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**I International Science Conference
«New ways of creating scientific ideas
for implementation»**

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NEW WAYS OF CREATING SCIENTIFIC IDEAS FOR IMPLEMENTATION

Abstracts of I International Scientific and Practical Conference

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(September 18-20, 2023)

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RESEARCH AND DEVELOPMENT OF A SYSTEM FOR AUTOMATING THE WORK OF INSURANCE COMPANIES IN THE HEALTHCARE MARKET

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In today's rapidly evolving healthcare industry, insurance companies face the challenge of efficiently managing medical claims and providing timely services to their clients [1-6]. The automation of insurance processes has become imperative in streamlining operations [7-11] and improving customer satisfaction [12-15]. This work explores the development of an automation system designed to enhance the functioning of insurance companies operating in the medical services market.

The insurance sector, particularly in the context of medical services, grapples with various complexities, including the need for precise claim processing, compliance with regulatory standards, and quick response times to medical emergencies.

To address the aforementioned challenges, our research and development efforts employ a comprehensive methodology. The methodology encompasses the following key components:

- **Data Integration:** We integrate data from diverse sources, including medical records, insurance policies, and claim submissions, to create a centralized and accurate database;

- **Workflow Optimization:** We analyze and streamline insurance workflows to minimize redundant processes, thereby reducing the time and resources required to handle claims and customer inquiries;

- **Security and Compliance:** Ensuring data security and compliance with healthcare regulations is paramount;

- **User-Friendly Interface:** Our system includes a user-friendly interface for both insurance company staff and clients, enhancing accessibility and ease of use.

Advantages and disadvantages of automation. Implementing automation in the operations of medical insurance companies offers a range of benefits as well as potential drawbacks that deserve careful consideration.

Advantages:

- **Enhanced Efficiency:** Automation reduces manual intervention, accelerates claim processing, and minimizes errors, leading to faster service delivery;

- **Cost Reduction:** By automating repetitive tasks, insurance companies can lower operational costs and allocate resources more effectively;

- **Improved Accuracy:** Automation systems can perform complex calculations and data analysis with precision, reducing the risk of human error;

- **Enhanced Customer Experience:** Quicker response times and improved accuracy contribute to higher customer satisfaction levels.

Disadvantages:

- Initial Investment: Setting up an automation system requires an initial financial investment in technology and training;
- Job Displacement: Automation may lead to the displacement of some manual jobs, necessitating workforce reskilling;
- Technical Challenges: Maintenance and troubleshooting of automation systems can pose technical challenges;
- Data Security Risks: Increased reliance on technology exposes insurance companies to potential cybersecurity threats.

A critical aspect of our research involves a comprehensive examination of competitors in the field of automated solutions for insurance companies operating in the medical services sector. This analysis provides valuable insights into the state of the market, identifies potential collaborators or partners, and helps us position our system effectively.

In conclusion, the development and implementation of an automation system for insurance companies operating in the medical services market offer significant advantages in terms of efficiency, accuracy, and customer satisfaction. This thesis has provided an in-depth analysis of the challenges faced by insurance companies in this sector and has outlined the methodologies employed in the creation of our automation solution.

By addressing these challenges through the integration of data and workflow optimization, our system aims to revolutionize the insurance process. However, it is essential to acknowledge the potential drawbacks of automation, including the need for initial investments and considerations regarding job displacement and data security.

The competitive analysis highlights the importance of staying informed about industry trends and learning from market leaders and innovators.

In summary, the automation of insurance processes in the medical services sector is a promising endeavor with the potential to enhance the industry's efficiency and effectiveness.

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