

# **Automating Claims Adjudication**

With Machine Learning



## **CLAIMS ADJUDICATION PROCESS**



#### **CLAIM SUBMISSION**

From policy holder or healthcare provider



#### **VERIFICATION**

Rule-driven manual verification and investigation



#### ACCEPTANCE/REJECTION

Explanation of benefits, details of findings, justification for settling.



#### **PAYMENT DETERMINATION**

Rule-based determination of settlement amount



## **CLAIMS ADJUDICATION CHALLENGES**

- Claims submission, collection, and processing is data and time intensive
- Manual verification is cumbersome and prone to errors
- Fraudulent claims result in huge losses to business
- Errors in claims adjudication process can result in additional effort and customer dissatisfaction
- Claims is a contact intensive part of the insurance customer lifecycle



### TRANSITIONING TO AUTO-ADJUDICATION



New claims are fed to ML classification models trained on historical claims data. The models generate diagnostic codes for each claim (approved, denied, partial payment).



A rules-based system sends each claim to its work queue based on its code. Low threshold claims are auto-cleared.



Human operators quickly identify issues in claims directed to them with the help of the diagnostic codes.



## TRANSITIONING TO AUTO-ADJUDICATION

#### **CLAIMS SUBMISSION**

- Chatbots
- Portals
- Fmails

- OCR
- Handwriting recognition
- Data extraction and classification

#### **CLAIMS ASSESSMENT**

- Check claim validity using trained ML models/engine
- Generate fraud score using predictive AI modeling
- Classify payable and non-payable line items
- Recommend outcome (approve, deny, partial payout)
- System is trained with historical data
- Feedback provided to ML engine for continuous learning and improved accuracy

CLAIMS DISBURSEMENT



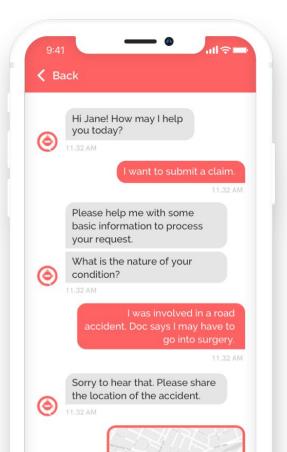
## **AUTOMATING CLAIMS SUBMISSIONS**

#### **Al-driven Chatbots**

Asks all the right questions to ensure error-free claim submission

2 Reduces claims processing time with little to no manual intervention

3 24X7 availability





## **AUTOMATING DATA EXTRACTION**

- Structured and unstructured data extracted from forms and documents
- Data extraction expedited using cognitive technologies such as Natural Language Processing
  (NLP), Optical Character Recognition (OCR), and Robotic Process Automation (RPA) technologies
- Deep learning-based handwriting recognition



## **AUTOMATING FRAUD DETECTION**

- Machine learning models trained on historical claims can help analyze new claims to establish veracity
- Claims data can be categorized for training, testing, and cross validation
- Algorithms can be trained on data with parameters continuously tweaked for cross validation
- Generation of diagnostic codes/warnings can help determine whether to accept, deny, or further validate a claim



## **BENEFITS**

- Faster and accurate processing: Integration of cognitive technologies, such as computer vision, chatbots, OCR, and RPA, reduces claims processing time and human errors significantly.
- Improved customer experience: Speedier processing leads to quicker claims resolution.
- Touchless claims: In the aftermath of global pandemic, digitalization and ML-enabled solutions would be the right way forward for claims adjudication. This would be ideal for areas such as auto and property insurance.
- Fraud-free settlements: Pre-trained neural networks glean insights from historical data to identify patterns and flag fraudulent claims.
- Better insights into claims costs.



## **WHY QBURST**



- Strong AI/ML capabilities NLP, computer vision, chatbots, OCR, document classification, and handwriting recognition
- Expertise in leading RPA platforms such as UiPath, Blue Prism, Jiffy.ai, and a range of complementary technologies
- Agile approach to project delivery
- Expertise in enterprise security
- Cloud skills for centralized implementation
- Competitive pricing

