eBook: Hedging Against Uncertainty

Leveraging Intelligent InsurOps to Relieve Upward Pressure on Premiums

Hedge Against Uncertainty with Resilient Organizations, Infrastructure, and Software



earnix

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“Despite the great uncertainties today – from the impact of the Ukraine war to the consequences of the interest rate turnaround and the continuing threat from Covid-19 – we are not too pessimistic about the more distant future.”

Allianz

On the current world economic environment, May 2022

Executive Summary

In this eBook, we'll examine:

- Some of the most potent **forces shaping the next decade** and putting pressure on premiums in the insurance industry
- Recommendations for building a **resilient organization** to mitigate effects of uncertainty
- Technological **infrastructure and software stack** required to support a resilient organization and to deliver intelligent insurance operations

When "we are not too pessimistic" is the best one can say about the future, you know you're facing a time of great uncertainty.

On the plus side of the ledger, the Allianz report predicts **global property and casualty (P&C) premiums to grow at a healthy rate of 4.6% annually** over the next decade.

On the other side of the equation, the impact on claims from such diverse forces as inflation, rising interest rates, altered driving patterns, cyber threats, and extreme weather events, to name just a few, create scenarios with upward pressure on premiums and highly uncertain outcomes.

In this environment, prediction with any degree of certainty is next to impossible, placing a premium on resilience, agility, and flexibility. Those qualities must be infused into insurers' organizations, infrastructure, and software applications in order to survive and thrive.

The Next Decade – a Time of Great Uncertainty

Predictions about the economic environment over the next decade seem to include just about everything short of water turning to blood, boils, and prolonged darkness. (We might not want to rule out frogs, lice, flies, livestock pestilence, hail, and locusts – see the section on climate change and severe weather events below.)

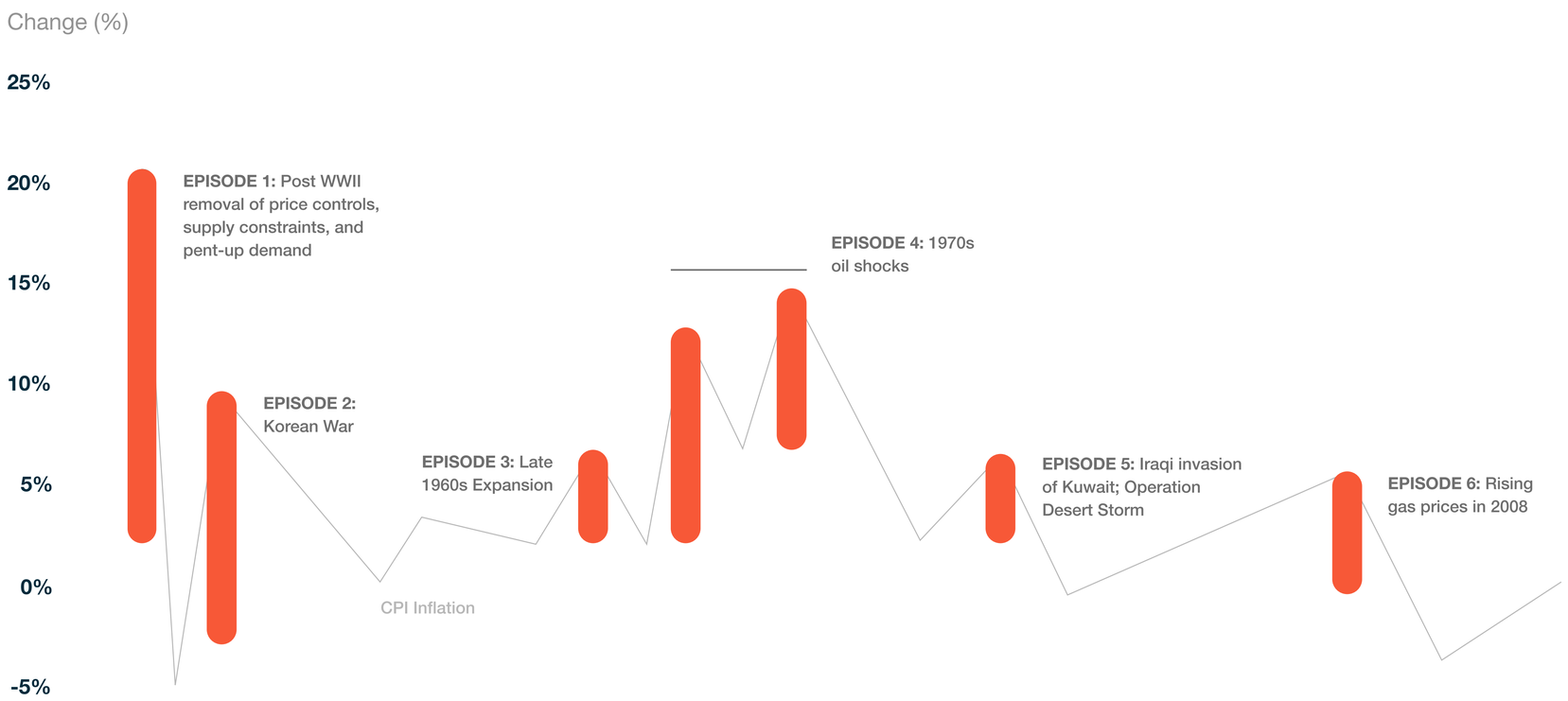
According to some forecasters, almost any calamity that could befall even the strongest economies is in the mix.

Insurance and reinsurance are especially sensitive to some of these powerful forces, **threatening overall financial performance and putting upward pressure on premiums** in particular.

Inflation

Nearly two full generations have functioned in the business world without inflation being a dominant topic of conversation, as it was earlier, when bouts of high inflation were driven by two major 20th-century wars and the oil shocks of the 1970's:

Six episodes of post-WWII inflation



Federal Reserve Economic Data (FRED), Haver Analytics, CEA Calculations

As seen in the chart, since the mid-1980's, inflation in the United States has remained within a relatively narrow band, predicable and tame enough to allow business forecasting and operations to focus elsewhere.

With that pattern broken, economies the world over are grappling not just with several post-pandemic effects, but also the energy, agricultural, and supply chain shocks of the Russia/Ukraine conflict.

Insurers now have no choice but to factor inflation into their strategies and tactics, no matter where they operate. According to a recent report by McKinsey, they also need to plan for it to be persistent, not transitory, running at **1.5 to 2 percent higher annually than the baseline inflation** of the last decade.

With inflation rising, particularly for necessities such as gasoline, food, and housing, **consumers may significantly alter their behaviors**, with knock-on effects for insurers.

On the plus side, end-customers may not drive as much as previously, seeking jobs with expanded work-from-home (WFH) options, carpooling, or otherwise cutting down their mileage in the face of rising gas prices. These practices may allow insurers to moderate increases in premiums, as these behaviors may have the beneficial side effects of reduced claims, fewer traffic fatalities, and less litigation.

On the downside, high inflation drives up liabilities, as the value of protected property and settlements increase, and losses must be reimbursed at higher levels than previously modeled.

Taken together, these and other decisions **change end-customers' risk profiles and make long-range forecasting essentially impossible.** These market behaviors require that insurers place added emphasis on real-time monitoring of market changes, engage in constant competitive reassessment, and learn to act and react faster.

With price-shopping and insurer-hopping on the rise, carriers will also find themselves forced into higher expenditures for marketing and brandbuilding, in an attempt to retain current customers and to lure new ones away from the competition.

Rising Interest Rates and the Threat of Recession

Results of Rising Interest Rates

Increased competitive pressure

Increased demands for sales

Redoubling of efforts

Higher costs for customer support & servicing

In an attempt to stem inflation, the US Federal Reserve and other central banks are significantly tightening the money supply and sharply raising interest rates. While inflation is likely to come under control at some point, finding the “sweet spot” between fighting inflation and tipping the economy into a recession has proven elusive in the past.

Even if a full-blown recession can be avoided, with interest rates on the rise and waning consumer confidence, insurers are likely to see a slowdown in new business written for home construction and home buying, automobile purchases, and other high-ticket items. With fewer new end-customers, risk is spread across a thinner pool, putting more pressure on premiums.

This in turn results in **increased competitive pressure**, demands for increased sales and marketing expenditures, and the redoubling of efforts – and the attendant higher costs – for customer support and account servicing.

Climate Change and Extreme Weather Events

Swiss Re **Reports**

$105B

In 2021, worldwide insured losses from natural catastrophic events totaled US$105 billion

According to Swiss Re, in 2021, worldwide **insured losses from natural catastrophic events totaled US$105 billion**, the fourth highest total since 1970. Among the costliest discrete events:

- Hurricane Ida (US) - $30-32 billion in insured damages
- Winter storm Uri (US) - $15 billion
- July flooding (Germany, Belgium, other parts of Western Europe) - $13 billion
- Severe summer storms (North and Central Europe) - $4.5 billion

Loss numbers continue to rise from a “witches’ brew” of hurricanes, wildfires, floods, deep winter freezes, heatwaves, and more severe cyclonic storms, calling for steeper premium increases and threatening insurers’ financial positions.

Protection Gaps

Swiss Re **Reports**

$500B

The US alone needs to spend $500 billion annually through 2040 to repair and replace critical infrastructure

With inflation and worsening climatic conditions comes a rise in resulting claims payouts. Insurers are further exposed due to persistent and growing protection gaps and aging infrastructure, in many advanced economies. PwC, in its “Insurance 2025 and Beyond” report, estimates that the protection gap amounts to over $1.4 trillion as of 2020, and is expected to grow at an accelerating rate through 2025, reaching some $1.84 trillion in that timeframe.

On the public side, Swiss Re, in the report cited earlier, estimates that the US alone needs to spend **$500 billion annually through 2040 to repair and replace critical infrastructure**, making the $1 trillion allocated in the 2021 infrastructure package a down payment at best. Swiss Re has called upon the insurance industry to work with the public sector to help fund and insure critical infrastructure, a further potential point of financial exposure and uncertainty for insurers.

Cyber Threats



20% of the top 99 insurance carriers have a high rate of vulnerability to ransomware.

Cyber threats are a two-headed monster for insurers. Insurers who offer cyber insurance to their clients are under increasing financial pressure, as the sophistication and frequency of attacks increase and claims become more costly.

According to Fitch, the claims-to-premiums ratio for cyber insurance in 2021 was 73%. This puts insurers in a bind – they cannot raise premiums fast enough or high enough to keep pace with claims without the risk of becoming unaffordable and losing clients to competitors.

Insurers themselves are also increasingly under attack. With its vast troves of highly sensitive information, the insurance industry is itself ripe for cyber-attacks and ransomware demands.

As reported by Bloomberg, one carrier was forced to pay a ransom of $40 million to hackers. Cyber security firm Black Kite, in its Cyber Insurance Risk in 2022 paper, reports that 82% of the largest insurance carriers have been and continue to be the focus of ransomware attacks. Further, Black Kite estimates that 20% of the top 99 insurance carriers have a high rate of vulnerability to ransomware. Insurers are thus under attack financially and from a reputation standpoint as they fight to protect their clients and to protect themselves from cyber threats at the same time.

Hedging Against Uncertainty – Capitalizing on Intelligent Insurance Operations

In these highly uncertain times, too many insurers find themselves saddled with disconnected operations that are ill-equipped to keep pace with and capitalize on the personalized, intelligence-driven world inhabited by their end-customers and prospects. Those end-customers are already living in the world of tomorrow, while insurers play “catch up”.

To master these market forces and unlock massive new potential, carriers must transform the way their businesses are run and become more connected, agile, and resilient. They need to strive for what we at Earnix term **Intelligent Insurance Operations**, or Intelligent InsurOps.

Intelligent InsurOps represent a reimagining of the insurance business, a way to better meet market needs, and to grow, prosper and provide a hedge against uncertainty. Intelligent insurance operations require imagining the organization, infrastructure and software technology of the future, and implementing it **now**.

Building a Composable and Resilient Organization

To meet the rapidly-evolving needs of the market, the composable enterprise places a vigorous emphasis on working across functional boundaries, breaking down silos, and **reacting quickly to market changes** wherever and whenever they are detected, resulting in a fully-connected organization.

Act Across the Entire Organization	As inflation appears to be settling in for a long run, it's time to engage the entire organization in working through its effects. People across the business need to **build inflation into their planning and execution**, and the entire organization needs to "own" a revamped and more responsive customer experience (CX). Other functions across the organization, including claims, underwriting, investments, finance, marketing, and customer operations, must all be involved.
Attract the Best and Brightest	Finding and retaining great talent is a challenge that can be lessened by taking the above measures. Raises alone are not the solution to a productive workforce. When employees feel that the data they are working with is accurate, when they are equipped with the best tools and technology, and when they feel connected to their colleagues across the organization, their **job satisfaction rises**, their decision-making confidence in increased, and they feel empowered to act quickly and decisively for the benefit of the organization.

Technology Infrastructure

Forward-thinking insurers can now select from a wide range of infrastructure technologies to assemble a composable infrastructure for maximum benefit, opening a wide world of choice that can simultaneously deliver agility, flexibility and speed, without compromising security or causing undue risk.

In particular, it’s time for all insurers to reduce their sole-dependence on legacy core systems. This is especially true of non-customer-facing back-office software that has been functioning well for decades – accounting, billing, financial reporting, etc. Putting these outdated but mission-critical core systems on track to becoming record keepers as their business value declines, for example through the use of encapsulation and micro-services, will allow resources to be directed to more productive tasks.

Applying composable infrastructure can result in significant cost reductions, allow for a wide range of technology choices, and provide a level of interoperability not possible with yesterday’s legacy, in-house/on-premises technology stacks.

A Vision for the Future – Resilient Software

With the complexities of the current economic environment, there are no single cures or “magic bullets”. The right technology and partner can play a key role in delivering intelligent insurance operations. There are several steps you can take today to improve your organization’s ability to adjust quickly to changing conditions.

An Eight-Point Action Plan

In order to survive and thrive in this environment, Earnix recommends immediately implementing this action plan, a practical mix of outwardly-focused and internal enablement efforts:

1. **Beef up** market monitoring capabilities to enable real-time reactions
2. **Build** strong simulation skills and technologies
3. **Enable** machine learning (ML) models
4. **Build** technology and infrastructure that enables quick deployment of pricing changes
5. **Control** the rising cost of claims through increased prevention efforts and quick claims processing
6. **Invest** heavily in customer retention and customer engagement
7. **Deploy** telematics and other product personalization tools
8. **Prioritize** high-ROI projects over infrastructure investments

A Technology Roadmap to Get There

That might seem a daunting “to-do list”, but the **technology is available today** to make it happen, with proven implementation steps you can start taking today.

Get the Data House in Order

Every insurance organization wrestles with multiple data issues, including insufficient data, bad data, missing data, outdated data, and duplicate data. These maladies stand in the way of sound analysis and decision-making, including the implementation of artificial intelligence (AI) and machine learning (ML), cornerstones of modern business.

The crucial first step of corralling and integrating internal and external datasets **removes the data nightmare** that all organizations face, and ensures that data flowing into data stores in the future can be captured and incorporated seamlessly, paving the way for full exploitation of advanced analytics and decisioning capabilities.

Employ Leading-Edge Technology

With the data house in order, leading-edge technology for dynamic decisioning and analytics can be brought to bear to make informed decision-making and quick reactions a reality.

When **dynamic decisioning and analytics are infused into every application** across the organization, and made available to all levels of the firm, smarter operational decisions become automatic. The technology allows insurers to identify, implement, and monitor strategic initiatives more confidently, while reducing the manual effort needed to manage daily performance.

Product-level implementations can be monitored automatically in real time, and adjustments made on a timely basis, to keep pace with changes in the industry, market conditions, and competition. In turn, keeping manual effort to a minimum helps rein in costs and frees up financial resources for strategic initiatives, and helping to protect the bottom line during these turbulent times.

In order to achieve these objectives, there are four key components that make up a full suite of insurance functionality, and all are available now from Earnix.

Pricing

At the heart of the Earnix solution is the engine that drives dynamic pricing. The AI-driven enterprise rating and pricing engine operationalizes advanced analytics, and builds in robust control and governance standards across the organization.This allows insurers to quickly deploy pricing to online channels, to serve up to millions of quotes and offers per day, and to leverage those digital channels in real time.

With this sophistication, insurers can also **focus their pricing analysis and risk mitigation** on the inflationary cost drivers specific to the business at the portfolio level, rather than taking a “one-size-fits-most” approach based on generic benchmarks.

Personalization

Nothing drives customer engagement more than personalized offers and attention. With Earnix, insurers can **reach a new level of personalized consumer experiences** to better serve diverse audiences, implement new market/product strategies in real time, and build a more relevant, value-adding organization.

Usage-based Insurance (UBI) and Telematics

Usage-based insurance and telematics are revolutionizing the way business is done and how customers are treated to highly-personalized experiences. The Earnix solution makes available a **leading-edge telematics app** that collects robust data around braking, acceleration, distraction, speed, cornering, and other real-world driving events, then uses ML to generate predictive scoring algorithms.

This allows insurers to assess the precise risk presented by individual consumers to align product offers to lifestyle and behavioral factors, going beyond simple financial or demographic data.

Summary

As you make your plans to address the many threats and opportunities posed by the current and future economic environment, Earnix can help you lead the way.

At Earnix, we create **agile, composable, and intelligent solutions that enable the world to reimagine their insurance operations**. We help leaders in centuries-old industries evolve their best practices and incrementally innovate all aspects of their operations to better serve modern end-consumers.

By creating more agile and resilient infrastructure and software applications, our customers can confidently take on large-scale transformation, while instantly unlocking more value from every customer engagement.

We connect existing systems, new technologies, and diverse teams at all levels across organizations to not only improve what exists, but to accelerate "what's next."

Mitigate the impact of inflation today

Partner with Earnix for composable and intelligent solutions with agile and resilient infrastructure that will empower you to strategize for any future.

Let’s reimagine insurance, together →

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Earnix is the premier provider of composable intelligent solutions designed to transform how global insurers and banks are run. Earnix solutions unlock value across all facets of the business, connecting with customers, and breaking away from the status quo imposed by legacy single systems.

Earnix’s solutions offer systemized, enterprise-wide value with ultra-fast ROI. It has been innovating for Insurers and Banks since 2001 with offices in the Americas, Europe, Asia Pacific, and Israel. For more information visit: earnix.com.