



## Case Study: Elevating Insurance Claims Processing Efficiency through Conversational AI

### The Client

Our client, a leading Knowledge Process Outsourcing (KPO) company specializing in Insurance Claims Back Office operations, faced a unique challenge within their domain. Working closely with insurance companies, they encountered an issue where their claims processing executives struggled to retain and apply training knowledge in their day-to-day tasks, leading to inefficiencies and delays.

### Business Problem

Despite receiving regular training and updates from insurance companies on claims processing, the client's claims processing executives encountered difficulties in remembering the intricate details, especially when new changes were introduced. This led to a reliance on team leaders for clarifications, subsequently slowing down the overall claims processing workflow. The client sought an innovative solution to address these queries promptly and independently, reducing delays and optimizing productivity.

### Solution

To tackle this challenge head-on, we crafted a cutting-edge solution: a Conversational Bot powered by the RASA framework and BERT model. Our approach involved custom training the BERT model on a comprehensive Knowledge Base specific to insurance claims processing.

The Conversational Bot provided claims processing executives with a user-friendly interface to ask queries related to their tasks. It swiftly answered questions, sought feedback on responses, and even suggested potential questions for users to choose from. If an inquiry proved particularly challenging, the bot seamlessly involved supervisors in the conversation. Such interactions were also leveraged for the bot's re-training, ensuring continual improvement.

### Outcomes

The impact of the RASA-based Conversational AI Bot was remarkable. The claims processing executives exhibited a noticeable reduction in mistakes compared to previous practices. This translated to an evident boost in overall productivity and efficiency within the team. While there was an initial learning curve in understanding how to interact effectively with the bot, within a few weeks, the claims processing executives seamlessly integrated the Conversational Bot into their daily workflow.

### Technology Used

Python, Django, RESTful API, BERT, NLP, RASA Framework



## Conclusion

This case study underscores our commitment to driving operational excellence through innovative AI solutions. By leveraging the RASA framework and BERT model, we transformed the client's claims processing landscape. The Conversational Bot empowered claims processing executives with rapid and accurate information access, streamlining operations and reducing reliance on team leaders. Our solution exemplifies the fusion of cutting-edge AI technology with real-world business challenges, resulting in enhanced efficiency, reduced errors, and empowered teams. As a testament to its success, the Conversational Bot has seamlessly become an integral and indispensable part of the claims processing workflow.