

**intelligent vehicle damage
assessment and cost estimator for
insurance companies**



Challenges for P&C providers in today's market

For many personal and commercial Property and Casualty (P&C) insurers, the cost of providing P&C insurance coverage for customers has become formidable. Cost-effective, swift claims management is often impeded by complexity, inaccuracy, and fraud, making claims resolution difficult. Additionally, P&C insurers can face high customer attrition since customers tend to switch providers based on a delayed or unsatisfactory claim experience.

With claims process automation, P&C insurers can mitigate claim costs and reduce customer attrition. Process automation can accelerate the time to claim resolution, improve the accuracy of claim amounts, and increase customer retention resulting in greater customer loyalty over time. This paper examines the challenges faced by P&C insurers in today's highly competitive marketplace, and how IBM Intelligent Automation for Insurance Claims is designed to address claim management issues.

IBM Intelligent Automation improves claims management

Using an intelligent workflow (IW), with a patent pending insurance transformation technology¹ and intelligent automation (IA), IBM Intelligent Automation for Insurance Claims is designed to simplify and automate P&C claims for both claimants and P&C insurers. IBM Intelligent Automation for Insurance Claims leverages IBM Cloud Pak® for Integration, Cloud Pak for Data, Cloud Pak for Business Automation, and IBM Watson® Conversational Services and Visual Recognition Services exposed as microservices to deliver enhanced capabilities that simplify the claims process. The solution's patent pending technology provides the ability to pause and restart a digital conversation based on a digital data conversation, data interactions and retrieval. This fundamental differentiator helps P&C insurers adapt and augment the relationship between machine and human workflows. The solution uses hyper automation technologies like process mining, IBM Business Automation Workflow (BAW), IBM Business Process Management (BPM), IBM Watson Assistant chatbots, artificial intelligence (AI) and natural language processing elements to reorchestrate front-office, core claims systems, and back-office insurance processes. This helps organizations automate enterprise-wide workflows, accelerate the claims filing process and, ultimately, deliver a better customer experience.

IBM Intelligent Automation for Insurance Claims provides image/video intelligence for damage assessment and validation with claims inspection and investigation integration. Using artificial intelligence, the solution can detect fraudulent reporting by analyzing images, and integrates unstructured data and other data sources to build an accurate risk profile. These AI-powered automation capabilities allow the insurer to enhance their existing business processes so that they are efficiently optimized with the use of automation tooling. Additionally, P&C insurers can integrate historical data into self-learning analytics models within the claims process to augment and improve claims handler assessments.

To improve the customer claims filing experience, the solution provides a simplified and reorchestrated user interface (figure 1 provides a sample customer experience). Upon starting a claim, the customer is assisted by unattended chatbots to collect information about the accident and is immediately assigned to an adjuster.



Figure 1: Sample customer experience in IBM Intelligent Automation for Insurance Claim using Watson Assistant chatbots

Figure 2 provides a sample claims handler experience for the started claim in figure 1, in which no injuries are reported, both cars were drivable and no fraudulent activity was detected. For this claim, the solution identified 41 applicable tasks to be tracked out of the solution's total 72 available tasks. The claims handler receives automated details with a list of claims filing tasks that are tailored to the type of claim. The claims handler is also presented with messages and documents pertaining to the claim. Throughout the process chatbots query and validate the accuracy of the customer's input, for example, verifying the insurance information of third parties and checking past claims activity.



Figure 2: Sample P&C claims handler view shows a completed claim with 42 identified tasks using the dynamic automated task list updated by BAW/BPM

Simplifying the auto claims process

The complexity of P&C claims process results in many claims handling steps that can happen in parallel with data arriving from multiple sources. The intelligent workflow (IW) of the IBM Intelligent Automation for Insurance Claims solution simplifies the intricacies of the claims handling process by automating most claim handling steps through full automation (unattended-mode robotic process automation), cognitive/augmented intelligence (discovery and mining), or digital data decision (data science) interaction. Figure 3 illustrates the extent of automation in the IBM Intelligent Automation for Insurance Claims solution. Of the 58 steps identified in the figure, over 80% have been reorchestrated with automation and/or AI alleviating manual effort.² By adding these automation technologies to the claims handling process, the solution improves efficiencies in the following process areas: claims submission, claims adjustment, verification, claims recovery, automated damage assessment, and fraud detection and subrogation, all of which are critical components in the claims handling process.

IBM intelligent workflow for claims automation



Figure 3: Reorchestrated IBM Intelligent Workflow process for auto claims automation with steps by type of automation

Not only does automation help simplify the claimant's effort and user experience; it improves P&C employee productivity and increases utilization of higher-value skills (see blue highlighted steps in figure 3). IW and automation alleviate claims handlers from performing routine, time consuming steps such as arranging for a car rental, finding a tow truck, or issuing payments.

Lowering the cost of risk reduction

An important business metric for P&C insurance is the Cost of Risk (CoR). Two critical KPIs that comprise CoR are Combined Ratio (CR) and Claims Leakage (CL). Combined Ratio is an insurer's incurred losses, loss-adjustment expenses, acquisition costs, and general and administrative costs compared to earned premiums for the same period. A CR score above 100 indicates that insurers paid out more than they took in as premiums. This can happen, for example, after a hurricane when P&C insurers receive high volumes of total loss claims.