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WHITEPAPER

Unlocking the Trillion-Dollar Potential: How AI is Revolutionizing the Insurance Value Chain

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Overview

The idea of AI taking over some of life's more mundane tasks—freeing us up to focus on what adds higher value or brings us joy—is consistently compelling. This promise holds a special allure in the insurance industry, where AI could potentially add about **$1.1 trillion** to the global market each year. However, with most insurers marching to the same beat, it's tough for any single company to really stand out and capture the bigger piece of the trillion-dollar pie.

In this unpredictable, complex world, insurers need to be bold and innovative to profit. It's important to identify and capitalize on opportunities that are hidden behind and linked to broader themes. Some of these might present themselves as business challenges that technology can tackle, and others might be clear opportunities that are coming to a slow boil. Either way, insurers must adapt quickly to stay relevant. To achieve that, insurers must examine every strategic link in the insurance value chain. And by doing so, they create value for the industry and not just their organizations.

In this paper, we examine what AI can do for the Customer Engagement and experience layer, Core insurance process layer, and Core tech and infrastructure layer, all of which are direct links to value creation.

Customer Engagement Layer: Getting the Touchpoints Right Every Time

Today's customers expect more. They want personalized advice, the convenience of interacting across multiple channels, and a seamless journey from start to finish, influenced by their experiences with leading digital-first companies. Yet, often, their encounters with insurance **don't quite hit the mark.** Unlike most other industries, insurance customer touchpoints are very few and sparse, making it even more important to get these experiences right. To consistently offer standout experiences, insurers face a unique mix of challenges – the complex nature of our products and how we distribute them, coupled with a history of investing in piecemeal digital tools. But these challenges aren't just hurdles—they're opportunities for insurance companies turn customer experience into a real competitive advantage. Opportunities **worth $300 billion!**

Hyper-Personalizing the Claims Journey

Clients, especially those considered low risk, have always wanted policies that reflect their unique circumstances. What's new is that with GenAI democratized, the push for even deeper personalization has led to 'hyper-personalization.' Thanks to the Internet of Things (IoT), insurers now have access to insights that were once unimaginable. Take auto insurance, for instance: smart tires with built-in sensors can track everything from how you drive to your tire pressure, offering a clearer picture of risk. In health insurance, data from wearables and other smart health devices are painting detailed portraits of daily habits and health routines, allowing insurers to tailor premiums more precisely. And the most exciting part is that this is now possible faster and at scale.

Quick, Empathetic, and Omnichannel Experiences

Self-service and omnichannel options are reshaping how customers interact with their insurance providers. Some customers might never want to interact with a real adjuster—they're happy just getting a text or email to confirm their claim has been handled, and their payment is on its way. Others might appreciate a quick call from a claims handler to confirm everything's settled. But when customers do choose to reach out, they expect seamless service. They want agents who are fully up to speed and don't ask them to rehash details over and over. The technology we have today is taking this another extra mile. Advanced sentiment analysis tools can now guide agents in real-time, helping them address customer concerns more empathetically and effectively right when it matters most. They help the agent understand the mood and needs of the customer on the spot, making every interaction count.

Decision-Making Layer: Deeper Risk Insights from the Flood of Data

It's true what they say—the devil is in the details. And the decision-makers –underwriters, actuaries, adjudicators – have more details than ever to go through. From weather patterns to health stats, the flood of risk data is staggering. Plus, with advanced analytical models, we're getting better at predicting catastrophes before they happen. Geospatial data is so precise that underwriters can now distinguish between two properties in the same flood zone that face wildly different risks.

But here's the rub: there's just too much data to handle the old-fashioned way. Traditional tools like spreadsheets just can't keep up. The sheer volume of information can swamp even the most diligent underwriter, leading to less thorough reviews and risk assessments. The end result? Pricing isn't as sharp as it should be, and the whole process feels like a beast. **80% of insurers believe** AI can change all that.

Claims Management: Streamlining Simple Cases and Strategizing Complex Ones

For simple claims that follow predictable patterns, the tech for automated straight-through processing has been around for a few years now. Cutting-edge analytics to smartly direct each claim to the ideal handler and the right resolution path. Assessing damages by scanning customer-submitted photos and videos to quickly estimate repairs. Customers handle things like arranging for temporary housing or scheduling repair times, all while keeping tabs on each step. Leading insurers have been moving this way for the last couple of years.

Complex claims, however, are a different story. Despite tech advancements, these claims still demand nuanced judgment and deeper interactions than rule-based engines can handle, not to mention a vast amount of data to refine these algorithms. Here’s where cognitive agents and Generative AI co-pilots come into play. These tools help handlers use data dashboards to quickly understand claims and guide customers through their next steps and resolution options. For instance, analytics in medical treatments might tell an adjuster that a worker's compensation claimant hasn’t finished necessary treatments, prompting a timely follow-up to ensure everything is on track.

Upgrading Underwriting: Calculated Responses for Complex Risks

As risks grow in complexity and the stakes rise, we need underwriters who can pull together information from various fields to tackle these evolving challenges. Risks aren't just becoming trickier; they're also happening more often and hitting harder, putting serious pressure on carriers' profits. This new reality demands underwriting that's not only sharp but also extremely savvy.

Thanks to tech advancements, underwriting is becoming more of a precise science. Take the Internet of Things (IoT), for example. The cost of IoT sensors has plummeted over the last two decades, boosting their use and flooding us with valuable data that can help cut down losses. And there's more good news: computer vision technologies have now surpassed human abilities in image recognition. These technological tools provide underwriters with comprehensive, detailed, and richer data points, and enhance their ability to assess potential losses, encourage a more analytical approach to underwriting, and sharpen their decision-making capabilities.

Core Technology Layer: The Cost of Stagnation and Inspiration to Invest

Not long ago, insurers saw little reason to **digitize customer journeys.** With only a few points of customer contact and a strong hold on the market, the drive to enhance efficiencies just wasn't there. The motto seemed to be: "If it ain't broke, don't fix it," to avoid the potential risks of shaking up their operational systems.

However, times are changing. Those once-reliable legacy systems are now showing their age and are increasingly prone to downtime that cuts productivity. The expertise needed to maintain these aging systems is retiring, and sticking to outdated tech has started to cost more than it saves. Even regulatory pressures are turning up the heat. What used to be seen as cost-saving is now a liability, making companies less competitive.

A Fortune 100 insurer was struggling with high operational costs and had issues integrating their multiple challenges due to outdated mainframe systems. They took on a core modernization journey, transitioning to an open stack system on the cloud. This strategic move reduced total cost ownership by 35%, and they are now able to go to market 30% faster!

While some insurers have seen success with AI in specific areas, the larger across-the-value-chain transformation needed to fully integrate AI throughout their operations has proven difficult to achieve.

So where should insurers begin their journey to become AI-ready?

1 Modernizing for Seamless Insurance

Fortunately for risk-averse insurers, modernization doesn't have to mean discarding old systems entirely. The right technology partner can implement a microservices architecture – small, independent services, each operating its own codebase and communicating using APIs. Managing these microservices is much easier than managing monolithic architectures.

2 Centralize & Optimize Tech Governance

Form a central team to develop standards and protocols for scaling advanced AI technologies like the GenAI. Do this to ensure efficient access to models, minimize risks, and manage costs, supporting enterprise-wide GenAI adoption. Reuse existing technology, streamline integrations, and enhance testing protocols. This approach helps avoid technical debt and inefficiencies, enabling sustainable growth and innovation.

3 Create a Talent Pool

Utilize your existing talent efficiently and ensure they can meet new technological demands, enhancing overall productivity. Implement hands-on training, apprenticeships, and create a culture of continuous learning and collaboration. Rotate experts through teams and hold regular knowledge-sharing sessions. Do this to build a scalable talent pool, ensuring your team remains proficient and can train others effectively, driving sustainable growth and innovation.

A Day in the Life of Insurance AI

While the future holds immense possibilities, the onus is on the insurers to adopt scalable solutions to transform into agile entities, grabbing what AI can do to each of the value streams with both hands. Let's trace AI's footprints in the life of a claim, for instance.

AI-led Data Extraction Automation

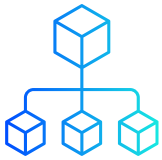
Consider a car accident: AI helps the distraught customer at every step, from policy application to claims. AI's multi-modal ability can extract and process text and images from unstructured documents, leading to faster issuance and claim settlement, and lower policy issuance costs.

IoT at Work

IoT sensors will play a significant role in data capture and analysis from connected devices, enabling risk prediction and prevention. In fact, they can initiate the FNOL (First Notice of Loss) automatically in auto insurance claims, making claim payout instantaneous.

Cognitive Computing

The customer uses the self-service portal that provides personalized, evidence-based advice on the next steps, all within seconds. Or they interact with an agent equipped with a cognitive copilot which augments the agents' capability in understanding the customer's immediate needs.



Blockchain Technology

When it's time for payouts, blockchain-based smart contracts immediately verifies the claim against the policy details stored securely in the cloud, approves it, and initiates an automatic transfer of funds to the customer's account, all without human intervention unless absolutely necessary.

Mobile Apps Enabling Edge Computing

Throughout this process, by processing data locally on mobile devices or nearby computing platforms, edge computing reduces latency and speeds up data analysis for time-sensitive applications, such as fraud detection during transactions or personalized marketing communications.

IPA Intelligent Process Automation

Behind the scenes, IPA streamlines every step of the claim process, from initial data capture to final payout, ensuring each phase operates flawlessly and efficiently. This speeds up processing, but the more important by-product is freeing up human agents to focus on cases that require a personal touch.

Incorporating these processes in the insurer's workflow means that products and processes will have more data insights from external and internal sources, resulting in insurance solutions that are **highly individualized, holistic, need-based, anticipatory, and compliant.**

In the insurance world right now, AI, Machine Learning, Natural Language Processing, Computer Vision, IoT, and Generative AI are the big players. These technologies are doing more than just crunching numbers—they're changing the way we interact with and understand data. But it's not just about having the right tech. For AI to truly benefit the insurance sector and society, it needs the right environment—one that includes solid governance, a supportive organizational structure, and a culture that embraces change.

Digital-Enabled Human Touch

AI is not just reshaping the re/insurance industry by boosting efficiency and sparking new offerings—it's setting a new standard. Yet, for all its power, AI doesn't work its magic alone. It thrives when paired with human insight. The real magic happens when we blend AI with human processes, not when it stands alone.

However, the most significant transformation expected from insurers would be the **adoption of agility as the norm.** AI in insurance would open lucrative opportunities to access large customer bases across multiple geographies at highly reduced marketing spend. All that is required are insurers who dare to change.

About Us

SLK is a global technology services provider focused on bringing AI, intelligent automation, and analytics together to create leading-edge technology solutions for our customers through a culture of partnership, led by an evolutionary mindset. For over 20 years, we've helped organizations across diverse industries - insurance providers, financial service organizations, investment management companies, and manufacturers - reimagine their business and solve their present and future needs. Being A Great Place To Work Certified, we encourage an approach of constructively challenging the status quo in all that we do to enable peak business performance for our customers and for ourselves, through disruptive technologies, applied innovation, and purposeful automation. Find out how we help leading organizations reimagine their business at https://www.slksoftware.com/