

Futurewerk

UNLOCKING INSURANCE EFFICIENCY

Modernise with Workflow Automation - Without Replacing Legacy Systems

A practical approach to cut costs and
accelerate efficiency

White Paper



Introduction

The insurance industry is undergoing pressure to improve efficiency, reduce costs, and enhance customer experience—yet many insurers remain trapped in manual workflows that slow down underwriting, claims, and billing processes.

Lengthy turnaround times not only limit the volume of quotes a carrier can handle but also lead to delays in claims resolution and customer dissatisfaction.

While policy administration platforms, AI, and automation offer transformative potential, many insurers struggle to achieve meaningful improvements without major cost and disruption.

Among the most effective modernisation strategies, workflow automation platforms have emerged as a practical and scalable solution.

By enabling insurers to automate decision-making, streamline operations, and embed AI into core workflows, these platforms offer a middle ground between full system replacement and fragmented, manual workarounds.

Workflow automation bridges the gap between legacy systems and AI-driven insurance.

This paper explores how underwriting workbenches built on workflow automation platforms:

- differ from other modernisation options
- their role in AI-driven transformation
- key lessons from a real-world implementation that demonstrate success factors, challenges, and best practices.

A close-up photograph of two hands, one from the left and one from the right, positioned to form a heart shape. The hands are silhouetted against a bright, warm sunset or sunrise background, with the sun low on the horizon. The lighting is soft and golden, creating a romantic and hopeful atmosphere. The hands are the central focus, with the fingers of each hand touching to complete the heart's outline.

Challenges in Modernising Insurance Systems



Challenges in Modernising Insurance Systems

Modernising IT landscapes is a priority for insurers, but the process is often delayed and made more costly by several persistent challenges.

1

Adapting business requirements to legacy systems

As business users grow accustomed to intuitive, high-performance digital applications, their expectations for faster, seamless experiences have risen.

Insurers now compete on speed of quoting, underwriting, and claims processing—areas where legacy systems struggle.

These older systems were designed for transaction processing and data storage, not agile workflows and customer-centric experiences.

They lack native integration capabilities, struggle to handle new data formats, and require custom-built APIs for even minor enhancements.

Over time, this leads to greater complexity, slower releases, and rising technical debt—hindering insurers' ability to keep pace with market demands.



Challenges in Modernising Insurance Systems

2

Fragmented systems and data silos

Customers expect a seamless, unified experience across all insurance products.

However, insurers often operate a patchwork of systems across business lines—each with its own UI, APIs, and workflows.

These systems are typically connected only for billing or reporting, rather than supporting an integrated end-to-end experience.

As a result, data remains siloed, processes remain disconnected, and integration efforts become costly and complex—making true digital transformation difficult to achieve.



Challenges in Modernising Insurance Systems

3

Limited process flexibility and automation

To remain competitive, insurers need adaptive, automated workflows that can evolve with market shifts, regulatory changes, and business needs.

However, most legacy systems—and even newer insurance platforms—come with rigid, predefined workflows that are difficult to modify.

This lack of flexibility hinders process automation, forcing insurers to rely on manual workarounds.

In this context, workflow platforms that provide agile, configurable automation outside of core systems present an attractive modernisation alternative.

The Role of Workflow Platforms

A workflow-based insurance workbench addresses the challenges without the cost and disruption of full system replacements.

By integrating disparate systems, automating key processes, and enabling AI-driven decision-making, workflow platforms provide a cost-effective, scalable path to modernisation.





What is a Workflow-Based Insurance Workbench?



A workflow workbench is an automation solution designed to modernise insurance processes by integrating multiple legacy systems into a unified, intelligent platform. Sitting above existing infrastructure, it acts as a process orchestration layer, enabling insurers to define, automate, and streamline business workflows without requiring full system replacements. At its core, a workflow platform typically includes the following key elements:

Modern user interface (UI) and low-code development

A flexible, customisable UI enhances user experience and often serves as the most visible driver of modernisation projects.

Leading workflow platforms incorporate low-code development capabilities, allowing insurers to build and modify functionalities using drag-and-drop configurations—reducing reliance on complex coding.

Integration layer

Smart integration connects disparate legacy systems and external data sources, ensuring that underwriting, claims, and policy servicing teams have real-time access to critical data.

The best workflow platforms offer pre-built APIs and connectors, simplifying integration and minimising IT overhead.

Process automation

The core function of any workflow platform is to automate decision-making and orchestrate workflows.

By enabling straight-through processing, workflow automation reduces manual effort, accelerates approvals, and minimises errors—ultimately improving operational efficiency.

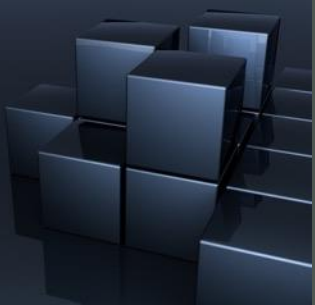
AI and analytics capabilities

Many modern workflow platforms embed AI-powered functionalities, such as OCR (Optical Character Recognition), document text extraction, and predictive analytics.

While AI modules can be integrated externally, leading platforms now include built-in machine learning capabilities, making AI a seamless part of underwriting and claims workflows.



Approaches to Modernisation



Insurers have four primary options when modernising their insurance system landscape. Each comes with its own trade-offs in terms of cost, complexity, and long-term scalability.

Approach	Description	Challenges/ Cons	Benefits/ Pros
Workflow platform implementation	Deploying a workflow platform to automate and integrate insurance processes.	Higher upfront cost than RPA or point solutions.	Extends the life of legacy systems, improves process automation, enhances user experience, and enables AI adoption.
Full system upgrade	Replacing a legacy system with a modern insurance platform.	High costs, long implementation timelines, and business disruption.	A fully integrated, future-ready system with modern capabilities.
Use-case-based implementation	Implementing targeted solutions for specific business needs.	Creates disconnected automation silos, requiring ongoing integration.	Lower initial cost, faster deployment for individual pain points.
Robotic process automation (RPA)	Automating specific tasks in underwriting, claims, and policy servicing.	Limited scope, does not address end-to-end process inefficiencies.	Low cost, quick to deploy, reduces manual workload in isolated areas.



Why Workflow Platforms Offer the Best Middle Ground

Workflow automation platforms provide a balanced approach between full-scale replacement and piecemeal automation. Their key advantages include:

Comprehensive automation

They enable insurers to streamline operations without replacing legacy systems.

Data integration

Workflow platforms provide a centralised integration layer, ensuring data from multiple systems and external sources is accessible for decision-making.

Enhanced customer and user experience

The modern UI and streamlined workflows improve efficiency and reduce turnaround times.

Scalability and AI readiness

Many platforms come with AI features, allowing insurers to integrate advanced analytics, machine learning, and automation tools easily.

Lower cost and faster deployment

While more expensive than RPA, workflow platforms are more affordable than a full system replacement and can be deployed within 3 to 18 months, depending on scope and complexity.

A woman with long, wavy brown hair, wearing a light blue button-down shirt, is looking down at a gold-colored tablet she is holding with both hands. She is in a modern office environment. In the background, there are blurred lights, possibly from a window or a decorative light fixture, and a desk with a lamp. The overall lighting is soft and professional.

Implementing a Workflow- Based Insurance Workbench



Implementing a Workflow-Based Insurance Workbench

While a workflow workbench is a lighter alternative to a full core system replacement, its successful implementation requires careful planning—from defining the right architecture to selecting the most suitable platform.

Key considerations include:

1 Assessing integration requirements

Workflow platforms offer powerful integration capabilities, but insurers must assess data types, exchange formats, and system compatibility early in the project.

Seamless integration with legacy policy, claims, and billing systems is essential for smooth automation and data flow.

2 Deciding which workflows and rules to migrate

A critical decision is whether underwriting rules should remain within legacy systems or be embedded in the workflow platform.

- Keeping rules in legacy systems may reduce migration complexity but limits automation potential.
- Transferring rules to the workflow platform allows for greater flexibility but requires careful evaluation, as not all rules should be moved—especially those that are highly complex or frequently modified.



Implementing a Workflow-Based Insurance Workbench

3 Balancing customisation vs. prebuilt features

While workflow platforms offer prebuilt automation capabilities, insurers must determine whether these features align with their specific business needs.

- Leveraging out-of-the-box features can accelerate deployment and reduce costs.

- Customisation may be necessary for unique underwriting, claims, or compliance processes—but should be approached carefully to avoid unnecessary complexity.

Choosing wisely, while keeping the organisation's capacity for change in mind, can improve adoption and streamline implementation.

4 Selecting the right platform

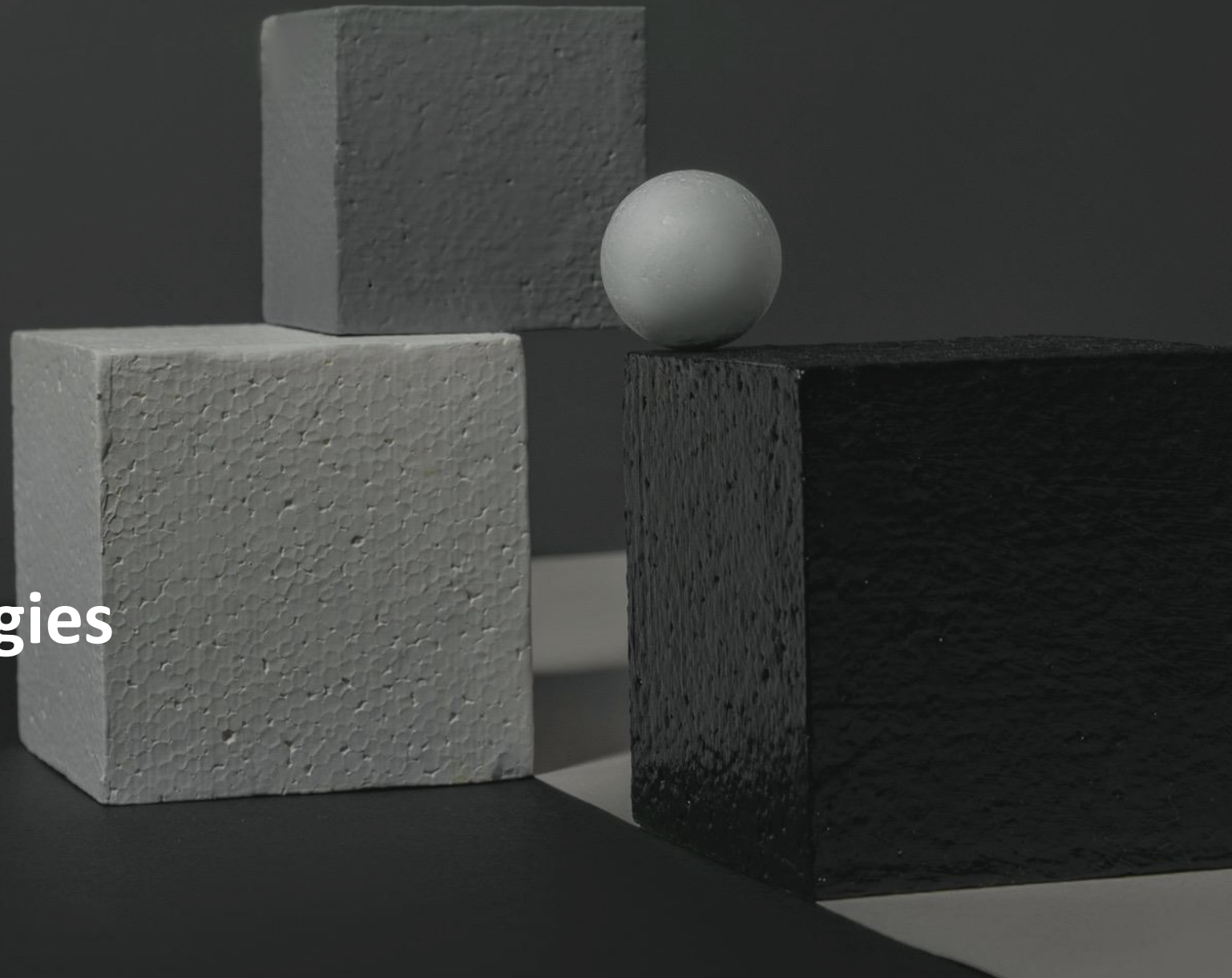
While most workflow platforms offer similar core functionalities, their historical development and client focus still influence their design.

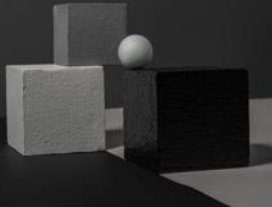
- Some platforms specialise in business process automation, enabling broad workflow orchestration.
- Others emphasise low-code development, allowing insurers to build applications with minimal coding effort.

- Some are designed for specific use cases, such as case management or claims handling.

Selecting the right platform requires aligning technology capabilities with an insurer's specific use cases, automation goals, and IT strategy.

Implementation Strategies for a Workflow-Based Insurance Workbench





Insurers typically adopt one of two strategies when deploying a workflow-based insurance workbench, each with distinct trade-offs:

The Big Bang approach

This strategy involves deploying the platform across all business units simultaneously. While it enables rapid transformation and ensures immediate system-wide consistency, it comes with significant risks, including:

- High stakeholder strain, as multiple teams must adapt to new workflows at once.
- Greater disruption, requiring extensive planning and training to avoid operational slowdowns.

- Substantial upfront investment, as resources must be allocated across the entire organisation simultaneously.

Despite its challenges, this approach may be suitable for smaller insurers or those undergoing a complete system overhaul with strong organisational readiness.

The phased approach (more common)

A more practical and widely used method, involves gradual implementation,

starting with a foundational platform setup and a Minimum Viable Product (MVP) within 2–3 months.

Expansion follows incrementally, rolling out across:

- Business lines (e.g., auto, specialty, life insurance).
- Processes (e.g., underwriting first, followed by claims and policy servicing).

Key advantages of this approach:

- Lower risk – Allows for incremental adoption, reducing the likelihood of major disruptions.

- Continuous improvement – Enables refinements based on lessons learned before full-scale deployment.
- Better stakeholder engagement – Teams can adapt gradually, leading to higher adoption and acceptance.

However, this approach comes with longer rollout times and increased project management complexity, requiring careful coordination across different teams and departments.

A CASE STUDY
**Successful Implementation
in Specialty Insurance**





Current State and Drivers

Current state

A leading global specialty insurer, underwriting millions of policies annually, implemented a workflow platform to streamline operations, reduce manual processing, and enhance customer experience.

While the company had already embarked on a digital transformation journey, many processes remained heavily manual, with agents relying on phone follow-ups to complete customer briefs.

The insurer operated in a heterogeneous system landscape, featuring a modern Guidewire implementation, yet still relying on multiple legacy systems and disconnected data sources.

Underwriters faced a cumbersome and inefficient user experience, limiting productivity and decision-making efficiency

Objectives of the workflow-based workbench implementation

The workflow automation initiative aimed to:

- Drastically reduce manual processing in submissions.
- Enhance data analytics capabilities to improve risk visibility.
- Automate complaints handling to improve customer experience and response times.

To achieve this, the insurer selected **Appian** as its workflow platform and partnered with a partner for implementation and system integration.



Key Functionalities Developed

While the platform provided broad automation and decision-making capabilities, three key functionalities were specifically developed:

1 AI-powered email data capture module

Utilised OCR and AI-driven triage tools to extract and analyse text from underwriting submission documents, reducing manual data entry.

2 Automated complaint management system

Implemented **with minimal customisation**, significantly improving response times and regulatory compliance.

3 Real-time analytics dashboards

Enabled portfolio-wide risk visibility, integrating traditional data repositories with new data sources for better decision-making on large loss notifications and risk assessment.

Additionally, the project involved **extensive integration with existing Guidewire policy administration systems and legacy platforms**.

Successful implementation required **not only detailed data mapping but also close collaboration between business stakeholders, internal IT teams, platform providers, and system integrators**.



Business Impact and Key Results

Impact

The implementation delivered immediate workflow efficiencies, with some processes achieving up to a 70% reduction in manual effort. However, two other critical success factors stood out:

- **Rapid Implementation and Controlled Costs** – The project was executed within a relatively short timeframe, ensuring minimal business disruption.
- **High User Adoption** – The visual, configurable nature of Appian accelerated user acceptance across underwriting teams.

Key benefits post implementation

- **Higher Efficiency** – Increased policy throughput by minimising manual interventions.
- **Enhanced Customer Experience** – Automated complaint handling reduced response times and boosted agent morale.
- **Stronger Analytics and Risk Insights** – Real-time dashboards enabled improved risk assessment and decision-making.

The Future of Workflow Platforms in Insurance

Workflow platforms like Appian and Pega are becoming essential modernisation tools for insurers. Their flexibility, seamless data integration, AI readiness, and cost-effectiveness make them an attractive alternative to full system replacements.

As insurers continue to embrace automation and AI, workflow platforms will play a pivotal role in:

- **Driving operational efficiency**
- **Enhancing customer experiences**
- **Enabling AI-powered underwriting, claims, and risk assessment**

Accelerating Innovation Through AI-Ready IT

We help enterprises unlock the full potential of technology.

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