyzing performance data to predict employee turnover and identify high-potential leaders (Ellerby and Morel, 2023). While diving into AI operational efficiency and automation, it's key to do it with strategy in mind. Teams need to assess how new technology will impact their operations and ensure everyone is familiar with it. Collaboration between humans and technology is crucial, as it combines their strengths for optimal results. Ultimately, the goal is to improve business processes through integration and transformation. Nevertheless, in order to fully maximize the advantages

of AI efficiency and automation, it is important to incorporate strategic planning and make collaboration between humans and machines better (Manyika and Sneader, 2018). Human Resource specialists can leverage AI to automate and optimize administrative tasks, allowing them to focus on more strategic aspects of employee development, such as providing mentorship, coaching, and support (Al – Ansi et al., 2023). According to AI has the potential to revolutionize employee training and development by offering personalized and dynamic learning experiences (Bhutoria, 2022).

However, Li (2022) and Seyedan and Mafakheri (2020) stated that most organizations are not fully prepared to implement AI in their HR functions, while Yawalkar (2019) reported that it is difficult to find suitable candidates to work with AI tools and AI limits HR departments to make decisions as the technology seems to take over this aspect. Yet, incorporating AI in HR faces challenges like ethical concerns regarding bias and privacy, prompting questions about fairness and openness. HR experts must handle these issues to guarantee AI benefits the workplace. If the first applicant has experience of working with Artificial Intelligence and services based on it, and the second does not, the first candidate is more likely to be selected for the vacancy.

This part provides examples of successful implementation and development of Artificial Intelligence technologies as a qualitatively changed methodology of work with personnel. Today, AI offers many benefits in Human Resources management, helping companies to expand and efficiently utilize of their resources (Thomas, 2023). The use of HR technology has sped up the automation of HR processes, especially during the pandemic, underscoring the importance of AI in improving HR operations. Despite the considerable advantages offered by AI, ethical issues continue to be a challenge. Efficient collaboration between people and technology is crucial for achieving the best results in streamlining recruitment, onboarding, and training. Automating administrative tasks allows HR professionals to dedicate their focus to strategic employee development. In general, strategic planning and working together are crucial for optimizing AI's effectiveness in Human Resources.

1.4 Human Resource Management and employee training

In the constant struggle for competitiveness, top management realizes the role of knowledge, competencies and skills of employees for successful implementation of current tasks and strategic plans (Freifeld, 2019). Qualified personnel who are able to quickly master new technologies and quickly solve issues of any complexity help achieve business strategy goals. The majority of businesses in today's market admit that having employees with proper training is

essential to their success (Ozkeser, 2019). Training costs are perceived as a long-term investment in human capital rather than an item of unwanted expenses. Businesses that implement training programs provide their staff members the information and abilities they need to perform better and bring substantial advantages to the company (Tracey and Hinkin, 2006).

In the contemporary definition, Human Resources management include hiring, selecting, and maintaining a workforce; on the other hand, it also covers rights-granting, development, training, and assessment (Bennett and Lemoine, 2014). In organizations, there are Human Resource managers who are important when it comes to training and development of employees. Training programs are an ongoing Human Resources management function that help workers adjust to new circumstances or surroundings and improve their ability to make decisions and solve problems in them (Ozkeser, 2019). In any company, someone has to fulfill the staff development function. Where there is no separate development specialist, this role is often forced on managers of the HR department. Not only does this distract them from their core tasks, but it is rarely effective: training becomes spontaneous, unstructured and often fails to deliver the expected results.

Sepahvand and Bagherzadeh Khodashahri (2021) conducted a study on how job engagement moderates strategic Human Resource Management (SHRM) practices on employee retention. Study findings underscored the role of job engagement in enhancing employee retention through SHRM practices. According to Abugre and Nasere (2020), job involvement mediates between HR practices and multinational corporation employees' performance such that high-performance work system would mediate the variables. The link between training/development that is positive towards performance cannot be overlooked; it underscores how significant is training when it comes to raising workforce effectiveness, since it is necessary in achieving better workforce effectiveness. In the hospitality sector humans as staff who provide services are the major resource (Khuong Mai and Phuong, 2020). The relationship between Human Resource practices, employee motivation, and employee loyalty was investigated in Vietnam, using the sector above (Khuong Mai and Phuong, 2020). Their findings showed that Human Resource Management practices played a critical role in influencing employee motivation and loyalty.

It was also noted that training evaluation is essential for enhancing staff output. Mehale, Govender and Mabaso (2021) found that human research development (HRD) evaluations measure performance improvement the training evaluation framework for performance improvement proposed by them should measure performance improvement effectively. When employees are satisfied while working there is less likelihood of them seeking employment elsewhere thus reducing turnover rates. Training also impacts on employee retention significantly.

Elsafty and Oraby (2022) discussed this concept of HRD as a tool for improving employee satisfaction, them putting into consideration the cordiality between training and development, job satisfaction, performance on the job and effective communication all aimed at reducing the level at which employees are moving out of the organizations. The research showcased how important it is to train employees when it comes to retaining them at workplaces.

Taken as one, the research under review underscore the necessity of employee training in order for which their efficiency levels shall rise, motivation heightened, and they shall remain loyal and committed to the employer. Human Resource managers have a key role in ensuring that through training programs, employees are able to deliver positive results in their organizations.

Employees can become more efficient and productive in their careers when they enhance their skills and knowledge, they do better now, but also get ready to face future challenges and advancements in the career. Employees may perform better now and in the future by becoming more efficient workers, which can be achieved via training and development (Poe, 2003). Such training programs may include wide range of areas starting from technical skills that are specific to certain job positions and ending with soft skills like communication or leadership. Employees who participate in training programs—the costs of which are paid for by the companies —may feel more privileged and develop their knowledge and abilities (Ozkeser, 2019). This can bring about increased morale and job satisfaction when employees feel that their improvement is being catered for by the employers. Employees can increasingly provide assistance to the company's goals and objectives by improving on their skills through training.

A critical role that is played by employee training is it enhances employee performance and achieves the goals set in the organization. In a variety of fields, including public administration, higher education, and banking, it has been revealed by research that training and development significantly influence employee performance. Based on employee attitudes and productivity outcomes Langan-Fox and colleagues (2002) pointed out how important it is for evaluating training programs. According to Ankrah (2017), training and development can lead to a positive improvement in job performance among employees, even though it might be difficult to organize training programs effectively. Rajeswari and Palanichamy (2014), on the other hand, have underscored how training can play a crucial role in boosting supervisors' and executives' efficiency in the public sector. Moreover, the research done by Bijumes and Kristanto (2019) is about the use of resumes as a training and development model to achieve certain objectives within a company.

Employee training is a type of education that is specific to the demands and activities of the workplace, as opposed to conventional education. In order to help its employees acquire the information, abilities, and behaviors necessary for successful job performance in the near or long term, a corporation may designate training as a deliberate endeavor (Maršíková and Šlaichová, 2015). Three types of personnel training are distinguished (Campbell, 1971): professional training, aimed at obtaining knowledge, skills and abilities that will help to fulfill specific tasks within a position; advanced training: employees acquire additional knowledge and master competencies that are necessary for career advancement or in connection with changes in requirements to professional activity; retraining, employees acquire new knowledge and master certain competencies in case of radical change of requirements within job descriptions. A separate form of personnel training includes adaptation and induction activities. For example, production briefing for quick adaptation of an employee at the workplace. Newcomer is briefed about the company, the peculiarities of the work of the unit, equipment, safety, work techniques, corporate culture.

Methods of personnel training depend on the goals and objectives of the company (Raheja, 2015). The particular requirements and goals of the training program determine the strategy to be used. The goals of the training may include improving technical skills, developing leadership skills, enhancing communication, improving problem-solving skills. There is a large range of techniques that may be applied in the training environment and categorized based on the locations of these educational activities. Moreover, there is a possibility to merge certain techniques in order to get a higher performance or they can complement each other.

Methods of employee training can be divided into two main groups: on-the-job and off-the-job. On-the-job training methos happen where people actually work, so they're learning while they are doing their jobs as usual. While off-the-job training methods involve training programs or sessions for the much involved are usually carried out in environments other than offices and involve some dedication. Although on-the-job training methods are increasingly utilized by managers and administrative personnel as well, they are traditionally employed primarily for employees who perform manual labor (Maršíková and Šlaichová, 2015). Moreover, on-the job training can be provided in two forms, which are general and specific training at the workplace. In the research conducted by Raheja (2015), on-the-job training methods include coaching, mentoring, job rotation, job instruction technology, apprenticeship, understudy, while off-the-job ones include lectures and conferences, vestibule training, simulation exercises, sensitivity training, transactional training.

Training and development play a crucial role in improving employees' skills and making sure they can adapt to their changing job requirements. There are two main types of training techniques: on-the-job training and off-the-job training. Every approach has unique objectives, traits, formats, lengths, feasibility, and effects on worker involvement. Table 2. Comparison of on-the-job and off-the-job training methods offers a comparison of on-the-job and off-the-job training techniques, both crucial elements of a company's training and development plan. Having knowledge about the distinctions between these two methods allows organizations to customize their training programs to achieve particular objectives, boost employee competencies, and enhance overall performance.

Table 2
Comparison of on-the-job and off-the-job training methods

Training method	On-the-job training	Off-the-job training
Goal	Develop skills while performing actual tasks	Acquire knowledge or skills outside of the regular work environment
Characteristics	Learning by doing, immediate application of skills, real-world context	Structured curriculum, often conducted away from the workplace, broader theoretical understanding
Forms of training	Coaching, mentoring, job rotation, job instruction technology, apprenticeship, understudy	Lectures and conferences, vestibule training, simulation exercises, sensitivity training, transactional training
Duration	Often ongoing or intermittent, integrated into daily work	Typically, discrete sessions or programs, scheduled separately from work duties
Practicality	Directly applicable to job tasks and responsibilities	Provides a broader perspective and theoretical foundation, may not always directly translate to job tasks
Employee engagement	Promotes engagement through active participation in real work scenarios	Encourages engagement through exposure to new ideas, concepts, and networking opportunities

Source: [Compiled by the author]

One of the popular training methods nowadays is online personnel training. Electronic learning, or e-learning, encompasses a broad range of software and procedures intended to provide education via electronic channels (Wijakkanalan et al., 2013). A company creates its own training portals on which it places training materials, presentations, video lessons, lectures, e-courses. Employees get access to the library and databases with industry materials. They receive training at a time that is convenient for them and make their own schedule of classes. This form implies obtaining new knowledge without taking time off from work. Remote training of personnel is

possible thanks to the development of digital technologies. The method is used to implement professional development programs, for trainings and courses on the basis of higher education. Teachers and students communicate online.

Secondments provide opportunities for hands-on experience and skill development which help individuals to explore careers, grow their networks and build their resumes, while on the other hand helping organizations to identify talent, gain fresh perspectives or may lead to future hires. Term secondment is defined as the temporary movement or 'loan' of an employee to another part of the organization (internal secondment, often involving a specific project) or to a separate organization (external) is increasingly recognized as valuable for both employee and organizational development (Randstad, 2019). Employees are assigned to work in another division, including another city or country. First, a training period is determined. The employee is assigned complex duties. The method is used as a form of training or in case of employee turnover. The employee gains additional knowledge and experience and is usually promoted upon return. When a leader is appointed to a permanent position overseas as the next rung on their career ladder, many firms use the word secondment to describe the arrangement (Renshaw and Holland, 2013).

One leadership tactic that benefits staff members is delegation and complication of tasks, which gives them a say in decision-making, boosts their confidence, and promotes improved connections and communication within the team (Ugoani, 2020). The head of the company delegates part of his functions and powers within a particular project to his subordinates. The tasks gradually become more complex. The method helps to acquire managerial skills, the ability to make decisions. After training, the employee receives a promotion.

Mentoring involves training a newcomer by an experienced employee. A specialist who has been working in the company for a long time is assigned to the newly hired employee. This helps to learn new knowledge, acquire competencies and certain experience in the professional sphere, and achieve personal growth. The mentor accompanies the newcomer for a year or longer. The development of attitude is the main goal of this training (Raheja, 2015). Another method is coaching, which is combined with mentoring. A coach helps a new employee to develop and utilize his or her potential. The coach can be from the same company (internal) or external, specially invited. It aims to concentrate on the weak areas and aids in their rapid identification. It also has the advantage of allowing theory knowledge to be used practically (Raheja, 2015). Mentoring and coaching provide personalized support and help people to improve their abilities, confidence and job opportunities in a same-oriented, collaborative environment in the organizations which ends in high employee satisfaction, sticking to the workplace for long and general success of the organization.

Gaining expertise in a different setting is often associated with the term shadowing. The idea is that a less experienced employee or a newcomer copies the actions of an experienced specialist. The form is used for young specialists and graduates of educational institutions for successful adaptation and entry into the profession. Through the process of shadowing, two people are paired up and one spends a day (or another predetermined amount of time) observing the other (Renshaw and Holland, 2013). The process of assigning an experienced worker to assist a newly hired employee with their onboarding is known as buddying (White, Clapton and Cook, 2020). One of a buddy's duties is often to assist the new hire in becoming acquainted with the people, procedures, work environment, and culture of the company. The essence of this method of personnel training is the joint work of two successful and equal employees. Both parties' benefit from each other's unique experience. Within a single project or within a company, a working group can be created that includes employees from different departments.

Summing up, comprehensive number of research underlines how crucial modern enterprises find employee training and development. When it comes to improving job performance and boosting worker's contentment as well as ensuring organizational being competitive by enhancing employees' long-term allegiance, training strategies come up as crucial investments in terms of Human Resources. The delineation of different training techniques, from old to modern techniques of the on-job training and other e-learning; is an explicit example that depicts adaptability of training methods towards varied organizational requirements. Additionally, it is confirmed that mentoring, coaching and shadowing are effective ways of enhancing individual ability in a career path which in turn enables employees to be empowered under a remarkable team approach leading to enhanced organizational performance. Taking a holistic approach to developing workers ensures that as of now, there will be an increase in output and the people can also gain abilities that will enable them face various issues as well as changes in days to come hence giving rise relevancy which is long lasting in organizations even when operating across markets which are dynamic.

1.5 Application of Artificial Intelligence in employee training

Artificial Intelligence has been seamlessly incorporated into the learning function of organizations, allowing employees to easily enhance their skills and adapt to changes in the business landscape at a faster pace (Pavitra and Agnihotri, 2023).

There are several ways in which Artificial Intelligence can be used in employee training. One of the most hope-filled applications of AI in corporate training is the ability to develop personalized learning encounters for each individual employee. By examining data about every

learner's aptitude, knowledge and style of education, AI can identify customized learning trails and materials that respond to their peculiarities. This strategy helps keep employees highly motivated while at the same time engendering a sense of belongingness to them through imparting only those skills that are relevant to their job descriptions. According to Chen (2023), adopting AI-based training can successfully compensate for the absence of individualized instruction. By intervening in the training process, AI systems may offer individualized instruction, enhancing the training impact. Employee development using machine learning will have a strong impact on employees' willingness and motivation to learn.

Another application of AI in corporate training involves developing intelligent tutoring systems (ITS). ITS are software programs that emulate human tutors and offer personal teaching experience to learners (The Princeton Review, 2024). These systems will adjust themselves to suit the pace and comprehension level of a learner by delivering feedback and guidance as needed. They may be particularly valuable in instances where live instructors are not available or during remote training delivery. According to Lin, Huang and Lu (2023), one benefit of integrating AI and ITS into education is the capacity to provide individualized learning experiences that are tailored to the own learning preferences and styles of a learner. Teachers can adjust their teaching strategies and approaches, or offer support or intervention in response, by using AI systems to give them data-driven insights regarding performance, emotions, and engagement levels.

In addition, it should be noted that Artificial Intelligence is also utilized in carrying out assessments and evaluations automatically during corporate training exercises. With an analysis of trainee performance data, impartial feedback on strengths and weaknesses can be given by AI systems based on its analysis hence trainers can detect areas needing additional support while students keep track on their progress over time. According to Goel and Joyner (2017), Artificial Intelligence is a very potent tool that may assist instructors in fulfilling their role while dealing with a big group of learners by enabling regular feedback to be sent automatically to them. In their course, they have put up a system where students may instantaneously view their scores and receive comments from the graders. In order to provide feedback and modify the subsequent assignments based on that input, Choi and McClenen (2020) present their AI system for formative assessment, which automatically grades students.

What is more, AI can be used to analyze massive amounts of data that are created during company training sessions. This data includes metrics on trainee performance, feedback from surveys and all other kinds of information that this might entail. Such an analysis would help organizations, by providing significant insights into the effectiveness of their training programs in

an effort to identify areas they could improve on. Therefore, by using data to drive decision-making processes, institutions can optimize the returns on their training investment as well as ensure it is maximized for every dollar spent on training. In order to assess the success of training initiatives and track the advancement of learners, analytics is also essential. Businesses may assess KPIs including completion rates, skill development, and the application of acquired knowledge in practical settings by utilizing advanced data analytics (Davies, 2024).

Table 3. Application of AI in employee training provide the different ways in which Artificial Intelligence is utilized in employee training, demonstrating the ways AI can improve the learning and growth procedures in companies. As artificial intelligence advances, its incorporation into training programs provides important benefits in terms of customization, productivity, and efficiency.

Table 3

Application of AI in employee training

Application of AI in employee training	Description
Personalized learning encounters	AI analyzes data on each learner's aptitude, knowledge, and learning style to develop customized learning paths and materials. Keeps employees motivated and engaged.
Intelligent tutoring systems (ITS)	Emulate human tutors, adjusting to learners' pace and comprehension level. Offer feedback and guidance. Particularly useful when live instructors are unavailable.
Automated assessments and evaluations	AI analyzes trainee performance data to provide impartial feedback on strengths and weaknesses. Helps trainers detect areas needing support and allows trainees to track progress.
Data analysis for training effectiveness	AI analyzes data from training sessions, including performance metrics and feedback, to provide insights into training program effectiveness and areas for improvement.

Source: [Compiled by the author]

Dellarocas (2023) stated that generative AI is expected to significantly affect learning and growth within the organizations. A person's learning style, speed, and areas of strength and weakness may all be evaluated using generative AI. It may design a special, personalized learning route for every employee using this data. What is more, the AI is able to search continually for

fresh data, updates, and industry trends. It may then include this data in the training materials so that the material is always current and applicable. Moreover, various and incredibly realistic training simulations may be produced using generative AI. The real-world situations that employees could go into at work can be modeled by these simulators. Furthermore, the AI is capable of analyzing performance data to pinpoint areas in which an employee may be having difficulties. To close these skill gaps, it might then provide more resources or alter the learning route. During training sessions, real-time feedback may be given using generative AI.

The effectiveness of using neural networks in training through various applications is due to the following: personalized learning, automation of checking completed tasks, identification of students' abilities and talents, analyzing the emotional state, emotional intelligence of existing and potential employees, automatic translation. With the ability of neural networks to analyze individual learning patterns as well as preferences, it has been possible for students to have learnings that are personalized according to their own likes hence being able to addresses each person's requirement. Systems such as CogBooks rely upon this feature for changing learning resources as well as rate-setting in order to ensure improved educational accomplishments (CogBooks, 2021 - 2024). Grading procedures such as those used by Gradescope rely on neural networks to grade automatically (Singh A. et al, 207). This way, students get other we expect feedback in time and fast without teachers wasting their time on this. Neural networks in tools like TALENT work by evaluating capabilities of different pupils like strength, weakness or talent so that we can continue giving specific assistance as well as direction needed (Sokolova and Arkhipov, 2023). Neural networks can infer the emotional states of people by analyzing their facial expressions, voice tones and written statements (Rashid, 2016). The capability is applied in Emotion Sensor, for example, which actually assesses employee's emotional intelligence hence supporting individual learning needs and organizational behavior. Transactional analysis consists in a series of phenomena, processes, or relations that occur periodically or are repeated again and again. Sophisticated algorithms are used by machine translation services such as HIX Translate that rely upon neural networks enabling one to translate texts to other languages with high accuracy thereby enabling global collaboration and knowledge accessibility (Raghunath, 2024).

Analyzing the experience of development of modern educational technologies, it should be noted the role of neural networks in the process of learning and formation of a personal model of learner and instructor, their involvement in learning by recognizing emotions and developing a career trajectory. In this regard, based on the application of neural technologies, it is possible in the future their integration into multi-component smart - training systems, including biometrics of the trainee, the level of formed competencies, analysis of completed work and monitoring of

information security incidents. With the help of neural networks, it is possible to carry out qualitative analysis of input information to eliminate errors caused by the human factor, which, according to some experts, should significantly facilitate the work of employees of training centers, relieving them of complex and routine tasks (Хабибуллин, Азовцева and Гареев, 2023).

There are benefits of using Artificial Intelligence in training. The use of AI in Human Resources enhances employee training and facilitates professional development and retraining of employees. According to Bespalko et al. (2018), AI makes training adaptable, allowing training courses to be created in a more customized way. For example, it can interpret video instructions into stories for employees. Moreover, it can increase completion rates. AI can provide significant preparatory content in ideal learning constructs for company employees. AI can collect data about the history of employees' individual learning styles and analyzes it and then uses the information to suggest the most appropriate method, prompting more productive ways of learning. Employee learning and development initiatives can benefit from the application of AI as well. AI systems can detect knowledge gaps and suggest training courses to close these gaps by examining employee data (Masum et al., 2018). These systems can uncover trends and disparities that indicate areas where individuals are not proficient or require more training. For example, an employee having trouble with data analytics may be given recommendations for pertinent classes in that field. By tailoring learning experiences to each employee's unique needs, AI-powered learning systems can enhance learning results. Another benefit of AI in training is it can automate the onboarding phase by offering new recruits individualized training and development packages (da Silva et al., 2022). Customized information is sent to new hires, facilitating a more seamless onboarding process. For example, a software engineer would focus on coding techniques, while a salesman might receive training modules specifically related to client relationship management.

However, given the benefits of using neural networks in employee training, risks in cybersecurity persists. Chen (2023) stated that management issues related to cost, data security, legal hazards, job displacement, equity, unfavorable attitudes, and measuring training results are brought on by AI-based training. The problems of using neural networks in personnel training can be highlighted, which are determined by the modeling of adaptive educational programs (Махметова, Кублин and Шарапов, 2023): the issues of building an optimal model of neural networks are insufficiently studied; the criteria of optimality of the trajectory of personnel training for a particular target audience depending on the industry, purpose, format of coverage of competence levels, forms and tools of training are insufficiently defined; the insufficient level of qualification of the tutor, capable of ensuring safety and efficiency of the training; the insufficient level of qualification of the tutor, capable of ensuring safety and efficiency of the training. Also,

one of the difficulties of widespread use of neural technologies is their cost. Taking into account all the advantages and disadvantages of neural technologies in the future, the task of researchers is to form a multimodal system that will allow synchronizing sensory perception and text recognition to work with data and search for different solutions.

The obsolescence of professional knowledge and skills, the need to develop Digital Skills and Future Skills in the training process increases the relevance of using new methods in personnel management. The professional and qualification landscape in the field of personnel development of enterprises has changed significantly, as new hybrid qualifications have appeared, which require a multi-directional approach to the training of relevant competencies (Deloitte, 2016). This, in turn, expands the toolkit of methods and technologies in the training system to identify employee's missing skills, search for the most optimal and adaptive tools in training, and take into account the company's needs in developing employee competencies.

Neural networks in the training system significantly change the traditional approaches and can influence the future of the education system, thereby improving the quality of training, speeding up certain processes, increasing the availability of training for the target audience. However, it should be understood that personnel training includes not only analysis, transfer, processing of information and knowledge, but also further development of critical thinking, social, communication skills, which makes it necessary to determine the balance between the application of neural networks and applied technologies in the training system.

The application of neural networks in personnel training is a promising direction, as there are examples of their successful application (Russel and Norvig, 2016). One of these examples is IBM, one of the biggest producers, suppliers, and makers of software, hardware, and IT services worldwide (IBM, 2020). The company has been a pioneer in using AI into its programs for staff training. IBM has developed personalized learning paths that are customized to each employee's individual talents, limitations, and career goals through the use of machine learning algorithms. The IBM staff has shown improved job performance and higher engagement as a result of this individualized strategy (IBM, 2020). The customization, automation, and data insights offered by IBM's AI-inspired staff training programs are unprecedented. The Learning Management System's vast employee data set may be enhanced with expert analysis and yield more insightful results thanks to Artificial Intelligence. IBM's creative application of AI in training initiatives has raised the bar for the sector while also enhancing the learning process for its staff members. Another example of successful implementation of AI in training programs is Walmart. AI has been used by Walmart, a well-known retailer, to teach its shop personnel since 2017. With the use of machine

vision and natural language processing, their AI-driven WalmartLabs training program provides new hires with immersive, captivating learning opportunities (Albinus, 2022). The training covers topics like product knowledge, safety procedures, and customer service. It has been acknowledged that Walmart's creative application of AI in their training initiatives has improved the general competency of its shop staff. Through its One Global Walmart Academy, the business hopes to provide its more than 2.3 million workers with leadership and wellness programs, future skills training, and retail training tailored to their unique jobs (Stomski, 2022). VR headsets and instructional materials power this program. These are some of the examples of big enterprises with a huge number of employees, and these enterprises have resources to incorporate AI in employee training.

The use of AI in employee training has received a lot of attention in various sectors. Xu and Xiao (2020) have studied VR technologies which have changed the way Human Resource Management is conducted in business organizations throughout the age of AI, with a particular focus on this sector. More specifically, they discuss how VR can be used to make sure that not only does it improve training processes for staff but also raises general staff happiness levels. The study by Renrui (2022) is changing the landscape by focusing on e-commerce, and importantly highlighting how AI can be used to augment employee training so that its usage is optimized in this sector. Arora et al. (2021) in a similar vein undertook a functional analysis relating to Artificial Intelligence within Human Resources management revealing obstacles surrounding upgrading labour competencies as well as transforming Human Resources teams into effective utilizers of AI capabilities. Alavi, Leidner and Mousavi (2024) investigated the part that generative AI can play in knowledge transfer, particularly in training and establishing a culture of learning within organizations. AI has potential to change the way workers are taught by aiding in their skill development, anticipating employee turnover, involves forecasting employee turnover rates and improving HR management practices as a whole. Afzal et al. (2023) studied how Artificial Intelligence can be employed in Human Resource Management (HRM), aiming to determine the practical applications of AI technology in HRM. In conclusion, it can be noted that 4 dimensions of HRM theory are significantly affected by AI, namely recruitment, training & development of personnel, management of employee performance and remuneration determination.

Taking into consideration the size of the company, there are few studies on the implementation of Artificial Intelligence in SMEs. In the research by Kumar et al. (2022), it was found that large enterprises have been implementing AI for labor management and HR purposes, however MSMEs have not adopted AI as widely. Furthermore, Hansen and Bøgh (2021) stated that although there have been many publications on the subject of Artificial Intelligence in Industry

4.0, these publications have mostly targeted bigger businesses. Nonetheless, they have studied the widespread of AI in small and medium enterprises, not focusing on HRM. Moreover, even fewer studies have been presented regarding the experience of HR managers in using Artificial Intelligence in employee training and how their role is changing. Ali et al. (2022) conducted research which was aimed to comprehend the connection between staff growth and training inside a business and Artificial Intelligence. In this paper authors get data from employees and studied the connection between Artificial Intelligence and staff development and training, which appeared positive. While in research by Klinga (2020), the case study about investigation of corporate learning in financial services organizations may be enhanced by automation and Artificial Intelligence was held. However, interviews were conducted with learning and development specialists, product managers, IT specialists. In this study the experience of HR managers, who are responsible for employee training, has not been studied.

In conclusion, with AI-based tools and solutions, organizations can improve their employees' learning and productivity. As the technology paradigm shifts, corporations can leverage AI and get the benefits of personalized, automated, data-driven learning and training models across the organization. AI-powered tools and solutions can revolutionize conventional and routable learning capabilities in any organization. AI has the potential to enhance learning and development capabilities, productivity, and employee insights that will certainly help an organization achieve its goals, prospects, and ROI. There are different examples of successful implementation of Artificial Intelligence in personnel training, nevertheless there are not a lot of studies about its implementation in SMEs and studies about the changing role of HR managers in employee training.

1.6 Summary

The part 1.1 Artificial Intelligence: foundational concepts, ethics and impact provided systemization of Artificial Intelligence concepts, ethics, and its impact on people and organizations. AI has advanced greatly since it was first established in the 1950s, described by John McCarthy as "the science and engineering of making intelligent machines" (Manning, 2020). AI strives to create systems that replicate human cognitive capabilities such as learning, problem-solving, and decision-making. AI boosts human abilities by handling tasks automatically, allowing individuals to dedicate their attention to more intricate tasks. Nevertheless, the moral consequences of AI, such as transparency, accountability, and fairness, are crucial factors in its advancement and utilization (Sample, 2017).

The part 1.2 Evolution and role of Human Resource Management provided the systemized literature review on Human Resource Management, its role and how it has been changed during the time as well as the role of HR manager. Human Resource Management has evolved from handling administrative tasks to playing a key strategic role within organizations. At first, HRM primarily dealt with staff management and labor issues, but now it includes recruiting talent, involving employees, providing training, and planning for the workforce strategically. According to Tiwari and Saxena (2012) Human Resources are the key to gaining a competitive edge. Moreover, the roles of HR managers were provided according to Ulrich et al. (2012). In this part HR manager's role and objectives with description were systematized.

In the part 1.3 The role of Artificial Intelligence in Human Resource Management the role of AI in HRM has been studied. AI is changing HRM by automating regular tasks and improving decision-making procedures. According to Peterson, the integration of AI is not merely a technological advancement but a transformative journey that elevates HR to a strategic cornerstone of organizational success (Peterson, 2019). AI is used in HR for tasks like finding candidates, screening resumes, scheduling interviews, and evaluating employee performance. These developments boost output, freeing up HR managers to focus on strategic projects like developing and retaining talents. Nonetheless, the incorporation of AI also brings about obstacles like moral worries, protection of data problems, and the necessity for HR experts to adjust to new technologies.

In the part 1.4 Human Resource Management and employee training the role of HR managers in employee training as well as the ways of training and importance of employee training has been systematized. According to Freifeld (2019), top management understands the importance of employee knowledge, abilities, and skills for the successful execution of ongoing tasks and strategic goals in the never-ending battle for competitiveness. HRM training strategies involve pinpointing areas lacking skills, creating appropriate training materials, and assessing the impact of training initiatives. Moreover, in this part the comparison of on-the-job and off-the-job training methods are presented.

In the part 1.5 Application of Artificial Intelligence in employee training the application of AI in employee training and its impact has been studied. AI greatly improves employee training by offering customized learning opportunities and pinpointing areas where skills need improvement (Davies, 2024). The systematization of AI application in employee training is provided. New technologies support ongoing learning and growth through providing immediate feedback and personalized learning journeys. AI also helps streamline administrative tasks and

ensures new employees are successfully integrated into the company during onboarding. Moreover, in this part the successful examples of AI integration in employee training are provided, such as IBM and Walmart.

During the systematic analysis of existing studies, it was revealed that literature emphasized the major influence of AI on different areas of Human Resource Management, especially in employee training. Researchers have studied how virtual reality and Artificial Intelligence technologies could improve training, boost employee happiness, and help share knowledge in enterprises. Yet, there is a research void in the narrow attention given to small and medium-sized enterprises in terms of incorporating AI into HRM, particularly in the area of employee training. Despite the fact that artificial intelligence has been the focus of several publications, Hansen and Bøgh (2021) noted that these publications have mostly targeted larger organizations. Furthermore, research has mainly concentrated on the technical aspects and results and there is lack of studies which are focused on the practical experiences and viewpoints of HR managers when using AI for employee training. Moreover, the existing studies focused more on Western countries and few of them had a focus on Eastern ones. Additionally, there is a lack of research about comparison of AI integration in employee training in different countries and cultural settings. This led to the formulation of research question which is "How do AI-driven technologies transforms the role of Human Resource managers in training employees in small and medium-sized enterprises?".

2. RESEARCH METHODOLOGY

In this part description of research methodology is provided. This part provides a detailed description of the research methodology, including the research design, secondary and primary data collection, and considerations for reliability and validity. The selected approach will be discussed along with the rationale behind selecting this specific research design. Additionally, a critical evaluation of the research's validity and reliability is conducted.

2.1 Research design

This research is based on qualitative research methods, using in-depth semi-structured interviews. This method was chosen, because in this research the implementation of AI technologies into employee training and the transformation of HR managers' role are discovering. Qualitative research for the study was chosen because it allows to explore how individuals interpret and experience changes in their cultural and organizational environments. Qualitative research has the advantage of being able to describe human behavior patterns and processes that might be challenging to measure (Foley and Timonen, 2015). With this method, the complex dynamics shaping the evolving role of HR managers in response to advancements in AI technology impacting training practices can be understood. Experiences, attitudes, and actions are examples of phenomena that can be challenging to precisely quantify; in contrast, a qualitative method enables participants to describe what they were thinking and experiencing at a particular moment (Tenny, Brannan and Brannan, 2022). Furthermore, qualitative research offers a valuable framework for investigating under-explored areas, such as how AI is affecting HR managers role in employee training in small and medium-sized enterprises. In order to conduct empirical research first of all the secondary data is collected to analyze existing knowledge and literature on the topic. As for the secondary data, it is collected through in-depth semi-structured interviews with representatives of HR departments in SMEs. Representatives of HR departments were chosen as interviewees because they have a deep knowledge of HR role and functions, and they possess important knowledge about the administration and execution of employee training initiatives. In light of that research goal, which is to comprehend how AI-driven changes impact HR managers' role in employee training, it would be most appropriate for Human Resource specialists to offer their personal perspectives and talk about their experiences incorporating different AI-related elements into employee training initiatives. In semi-structured interviews topics and questions are prepared in advance. When gathering vast amounts of attitudinal data or when little is known about the topic, semi-structured interviews might be helpful in generating a list of potential pre-codes (Fox, 2009). The open-ended character of the question in semi-structured interviews helps to

identify the subject of the inquiry while also giving the interviewer and interviewee the chance to go into further depth on certain subjects. In comparison to semi-structured interviews, in-depth semi-structured interviews have more focus on details and depth. The reason for undertaking indepth semi-structured interviews is to capture a thorough understanding of complex issues, usually eliciting more information from participants on their involvement, thoughts and opinions. The empirical findings and their relevance will provide the foundation for more research on the subject of using Artificial Intelligence to train employees and change the role of HR in SMEs. In this study detailed interviews and thorough thematic analysis are used to shed light on the HR representatives experience in implementing AI-driven technologies in employee training.

2.2 Secondary data collection

The purpose of gathering secondary data is to get a more profound comprehension of the subject matter and identify any knowledge gaps that may be bridged using primary data collecting methods. Secondary data was collected through literature review. Additionally, a study of the literature was done to compile and summarize different ideas, approaches, and findings that were described and explained by a variety of studies in the fields of Artificial Intelligence, Human Resource Management, and employee training.

The literature research on the subject of AI-driven HR transformation in employee training looked at the secondary data that was available. During the process of searching a relevant literature Google Scholar was used as well as Google searching engine to find industry reports, companies' information and available AI tools for HR. Literature and articles both on English and Russian were used to get more available information and insights. The key words that were used for finding existed studies are: Artificial Intelligence, Human Resource, Human Resource Management, employee and corporate training, employee development, training automation, learning automation. The scope was further expanded by adding industry studies and actual company cases, though, because it was discovered that the literature on the subject of applying AI in staff training in SMEs was relatively narrow. The available literature on Google Scholar was helpful to analyze AI terminology as well as AI implications in HR, review HR managers' role in training and transformation of HR managers role in training of employees. However, there is a lack of literature about case analysis of implementation of AI in employee training, especially in small and medium-sized enterprises. Unfortunately, there are also lack of studies about currently available AI-powered tools for employee training. Thus, to get familiar with them not scientific articles were used. During, the analysis of existing literature it was found out that this topic is

studied more in a large enterprise or even the size of the enterprises is not taking into the account. This has also been confirmed by other researchers in the field. Additionally, it was found out that even there are few studies about implementation of AI in small and medium-sized enterprises, researchers are not studying the use of AI in HR and in training of employees. They are focused more on the overall widespread and usage of AI in SMEs. Therefore, literature review was useful for the research process in a way of the formulation of a perceptive and valuable research question based on the corpus of current information. Moreover, literature review helped to get a deeper knowledge and insights in the field of Artificial Intelligence usage in HR with the focus on employee training.

The information gathered will be helpful to HR managers since they are the ones who design staff development strategies and develop employee training programs, and this study aims to investigate the integration of Artificial Intelligence into employee training and the role of HR managers in this. Promoting an efficient and encouraging learning environment is one of a main responsibilities of HR departments. The HR department may enhance the efficiency, speed, and customization of training as well as the evaluation process by using Artificial Intelligence into employee training programs. This has an impact on the organization as a whole as well as the efficiency of training and the performance of HR departments. Moreover, secondary data collection served as a basis for creation of interview questions.

2.3 Primary data collection

In this part the process of primary data collection is presented. This part explores the careful process of choosing participants for qualitative research on the changing role of HR in employee training as a result of AI incorporation. It defines the guidelines for choosing respondents from small and medium-sized enterprises participating in AI-based training programs, guaranteeing a variety of viewpoints. Moreover, it outlines the techniques used for gathering data, such as semi-structured interviews with specific representatives of HR departments and underscores the importance of ethical considerations and the thematic analysis method used for interpreting the data.

2.3.1 Respondent selection

When engaging in qualitative empirical research with in-depth semi-structured interviews, it is crucial to thoughtfully choose participants for the interviews. Choosing the right participants

is crucial to guarantee the quality and significance of the collected information. Their personal experiences offer valuable understanding and complex viewpoints that enhance a thorough comprehension of the AI-driven transformation of HR managers' role in employee training within SMEs. The choice of respondents from different background and experience helps to explore the topic from different points of view and identify a wide range of ideas and interpretations. Additionally, the selection of participants should be consistent with the research goal and objectives.

All prospective candidates had to meet the basic qualification requirements at the first contact with a company in order to be considered as sufficient for this interview-based study. When studying the AI-driven transformation of HR managers role in employee training, it is not sufficient to conduct interviews with all available representatives of HR department, who are willing to participate in interview. As the goal of this research is to explore how AI-driven changes are affecting the roles of HR managers in training of employees in small and medium-sized enterprises, it is necessary to find HR managers or HR specialists who are working or has been working in small or medium-sized enterprise, in which the use of Artificial Intelligence is practiced in employee training. In order to determine whether the company is suitable in size, the number of employees was requested from the company's representatives at the first contact. In this regard the following requirements should be met in order to be chosen for this research: small or mediumsized enterprise, which implemented AI tools in employee training, and there should not been privacy policies regarding employee training programs. According to the EU, an enterprise is considered small-sized if it has from 10 to 50 employees and an annual turnover equal or less then €10 million. While the enterprise is considered medium-sized if it employs from 50 to 250 people and has an annual turnover of no more than €50 million or total assets on the balance sheet of no more than €43 million (European Commission, n.d.). As for Russia, unless another limit value of the average number of workers for medium-sized firms is set in line with federal law, a mediumsized enterprise is defined as a business that employs between 111 and 250 people (Федеральная Налоговая Служба, 2005 – 2024). Both European Union and Russian Federation has a limit of 250 people in medium-sized company, so enterprises which are sufficient for the study have at maximum 250 people. Moreover, the respondent is considered to be accepted if she or he is working or has been worked in a company which had implemented AI based tools in its employee training programs, otherwise the information obtained during the interview will not be relevant for the research and will not provide insights to the research field. These requirements were chosen in consideration of the research goal. Moreover, representatives of HR department should be available for open conversation and the company in which she or he had an experience with AI

tools for employee training does not have confident information about its Human Resource department work and its training programs.

2.3.2 Data collection

The study aims to explore how AI is transforming employee training in small and medium-sized enterprises, and its effects on HR managers role. In-depth semi-structured interviews for qualitative research purposes were conducted with representatives of HR departments of small and medium-sized enterprises to get their insights in the studied field. Initially, a pool of questions was made that were based on the studied secondary data, which are provided in Appendix 1. Interview guide, but as the research employed semi-structured interviews, these questions served just as a basis and during the interviews additional questions were asked. Qualitative methodology was used in the information gathering procedure for this research. This is because the integration of AI into employee training is rarely regulated and structured in a way that makes quantitative methodologies appropriate.

Interviews with representatives of HR department were conducted primarily with the intention of learning about actual experiences with AI-driven tools for employee training. To get opinions and ideas from HR professionals on the subject of using AI technologies into employee training is the aim of the interviews. The purpose of interviews is to provide an opportunity for HR professionals to discuss their experiences of using AI tools in real-life working contexts in terms of their practical application, challenges faced and impact on HR roles and effectiveness of training employees. The purpose of this study is to explore the ways that innovations caused by AI are impacting HR managers' responsibilities for employee training in small and medium-sized enterprises.

As for choosing respondents for the study, initially 100 company representatives, including HR departments representatives, were contacted. However, in 73 companies the AI tools are not incorporated into HR departments functions and 20 of the representatives did not work in small or medium-sized company and had a very low level of knowledge about AI tools in employee training or did not have it at all. As a result, 13 respondents were selected for semi-structured interview, which were suitable for all the parameters described in part 2.3.1 Respondent selection. Moreover, HR specialists were also chosen to conduct an interview in order to get more opinions, insights and broader picture of HR managers role transformation due to integration of AI in employee training.

Thirteen representatives of HR departments from various sectors, age groups, and experience levels were chosen to participate in in-depth semi-structured interviews. Respondent Al works in a Company A which is a Poland-based fintech company, which offers financial technologies for banks and insurance enterprises and has 150 employees. She is woman in her middle thirties, working in HR for 10 years. She became an HR manager 10 years ago. Respondent A2, being a woman in her early twenties, is also working in Company A for 4 years as HR specialist. Respondent B1 working in Company B which is Russian-based agricultural company, focusing on the production of salads and greens. Company B has 220 employees. He is a man and has 17 years of experience as an HR manager. Respondent B2 and Respondent B3 are women in late twenties working for Company B for 4 and 5 years respectively. Respondent C1 is a young HR manager who works for 4 years in Company C, which is the franchise department of a logistics company located in Russia. The company works with the B2B segment and employs 53 people. Respondent C2 also works in Company C for 2 years as HR specialist, being a young man. Respondent D1 is a woman in her middle thirties who works as HR manager in Company D and has 10 years of experience in HR. Company D is a European marketing agency which employs 40 people. Company E is Russian-based marketing company, which offers solutions to B2B and has 110 employees. Respondent E1 is a HR manager in it and works for 7 years. Respondent E1 is a woman is her yearly thirties. Respondent E2 and Respondent E3 has 4 and 2 years of experience respectively. They are woman and man in their middle to late twenties. Respondent F1 is a woman in her middle thirties and has 9 years of experience in HR. She is HR manager in Company F, which is engaged in e-learning in Russia and has 56 employees. Respondent G1 is HR manager working in Russian Company G, which is specialized on food production and has 170 employees. Respondent G1 is a female in her late thirties and has 12 years of experience in HR. The systemized table with respondents is provided in Appendix 2. Respondent profile.

The participants were picked in order to provide a variety of viewpoints on the topic of using AI in employee training. Their distinct backgrounds, industries and age ranges can offer a range of perspectives on the topic. By including individuals from a fintech company, agricultural businesses, logistics, marketing agencies, e-learning firms, and food production enterprises, the research aims to capture perspectives from a broad array of industries. The viewpoints also differ greatly since the HR industry's players range substantially in terms of age and degree of experience. These disparities might include more youthful professionals who might give relatively fresh thoughts about what the current trends in technology require from us, compared to more seasoned experts who have been in the field for a while and so have a lot of knowledge into how things function.

There are a number of ethical concerns that might come up when doing social science research. When doing research in social science, researchers must adhere to four fundamental ethical requirements: information, permission, privacy, and appropriate use (Blomkvist and Hallin, 2015). Research participants in interview-based studies may have access to extremely sensitive firm information, which might put their job safety and status in danger if the researcher handles it improperly. Before the interview each of the respondents was informed about the study goal. Ethical standards for interviews were followed in this investigation concerning respondent. Prior to interviews, every respondent gave their consent and were made aware in advance of the subjects to be covered and their part in the process of conducting empirical research. Data was safely preserved, and participants' identity and confidentiality are guaranteed by giving each one a pseudonym. Along with these principles, the study follows informed consent, debriefing, and voluntary involvement.

Interviews were conducted using in-depth semi-structured method to have an adaptable approach for gathering data. The length of the interviews was about an hour, in order to get more insights and avoiding making mistakes just because of misunderstanding. The hour-long duration provided an opportunity to get respondents opinions, viewpoints and examples as well as elaborate on their experiences with AI-driven training initiatives within their respective organizations. A more conversational and exploratory approach was also made possible by the longer interview times, which allowed for deeper dives into certain subjects, the posing of follow-up questions, and the encouragement of participants to expound on their answers. The interviews were conducted using online communication platforms such as Zoom and Telegram depending on respondent's preference. Online communication platforms were chosen, because they provide a versatile, effective, and easily obtainable method of conducting interviews, allowing to obtain significant insights while taking into account the preferences and demands of participants. One of the main factors that influenced the choice of online communication platforms was remote accessibility since respondents are living in different countries and cities. Most of the interviews were conducted via video call, however some were conducted in audio format due to technical issues. The language in which the interview was conducted was either Russian or English. With all Russian-speaking respondents' interviews were on Russian in order to have more profound discussion and not to be limited of information just because of someone's insufficient level of English. Interviews with European respondents were conducted on English, only with one European respondent the choice of the interview language fell on Russian, because she lived in Russia 15 years and mastered her Russian, so it was not a problem for her to answer questions on Russian and it was easier for her to speak on Russian rather than on English.

A theme assessment technique was employed in the transcription and analysis of the interview records. Finding patterns, topics, and subthemes within the data was part of the analytic process, and the results were utilized to expand on the scope of the study's topic. All interviews were recorded and transcribed using MS Word voice recorder, which transcripts audio to the text. To ensure that the automatically generated transcripts matched the real interview, they were later checked and updated using the original record as a guide. After transcript was made, the thematic analysis was conducted. According to Dapkus (1985), thematic analysis is a method for identifying themes in qualitative data. Finding, examining, and interpreting themes or patterns of meaning in qualitative data is known as thematic analysis (Clarke and Braun, 2017). A major advantage of this approach, given the volume of data created, was the ability to filter out data that was determined unnecessary and to make inferences from a set of data gathered. Themes that were identified during the thematic analysis are application of Artificial Intelligence in employee training, transformation of HR managers' role and responsibilities, challenges encountered with AI-based employee training and comparison of Artificial Intelligence application in employee training in Russia and Europe. The coding process is presented in Appendix 3. Overview of coding process, which is divided into categories according to the relevant context and theme.

2.4 Reliability and validity of research

Maintaining a high standard of quality and credibility is crucial while performing qualitative research. Blomkvist and Hallin (2015) indicate that the ideas of validity and reliability might be used to assess the quality of a scientific report. By focusing on these areas, researchers may make sure that their studies are reliable, accurate and beneficial in the field of scientific study. Consequently, these two ideas are expanded upon and examined considering the study methodology.

2.4.1 Reliability

The reliability was defined by Hammersley (1992) as the consistency with which instances are categorized into the same group by several observers or by the same observer on various occasions. The conventional definition of reliability places a strong emphasis on standardized data collecting tools (Mason, 1996). In order to guarantee a high level of reliability, the research methodology was carefully planned and executed. The standardized method of data collection involved conducting semi-structured interviews on online platforms like Zoom and Telegram. This

method not only allowed for adaptability but also guaranteed that all individuals, irrespective of where they were located, could participate in the research. Using in-depth semi-structured interviews maintained a structure yet offered flexibility to delve extensively into relevant topics based on participant answers.

The use of thematic analysis in transcribing and analyzing the interview data also helped enhance reliability by providing a structured approach to recognizing patterns and themes in the data. This approach helped streamline the analysis, improving the reliability of the results. The use of coding for effective data classification, ensuring the organization of analysis and the ability to reproduce it by other users. Verifying interview transcripts increased the reliability of the data. The transcripts were created using the MS Word voice recorder and then carefully checked against the original recordings for accuracy. This stage was essential to uphold the accuracy and dependability of the transcribed information.

Furthermore, throughout the research, an unbiased perspective was upheld, and the data was analyzed objectively to eliminate any potentially misleading biases. The research process involved a thorough plan to guarantee transparency and avoid reaching premature conclusions until the empirical study was finished. This meticulous method of gathering and examining data guaranteed the trustworthiness of research findings, showcasing a steady and precise evaluation procedure.

Moreover, to ensure the study's reliability, the researcher engaged in discussions with the scientific supervisor to evaluate both the research process and the findings. This external evaluation is useful for detecting any discrepancies or possible misinterpretations while collecting and analyzing data. Upon receiving feedback, it was discovered that adjustments needed to be made to the methodology in order to guarantee the reliability of the results.

The study aimed to attain reliability by putting into place these measures, guaranteeing that the research results remained consistent, accurate, and repeatable. This method of confirming reliability highlights the trustworthiness of the research and its impact on comprehending AI-driven changes in HR manager's role and employee training.

2.4.2 Validity

An account is considered valid or true if it properly captures the aspects of the phenomenon that it is meant to describe, explain, or theorize, according to Hammersley (1992), who offers a qualitative viewpoint on validity. Validating the respondents was crucial to guaranteeing the

validity. One of the methods that was used is member checking, which is a method for examining the veracity of findings is member checking, often referred to as responder or participant validation (Birt et al., 2016). Participants were allowed to review and verify the accuracy of their interview transcripts. Ensuring accuracy of the findings, member checking process validated participants' perspectives and experiences. Clarifications were made to address discrepancies or misunderstandings, guaranteeing that the final data accurately reflected the participants' perspectives.

The research also considered how the cultural and organizational settings affect the implementation of AI in HR practices, especially in the comparison between Russia and Europe. This understanding of the context was essential to guarantee the accuracy and validity of the results, which accurately captured the intricate interactions in play. The study offered a detailed and precise portrayal of how AI-driven changes in HR management and employee training are influenced by external factors.

Furthermore, the research methodology and analysis procedures were recorded, ensuring transparency and facilitating potential replication of the study by other researchers. The study incorporated both the coding process and the themes identified in the analysis. This documentation played a crucial role in showcasing the legitimacy of the research process and results. Additionally, the design of the research was planned to correspond with the research goal and objectives. The use of suitable measurement tools and techniques guaranteed the construct validity by accurately capturing the intended constructs.

The research carefully maintained credibility by utilizing methods like participant validation through member checking, guaranteeing that the results truly reflected the perspectives and experiences of the participants. In addition, the study systematically took into account situational elements, like cultural and organizational environments, to ensure the precision and validity of the findings in depicting the intricate dynamics in progress. These efforts highlight the study's dedication to generating trustworthy and dependable findings on the integration of AI in HR procedures.

2.5 Summary

In part 2 of the research, the methodology used to study how Artificial Intelligence is being incorporated into employee training in small and medium-sized enterprises is described. The part delves into the qualitative research design, specifically emphasizing conducting in-depth semi-

structured interviews with HR professionals. This method was selected in order to investigate personal perceptions and comprehend the intricate interactions of AI's influence on HR manager's role in employee training. Discussion of the process of collecting secondary data, which included reviewing literature to find gaps and shape the research questions is also presented in this part. The main part of the data collection process included choosing appropriate HR representatives from SMEs who have integrated AI into their training programs, in order to gather a variety of perspectives. The interviews were conducted with 13 representatives form 7 enterprises from Russia and Europe from different cultural and organizational settings and with different background. The part also covers the methods for guaranteeing the trustworthiness and accuracy of the study, such as verifying transcripts and conducting thematic analysis on interview data. This detailed approach seeks to offer a strong comprehension of the impact of AI-driven changes on HR management and training practices in small and medium-sized enterprises.

3. EMPIRICAL PART

In this part the results from in-depth semi-structured interviews with representatives of HR department will be presented. Valuable insights about how AI-driven changes in employee training impacts HR managers' roles and responsibilities were obtained through semi-structured interviews with representatives of small and medium enterprises' HR department. Themes and patterns that surface can be the sole basis for analysis and coding of the data gathered from the interviews. The results are organized in four key themes that were identified after the interview.

3.1 Application of Artificial Intelligence in employee training

Artificial Intelligence has changed the employee training process. Thematic analysis revealed the main application of Artificial Intelligence in employee training, which are customized learning and automation of administrative tasks. Tailoring training experiences to individual employee needs, AI-driven personalized learning maximizes engagement and outcomes. The streamlining of training management through automation of administrative tasks enables HR professionals to concentrate on strategic initiatives.

AI helps with adaptive learning paths adapted to the performance and progress of every employee. Personalized learning facilitated by Artificial Intelligence, transforms conventional training approaches by customizing educational opportunities based on the specific requirements of each employee. According to Respondent A1 and Respondent D1, AI-driven adaptive learning paths have greatly contributed to personalized training programs that meet specific employee requirements. AI algorithms assess performance data to automatically modify learning paths, guaranteeing that training materials are provided at the most suitable difficulty levels and speeds for every learner. Respondent A1 provided a list of steps how it is done. First of all, AI algorithms analyze employee performance data and identify strengths and weaknesses. Based on the analysis, AI adjusts the content and pace of training to fit individual needs of employee. One of the tools they are using is Canvas LMS, which track progress and customize learning paths. Moreover, respondents mentioned Moodle, Cornerstone and Coursera platforms for the personalized learning. AI-driven systems improve engagement and retention by delivering content in formats and contexts that align with employees' learning styles, preferences, and skill gaps. People from different industries, especially from fintech and marketing, have stated that it is important for training materials to be made with Artificial Intelligence that caters for different learning styles because this helps in making employees more engaging and retentive. In addition, AI-powered real-time feedback tools enable employees to quickly identify and work on areas requiring improvement, supporting ongoing development and progress. HR managers, such as Respondent D1 and Respondent C1, have noted the importance of AI-driven systems as regards giving feedback on employee advancement promptly so that one can quickly notice when something goes wrong, and steps are taken to correct it.

Automation of administrative tasks is one of the most important applications of AI in employee training, because it helps to focus more on strategic plans. In the field of training management, Artificial Intelligence provides revolutionary abilities. In the words of HR manager Respondent C1, managing training process has become much easier thanks to the introduction of AI algorithms that automate appointment delays as well as follow up monitoring. AI algorithms simplify scheduling, attendance tracking, and course registrations, freeing HR professionals from manual duties to focus on strategic initiatives. Respondent C2 stated that AI-powered systems have transformed the way they handle training operations, allowing more time for strategic HR projects. Additionally, AI-powered systems are transforming the grading and assessment procedures by autonomously assessing tests, tasks, and simulations, guaranteeing effectiveness and justice while delivering immediate feedback to employees. Both Respondent G1 and Respondent E1 underscore the groundbreaking effect of AI on grading quizzes and evaluations, offering immediate feedback to staff members and conserving precious time. Moreover, AI-driven content management systems are crucial in sorting and classifying training resources, improving ease of access for staff members. As stated by Respondent F1, tools that are run by Artificial Intelligence have greatly changed the way educational resources are managed and stored, thus enriching workers' learning experience.

Summing up, Artificial Intelligence has brought about major changes in how employees are trained, as it allows for customized learning and automation of administrative duties. Alpowered personalized learning paths and instant feedback systems increase involvement and memory retention, customizing educational opportunities to individual requirements and enhancing overall training results. Automating repetitive administrative tasks like scheduling and evaluation enables HR professionals to concentrate on strategic projects, which improves the efficiency and effectiveness of managing training. Respondents from different sectors have pointed out the significant influence of AI on both employee growth and HR functions, stressing the need for ongoing education and incorporating cutting-edge technologies. Through the utilization of AI, companies can guarantee that their training programs are thorough and flexible, ultimately leading to enhanced organizational performance and employee contentment. By utilizing these AI-powered innovations, enterprises can boost operational efficiency and

effectiveness in overseeing training programs, while also providing employees with improved learning opportunities.

3.2 Transformation of HR managers' role and responsibilities

The role of HR professionals is experiencing a significant shift as enterprises adapt to changes in the Human Resources. HR managers are experiencing a significant change in their role, which is being influenced by the incorporation of AI technologies in different areas of their job. This change is characterized by a strong focus on analyzing data and customizing training programs with the use of AI technology. Additionally, AI's automation of administrative tasks allows HR professionals to focus more on important efforts like developing thorough training plans and promoting company expansion. The inclusion of AI technology has enabled HR professionals to focus on strategic and analytical activities, because it makes traditional administrative tasks more effective. This change not just allows HR to take on a key role in planning and managing talent within the organization, but also promotes working together with different business departments, ultimately improving the company's overall performance. Additionally, AI-driven platforms support the development of ongoing learning environments within enterprises, meeting the specific requirements and choices of each employee for career advancement.

The changing role of HR professionals involves doing less traditional administrative work and engaging increasingly in strategic and analytical activities. It is only by automating routine responsibilities using AI that these professionals can get enough time for deep data analysis, identification of trends, and making strategic policy decisions which are fundamental for the enterprise. Respondent A1 emphasized the importance of AI tools in allowing HR professionals to focus more on strategic activities. This development allows HR to have a crucial role in planning workforce, acquiring talent, and developing organizations, which directly affects business strategy and performance. All of the respondents admitted that with AI tools they have more time to work on strategy. Thanks to AI handling routine tasks, HR professionals can focus on creating detailed learning strategies and promoting ongoing growth. This change in strategy allows HR managers to take a proactive approach in influencing the organization's learning culture and aligning training programs with future business goals. Respondent B1 pointed out the changes, saying that automating mundane tasks has freed up time for focusing on important projects like creating personalized learning programs and fostering organizational growth. Likewise, G1 mentioned the value of AI in HR, highlighting that automating administrative duties allows HR to concentrate on

strategic tasks such as nurturing talent and planning for the future, which positively impacts the company's prosperity.

As HR departments transform into strategic partners in organizations, AI is essential for simplifying administrative tasks, allowing HR professionals to focus more on collaborating with business units. Having a better grasp of their requirements, HR can coordinate plans with broader company goals, using AI-generated information to offer helpful advice on managing talent, planning workforce, and developing the organization. This change encourages teamwork and unity throughout the organization, giving HR the ability to effectively participate in strategic decision-making. Respondent G1 noted that this change encourages teamwork and unity throughout the organization, giving HR the ability to effectively participate in strategic decision-making.

HR managers are heavily engaged in analyzing data with AI tools to monitor employee development and personalize training initiatives. This change requires gaining new technical skills and abilities, like understanding data and being familiar with AI programs. Respondent E1 highlighted the significance of HR professionals adjusting to these changes, pointing out that "the incorporation of AI has expanded our duties, necessitating us to acquire new abilities in data analysis and AI technologies". Moreover, Respondent E1 also expressed the same idea, stressing the importance of HR professionals constantly improving their skills and staying informed about technological advancements in order to successfully utilize AI in training and development programs.

Another change is ability to focus more on continuous learning. HR departments are placing more importance on creating a culture of ongoing learning and growth in enterprises. Alpowered platforms make it easier and faster to create more learning activities that cater to each employee's specific needs and preferences, encouraging a mindset of growth and improving employee engagement. By using AI, HR professionals gather a variety of learning materials like online classes and workshops, and microlearning modules to cater to different learning preferences and styles. Several respondents noted that AI facilitates the customization of learning activities.

In conclusion, AI is significantly altering the duties of HR professionals by enabling them to focus on strategic and analytical work, automating repetitive activities, and encouraging further education. With this modification, HR may now play a significant role in workforce planning, talent management, and organizational growth, all of which have a direct impact on company success.

3.3 Challenges encountered with AI-based employee training

Incorporating AI into HR operations has great potential to improve productivity and results. Yet, a number of challenges need to be overcome in order to fully achieve the advantages of AI in Human Resources departments. HR professionals face challenges such as lack of technical skills, high initial costs of AI adoption, and employee resistance to change.

Although AI allows HR professionals to focus more on strategic goals and provide better training for employees, there is a shortage of skills within HR teams in effectively using these technologies. The complexity of the skills gap in HR departments presents a challenge that extends beyond just technical skills. Some HR experts face challenges not in interpreting data and utilizing AI tools but in grasping the ethical implications of AI driven choices and complying with privacy laws. Respondent A1 emphasized this difficulty by noting that numerous HR professionals are deficient, in the abilities to efficiently utilize AI for tasks such, as data analysis and ethical AI methods despite the advantages it presents. Moreover, HR professionals must be more flexible. Committed to learning to keep pace with the swiftly advancing technology of AI. Respondent D1 emphasized again the importance of continuous learning and professional development in order to keep pace with advancements in technology. Closing the skills gap requires thorough training programs, professional development efforts, and partnerships with outside experts or consultants. Moreover, creating an environment that encourages ongoing education in HR departments can give professionals the ability to keep up to date with technological progress and successfully incorporate AI into their work. Respondent C1 emphasized the significance of investing in employee training and development, explaining that a dedication to continuous learning and upskilling within HR departments is necessary to tackle the skills gap. Not tackling it impairs both the effective adoption of AI tech and weakens HR's capacity to promote organizational development and innovation in the digital era.

Another problem is the cost of AI tools. The significant obstacle for numerous HR departments in SMEs, is the considerable expense and investment needed to adopt AI technologies. This financial obstacle includes costs associated with obtaining AI infrastructure, buying software licenses, and offering thorough training to HR personnel. Respondent B1 pointed out that although AI has the potential to transform HR practices, the initial costs of implementation can be a barrier for smaller enterprises with restricted budgets. Moreover, continued expenses for maintaining and supporting AI initiatives add to the financial strain, posing challenges for organizations to sustain these projects over time. Respondent E1 agreed with this view,

highlighting that limited funds frequently prevent SMEs from fully adopting AI technologies in HR.

Employees' resistance to change presents a significant challenge in implementing AI-driven changes in HR departments, as they may worry about losing their jobs or have apprehensions about privacy and data protection. This resistance towards adopting AI technologies may impede the successful execution of new HR practices and initiatives. Respondent G1 pointed out that even though AI has the potential to bring advantages to HR, employees might be hesitant to embrace it because they are unsure about how it will affect their positions and livelihood. Additionally, worries regarding privacy and data security also add to employee anxiety about AI-powered transformations. Respondent E1 stressed the significance of dealing with these issues, mentioning that "it is essential to create clear policies and protections for data privacy in order to build employee confidence and approval of AI technologies in HR". Effective communication and engagement with employees at every level of the organization are necessary to overcome resistance to change. Respondent D1 highlighted the significance of HR professionals in helping with this process, expressing that clear and honest communication regarding the reasons and advantages of AI implementation is crucial in addressing employee worries and encouraging acceptance of change.

In summary, although AI can improve HR operations and strategic focus, there are significant challenges that need to be overcome to fully achieve the advantages of Artificial Intelligence. Continuous learning and ongoing professional development are necessary for HR teams to bridge the skills gap. Moreover, the significant barriers of high AI implementation costs and employee reluctance to change require strategic investment and successful communication strategies. It is crucial for HR departments to overcome these challenges in order to effectively utilize AI and propel organizational growth and innovation.

3.4 Comparison of Artificial Intelligence application in employee training in Russia and Europe

Comparison of the use of AI and its effects, gaining insight into the differences in the technology's adoption in Russia and Europe can offer valuable understanding of how it is integrated in varied socio-economic environments.

Cultural differences and attitudes towards innovation are highlighted by the varying adoption rates of AI technologies within HR practices among European and Russian enterprises.

European enterprises have shown a greater willingness to adopt AI-powered solutions, a pattern can be linked to a culture that favors innovation and technological progress. Respondent E1 demonstrates this view, explaining that European organizations are known for their strong history of embracing innovation, leading to a quick integration of AI in HR. On the other hand, Russian businesses are more inclined to adopt careful attitudes towards technological advancements, which are shaped by historical circumstances and social expectations. Respondent G1 agrees with this assessment, explaining that in Russia, traditional approaches are often favored, and technology is adopted at a slower rate, which can impede the incorporation of AI in HR. These differences in culture influence both how quickly AI is adopted and the level of complexity in its integration into HR departments. European firms are inclined to invest in advanced AI technologies and experiment with new HR applications, while Russian enterprises still prioritize stability and dependability over innovation. Consequently, the disparity in adoption mirrors more general cultural variations in perspectives on risk, trying new things, and accepting new technologies in organizational settings.

The differences in support for AI projects within European and Russian firms reveal discrepancies in how resources are allocated, and strategic goals are prioritized. European enterprises tend to show more support for integrating AI into HR departments, typically demonstrating high levels of investment and dedication to innovation. Respondent D1 confirms this view, noting that European enterprises tend to invest substantial resources in AI projects in HR, acknowledging its ability to enhance organizational performance. On the other hand, Russian enterprises face challenges like financial limitations and restricted technology availability, which hinder their capacity to fully adopt AI-driven HR solutions. Several respondents from Russian enterprises mentioned that Open.ai, one of the pioneers of AI chatbots, is restricted in Russia and it does not work without Virtual Private Network (VPN). Respondent B1 highlights this difficulty, stating that Russian enterprises frequently encounter financial constraints and struggle to acquire advanced technology, hindering their ability to invest in AI for Human Resources functions. The differences in these situations lead to varying levels of preparedness and ability to effectively utilize AI technology in HR operations. European enterprises have advantages for innovation due to resources and environment, whereas Russian enterprises face barriers hindering the use of AI in HR. Most of the Russian enterprises whose HR managers participated in the interview use less advanced AI tools compared to their European counterparts due to different reasons, including cost constraints, lack of support from owners and CEOs and others.

To sum up, the use of AI in HR practices differs between Europe and Russia due to cultural beliefs and resource accessibility. Russian enterprises are hindered by financial and technological obstacles, while European firms prioritize investing in advanced AI technologies due to their focus on innovation. These differences underscore the necessity of personalized approaches to aid in the incorporation of AI in various socio-economic environments.

3.5 Summary

In this part an in-depth examination of the empirical results obtained from the semistructured interviews carried out with HR professionals from small and medium-sized enterprises is provided. This part highlights and delves into four main themes: AI usage in employee training, changes in HR managers' role and responsibilities, challenges linked to AI-driven training, and the varying levels of AI implementation in Russia and Europe.

Artificial Intelligence has had a major influence on employee training by facilitating individualized learning opportunities and streamlining administrative duties, thereby freeing up HR managers to concentrate on strategic endeavors. The thematic analysis pointed out that AI-powered adaptive learning paths customize training for each employee specifically, improving engagement and results. HR managers are saying that their responsibilities are changing, necessitating new skills and a stronger emphasis on data analysis and technology management. Some of the challenges that have been identified include reluctance to adapt, the necessity for substantial funds for AI resources, and the importance of preserving data confidentiality. The results offer important understanding of the advantages and challenges of incorporating AI in HR training methods, especially in small and medium-sized enterprises.

To conclude, this part highlights the important influence of AI on employee training and HR management in small and medium-sized enterprises. The results offer important observations on the advantages and challenges of AI incorporation, stressing the importance of strategic planning and customized strategies to successfully utilize AI technologies in a variety of organizational settings.

4. CONCLUSION AND IMPLICATIONS

In this part the conclusion of the research is provided as well as the theoretical contribution of this research to the existing literature, managerial implications which provide insights and recommendations that assist managers in making informed decisions. Moreover, limitations of the research and ideas for future research are provided.

4.1 Conclusion

The goal of this research was to explore how AI-driven changes are affecting the role of HR managers in training of employees in small and medium-sized enterprises. Despite a number of existing studies on the topic of integration of Artificial Intelligence into HRM as well as employee training, still there is a lack of studies about changing HR manager's role. Especially few studies had considered SMEs, targeting bigger enterprises, because the second ones have more resources for AI integration. Furthermore, the existing studies focused more on Western countries and few of them had a focus on Eastern ones. Furthermore, little study has been done comparing the use of AI in staff training across national boundaries and cultural contexts. In this context, this study brings new findings to the existing knowledge by studying how AI transforms the role of HR managers in employee training in small and medium-sized enterprises and making a comparison between Russia and Europe.

The research highlights the significant influence of Artificial Intelligence on how HR managers in SMEs handle employee training. AI technologies make personalized learning experiences easier and reduce the time spent on administrative tasks, allowing HR managers to concentrate on strategic functions. Nevertheless, the implementation of AI also brings about difficulties such as gaps in technical skills, high investments, and employee resistance to change. The research effectively addresses the objectives of the study and provide important findings.

The research provided clear definitions for important Artificial Intelligence terms. AI has grown into an industry affecting today's society through technological advancements. The groundwork on which its numerous applications like machine learning have been built was laid by revolutionists like McCarthy and Marvin Minsky who made this possible. In spite of its headway, Artificial Intelligence still finds it hard to ensure that there is transparency, fairness and ethical deployment. Machine learning involves building algorithms used by computers for data learning ability thereby enabling prediction-making. Machine learning in the business sector has the capacity to look at massive amounts of data for pattern recognition and understanding which could lead to improved decision-making and predictive analysis in the end. Besides, it is because of NLP

technology machines can understand human languages. NLP is implemented in chatbots and virtual assistants to enhance user experiences and improve customer service through real-time, automated support. Another AI application, predictive analytics, utilizes past data to forecast future results. As Artificial Intelligence expands, it offers the potential to improve human abilities, simplify decision-making processes, and stimulate economic and social advancement. Continued exploration and advancement in AI are essential for tackling its intricacies and realizing its maximum capacity in the years to come.

The research reviewed how AI integration is changing the traditional functions of Human Resource Management. Historically, HRM includes activities like hiring, onboarding, providing training, managing performance, and handling employee relationships. These functions play a vital role in keeping the workforce productive and engaged. AI is changing these classic duties by implementing tools that automate repetitive tasks like resume screening, scheduling interviews, and responding to common inquiries. AI-powered data analysis offers HR managers improved understanding of employee productivity and involvement, enabling them to make decisions based on data. The incorporation of AI in HRM allows HR professionals to concentrate on strategic priorities like talent growth and workforce planning, vital for sustained organizational growth.

The study also investigated the responsibilities of HR managers in employee training. They create training programs that target skill gaps, making sure they are in line with the objectives and strategies of the organization. Employee training and development play a crucial role in today's competitive business environment. Top management is realizing more and more that it is essential to invest in the knowledge, competencies, and skills of employees to reach current operational goals and long-term strategic objectives. Training is viewed as more than just a cost but as a valuable investment in human capital that improves employee performance, engagement, and longevity. A range of training approaches, such as conventional on-the-job training and contemporary e-learning, show flexibility to meet different organizational requirements. Providing mentorship, coaching, and shadowing can greatly personalize growth and cultivate a team environment based on collaboration. Thorough training programs not only enhance current job performance, but also equip employees to tackle future challenges. In the end, qualified employees are essential for maintaining competitiveness and reaching organizational success in changing market conditions.

Moreover, different AI applications were reviewed in the context of employee training. AI-powered Learning Management Systems (LMS) utilize Artificial Intelligence to provide customized training material, monitor learner advancement, and offer insights on training

efficiency. AI-powered virtual training assistants can offer learners instant assistance and direction, addressing queries and providing extra materials when needed. Adaptive learning technologies tailor the level of difficulty and speed of instruction according to the individual's progress, guaranteeing a customized learning journey. The study showed that these applications greatly improve the entire training process by increasing engagement, effectiveness, and customization to personal requirements. AI-powered training programs have the potential to lessen both the time and resources needed for training, all while enhancing learning results and retention rates.

Important findings from the study paper's empirical part were given in 3. EMPIRICAL PART, such as transformation of HR managers role and their responsibilities in employee training with the integration of AI-driven technologies.

The transformation of HR managers role in employee training was studied through interviews. The incorporation of AI is greatly changing the duties and functions of HR professionals, especially in small to medium-sized enterprises. AI technology is streamlining routine administrative duties like scheduling, monitoring advancement, and creating reports, allowing HR managers to concentrate on more strategic tasks. This transition enables HR professionals to conduct more thorough data analysis, spot patterns, and form strategic decisions that match organizational objectives and promote progress. AI-powered platforms allow for tailoring training programs to suit individual learning preferences, leading to ongoing learning settings that cater to the unique requirements of every employee. In addition, AI enhances collaboration among diversions departments in an organization, reinforcing strategic decision making and planning by HR. Herein lies a need for HR specialists to acquire new skills connected with data analysis and AI technologies while underlining the need for continuous learning and keeping abreast of technology. In the end, the incorporation of AI into HR tasks enhances proactive approach to workforce planning, talent management, and company growth, ultimately driving overall success and competitiveness. However, integrating AI into HR functions comes with major obstacles, such as a shortage of technical expertise in HR staff, expensive initial costs for AI implementation, and employee resistance stemming from concerns about job stability and data confidentiality. To tackle these challenges, managers should constantly learn, invest in training, and effectively communicate to promote trust and adoption of AI technologies.

In the research the comparison of the experiences of representatives of HR departments in Russia and Europe regarding AI-based employee training is provided based on information gathered from interviews. The results showed that cultural and organizational variances are highly influential in the integration of AI within the HR field. European enterprises tended to be more prepared and open to incorporating AI compared to Russian ones. HR managers in Russia encountered greater challenges involving resistance to change, infrastructure constraints, and a shortage of technical expertise. These obstacles prevented the extensive implementation of AI in HR procedures. European HR managers have had better results with AI-based training, pointing to improved support systems, increased technological readiness, and more favorable attitudes towards innovation. The study emphasized the significance of taking into account regional and cultural factors when integrating AI into HR processes.

Ultimately, in the research all the objectives were met by delivering a thorough examination of the influence of AI on HR training methods. Incorporating AI into HR offers great potential for improving training outcomes, yet requires careful handling of potential challenges. Continuing to enhance the skills of HR professionals, controlling costs of implementation, and promoting a culture of innovation and adaptability are essential for unlocking the full potential of AI in revolutionizing HR functions in small and medium-sized enterprises.

4.2 Theoretical contribution

This research offers several theoretical contributions enhancing current understanding of how Artificial Intelligence can be applied in Human Resource Management and its implications for employee training by advancing existing literature.

This research enhances the existing literature on the use of AI in HR by presenting empirical evidence on its implications for training of employee and altering HR functions within small and medium-sized enterprises. Most of the previous studies have focused on large firms and there has been a lack of understanding about how Artificial Intelligence is changing HRM processes in SMEs. The study completes the gap by displaying how AI assists in personalizing training programs, easing administrative jobs, and enhancing learning outcomes within small and medium-sized enterprises. It also illustrates how HR managers nowadays are transitioning from day-to-day operations toward strategic roles that enable them focus more on competences deployment, staff scheduling, long-term planning for sustainable company growth. Additionally, it explores the practical challenges and advantages of integrating AI into HR practices, giving a deeper insight into its effects on the HR field.

Moreover, this research examines how cultural and organizational elements impact AI adoption in HR by comparing results gathered from respondents from Russia and Europe. The

research explores the impact of cultural perspectives on technology and innovation on the adoption of AI in employee training in SMEs. The study discovered that European enterprises typically show greater readiness and acceptance of AI in comparison to Russian enterprises. It emphasizes the significance of organizational preparedness, such as technological infrastructure, support from leadership, and employee attitudes toward AI. Additionally, results offer understanding of the unique hurdles encountered by HR supervisors in various areas, including opposition to changes, inadequate technical abilities, and limitations in infrastructure.

Renrui's (2022) study on AI in e-commerce is enhanced by this research, which demonstrates comparable patterns in small and medium enterprises outside of the e-commerce industry. The results of this research indicate that AI optimization in employee training can be applied to different industries, not only restricted to e-commerce. Arora et al. (2021) examines the difficulties of enhancing labor skills with AI within big companies and this research builds upon this by tackling similar obstacles in small and medium-sized enterprises, emphasizing that the challenges and resolutions can be adapted and relevant to various business scales, ultimately offering a more inclusive insight into the impact of AI on human resource management. Moreover, this research enhances Alavi, Leidner and Mousavi (2024) study on generative AI in knowledge transfer by demonstrating that generative AI can promote a culture of learning in small and medium-sized enterprises. This project showcases real-world applications and results, highlighting the capability of generative AI in various organizational settings. This research further supports Ali et al. (2022) favorable results regarding the relationship between AI and employee growth. More evidence is given to demonstrate how AI can improve training and development of employees in SMEs, supporting Ali's findings on its wider usefulness. Moreover, this research extends Klinga's (2020) research centers on corporate training within the finance industry by exploring how HR managers are involved in introducing AI-based training initiatives in various industries and enterprises of varying sizes. This expands the knowledge of how AI's influence on corporate training goes beyond the financial services sector.

In general, this study enhances HRM theory by combining ideas from Artificial Intelligence and Human Resource to create a comprehensive grasp of the impact of AI technologies on HR practices. It lays the groundwork for upcoming AI in HR studies by exploring the relationship between technology, HR practices and role of HR managers. This study expands the scope of HRM theory by considering the unique requirements and environments of small and medium-sized enterprises, making it more applicable and relevant in a variety of organizational contexts. Moreover, this research supports previous studies and expands on the understanding of

AI in HRM, specifically in the context of SMEs. This contributes greatly to the current knowledge base and emphasizes the practical uses and obstacles of AI in various organizational environments.

4.3 Managerial implications

The findings of this research offer several practical implications for HR managers particularly in small and medium-sized enterprises. It also highlights the benefits for HR managers, organizational leaders and enterprises as a whole, but at the same time they should understand that challenges persist and are needed to be addressed.

AI technology helps with administrative tasks, freeing up HR managers to concentrate on strategic initiatives. It offers improved analytical features, providing in-depth understanding of employee performance and behavior, ultimately enhancing decision-making. Continuous learning in AI and data analysis offers HR managers essential skills, enhancing both their career progress and effectiveness. AI-driven data analysis empowers improved HR tactics and choices for organizational expansion. Specialized training programs improve employee performance, satisfaction, and retention, resulting in positive impacts for SMEs. AI helps to streamline tasks and cut down on human errors thus enabling incremental savings. Small and medium-sized enterprises remain competitive by encouraging ongoing learning and adoption of innovations. When integrated into human resources procedures for instance, it enhances productivity and helps devise strategies for successful firm operations which ultimately foster sustainable development. However, challenges such as a lack of technical experience among HR personnel, high upfront expenditures associated with using AI, and opposition from employees due to worries about data protection and job stability. In order to address these issues and encourage the use of AI technology, managers must make investments, learn new things on a regular basis, and communicate clearly.

The research results suggest that AI integration in HR practices has specific recommendations to improve efficiency, personalization, and strategic alignment, especially for small and medium-sized enterprises, which are:

1. HR managers need to prioritize using AI to automate repetitive administrative tasks like organizing training sessions, managing records, and tracking employee development. In this way, they can focus their energies on strategic projects that support the organization's goals for growth and talent development. This change not just improves operational efficiency but also enables HR professionals to take on a more significant role in reaching business objectives.

- 2. AI-based technology can be used in designing individualized training that caters to the requirements of each staff and their performance. This is especially good for SMEs, because there are limited resources. Tailored training not just focuses on specific skill deficiencies but also boosts employee retention rates through cultivating a more involved and skilled employees.
- 3. Encouraging ongoing learning and professional advancement with AI-powered platforms is also essential. These platforms offer employees quick access to educational materials, virtual mentoring, and real-time feedback. These tools guarantee employees are consistently enhancing their skills, thus maintaining the organization's competitiveness in a rapidly changing business environment.
- 4. It is crucial to invest in AI and data analysis training for HR professionals. Equipping HR managers with necessary skills that AI tools demand as well as understanding data analytics is crucial as it enables them to exploit these technologies efficiently for strategic organizational goals attainment. By this investment, professional skills improvement for HR teams is achieved by enabling them to always remain current on technological advancements.
- 5. Efficient change management is important for the successful implementation of AI in HR processes. enterprises need to create detailed plans for managing change that involve educating staff, handling their worries, and nurturing a positive environment that welcomes AI. When small and medium-sized enterprises grow, they experience resistance from the regional and cultural differences among people which also raises infrastructural challenges if not addressed well.
- 6. AI-based analytics could significantly improve the manner in which decisions are made within the HR departments. In-depth analysis from AI on employee performance and behavior can aid in developing more effective strategic planning and HR strategies, leading to improved organizational growth. This approach based on data ensures decision-making is more informed and effective, ultimately enhancing the organization's overall success.
- 7. Using artificial intelligence to make HR tasks more efficient also results in better allocation of resources and lower expenses. AI decreases mistakes made by humans and diminishes the requirement for physical work, leading to notable financial savings and improved allocation of resources. These improvements help enhance overall productivity and profitability, resulting in benefits for the entire organization.
- 8. Ensuring that AI programs align with the overarching goals of the firm is essential. AI-generated information should be utilized to guide HR strategies that aid in workforce planning, talent management, and organizational growth. This alignment improves company performance and competitiveness by ensuring that AI integration effectively supports the business's strategic objectives.

Summing up, the identified managerial implications highlight the transformative power of AI in Human Resources operations, especially in small and medium-sized enterprises. HR managers can use AI to improve their roles and help their organizations succeed by concentrating on strategic goals, creating customized training programs, promoting a culture of constant learning, filling skill deficiencies, and utilizing efficient change management strategies. Moreover, it is essential to recognize and deal with regional and cultural differences for the effective implementation of AI technologies in a wide range of organizational environments. These recommendations offer guidance for HR professionals and leaders in organizations looking to navigate the challenges of incorporating AI into HR strategies.

4.3 Limitations and further research

One of the main limitations of this research is sample size of interview respondents. The study involved 13 HR representatives just from 7 enterprises, who introduced Artificial Intelligence in their employee training programs, indicating a small sample size. Moreover, only 3 respondents were from Europe and most of respondents were representatives of Russian enterprises. This small sample may not fully represent the wide range of experiences and viewpoints of HR professionals around the world. Moreover, the study's focus on Russia and Europe may restrict the generalizability of the results to regions with distinct cultural and economic backgrounds.

Additionally, the study used qualitative research method, such as conducting interviews with HR managers. Although this method offered thorough understanding of the perspectives and experiences of HR professionals, it may not have the statistical robustness and broad applicability of quantitative techniques. Incorporating quantitative data in future research could help verify and build upon the findings.

Furthermore, the research focused on small and medium-sized enterprises, which might possess varying resources, obstacles, and potential advantages in contrast to bigger corporations. The results may not be relevant to bigger enterprises with more intricate HR systems and larger budgets for implementing AI technologies.

Even though AI in HR had its ethical issues discussed in the study, it did not sufficiently cover such topics as data privacy, fairness or transparency. There is indeed need for more discussion about these significant considerations to make sure that AI integration into HR strategies is ethical as well as responsible. It is important to continue research in order to know

more about the ethical considerations surrounding Artificial Intelligence that apply within Human Resources with a special emphasis on data privacy, fairness as well as transparency issues. Besides this, organizations should also find out how they will be able to develop policies needed for addressing these ethical dilemmas by making proper use of the AI techniques at their disposal.

There are several potential ways for future research. First of all, future research should strive to incorporate a broader and more varied selection of Human Resources professionals from different geographical areas and cultural backgrounds. This would improve the applicability of the results and offer a broader view on AI incorporation in HR. Moreover, in addition to qualitative insights, future research should include quantitative methods like surveys and experimental designs to enhance the study. This combination of methods can offer stronger evidence on how AI affects HR and confirm the qualitative results. Another way is investigation on how AI is being used and its impact on Human Resources in various sectors and organizations of varying sizes. Comparative research on AI adoption in diverse contexts can uncover distinct obstacles and successful strategies in small and medium-sized and large enterprise. Additionally, the investigation of the impact of AI-powered HR strategies on the overall employee experience can be conducted, including aspects like job satisfaction, engagement, and retention. HR managers can create AI applications that are easy to use and promote employee wellness by considering the employee viewpoint. Finally, comparative research across various regions and cultures can demonstrate the impact of contextual elements on the adoption and integration of AI in HR. This type of research can pinpoint strategies and frameworks tailored to specific regions for successful implementation of AI.

In summary, this research enhances the comprehension of how AI is changing HR processes, but further and broader studies are necessary to fully harness its capabilities and tackle the identified problems. By examining these potential areas for research in the future, academics and professionals can help improve AI-driven HR practices to be more efficient, moral, and diverse.

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APPENDICES

Appendix 1. Interview guide

- 1) Which company do you work for? What kind of activity? Is it a small/medium/large company? What is the staff?
- 2) How many years have you been working as an HR? How many people are subordinate (if any)?
- 3) What influenced the decision to implement AI in employee training? How long have you been using AI in the company?
- 4) Can you describe your experience of introducing AI-based technologies into employee training in your organization?
- 5) What specific AI technologies have you integrated into your employee training processes?
- 6) What are the main benefits you've experienced from implementing AI in HR processes?
- 7) Can you share examples of how AI has enhanced employee learning experiences or improved HR efficiency?
- 8) How do you see the role of HR professionals evolving with the integration of AI technology?
- 9) In what ways has AI-enabled automation transformed traditional HR tasks within your organization?
- 10) What changes have you observed in the role of HR managers as a result of AI adoption?
- 11) How has AI-driven automation allowed HR managers to focus more on strategic initiatives?
- 12) What are some of the key challenges your organization has faced in integrating AI into HR operations?
- 13) How do you address skill gaps or training needs within the HR team to effectively utilize AI technologies?
- 14) How do you see the role of AI in employee training evolving over the next few years?
- 15) What advice would you give to other HR managers in SMEs who are considering integrating AI into their training programs?

Appendix 2. Respondent profile

Respondent	Gender	Work experience	Position	Company	Industry	Russia/Europe
Respondent A1	Female	10 years	HR manager	Company A	Fintech	Europe
Respondent A2	Female	4 years	HR specialist	Company A	Fintech	Europe
Respondent B1	Male	17 years	HR manager	Company B	Agriculture	Russia
Respondent B2	Female	4 years	HR specialist	Company B	Agriculture	Russia
Respondent B3	Female	5 years	HR specialist	Company B	Agriculture	Russia
Respondent C1	Female	4 years	HR manager	Company C	Logistics	Russia
Respondent C2	Male	2 years	HR specialist	Company C	Logistics	Russia
Respondent D1	Female	10 years	HR manager	Company D	Marketing	Europe
Respondent E1	Female	7 years	HR manager	Company E	Marketing	Russia
Respondent E2	Female	4 years	HR specialist	Company E	Marketing	Russia
Respondent E3	Male	2 years	HR specialist	Company E	Marketing	Russia
Respondent F1	Female	9 years	HR manager	Company F	E-learning	Russia
Respondent G1	Female	12 years	HR manager	Company G	Food production	Russia

Appendix 3. Overview of coding process

