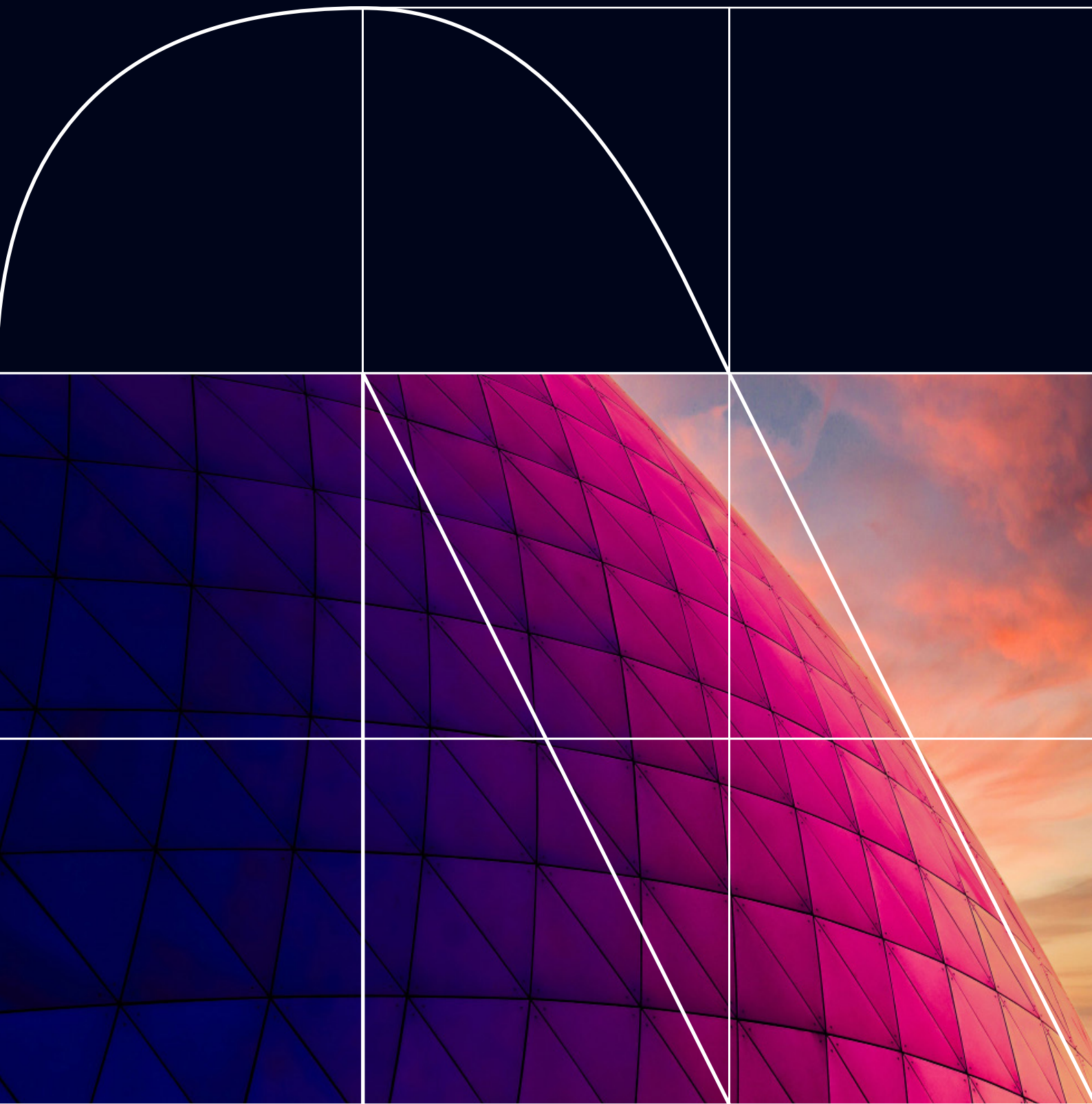
Reinventing Insurance: Transforming Costs into Competitive Advantage

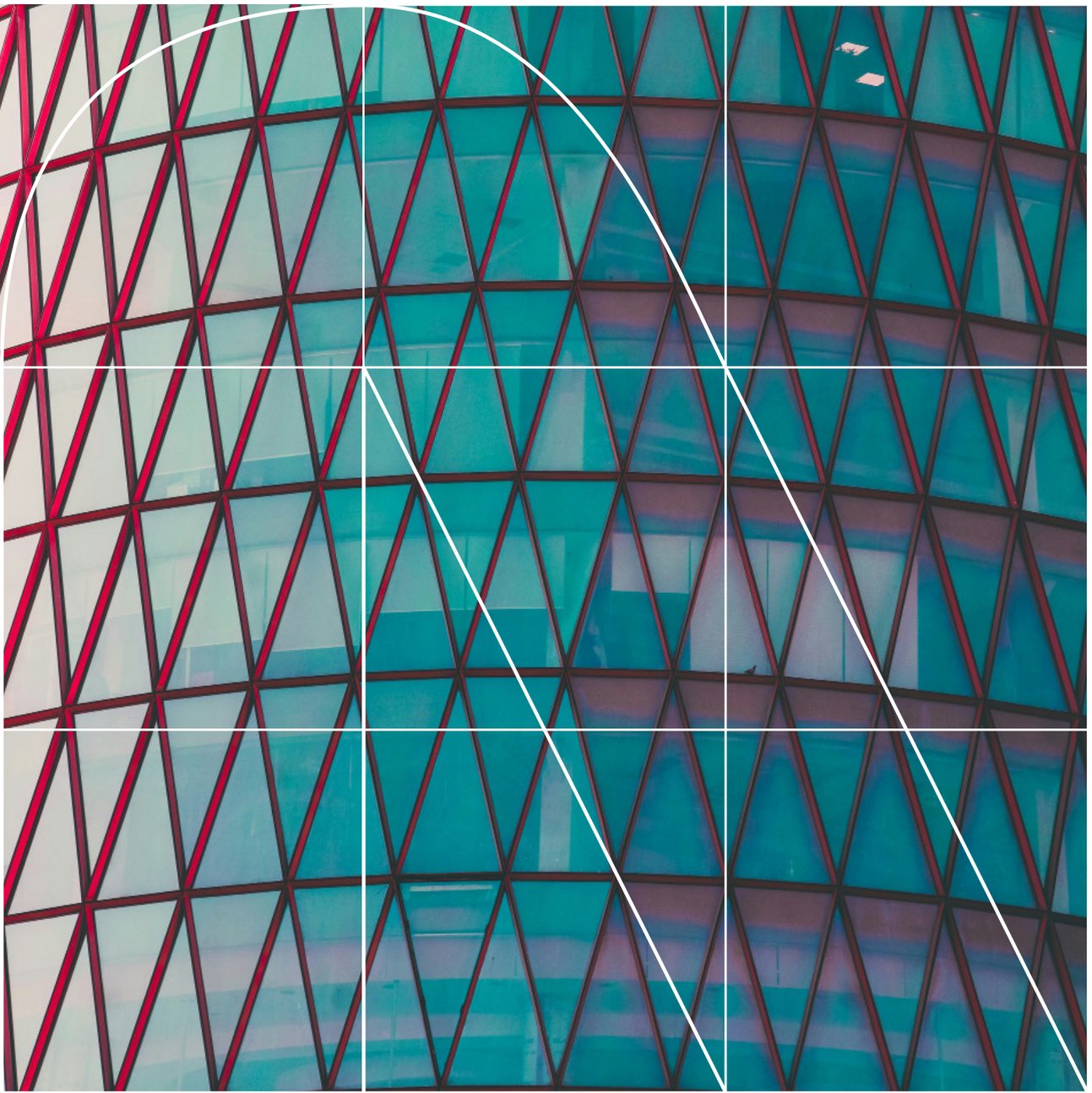
Thought Leadership



Contents

4 Introduction
14 Market Trends
18 Cost Optimization Techniques
20 Operational Efficiency
24 TCO in Legacy Environment
28 Key Smart Technology
32 Use Case
34 NTT DATA Approach
35 Cost Optimization Strategies
62 Conclusion
64 References

Introduction



Enhancing Insight: Understanding the Cost Optimization Landscape

The insurance industry has undergone substantial shifts in how it and its customers operate. Financial challenges arising from the post-COVID downturn, inflation, the cost-of-living crisis, and other economic pressures have intensified the need for a leaner cost base. However, with the market landscape fundamentally transformed, traditional cost-cutting measures are no longer effective, calling for a more strategic approach.

To stay competitive, insurers must prioritize reducing overall costs as one of the important strategies. Cost optimization should now be viewed as a strategic initiative, driving large-scale operational transformations and new, tech-enabled financial models. The focus should be on fostering sustainable growth while maintaining a competitive edge. Industry reports indicate that companies focusing on digital transformation and efficiency improvements can achieve significant operational savings, with some organizations reporting overall cost reductions of around 10- 20% Because of strategic initiatives.

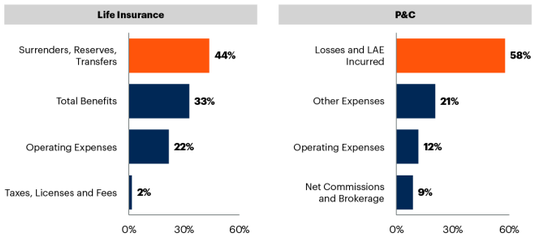
The Need for Cost Optimization

While the principles of cost optimization are well understood, their implementation can often be disruptive.

Insurers' expenses are increasing and are earning very marginal profit or no profit, Insurers are facing the challenge of managing existing costs without compromising their growth strategies and long-term sustainability. Many initiatives tend to focus primarily on immediate financial benefits, they often neglect broader strategic needs, especially when organizations face deep-rooted inefficiencies. Resistance to change, driven by an organization's culture, complicates these efforts.

[1] For successful cost optimization, strong governance and alignment with long-term strategic goals are essential. Leadership should focus not just on cost reduction but also on managing change, actively addressing potential resistance and inefficiencies to ensure smoother implementation and sustainable benefits.

Examples of Insurance Company Expense Structures



[1] **Source:** Insurance CIOs Must Balance Value and Costs, Not Just Cut Costs

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

Key Areas for Improvement

To effectively identify and address inefficiencies, organizations should focus on several critical areas: Operational costs must be thoroughly evaluated to eliminate redundancies and inefficiencies. This can be achieved through the simplification and automation of workflows. Additionally, resource utilization requires careful assessment to ensure that human and material resources generate maximum value, optimizing both employee productivity and asset efficiency.

Insurers can see a potential increase in their profit if the right cost optimization is achieved in their current end-to-end business processes. From sales to marketing to IT operations and infrastructure, there is a significant opportunity to rework and realign processes.

Another crucial area is the scrutiny of technology expenses. Insurers should evaluate the return on investment (ROI) of current technologies and explore new solutions that can drive efficiency gains. Specific KPIs must be implemented to measure cost reduction, efficiency improvements, and the return on technological investment. Without clear metrics, projects may fail to achieve the desired impact. Additionally, supply chain management requires a comprehensive review to identify vulnerabilities and enhance resilience, which can be achieved through supplier diversification and better negotiation strategies.

[2]Why Address Cost Optimization Now?

Insurance companies face several microeconomic and macroeconomic disruptions:

- Continuous concerns regarding a possible slowing of growth — in some geographies more than others — as demand for insurance typically reduces in an economic slowdown.

- The rise of insurtechs is disrupting traditional insurers by offering differentiated digital services without the burden of legacy systems, books to service, or cultural barriers that conventional companies face. Partnering with Insurtech firms can bring cost-effective innovation in claims processing, underwriting, customer acquisition and other business functions. On the flip side, to remain competitive, traditional insurers must adopt an agile mindset, enabling them to pivot quickly in response to such disruptions. This can be achieved by embracing agile tools and methodologies, fostering a more adaptable and responsive approach to market changes and customer demands.

- Continued pressure on underwriting profitability and combined operating ratio (COR), particularly with rising loss costs in property catastrophes and U.S. casualty lines of business (LOBs).

- Increasing maintenance costs due to Legacy and outdated technologies and getting Burdened by consistent delays and cost overruns.

- Pressures on investment income due to continued low interest rates and monetary easing in major developed economies, with currently no view of this situation changing in the near future.

- Increasing cost of compliance with new or existing regulations, including changes to reporting requirements, such as IFRS 17 or General Data Protection Regulation (GDPR).

Key Principles to Take into Consideration when Optimizing Cost

1. Key principles to take into consideration when optimizing cost

2. Establish Strong leadership to drive change

3. Define the right program structure and team

4. Differentiate Good Costs from Bad Costs

5. Adopt a context specific Enterprise-wide view of costs

6. Leverage Quantitative Approaches to model cost hypothesis

The Challenges, Benefits, and ROI of Cost Optimization

Embarking on cost optimization entails navigating initial resistance, managing upfront investments, and adapting to new processes and technologies. The complexity of accurately identifying inefficiencies and implementing changes without disrupting operations poses significant challenges.

Challenges of Cost Optimization in Insurance

1. Digital Transformation

- **Resistance to Change:** Integrating new technologies and automation tools can disrupt established workflows, leading to employee resistance and potential operational inefficiencies.

- **Implementation Complexity:** Successfully adapting to digital solutions requires not only significant training but also a cultural shift across the organization.

2. Operational Cost Management

- **Balancing Cost and Quality:** Reducing operational costs must not compromise service quality, which is essential for customer satisfaction and retention.

- **Impact on Profitability:** Optimizing costs in portfolio management needs careful execution to ensure it positively affects the bottom line while minimizing risks.

Market Trends

3. Balancing Cost Savings with Customer Experience

- **Risk of Reduced Service Quality:** Cost-cutting measures in areas like customer service or claims handling can harm the customer experience, leading to dissatisfaction, churn, and ultimately higher costs for customer acquisition.

- **Demand for Digital Services:** Customers now expect digital self-service options and personalized experiences, which can be costly to implement but are necessary to remain competitive.

4. Renewal Price Adjustments

- **Customer Retention vs. Revenue:** Finding the right balance between competitive renewal prices and revenue growth is a constant challenge.

5. Legacy Systems and Infrastructure

- **High Maintenance Costs:** Many insurers still rely on costly legacy IT systems that are difficult to maintain and integrate with newer, more efficient technologies, hindering innovation and operational efficiency. A fragmented legacy IT landscape is often a root cause for failure to leverage economies of scale, driving high IT costs as well as bulging operational costs.

- **Integration Complexity:** Legacy systems often lack interoperability with modern digital solutions, which complicates data sharing, process automation, and system upgrades—key elements for achieving cost savings.

6. Cybersecurity Risks

- **Increased Vulnerabilities:** Expanding digital solutions heighten the risk of cyber-attacks and data breaches, threatening financial stability and customer trust.

7. Regulatory and Compliance Constraints

- **Compliance Costs:** Insurance is a highly regulated industry, with stringent reporting, data security, and compliance requirements. Meeting these standards can incur high costs, and changing regulations can necessitate expensive system updates and process changes.

- **Data Privacy Requirements:** Compliance with data privacy laws (e.g., GDPR) to ensure data is collected, stored and used responsibly and transparently can be costly, as insurers must implement and maintain robust data protection measures, limiting some cost-saving opportunities. Adhering to legal and ethical guidelines related to data privacy, ensuring proper consent, and safeguarding sensitive personal information is a key agenda item for insurers globally.

8. Cultural Resistance

- **Employee Pushback:** Without deep organizational change and comprehensive employee training, the true potential of these technologies may remain unrealized.

9. Investment Requirements

- **Capital Allocation:** Reducing necessary investments to meet profitability targets is challenging without compromising growth and innovation potential.

10. Operational Risk Minimization

- **Quality Assurance:** Insurers must ensure that cost optimization strategies do not compromise the agreed quality of service to customers.

Cost Optimization Strategies and Urgency Levels

Challenge	Technology/Technique	Which Cost	Impact/Urgency
High reserves tied up (over-reserving).	Predictive Analytics for Risk and Reserving.	Surrenders, Reserves, Transfers (Life Insurance).	**High.**
High policy surrenders.	Policy Retention Programs, Customer Engagement Platforms.	Surrenders, Reserves, Transfers (Life Insurance).	**Medium.**
Inefficient claims processing.	Claims Automation (RPA, AI).	Total Benefits (Life) / Losses & LAE (P&C).	**High.**
Fraudulent claims.	AI-powered Fraud Detection.	Total Benefits (Life) / Losses & LAE (P&C).	**High.**
High operational overhead.	Business Process Outsourcing (BPO), Automation.	Operating Expenses (Both).	**High.**
Manual underwriting processes.	AI-driven Underwriting.	Operating Expenses (Both).	**Medium.**
High commissions paid to brokers.	Digital Sales Channels, Direct-to-Consumer Models.	Net Commissions & Brokerage (P&C).	**Medium.**
Increased customer claims frequency.	IoT for Risk Mitigation, Wearables, Wellness Programs.	Total Benefits (Life) / Losses & LAE (P&C).	**Medium.**
High operational costs for claims handling.	Cloud Infrastructure and Automation.	Operating Expenses (Both).	**High.**
Fraudulent or inflated claims in P&C.	AI for Losses and Claims Fraud Detection.	Losses & LAE (P&C).	**High.**
Legacy systems causing inefficiencies.	Cloud Migration, Digital Transformation.	Operating Expenses (Both).	**High.**
Manual handling of regulatory tasks.	Compliance Automation Tools (RegTech).	Taxes, Licenses, Fees (Both).	**Low.**

KEY INSIGHTS

High Urgency for solutions targeting claims automation, fraud detection, operating expense reduction, and reserving optimization, as these areas represent the largest cost components and thus offer the most significant savings.

Medium Urgency is required for solutions like underwriting automation, policy retention, and IoT for risk management, as they provide essential long-term cost control benefits.

Low Urgency for regulatory automation, as these costs (taxes, licenses, and fees) are smaller portions of overall expenses.

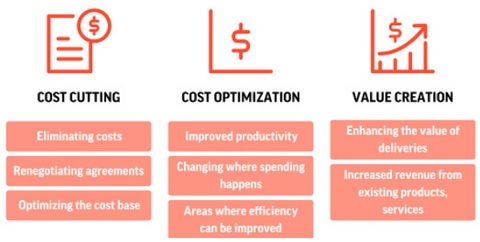
Despite these hurdles, the benefits of a strategic approach to cost optimization are manifold. Enhanced operational efficiency, improved financial performance, and increased competitiveness are just the beginning. Organizations also enjoy greater agility, allowing them to adapt to market changes more effectively.

- **Improved profitability** through more efficient resource allocation.
- **Increased agility** by embracing technology and redesigning processes.
- **Enhanced competitiveness** by reducing operating costs and improving customer experience.
- **Long-term growth** by reinvesting savings into innovation and new opportunities.
 ensuring sustainability and adaptation to shifting demands.

The return on investment from cost optimization can be substantial from 20-40%, though it often requires a strategic and patient approach. While initial costs associated with process improvements, technology upgrades, and training are frequently viewed as barriers, these investments are crucial for long-term savings and efficiency gains. For example, insurers investing in AI to streamline claims processing may face upfront expenses, but the resulting efficiencies can significantly enhance operational performance and reduce costs over time. This strategic realignment towards a more resilient and flexible operational model not only drives sustainable financial health but also contributes to a more robust bottom line and enhanced shareholder value.

Evolve Beyond Cost Cutting to Business Value Optimization

Improvements in insurance company cost structures can be looked at in terms of varying degrees of strategic impact. These include cost cutting, cost optimization and value optimization.



3

Although cost-cutting and cost optimization are important, they are often short-term fixes (for next year). Value optimization represents a more sustainable, competitive, and long-term approach (for the next decade).

Cost Cutting Is a Defensive Approach and Is Least Impactful

This is a one-time undertaking aimed at reducing expense levels. The most effective cost-cutting efforts are those that set a specific savings target and a clear deadline for achieving it. These are standard budget-cutting exercises that all insurance cost centers engage in regularly. An example of cost-cutting would be applying a 5% to 10% cut to each budget. Key focus areas could include activities such as contract negotiation and IT service reduction. This approach is also used by insurance companies that are in extreme financial distress.

Cost Optimization Is a Stepping Stone or Incremental-Growth Approach

Insurance business and IT leaders are primarily attempting to lower the cost of something that already exists, such as a specific business process, through an ongoing program of cost management activities. These types of activities are typically tactical in nature. Automating an expensive business process, like new business onboarding, is an example of operating cost optimization

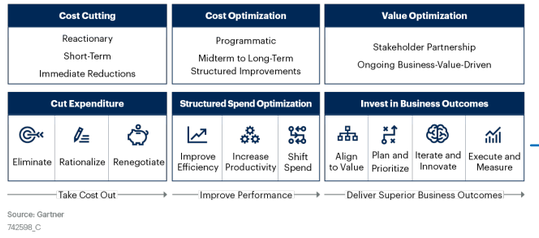
Value Optimization Transforms the Competitive Approach

CIOs and business leaders are restructuring the entire cost basis of the insurance company to proactively set a new standard for what constitutes a competitive price point or to greatly expand the firm's profit margins. Cost transformation will go beyond using automation to optimize operating costs. An example would be using analytics to predict the likelihood of surrenders before they occur, enabling the insurer to take pre-emptive actions to retain at-risk customers. From a technology perspective, cost transformation requires not only automation technology but also technology categories such as AI and machine learning (ML) to fundamentally improve decision-making and customer experience, which have a direct impact on cost.

Why Cost Optimization is the Right Solution

By adopting a balanced approach to optimizing agency costs, sustainable efficiency can be achieved through a combination of short-term cost reductions and long-term savings. This approach takes into consideration both fixed and variable intermediary expenses over some time.

The Evolution of Cost Management



Source: Gartner
742598_C

Gartner.

Insurance Cost Optimization Actions and Solutions

Cost Driver Optimization Action Checklist	Cost Optimization Solution Checklist
Select the appropriate cost optimization action(s) for the target insurance capability.	Select the cost optimization digital idea(s) that best fit the selected cost driver optimization action(s).
○ Eliminate — Fundamentally eliminate the cost driver. ○ Simplify — Remove duplicates and redundancies; combine process execution tasks. ○ Utilize — Maximize asset utilization. Average out workload across assets/load balance. ○ Standardize — Suppress variability of workload/activities. ○ Centralize — See economies of scale. Leverage highly skilled resources. ○ Automate — Eliminate manual and cumbersome procedures. Visualize/share knowledge and know-how. ○ Renegotiate — Rebalance portfolio between buyer, seller or source. Competitively bid product/service or minimize license cost increases.	○ Digitalize business processes. ○ Create a culture of continuous improvement. ○ Improve customer self-service. ○ Improve business efficiency through analytics. ○ Improve data management. ○ Invest in process automation and robotics. ○ Improve asset management. ○ Optimize the supply chain. ○ Improve inventory management. ○ Utilize business process outsourcing.

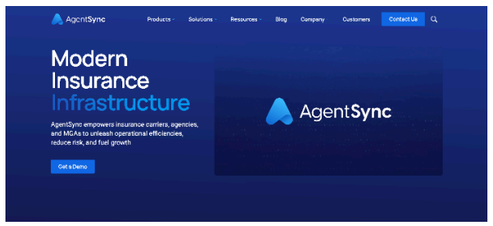
Source: Insurance CIOs Must Balance Value and Costs, Not Just Cut Costs

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose

Example: Companies Driving Cost Optimization in their Business Models

[4] AgentSync Helps Insurance Carriers Reduce Operating Costs with Modern Insurance Infrastructure

AgentSync has become the core infrastructure for hundreds of insurance companies, helping them scale distribution and reduce costs, AgentSync builds modern insurance infrastructure that connects carriers, agencies, MGAs, and producers. With customer-centric design, seamless APIs, automation, and unparalleled service, AgentSync's solutions provide data intelligence and streamlined onboarding and compliance management processes that reduce costs, increase efficiency, and get producers ready to sell in hours instead of weeks.



AgentSync's infrastructure solves a vital problem in the insurance industry: effective and efficient distribution. By establishing flexible, scalable connections between insurance distributors and underwriters, AgentSync powers and streamlines the delivery of insurance products. The company continues to aggressively build and innovate with a focus on SaaS and API solutions that create data visibility and efficiencies for insurers, and exceptional experiences for agents and brokers.

AgentSync solves a critical, ubiquitous and long-neglected problem in the Insurance Industry. This infusion of capital ensures they have the platform and support needed to move up the market to larger and more complex carrier requirements and continue to charge ahead solving the extremely complex problems plaguing the insurance industry today.

[5] Earnix and NTT DATA Partnership: A Full Spectrum of Technology and Services for Leading Insurers

Objective:
Provide Intelligent Insurance Operations through agile, composable, and real-time solutions. Earnix is a provider of mission-critical cloud-based intelligent solutions across pricing, rating, underwriting and product personalization. Enhance pricing and underwriting through expert integration of technology and industry knowledge. NTT DATA, with over 50 years of IT experience, facilitates the implementation of Earnix's AI-driven technologies for pricing, product personalization, and underwriting, supported by consulting, digital transformation, and seamless systems integration.

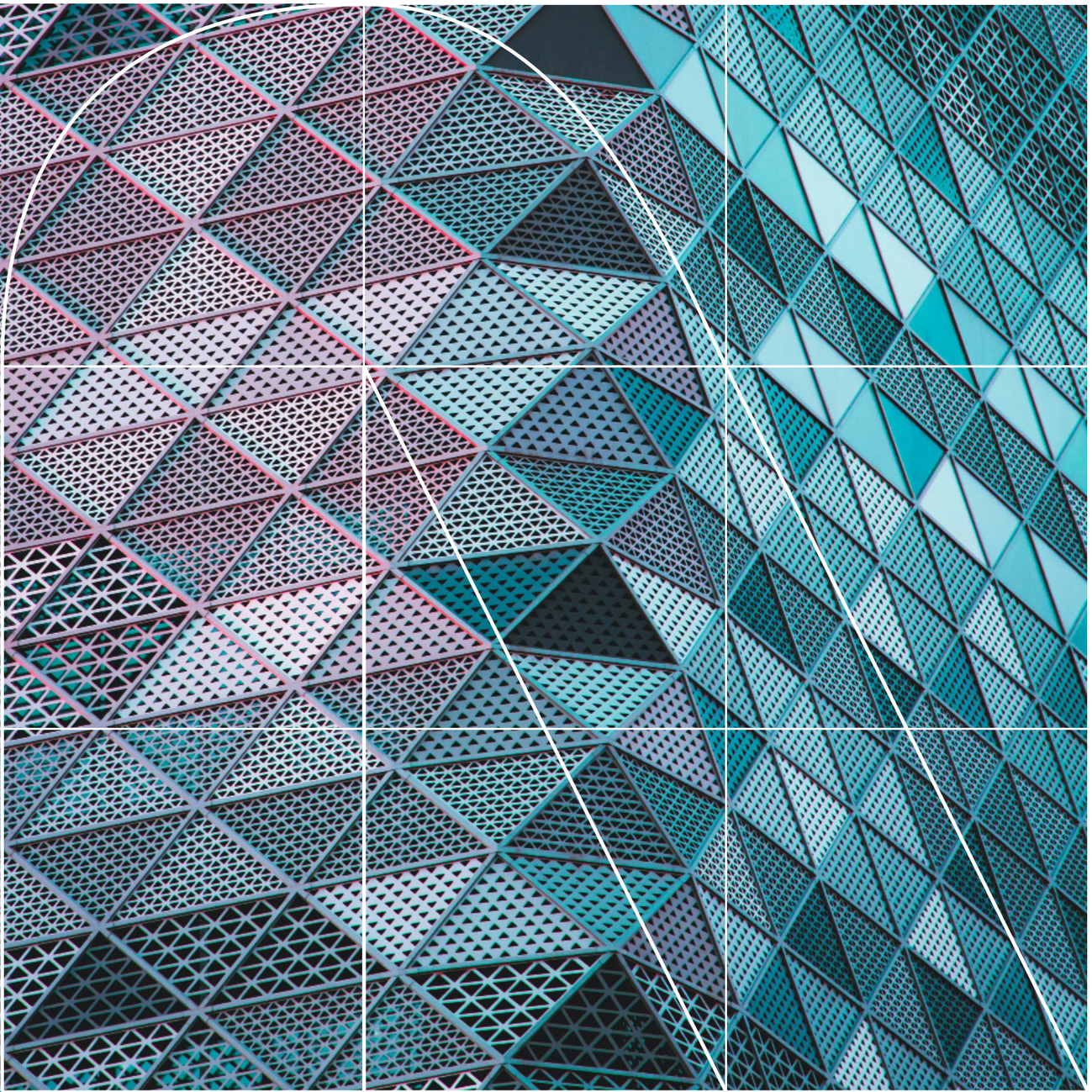
Challenge:

- Many organizations lack the in-house expertise to develop innovative solutions efficiently. Effective management of applications, data, and infrastructure is essential for increasing revenue, enhancing competitive advantages, and reducing operational costs.
- Managing thousands of raters in spreadsheet format, SQL codebase, etc.
- No standardized documentation or rate manuals are available.
- Lack of sophisticated central rating repository.
- Difficulty in exposing complex rating rules from existing systems.
- Challenges in integrating multiple PAS or customer-facing applications with rating engines and rate repositories.
- A complicated rate change tracking process.
- Tedious testing procedures are required after implementing rate changes.

Solution:

- A real-time rating engine that can connect to all core platforms enabling the company to develop and deploy rate changes faster and more easily.
- Improved analytical modeling, rating deployment and pricing all in a single, end-to-end platform.
- Provides automation capabilities, data and model management, online testing, governance and reporting.
- Inbuilt APIs for integration with core applications.
- Ability to create standard documents as rating manuals for future usage.

Market Trends



Based on industry trends, the insurance sector can achieve cost savings of up to $15-30 billion annually through strategic optimization measures. This includes improved IT infrastructure, streamlined operations, better risk management, and enhanced customer engagement strategies:

- **Digital Transformation:** The increasing adoption of digital tools and technologies (e.g., cloud solutions, automation, and AI) is a major driver of cost optimization. The insurance digital transformation market is projected to grow to $165 billion by 2028, representing a critical area for cost reductions.

- **Claims Management:** Insurers spend nearly 70% of premium income on claims. Technologies like AI, predictive analytics, and automation can reduce claims processing costs by 20-30%, potentially representing billions in global savings.

- **Underwriting:** Automated underwriting and risk assessment can reduce costs by enhancing accuracy and reducing the time required for risk evaluation. This could result in a 15-20% cost reduction

- **Operational Efficiency:** Insurers are increasingly investing in cloud-based solutions, robotics, and process automation to drive efficiencies. This area could see cost savings of 15-25%, depending on the level of automation.

- **Strategic Partnerships[6]:** Collaborating with technology providers and other stakeholders to develop innovative solutions, such as climate risk mitigation, helps insurers manage risks more effectively and reduce costs.

Global Focus Areas:

- **North America:** The largest insurance market globally. Here, cost optimization can focus on reducing legacy system costs, operational inefficiencies, and improving digital channels, leading to billions in savings annually.

- **Europe:** Compliance with regulations (e.g., GDPR, Solvency II) often adds to costs. Optimizing compliance processes, using RegTech, and operational efficiency can save up to 10-15% of administrative costs and improve customer services by investing in technology-driven solutions.

- **Asia-Pacific:** A growing insurance market with significant investment in technology-driven efficiency. The cost optimization potential is high, particularly in emerging markets with rising adoption of digital channels.

[6]IT Spending in Insurance Increases

- The global insurance industry IT spending is expected to reach $343 billion by 2028, growing at a 9.2% compound annual growth rate (CAGR) from 2023 through 2028. Inflationary pressures continue to increase baseline costs in some geographies.

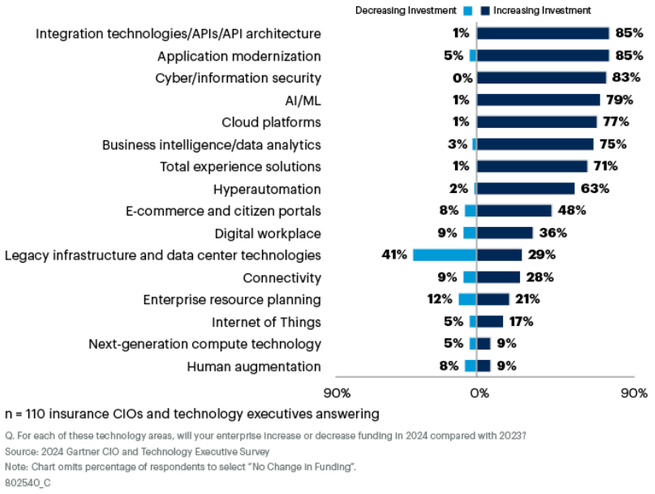
- The IT spending CAGR for life insurers between 2023 and 2028 remains consistent with the 1Q24 forecast at 9.3%, as does P&C insurance with an estimated five-year CAGR of 10.2%.

- IT services spending is now projected to grow 7.1% in 2024, down from 9.7% within the last forecast, due in part to slower spending across subsegments that include consulting and business process services.

Table 1. Worldwide IT Spending Forecast (Millions of U.S. Dollars)

	2023 Spending	2023 Growth (%)	2024 Spending	2024 Growth (%)
Data Center Systems	236,098	4.0	293,091	24.1
Devices	692,784	-6.5	730,125	5.4
Software	974,089	11.5	1,096,913	12.6
IT Services	1,503,698	4.9	1,609,846	7.1
Communications Services	1,491,733	3.2	1,537,188	3.0
Overall IT	4,898,401	3.8	5,267,163	7.5

Source: Gartner (July 2024)



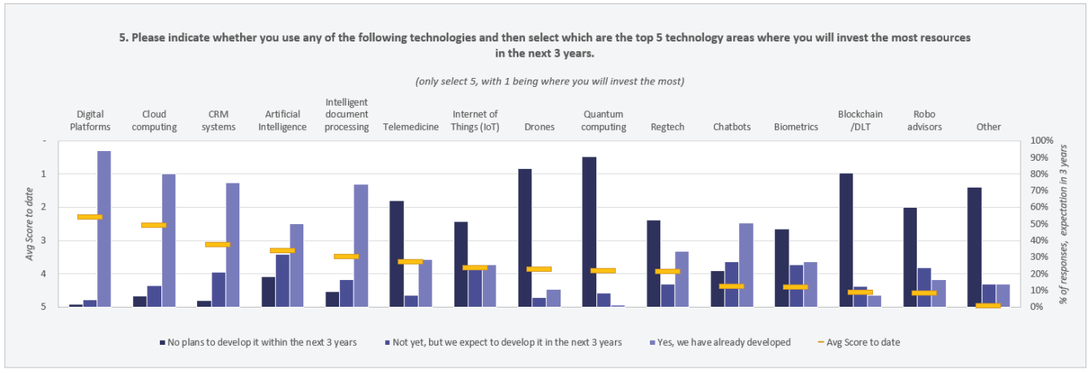
Source: Insurance CIO Priorities 2024: Insights for Technology and Service Providers' Product Plans.[7]

Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose

Investment Trends

Insurance CIO Priorities (Budget Allocation Priority):

- **High Priority:** Generative AI, Integration Technologies (APIs, Digital Twin), Cybersecurity (Blockchain).
- **Moderate Priority:** Cloud Platforms (Satellite & Data), AI/ML (Emotion Recognition, Digital Human), Application Modernization (Smart Robotics).
- **Low Priority:** Quantum Computing, Metaverse.



Source: EIOPA'S Digitalization Market Monitoring Survey, June 2023.[8]

Cost Optimization Techniques

Strategies for Sustainable Financial Health

Sustainable financial health hinges on versatile strategies: operational efficiency, resource optimization, smart technology investments, and supply chain resilience. These strategies bolster an organization's financial stability and guide it toward prosperity.

As Insurers look into Operational Efficiency, we aim at maximizing output with minimal input, streamlining operations to eliminate waste and enhance productivity. Key steps include adopting lean management principles like Kaizen and automating processes where possible, based on a thorough audit of current operations to pinpoint inefficiencies.

Another way of Increasing Operational efficiency is by reducing and managing Total Cost of Ownership (TCO), particularly in managing legacy systems. This can help in identifying the hidden costs, Reducing Licensing costs, optimizing resource allocation, enhancing efficiency through Modernization, Mitigating risks and Compliance costs. All these ways can help to build long-term strategic planning. A thorough understanding of TCO allows for better cost-benefit analysis when considering upgrades or migrations, ensuring that investments lead to actual cost savings and operational improvements.

One of the most effective means to reach that goal is through leveraging both human and available assets, i.e. Resource Optimization, which is crucial for growth as it involves not just placing the right people in the right roles but also utilizing technology to automate tasks and free up staff from administrative task to more strategic activities, ensuring optimal performance.

The Role of Employee Involvement and Training in Cost Optimization: Employee engagement and training are essential for driving cost optimization in the insurance industry by aligning the workforce with strategic objectives and motivating contributions. Involving employees in process re-engineering fosters ownership and encourages innovative solutions. Cross-functional collaboration, idea-sharing platforms, and recognizing contributions create a culture of continuous improvement. Training programs that address skill gaps and focus on adapting to new technologies and processes ensure operational excellence. Clear communication of goals, fostering professional development, and regularly assessing training initiatives are key to sustainable, impactful outcomes.

However, organizations must ensure they are investing wisely in technology, aligning with their strategic goals for clear ROI. Smart Technology Invest-

Operational Efficiency

ments represents an essential ingredient, including but not limited to harnessing AI, Machine Learning, and other emerging technologies to streamline operations, from underwriting to claims and other activities, to enhance decision-making with a focus on customer-centricity.

In the insurance industry, investments in process improvements, technology upgrades, and training lead to significant long-term savings and efficiency gains. For example, automating claims processing with AI reduces processing times and labor costs, while predictive analytics enhances risk assessment and pricing accuracy. Customer self-service portals streamline policy management and claims filing, lowering operational costs and boosting satisfaction. Advanced fraud detection technologies minimize losses from fraudulent claims, and ongoing employee training enhances productivity. Additionally, digital underwriting speeds up decision-making, and telematics promotes safer driving through usage-based insurance. Together, these strategies help insurers overcome initial costs and achieve sustained operational efficiency and profitability.

Cost optimization extends beyond mere cost reduction to enhance the operational model's efficiency, resilience, and agility. Emphasizing these key strategies allows Insurers to build a foundation for long-term success, ensuring they remain flexible and financially healthy across economic cycles.

Operational excellence is the process of making organizations more agile, faster, efficient and competitive by decoding their complexities and lags into actionable plans of success. These plans are created in tandem with new customer profiles and their expectations as well as what is implementable from the company's perspective. The goal of achieving operational excellence is to deliver value to both customers and organization by streamlining workflows, reducing costs, eliminating waste and enhancing experiences, all while maintaining compliance and managing risks.

Achieving Operational Excellence with the Use of Technology / Automated Claims Processing
– An example

Traditional Approach

Traditionally, claims processing in insurance has been a manual, time-consuming process that involves paperwork, manual data entry and lengthy validation steps, leading to slow response times, increased human errors and high operational costs. These inefficiencies negatively impact customer experience and the company´s bottom line.

Operational Excellence Approach

To overcome these inefficiencies, insurance companies decide to implement and automated claims processing system using AI, ML & RPA. The focus of such technologies is to streamline processes, improving service quality and reducing waste. This new path of change would improve the customer experience and margins of insurance companies.

Measures Implemented to Achieve Operational Excellence:

Automating data collection and verification

All data and documents regarding customer, policies and claims are automatically retrieved from internal systems and external sources.

AI powered decision-making

ML models analyze historical claims to detect fraud patterns, assess risks and make recommendations on whether a claim should be approved or denied.

Streamlined communication

Real updates on the status of claims. Chatbot or virtual assistant to answer common questions and and provide guidance.

Reducing cycle time and errors

Automation improves errors and time consumption.

Continuous improvement

Track and analyze KPIs like cycle time, claim accuracy, customer feedback, etc.

Power of simplicity in Operational Excellence

There are two ways to achieve operational excellence:

1. Using technologies to automate and make operations more efficient.

2. Making operations and processes simpler just eliminates redundancies.

Simplifying operations without the use of technology offers several **benefits**, such as:

1. Cost savings: Simplifying processes manually reduces the need for expensive technology investments, which can save money on software, hardware and maintenance.

2. Increased flexibility: Companies will gain greater control and flexibility, free from the constraints of specific technologies that may not fully meet their unique needs.

3. Better process understanding: By manually streamlining processes, teams develop a deeper understanding of how things work. This leads to more effective problem-solving and continuous improvement since employees are closer to the operations.

4. Immediate implementation: Manually solving for inefficiencies is quicker than waiting for new technologies to be implemented. Insurers can make real-time adjustments without the need for lengthy setup periods.

5. Focus on customer needs: Tech-driven features tend to distract companies from critically thinking about the real needs of the customers and how to serve them better.

6. Reduces complexity: By cutting unnecessary steps and focusing on what really matters, Insurers naturally create simpler, more efficient processes that are easier to manage and maintain over time.

There are 3 Ways for Insurers to Solve for Operational Excellence, “Simply”:

1. Keep it simple and make choices: Simplicity does not mean being basic. Being simple requires prior thinking and a decision-making process while stopping existing things or starting new ones. This is crucial to focus on what brings value to the customer and the insurance company

2. Simplify inside to be agile outside: The simpler and more structured a company’s processes are, the easier it is to deliver product and service bundles through easy and agile processes. This allows agents to deliver value to customers, rather than spending time on complex processes.

3. Automation goes beyond technology: Smart automation is not just about technology. Automation should be focused on adding value to customers rather than just to achieve cost savings and efficiency and that will lead to less complex and efficient processes.

How to Achieve Operational Excellence?

To achieve operational excellence, organizations should be able to construct a target operating model. This is based on their expectations of results that they want to achieve that are realistic and implementable.

In order to create this target operating model, we can break the various functions down into 6 layers of an operating model:

Category	What does it do for me?	What is inside?
Functional Process	This frames your world. Everything that happens is part of a process.	Hundreds of predefined processes for finance, HR, IT, Customer support, etc.
Technology	The environments, applications, and integrations that enable and automate the process.	Reference cloud architecture, prebuilt integrations, prebuilt conversations, and thousands of test scripts.
People	Who does what, the reporting lines, the required skill sets, roles, and responsibilities.	Organization and job definitions with process connections.
Performance Insights & Data	What will be reported and how. Defines the information requirements, KPI framework to optimize decision-making.	KPIs, PPIs, and enhanced reporting beyond the vendor-supplied reports to satisfy the organization’s needs.
Service Delivery Model	What will get done and where. Identification of what capabilities are delivered and how.	Shared service center, centers of excellence, and outsourcing operating models to optimize service delivery.
Governance	How to oversee. Define risks and controls for every process, plus segregation of duties, access rules, and policies.	Risk and internal control for every process, plus segregation of duties reference and policy identification.

TCO in Legacy Environment

To minimize operational disruption, companies should pinpoint specific business challenges to target for updates. The modernization strategy should focus on three key areas:

To minimize operational disruption, companies should pinpoint specific business challenges to target for updates. The modernization strategy should focus on three key areas:

- **Infrastructure:** Begin with the infrastructure, which typically involves Kubernetes-based containers, hybrid cloud infrastructure, and API-centric approaches.

- **Applications:** Modernize core applications by moving them to container and cloud environments. This can be achieved by either adding new layers to existing architectures or completely overhauling applications to create new architectures.

- **Approaches:** Use various approaches to enhance system agility, ensuring applications work together effectively.

- **People:** They are responsible for driving change management, ensuring the smooth adoption of new technologies, and fostering collaboration across teams. Leadership is essential in aligning modernization efforts with the organization's long-term strategic goals.

Despite their reliability and processing power, mainframes are costly to maintain and lack the flexibility of modern systems. Similarly, open systems, which include a variety of server-based applications, face challenges related to aging infrastructure and escalating operational costs. Selecting a modernization strategy depends on business needs and the desired benefits, guided by experts who provide timeframes and functional roadmaps for system changes.

In the not-so-distant past, funding for large, multi-million-dollar legacy modernization programs was hard to come by—mostly due to the cost and complexity of migrating to a modernized data platform and justifying these costs to business value.

Leveraging automation across all aspects of migration has significantly reduced the cost, complexity, and risk associated with legacy modernization projects. Today, migrating to the cloud offers an alternative with a clear ROI.

1. Assessment and Planning:

- Conduct a TCO Analysis: Evaluate the current costs associated with your legacy systems, including hardware, software, maintenance, and operational expenses.

- Identify Pain Points: Determine the areas where costs are highest and where inefficiencies exist.

2. Modernization of Applications:

- Replatforming the System (Migrating it to the Cloud): Migrate parts of the legacy system to the cloud with minimal changes, improving agility and efficiency.

- Replacing the System with a Vendor Solution or a Customized Solution: opt for a vendor or custom-made solution to completely rebuild outdated applications, thereby optimizing business practices and enhancing maintainability and scalability.

- Middle Layer Solution: Add new application layers via APIs without changing the core architecture, scaling the system to the cloud.

3. Cloud Data Platforms for Insurers:

- Reduced Costs: Transitioning to a cloud data platform can significantly lower the total cost of ownership (TCO) for legacy systems. Nearly half of business leaders cite cost and performance issues as major reasons for migrating to the cloud.

- Better Datasets: Cloud platforms enable insurers to utilize not just structured data but also unstructured and streaming data. This comprehensive data access enhances insights, optimizes data sharing, eliminates silos, and accelerates innovation.

- Scalable Infrastructure: By separating computing and storage, insurers can scale resources up or down as needed, ensuring timely access to data without excessive infrastructure costs during peak demand.

- Expanded Capabilities: Cost savings can be reinvested into new capabilities, like data science and machine learning, leading to improved pricing models, enhanced customer engagement, and innovative business strategies. For example, one global insurer is projected to save $25 million annually, which was reinvested into telematics for new offerings like pay-per-mile insurance.

- Enhanced AI/ML Capabilities: Cloud platforms improve the speed and accuracy of AI and ML by integrating more data sources, boosting data quality, and scaling computing power. This supports advanced analytics for fraud detection, risk modeling, and customer lifetime value analysis.

4. Automation:

- Implement RPA (Robotic Process Automation): Use RPA to automate repetitive tasks, reducing manual effort and errors.

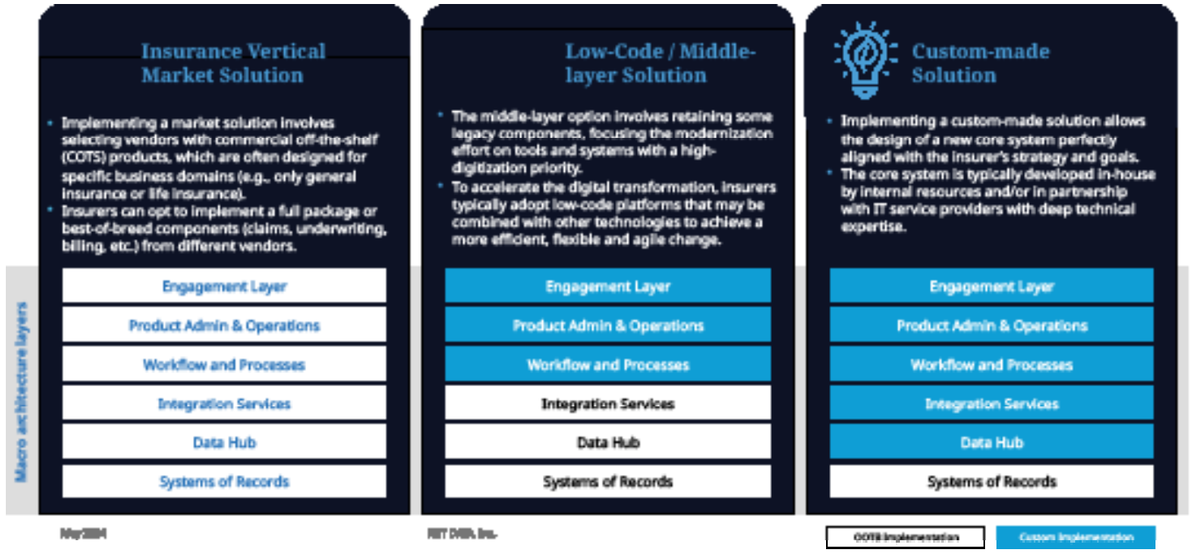
- Automate Maintenance: Use automated tools for system monitoring and maintenance to reduce downtime and manual intervention.

Core Modernization Dilemma: Make or Buy Decision Facilitation

The decision to make or buy a new core system should be based on a thorough analysis of the organization's business and IT strategy and considering the following factors: Costs, Timelines and Capacity, Operations and Processes, Competitive Advantage, Regulation and Requirements.

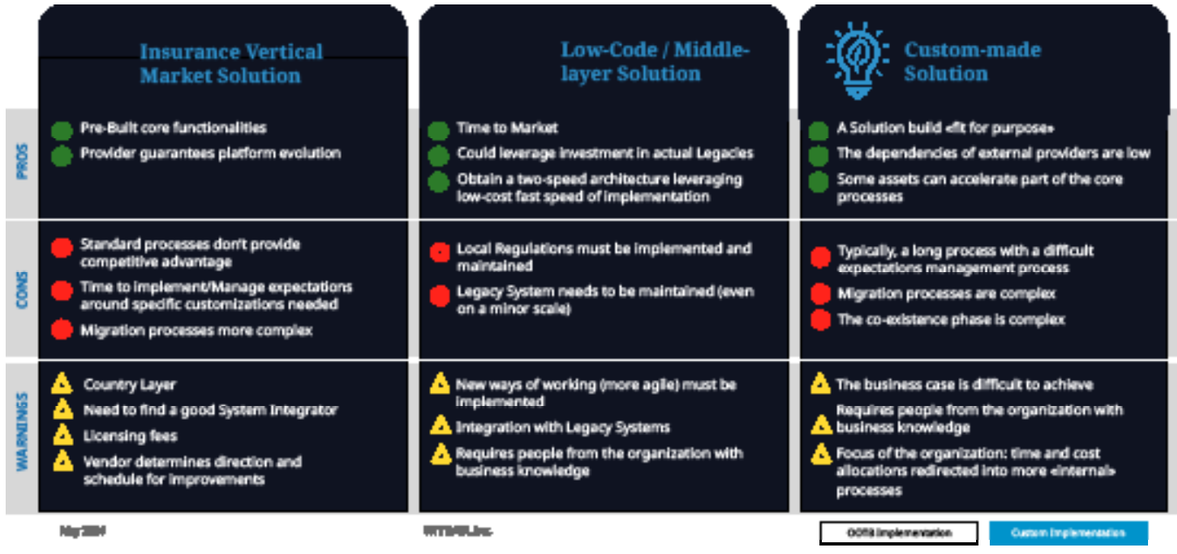
According to a study* carried out by Celent in 2023 in EMEA, ~30% of Insurers prefer to make their own core systems (either through pure developments or by using low-code platforms), while ~60% opt to buy commercial off-the-shelf (COTS) solutions.

Insurers can implement a new core system, balancing pre-built functionality with customization.



Source: NTT DATA

Each approach has its advantages and disadvantages, and they should be evaluated considering the organization's business and IT strategy and objectives:

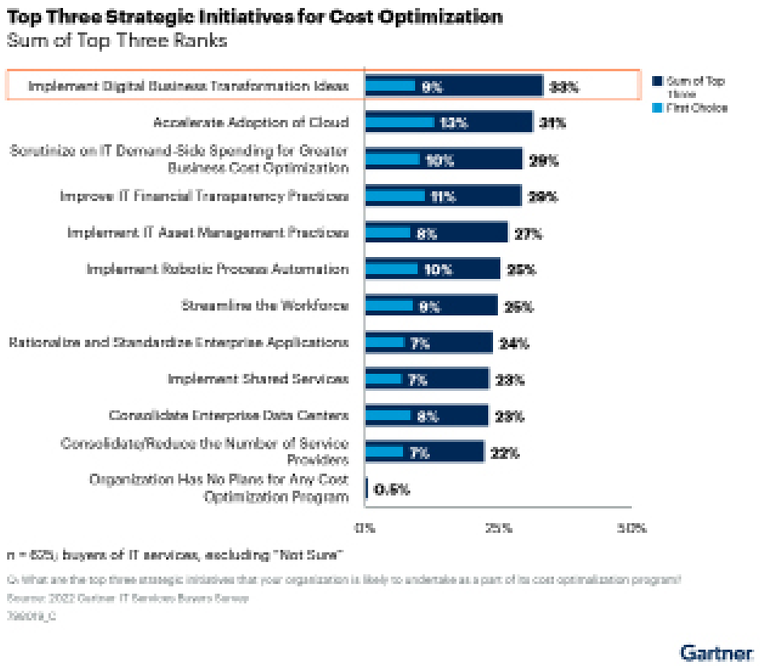


Source: NTT DATA

Key Smart Technology

[9]Investing in key technology and business model innovation is crucial for cost optimization in the insurance industry because it enables insurers to operate more efficiently, reduce unnecessary expenses, and improve service delivery.

Several surveys say that the top strategic initiative for cost optimization is implementing digital business transformations. As can be seen in the figure below, the implementation of digital business transformation ideas is one of the top strategic initiatives for cost optimization with the adoption of cloud and IT activities.



Several emerging and existing technologies are critical in driving cost optimization within the insurance industry:

• Artificial Intelligence (AI) & Machine Learning (ML): AI is used for predictive analytics, fraud detection, claims automation, and underwriting processes. AI-driven automation can significantly reduce labour costs and errors.

• Cloud Computing: Transitioning to cloud-based infrastructure helps reduce IT costs, improves scalability, and enhances flexibility. Cloud adoption also accelerates product launches and improves data storage efficiency. The cloud computing market for insurance is expected to grow by 15% CAGR, potentially saving insurers billions in IT infrastructure costs annually.

• Robotic Process Automation (RPA): RPA streamlines repetitive back-office tasks such as policy administration, claims processing, and customer service, reducing processing times and operational costs. AI and RPA solutions in insurance are projected to save the industry up to $1.2 billion annually by 2025 in claims management and customer service.

• Big Data & Predictive Analytics: Insurers leverage big data and predictive analytics to refine risk models, improve underwriting accuracy, and personalize pricing, ultimately reducing risks and improving cost structures. Analytics-driven cost reductions in underwriting and claims could save 20-25% of operational costs across the industry, contributing to market savings of $10-20 billion annually.

• Internet of Things (IoT): IoT-enabled devices (e.g., telematics for auto insurance) provide real-time data that can reduce underwriting costs, improve risk assessment, and optimize claims processes.

• Predictive Analytics: Using data analytics to predict customer behavior and risk, allowing insurers to set more accurate premiums and reduce losses.

GenAI

• Automated Claims Processing: Speeds up claims assessment, reducing labor and operational costs.

• Enhanced Fraud Detection: Identifies suspicious patterns early to minimize fraudulent payouts.

• Efficient Underwriting: Automates data-driven risk assessment for faster, more accurate pricing.

• Customer Self-Service: Virtual assistants handle routine queries, lowering customer support costs.

• Document Automation: Streamlines document processing and generation, cutting down administrative work.

• Targeted Marketing: Personalizes campaigns for higher ROI and improves customer retention through predictive analytics.

• Predictive IT Maintenance: Reduces unexpected downtimes, optimizing IT resource allocation.

• Compliance Automation: Automates claims audit for regulatory compliance, minimizing associated costs.

Cloud Computing

• Reduced IT Infrastructure Costs: Insurers can minimize the need for expensive on-premises hardware by using cloud services, leading to lower capital expenditures on data centers, servers, and maintenance.

• Pay-as-You-Go Model: "Cloud providers offer a usage-based pricing model, enabling insurers to pay only for the resources they use, thereby reducing unnecessary expenses.

• Disaster Recovery and Business Continuity: Cloud solutions offer cost-effective disaster recovery options, reducing the need for insurers to maintain costly backup systems while ensuring business continuity.

• The best and most cost-effective option to migrate to the cloud is replacing your existing technology. Pick the most suitable SaaS platform built natively in the cloud. It relieves you of the responsibility of managing your infrastructure while having control of all the data, irrespective of the database size.

• Cloud-based systems offer IAM (Identity and Access Management): It provides a single sign-on facility to simplify the login procedure. Moreover, users can access critical information only within the office premises while other data is easily accessible from anywhere.

Robotic Process Automation (RPA)

• Reduced Manual Labor Costs: RPA automates time-consuming tasks like claims processing, data entry, and policy issuance, significantly lowering the need for human intervention and associated labor costs

• Minimized Errors and Rework: RPA eliminates human errors in repetitive tasks such as data input and document processing, reducing costs associated with rework and corrections.

• Scalability without Extra Costs: RPA can scale operations quickly to handle high volumes during peak periods, like natural disasters or insurance renewals, without the need for additional staff or infrastructure.

• 24/7 Operational Efficiency: RPA bots can work continuously without downtime, allowing insurers to process tasks around the clock, optimizing resource usage and reducing the need for overtime.

• Improved Compliance and Audit Trails: By automating regulatory reporting and compliance tasks, RPA reduces the risk of non-compliance fines and ensures accurate, timely submissions at a lower cost.

• Faster Processing Times: Automation speeds up processes like underwriting, customer onboarding, and claims management, reducing turnaround time and improving productivity without increasing workforce size.

Big Data & Predictive Analytics

• Accurate Risk Assessment: Predictive analytics uses large data sets to assess individual policyholders' risk more precisely, allowing insurers to price policies more accurately, reducing overpricing and underpricing.

• Fraud Detection and Prevention: By analyzing patterns and anomalies in large data sets, insurers can detect fraudulent claims earlier, reducing costs associated with payouts on false claims.

• Optimized Claims Processing: Predictive analytics can forecast claims likelihood, helping insurers prioritize and process claims more efficiently, reducing operational expenses.

• Personalized Product Offerings: Big Data helps insurers analyze customer behaviors and preferences, enabling the creation of personalized policies and pricing models, improving customer retention and reducing acquisition costs.

• Customer Retention and Acquisition: Analyzing customer data helps insurers understand customer preferences and behaviors, enabling them to offer personalized products and services. This can improve customer satisfaction and retention.

• Operational Efficiency: Analytics help in optimizing resource allocation, ensuring that the right resources are available where and when they are needed.

What to do Now?

Identifying the right vendor technology partner remains a compelling way for insurers to leverage technology solutions to expediently deliver cost optimization and business value. This approach provides an opportunity for TSPs to attract executive attention as insurers are scanning the market for the right solution.

Here are ten key techniques for IT cost optimization:
1. Implement Shared Services: Consolidate common functions across departments to create shared services, reducing redundancy and increasing efficiency.

2. Adopt a Cloud-First Policy Where Appropriate: Shift IT infrastructure and applications to the cloud for scalability, reduced hardware needs, and lower maintenance costs.

3. Consolidate Enterprise Data Centers: Merge data centers to cut costs related to hardware, maintenance, and energy while boosting operational efficiency.

4. Rationalize and Standardize Enterprise Applications: Streamline applications by reducing duplicates and focusing on standardization to improve maintenance efficiency.

5. Improve IT Financial Transparency Practices: Increase visibility into IT costs to help stakeholders understand spending and identify inefficiencies.

6. Focus on IT Demand-Side Spending: Align IT expenditures with business needs by managing and prioritizing spending based on demand, avoiding unnecessary costs.

7. Implement Robotic Process Automation (RPA): Use RPA to automate repetitive tasks, reduce labor costs, and free up resources for higher-value work.

8. Evaluate IT Asset Management Practices: Regularly review hardware and software usage to ensure assets are fully utilized and avoid unnecessary purchases.

9. Evaluate Digital Transformation Ideas: Explore digital transformation opportunities like automation and analytics that can reduce costs and improve efficiency.

10. Optimize the Workforce: Right-size the IT workforce and invest in upskilling or reskilling to align with current needs and reduce overstaffing.

Use Case

Next Level underwriting	Pricing and Risk	Claims	Operations	Infrastructure
STP Undewritting with human supervision	AI and ML for dynamic pricing modelling	Automated claims processing with image recognintion	Outsourcing	Corporate and tax structure optimization
Fraud detection using AI	Predictive analytics	AI and ML for fraud detection	RPA for repetitive tasks	Legacy systems restructuring
Control frameworks using automation	Cloud-based solutions	Cloud-based claims management	Virtual workforce	Property management
Real time data	IoT and Sensor	RPA for claims workflows	Digital self-service portals	Digital transformation
Satellite imagery	Microsegmentation	Digitization of claims data	Third-party spend analysis	Cloud migration
	Telematics	Instant payouts with specified triggers	Internal AI bot for workforce	

Source: NTT DATA

NTT DATA Approach

Cost Optimization Strategies

Business Process Optimization and Automation

Many companies face challenges in improving their scalability, particularly when relying on internal resources. Achieving optimal scalability can be difficult without the right support and innovative strategies.

At NTT DATA, we understand these challenges and can help companies overcome them. Our expertise allows us to create flexible and effective scalability solutions tailored to your needs. With our expertise and resources, we can help your organization optimize processes and unlock new potential.

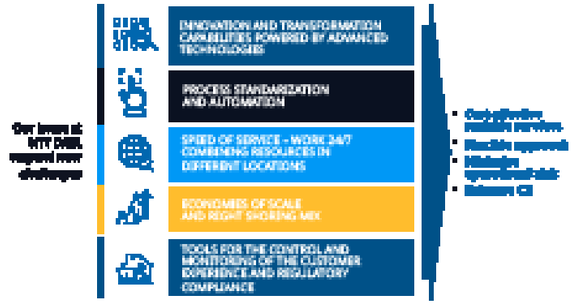
Our BPO capabilities are supported by +48k employees providing global outsourcing services, operating from 25 countries, and 24x7 coverage.

NTT DATA's BPA initiative offers off-the-shelf, optimized and automated processes designed to enhance an organization's ability to thrive in today's competitive landscape and accelerate the pace of digitalization. By leveraging these solutions, businesses can streamline operations, improve efficiency, and adapt more swiftly to changing market demands, positioning themselves for sustained success in a rapidly evolving environment.

NTT DATA is the only provider designing an Insurance Ecosystem that can deliver end-to-end Value Chain Solutions. NTT DATA has its own cloud sandbox where 3rd party providers can hook their application to other insurance applications (both core and point applications) and use it for POC, MVP, and demo. NTT DATA has built an insurance value chain with Insurtechs integrating with core insurance platforms to help insurers optimize their business processes and metrics.

Capabilities and Value Proposition in Operations

Our operational approach combines services and solutions, striking the right balance between human interaction and technology:



We are proactively investing in the development of solutions to support Insurance BPO operations, leveraging our existing capabilities, creating new assets and building a partner ecosystem – including our clients.

NTT DATA proposes solutions aimed at addressing the challenges faced by insurers through a variable-based model.

Flexibility, scalability and efficiency:

NTT DATA can support insurers in creating flexibility and adaptability across their business lines. Our approach emphasizes three key areas: flexibility, scalability, and efficiency in service execution.

• Outsource a percentage of recurring activity to enhance the flexibility and scalability of the service in response to business or activity developments.

• Support for additional needs/capacities required for planned annual seasons, with the ability to scale up in response to unforeseen events.

• BPO-GENAI services provide an immediate response to customers when an unexpected event happens.

We recognize that activity levels can fluctuate beyond baseline expectations due to seasonal variations or unexpected demand spikes. To address this, we offer a range of service delivery scenarios tailored to your needs:

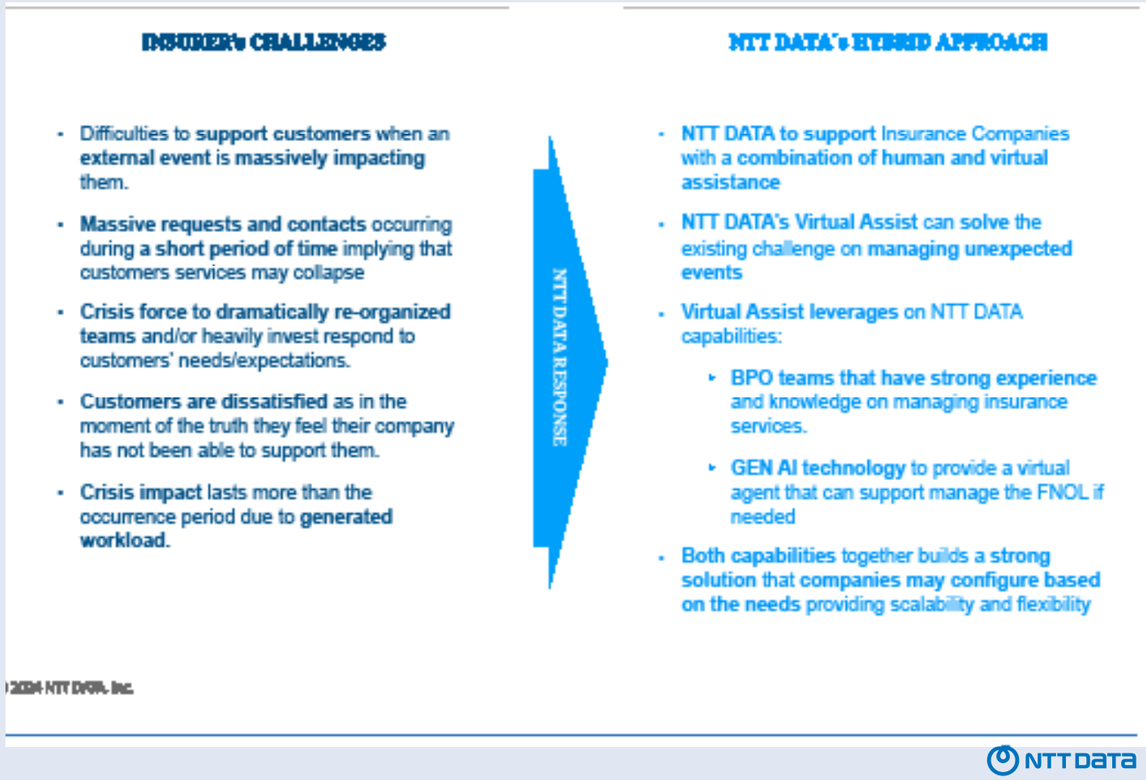
1. Full Local Support: 100% of services are delivered by local NTT DATA staff, ensuring high efficiency and responsiveness.

2. Mixed Team Model: A combination of over 50% local staff and less than 50% nearshore/offshore resources to balance quality and cost.

3. Nearshore/Offshore Focus: Less than 50% local staff with a greater reliance on nearshore/offshore teams, optimizing resources while maintaining service levels.

4. Hybrid Model with Generative AI: A mix of local, nearshore, and offshore agents, incorporating virtual agents to enhance efficiency and scalability.

Through these models, NTT DATA enables insurers to efficiently manage fluctuations in activity while driving adaptability in their operations.



Virtual Agent for Exceptional Situation Management:

1. Telephone service for the opening of claims consisting of:

• GENAI virtual agent manages the opening of the claim during the policyholder's call through natural and empathetic language.

• Automatic collection of necessary information for claim opening, along with notifying the insured of the next steps.

2. Delivery of Collected Information through the following 2 options:

• Generation of a file containing all the necessary information for initiating the claim.
• Automatic claim opening in the insurance company's systems via APIs.

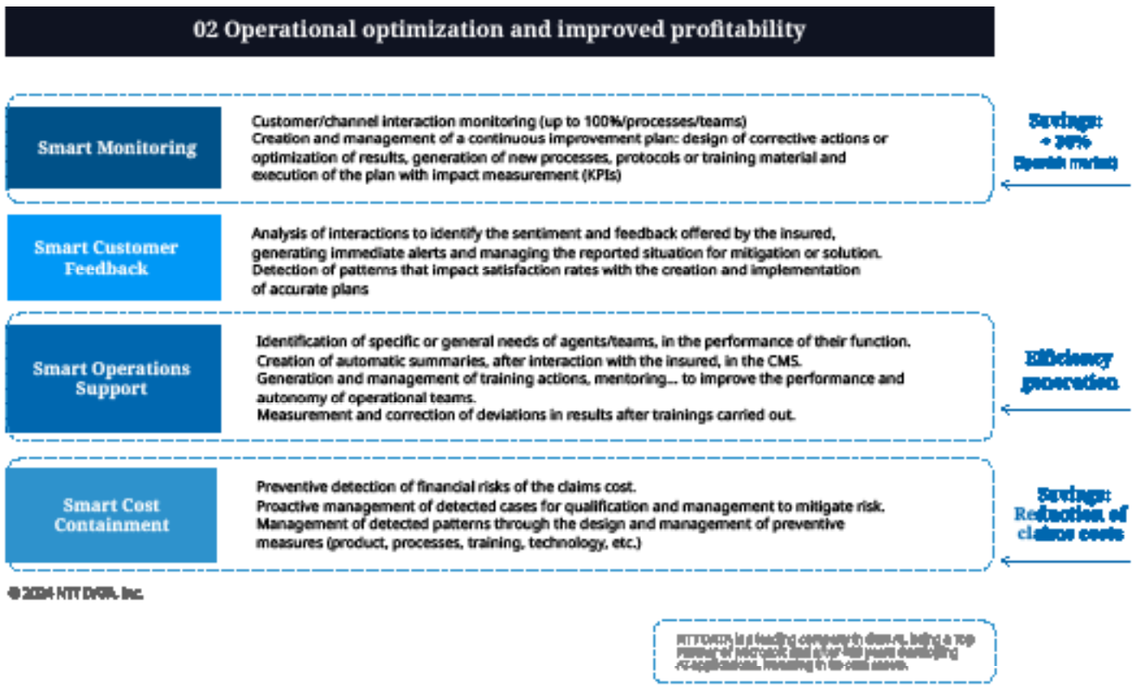
Operational optimization and Improved Profitability

• Operational optimization derived from automating processes with greater efficiency, quality and added value supported by NTT DATA Gen AI-based services.

• Interaction Quality Management (Customer Service).

• Proactive external cost containment services, based on GENAI, to control and reduce external costs: leakage, network control, fraud, billing management.

GenAI capabilities enable the delivery of specialized services in critical areas of insurance operations



A service for monitoring and managing cases of fraud caused by incorrect billing by the provider:

• NTT DATA manages and offers a comprehensive service consisting of:

- Managed Alerts:
  - _ No incident.
    With an impact.
- Incident Alerts:
  - _ Contact the supplier for the review and resolution of the incident.
    Escalation of special issues to L2.
    Analysis of trends by the supplier for reporting to the Supplier's area.
  - _ Reporting:
  - _ Managed claim cost.
    Reduced loss cost.
- Analysis of root causes and proposal of corrective or mitigating actions.

BPO services for insurance companies, acting as a partner to vary and improve costs, provide scalability and business continuity

These services can be delivered on our own platform or on the client's platform by leveraging our digital efficiency tools

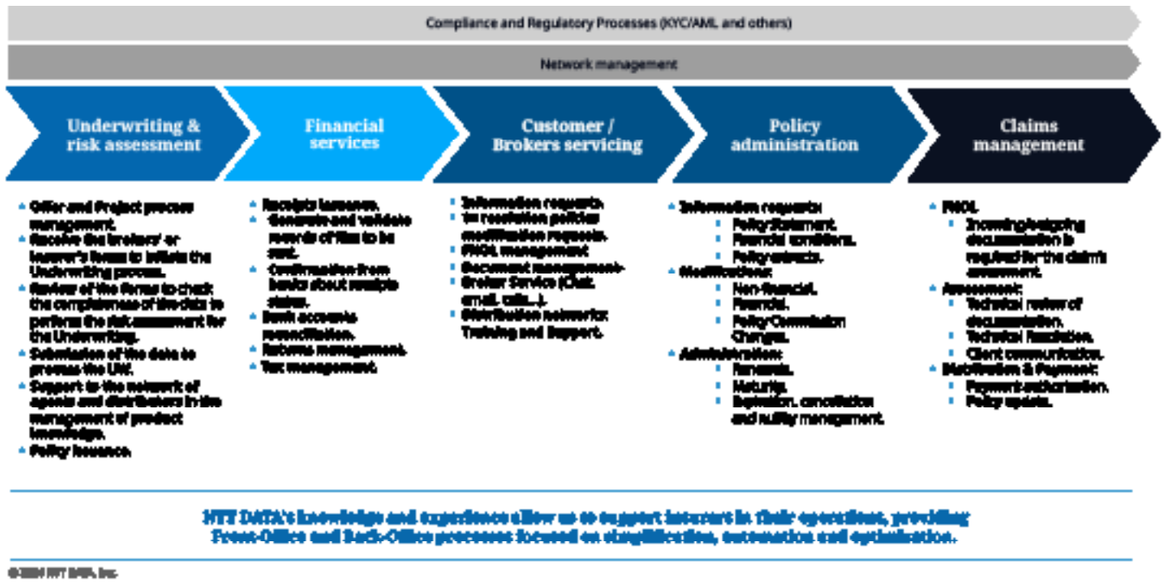
© 2024 NTT DATA, Inc.

NTT DATA

Value Chain Disruption

NTT DATA has extensive experience in managing the operations of all lines of insurance along the entire value chain.

NTT DATA's capabilities enable insurers to optimize both front-office (customer and broker interactions) and back-office (financial, policy, and claims administration) processes. This approach focuses on simplification, automation, and optimization across the entire insurance value chain, enhancing efficiency, accuracy, and customer satisfaction.



© [illegible] NTT DATA, Inc.

NTT DATA has a deep understanding of the underwriting process across all lines of insurance, assisting insurers with complex processes, including commercial and group life products.

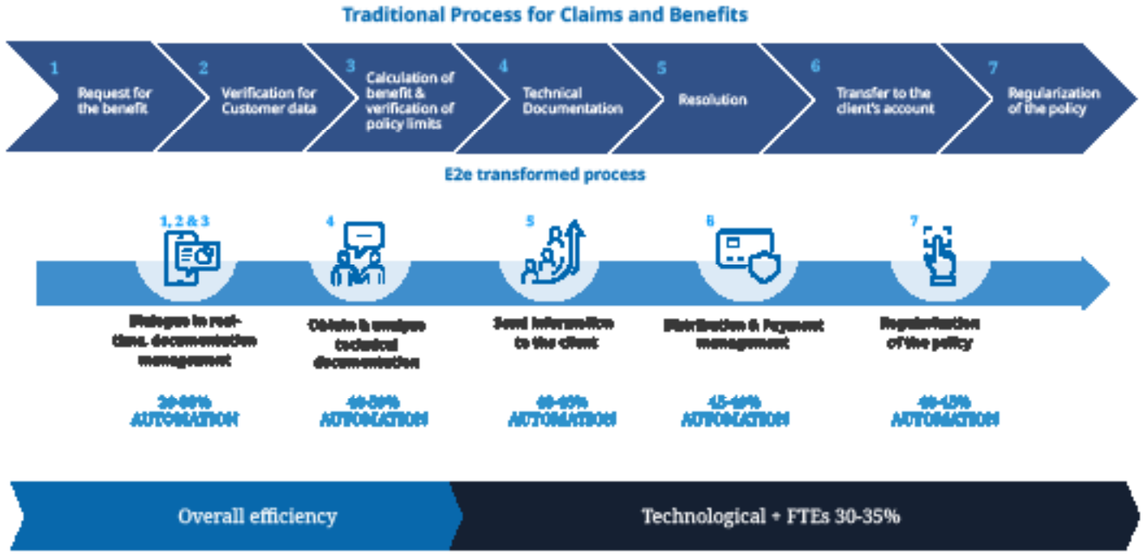
NTT DATA optimizes underwriting, especially for complex products like commercial and group life insurance, by improving workflows, using AI for document management, and saving 30% in handling time.

They streamline onboarding with data checks and compliance, and support agents with knowledge tools, achieving 70% savings in query handling time and 85% accuracy on first responses. This approach enhances efficiency and accuracy across the underwriting process.

© [illegible] NTT DATA, Inc.

Life Insurance Automation Savings Example for Claims & Benefits

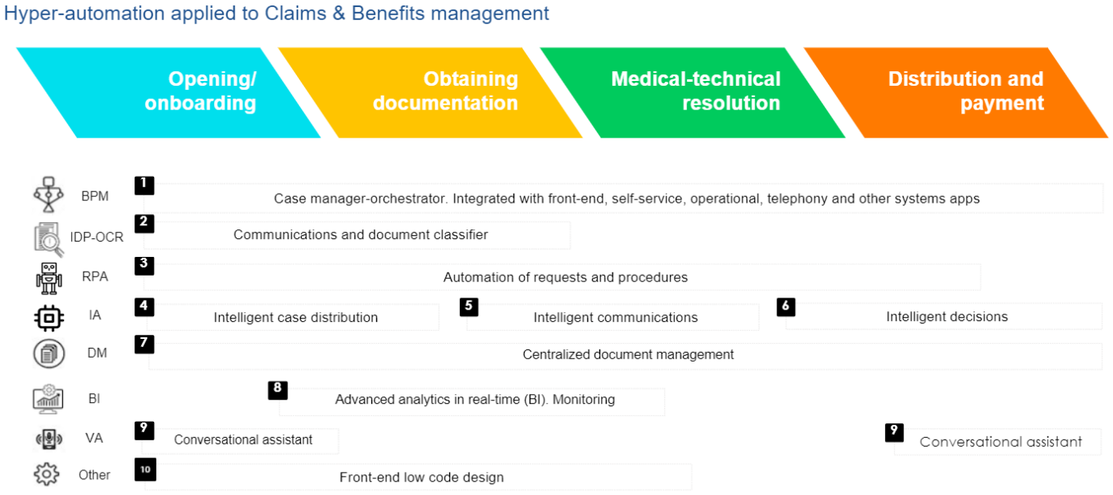
The image below shows how automation transforms the traditional claims process, achieving 30-35% overall efficiency by reducing manual steps across key stages. Automation enables faster data verification, documentation management, payment distribution, and policy finalization, significantly speeding up claims resolution and improving the customer experience.



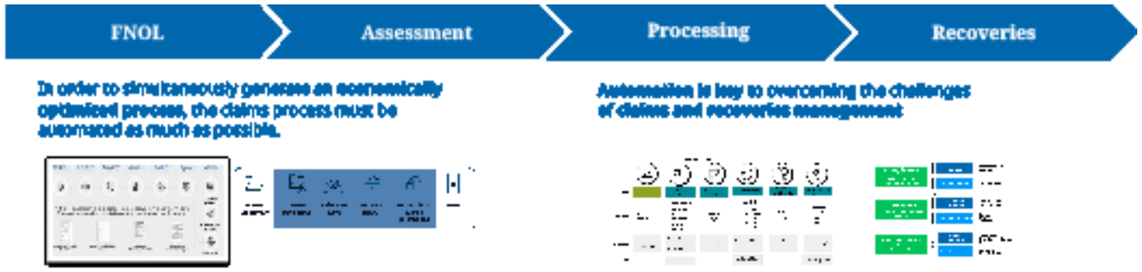
Source: NTT DATA

Intelligent automation technologies are essential to automation, enhancing the benefits of a customer-centric management approach.

The image below illustrates the application of hyper-automation in Claims & Benefits Management processes within insurance, spanning four key phases: Opening/Onboarding, Obtaining Documentation, Medical-Technical Resolution, and Distribution and Payment.

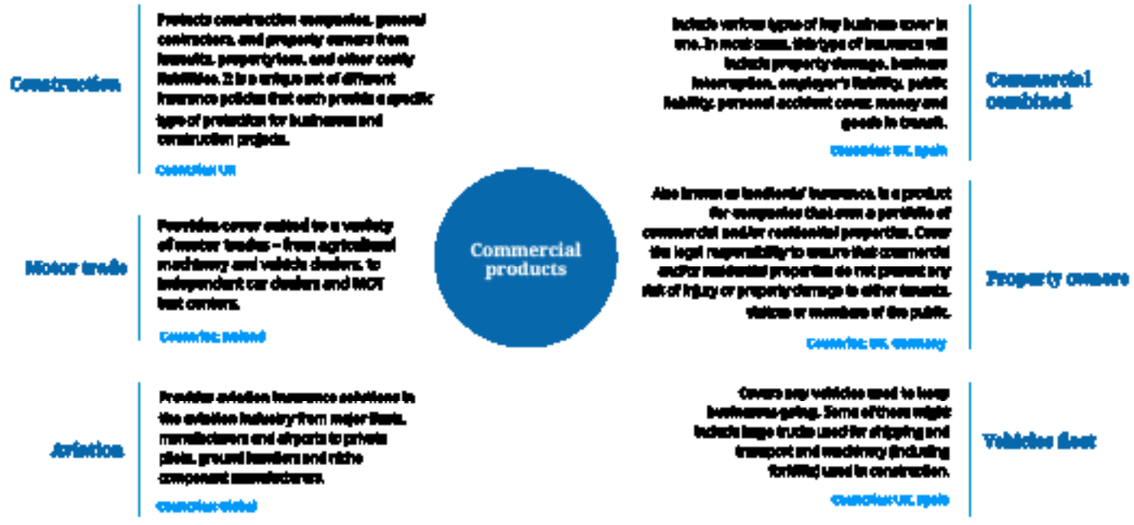


At NTT DATA, we have focused on the industrialization of end-to-end processes, taking advantage of robotization and the use of cognitive engines to improve response time and claims management costs.



Our Operational Services for Commercial Lines

At NTT DATA, we manage all these products and services mentioned below in processes such as the evaluation of information related to risk assessment before underwriting and claims management.

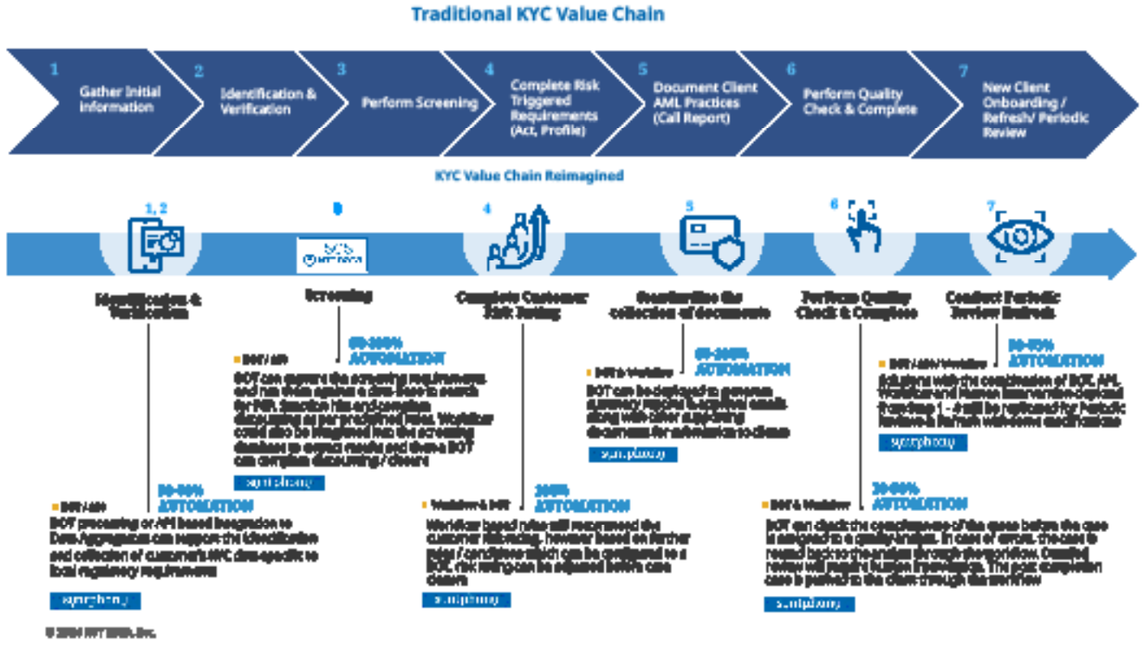


NTT DATA is a proven and trusted partner in the Financial Crime arena, providing cost-effective, future-proof and sustainable services.

Compliance Knowledge	Specialty market knowledge	Scalability	Future proof	Operational & IT security standards
Strong KYC/CDD and sanctions processes & platform knowledge. Mature BPO & Insurance practices with proven track record delivering operational & IT services.	Seasoned, specialty insurance line experts with compliance and commercial insurance products knowledge. Experience with proprietary and third-party platforms.	Scalable platform and IT & Operational delivery organization with local, nearshore and offshore capabilities. Strong partner ecosystem.	Leader in applying best-of-breed technologies with focus on digital capabilities and automation. Growing Compliance Practice, creating the conditions for sustainability & continuous innovation.	Operational and IT controls built around global standards. Comprehensive risk management framework. Continuous innovation and investments to evolve security standards and practices.

FINANCIAL CRIME IT ECOSYSTEM

Our technological and innovative DNA, combined with our knowledge and expertise, allows insurers to optimize and increase efficiency in the overall process.

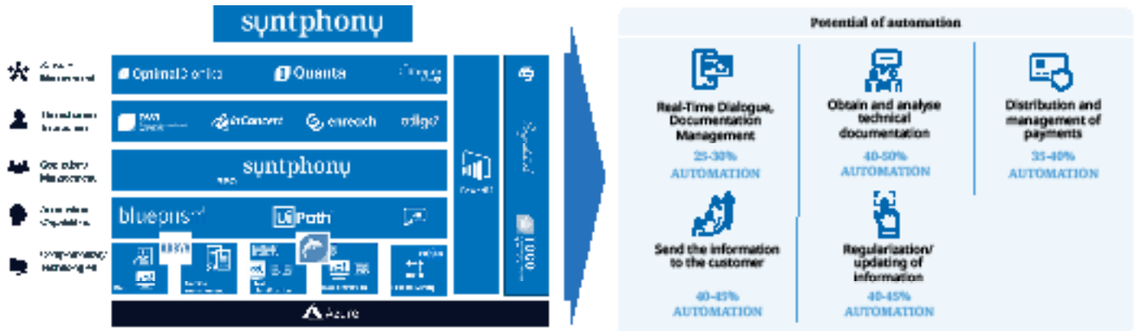


NTT DATA

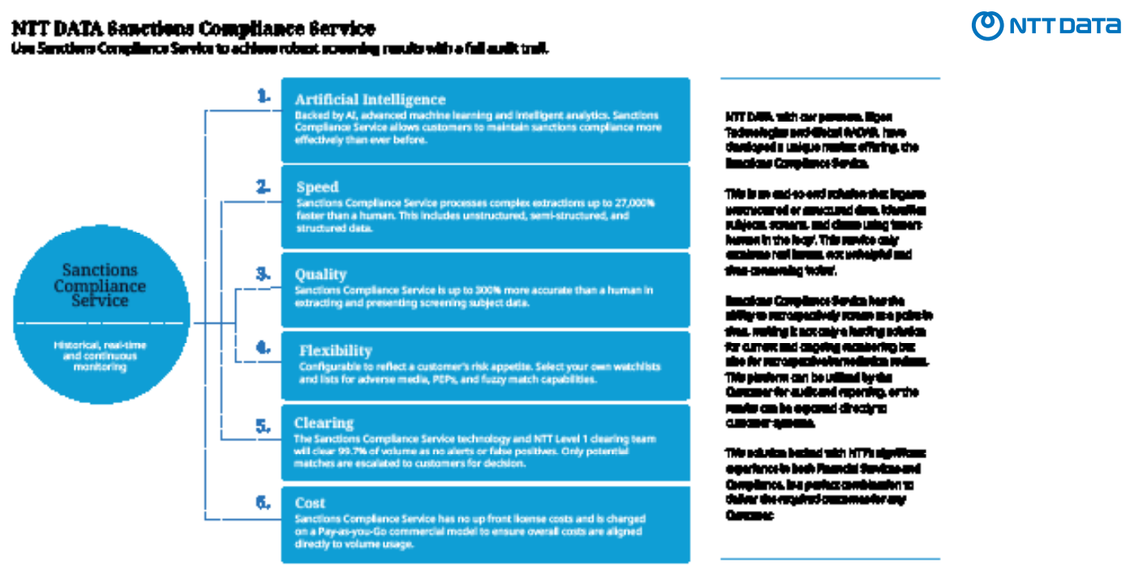
NTT DATA Assets

Syntphony and Sanctions Screening Platforms (SCS)

We transform our client's operations by leveraging on our intelligent automation platform and the specialized vertical solution for Financial Crime.

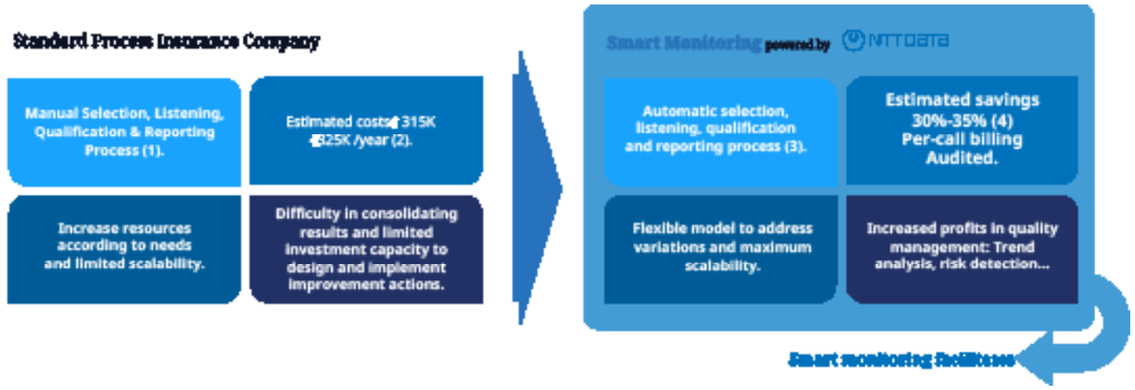


We can also use our customers' tools to maximize all possibilities of efficiency



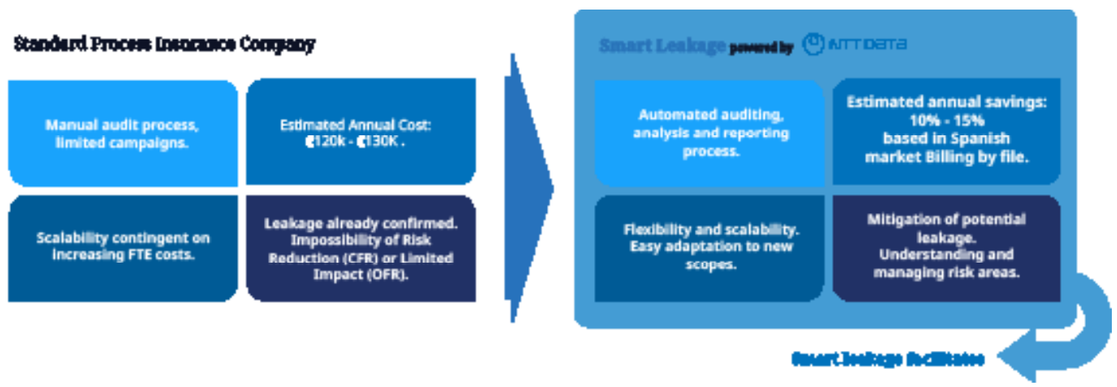
Call Quality Management: Smart Monitoring

NTT DATA's GenAI capabilities enable innovation in quality management by reducing costs while increasing service impact.



Call Quality Management: Smart Leakage

NTT DATA's services enable leakage prevention through greater control penetration, early detection, and acceleration of actions.



Hyper Automation Platform

It is a framework that includes a set of assets for the automation of a wide variety of activities: Management, Development, Testing, Support, Operation, etc, that accelerates the modernization of a core system.

Code Generation

We have two types of tools for development from software models and development from rules

Dedalow iwokone

Migrations

Source code analysis to identify patterns

rosetta

Coding

Platform that combines Azure OpenAI and proprietary features for software development and modernization of outdated systems

Processes

Low-code platform combined with BPMN flows. It has 4,000+ connectors and pre-designed flows with which to build applications and bots to automate all kinds of technical, management and business processes.

deptapps

Managed Services

Spärck — Ticket Automation Using AI

radia — Automated solution to analyze service activity

Development Assistant

Smart Development Assistant - Get suggestions from an AI trained on best practices and code from your own project.

diana

Generation testing

Dedalow — Dedalow Testing generates e2e test code in web and mobile apps.

ceres shutter — Functional test documentation and evidence managemen

vesta xpi — Unit Test Generation

Front-end design

Visually design your requirements without coding. Get your Front-end from a design system from Figma or using your client's own components.

vortex

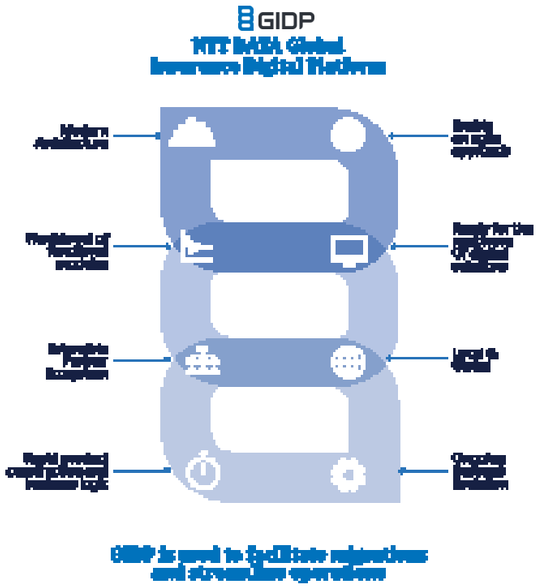
Integrated Testing

TOK (Time-Out Killer) is a time-optimizing tool for development teams working with distributed environments

tok

Source: NTT DATA

The GIDP Framework and Ecosystem Allow us to Quickly Optimize Operations and New Business



WHY

NTT DATA's GIDP helps insurers to innovate and achieve a fast core modernization, facilitating the best-in-class customer experience.

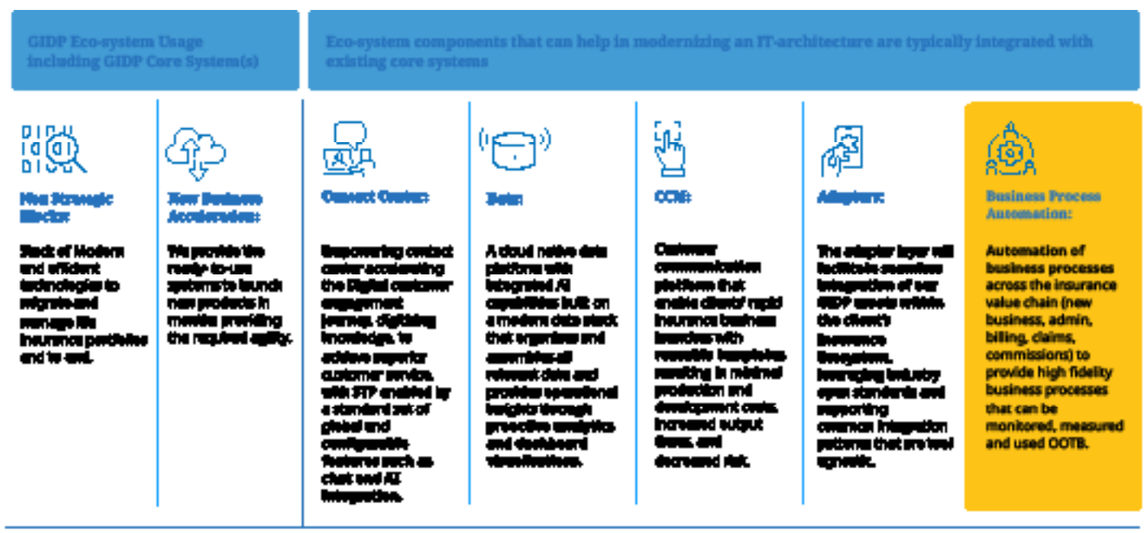
HOW

GIDP functional architecture integrates mature, proven solutions and accelerators, giving access to leading technology with lesser implementation risk and higher future-proofness.

WHAT

GIDP is a modular and extensible framework with a set of interchangeable functional modules. It can be offered in the context of NTT DATA BPO services but also 'standalone'.

Automation is part of the GIDP ecosystem
The image below outlines key components of the GIDP ecosystem that modernize IT architecture in insurance through automation. Contact center technology improves customer engagement with digitization and AI integration. A cloud-native data platform provides real-time insights with AI-powered analytics. Customer communication management (CCM) enables rapid product launches using reusable templates, while adapters integrate GIDP assets seamlessly into insurers' systems. Business process automation streamlines workflows across the insurance value chain, enhancing efficiency in areas like claims, billing, and administration.



Overview of the Global Insurance Digital Platform (GIDP) and its integration with Generative AI use cases.

The GIDP consists of four key components:

1. Smart Contact Center: Enhances customer support and engagement.
2. Smart Data Layer: Organizes and processes data for advanced insights.
3. Smart Customer Communications: Streamlines client interactions.
4. Smart Process Automation: Automates workflows for increased efficiency.

The image below illustrates various use cases for Generative AI for GIDP/BPaaS (Business Process as a Service):

Unlock the future of your business with UniKix mainframe modernization solutions and save up to 70% in operating costs.

Experience unparalleled flexibility, scalability and cost-efficiency while preserving your company's existing business logic and user interface. With over 30 years of continuous innovation, UniKix is your go-to software suite that offers a seamless, low-risk path to migrate your business-critical applications to highly virtualized and modern cloud-based platforms.

70% Savings in operating costs

25% Reduction in operational support costs

80% Reduction in manual deployment activity

10

Benefits:

- Lowers annual IT operating costs significantly.
- Reduces migration risk, time and complexity.
- Simplifies IT environments to accommodate growing workloads and new demands
- Provides a native, mainframe-compatible processing environment on open systems
- Delivers a proven platform for evolving technologies such as cloud computing, mobility and virtualization

Renew valuable legacy assets
Our UniKix Mainframe Re-hosting Software Suite moves multiple application languages and utilities to industry-standard systems. Doing so preserves valuable business logic and provides the immediate advantages of reuse. The software supports distributed COBOL platforms, including NTT DATA Enterprise COBOL and Micro Focus COBOL, as well as C, C#, Natural and Java applications. It uses XAcompliant architecture and supports mainframe VSAM file types and popular relational databases such as IBM DB2 LUW, Microsoft SQL Server, Oracle database and Sybase to enable the seamless migration of legacy assets.

Case Studies

Solution to the Peaks in Demand for Customer Service: Virtual Assistance

Insurers aim to achieve the flexibility and scalability needed to accommodate unforeseen changes in business volume and/or activity, minimizing financial impact and policyholder dissatisfaction while maximizing the value of their human talent.

CLIENT NEEDS

• Optimize operating costs with a direct impact on bottom-line improvement.

• Minimize operational risks and ensure the quality agreed with insurers' customers.

• Minimize the investments required to achieve profitability targets.

OUR SOLUTION

• Virtual agent that attends the FNOL.

• Provides emotional support to the insured.

• Orchestrate the distribution of the case to the areas involved.

RESULTS / BENEFITS

• Immediate attention to insured persons without waiting.

• Generating flexibility according to the Insurer's needs.

• Scalability of cost-effective crisis support.

• Dedication of the management team to claims processing.

• Increased member satisfaction when receiving quality service in an emergency.

Simplification and Automation to Remain Competitive in Insurance

Integration of the development and implementation of new platforms for the integrated management of life insurance, policies, and claims.

CLIENT NEEDS

• Due to the implementation of the insurer's growth, competitiveness, and restructuring strategy (based on the merger and acquisition of insurance companies), it was necessary to implement a back-office solution that would meet its needs. It had to be unique and integrated to manage life insurance policies in the contact center. It should also help improve the company's operational efficiency and effectiveness.

OUR SOLUTION

• In the first phase, NTT DATA Portugal conducted a comprehensive assessment of the insurer's processes and then undertook a redesign to focus on two pillars: simplification and automation of procedures.

• In the second phase, NTT DATA Portugal designed and developed a back-office solution based on OutSystems. It also used an agile methodology for the contact center operators to manage their activity.

RESULTS / BENEFITS

• After 9 months, the insurer launched the Customer Service Portal (CSP), which allows contact center operators to better manage their business. Through this tool, they can process queries in three of their main legacy systems, while the other systems process key operations.

• NTT DATA continues to expand the functionality of the CSP, as well as integrate new legacy systems into this portal.

Cognitive RPA's to Process Massive Reimbursements and Medical Claims

Productive Thinking was used to transform and automate current processes to improve agility and efficiency in the company.

CLIENT NEEDS

• A leading health insurer in Latin America needed support on digitalization and automation processes of its back-office activities.

• Most of the current transformational activities involve development of self-service solutions via apps to end customers and also internal transformation and automation activities to eliminate manual-intensive and paper-based processes.

OUR SOLUTION

• The insurer selected NTT DATA as the partner of choice to a first E2E BPO of the Reimbursement & Medical Bill Processing areas.

• NTT DATA became a solid partner of this leading health insurer in Latin America to accompany them in their new digitization and automation path.

RESULTS / BENEFITS

• NTT DATA's value proposition was the application of Productive Thinking in the transformation of the current state processes added by the implementation of cognitive RPA´s to process massive reimbursements and medical claims.

• This initiative has allowed a great reduction of the total cost for the insurer.

Reducing Claim Assessment Time from Days to Minutes with AI

Implementation of a low-code claims management system, underpinned by machine learning models, using AI to drive faster customer outcomes, reduced risk, and operational efficiency.

CLIENT NEEDS

• The main objective was to implement in time a system that would allow claims to be paid "without human intervention". The claims process offers an "obvious" use case for artificial intelligence, whereas a traditional, manual claims process can lead to unacceptable delays for customers. The aim was to reduce the time spent assessing a claim from days to minutes by using AI models to assist case managers.

OUR SOLUTION

• The insurer's goal was achieved by focusing on reducing effort, increasing accuracy, and improving the customer experience.

• Claims encompassed a life claims submission portal and a life claims workflow for internal staff users. For income protection, this was an end-to-end solution that allowed income protection benefits to be calculated based on AI data, while the customer is in a claim situation.

RESULTS / BENEFITS

• NTT DATA was selected to develop the customer-facing application, including branding, customer journey design, and web application. It worked with the available high-level requirements shared by the insurer for general claims and detailed what would be needed for life and intellectual property claims.

• This project was particularly challenging because it looked at the design and build of the entire infrastructure. In addition, there was pressure to conclude the separation process from the old company.

Increasing Efficiency with Simplified and Rationalized Templates

CLIENT NEEDS

• Life insurer with 1.5 million policies in run-off mode utilizes NTT DATA's TPA Services.

• Block includes Term, Whole Life, Universal Life, Variable Universal Life, Fixed Annuities, Indexed Annuities and Variable Annuities.

• Client shared over 2000 document templates covering state variations and 4 issuing companies (brands).

OUR SOLUTION

• Standard set of document templates by Line of Business:
_ Life & Annuities: today.
_ Health, Group/Worksite : future.

• State regulations and updates maintained by NTT DATA.

• Client specific configuration for:
_ Branding.
_ State filed language.
_ Fully integrated with LifeSys, Penn River and/or ODS.

RESULTS / BENEFITS

• NTT DATA was able to rationalize and consolidate the templates down to around 300, using the capabilities provided by SmartCOMM to:

_ Use standard static text across all brands.
_ Variable values from 3 source systems.
_ Populate the appropriate state specific language.
_ Provide outputs via print and web portal.

Conclusion

Future Trends and Innovations

Staying ahead in the fast-paced insurance industry involves Improving the operational efficiency along with embracing emerging technologies and innovative business models to maintain a competitive edge and enhance cost efficiency. Integrating latest technology promises secure and efficient claims processing, while Artificial Intelligence and Machine Learning are revolutionising task automation and decision-making processes. Predictive analytics is refining risk assessments and pricing, leading to more tailored and potentially cost-effective insurance products.

The industry is also witnessing a shift towards personalised products, meeting consumer demands while optimising operational costs. Addressing the impacts of climate change through advanced risk modelling is becoming crucial for reducing long-term claims expenses.

Furthermore, partnerships with Insurtech start-ups offer a pathway to integrating cutting-edge solutions without the overhead of in-house development. Meanwhile, investments in cybersecurity are essential to safeguard against both financial and reputational losses, and regulatory technology (RegTech) is emerging as a tool to automate compliance and minimise associated costs. Adapting to these developments allows insurers to streamline operations and better meet evolving customer expectations, ensuring sustained financial health amidst a changing industry landscape.

What's Nnext?

In the ever-evolving insurance industry, embracing technological innovations and adapting to new business models is crucial for sustainable growth and operational efficiency. The adoption of cloud, artificial intelligence, and predictive analytics is revolutionizing claims processing and risk assessment, enabling more personalized and cost-effective insurance offerings. This shift toward consumer-centric products, driven by technology, not only enhances customer satisfaction but also streamlines operations to reduce costs.

Furthermore, addressing sustainability through advanced risk modeling is becoming increasingly important, helping companies mitigate future claims costs and demonstrate market leadership. The future of insurance lies in integrating technology, consumer insights, and sustainability, setting the stage for enduring success in a dynamic market with a focus on customer centricity and an ever-changing market landscape.

By embracing these strategies, businesses can achieve immediate financial benefits while also ensuring long-term sustainability. This is a great opportunity to turn the challenge of cost optimization into a driver of strategic growth.

References

1. https://www.gartner.com/document-reader/document/4746931?ref=solrImgSearch&refval=438065327document/4746931?ref=solrImgSearch&refval=438065327
2. https://www.gartner.com/document-reader/document/3981566
3. https://blog.decideact.net/cost-optimization-strategy
4. https://agentsync.io/blog/industry-news/how-insurance-carriers-can-reduce-operating-costs
5. https://earnix.com/partners/technology/ntt-data/
6. https://www.gartner.com/document-reader/document/5662323
7. https://www.gartner.com/document-reader/document/5060731?ref=solrImgSearch&refval=438072041
8. https://www.eiopa.europa.eu/publications/eiopas-report-digitalisation-european-insurance-sector_en
9. https://www.gartner.com/document-reader/document/4945831?ref=solrImgSearch&refval=438073175
10. https://us.nttdata.com/en/services/applications/mainframe-modernization/unikix

Image Attribution:

Photo Page 1, 14, 18, 34, 62 and 64 by **hossein-nasr** on Unsplash

Rob Baughman
Head of Insurance at NTT DATA North America
Akshay Arora
Senior Vice President: Life, Annuities & Retirement, North America
Amitabh Bisaria
Vice President BPO, North America
Andre Burke
Senior Director, Analyst Relations & GTM, North America
Nora Machata
Mergers, Acquisitions and Divestitures Consulting for Insurance at NTT DATA North America
Prashanth Kulkarni
Strategic Advisor and Enterprise Solutions (Sr. Director) at NTT DATA North America
Proneet Sharma
Industry President & Business Leader at NTT DATA, Inc. North America

Alex Lu
CEO at NTT Ltd. China and Hong Kong Region
Jaslin Ng
Head of FSI NTT DATA Singapore
Junji Maeki
Sr. Director Sales at NTT DATA Japan
King Lo
Head of GTM, Go-To-Market | Sales Management, Hongkong
Koji Aiura
Head of Managed Services Organization Division at NTT DATA Global Services
Krishnappan Ramanathan
Managing Director at NTT DATA Singapore
Lionel Gu
Head of Sales, China
Naoshi Yoshida
President & CEO in NTTD Inc's group company, Japan
Nick Teo
Vice President, NTT Ltd., Singapore
Rajarshi Raj
Director, Insurance Consulting: Senior IT Insurance Leader INDIA, APAC

James Powell Fernandez
Digital Strategy & Advisory Executive Manager Europe & Latam
Juan José Castro
Insurance BPS Director at NTT DATA Europe & Latam

NTT DATA – a part of NTT Group – is a trusted global innovator of IT and business services headquartered in Tokyo. We help clients transform through consulting, industry solutions, business process services, IT modernization, and managed services. NTT DATA enables clients, as well as society, to move confidently into the digital future. We are committed to our client's long-term success and combine global reach with local client attention to serve them in over 50 countries. Visit us at insurance.nttdata.com.