

Artificial Intelligence and its impact on people management

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ABSTRACT

People management is a key area for an organization's success, and artificial intelligence is playing an increasingly important role in this process. Through the use of technologies such as data analytics, machine learning, and automation, companies can improve talent selection and recruitment, as well as employee performance management and skills development. Artificial intelligence can also be used to predict employee behavior and identify potential problems before they occur. This can help increase productivity and talent retention, as well as reduce training and *turnover* costs. However, the implementation of artificial intelligence in people management also brings challenges and concerns, such as information privacy and the possibility of algorithmic discrimination. It is important for companies to have clear and transparent policies for use in people management in order to ensure that it is used ethically and responsibly.

Keywords: Artificial Intelligence, People management, Technology, Business strategy.

INTRODUCTION

The realization of this article was justified by the current relevance of technologies and collaborators for companies. The overall objective was to examine the impact of AI

(Artificial Intelligence) in people management and evaluate its advantages, disadvantages, ethical and social implications and the main applications of AI in people management in the sectors of recruitment, selection, training and development of people in their work environment. In addition, investigate how AI tools can improve decision-making in relation to employees, increase efficiency and productivity, and potentially impact organizational culture and interpersonal relationships in companies.

The people management area is responsible for managing the human capital of companies and uses human resources techniques to reconcile the objectives of employees with the goals of the organization.

With technological evolution, it has changed people's lives in several instances, and has also caused major transformations in organizations and in the world of work. In this context, tasks considered manual and repetitive begin to be performed by automated systems.

Artificial intelligence (AI) is becoming increasingly used by businesses. Therefore, it is crucial to analyze its impact on people management and how it is affecting human resource management practices.

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The type of research conducted was a Literature Review and qualitative research that involves a systematic and rigorous approach to produce new and reliable knowledge in the field of AI and people management.

The work was structured in four sections. In the first, the introduction to the theme is presented; in the second, the development of the article itself is carried out; In the third section, the methodology is presented; the fourth section, in turn, presents the final considerations of the study; and the bibliographic references used in the development of the research are listed at the end of the work.

PEOPLE MANAGEMENT – CONCEPT AND CONTEXT

People management had its origins in the Industrial Revolution of the eighteenth century, when companies began to care about the efficiency and productivity of their employees. Prior to this period, employer-employee relations were based on informal agreements and there was no systematic concern with people management. With the Industrial Revolution, companies began to have a large number of workers and the need to manage their activities became increasingly important. Then, the first personnel departments emerged, which aimed to control the workforce and ensure that workers performed their tasks efficiently (CHIAVENATO, 2014).

Over time, it has developed and gained new functions. In the 1950s, for example, the concept of personnel administration emerged, which focused on hiring, training, and developing employees. In the 1970s, people management began to incorporate concepts of psychology and human behavior, such as motivation, leadership, and communication (CHIAVENATO, 2014).

People management is an extremely important area for organizations that seek to achieve their business goals and stand out in an increasingly competitive market. According to Rego et al. (2015), people management involves a series of practices and policies that aim to attract, develop and retain talent, ensuring alignment between employee expectations and the organization's strategic objectives and also enhancing human capital, increasing the efficiency and effectiveness of employees. People management also aims to create a healthy and motivating work environment that provides satisfaction and well-being. It can also be defined as "a set of policies and practices that aim to guide human behavior and interpersonal relationships within the organization" (CHIAVENATO, 2014).

With the advent of globalization and new technologies, there has been a drastic change in all market sectors. Consequently, changes in management methods, including people management. Companies have needed to become more agile and flexible, and people management plays a crucial role in this process. According to Chiavenato (2014, p23), "organizations need people who are able to adapt to change, learn quickly, and work as a team." It plays a key role in creating organizations that are efficient and adaptable to changes in the work environment."



To achieve this goal, it is necessary for companies to take a strategic approach to their management. This implies a clear understanding of the organization's objectives and how people management can contribute to achieving them. In addition, it is important that it is aligned with the company's culture and values, in order to ensure employee cohesion and engagement.

Another important aspect is the relevance of human capital in the organization. This includes recognizing and valuing employees, providing a healthy and motivating work environment, and providing opportunities for professional development and growth. According to Rego et al. (2015), valuing human capital contributes to talent retention and the construction of an assertive organizational climate.

According to Chiavenato (2014), it must also be attentive to changes in the external environment, such as labor market trends and consumer demands. This implies a constant updating of the competencies and skills of employees, in order to ensure that the organization is prepared to face the challenges and take advantage of the opportunities of the market.

ARTIFICIAL INTELLIGENCE – CONCEPT AND CONTEXT

Artificial intelligence is a field of study that is concerned with developing computer systems that can perform tasks that, until then, required human intelligence to be performed. According to Luger (2013), artificial intelligence can be defined as "the discipline that is concerned with the creation of programs that can exhibit behaviors that, if exhibited by human beings, would be considered intelligent".

For Russell and Norvig (2004), the history of artificial intelligence can be divided into three distinct periods: the initial period, which runs from the late 1940s to the mid-1960s; the "AI winter" period, which runs from the late 1960s to the mid-1980s; and the current period, which begins in the late 1980s and extends to the present day.

During the early period, researchers such as John McCarthy, Marvin Minsk, and Claude Shannon sought to develop systems that could simulate human intelligence. During this period, algorithms were developed to play chess and to solve mathematical problems, as well as natural language programs. (RUSSELL AND NORVIG, 2004)

In the period of the "AI winter", there was a widespread disbelief in the viability of artificial intelligence, and investments in research decreased considerably. However, according to Russell and Norvig (2004), "the 1980s were a renaissance period for artificial intelligence", with the creation of new machine learning techniques and the emergence of new applications, such as computer vision and recommender systems.

Currently, artificial intelligence is applied in various fields, such as medicine, industry, education, and security. According to Luger (2013), "artificial intelligence has the potential to revolutionize the way we live and work, creating new opportunities and transforming old paradigms."



According to Silva and Mairink (2019), the fact that it is possible to use artificial intelligence in several areas facilitates production and optimizes the time spent on carrying out activities to be performed. In addition, the use of artificial intelligence brings a solution to one of society's biggest problems, which is lack of time.

Artificial intelligence is not exactly a form of intelligence, but rather a form of manifestation of human intelligence. (SANTAELLA, 2023). In fact, artificial intelligence is created and programmed by humans, and its "intelligence" is limited by the knowledge and skills that have been incorporated into its algorithms.

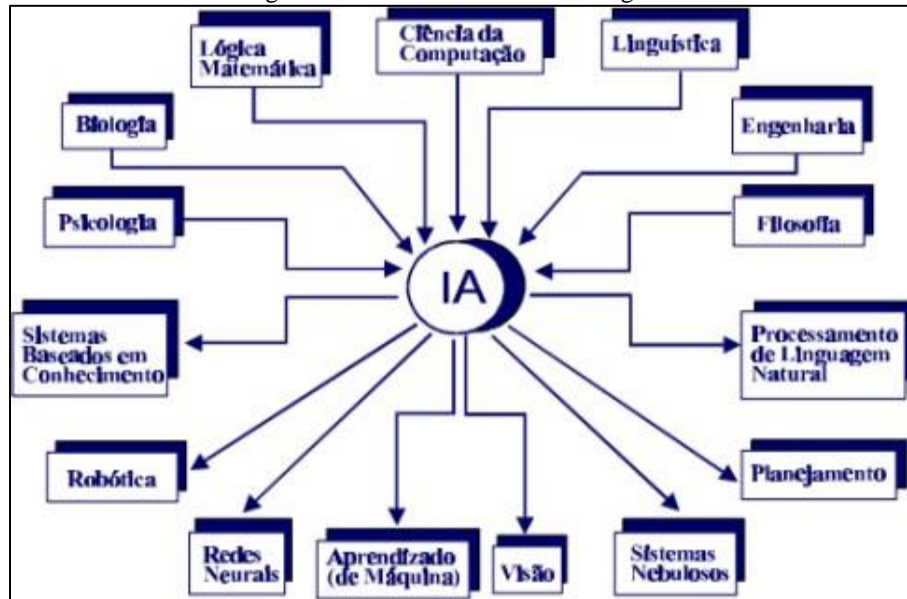
According to Luger (2013), although AI systems can be highly efficient at the specific tasks for which they were designed, this does not imply that they are intelligent in the human sense. Therefore, it is important to recognize that artificial intelligence has its limitations and should not be seen as a complete replacement for human intelligence.

APPLICATIONS OF ARTIFICIAL INTELLIGENCE

The application of Artificial Intelligence (AI) takes place in the following sectors: selection, talent recruitment, performance evaluation, and skills development. AI uses algorithms to analyze resumes, social media, and other data to find suitable candidates (SILVA; MAIRINK, 2019). In addition, AI can also be used to evaluate employee performance, identify patterns, and provide personalized feedback (LUGER, 2013).

The use of AI in people management is what makes it possible to identify *gaps* in employees' skills and provide personalized training to meet these needs (SILVA; MAIRINK, 2019). In addition, AI can be used to predict the need for training in certain areas and help in the development of more effective career plans (LUGER, 2013).

Figure 1 - Areas of Artificial Intelligence



Fonte: MONARD e BARANAUSKAS (2000)

However, it is important to note that the implementation of AI in human resources management can raise concerns about the privacy of employee data and the risk of algorithmic discrimination (SILVA; MAIRINK, 2019). That's why it's crucial for organizations to establish explicit and transparent policies to ensure their use judiciously

APPLICATION OF ARTIFICIAL INTELLIGENCE IN PEOPLE MANAGEMENT

Artificial intelligence (AI) has become an increasingly present tool in people management, covering areas of training, recruitment and selection, performance evaluation and job design. (Da Silva, Oliveira and Junior, 2019).

In reining, AI personalizes learning according to the needs of each employee, through pattern recognition and data analysis (Lee, 2019). In addition, AI can help identify knowledge *gaps* and suggest specific training for each employee, optimizing the company's time and resources (Da Silva, Oliveira and Júnior, 2019).

In recruitment and selection, AI assists in screening resumes, analyzing competencies, and identifying profiles that fit the company's needs (Luger, 2013). According to Chiavenato (2014), AI can help reduce subjectivity in the selection of candidates, making the process more objective and impartial.

In performance evaluation, AI can be used to collect and analyze information in an automated way, providing more accurate and objective information about each employee's performance (Da Silva, Oliveira and Júnior, 2019). Additionally, AI can help identify performance trends and patterns, aiding in strategic decision-making (Lee, 2019).

Finally, in job design, AI can be used to automate routine and repetitive tasks, allowing employees



to focus on more strategic and creative activities (Chiavenato, 2014). AI can also help identify opportunities for improvement in job design, through the analysis and identification of patterns (Da Silva, Oliveira and Júnior, 2019).

ADVANTAGES AND RISKS OF USING ARTIFICIAL INTELLIGENCE IN PEOPLE MANAGEMENT

With the use of artificial intelligence in people management, it is noted that this technology has several benefits and challenges for organizations. According to Albuquerque de Mendonça et al. (2018), AI is a tool that can help in making more efficient and accurate decisions in selection processes, performance evaluation, and training.

Jatobá (2018) points out that AI can be used in the recruitment and selection of candidates, optimizing the process of screening resumes and assessing skills. However, it is important to consider that AI should not be used in isolation and completely replace human evaluation, but rather complement and help with data analysis.

However, the use of AI in people management also brings risks and challenges. According to Chiavenato (2014), AI can lead to a dehumanization of the work environment, affecting the relationship between employees and the company. In addition, AI can raise concerns regarding employee data privacy and the possibility of algorithmic discrimination (Silva and Mairink, 2019).

According to Santaella (2023), AI is intelligent only to the extent that it is programmed and used responsibly by humans. It is essential that people management continues to be seen as a strategic area and that it considers the importance of the human factor in organizations, even with the advancement of technology.

In this sense, as highlighted by Lee (2019), artificial intelligence (AI) can be perceived as an "empowerment tool", capable of enabling people to direct their focus to more creative and strategic activities, while repetitive and routine tasks are performed by technology. However, it is critical to remember, as highlighted by Rego et al. (2015), that AI is just a tool and that the human element still retains its essential importance within organizations. Therefore, the balance between the use of technologies and the maintenance of human contact is necessary in people management, in order to obtain the benefits that AI can provide.

It is necessary, therefore, to understand the advantages and disadvantages of the use of artificial intelligence so that, in this context, organizations, together with the government, create strategies for training people and relocating them in the labor market.



THE IMPORTANCE OF DATA PRIVACY AND SECURITY IN THE IMPLEMENTATION OF AI IN PEOPLE MANAGEMENT

AI can assist with talent identification, performance management, data analysis, and decision-making, among other activities. However, it is necessary to consider the importance of data privacy and security in this context.

Confidentiality is a fundamental right that must be respected in all areas, including in the management of people with the use of AI. According to Albuquerque de Mendonça et al. (2018), "confidentiality refers to the protection of each individual's personal information, such as name, address, telephone number, CPF, email, among others". It is necessary to ensure that employee information is protected and used only for the specific purposes for which it was collected.

Information security is also essential in the use of AI in people management. The collected data should be stored in secure locations and accessible only by authorized persons. According to Chiavenato (2014), "information security is essential to prevent fraud, data theft and other cyber threats that can compromise the confidentiality and integrity of the company's information".

In addition, the General Data Protection Law (LGPD), which came into force in September 2020, requires companies to ensure the confidentiality and security of personal information collected (GENERAL DATA PROTECTION LAW No. 13,709/2018). Da Silva et al. (2019) state that "the LGPD is a piece of legislation that aims to protect the confidentiality of individuals' personal information by establishing clear rules for the collection, use, storage, and sharing of this information."

Therefore, the confidentiality and security of information should be considered as fundamental aspects in the use of AI in people management. Transparency in the collection and use of personal information, as well as the use of information security technologies, are essential to ensure the confidentiality, integrity, and availability of information.

However, AI can also be a tool used to breach the confidentiality and security of employee information. According to Santaella (2023), "AI can be used to track, monitor, and collect information without employee consent, which can be considered a breach of confidentiality." Therefore, it is important for organizations to implement clear policies on the use of AI in people management, setting boundaries and ensuring the confidentiality and security of employee information.

However, the use of AI in people management can bring many benefits to companies, as long as the fundamental rights of employees, such as the confidentiality and security of information, are respected. The LGPD establishes clear rules for the collection and use of personal information, and organizations must implement clear policies on the use of AI in people management, ensuring transparency, confidentiality, and integrity of information.



THE FUTURE OF PEOPLE MANAGEMENT WITH ARTIFICIAL INTELLIGENCE

According to Silva, Oliveira and Júnior (2019), the increase in results and achievement of objectives of any type of organization depends on people and technology. Thus, it is important that they pay attention to the need for people to interact with technologies and always seek to improve their strategies. Artificial intelligence (AI) is rapidly transforming the way organizations manage their human resources (HR). Advanced AI technologies, such as machine learning, data analytics, and process automation, are enabling HR departments to perform complex tasks such as forecasting recruitment needs, managing performance, and personalizing career development.

According to Albuquerque de Mendonça et al. (2018), AI is a tool that is changing the dynamics of people management. AI technologies are helping to improve people management decision-making and make processes more efficient and accurate. Additionally, AI is allowing businesses to gain access to valuable insights into their employees, which can help improve performance, increase job satisfaction, and reduce turnover.

However, as highlighted by Silva and Mairink (2019), AI also brings with it significant challenges for people management. As organizations become more reliant on AI technology, changes may occur in the organizational structure, as well as in the role and skills of employees. Additionally, there may be concerns about the privacy of employee data and the impact of technology on workers' mental health and well-being.

In the face of these challenges, it is important for organizations to approach AI with morality and responsibility, as discussed by Da Silva, de Oliveira and Júnior (2019). This includes adopting clear policies on the use of AI in processes, protecting employee data, and creating a healthy and safe work environment.

In addition, as highlighted by Chiavenato (2014), AI does not completely replace the role of professionals in the field of people management. While technology can perform complex tasks faster and more accurately, human intervention is still required to interpret the results and make decisions based on ethical and social criteria.

AI is changing the methods of how organizations manage their human resources. While there are significant challenges to be addressed, AI also provides opportunities to improve efficiency, accuracy, and decision-making. It is important for organizations to take a prudent and responsible approach when integrating AI into their people management processes, and to recognize that human intervention is still necessary to ensure a fair and balanced approach.

Silva, Oliveira and Júnior (2019) state that activities with low added value or that require physical effort would be minimized with Artificial Intelligence and the people management area ceases to be an operational department to become a strategic environment performing activities that require critical



analysis, knowledge and intellectual capital.

METHODOLOGY

The article in question adopted a methodological approach that combined different research techniques. Historical, hypothetical-deductive and bibliographic methods and qualitative research were used in order to provide a broad and detailed analysis of the topic addressed. The historical methodology allowed the understanding of the evolution of the subject over time, while the hypothetical-deductive method made it possible to formulate hypotheses. The bibliographic method was used for the review and critical analysis of the existing literature on the subject. This combination of

methodologies contributed to the achievement of robust and reliable results, allowing a more complete and in-depth approach to the subject.

According to Köche (2016), scientific methodology is composed of steps that must be followed to ensure the validity and reliability of the results obtained. Among the steps, the following stand out: the definition of the problem to be investigated, the review of the existing literature on the subject, the definition of the hypothesis or research questions, the choice of the methodology for collecting and analyzing the collected data, and the interpretation of the results obtained. Thus, scientific methodology is essential to ensure the quality and validity of scientific research. (KÖCHE, 2016)

According to Köche (2016), bibliographic research is one of the most used techniques in scientific methodology and allows the researcher to know the state of the art of the topic studied. Ethics in scientific research is essential to ensure the integrity and credibility of research. In this article, it was used for the review and critical analysis of the existing literature on the subject. This combination of methodologies contributed to obtaining robust and reliable results, allowing a more complete and in-depth approach to the subject.

Moresi et al. (2003) highlight the importance of bibliographic research as one of the most used techniques in scientific methodology. According to the authors, bibliographic research consists of the "identification, selection, analysis and interpretation of information contained in books, scientific articles and other documentary sources" (MORESI et al., 2003, p. 5). The bibliographic research allows the researcher to know the state of the art of the subject studied and to identify gaps in the existing knowledge.

FINAL THOUGHTS

As presented throughout the work, it is possible to reinforce the importance of the use of Artificial Intelligence in People Management, since the application of technology can strongly impact the organizational strategy in relation to the achievement of objectives and goals and also examining its



applications in the sectors: recruitment, selection, training and development of employees.

Through the literature review and the use of a scientific methodology, it was possible to understand the advantages and disadvantages of AI in people management.

People management plays a crucial role in the success of organizations, seeking to attract, develop and retain talent, as well as create a healthy and motivating work environment. With the advancement of technology, artificial intelligence has become an expressive tool to assist people management processes, automating tasks, analyzing large amounts of data, and improving decision-making.

However, it is important to keep in mind that the introduction of artificial intelligence in people management also brings challenges and moral issues. Process automation can lead to concerns about job substitution and employee data privacy. In addition, AI can be influenced by biases and discriminations present in the data used, which can affect the decisions made.

Despite the potential drawbacks and challenges, artificial intelligence has the potential to bring significant benefits to people management. It can streamline processes, increase efficiency and productivity, provide valuable *insights* for strategic decision-making, and contribute to the creation of a more innovative organizational culture.

Artificial intelligence is transforming the way organizations manage their human resources. People management needs to adapt to new technologies and take advantage of the opportunities offered by AI. A balanced and strategic approach, which values human capital, promotes a healthy work environment and considers social and ethical impacts, will be key to obtaining the best results from the combination of artificial intelligence and people management.



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