

## The Impact of Artificial Intelligence on Managing the Recruitment Process in a Company

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### Abstract

**Aim:** The aim of this article is to analyse the impact of artificial intelligence on data management in the recruitment process in a company.

**Methodology:** The method of document analysis was used, followed by an experiment, consisting in identifying artificial intelligence algorithms, preparing a data set, implementing algorithms, testing algorithms, and comparing the results – obtained from artificial intelligence algorithms in terms of efficiency, precision and speed of data processing, analysis and interpretation of the experiment results in the context of hypotheses and theories of data management and artificial intelligence.

**Results:** Thanks to the use of the artificial intelligence algorithm, the efficiency of the recruitment process was increased by shortening its implementation time, and its effectiveness and quality were improved by a more objective and precise selection of suitable candidates. The integrity of the AI system with various advertising portals allowed for quick and easy posting of job offers on various platforms. The use of AI contributed to the reduction of costs and errors, which in effect leads to the sustainable development and success of the company.

**Implications and recommendations:** The use of the AI algorithm allowed us to draw conclusions regarding the potential benefits and challenges related to the implementation of AI in data management. They can

be a valuable guide for companies considering the implementation of AI in their structures, contributing to their development and improving operational and financial efficiency.

**Originality/value:** The development of an algorithm for implementing AI technology in the recruitment process has shown tangible benefits resulting from its use.

**Keywords:** artificial intelligence, machine learning, data management, recruitment process

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## 1. Introduction

Currently, the development of technology is reaching an unprecedented pace, and one of its most fascinating and dynamic areas is artificial intelligence (AI). Artificial intelligence, through its advanced data analysis and processing capabilities, opens up new perspectives in management, contributing to the optimisation of processes and increasing operational efficiency. In the era of digitalisation and technological transformation, data management, which is one of the key elements of the activities of every organisation, is also gaining importance. In the face of increasingly complex data, artificial intelligence is increasingly becoming an indispensable tool, enabling more precise, effective and efficient actions. It can therefore be hypothesised that the use of artificial intelligence algorithms in data management will bring noticeable benefits in the form of reducing the costs and time spent on the recruitment process compared to traditional methods.

By using advanced machine learning algorithms and natural language processing methods, companies can also increase their financial efficiency. Process automation not only contributes to reducing costs and errors, but also enables better use of human resources, which ultimately leads to sustainable development and success of the company in a dynamically changing market environment.

The article is devoted to the issue of increasing operational and financial efficiency based on artificial intelligence algorithm solutions. The aim of this article is to analyse the impact of artificial intelligence on data management in the recruitment process in a company.

The basic concepts related to this issue are explained. The study presents an experiment consisting in implementing a system based on AI algorithms in real recruitment processes in the company. The effectiveness of this system was analysed by comparing the recruitment time, candidate quality, process efficiency and time and cost savings resulting from the automation of administrative processes. Thanks to this, it was possible to draw conclusions regarding the potential benefits and challenges related to the implementation of AI in data management.

## 2. Background

Defining artificial intelligence is a challenge. So far, no single definition of artificial intelligence has been developed in national legislation and international conventions. Attempts are being made to descriptively approach the phenomenon and to compare artificial intelligence techniques. Artificial Intelligence (AI) is an attempt to recreate the intelligence that humans possess (Kapelczak, n.d.; Kurp, 2023, pp. 11-13). The most important features that artificial intelligence should have are (Iszkowski & Tadeusiewicz, 2023): the ability to learn and acquire knowledge, autonomy (coping with random and unexpected situations), adaptation (the ability to adapt to new conditions).

Artificial intelligence is also seen as a field of knowledge encompassing, among others, neural networks, robotics and the creation of models of intelligent behaviour and computer programmes simulating these behaviours, including machine learning, deep learning and reinforcement learning (Michałowski, 2018).

The definition of artificial intelligence as a system model based on the technical development of the intelligent agent model comes down to the description of artificial intelligence as an AI System. This

system is based on the concept of a machine that has the ability to influence the environment by formulating recommendations, predictions or decisions regarding specific goals. Input data, machine or human data, are used to perform these tasks, which enable (*Polityka dla rozwoju...*, 2020):

- perception of real and virtual environments,
- compilation of this perception into models,
- use of model interpretation to formulate result variants.

The differences between the use of intelligence by devices and by humans concern the efficiency and quality of data processing and their subsequent use. Although intelligence can be associated with such qualities as imagination, abstract thinking, or creativity, devices have not yet been equipped with them (Hurbans, 2020, pp. 1-5).

Evolutionary algorithms are a powerful tool in the field of artificial intelligence and optimisation, drawing inspiration from evolutionary processes occurring in nature. Using the mechanisms of natural selection, crossover, and mutation, these algorithms generate and improve solutions in the process of iterative evolution, striving to find optimal or close-to-optimal solutions in complex problems (Leciejewski, 2017, pp. 3-9). The genetic algorithm is a basic example of an evolutionary algorithm. Distributed intelligence can also be used for similar purposes, especially in situations where there is a need for flexibility and scalability (Boryczka & Płoska, 2021, pp. 16-19).

Distributed intelligence algorithms (e.g., ant algorithms) are useful for solving optimisation problems, especially when there are many constraints in the problem space and it is difficult to find the absolute best solution (Hurbans, 2020, pp. 145-177).

Machine learning (ML), on the other hand, is a paradigm in which computers are capable of acquiring knowledge and skills on their own, without the need for explicit programming (Sarker, 2021, p. 160; Zhou, 2021, p. 22).

The integration of artificial intelligence (AI) into the recruitment process has significantly transformed how organisations manage their human resources, particularly in the context of talent acquisition. AI technologies are increasingly being utilised to streamline various stages of recruitment, from job postings to candidate assessments, thereby enhancing efficiency and effectiveness in hiring practices. The application of AI in recruitment not only automates routine tasks but also provides advanced analytical capabilities that can lead to better decision-making in selecting candidates (Agustono et al., 2023; Albassam, 2023; Tay et al., 2024).

One of the primary benefits of AI in recruitment is its ability to process vast amounts of data quickly and accurately. Traditional recruitment methods often rely on manual screening of resumes, which can be time-consuming and prone to human error. AI-driven recruitment tools, such as Applicant Tracking Systems (ATS), can analyse resumes and applications at a much faster rate, allowing HR professionals to focus on more strategic aspects of the hiring process (Afzal et al., 2023; Albassam, 2023; Tay et al., 2024). This automation not only reduces the time-to-hire but also enhances the overall candidate experience by providing timely feedback and communication throughout the recruitment journey (Afzal et al., 2023; Tay et al., 2024).

Moreover, AI technologies can help mitigate biases that often plague traditional recruitment processes by employing algorithms that assess candidates based on objective criteria rather than subjective judgments (Avery et al., 2023; Chen, 2022). However, it is crucial for organisations to ensure that the AI systems they implement are designed to be fair and transparent (Burrell & McAndrew, 2023; Stuss & Fularski, 2024).

In addition to improving efficiency and reducing bias, AI can enhance the quality of hires by utilising predictive analytics. By analysing historical data on employee performance and turnover, AI can identify the characteristics and qualifications that correlate with successful job performance (Abdelraouf et al., 2024; Udayanan et al., 2024). This data-driven approach allows HR professionals to

make more informed decisions when selecting candidates, ultimately leading to better organisational outcomes (Afzal et al., 2023; Tay et al., 2024). Furthermore, AI can assist in talent sourcing by identifying potential candidates from various online platforms, thereby expanding the talent pool beyond traditional recruitment channels (Albassam, 2023; Tay et al., 2024; Udayanan et al., 2024).

The implementation of AI in recruitment also raises several ethical considerations that organisations must address. While AI can enhance efficiency and objectivity, it is essential to remain vigilant about the potential for algorithmic bias and the implications of data privacy (Burrell & McAndrew, 2023; Stuss & Fularski, 2024). Additionally, HR professionals need to be trained in understanding AI technologies and their implications to effectively manage the recruitment process in an AI-driven environment (Rabenu & Baruch, 2024).

Furthermore, the integration of AI into recruitment processes necessitates a cultural shift within organisations. HR teams must embrace a mindset that values data-driven decision-making and continuous improvement (Rabenu & Baruch, 2024).

The future of recruitment is likely to see even greater advancements in AI technologies, including the use of machine learning and natural language processing to enhance candidate assessments and interactions (Albassam, 2023; Tay et al., 2024; Udayanan et al., 2024). For instance, AI-powered chatbots can engage with candidates in real-time, answering questions and providing information about the recruitment process, which can further improve the candidate experience (Udayanan et al., 2024). As AI continues to evolve, organisations that proactively adapt their recruitment strategies to incorporate these technologies will be better positioned to attract and retain top talent in an increasingly competitive job market (Albassam, 2023; Tay et al., 2024; Udayanan et al., 2024).

### 3. Methodology

The introduction of the experiment – ATS System using Machine Learning – involves introducing the ATS (Applicant Tracking System) system based on Machine Learning into the recruitment process in the company. This system automatically analyses and evaluates candidates' CVs, assigning them to appropriate positions based on their skills, experience and education. The aim of the experiment is to streamline and automate the recruitment process, speed up the finding of suitable candidates and increase the efficiency of the HR department. The experiment plan includes:

- implementation of the ATS system in the company's HR department,
- testing the effectiveness of the system by analysing the recruitment time, candidate quality and process efficiency,
- monitoring the reaction of HR employees and candidates to the new system,
- analysis of the experiment results in order to assess its effectiveness and identify possible areas for further improvement.

The analysed data related to the company were prepared in cooperation with the HR Manager of the given company and numerous interviews were conducted with employees responsible for recruitment, data related to the use of the ATS system were collected thanks to a telephone interview and information on the website <https://erecruiter.pl>.

The company does not have systems supporting the recruitment process or systems automatically evaluating CVs, which results in manual verification of meeting the criteria by the people responsible for recruitment and takes a lot of time. The average time for a recruiter to post five ads on job portals takes an average recruiter about 1.5 hours.

Data on the number of CVs received by the company, necessary to conduct a given experiment, i.e. Introduction of the ATS System using Machine Learning, are presented in Fig. 1.

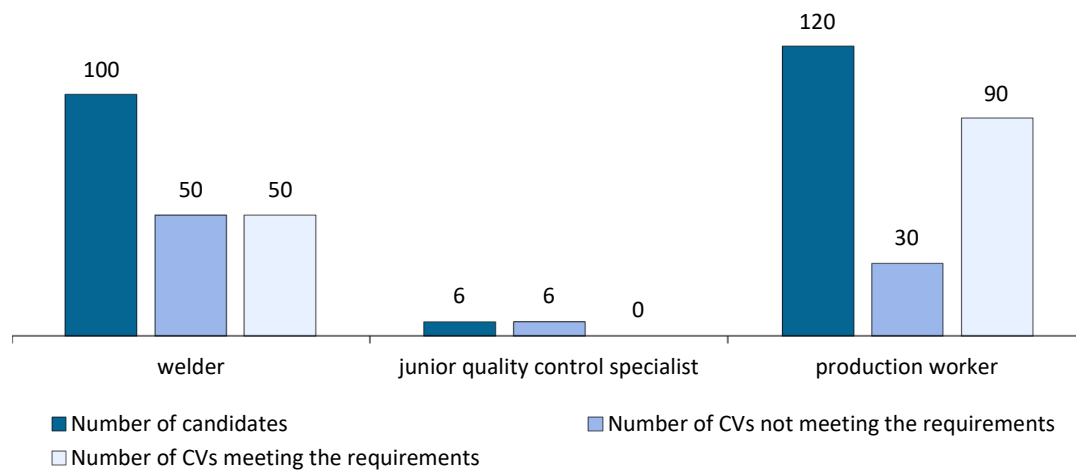


Fig. 1. Number of CVs received by the company and their quality during the month

Source: own study based on company data.

The following criteria were distinguished for assessing a given candidate:

**Welder:** years of work in the profession – three, required documents and certificates for performing the profession, education at least secondary.

**Junior quality control specialist:** years of work in a similar position – three, certificates and training, knowledge of solutions and products used in the company, higher education in the profession.

**Production worker:** education at least secondary, willingness to work, years of work in a similar position – one.

Time required to review one CV for a position (the time includes the time of switching from portal to portal depending on where the CV was sent by the candidate): welder – 15 min., junior quality control specialist – 20 min., production worker – 10 min., time for assessing the candidate's CV is included in the five min. needed to invite the candidate for a job interview (Fig. 2).

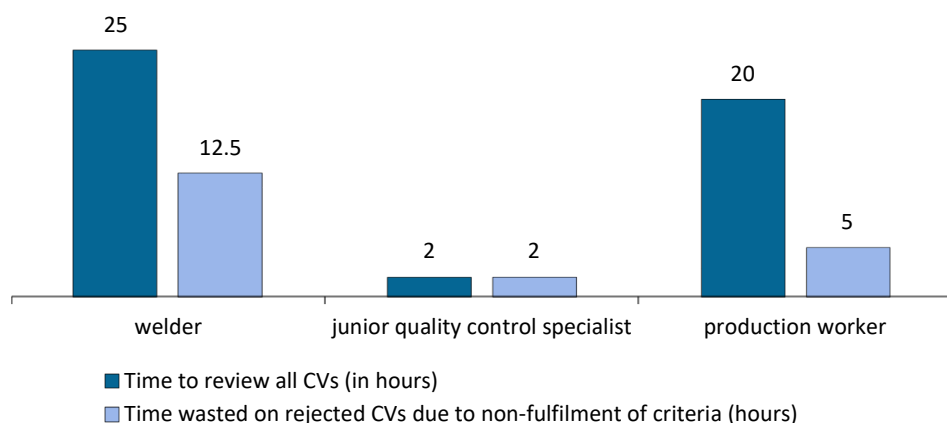


Fig. 2. Time of candidate evaluation by the recruiter

Source: own study based on company data.

The time a recruiter spends checking CVs per day is two hours due to the number of other tasks. Only one person is responsible for CV evaluation. An hour of a recruiter's work in company costs approximately PLN 70. The system implemented in the experiment uses machine learning algorithms, the cost of a licence for a given product with given solutions is about PLN 2,000 per month, PLN 24,000 per year.

The main goals of introducing the ATS system using Machine Learning include:

- automating the process of evaluating CVs of candidates for various positions in the company,
- reducing the time spent on manual CV verification,
- increasing the efficiency of the recruitment process using advanced Machine Learning algorithms,
- reducing the time associated with posting job offers on various websites such as pracuj.pl or OLX through the integrity of the given system with the given portals.

The ATS system was chosen due to:

- ease of access for employees – the system allows employees easy access by using only a device with Internet access;
- quick adaptation of new employees – thanks to the simplicity and intuitiveness of the interface, new employees quickly adapt to using the system;
- integrity with many AI solutions – the system is integrated with many solutions based on artificial intelligence (AI), which makes it possible to use advanced machine learning algorithms to optimise recruitment processes, analyse candidate data and create personalized recommendations;
- no IT resources – thanks to the use of the ATS programme, which is located on the Internet, the company does not need its own IT resources;
- training employees and implementing the entire system involve approximately seven working days.

The employee responsible for recruiting people for positions in the company can independently conduct the implementation process, using available training provided on the manufacturer's website. Thanks to this, the company does not have to engage additional resources or third parties to carry out this process, which will save time and costs

The research used the document analysis method, which is a process of systematically collecting, exploring and interpreting textual or graphic documents to gain a deeper understanding of the issue being studied.

The basic steps of this method include:

- 1) document collection – identifying and collecting documents related to the topic being studied;
- 2) document selection – choosing the most important and relevant documents for the problem being studied;
- 3) content analysis – a detailed study of the content of documents, identifying key topics, concepts, patterns or relationships between them;
- 4) interpretation of results – conclusions drawn from the analysis of documents regarding, for example, the identification of key problems, relationships or trends, the assessment of the effectiveness of actions or the forecasting of future events;
- 5) contextualization – considering the context that may affect the interpretation of documents and their significance for the problem being studied.

For this purpose, an experiment method was used, which included:

- 1) selection of algorithms – identifying different types of artificial intelligence algorithms, such as machine learning, neural networks, or genetic algorithms, which can be potentially effective in optimising data management;
- 2) data preparation – preparing a data set that will be used to conduct the experiment; the data includes various information related to data management, such as customer data or operational data;
- 3) algorithm implementation – implementing selected artificial intelligence algorithms for data analysis and optimisation; the algorithms were adapted to the specificity of the data and the goals of their management;
- 4) conducting the experiment – the experiment consisted of comparing the effectiveness of artificial intelligence algorithms in optimising data management based on established indicators, such as data processing time, precision of results, and operational costs.

The experiment was carried out by:

- testing algorithms – performing algorithm tests on prepared data, analysing the results and adjusting the algorithm parameters to obtain optimal results;
- comparing the results – obtained from different artificial intelligence algorithms in terms of efficiency, precision and speed of data processing;
- analysing and interpreting the experiment results in the context of hypotheses and theories of data management and artificial intelligence.

Interpretation of the results allows for drawing conclusions regarding the effectiveness of individual algorithms and their potential application in data management practice.

## 4. Findings

The analysis conducted before the implementation of the new solution showed that:

- the time spent preparing a CV and placing it on five job portals (average per month) is on average 1.5 h x 3 positions = 4.5 h,
- the time spent assessing the CV to see if the candidate meets all the conditions to be invited to a recruitment interview is on average 20 h.

Table 1 presents calculations related to the time spent on finding the right candidate for work in the company.

Table 1. Calculations related to the time spent on finding the right candidate

	Welder	Junior quality control specialist	Production worker
Number of CVs submitted	100	6	120
Number of CVs rated positively	50	0	90
Number of CVs rated negatively	50	6	30
Time spent reviewing one CV (minutes)	15	20	10
Amount of time wasted (time spent reviewing negative CVs) (hours)	12,5	2	5
Total time (hours)	25	2	20
Total monthly time reviewing resumes (hours)	$20 + 25 + 2 = 47$		
Average monthly time wasted reviewing resumes (hours)	$12.5 + 2 + 5 = 19.5$		
Monthly time spent reviewing resumes (hours)	40		
Amount of overtime due to high resume volumes (hours)	7		
Average annual employee time spent reviewing resumes (hours)	564		

Source: own study based on company data.

Table 2 presents calculations related to retaining an HR employee responsible for recruitment before the system was implemented.

Table 2. Calculations related to retaining an HR employee responsible for recruitment

Estimated annual cost of maintaining an HR employee	<b>133 200 PLN gross</b>
Cost related to overtime due to CV evaluation	$139\,080 - 133\,200 = 5880$ PLN gross
Annual cost with overtime	139 080 PLN gross
Cost resulting from negative CV evaluation by the employee	$8.5\%$ (percentage of time spent reviewing negative resumes without overtime) $\times$ 133 200 = 11 322 PLN + 5880 PLN= 17 202 PLN gross

Annual cost of an employee reviewing CVs for a designated 40 hours per month + overtime	$133\,200 \text{ PLN} \times 25\% = 33\,300 \text{ PLN gross}$ $33\,300 \text{ PLN} + 5\,880 \text{ PLN} = 39\,180 \text{ PLN gross}$
Annual cost of an employee reviewing CVs + cost of issuing CVs	$39\,180 \text{ PLN} + 3\,780 \text{ PLN} = 42\,960 \text{ PLN gross}$
Employee maintenance cost per month	<b>11 100 PLN gross</b>
Hourly rate	70 PLN gross
Overtime cost	$7 \text{ h} \times 70 \text{ PLN} = 490 \text{ PLN gross}$
Average cost of employee CV checking per month	$40 \text{ h} \times 70 \text{ PLN} + 490 \text{ PLN} = 3290 \text{ PLN gross}$
Employee cost spent on posting job ads	$4.5 \text{ h} \times 70 \text{ PLN} = 315 \text{ PLN gross}$
<b>Total employee cost</b>	<b>3290 PLN + 315 PLN = 3605 PLN gross</b>

Source: own study based on company data.

Table 3 shows the average time a recruiter needs to conduct job interviews per month and per year.

Table 3. Calculations related to the use of time of the HR employee responsible for recruitment after the system implementation

Average number of CVs per month after rejecting bad ones	140 pcs
Time spent on candidate interview invitations	5 min.
Average time spent on interview invitations	$11.66 \approx 12 \text{ h}$
Average time per year for interview invitations.	14 h
Average time to create job advertisements per year	$0.3 \text{ h} \times 3 = 0.9 \text{ h}$
$0.9 \text{ h} \times 12 = 10.8 \approx 11 \text{ h}$	

Source: own study based on company data.

Table 4 presents calculations related to retaining an HR employee responsible for recruitment after the system was implemented.

Table 4. Calculations related to maintaining the system and the HR employee after the system implementation

Annual cost of maintaining the system	24 000 PLN
Annual cost of maintaining an employee who checks CVs	$155 \text{ h} \times 70 \text{ PLN} = 10\,850 \text{ PLN}$
Total average annual recruitment cost	$24\,000 \text{ PLN} + 10\,850 \text{ PLN} = 34\,850 \text{ PLN}$

Source: own study based on company data.

The annual cost of maintaining an employee checking CVs before the implementation was PLN 39 180 (Tab. 2), after the implementation it dropped to PLN 10 850 (see Table 4). After the implementation of the system, the time spent on CV assessment will be 0, because the system will allow for automatic assessment of CV documents. The only thing that will remain will be the need to spend time inviting the candidate to a job interview.

Table 5 presents the average annual profits associated with the introduction of the system.

Table 5. Calculation of average annual profits associated with the introduction of a given system

Average annual reduction in CV data evaluation process (hours)	$564 \text{ h} - 155 \text{ h} = 409 \text{ h}$
Average annual funds gained related to implementing the new solution	$42\,960 - 34\,850 = 8110 \text{ PLN gross}$

Source: own study based on company data.

Table 6 presents calculations related to the profit achieved after the implementation of the system, which gradually increase each year.

Table 6. Calculations related to profit after implementing a given system within five years

Years	Pre-implementation costs per year post-implementation (PLN)	Costs after implementing a new solution one year after implementation (PLN)	Implementation profit (PLN)
1	42 960.00	34 850.00	8 110.00
2	85 920.00	69 700.00	16 220.00
3	128 880.00	104 550.00	24 330.00
4	171 840.00	139 400.00	32 440.00
5	214 800.00	174 250.00	40 550.00

Source: own study based on company data.

Table 7 presents calculations related to the average annual time spent on CV checking by an employee before the solution was implemented and after the implementation within five years. Before the system was implemented, the recruiter had needed an average of 564 hours per year to check CVs, after the system was implemented in the first year 155 hours, after five years the hourly profit will increase to 1645 hours.

Table 7. Calculations related to the hourly profit in the recruitment process, after implementing a given system within five years

Years	Average annual time spent before implementing the solution (hours)	Average annual time spent after solution implementation (hours)	Profit from implementation (PLN)
1	564	155	409
2	1028	310	718
3	1492	465	1027
4	1956	620	1336
5	2120	775	1645

Source: own study based on company data.

In summary, the introduction of the ATS System using Machine Learning turned out to be a very good solution, bringing tangible benefits both in terms of the efficiency of the recruitment process and saving time and resources. The investment in modern recruitment tools contributed to the improvement of the company's operations and strengthening its position on the market.

## 5. Conclusions

The goals of the experiment were achieved. After conducting the experiment introducing the ATS System with the Use of Machine Learning in the company, a number of important conclusions can be drawn that confirm the effectiveness and benefits of using modern recruitment tools:

- The process of evaluating CVs of candidates for various positions was automated, which contributed to a significant reduction in the time spent on manual document verification.
- The use of advanced Machine Learning algorithms increased the efficiency of the recruitment process.
- The ATS system's integrity with various job portals allowed for quick and easy posting of job offers on various platforms.
- Efficiency of the recruitment process – automation of the evaluating CVs of candidates contributed to faster and more precise selection of suitable candidates, which shortened the duration of the entire process.
- Saving time and resources – automation of the CV evaluation process significantly reduced the amount of time spent by employees on manual document verification. Thanks to this, human

resources can be used more effectively in other areas of the company's operations, which contributes to increased productivity and profitability (see Table 7).

- Increased recruitment quality – the use of advanced Machine Learning algorithms allowed for a more comprehensive and objective evaluation of candidates' CVs. This gives the company greater confidence that it is selecting candidates who are best suited to its needs, which translates into better quality employment.
- Ease of implementation and use – the ATS system is characterized by an easy access and intuitive interface, which makes it easy for employees to use it. No need of having own IT resources in the company makes the system implementation quick and easy, and employee training does not require the involvement of additional resources.
- Financial profit – despite certain costs related to the implementation and maintenance of the ATS system, the company achieved significant savings by reducing the time spent on recruitment and increasing the efficiency of the process. The average annual profit related to the introduction of the new solution allowed the company to make additional investments and develop (see Table 6).

The study showed specific, measurable benefits of using artificial intelligence algorithms in recruitment processes. The results of the experiment clearly indicate that process automation using artificial intelligence is an effective tool that can significantly increase the competitiveness and operational efficiency of an enterprise. Process automation not only contributes to reducing costs and errors, but also enables better use of human resources, which in turn leads to sustainable development and success of the company in a dynamically changing market environment. It should be noted that the future of data management in the recruitment process will increasingly depend on innovative technologies that are constantly developing.

According to the LinkedIn's survey for *Future of Recruiting 2024*, as many as 62% of recruitment specialists are optimistic about the use of AI in their daily work, 27% use popular models, 57% of them indicate that they make writing job advertisements easier and faster, 45% see the possibility of automating processes, and 42% appreciate that tools can take care of repetitive tasks and in 2023 alone, the number of recruiters who have supplemented their profiles with AI-related skills increased by 14%. Artificial intelligence is mainly used in the initial selection of candidates, analytics and reporting, arranging interviews, initial job interviews, and preparing job advertisements (Prescot, 2024).

In conclusion, it is also worth noting that the support of the latest technologies in the recruitment process may raise certain concerns and pose new challenges for recruiters. The use of artificial intelligence algorithms in recruitment may lead to the shallowing of this process or unfair selection of candidates. AI tools, although they are still being improved, do not have human intuition and may be prone to errors. That is why it is so important that AI-supported recruitment processes are well-balanced, based on appropriate principles and maintaining a balance between automation and human decisions. It is also important that the use of artificial intelligence in HR considers appropriate ethical and legal aspects. Although artificial intelligence has been proven to be very helpful, it cannot yet fully replace the human factor.

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## Wpływ sztucznej inteligencji na zarządzanie procesem rekrutacji w firmie

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### Streszczenie

**Cel:** Celem artykułu jest analiza wpływu sztucznej inteligencji na zarządzanie danymi w procesie rekrutacji w firmie.

**Metodyka:** Zastosowano metodę analizy dokumentów, a następnie eksperymentu, polegającego na zidentyfikowaniu algorytmów sztucznej inteligencji, przygotowaniu zbioru danych, implementacji algorytmów, testowaniu algorytmów, porównaniu wyników uzyskanych z algorytmów sztucznej inteligencji pod kątem efektywności, precyzji oraz szybkości przetwarzania danych, analizie i interpretacji wyników eksperymentu w kontekście hipotez oraz teorii zarządzania danymi i sztucznej inteligencji.

**Wyniki:** Dzięki zastosowaniu algorytmu sztucznej inteligencji zwiększono efektywność procesu rekrutacyjnego dzięki skróceniu czasu jego realizacji, poprawiono jego skuteczność i jakość przez bardziej obiektywne i precyzyjne wyłanianie odpowiednich kandydatów. Integralność systemu AI

z różnymi portalami ogłoszeniowymi pozwoliła na szybkie i łatwe wystawianie ofert pracy na różnych platformach. Wykorzystanie AI przyczyniło się redukcji kosztów i błędów, co w efekcie prowadzi do zrównoważonego rozwoju i sukcesu firmy.

**Implikacje i rekomendacje:** Wykorzystanie algorytmu AI umożliwiło wyciągnięcie wniosków dotyczących potencjalnych korzyści oraz wyzwań związanych z implementacją AI w zarządzaniu danymi. Mogą one stanowić cenną wskazówkę dla przedsiębiorstw rozważających wdrożenie AI w swoich strukturach, przyczyniając się do ich rozwoju i podnoszenia efektywności operacyjnej i finansowej.

**Oryginalność/wartość:** Opracowanie algorytmu wdrożenia technologii AI w procesie rekrutacji pokazało wymierne korzyści, wynikające z jej zastosowania.

**Słowa kluczowe:** sztuczna inteligencja, uczenie maszynowe, zarządzanie danymi, proces rekrutacji

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