Transforming the Healthcare Industry with RPA & Intelligent Automation

The World Health Organization (WHO) forecasted in 2013 that the global shortfall of healthcare workers will reach 12.9 million by 2035, making in-person medical appointments a privilege few patients can afford. The COVID-19 pandemic has only made matters worse.

While telehealth and remote patient monitoring (RPM) solutions help to relieve some of the strain on the healthcare system, increase in telemedicine use has put a strain on medical personnel who must manually process claims, enter data into electronic health records, and interact with patients via digital channels. The widespread implementation of robotic process automation (RPA) technology in healthcare could eliminate inefficiencies in the healthcare system.

The market for robotic process automation (RPA) is booming. With RPA, businesses can automate manual, time-consuming, repetitive, and transactional procedures. RPA can help organisations enhance process quality, speed, and productivity while also integrating legacy systems, which is becoming more crucial in the present context as businesses attempt to accelerate digital transformation projects.

While RPA has the potential to be a very useful technology, it is evident that business complexities, subjective judgements, and unstructured data are all major roadblocks to its effectiveness. RPA allows automating everyday simple business tasks. RPA requires processes that adhere to finite, specified rules when dealing with organised data.

Connecting RPA and AI

Connecting the head (AI and ML) with hands (RPA) holds the key to improve the digital optimization efforts. The combination of RPA with AI and ML to produce intelligent automation, which has the ability to vastly expand the spectrum of knowledge work that was previously thought to be too difficult to automate and required human interaction to make predictions. AI and machine learning (ML) automate decision-making, while RPA automates the process's manual next steps.

How? Machine learning can be divided into two key components at a high level. The initial step is to train models using past data in order to generate predictions. This includes gathering and processing data – frequently the most time-consuming phase in machine learning – and culminating in a labeled training data set ready for modeling. Following that, models are developed utilising algorithms for many types of data problems, including as classification, regression, and binary. Once the model has been constructed and deployed into production, the next step in machine learning is to score unseen data against the built models.

At this stage RPA instructs the machine learning model what to do next and the model will provide a prediction choice for RPA to proceed without human interaction.

Benefit of Combining RPA and AI

In this case, the primary organisational benefit of utilising intelligent automation to eliminate human labour from monotonous tasks is that it allows healthcare professionals to focus on higher-value, human-led decision making, diagnosis, and treatment. Improving results and giving a better patient experience can be accomplished through optimising patient involvement and providing doctors with faster access to more information, allowing them to give personalised care.

Pharmaceutical companies and medical device manufacturers, for example, are using real-time data visibility to remove potential compliance risks by reducing fraud and error rates and increasing accuracy, safety, and security. This is especially true in the life sciences sector.

Organizations like CIGNEX can help businesses to maximize their investments in RPA with their comprehensive suite of RPA services and optimize and automate business processes with intelligent algorithms. Being a UiPath gold partner and having worked on leading RPA tools like Automation Anywhere & Blue Prism, their solutions can help organizations deliver high performance.

AI during COVID-19

Intelligent automation is being used to accelerate drug discovery, vaccine development, and clinical trials by automating documentation and regulatory monitoring operations. Removing bottlenecks is proven to be critical in tackling some of the pandemic's issues, particularly in terms of providing test kits and Fast Track analysis.

In the era of digitalization, introduction of AI in manufacturing and laboratories can open new possibilities. It will allow laboratories to link data back to the manufacturing units and other repositories allowing for greater visibility of trends, faster and more scale manufacturing, and more agile supply chains, all of which are critical requirements, particularly at this time.

Intelligent automation is allowing the life sciences and healthcare industries to manage and integrate old systems while taking full advantage of digital transformation without having to update software, establish APIs, or build a new system in weeks rather than months or, in some cases, years.

Key Success Factors

Data can be gathered from a variety of sources and must be scrubbed and prepared before modelling can begin. Instead of being available to a limited group, AI and RPA are becoming more accessible to the general public through intelligent automation. People can gain direct access to data science and use the information directly, rather than waiting for it from a group that is segregated somewhere else. The ability to make use of these AI, ML and RPA tools allows life science and healthcare industry to support AI driven decision making and generate ROI in quick turn-around time.

The next step in the intelligent automation journey is the merger of RPA, AI, and machine learning. Data-driven machine learning use cases including as patient readmission, staff forecasting, medication adherence, and patient stay reduction are being solved by organisations, and they aren't stopping there. Instead, they're combining numerous intelligent automation components to provide new RPA automations that weren't previously feasible to handle more crucial use cases. These are exciting time for the healthcare industry.

Conclusion

Having invested in RPA since 2016, CIGNEX has built an RPA Center of Excellence (CoE) with certified RPA professionals (over 150+ certifications accomplished by 60+ RPA experts), who are helping customers achieve their automation goals with quality RPA solutions, RPA tools knowledge, and an ability to quantify the ROI. As a leading RPA service provider, they provide end-to-end RPA services ranging from assessment, strategy to implementation, deployment & support. CIGNEX experts adept at leading artificial intelligence and machine learning frameworks would help you solve real-life business challenges and develop your unique concepts from idea to production.

If you would like to discuss or implement RPA, you can schedule a free consultation by reaching out to them at info@cignex.com.

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