Applying Machine First™ Principles to Insurance Platforms

WHITE PAPER

Abstract

Life and non-life insurers across the globe use several commercial off-the-shelf (COTS) platforms to power core operations across the value chain. While these platforms have ushered in innovation and facilitated transformation of global insurance business, we believe there are ways to further enhance value. To achieve this, insurance companies will have to rethink business models rather than merely digitalizing and automating their business processes and services.

Applying the Machine First™ approach can help insurance companies reshape business models and tap into the power of automation, artificial intelligence (AI), internet of things (IoT), and advanced analytics to provide unprecedented improvements in operational efficiency. This white paper explains the relevance and significance of adopting the machine first approach to implement insurance platforms and highlights how it can enhance business value and return on investment (RoI).

The Case for Machine First Approach

In the pandemic-stricken world, consumers are increasingly utilizing digital technologies to manage their insurance needs. J.D. Power's 2020 U.S. Auto Insurance Study[SM] reveals that customers prefer to interact digitally with their insurers through company websites rather than agents.[1] Accelerating digital transformation is therefore fast becoming an imperative for insurers as well as agents to compete and thrive in the new world.

A growing number of insurers – both startups and incumbents – have accelerated digitalization using emerging technologies. AIA Hong Kong, a life insurance provider, has launched a chatbot to offer round the clock self-service.[2] Lemonade, a startup, uses AI bots to provide homeowners, renters, and pet health insurance, create policies, and handle claims.[3] In the post-pandemic world, companies that are agile and respond quickly are more likely to attract and retain customers – and this is where the machine first paradigm comes in.

The machine first approach provides a structured approach to digital transformation by automating business process activities, and where possible, turning them into intelligent processes using automation, advanced analytics and AI technologies to transform insurance business models across acquisition, underwriting, policy servicing, and claims processing.[4] The machine first approach can empower insurers to respond swiftly to market and macro-economic shifts and engender innovational changes to their business models as well as deliver key benefits that drive business outcomes. Some of these benefits include:

Consistent and Sustainable Customer and Agent Experience

Customers want more choice and best-in-class service at affordable prices. Insurers that make data ubiquitous, apply analytics tools to understand the changing patterns of customer behavior, and continuously tweak their business models will be in a stronger position to cater to the rapidly changing needs. By leveraging intelligent conversational bots, analytics-driven personalization, and social media sentiment analysis, insurers will be in a position to offer attractive prices and superior service, thereby enhancing the experience for the customers and the agents.

[1] *JD Power, Auto Insurance Websites Surpass Agents in Importance to Customer Interaction, J.D. Power Finds, June 2020, Accessed January 2021, https://www.jdpower.com/business/press-releases/2020-us-auto-insurance-study*

[2] *AIA, AIA Hong Kong launches industry-first customer service robot artificial intelligence chatbot offers 24-hour instant self-service customer support, May 2018, Accessed January 2021, https://www.aia.com.hk/en/about-aia/media-centre/press-releases/2018/aia-press-release-20180502.html*

[3] *Lemonade, The secret behind Lemonade's Claims, Accessed January 2021, https://www.lemonade.com/claims*

[4] *TCS, Making organizations AI-ready by combining the here and now value of automation with a future-proof architecture, Accessed February 2021, https://www.tcs.com/mfdm-enterprise*

Unique but Simple Products

Post the pandemic, the demand for simple products that offer coverage for different types of risks, such as those arising from continuous remote work, will increase, especially from small business owners and personal lines consumers. Adopting the machine first approach enables insurers to leverage AI based analytics to analyze non-traditional data variables and data from devices and sense evolving customer needs. To gain an edge over the competition, insurers must design simple, personalized products to meet such needs. In addition, simplifying product structure and underwriting processes across both personal and small commercial lines of business will be key to thriving in the new world.

Touch Free and Straight-through Processing

Insurers are looking to improve straight-through processing (STP) capabilities across underwriting, policy acquisition, and claims processing. Introducing machines to perform virtual inspection for risk and damage assessments can help insurers enable low-touch or no-touch service. Analytics based risk models and evaluations provide not only the requisite speed of servicing but also help optimize operational efficiencies and costs.

Applying the Machine First Approach to Insurance Platforms for Better Business Outcomes

In applying the machine first approach to insurance platforms, we envision purpose-driven machines that are connected, intelligent, secure, and deployed on the cloud. In conjunction with insurance platforms, these machines can:

- **Interpret** natural language and converse with users or customers
- **Suggest** next best offers based on contextual awareness of insurers' product and service portfolio
- **Automate** using first- and last-mile automation techniques
- **Enhance** data accuracy and reliability
- **Integrate** seamlessly with platforms in the ecosystem, multiple niche products, and automation platforms such as robotic process automation and so on

The machine first approach can be applied to insurance platforms across a plethora of processes (see Figure 1).

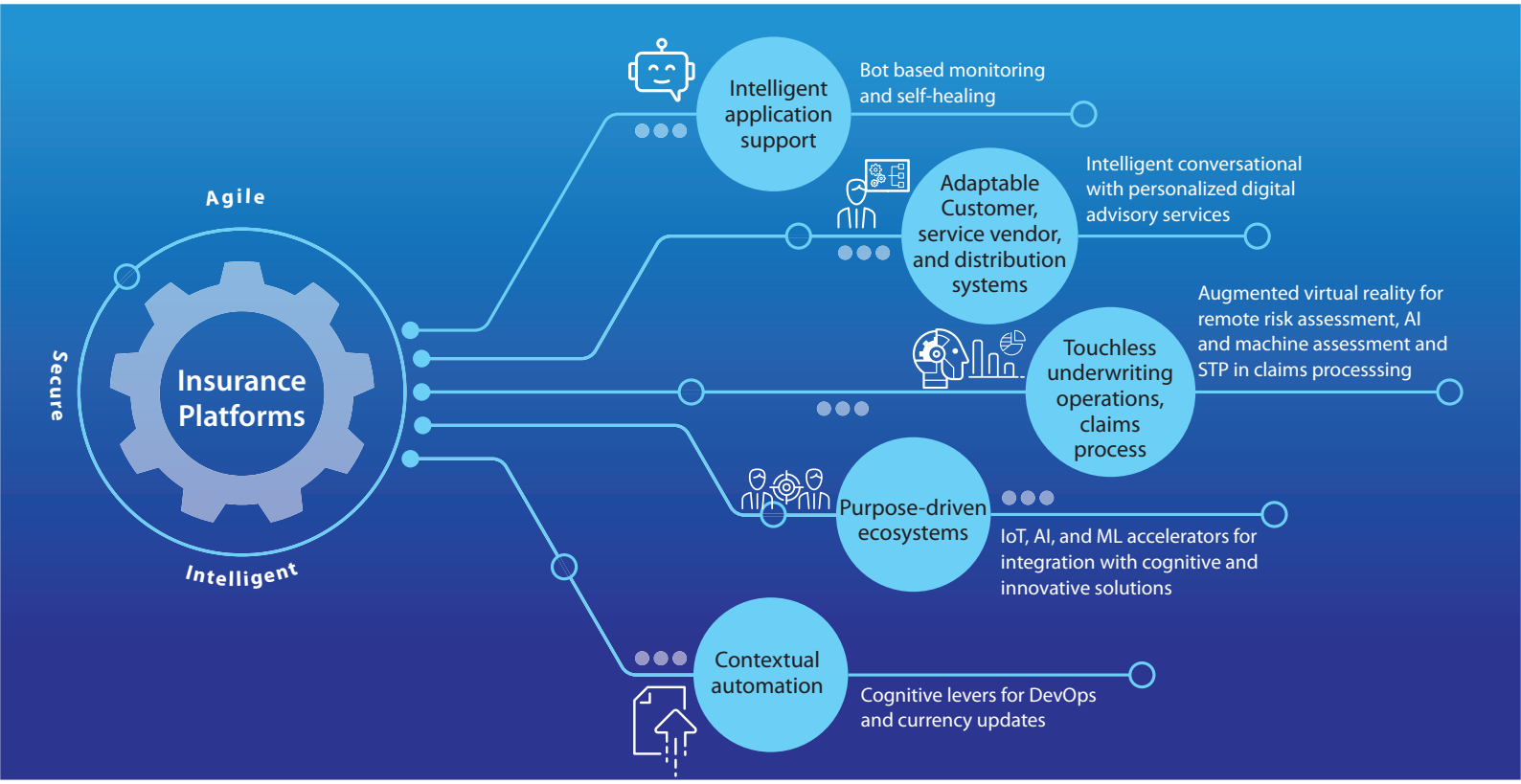

Figure 1: Insurance Processes Suitable for the Machine First Approach

Before embarking on a transition to the machine first approach, insurers need to:

Augment technology with context

The foundational step is building a ubiquitous networked environment that offers real-time information at all times. Data collection and analysis are key to a machine first approach to digital transformation. Insurers should begin by identifying the physical and knowledge-based work that the machines need to do. This will help identify the processes to automate in order to deliver value and understand changing customer behavior. Insurers need to collaborate with ecosystem players like internet of things (IoT) service providers, analytics-based scoring model providers, and independent agencies to collect data in real-time. Combining this information with internal data residing on their systems will help insurers offer contextual insights to each stakeholder within and outside the enterprise. Predictive analytics, working in tandem with AI, is essential for an insurer to accelerate the delivery of products and services and maximize business value by moving beyond rigid planning and operational barriers. Adopting niche predictive analytics solution for litigation and subrogation in claims processing, data driven insights on loss ratios, profitability, and discretionary credits for commercial property underwriting and automated rate adjustment can help insurers monetize real-time data, embrace risk, and drive growth.

Redefine Business Value with Focus on Customer-centricity

Insurers must formulate a customer-centric strategy by adopting new business models with limitless access to addressable markets. By embedding analytics and enhancing digital experience, insurers can offer a personalized experience and increase business value. The several low or no code software tools for designing and modeling business products, configuring rules available in the market, can help insurers successfully adopt the machine first approach. Additionally, no code or low code-based tools accelerate the deployment of digital platforms to help deliver a unique digital experience. The machine first approach ensures optimal alignment and integration of technology, process, and support personnel within and across the overarching insurance landscape and surrounding ecosystems, resulting in better synergy across intra-IT functions. It also ensures quick value delivery and continuous improvement in the quality of customer service.

Accelerate Value Realization with Purpose-driven Ecosystems

Insurers must continue to enhance the business value of their insurance platforms by creating purpose-driven ecosystems that deliver superior customer experience. Marketplaces offer insurers plug-n-play solutions that allow collaboration with niche solution providers and insurtech players inside and outside the supply chain to further enhance the products and services and accelerate the ecosystem development.

Sustain Enterprise Security, Operations, and Maintenance

Insurers must implement monitoring mechanisms on the security architecture and devices to adapt to post pandemic scenarios. An emerging trend in security is the use of security process automation (security plus operations or SecOps) teams to ensure system and data security both on-premise and on the cloud.

Incorporating machine first principles into insurance platforms enables operations management and service deliveries across all facets of IT infrastructure, application services, and business processes to become intelligent and automatable. Bot-based monitoring and self-healing can be deployed to monitor the health of insurance platforms. This scalable and robust framework becomes the central contact across organizational input channels seamlessly connecting end users with the automation systems.

Next Steps

In the post pandemic world, insurers will have to adopt the machine first approach to enhance the business value of their investments in insurance platforms. To realize this vision, insurers will have to invest in reskilling employees to work with intelligent machines and leverage the machine first approach to maximize the benefits from the out-of-the-box features of the insurance platforms. Firms must focus on ensuring resilience and infusing adaptability into their business models and systems and processes. Insurers that respond swiftly and positively during testing times and build the agility required to rapidly adapt to paradigm shocks will emerge as leaders in the post COVID-19 world.

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