Application of Artificial Intelligence in the Health Insurance Claims Management Process

Lukas Kaškevičius

Business Management Faculty, Vilnius Gediminas Technical University, Sauletekio al. 11, LT-10223, Vilnius, Lithuania
lukaskaskevicius@gmail.com

Received date:May 3, 2025, Revision date: May 28, 2025, Accepted: June 19, 2025

ABSTRACT

The increasing number of business clients and insured individuals in the insurance sector is leading to a growing volume of health insurance claims, necessitating more efficient administration processes. One solution is to automate these processes using artificial intelligence (AI) tools, which can handle repetitive tasks, reduce the likelihood of errors, and ultimately increase customer satisfaction. AI tools enhance efficiency by streamlining workflows, enabling employees to focus on more complex and strategic tasks. They can process large volumes of data quickly and accurately, which reduces the time spent on manual data entry and analysis. This increased efficiency not only improves service quality but also enables companies to attract more business clients. The primary issue identified is the rising demand for employees and increasing administrative costs, prompting a search for innovative solutions. The purpose of this study is to propose suggestions on how the application of artificial intelligence tools in the health insurance claims administration process would help automate processes, increase the efficiency of the claims administration structural unit, and encourage new sales in companies operating in the insurance sector. To achieve the goal, the following research tasks were set: to review how the scientific literature analyzes the application of AI tools in the operational processes of an insurance company; using expert assessment, to find out which claims administration processes can be automated by applying AI tools, and what impact this would have on the claims administration process and the attraction of new business customers; to evaluate alternatives for how the application of AI tools in the health claims administration process would help increase sales to new business customers. The study includes a literature review, expert assessment, and evaluation of alternatives. Based on the empirical research results, it was found that AI tools create the prerequisites for reducing the process time from a few minutes to seconds, making it possible to settle a larger number of claims within the same time unit. Accordingly, the insurance company can attract more new customers and ensure that customers receive a better experience in administering their claims and communicating.

Keywords: artificial intelligence (AI), AI tools, health insurance, health insurance claims management process, process management.

1. Introduction

For companies operating in the insurance sector and seeking to capture a larger market share, it is crucial to expand their client base, particularly by targeting corporate groups and business clients. In addition to other factors, improving the efficiency of claims management processes through the use of artificial intelligence (AI) tools plays a crucial role (Čyras, Nalivaikė, 2024; Devaraj, 2025). Automation of this process is crucial, as the growing number of business clients and insured individuals – with Lithuanian health insurance contributions increasing by 21% and issued policies by 42% in 2024 (Bank of Lithuania, 2025) – results in a rising number of health insurance claims that must be resolved timely and in accordance with contractual obligations. The claims process could become more efficient if AI were used to handle

cases that require minimal human intervention. AI solutions not only automate technical processes but also collect and analyze data to gain a deeper understanding of customer needs.

The primary issue identified in this study is that the increasing number of insured persons leads to a growing need for staff to manage registered claims. Between 2022 and 2024, the volume of paid health insurance claims rose from EUR 56 million to EUR 80.3 million (Bank of Lithuania, 2025). A portion of these tasks can be performed using AI tools integrated into repetitive processes, such as fraud detection, document evaluation, or data processing for decision-making (Pingili, 2025). Automating these processes would enhance the efficiency of claims handling departments, increase customer satisfaction, and decrease the likelihood of errors. Otherwise, companies in the insurance sector might face the need to limit participation in new tenders, as claims departments would reach their capacity limits, hindering their ability to serve new business clients and process claims and payments on time. Therefore, it is essential for insurance companies not only to ensure fast service but also to maintain high quality, particularly in a competitive market. Importantly, the integration of AI must be implemented responsibly and ethically, adhering to legal and data protection requirements. Ultimately, AI integration can be viewed as a strategic factor that contributes to the long-term sustainability and innovativeness of an organization.

To address the identified issue, the study aims to propose suggestions on how the application of artificial intelligence tools in the health insurance claims administration process would help automate processes, increase the efficiency of the claims administration structural unit, and encourage new sales in companies operating in the insurance sector. To achieve the goal, the following research tasks were set: to review how the scientific literature analyzes the application of AI tools in the operational processes of an insurance company; using expert assessment, to find out which claims administration processes can be automated by applying AI tools, and what impact this would have on the claims administration process and the attraction of new business customers; to evaluate alternatives for how the application of AI tools in the health claims administration process would help increase sales to new business customers.

The study employs research methods such as literature analysis, expert assessment, and in-depth interviews.

2. Literature Review

Improving processing efficiency can lead to faster turnaround times and increased productivity, reducing operational costs by minimizing resource waste and streamlining workflows. Efficient processing also enhances customer satisfaction by delivering quicker results and services (Vera, Zapata, 2022; Wang et al., 2024). One way to increase business process efficiency is to integrate AI tool solutions. AI tools generally assist in performing tasks that require human reasoning and are particularly useful in decision-making or predicting future outcomes based on large datasets (Merkevičius et al., 2024; O'Brien & Downie, 2024). For this reason, AI solutions can be applied across various industries, including finance and insurance, where forecasting future events based on past statistical data is a core activity (Luna, 2024). In the insurance sector, AI is primarily used in fraud detection and prevention, claims management, risk assessment, and communication with clients and business partners (Scattaglia et al., 2024). Key AI techniques include object recognition, natural language processing (NLP), large language models (LLMs), autonomous agents, machine learning, recommendation systems, and predictive analytics (Kumar et al., 2019).

The health insurance claims process consists of six key steps: claim notification and document submission, preliminary document review, verification of insurance policy conditions, expert (medical) evaluation, claim amount calculation (if the event is covered), and communication of the decision to the client (Hehner et al., 2017). Additionally, communication with healthcare institutions, which are also under pressure due to rising patient volumes and administrative costs, is part of the process (Dursan et al., 2021). The entire process includes numerous repetitive tasks that currently require inefficient manual work from employees. Both

clients and insurers face issues when required documentation is missing, delaying the process. Clients must often clarify sensitive health-related information and be reachable during business hours. Claims assessors, in turn, must possess medical knowledge and have prompt access to various databases (Mitchell, 2023).

AI can significantly expedite many steps of this process. The main AI tools used include optical character recognition, LLMs, and NLP systems that scan various types of documents and images submitted by clients, organizing them into structured data necessary for claims evaluation. Object recognition techniques enable the evaluation of medical documents, such as X-rays, potentially eliminating the need for human expert assessment. These AI tools rely on machine learning trained on vast datasets accumulated by insurers, based on decisions made in past claims cases (Balasubramanian et al., 2021; Pareek, 2023). The most critical AI functions – NLP and context awareness – are vital for detecting potentially fraudulent cases where clients seek unjustified payouts (Anglen, 2023; Chandravanshi et al., 2024).

Table 1: Applying artificial intelligence tools to the health insurance claims management process (compiled by the author based on Hehner et al. 2017; Kumar et al. 2019; Balasubramanian et al. 2021)

Claims Management Step	Applied AI Tool	Purpose of the Tool	Advantage	Disadvantage
Initial assessment of submitted documents	Object recognition methods Natural language processing tools Large language models Context awareness	To identify which insurance risks the submitted documents relate to. To detect possible signs of forgery.	Eliminates repetitive human work in evaluating initial documents	The document may be misinterpreted fraud risk might not be detected
Verification of insurance policy terms	Large language models Autonomous agent	To verify whether the submitted documents entitle a payout (e.g., pharmacy receipts submitted, but the policy does not cover medication expenses).	Documents are linked to specific insurance risks; if the risk is not covered, the case is immediately closed	Policy terms may be customized, and the AI tool may incorrectly close the claim
Expert (medical) evaluation	Object recognition methods Large language models	To medically assess the submitted documents	Enables fast medical assessment based on which it is determined whether the case is insurable	The document may be misinterpreted, especially when evaluating complex medical conditions
Calculation of claim amount	Large language models Autonomous agent	To calculate the insurance payout based on policy terms	Claim amount is calculated immediately	The payout may be calculated incorrectly
Informing the client about the decision	Large language models	To generate a letter informing the client of the decision	Saves time in generating template letters	Important information for the client may be omitted

3. Research Methodology

Two main types of research methods were used in this study – quantitative and qualitative (Žukauskienė, 2008; Pukelis, 2021). To examine and evaluate how the application of artificial intelligence (AI) tools

enhances the efficiency of health insurance claims management in insurance companies, an expert evaluation was conducted through in-depth interviews. These involved professionals from insurance and insurance brokerage companies were directly engaged in health claims administration and the implementation of AI solutions in these processes.

Gaižauskaitė and Valavičienė (2016) emphasize that in-depth interviews are beneficial for research, as questions are prepared in advance and tied to the research problem. During the interview, additional nuances of the issue can be explored. Proper evaluation of the problem requires gathering insights from experts with at least 6–7 years of professional experience in the field, which also presents a limitation of this method. The strength of the expert evaluation lies in the fact that the provided responses are based on real experience and practical knowledge. However, the personal opinions expressed may not always offer universal solutions (Baležentis et al., 2011).

Experts interviewed had no less than 4 years of experience in health insurance claims management and were directly involved in AI implementation in these processes:

- Expert 1: Health Insurance Product Manager, 8 years of experience
- Expert 2: Head of Claims Department, 22 years of experience
- Expert 3: Head of Employee Motivation Programs, 17 years of experience
- Expert 4: Head of Health Insurance Group, 20 years of experience
- Expert 5: Health Insurance Expert, 9 years of experience
- Expert 6: Supplementary Benefits Expert, 13 years of experience

The following questions were asked:

1. What are the main challenges encountered when managing the increasing volume of health insurance claims? What AI tools are used in the initial assessment of client-submitted data? What are their advantages and disadvantages?
2. Please provide examples of AI tools applicable in claims management and their functions. What are their advantages and disadvantages?
3. What is the claims regulation process in your company, and which factors most influence its performance?
4. How does the use of AI tools improve process and organizational efficiency? What tools are currently applied in your company? What are their strengths and limitations?
5. Which process steps could be accelerated by implementing AI?
6. What benefits can AI use in claims management bring to both the company and the clients?
7. How do you manage the risk that AI might incorrectly assess documents and generate an inaccurate claims calculation?
8. Why is AI integration into health claims processing in insurance companies implemented gradually?

These questions can be grouped into three categories based on the type of insights they aim to gather:

- Questions 1, 3, and 8 reveal the current situation and business problem;
- Questions 2, 4, 5, and 6 focus on evaluating the potential and application of AI tools;
- Question 7 examines the risks associated with the use of AI in claims management.

4. Research Results

The expert evaluation confirmed that insurance companies managing health claims encounter similar challenges during the claims handling process and are actively investing in the implementation of AI tools. Experts pointed out that the growing number of insured business clients and claims negatively impacts overall efficiency, increases the risk of errors, and prolongs the decision-making process. This ultimately raises the workload on human resources and reduces customer satisfaction. The key problem area identified was the need to enhance efficiency in health claims administration, reduce administrative costs, and increase the number of insured business clients using AI solutions. Companies aim to automate tasks such as scanning and structuring submitted documents, detecting potential fraud, and communicating decisions to clients — all of which would significantly shorten the overall processing time. Experts emphasized that AI tools are most effective in:

- Evaluating submitted documents;
- Comparing them against policy terms;
- Communicating with clients;
- Calculating claim amounts;
- Detecting fraudulent cases.

By applying these tools, insurers can optimize their use of human resources, reduce administrative costs, attract new clients, and provide faster, more accurate service — thereby improving customer satisfaction with their health insurance products.

However, the integration of AI into the claims process is still gradual due to high implementation costs, lengthy testing cycles, and stringent compliance requirements with legal and data protection regulations.

Research results were based on seven evaluation criteria related to the application of artificial intelligence (AI) in the health insurance claims management process. Based on the experts' responses, the outcomes for each criterion can be summarized, and brief conclusions can be drawn.

Table 2: Expert assessment of the health insurance claims administration process: Results of Expert 1 and Expert 2 assessments (compiled by the author)

Evaluation Criterion	Expert 1	Expert 2
Problems arising from the increased number of health insurance claims	Increased burden on human resources, higher likelihood of errors, and failure to detect fraudulent cases.	1. Maintaining quality 2. Human resource capacity
AI tools applied in the health insurance claims process – functions, advantages, and disadvantages	Large language models and object recognition tools scan textual data in documents and input it into the system – work that took minutes is now done in seconds. However, effectiveness depends on the quality	Optical character recognition is used for document scanning and data extraction, NLP tools analyze text. Advantages include speed, efficiency, and a reduced risk of errors. Disadvantages include the potential for misinterpretation of non-

Evaluation Criterion	Expert 1	Expert 2
	and interpretation of the data received.	standard documents and incorrect assignment of insurance risks.
Factors affecting the efficiency of the claims management process	1. Investment in AI programming and its adaptation for reading different types of documents. 2. Quality of automated document scanning.	1. Continuous improvement of AI tools and updates of automated decisions. 2. Cooperation with healthcare institutions to integrate AI into their administrative processes.
Claims process steps that can be accelerated using AI	1. Document scanning and data entry into the system. 2. Preliminary claims assessment. 3. Identification of risky and atypical claims.	1. Customer service using chatbots to answer inquiries. 2. Decision-making using image analysis and autonomous agent methods.
Benefits for the company and the client from using AI in health insurance claims	For the company, this means reduced administrative costs and faster processes. For the client, more accurate and timely communication is essential.	For the company, this results in reduced administrative costs, minimized error risk, and improved employee efficiency. The client performs fewer additional steps during the process.
Risk management when using AI in claims processing	1. Human review of critical steps. 2. Ongoing process testing.	Determining acceptable error margins and analyzing decisions where the actual payout exceeds the projected payout.
Reasons why AI is implemented gradually in health insurance claims	1. Lack of time for testing and employee training. 2. Ensuring compliance with legal requirements. 3. New technology.	1. Protection of sensitive health data and compliance with legal regulations. 2. Need to test each decision individually.

Experts identified the main problems encountered in managing the increased number of claims:

- A higher probability of errors when handling large volumes of documents;
- Inefficient use of human resources, with the company being highly dependent on its employees.

Research results showed that problems arising from the increased number of health insurance claims are related to an increased burden on human resources, a higher likelihood of errors, and a failure to detect fraudulent cases, as well as maintaining quality and staff capacity.

Table 3: Expert assessment of the health insurance claims administration process: Results of Expert 3 and Expert 4 assessments (compiled by the author)

Evaluation Criterion	Expert 3	Expert 4
Problems arising from the increased number of health insurance claims	1. Large volume of documents. 2. Fraudulent cases. 3. Evaluation of different unstructured documents.	Increased workload in reviewing claims. Risk of errors and lack of impartiality. Longer decision-making time.
AI tools applied in the health insurance claims process – functions, advantages, and disadvantages	Automated decision-making systems, NLP and LLM methods, and optical character recognition. Reduces repetitive tasks, adapts to new data analysis, and ensures timely customer service. Disadvantages include the potential for misinterpretation of handwritten text and limited flexibility.	Automated document scanning allows comparison with past cases to form a suggested decision. However, there is still a risk of errors in non-standard case evaluations.
Factors affecting the efficiency of the claims management process	Cooperation and timely communication between the insurance company and the client.	1. Employee qualifications 2. Quality of submitted data 3. Legal regulations 4. Process digitalization
Claims process steps that can be accelerated using AI	Automation of document scanning, data entry, and analysis. Fraud prevention. Automated client communication.	1. Data processing 2. Decision-making 3. Analysis of available data and decision-making 4. Client service and experience
Benefits for the company and the client from using AI in health insurance claims	Clients can submit data more easily and receive faster claim decisions, as well as 24/7 access to answers to their questions. The company can analyze and forecast claim trends.	Helps the company forecast future claim trends and optimize processes. Clients receive faster responses and more accurate service.
Risk management when using AI in claims processing	A human must make the final decision, especially if the payout amount is significant. Continuous testing.	Human oversight is required when using AI in an assistant role, rather than for decision-making. Ongoing testing is essential.

Evaluation Criterion	Expert 3	Expert 4
Reasons why AI is implemented gradually in health insurance claims	1. Need for high-quality, large-scale data 2. High cost – an expensive solution 3. Technical complexity in integrating new technologies into existing processes	1. Process complexity 2. Lack of quality data for testing 3. Legal regulation

Advantages, disadvantages, and functions of AI tools used in health insurance claims management:

- Automated document assessment and analysis;
- Faster decision-making and reduction of human errors;
- Requires continuous process testing;
- Limited accuracy in handling non-standard cases;
- Must comply with legal and regulatory requirements.

According to the experts, the main factors influencing the performance of the health insurance claims process are:

- Employee qualifications;
- Quality of submitted documents;
- Automation of the information processing workflow.

Process steps in health insurance claims management that AI tools could automate:

- Document analysis, classification, and decision-making;
- Communication with clients;
- Fraud prevention and data analysis.

The automation of the health insurance claims process brings additional benefits to both the client and the insurance company:

- Increased efficiency, reduced costs, and faster decision-making (as stated by all experts);
- The ability to attract new clients through more reliable and faster service.
- More accurate analysis and better alignment with client expectations.

Table 4: Expert assessment of the health insurance claims administration process: Results of Expert 5 and Expert 6 assessments (compiled by the author)

Evaluation Criterion	Expert 5	Expert 6
Problems arising from the increased number of health insurance claims	Increased probability of errors and increased workload for employees,	Work efficiency is not ensured due to the limited autonomy of current AI tools.

Evaluation Criterion	Expert 5	Expert 6
	resulting in prolonged process duration.	
AI tools applied in the health insurance claims process – functions, advantages, and disadvantages	An autonomous agent requests missing documents, and object recognition models aid in detecting fraud at an early stage. Algorithm error risk remains.	Information from submitted photos is entered into the system, compared with policy data, and in simple cases, the insurance payout is calculated. Employees can focus on analyzing complex cases.
Factors affecting the efficiency of the claims management process	1. Proper collection of initial documents. 2. AI's ability to evaluate documents in various formats. 3. Quality of data structuring.	1. Client cooperation with the insurer. 2. Integration of insurer systems with partner systems. 3. Quality of automatic data scanning. 4. Complexity of AI tools.
Claims process steps that can be accelerated using AI	1. Client communication and notifications. 2. Medical document analysis.	1. Document scanning. 2. Claim amount calculation. 3. Comparison of documents with insurance policy terms.
Benefits for the company and the client from using AI in health insurance claims	The company optimizes the utilization of human resources, while the client enjoys a more favorable experience with the insurer.	The company can allocate saved resources toward upgrading AI tools and thus attract more new clients.
Risk management when using AI in claims processing	Clear operational rules must be defined in algorithms.	1. Establishing payout limits. 2. Continuous updating of data used in AI processes.
Reasons why AI is implemented gradually in health insurance claims	1. An expensive solution that requires internal approval. 2. Lack of prior implementation experience.	1. Cost. 2. Risk of GDPR violations. 3. Long testing period for processes.

However, the use of AI tools also presents certain risks:

- Compliance with legal and regulatory requirements;
- Inaccuracies in AI-generated decisions, particularly in complex cases, underscore the importance of human oversight.
- There is a need for constant testing and access to large volumes of sensitive personal data when making decisions in health insurance claims.

The integration of AI tools in insurance companies is gradual due to:

- Limited financial resources;
- The need to comply with legislation and GDPR requirements;
- The novelty of the solution requires thorough testing before full implementation.

5. Recommendations for the Process Reorganization for Insurance Companies

The application of artificial intelligence (AI) tools in the health insurance claims management process enables the digitalization of procedures and reduces manual, repetitive human labor. Based on expert insights, the process can be significantly optimized by incorporating AI technologies.

First, it is recommended to automate document intake, classification, and evaluation using natural language processing (NLP) and image recognition algorithms. These solutions reduce the likelihood of human error and accelerate decision-making, particularly in non-standard cases. It is also advisable to implement automated customer service tools.

Insurance companies should invest in different AI tools that correspond to distinct stages of the claims process:

- Autonomous agents assist clients by answering common questions and requesting missing documents.
- Large language models (LLMs) and NLP tools read and compare submitted documents against policy terms, calculate potential payouts, and inform clients of the decisions made.
- Object and content recognition methods aid in detecting fraudulent claims and conducting medical evaluations of submitted documentation.

Furthermore, AI tools that identify unusual behavior patterns or document inconsistencies should be integrated into fraud prevention efforts. To ensure the reliability of AI solutions, continuous training and testing mechanisms must be in place. Pilot projects are recommended as a means to evaluate the effectiveness and risks associated with the technologies gradually.

AI tools can reduce processing time from several minutes to just seconds, enabling insurers to handle a higher volume of claims in the same period. As a result, companies can attract more clients while also improving customer experience through faster and more accurate claim resolutions.

6. Conclusions

The literature review confirms that AI tools are widely applicable in the insurance industry, encompassing customer service, fraud detection, and claims management. Health insurance claims administration involves numerous repetitive tasks that AI can efficiently handle.

Large language models, object recognition, and content detection methods can streamline various steps in the claims process, such as medical evaluation, payout calculation, or informing clients about missing documents. AI tools used in health claims management enable:

- Scanning and structuring submitted documents,
- Comparing them with policy terms,
- Calculating the claim amount,

- Communicating with clients about outcomes or required clarifications.

When these tasks are performed manually, the process becomes longer and more prone to errors. Automation enhances the customer experience while enabling insurance companies to process a larger volume of claims more efficiently, ultimately driving client growth.

Since claims management is a complex, multi-step process, insurance companies should invest in a range of AI tools that digitize different parts of the workflow. The more stages are automated, the shorter the processing time becomes, helping the company expand its client base and increase its market share.

References

Anglen, J. (2023). AI in Claims Processing. Rapid Innovation. Retrieved from: https://www.rapidinnovation.io/post/ai-in-claims-processing

Balasubramanian, R., Libarikian, A., McElhaney, D. (2021). Insurance 2030—The impact of AI on the future of insurance. McKinsey & Company. Retrieved from: https://www.mckinsey.com/industries/financial-services/our-insights/insurance-2030-the-impact-of-ai-on-the-future-of-insurance

Chandravanshi, S., Kotdiya, G., Kotdiya, Y., Patidar, Y. (2024). Study the insurance claims detection using machine learning. *International Journal of Engineering Applied Science and Management*, 5(6), 2024/IJEASM/5/2024/2094.

Čyras G., Nalivaikė, J. (2024). Artificial intelligence in the mirror of innovative changes in the conditions of a mobilization economy, *Journal of Management Changes in the Digital Era*, 1(1): 1-13. https://doi.org/10.33168/JMCDE.2024.0101

Devaraj, S. M. (2025). AI and cloud for claims processing automation in property and casualty insurance. *International Journal of Engineering and Technology Research*, 8 (1). https://doi.org/10.5281/zenodo.14498802

Dursun, M., Fındık, S.S. and Goker, N. (2022). Business process reengineering in healthcare sector: application for the central sterilization unit. *Kybernetes*, 51(2): 715-744. https://doi.org/10.1108/K-11-2020-0777

Gaižauskaitė, I., Valavičienė, N. (2016). Socialinių tyrimų metodai: kokybinis interviu [*Social research methods: qualitative interview*] (p. 75-85). Vilnius: Registrų centras.

Hehner, S. Körs, B., Martin, M., Uhrmann-Klingen, E., Waldron, J. (2017). Artificial Intelligence in Health Insurance: Smart Claims Management with Self-Learning Software. McKinsey & Company. Retrieved from: https://www.mckinsey.com/industries/healthcare/our-insights/artificial-intelligence-in-health-insurance-smart-claims-management-with-self-learning-software

Kumar, N., Srivastava, D. J., Bisht, H. (2019). Artificial intelligence in insurance sector. *Journal of The Gujarat Research Society*, 21(7), 79-91.

Lietuvos bankas (2025). Veiklos rodikliai [*Performance indicators*]. Retrieved from: https://www.lb.lt/lt/draudikai-veiklos-rodikliai

Luna, J. C. (2024). AI in Insurance: Benefits, Challenges, and Insights. Data Camp. Retrieved from: https://www.datacamp.com/blog/ai-in-insurance

Merkevičius, J., Nalivaikė, J., Nalivaika, D. (2024). Expanding Internet of Things into the new markets, *Journal of Management Changes in the Digital Era*, 1(1), 42-58. https://doi.org/10.33168/JMCDE.2024.0104

Mitchell, M. (2023). What is Claims Management in Insurance. Invensis. Retrieved from: https://www.invensis.net/blog/what-is-claims-management-in-insurance

O'Brien, K., Downie, A. (2024). What is AI in insurance? IBM. Retrieved from: https://www.ibm.com/think/topics/ai-in-insurance

Pareek, S. C. (2023). From detection to prevention: The evolution of fraud testing frameworks in insurance through AI. *Journal of Artificial Intelligence, Machine Learning and Data Science*, 1(2). https://doi.org/10.51219/JAIMLD/chandra-shekhar-pareek/401

Pingili, R. (2025). AI-driven intelligent document processing for healthcare and insurance, *International Journal of Science and Research Archive*. https://doi.org/10.30574/ijsra.2025.14.1.0194

Pulelis, K. (2021). Teorinis tyrimas: tyrimo konstrukto parametrai [*Theoretical research: parameters of the research construct*]. Vytauto Didžiojo Universitetas. Retrieved from: https://www.researchgate.net/profile/Kestutis-Pukelis-2/publication/352373643_Teorinis_tyrimas_tyrimo_konstrukto_parametrai/links/60c717f1a6fdcc2e614065b6/Teorinis-tyrimas-tyrimo-konstrukto-parametrai.pdf

Scattaglia, S., Adesman-Navon, I., Henderson, J. (2024). AI in insurance: A catalyst for change. KPMG. Retrieved from: https://kpmg.com/xx/en/our-insights/ai-and-technology/ai-in-insurance-a-catalyst-for-change.html

Vera, A. and Zapata, C.M. (2022). Best practices of business process improvement: towards a representation on top of the Quintessence kernel. *Business Process Management Journal*, 28(3): 876-903, doi: 10.1108/bpmj-10-2021-0687.

Wang, C.N., Vo, T.T.B.C., Hsu, H.P., Chung, Y.C., Nguyen, N.T. and Nhieu, N.L. (2024). Improving processing efficiency through workflow process reengineering, simulation and value stream mapping: a case study of business process reengineering. *Business Process Management Journal*, 30(7): 2482-2515. https://doi.org/10.1108/BPMJ-11-2023-0869.

Žukauskienė, R. (2008). Kokybiniai ir kiekybiniai metodai [*Qualitative and quantitative methods*]. Mykolo Romerio universitetas. Retrieved from: http://rzukausk.home.mruni.eu/wp-content/uploads/kokybiniai-ir-kiekybiniai-tyrimai.pdf