

Reinforce value in the Insurance Value Chain in 2021

WITH THE ADVANCE MACHINE LEARNING MODEL POWERED BY AI

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Introduction

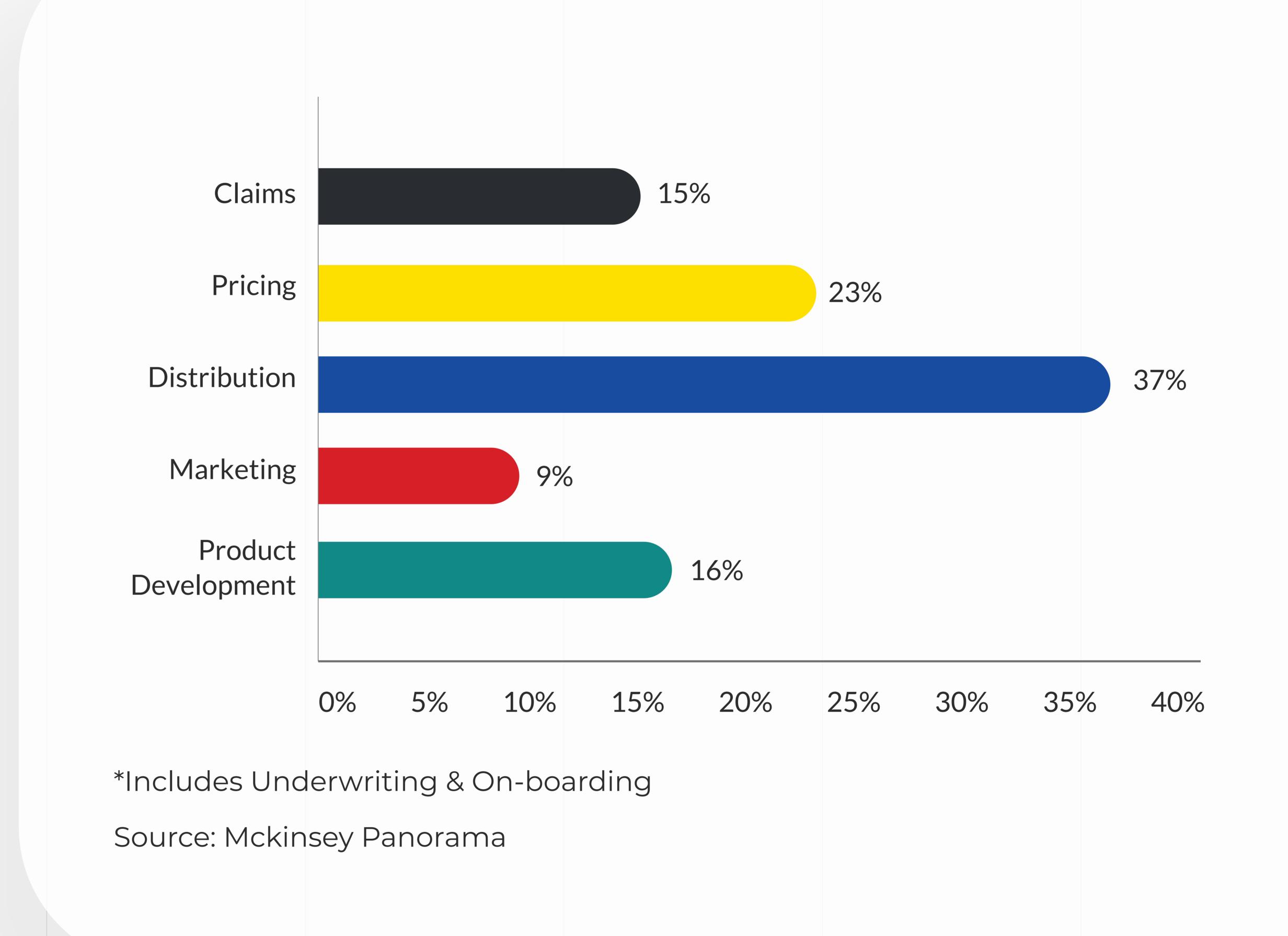
If we were waiting for long paused radical change in the Insurance Landscape, then it is happening now. With Data becoming the central powerhouse to all the business, it has also reinforced value in the insurance industry. In past three decades we have generated enormous amount of data which leads to valuable insight. But how much of this data are insurance companies using to harness information?

Report suggest that Insurance Companies are using around 10 to 15 percent of the data and mostly structured data are used by the insurers. Considering the 2008 financial crisis and 2020 coronavirus crisis, insurance industries are facing tighter times. They are working on the margins and relying on reducing operating cost, reducing claims and maximising sales for profit.

Today, shift in technological trend has also become one of the chief enablers for insurance companies to adapt Machine learning and AI in their service. The gaining importance of product personalisation, digital self service, dynamic pricing and instant quote have all become a part of insurance landscape now. Now the early adoption of analytics and exploring the various ways of using machine learning and predictive modelling in advantage of solving the business challenges across the insurance value chain are yet to watch. This can become the game changer for Insurance Industry in 2021.

Disruptive forces on Traditional Insurance Value Chain

With technological advancement and enhanced customer experience becoming integral part of the business, insurance sector is nothing exceptional. Here are some of the key trends that impacted Insurance value chain which Insurers need to identify and understand for staying future ready:



Penetration of digital innovations across the insurance value chain



Product Development

Leveraging the customer and market insight, insurer are disrupting product and service design because: Increase in tailored product, Rise in demand for customization, market Expansion, Increase demand for precise marketing.



Marketing

In this data driven era, insurers are looking for monitoring and enabling sales for further customer engagement which leads to customer retention strategy. The enablers for digital disruption are majorly because of: importance for understanding customer persona, rise in demand for quick response, sealing the leakage of lead capturing.



Distribution

With the technological advancement, insurers feels the requirement to understand the market and penetrate with the relevant product. The enablers for disruptions are because of:
Importance of offering relevant product, More Usage of Platforms, Demand for transparency and Visualization.



Underwriting

In the Insurance Value Chain, insurers are looking beyond product and therefore the enablers for disruptions are: optimisation of cost, Improved customer engagement, Rise in demand for personalisation, rise in use of data driven approach.



Claims Management

Aiming for high customer retention with smooth claims processing pipeline, insurers are disrupting because: Advancement in technology, rising interest in automation, optimisation of loss

How Al/ML is working in insurance value chain?

Marketing & Sales & Distribution

- Automated data extraction from PDF reports & comparison against various policy combinations
- Automated demand analysis & generating new product offerings
- Machine learning insights to support customer segmentation

- Automated creation of targeted
 Automated product marketing materials & promotions
- Customer personality & tone analysis
- Enabling intelligent customer engagement
- Workload balancing/lead allocation for agents

- recommendations & natural language question answering
- Enabling intelligent self-service product research for customers
- Intelligent reporting & visualisation

Source: Accenture

CASES

USE

Underwriting

Servicing & Policy Administration

Claims Management

- Extraction of insights from multiple data sources(incl. unstructured)
- Automated demand analysis & generation of new product offerings
- Enhanced pricing & policy rating, personalization
- Natural language question answering for employees

- Understanding & actioning of external emails & requests
- Automation of call center & webchat service
- Assistance for self-service queries on policy issuance, endorsements, cancellations & renewals
- Processing of unstructured data

- Real-time Q&A service for FNOL
- Pre-assessment of claims & automated damage evaluation
- Automated claims fraud detection using enriched data analytics
- Prediction of claim volume patterns
- Augmentation of loss analysis

Source: Accenture

Al incorporated in Insurance Distribution

The insurance industry is the stiff competitive one and with customers becoming selective towards choosing the insurance, it has become crucial for the insurers to deploy artificial intelligence along with the machine learning model to improve customer satisfaction. Let us see the following use cases of AI:

Automation in policy recommendation

Insurers are deploying AI to understand the customer's sentiment and cognitive behaviour. With the sentiment analysis, the machine learning model further detects the real risk appetite and the motivation to purchase the risk. This further lead the software to recommend the policy relevant for the customer.

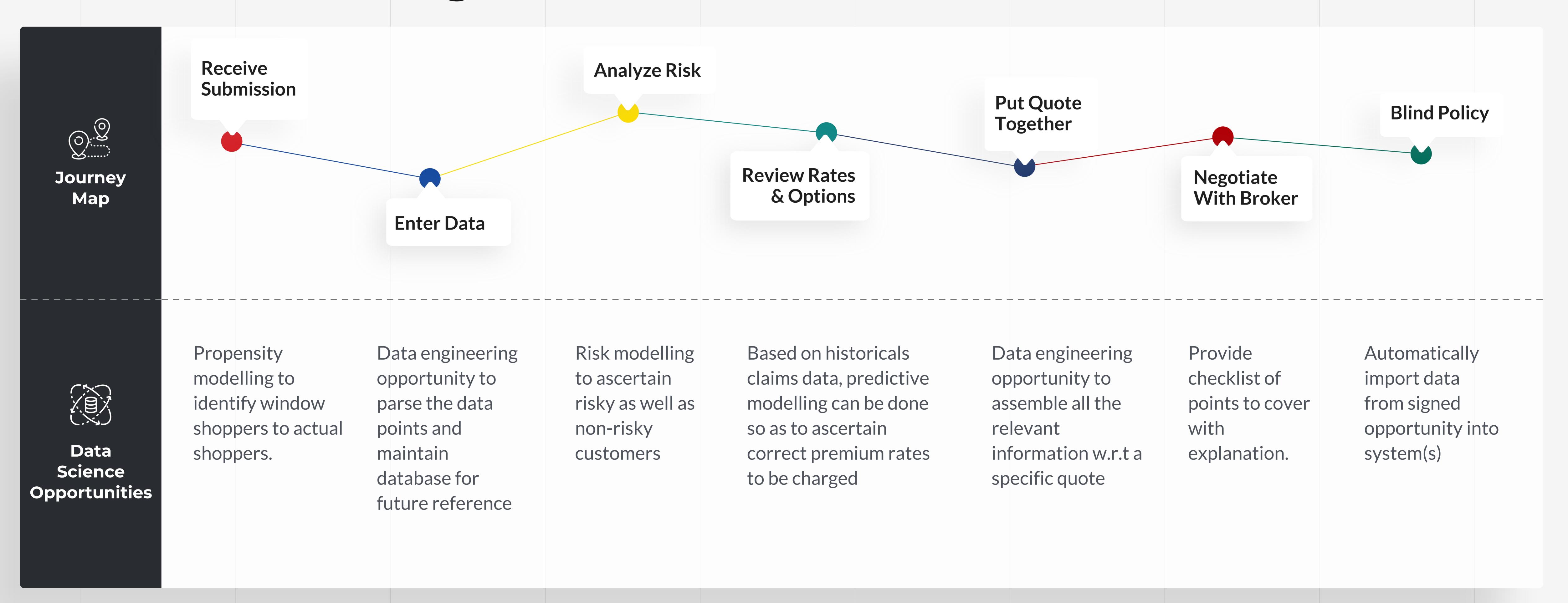
New relevant Product Configuration

With data generating each data, Al is deployed by the insurance companies to process vast data including historical data, social media data and analyse the future demand of the customers. It also analyses the channels preferred by the customers. If data suggest that the client spends 90% of their time in LinkedIn then a brand new LinkedIn AD on the new product relevant for the customer can be shown repetitively.

Creating personalised experience

Leading insurance companies are leveraging the combined power of artificial intelligence and visualization from analytics to create a personalised experience for the customer. Marketing analytics visualization tools also enabled insurers to see the market trend and place the right product with the right messaging to the customer. Also, machine learning helped in continuous improvement in prediction

Machine learning and predictive modelling in enhancing the Underwriting Process



Source: INT.

Machine Learning can provide a faster solution to the insurer in their underwriting process. Its effectiveness and accuracy in processing the big data from various unstructured data help in identifying the trend and underwrite accordingly. This helps in standardizing the risk through risk scoring, identifying the risk associated with claims and pricing the claims. Let us see how insurance companies are deploying machine learning along with predictive modelling to enhance effectiveness in the underwriting process:

Risk Scoring and Risk Assessment

Insurance companies are using Machine Learning software developed for assessing the risk associated with the claim. An intelligent machine learning model helps the underwriter in scoring the claims and the claimants on the basis of various data and it is classified based on the classification model. Further, it is mapped with the characteristics of the past claimants. The whole process is used to view the risk factor confidently.

Generating Quote and Pricing the Premium

Insurance companies are leveraging machine learning model also to automate in generating quotes for the premiums. Underwriters don't need to invest their time in quoting every premium. Insurance companies can determine any risk factor in case of renewals. If it is the same as the previous year, the software automatically generates the quote otherwise flag for further changes. It also used in detecting any inappropriate quotes that mismatch with the current situation before sending it to the client's account

Benefits:

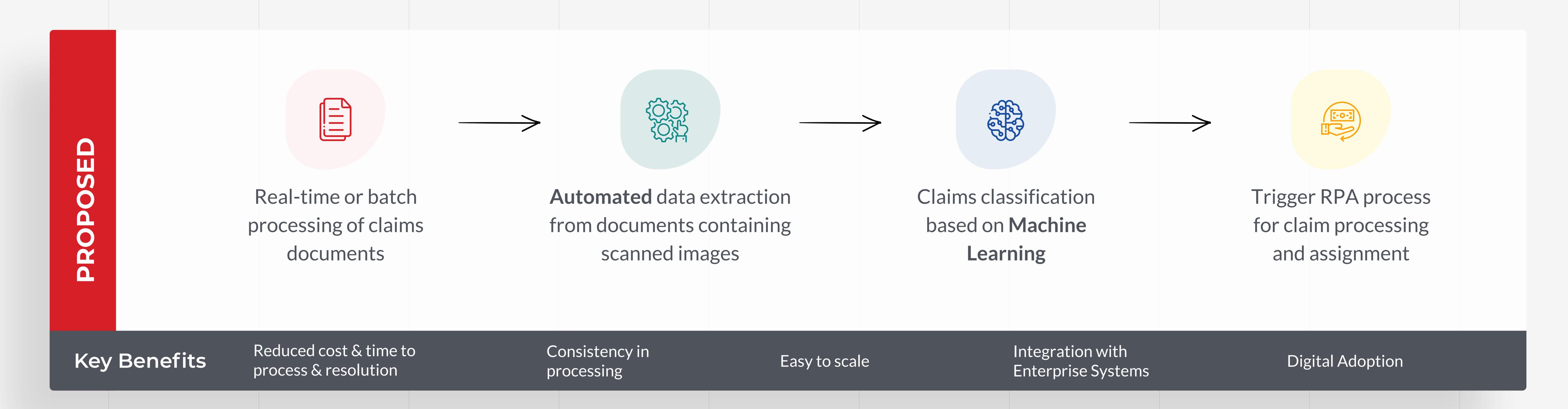
Pattern Recognition helping in identifying and assessing risk

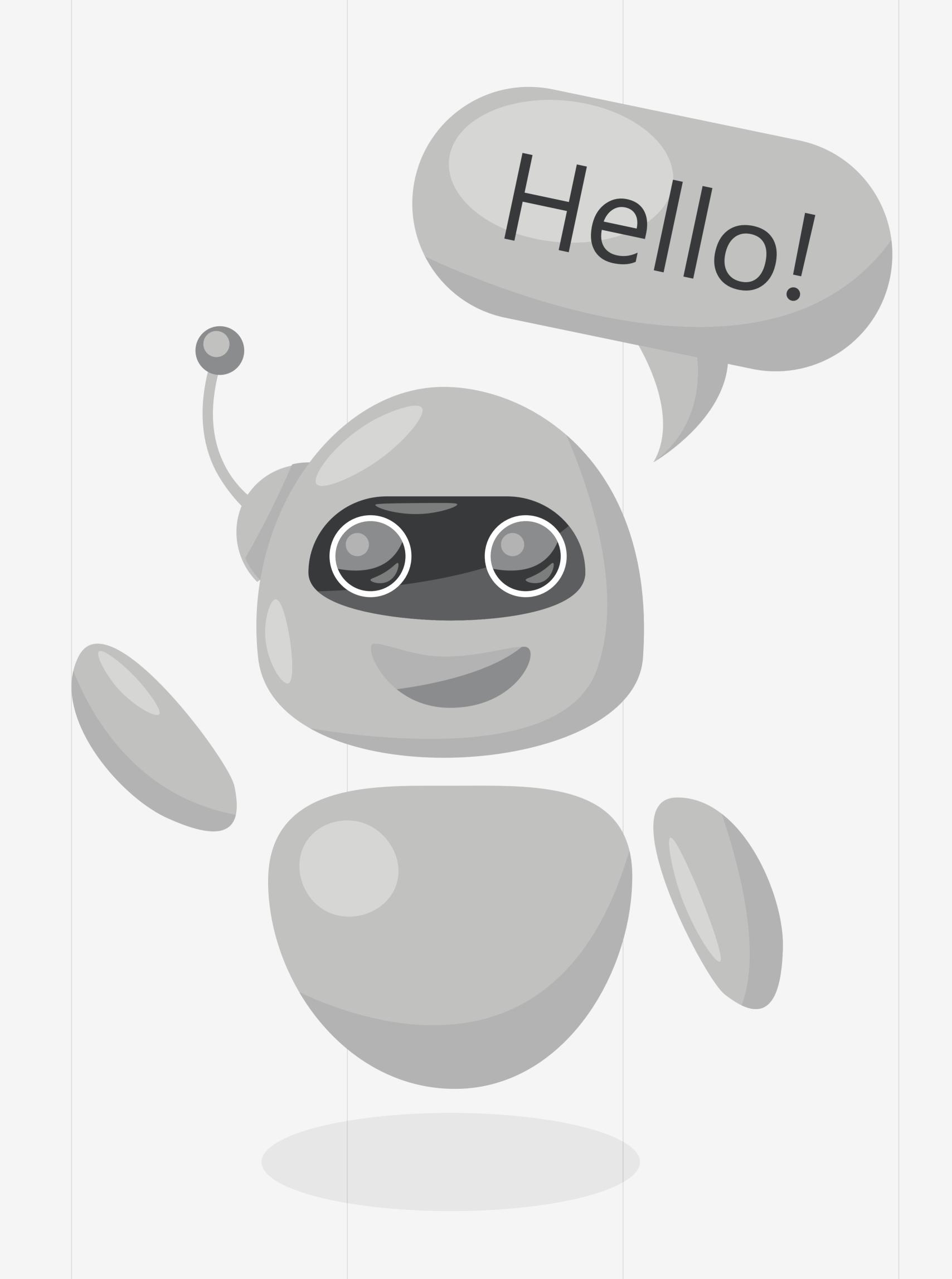
Pragmatic actuarial solutions for making effective decisions on large data

Fraud detection model in detecting hidden correlation

Artificial Intelligence and Machine Learning are changing the claim management process

With thousands of queries and a huge number of request for claims, insurers are relying on data-driven technologies powered by AI to increase the 30 per cent accuracy in the claim management process. To manage these on a day to day basis, insurers are inclining towards huge disruptor of the Insurance Industry i.e AI. here are some of the ways insurers are deploying AI for smoother and efficient claim processing:





Al chatbots for Quick FNOL

In the traditional method, insurers get into the call for FNOL but with the advancement of technology, Aldriven chatbots are used by the insurance companies to fill in the details, upload the documents and other details required for FNOL. this first step of the claiming process is handled with accuracy through leveraging Al-driven Chatbots.



Al-enabled tool for Faster Document Processing

Insurers are deploying intelligent document processing tools to extract relevant and structured information from unstructured claim documents. The AI-enabled tool is deployed and it used natural language processing, deep learning and computer vision to classify the documents. It is used in RPA as a function to extract relevant information and send the document for further processing.



IoT and Computer vision for damage evaluation & prevention claims

Al-driven image detection tools are deployed to evaluate the damage or casualties required for the claim processing. Also, internet-connected things such as in-car sensors, smoke sensors are deployed to prevent casualties through the alarm. Further, data from these tools are collected as a document for FNOL, which further helps in detecting false claims.



Predictive analytics for Smart claim prioritization

In the time of crisis, there are many claims that need to be resolved quicker. Thus, insurers deploy predictive analytics which leverages historical data, statistics and advanced analytics to segment easy claims and complex claims which need further adjustment. This data is stored and the easy claims are easily rolled out and route for payments.

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