Determinants of the Acceptance of RPA Technology in a Medical Facility

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Abstract

This article explores the implementation and acceptance of Robotic Process Automation (RPA) technology at the Hospital of Pulmonary Diseases in Olsztyn, Poland. With the healthcare sector increasingly under pressure to enhance efficiency while maintaining high-quality patient care, RPA provides a promising avenue for process optimization. Understanding the factors that affect the acceptance and successful implementation of this technology is critical for organizations seeking to leverage its full potential. The main purpose of this paper is to investigate the factors influencing the acceptance of RPA technology in a medical facility, using the MARPA technology acceptance model. The study aims to identify organizational determinants related to personnel, tasks, and structure that impact the success of RPA adoption. The research employs the MARPA technology acceptance model as a framework for analysing organizational factors. The study focuses on qualitative and quantitative data from the Hospital of Pulmonary Diseases to assess the interplay between change management, staff support, and the alignment of RPA technology with specific organizational needs. The findings reveal that the successful acceptance of RPA technology in medical facilities hinges on effective change management, robust staff support, and the customization of RPA solutions to meet the unique requirements of the organization. Employees buy-in and adaptability to technological change were identified as critical components of success. This paper contributes to the literature on technology acceptance in healthcare by applying and validating the MARPA model in a real-world setting. It highlights the interplay between organizational dynamics and technology adoption, offering a nuanced understanding of the factors influencing RPA implementation. The research underscores the importance of strategic change management and workforce engagement when introducing RPA in healthcare settings. It provides actionable insights for managers and decision-makers, emphasizing the need for tailored technology solutions and structured support systems to ensure successful adoption and integration of RPA into organizational processes.

Key words

Robotic Process Automation, technology acceptance, model MARPA management, healthcare units.

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Introduction

In recent years, robotic process automation (RPA) technology has become popular in the market. RPA involves the use of specialized software that mimics human workflows. Modern software robots create intelligent and friendly digital workforces, capable of performing tasks that were previously performed only by humans thanks to new functions and integration with user interfaces (Pypłacz & Sasak, 2022). According to statistics, expenditures on RPA have been gradually increasing since 2020. Projections indicate that the market size will grow from \$1.23 billion in 2020 to \$13.39 billion by 2030. Research also presents even more optimistic forecasts, suggesting that the RPA market, valued at \$2.3 billion by 2023, will reach \$66 billion by 2032, with a Compound Annual Growth Rate (CAGR) of 39.9% (Market Research Report, 2023).

Many organizations and researchers view RPA as an emerging technology that enhances productivity and operational flexibility (Fernandez, Aman, 2018), improves quality (Kokina & Blanchette, 2019), and reduces costs (Hallikainen et al., 2018) and risk (Burgess, 2018; Syed et al., 2020). By integrating RPA into management structures, it is possible to develop new business models, create new processes (including those that engage customers and/or the environment in collaboration or are fuelled by data), and modify existing ones.

The implementation of RPA technology is regarded as a comprehensive undertaking that encompasses the entire organization. As noted by Lacity et al. (2016), it is primarily a business initiative with an IT component. Therefore, it should be treated as an organizational change rather than merely software implementation (Pypłacz & Zukovskis, 2023). RPA represents non-traditional automation, which does not require integration at the database or infrastructure level. It can operate non-invasively within applications, leveraging existing infrastructure, and functions as an assistant to the computer operator.

Today, there are very few organizations that do not use IT tools or IT solutions in a broad sense. There are many solutions that support many different areas of business. Simultaneously, the conventional technological barrier of inadequate IT skills is gradually diminishing. Workers are becoming more adept at using technological tools and solutions. In order for new technologies to be implemented in businesses efficiently, they need to be embraced and integrated into workers' daily tasks. Since innovation is being included into employees' day by day lives from the starting, it is getting to be progressively critical to comprehend the variables that impact employees' acknowledgment or dismissal of innovation.

This ponder looks into the organizational components that influence a therapeutic facility's selection of RPA innovation. The RPA Innovation Acknowledgment Show – MARPA given the system for the develops relating to individuals, assignments, structure, and innovation acknowledgment (Pypłacz, 2024).

1. Literature review and hypotheses development

1.1 Robotics Process Automation

To preserve competitiveness, organizations endeavour to progress the proficiency of their operations, counting through the overhaul and administration of trade forms. Data innovation plays a key part in supporting these changes (Al-Gasawneh et al., 2021). Among more than 900 respondents overviewed within the Forbes Insights/KPMG report (KPMG Transformation Study, 2017), 93.0% expressed that they are arranging, within the handle of, or have fair completed a trade transformation. One of the key components of this change is prepare computerization. Agreeing to investigate by Olszynka et al. (2022), robotization most commonly includes detailing (68.0%), data collection from items utilized by clients (55.0%), and frame filling (49.0%). The most benefits recognized incorporate a decrease in prepare term (89.0%) and the disposal of blunders and exclusions (78.0%).

The term RPA combines robotics, which refers to software robots (software agents) that act like employees in system interactions, and process automation (Hallikainen et al., 2018; Syed et al., 2020; Kajrunajtys & Kajrunajtys, 2022). Robotic Process Automation is a specific form of automation aimed at transforming processes by partially or entirely replacing traditional solutions with digital ones. It particularly involves redirecting repetitive and high-volume tasks performed by humans to software robots (Lacity & Willcocks, 2015; Lacity et al., 2015; Bruno et al., 2017; Fernandez & Aman, 2018;

Cohen, Rozario, 2019; Kokina & Blanchette, 2019), thereby relieving employees of tedious, routine tasks and allowing them more space for creative work (Lacity & Willcocks, 2015; Agostinelli et al., 2019; Berruti et al., 2017; Cewe et al., 2018). RPA does not involve physical robots but software robots whose typical tasks include migrating large volumes of data between different systems with comparison and validation, automating email distribution to a large number of users, data acquisition from various sources, data updating, and handling different tasks based on operations in IT systems (Marciniak & Stanisławski, 2021a). This technology can only be applied to business processes with clearly defined rules and business logic. It primarily involves interacting with IT system interfaces by replicating the steps taken by employees to navigate through the entire business process (Geyer-Klingeberg et al., 2018).

The concept of RPA innovation isn't unequivocally characterized, as famous by Sobczak (2018), Syed et al. (2020), Gao et al. (2021), Marciniak & Stanisławski (2021b), Ghouse & Sipos (2022), and da Silva Costa et al. (2022). In the literature, various authors present different approaches, concepts, and literature reviews in this area, attempting to establish some framework for this solution. Definitions frequently highlight the aspects of a "computer program" and the "replacement or imitation of human work". Less frequently, definitions of RPA include terms related to automation and descriptions of tasks performed within the technology.

For the purposes of this consider, RPA is characterized as a innovation based on progressed computer program apparatuses, computer equipment, and amassed information, empowering the impersonation of human behaviour in intuitive with computer applications. It is especially reasonable for dreary errands, whether including whole forms or particular parts thereof. RPA on a very basic level modifies work organization by presenting program robots into forms that reenact human activities in tedious exercises (Pypłacz, 2024).

2.1 RPA in Healthcare Units

As of now, clinics confront various challenges emerging from expanding understanding desires, budget imperatives, and the quickly advancing mechanical and lawful environment. In look of arrangements, there's a developing centre on prepare mechanization, which empowers more proficient administration of therapeutic units, moves forward the quality of administrations given, and upgrades understanding security (Czerwińska, 2015). Automation in the healthcare sector encompasses the management of electronic documentation for both administrative and medical processes, data exchange with institutions that fund and supervise healthcare facilities, communication and information exchange with patients, and the implementation of electronic tools that support diagnostics and therapy. It is assessed that in Poland, handle computerization is still in its early stages of improvement (Janik, 2024). This computerization regularly centres on restorative and demonstrative strategies, frequently ignoring authoritative regions. As a result, robotization forms are not conducted comprehensively and as a rule address person zones, driving to a need of coordination and the nonappearance of an coordinates framework to bolster healing centre forms (Szczerbak & Szczerbak, 2024). This fragmented approach to automation, known as "island automation," prevents healthcare units from fully realizing the benefits of process automation. The low awareness of the need for comprehensive solutions is evidenced by the relatively small proportion of hospitals – only 25% – that employ individuals responsible for process optimization and improvement (Process Automation in Healthcare). This situation further indicates a limited awareness of modern management methods and tools among managers.

Literature sources indicate that the most common areas of automation implementation in healthcare involve medication and medical supply management, where vending machines are used for internal purposes. Computerization in this zone covers two fundamental perspectives: specialized mechanization, which includes the utilize of gadgets for apportioning and collecting solutions, and information stream administration, which controls and confirms the exactness of apportioned drugs. The moment zone of computerization is the bolster of demonstrative forms and clinical case investigation, frequently utilizing arrangements based on fake insights and machine learning (Denisiewicz, 2024). In Polish healthcare facilities, this type of automation is relatively rare due to the specificity and high costs associated with AI technologies. Nonetheless, chatbots have found wide application (Taulli, 2020; Chakrabortti et al., 2020), particularly in patient registration systems and for collecting health-related data (Dryl, 2024). Although these technologies are among the most commonly used, they are not always recognized as process automation technologies, mainly because chatbot systems are often seen as autonomous IT systems rather than integral automation solutions. In the healthcare sector, processes are being automated across all areas of operation, including the administrative domain, where several fundamental technologies are applied. Most commonly, components implanted in healing centre data frameworks are utilized, whereas committed arrangements or RPA-class apparatuses are once in a while utilized (Skoczylas, 2023). The application of RPA innovation is basically watched in back-office offices, especially in regulatory and budgetary forms (Ortiz& Costa, 2020; Gotthardt et al., 2020). An analysis of IT technology use in Polish hospitals revealed that the adoption of RPA technology is very limited. Typically, RPA technology creates a so-called "virtual back-office," where processes are executed without direct human involvement, delivering high efficiency (Willcocks et al., 2017). It is important to note that the range of processes suitable for such improvements is limited. These are generally systematic processes with a high degree of repetition, schematically performed within existing IT systems via the user interface (Penttinen et al., 2018). Inquire about conducted by the Clean Healing centre Alliance shows (Robotyzacja procesów w Ochronie Zdrowia, 2022) that there's critical potential for the execution of RPA innovation in healing centres. This would permit for considerable decreases in information preparing mistakes. The key to effective process automation lies within the integration of these mechanical arrangements into a bound together framework that envelops both administrative and therapeutic forms, in this manner empowering the complete realization of the benefits of mechanization.

Despite the growing interest in process automation across various sectors, the scientific literature still lacks a sufficient number of empirical and theoretical studies that provide a detailed analysis of the application of Robotic Process Automation (RPA) in the specific context of hospitals and medical institutions.

An analysis of articles available in the Scopus database confirms that although RPA technology is increasingly recognized as a tool for improving efficiency and reducing costs, the majority of publications focus on its applications in financial, logistical, or administrative sectors (c.f. Pypłacz, 2023). Publications addressing healthcare are considerably less frequent, and their content is dominated by general theoretical discussions, with limited focus on practical implementations or the specific challenges faced by hospitals.

To provide readers with an overview of the state of scientific publications in this area, a brief bibliometric analysis was conducted based on the Scopus and Web of Science (WoS) databases. Due to the similarity of results obtained from WoS and the exploratory nature of this element, the article presents detailed findings based on data from the Scopus database (as of November 25, 2024). Between 2000 and 2024, the Scopus database identifies 306 publications retrieved using the query (TITLE-ABS-KEY (rpa AND technology) OR TITLE-ABS-KEY (software AND robot) AND TITLE-ABS-KEY (medicine) OR TITLE-ABS-KEY (health AND service) OR TITLE-ABS-KEY (hospital) AND NOT TITLE-ABS-KEY (robot AND assisted) AND NOT TITLE-ABS-KEY (hardware) AND PUBYEAR > 1999 AND PUBYEAR < 2025 AND (EXCLUDE (SUBJAREA , "MATH") OR EXCLUDE (SUBJAREA, "BIOC") OR EXCLUDE (SUBJAREA , "PHYS") OR EXCLUDE (SUBJAREA , "MATE") OR EXCLUDE (SUBJAREA , "CENG") OR EXCLUDE (SUBJAREA , "ENER") OR EXCLUDE (SUBJAREA , "AGRI") OR EXCLUDE (SUBJAREA , "EART"). This query was the result of iterative testing with various datasets. Following abstract analysis, several exclusions were made, as many articles addressed the use of hardware robots as surgical or procedural assistants, rather than software-based automation.

As illustrated in Figure 1, an increase in the number of publications has been observed only since 2012, with approximately a dozen publications per year. Notably, 2021 saw a marked rise in publication volume, likely linked to the COVID-19 pandemic and the increased focus on automating activities within healthcare institutions during this period.

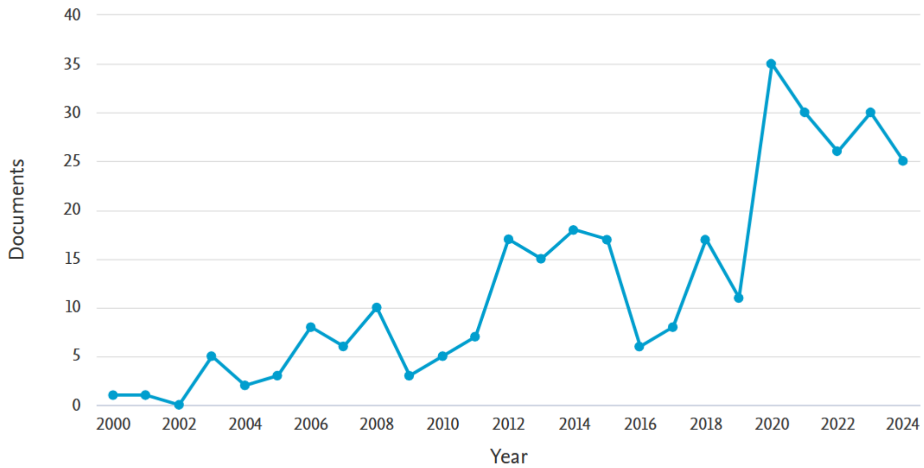

Figure 1. Number of publications by year in the Scopus database on the use of RPA technology in healthcare institutions.
Source: Own study, as of November 25, 2024.

It is worth noting (Figure 2) that the majority of the analysed publications focus on areas such as computer science (32.4%), engineering (24.7%), decision sciences (5.0%), social sciences (5.0%), and business, management, and accounting (2.8%). The remaining publications fall within the medical field and, to a large extent, analyse medical aspects in their content.

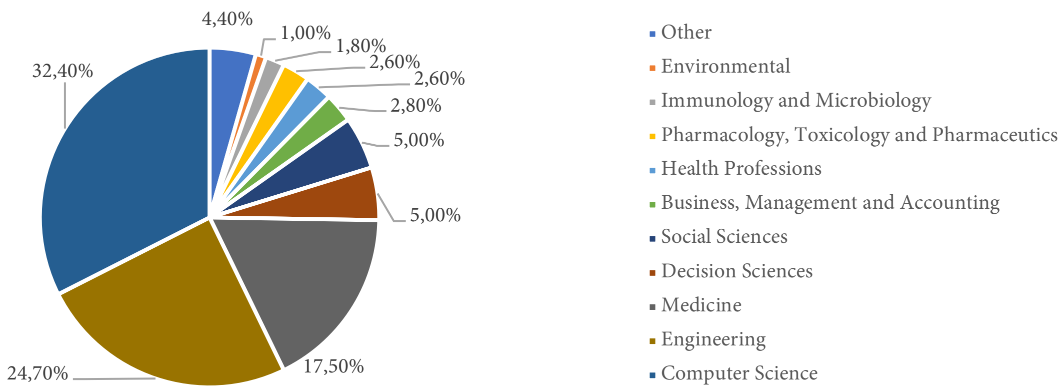

Figure 2. Publications in the Scopus database on the use of RPA technology in healthcare institutions by research areas.
Source: Own study, as of November 25, 2024.

An analysis of abstracts and selected content reveals a lack of detailed studies on the impact of RPA on organizational workflows in medical institutions, such as changes in employee roles, interpersonal relationships in automated environments, effects on the quality of healthcare, or shifts in organizational culture. Additionally, the literature lacks case studies documenting the detailed implementation of RPA in hospitals, which could serve as a valuable source of practical knowledge for other institutions considering process automation. Furthermore, there are few studies addressing the long-term effects of RPA adoption in healthcare facilities, such as its impact on cost reduction, efficiency improvement, or the satisfaction levels of both patients and employees.

The analysis of keywords presented in the word map (Figure 3) illustrates the key terms associated with the RPA topic and their frequency in the reviewed publications from the Scopus database. A diversity of terms is evident, reflecting the wide range of applications and connections to various disciplines, including robotics (76 occurrences), humans (43), artificial intelligence (31), and healthcare (29).

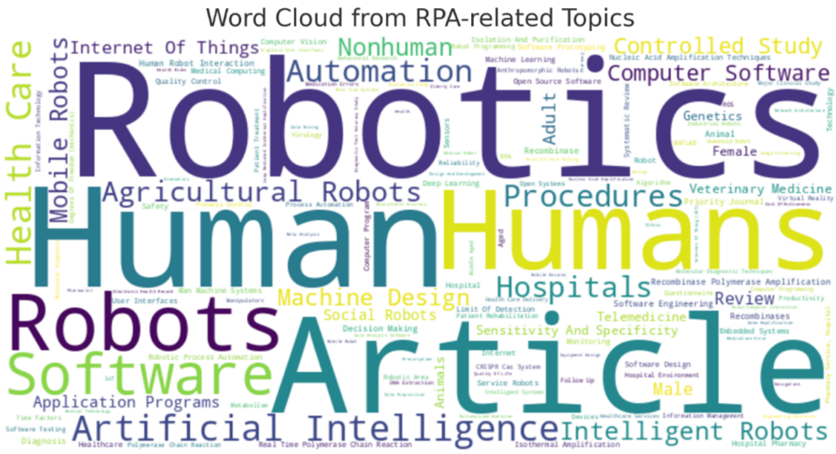

Figure 3. Keyword map on the use of RPA technology in healthcare institutions based on publications from the Scopus database.
Source: Own study, as of November 25, 2024.

From the perspective of management and quality sciences, a relatively small proportion of publications is directly related to this area. Although RPA technology is applied across various fields such as computer science, engineering, and social sciences, its exploration in the context of process management, quality optimization, or organizational transformation in healthcare institutions is marginal. This situation highlights a research gap that calls for more in-depth analyses, particularly concerning the impact of automation on management efficiency, organizational structures, and the operational culture of institutions such as hospitals.

1.2 Acceptance of RPA Technology in Business Process Automation

Numerous changes in organizations are driven by mechanical changes, counting the usage of program robots. Leavitt's (1964) demonstrate serves as a apparatus for clarifying the concept of organizational alter, which envelops activities that organizations routinely experience. In spite of the fact that the show does not diagram a particular way for alter, it permits for a comprehensive investigation of the alter handle. Changes occur in each area represented in the model and, importantly, affect other organizational elements. The model's creator presents it based on components in which individual variables hold specific significance while simultaneously considering other factors. These components include structural, technological, and social approaches. The common goal of these three components is to enhance tasks, contributing to the implementation of solutions, innovations, and changes. The relationship between structure and the people area is very strong and can have both positive and negative effects, particularly concerning employee behaviour and efficiency. Any modification of the structure leads to changes in employee behaviour and necessitates adjustments in competencies. Integrating software robots into the organizational structure alters the scope of employee responsibilities, affecting the number of tasks, hierarchy, and the range of control. From another perspective, the development of new technologies and the evolution towards digitalization contribute to changing the employee profile, which consequently necessitates organizational changes, such as the creation of new structures or internal adjustments within departments or divisions. Employees are assigned new roles and responsibilities within the newly established structure.

The techno-structural approach to alter is based on improving productivity by adjusting certain viewpoints of both structure and innovation. Cases of techno-structural approaches to alter incorporate work extension and enhancement programs, which point to supply workers with more noteworthy work assortment, expanded duty for their work, and the next sense of engagement. This approach seeks to improve organizational efficiency by altering the work environment, which should, in turn, lead to increased employee productivity. Work automation and digitalization respond to the need for departmental reorganization, cost reduction, and productivity enhancement. It is also essential to consider the humanistic objectives of job enrichment, including task complexity as a source of motivation. These changes naturally lead to further consequences. Structural modifications trigger changes in tasks that are directly linked to employees. The introduction of new departments, new management levels, and new employee competencies result in changes to the tasks performed by employees. Auxiliary changes too affect workflow and prepare organization. Changes in the organizational structure affect workflow and the organization of processes. Every change in the course of a process forces employees to adapt to new conditions, which requires training to acquire new skills, gain experience, and share knowledge.

It is important to consider the relationship between technology, tasks, and people (Jędrzejczyk, 2021). Changes in technology lead to alterations in tasks and activities, but it is the employees who must adapt to these changes by collaborating with technology or reducing manual tasks. Successful adaptation requires a well-designed training program. Technological changes may sometimes necessitate hiring new employees, which not only affects the organization of work but also leads to the emergence of new communication channels and methods, as well as new formal and informal personal relationships. It should also be noted that the relationship between technology and people is bidirectional. To a large extent, the skills and knowledge of the organization's employees determine the level of technology that is used and can be implemented. If employees are not adequately prepared to use the new technology, its utilization will be limited, rendering the implementation ineffective. When implementing new technologies, there is a high risk that employees will reject the introduced solutions because they do not understand or are unfamiliar with them. Technology acceptance is a complex process in which users adopt and adapt new technologies into their daily use. This process is influenced by psychological, social, and cultural factors that either support an individual's or group's readiness to accept and use a given technology or hinder its implementation. According to technology acceptance models (TAM – Technology Acceptance Model, UTAUT – Unified Theory of Acceptance and Use of Technology), factors influencing technology acceptance include:

- Perceived usefulness: the subjective belief that using RPA technology will improve job performance and increase efficiency (Davis, 1989).
- Perceived ease of use: the extent to which an individual believes that using RPA technology will be effortless, relating to beliefs about the challenges encountered while using RPA (Davis, 1986; 1989).
- Behavioural intention to use: defined as the belief in the ability to perform an action using RPA (Nahotko, 2014).

Based on the analysis of the literature, a research model was proposed. This model is presented in Figure 4.

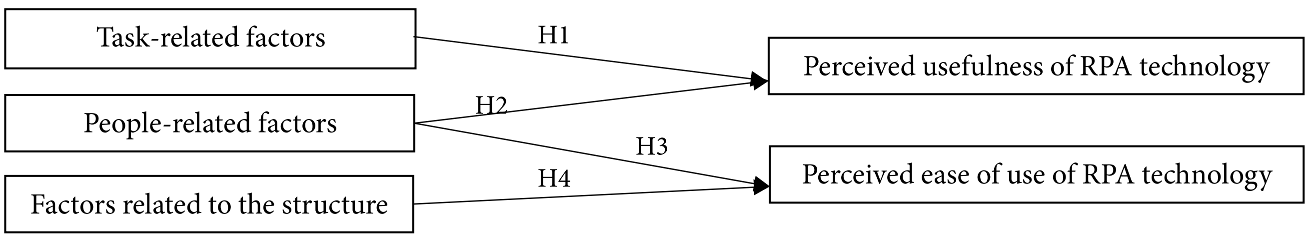

Figure 4. Hypotheses.
Source: own study.

Hypotheses 1: Task-related factors influence the perceived usefulness of RPA technology in automating the hospital's business processes. Tasks were defined according to Leavitt's model and the technology acceptance models TAM and UTAUT, as follows:

- Willingness to "interact" with RPA / "play with RPA": The user's intrinsic motivation to explore RPA technology and the desire to create additional scenarios (RPA playfulness). It reflects the level of cognitive spontaneity in interactions with software robots (Webster & Martocchio, 1992, p. 204).
- Result demonstrability: The degree to which an individual believes that the outcomes of using the system are tangible, observable, and communicable (Moore & Benbasat, 1991).

Hypotheses 2: People-related factors influence the perceived usefulness of RPA technology in automating the hospital's business processes.

Hypotheses 3: People-related factors influence the perceived ease of use of RPA technology in automating hospital business processes. Referring to hypotheses 2 and 3, the people domain, in accordance with Leavitt's model and technology acceptance models TAM and UTAUT, has been defined as follows:

- Subjective norm / social influence: The extent to which the user perceives that important individuals believe they should or should not use RPA technology (related to behaviour and/or decision-making) (Fishbein & Ajzen, 1975; Ajzen, 1991; Venkatesh & Davis, 2000).
- User engagement in the functioning of RPA within the organization: This factor is always variable, progressing through the cycle of change acceptance and then through the life cycle of the technology in a given job position.
- Trust in robots: Two main aspects of trust in technology can be distinguished (Ejdys, 2017): those related to the perceived features of the technology, such as its functionalities, and the declared willingness to rely on the technology, stemming from its inherent characteristics. Trust is analysed from the perspectives of reliability and the potential for risk.
- Computer literacy: The extent to which an individual believes they can perform a specific task using computer technology (Compeau & Higgins, 1995a, 1995b).

Hypotheses 4: Structure-related factors influence the perceived ease of use of RPA technology in automating the hospital's business processes. The structure domain is defined according to Leavitt's model and the technology acceptance models TAM and UTAUT as:

- Job relevance / fit to the job: The extent to which the user believes that RPA technology is applicable to their work (Venkatesh & Davis, 2000).
- Availability of external and internal support: The degree to which an individual believes that organizational, technical, and human resources are available to support RPA solutions within the organization (Venkatesh et al., 2003).

2. Methodology

For the purposes of this study, the technology acceptance model developed in 2024 (Pypłacz, 2024) was utilized. The model, designated by the acronym MARPA, was specifically designed for small and medium-sized enterprises, taking into account their unique characteristics, such as the absence of specialized departments, lack of expert programming staff, and limited resources. These criteria are also met in the hospital under study, as the automation involves small units where employees work directly with software robots, and the implementation of RPA technology was driven, among other reasons, by the lack of human resources for administrative tasks.

The MARPA model was published in 2024 as an innovative concept designed to support business process automation in SMEs. However, to date, there are no scientific publications or empirical studies demonstrating its practical application in other entities. The model identifies eight external variables categorized into three domains: people, tasks, and structure. These variables are described by detailed factors, as outlined below:

- Willingness to "interact" with RPA / "play with RPA," understood as:

  - Perceiving work with software robots as enjoyable and entertaining.
  - Freedom to perform tasks using new technologies.
  - Absence of fear that software robots will take over jobs.
- Ability to present outcomes, understood as:
  - Ability to explain and present the goals and outcomes of software robots' work.
  - Understanding the results of software robots' tasks.
  - Ability to explain the benefits of using software robots.
- Subjective norm / social influence, understood as:
  - Perception of software robots by external stakeholders.
  - Perception of software robots by individuals directly associated with the employee.
  - Perception of software robots by supervisors.
- User engagement in the functioning of RPA within the organization, understood as:
  - Direct involvement in the implementation of robotic automation.
  - Direct involvement in testing software robots.
  - Familiarity with the assumptions and capabilities of robotic automation.
- Trust in robots, understood as:
  - Protection of privacy while working with software robots.
  - Trust in the resistance of software robots to manipulation.
  - Confidence in the accuracy of software robots' work results.
  - Trust that software robots' operations align with predefined assumptions.
- Proficiency in using computer technologies, understood as:
  - Ability to assist others with IT-related issues.
  - Capability to resolve unexpected IT-related problems.
  - High-level problem-solving skills related to IT system functionality.
- Work utility / fit to the job position, understood as:
  - Relevance of software robots in the job.
  - Necessity of using software robots for work.
  - Alignment of software robots with the employee's work style.
- Availability of external and internal support, understood as:
  - Equipping the organization with resources necessary for software robots' usage.
  - Direct supervision by an individual knowledgeable about software robots.
  - Accessibility of support for resolving issues with software robots' operation.

2.1 Research design

The consider included 34 representatives of the Clinic of Aspiratory Maladies in Olsztyn, Poland. In June 2023, the healing centre propelled a pilot venture of understudy internships, amid which RPA innovation was executed over all zones of healing centre operations. The essential ponder was quantitative and conducted in July 2024, one year after the graduation of collaboration with computer program robots. Among the respondents were 9 regulatory staff individuals and 25 therapeutic staff (n=34), speaking to 100% of the people who have been working with computer program robots for the past year. Thus, all respondents are recognizable with RPA innovation.

The survey questions focused on the perception of individual factors related to people, tasks, and structure. The questions predominantly used an ordinal scale (7-point Likert scale), and individual items were derived from the previously introduced MARPA model. Due to the use of the MARPA model, which illustrates the relationships between the identified constructs, a quantitative approach through survey research was chosen. This choice was also driven by the need to analyse factors influencing the acceptance of RPA technology.

The investigate strategy utilized conventional inductive-deductive strategies and factual apparatuses, utilizing the STATISTICA 13 computer program. Expressive measurements, such as the middle (Mi) and mode (Mo), were utilized to display the comes about. Cronbach's alpha coefficient was applied to assess the reliability of the measurement scales. The conducted analyses were performed according to the correlational model. Although the correlational model itself is not intended for causal interpretation, its elements allow for cautious derivation of such conclusions (Aczel & Sounderpandian, 2021). In structural models based on primary data, the significance of causal relationships is assumed to be based on correlational dependency. The proposed MARPA model concept shows such a relationship between variables. Therefore, the strength and direction of the relationship between variables were determined using Spearman's rank correlation coefficients, with significance set at $p < 0.01$, and the strength of the correlation assessed using Guilford's scale. This method was also applied because the obtained distribution could not be considered normal.

3. Results

All variables studied take values between 5 and 7 on the 7-point scale. The Mo and Mi values for most variables are at a similar level (Mi = 5, Mo = 7). Therefore, it can be concluded that all variables are quite important for the acceptance of RPA technology. The variables show moderate to high variability, indicating heterogeneity in the study population. Reliability analysis of the applied measurement scales using Cronbach's alpha coefficient demonstrated high internal consistency for the entire test ($\alpha = 0.91$) and satisfactory reliability for individual scales ($\alpha > 0.81$).

One of the assumptions of the tested MARPA model is based on the existence of a relationship between the perceived usefulness of RPA technology and task-related factors, as shown in Table 1.

Table 1. Spearman's rho correlation coefficient for the variable perceived usefulness of RPA technology.

		Willingness to "interact" with RPA / "playfulness with RPA"	**Result demonstrability**
Perceived usefulness	Correlation coefficient	0.772**	0.693**
	Significance (two-sided)	0.000	0.000

Note: ** Correlation significant at 0.01 (two-sided); n=34.
Source: elaborated by the authors.

For the variables related to the task domain and the perceived usefulness of RPA technology, the correlation was moderate and statistically significant at the level of $p < 0.01$ (Table 1). The detailed factors that proved significant were the freedom to perform tasks using new technologies and the absence of fear that software robots would take over jobs. The relationships between perceived usefulness and the willingness to "play" with RPA, as well as the ability to present results, are positive and show clear dependencies.
Another assumption of the tested MARPA model is based on the existence of a relationship between the perceived usefulness of RPA technology and the perceived ease of use of RPA technology and factors related to the people domain, as reflected in hypotheses 2 and 3. The results are presented in Table 2.

Table 2. Spearman's rho correlation coefficient for the variables perceived usefulness and perceived ease of use of RPA technology.

		Subjective norm / social influence	**User engagement in the functioning of RPA within the organization**	**Trust in robots**	**Computer Literacy**
Perceived usefulness	Correlation coefficient	0.698**	0.645**	0.793**	0.763**
	Significance (two-sided)	0.000	0.000	0.000	0.000
Perceived ease of use	Correlation coefficient	0.784**	0.826**	0.564**	0.719**
	Significance (two-sided)	0.000	0.000	0.000	0.000

Note: ** Correlation significant at 0.01 (two-sided); n=34.
Source: elaborated by the authors.

The data presented in Table 2 show that all correlations are significant at the level of $p < 0.01$. For perceived usefulness, the strongest relationships are exhibited by the factors: trust in software robots (0.79; $p < 0.01$) and computer literacy (0.76; $p < 0.01$). In the case of the perceived usefulness of RPA technology, the factor of user engagement in the functioning of RPA within the organization shows the strongest relationship (0.83; $p < 0.01$). The factors subjective norm / social influence and computer literacy also demonstrate a positive, significant relationship with the perceived ease of use of RPA technology (above 0.7; $p < 0.01$). On the other hand, trust in robots shows a moderate relationship with perceived ease of use (0.56; $p < 0.01$), which may be due to the high-risk level of tasks performed by robots. The specific task-related factors that proved significant include: the perception of software robots by supervisors, direct involvement in the implementation of robotic automation, familiarity with the assumptions and capabilities of robotic automation, protection of privacy while working with software robots, trust in the accuracy of software robots' work outcomes, trust that software robots operate in accordance with predefined assumptions, the ability to assist others with IT-related issues, the ability to resolve unexpected IT-related problems, and a high level of proficiency in solving IT system functionality issues. Consequently, employees still verify whether errors occur during the operation of software robots.

Therefore, it can be concluded that factors related to people, perceived usefulness of RPA technology, and perceived ease of use of RPA technology have a clear, positive relationship. The next assumption of the tested MARPA model is based on the existence of a relationship between the perceived ease of use of RPA technology and structure-related factors, as reflected in hypothesis 4, with results presented in Table 3.

Table 3. Spearman's rho correlation coefficient for the variable perceived ease of use of RPA technology.

		Job relevance / fit to the job	**Availability of external and internal support**
Perceived ease of use	Correlation coefficient	0.548**	0.572**
	Significance (two-sided)	0.000	0.000

Note: ** Correlation significant at 0.01 (two-sided); n=34.
Source: elaborated by the authors.

Structure-related factors, such as job relevance / fit to the job and the availability of external and internal support, as well as the perceived ease of use of RPA technology, have a significant positive relationship ($p < 0.01$), but in this case, the correlations are moderate. Therefore, the structure is the least associated with technology acceptance. The specific factors that proved significant include: the alignment of software robots with the work style, the organization's provision of resources necessary for using software robots, direct supervision by an individual knowledgeable about software robots, and the availability of contact with a person assisting in resolving issues with the operation of software robots. This may be due to the highly formalized organizational structure of the hospital and the fact that, in the discussed implementation, the individuals training the robots are continuously available on-site.

4. Discussion

The analysis conducted using Spearman's rho correlation coefficient showed that all correlations are significant, although they vary in strength. The obtained coefficient values ranged from $r = 0.55$ to $r = 0.82$ ($p < 0.001$), indicating moderate to strong relationships. Task-related variables essentially impact the seen convenience of RPA innovation. Seen convenience increments when representatives upgrade their abilities in clarifying and displaying the objectives and results of program robots, as understanding the impacts of robot work and the capacity to verbalize the benefits of working with program robots' progress. Purposefulness and understanding of the task are important for employees because when they comprehend the effects of robot work, they can demonstrate these to others and discuss them. Similar observations are presented by Wewerka & Reichert (2020), who highlight the importance of obtained outcomes and their measures. Another imperative perspective is the nonattendance of fear related to work substitution by robots. In this way, the less workers fear losing their occupations to program robots, the more it emphatically impacts the seen convenience of RPA innovation. Representatives' commonplace with RPA innovation, knowing its capabilities, don't fear substitution but or maybe see it as bolster in assignment execution. This is an important issue, as research (Lacity & Willcocks 2015; Asatiani & Penttinen, 2016; Fernandez & Aman, 2018; Hallikainen et al., 2018) shows that employees generally fear job loss to robots in cases where RPA technology is introduced.

People-related factors significantly influence both the perceived usefulness and perceived ease of use of RPA technology by employees. Social influence proved to be a significant factor, specifically how the concept of software robots is perceived by supervisors. The change involving the implementation of software robots requires management to engage in the change process and support employees. In the studied hospital, the management was the initial driving force behind the process automation, continuously supporting and personally overseeing this initiative. Trust in software robots is also a crucial area. Technology acceptance is influenced by whether it aligns with the original assumptions, whether the outcomes of the robots' work are correct, and whether the level of security is adequate, as also analysed by Lacity et al. (2015) in their studies. When many exceptions arise and robot performance needs frequent checks, the work process becomes longer, and employees become uncertain about the correctness of the tasks for which they are responsible. Similar observations are made by Willcocks (2020) in his discussions on automation and the future of work. It seems natural that the ability to assist with IT operation issues impacts the level of acceptance of RPA technology. An employee who feels confident using a particular IT solution recognizes the potential of that tool. Employees with higher competencies in using technological solutions will handle RPA technology better. Direct user engagement in the functioning of RPA, expressed through knowledge of its assumptions and capabilities, positively influences the perceived usefulness of RPA technology and its ease of use.

The seen ease of utilize of RPA innovation too depends on structure-related variables, counting the concentrated of coordinate supervision by somebody commonplace with the operation of program robots and the capacity to contact an individual who can help with robot-related issues. The compatibility of computer program robots with the work fashion moreover plays a noteworthy part, guaranteeing improved and more focused on fit. This is often affirmed by thinks about conducted in particular businesses, such as HR (Balasundaram & Venkatagiri, 2020), managing an account (Romao et al., 2019), and inspecting (Huang & Vasarhelyi, 2019).

An appropriate organizational structure, direct contact with supervisory personnel, and a good fit within organizational units where robots are used condition the perception of RPA technology as easy to use. It is additionally basic to prepare the organization with assets vital for the viable and proficient operation of program robots, such as fitting gear, reasonable workstations, and steady associations. These assets permit representatives to centre on the substantive perspective of working with program robots, subsequently reinforcing organizational flexibility, as watched in thinks about conducted in Clean organizations executing RPA (Sobczak, 2022). It is additionally pivotal to consider joining a steady organizational unit, such as a staff or outside unit, to encourage collaboration with program robots or adjust the operational demonstrate, for occurrence, by organizing Centres of Greatness (CoE), as recommended within the investigate by Anagnoste (2018), Kedziora & Penttinen (2021), and Marciniak & Stanisławski (2021a, 2021b).

Conclusion

RPA can be applied to various business processes across multiple departments. However, the implementation of RPA within an organization varies depending on its structure, business process flow, and decision-making process.

In the task domain, it was observed that employees who better understand and can explain the outcomes of software robots perceive the technology as more useful. A key factor is also reducing employees' fear of being replaced by robots, which significantly influences the positive perception of RPA as support rather than a threat to the work of hospital staff. Implementing RPA in a hospital also requires well-planned technological infrastructure and technical support to ensure the continuity of system operations. An important element is establishing appropriate mechanisms for monitoring and managing software robots, which will ensure process efficiency and minimize the risk of errors.

People-related factors, such as social influence and managerial involvement in the implementation process, are also critical for technology acceptance. Employees with greater trust in robots, confidence in the accuracy of results, and a sense of security in working with RPA are more likely to embrace the new technology. It is also important for employees to have the necessary technological skills that facilitate the use of the RPA system.

In the organizational structure domain, the availability of direct technical support and the alignment of RPA technology with the hospital's specific work environment proved to be significant factors. Proper organization, technical resources, and structural support, such as establishing Centres of Excellence, are essential for the acceptance of RPA technology, defined as perceived ease of use.

The implementation of RPA technology is undoubtedly a change, where it is crucial to understand that it does not replace medical staff but supports them in performing daily tasks, such as patient registration, service billing, processing test results, or managing medical documentation. This allows employees to dedicate time to patients and focus on more creative tasks that require specialized knowledge.

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References

1. Aczel, A.D., & Sounderpandian, J. (2021). *Statystyka w zarządzaniu*. Wydawnictwo Naukowe PWN, Warszawa.
2. Agostinelli, S., Marrella, A., & Mecella, M. (2019). Research challenges for intelligent robotic process automation. In A. Fahland, C. Ghidini, J. Becker, & M. Dumas (Eds.), Business process management workshops: BPM 2019 international workshops, Vienna, Austria, September 1–6, 2019, revised selected papers (Vol. 17, pp. 12–18). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-37453-2_2.
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T.
4. Al-Gasawneh, J. A., Anuar, M. M., Dacko-Pikiewicz, Z., & Saputra, J. (2021). The impact of customer relationship management dimensions on service quality. *Polish Journal of Management Studies, 23*(2), 24–41. https://doi.org/10.17512/pjms.2021.23.2.02.
5. Anagnoste, S. (2018). Setting Up a Robotic Process Automation Center of Excellence. *Management Dynamics in the Knowledge Economy*, *6*(2), 307–332.

6. Asatiani, A., & Penttinen, E. (2016). Turning Robotic Process Automation into Commercial Success – Case OpusCapita. *Journal of Information Technology Teaching Case*, *6*(2), 67–74.
7. Balasundaram, S., & Venkatagiri, S. (2020). A structured approach to implementing robotic process automation in HR. In *Journal of Physics: Conference Series* (Vol. 1427, No. 1, p. 012008). IOP Publishing. https://doi.org/10.1088/1742-6596/1427/1/012008
8. Berruti, F., Nixon, G., Taglioni, G., & Whiteman, R. (2017). Intelligent process automation: The engine at the core of the next-generation operating model. McKinsey & Company. https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/intelligent-process-automation-the-engine-at-the-core-of-the-next-generation-operating-model
9. Bruno, J., Johnson, S., & Hesley, J. (2017). Robotic disruption and the new revenue cycle: Robotic process automation represents an immediate new opportunity for healthcare organizations to perform repetitive, ongoing revenue cycle processes more efficiently and accurately. *Healthcare Financial Management, 71*(9), 54–62.
10. Burgess, A. (2018). *The executive guide to artificial intelligence: How to identify and implement applications for AI in your organization.* Springer. https://doi.org/10.1007/978-3-319-63820-1
11. Cewe, C., Koch, D., & Mertens, R. (2018). Minimal effort requirements engineering for robotic process automation with test driven development and screen recording. In H. Fahland, C. Ghidini, J. Becker, & M. Dumas (Eds.), *Business process management workshops: BPM 2017 international workshops, Barcelona, Spain, September 10–11, 2017, revised papers* (Vol. 15, pp. 642–648). Cham: Springer International Publishing.
12. Chakraborti, T., Isahagian, V., Khalaf, R., Khazaeni, Y., Muthusamy, V., Rizk, Y., & Unuvar, M. (2020). From robotic process automation to intelligent process automation: Emerging trends. In C. Fahland, D. Fahland, & A. Polyvyanyy (Eds.), *Business process management: Blockchain and robotic process automation forum: BPM 2020 Blockchain and RPA Forum, Seville, Spain, September 13–18, 2020, proceedings* (Vol. 18, pp. 215–228). Cham: Springer International Publishing.
13. Cohen, M., & Rozario, A. (2019). Exploring the Use of Robotic Process Automation (RPA) In Substantive Audit Procedures. *The CPA Journal*, *89*(7), 49–53.
14. Compeau, D.R., & Higgins, C.A. (1995a). Application of Social Cognitive Theory to Training for Computer Skills. *Information Systems Research*, 6, 118–143.
15. Compeau, D. R., & Higgins, C. A. (1995b). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly, 19*, 189–211.
16. Czerwińska, M. (2015). Narzędzia e-zdrowia jako instrumenty poprawiające dostęp do usług medycznych w regionie. *Nierówności społeczne a wzrost gospodarczy, 43*, 173–185.
17. da Silva Costa, D. A., São Mamede, H., & da Silva, M. M. (2022). Robotic process automation (RPA) adoption: A systematic literature review. *Engineering Management in Production and Services, 14*(2), 1–12. https://doi.org/10.2478/emj-2022-0012.
18. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340.
19. Davis, F. D. (1986). *A technology acceptance model for empirically testing new end-user information systems: Theory and results* (Doctoral dissertation). Massachusetts Institute of Technology, Cambridge.
20. Denisiewicz, N. (2024). Najlepsze zastosowania sztucznej inteligencji w radiologii. *Innowacje w medycynie*, 240.
21. Dryl, T. (2024). Poprawa komunikacji z pacjentem poprzez chatboty oparte na sztucznej inteligencji (AI): spostrzeżenia empiryczne i zalecenia menedżerskie. *Problemy Jakości, 3*, 25–31. https://doi.org/10.15199/46.2024.3.4.
22. Ejdys, J. (2017). Determinanty zaufania do technologii. *Przegląd Organizacji*, 12, 20–27. https://doi.org/10.33141/po.2017.12.03.

23. Fernandez, D., & Aman, A. (2018). Impacts of Robotic Process Automation on Global Account ing Services. *Asian Journal of Accounting and Governance*, *9*(1), 127–140. http://dx.doi.org/10.17576/AJAG-2018-09-11.
24. Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
25. Gao, X. Z., Kumar, R., Srivastava, S., & Soni, B. P. (2021). *Applications of artificial intelligence in engineering*. Singapore: Springer.
26. Geyer-Klingeberg, J., Nakladal, J., Baldauf, F., & Veit, F. (2018). Process mining and robotic process automation: A perfect match. In *Proceedings of the 16th International Conference on Business Process Management (BPM)* (pp. 124–131), Sydney, Australia.
27. Ghouse, A., & Sipos, C. (2022). RPA Progression throughout Years and Futuristic Aspects of RPA. *Pollack Periodica*, *17*(1), 30–35. https://doi.org/10.1556/606.2021.00344.
28. Gotthardt, M., Koivulaakso, D., Paksoy, O., Saramo, C., Martikainen, M., & Lehner, O. (2020). Current state and challenges in the implementation of smart robotic process automation in accounting and auditing. *ACRN Journal of Finance and Risk Perspectives, 9*(1), 90–102. https://doi.org/10.35944/jofrp.2020.9.1.007.
29. Hallikainen, P., Bekkhus, R., & Pan, S. L. (2018). How OpusCapita Used Internal RPA Capa bilities to Offer Services to Clients. *MIS Quarterly Executive*, *17*(1), 41–52.
30. Huang, F., & Vasarhelyi, M. A. (2019). Applying robotic process automation (RPA) in auditing: A framework. *International Journal of Accounting Information Systems, 35*, Article 100433. https://doi.org/10.1016/j.accinf.2019.100433
31. Janik, J. (2024). Robotyzacja systemu opieki medycznej. *Menedżer Zdrowia, 1*, 58–73. ISSN: 1730-2935.
32. Jędrzejczyk, W. (2021). Managing customer relations and value in organizations with the use of IT tools: Customer segmentation on the market of eco-innovative services. *Procedia Computer Science, 192*, 2816–2825. https://doi.org/10.1016/j.procs.2021.09.052.
33. Kajrunajtys, A., & Kajrunajtys, D. (2022). Samonaprawiający się robot – quasi-transakcyjność robota RPA3. *Zeszyty Naukowe Wyższej Szkoły Ekonomii i Informatyki w Krakowie, 18*, 85–98.
34. Kedziora, D., & Penttinen, E. (2021). Governance models for robotic process automation: The case of Nordea Bank. *Journal of Information Technology Teaching Cases, 11*(1), 20–29. https://doi.org/10.1177/2043886920937022.
35. KPMG. (2017). *Business transformation and the corporate agenda*. https://advisory.kpmg.us/articles/2017/business-transformation-and-the-corporate-agenda.html.
36. Kokina, J., & Blanchette, S. (2019). Early Evidence of Digital Labor in Accounting: Innovation with Robotic Process Automation. a*International Journal of Accounting Information Systems*, 35, Article 100431. https://doi.org/10.1016/j.accinf.2019.100431.
37. Lacity, M., Willcocks, L., & Craig, A. (2016). *Robotizing global financial shared services at Royal DSM* (The Outsourcing Unit Working Research Paper Series No. 16/02). London School of Economics and Political Science.
38. Lacity, M., & Willcocks, L. (2015). *Robotic process automation: The next transformation lever for shared services* (Outsourcing Unit Working Research Paper Series No. 7, pp. 1–35). London School of Economics and Political Science.
39. Lacity, M., Willcocks, L., & Craig, A. (2015). *Robotic process automation at Telefónica O2* (The Outsourcing Unit Working Research Paper Series No. 15/02). London School of Economics and Political Science.
40. Leavitt, H. J. (1964). Applied organization change in industry: Structural, technical and human approaches. In W. W. Cooper, H. J. Leavitt, & W. M. Shelly (Eds.), *New perspectives in organization research* (pp. 55-71). New York: Wiley.

41. Marciniak, P., & Stanisławski, R. (2021a). Internal determinants in the field of RPA technology implementation on the example of selected companies in the context of Industry 4.0 assumptions. *Information, 12*(6), Article 222. https://doi.org/10.3390/info12060222.
42. Marciniak, P., & Stanisławski, R. (2021b). Kształtowanie zmian strukturalnych i kompetencyjnych centrów doskonałości w procesie wdrożeń robotic process automation – studium przypadku. *Przegląd Organizacji, 10*, 36–44. https://doi.org/10.33141/po.2021.10.05.
43. The Brainy Insights. (2023). *Market research report*. GLOBE NEWSWIRE.
44. Moore, G.C., & Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Systems Research*, *2*(3), 192–222.
45. Nahotko, M. (2014). Zastosowanie modeli akceptacji technologii w badaniu użyteczności bibliotek cyfrowych. *Bibliotheca Nostra*, 1, 49–61.
46. Olszynka, P., Gryzło, K., Witanowski, P., & Mazowiecki, B. (2022). Transformacja organizacyjna przedsiębiorstw przemysłowych w Polsce. *Badanie przeprowadzone w Q1 & Q2 2022 na zlecenie Dassault Systemes*. PMR Market Experts.
47. Ortiz, C. F. M., & Costa, C. J. (2020). RPA in finance: Supporting portfolio management. In *15th Iberian Conference on Information Systems and Technologies (CISTI)* (pp. 1–4). https://doi.org/10.23919/CISTI49556.2020.9141155.
48. Penttinen, E., Kasslin, H., & Asatiani, A. (2018). How to choose between robotic process automation and back-end system automation? In *European Conference on Information Systems (ECIS)*. https://www.researchgate.net/publication/324918928.
49. Pypłacz, P. (2023). Badania dotyczące robotyzacji procesów biznesowych w naukach o zarządzaniu – systematyczny przegląd literatury. *Przegląd Organizacji*, 2. https://doi.org/10.33141/po.2023.
50. Pypłacz, P., & Žukovskis, J. (2023). Implementing robotic process automation in small and medium-sized enterprises – Implications for organisations. *Procedia Computer Science,* 225, 337–346. https://doi.org/10.1016/j.procs.2023.10.018.
51. Pypłacz, P. (2024). *Uwarunkowania akceptacji technologii RPA w automatyzacji procesów biznesowych małych i średnich przedsiębiorstw. Częstochowa: Wydawnictwo Politechniki Częstochowskiej.*
52. Pypłacz, P., & Sasak, J. (2022). RPA jako narzędzie automatyzacji i optymalizacji procesów. *Organizacja i Kierowanie, 2*(191), 173–188.
53. Polskie Forum Systemów (PFS) & First Byte. (2022). *Robotyzacja procesów w ochronie zdrowia: Podsumowanie ankiety 2022*. https://wizlink.eu/wp-content/uploads/2023/01/Robotyzacja-procesow-w-Ochronie-Zdrowia-Podsumowanie-ankiety-2022.pdf.
54. Romao, M., Costa, J., & Costa, C. J. (2019). Robotic process automation: A case study in the banking industry. In *2019 14th Iberian Conference on Information Systems and Technologies (CISTI)* (pp. 1–6). IEEE. https://doi.org/10.23919/CISTI.2019.8760733.
55. Skoczylas, D. (2023). Administracyjnoprawne aspekty informatyzacji sektora ochrony zdrowia w Polsce. E-zdrowie w dobie pandemii COVID-19. *Acta Universitatis Lodziensis. Folia Iuridica*, 98, 303–313. https://doi.org/10.18778/0208-6069.S.2023.26.
56. Sobczak, A. (2018). Robotisation of business processes – Present state and development directions. *Organisation Review,* 10, 52–61.
57. Sobczak, A. (2022). Robotic process automation as a digital transformation tool for increasing organizational resilience in Polish enterprises. *Sustainability,* 14, Article 1333. https://doi.org/10.3390/su14031333.
58. Syed, R., Suriadi, S., Adams, M., Bandara, W., Leemans, S. J., Ouyang, C., ter Hofstede, A., van de Weerd, I., Wynn, M. T., & Reijers, H. A. (2020). Robotic process automation: Contemporary themes and challenges. *Computers in Industry,* 115, Article 103162. https://doi.org/10.1016/j.compind.2019.103162.

59. Szczerbak, M., & Szczerbak, O. (2024). Narzędzia lean management jako sposób na poprawę jakości procesów medycznych i bezpieczeństwa pacjentów. *Medycyna Środowiskowa, 27*(2), 80–89. https://doi.org/10.26444/ms/189226.
60. Taulli, T. (2020). *The Robotic Process Automation handbook*. Springer.
61. Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, *46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926.
62. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly, 27*(3), 425–478. https://doi.org/10.2307/30036540.
63. Webster, J., & Martocchio, J. J. (1992). Microcomputer playfulness: Development of a measure with workplace implications. *MIS Quarterly, 16*(2), 201–226. https://doi.org/10.2307/249576.
64. Wewerka, J., & Reichert, M. (2020). Robotic process automation – A systematic literature review and assessment framework. *arXiv*. https://doi.org/10.48550/arXiv.2012.11951.
65. Willcocks, L., Lacity, M., & Craig, A. (2017). Robotic process automation: Strategic transformation lever for global business services? *Journal of Information Technology Teaching Cases, 7*(1), 17–28. https://doi.org/10.1057/s41266-016-0016-9.
66. Willcocks, L. (2020). Robo-apocalypse cancelled? Reframing the automation and future of work debate. *Journal of Information Technology, 35*(4), 286–302. https://doi.org/10.1177/0268396220925830.