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Insurance Futures: Digitizing Value Network Insights

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Introduction

Two key trends in the insurance industry are the use of Big Data multi-structured analytics, and an emphasis on omnichannel customer interaction. The transformation of raw data to information to knowledge to insights — and ultimately insights-based decisions — has been facilitated by advances in the data sciences. For insurers, competitive advantage will be determined by their ability to adopt and exploit advanced analytics techniques, and their decision to institutionalise insights-based decision making as part of their organisational fabric.

Insights-driven decisions can transform insurance enterprises by providing comprehensive, accurate, real-time, actionable insights about people, machines, and processes from interactions across multiple channels. Technology today enables enterprises to correlate insights from multiple channels and create a single view of the customer.

Issues in the Insurance Claims Process

The typical claims process in the case of personal insurance is a complex set of events that are disconnected and distributed within the insurance organisation. The problem is compounded by the inclusion of numerous internal and external partners who potentially operate on different systems or platforms, generating data in many formats.

For an auto insurance claim, for example, the policyholder's data is processed at First Notice of Loss (FNOL) and damage assessments carried out. Suppliers are instructed to carry out vehicle repairs; these could further include the involvement of an Assessor.

From this point, the customer is no longer in the control of the insurer; the baton is handed over to the supplier to manage the remainder of the repair process — and, therefore, the customer experience. Other processes could be in play — for instance, fraud investigation.

If the incident was the customer's fault, the insurer might try to entice an innocent Third Party (TP) insurer into their network in an effort to reduce costs. If this fails, yet another team could be handling incoming claims from the TP for damages. Conversely, if the incident was not the customer's fault, subrogation or recovery processes kick in to establish an acceptance of liability from the TP before seeking recompense for the cost of repair.

Most insurers still operate a dual signatory process, so that a payment input by one agent must be authorised by a senior colleague. Specialist Investigation Units (SIUs) operate independently to cover fraud, theft, injury, and so on. For commercial or High Net Worth claims, there is often the added complication of dealing with a broker or agent.

From the above, we can visualise the key issues in the traditional claims process:

- Isolated systems with multiple points of contact for FNOL. In the auto insurance example, multiple handoffs across FNOL agents, supplier and vehicle repairer, as well as supplier and hire car provider
- Lack of a Customer 360 view, which results in lack of personalisation, with each customer handoff resulting in a unique conversation
- Localised and sub-optimal fraud detection processes with a focus on internal data, driven by manual fraud identification at FNOL based on Red Flag indicators and agent gut feel. This results in claims leakage and lack of effective knowledge and experience transfer
- Lack of data-driven insights because data across platforms is not organised, and locations have limited integration with supply chains
- Lack of Open Data standards for industry-wide data sharing. For example, telematics data is never shared between insurers at renewal transfer

These issues can be effectively addressed by the adoption of digitization and the use of analytics.

Digitization for Insurance Value Network Insights

- Isolating critical pain points and generating insights using multi-structured analytics

  A small proportion (20 percent) of insurance claims accounts for a large proportion (80 percent) of fraud-related losses. Multi-structured analytics combines multiple types of data — structured, unstructured, multimedia data, streaming data, and so on. Big data analytics into people and machines gives a historical picture of customer behaviour, the elements that constitute claims fraud, and their evolution. This can be coupled with other techniques such as social data analytics, customer voice analytics, and cognitive intelligence-based user profiling and modelling.

Cognitive intelligence enables insurance companies to analyse data about interactions in real time to predict propensity for fraud based on voice, video, and chat sessions, and by correlating this data with fraudulent customer bethaviour.

- Creating a digital Customer 360 view

  Insurers can create a customer footprint correlation engine that takes slivers of customer data from multiple interaction channels and builds an accurate customer profile for channel-specific product recommendations. The driver for this is integration of multiple customer touch-points throughout the claims process. This involves complex event processing that correlates data about customer demographics and transactions, call centre data, data from Web browsing behaviour and online chat sessions, e-mail campaign data, data from display advertising, and more.

- Developing an enterprise-level strategy that aligns analytics programmes with key business drivers

  An enterprise-wide strategy for using multi-structured analytics is key to generating value network insights.

- Developing analytics - driven and people - driven mechanisms for application of insights to business decision scenarios

  This includes the facilitation of real-time correlation for continuous insights, closed-loop learning for risk analysis, self-service interactive dashboard-based configurable analytics, heat maps, KPI Grid and Views, ad hoc analysis, Agile Risk Reporting, and Intelligent Discovery and Exploration.

  On-demand data transformation, on-demand data cleansing, content analysis, self-service interface across the enterprise, personalised interfaces, and user-assembled solutions facilitate easier adoption of insight-driven decisions and significantly reduce learning time.

  Natural Language Processing, emotion detection, microsensor analytics, Automatic Content Recognition, advanced decision tree-based visualisation, lifecycle simulation, and Massively Parallel Processing (MPP) appliances such as NoSQL and Hadoop need to be explored for applicability to business scenarios. The technical challenges — such as managing large datasets, integrating with existing infrastructures, using systems effectively, and so on — need to be addressed; so do people-related challenges such as skill gaps and the management of cross-functional teams.

- Designing governance structures for analytics groups and policies to ensure data security and privacy

  The building of an insights-driven organisation mandates the setting up of robust policies and practices to ensure data security and privacy through role-based security integration, access control policies, data masking and encryption, and Single Sign-On.

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Dr. Jai Ganesh is a Product and Service Innovation leader with extensive experience in inventing, conceptualizing, building and commercializing successful technology product and service innovations. Jai heads NEXT Labs, which is a strategic initiative by Mphasis to research and innovate on emergent and future paradigms. NEXT Labs focuses on applied research and innovation on emerging and future paradigms through disruptive world class innovations, new products and service models, platform based offerings, thought leadership and industry relevant solutions.

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Ian Jones is an Insurance domain expert with Mphasis UK. He has over 30 years experience in the Insurance industry within Claims, and PAS, having previously worked with several Tier 1 Insurers and providers. He is a Telematics SME having led Product delivery and improvements for a number of leading UK Telematics Insurers.

About Mphasis

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