

HEXAWARE

AI in Insurance Claims Processing for End-to-end Transformation

Insurance claims automation, process re-engineering, analytics, and centralized control for a US specialty insurer.

Case study



Client

| Client

Challenge

Solution

Benefits

Summary

Insurance claims transformation for a global specialty insurer

Our client is a US-based global specialty insurance provider. It offers a broad range of tailored insurance solutions across property and casualty, health, professional liability, management liability, and other niche commercial lines, and is known for its disciplined underwriting approach. Hexaware proposed to modernize the client’s workflow and drive operational excellence by leveraging AI and insurance claims automation.



Challenge

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| **Challenge**

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Legacy barriers in the insurance claims processing workflow

The client faced persistent bottlenecks across claims management and servicing. Challenges included:

- Limited visibility and risk across the insurance claims processing workflow because of legacy workflows and disconnected systems
- Slow, inconsistent claims handling damaged customer trust and made retention harder in a competitive market
- Limited strategic insight because of inconsistent data ingestion, poor data quality, collation, and reconciliation undermined analytics and reporting
- Manual intake, document handling, and re-keying limited straight-through processing



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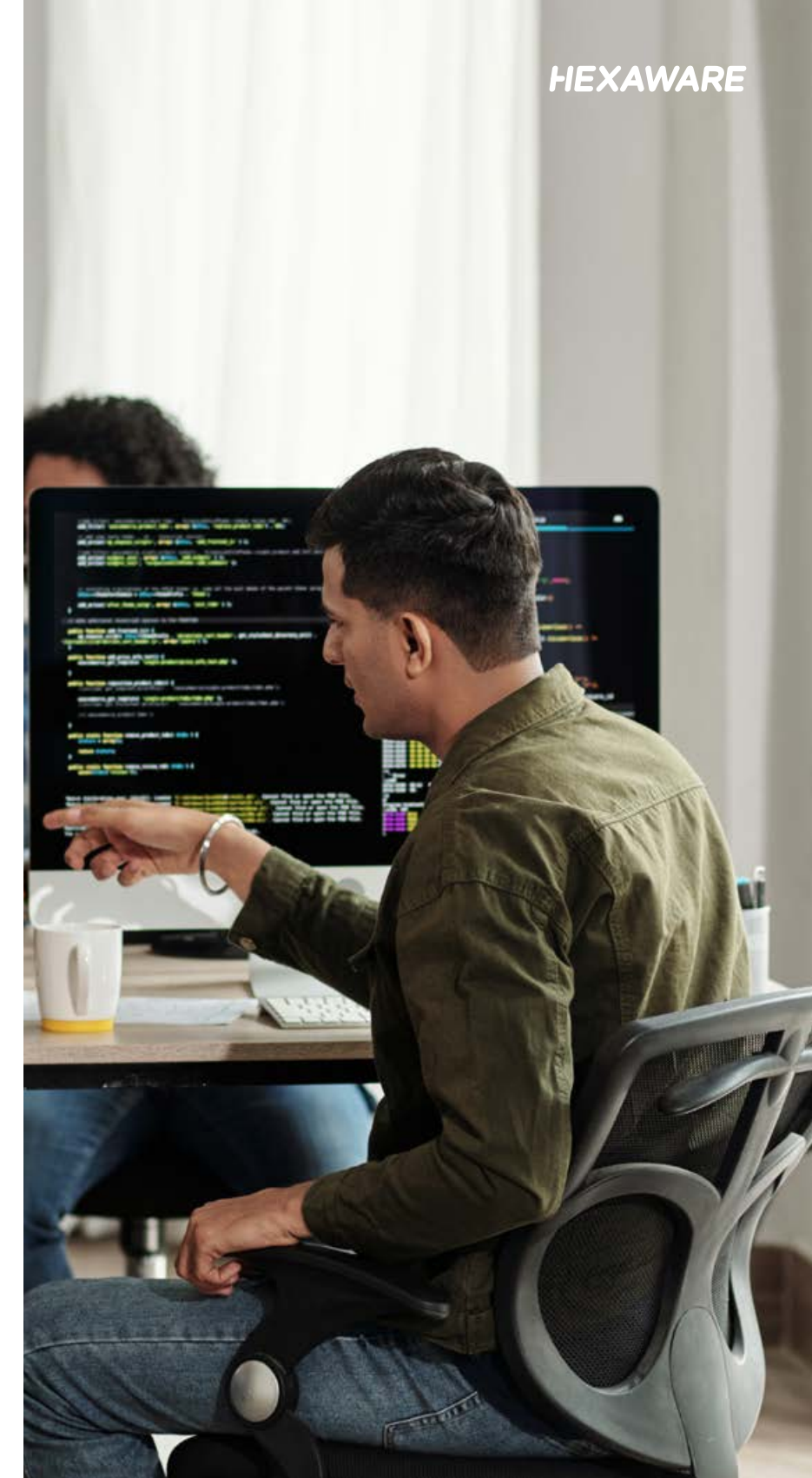
AI solutions for insurance claims management

Hexaware proposed an AI-enabled, end-to-end claims transformation that combines process re-engineering, automated claims management, analytics, and a centralized control layer:

- AI-enabled case management platform for automated case allocation, intelligent routing, work distribution, and full lifecycle visibility.
- Agentic AI (AI/ML-driven document classification and data extraction) to convert unstructured inputs into structured claims data, integrated with the document management system and metadata tagging.
- A unified orchestration layer that automates critical steps in the claims process, including updates, payments, and validation checks, and coordinates interactions across systems via APIs (with minimal, targeted RPA to avoid technical debt).
- Predictive models for claims prioritization, settlement prediction, risk scoring, and fraud detection.
- AI-driven customer interaction channels (IVR, voice bots, chatbots) and GenAI-powered agent assistance for faster query resolution and claims summarization.
- Centralized control panel and collaboration tool to streamline processes, monitor KPIs, and enable real-time analytics for decision support.

Here's how the solution was proposed to be implemented:

- SMEs and claims adjudicators would train and label initial datasets, validating edge cases to improve model accuracy.
- Process owners and business analysts would redesign workflows for automation and define escalation rules for exceptions.
- A human-in-the-loop approach would route uncertain or high-value claims to specialists, ensuring quality while maximizing STP.
- Continuous feedback loops (agent corrections, QA reviews) would help retrain models and reduce false positives/negatives over time.
- Change management, training, and a stabilization period would ensure agents adopt new tools and that operational KPIs improve sustainably.



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AI and insurance claims automation streamline processing workflows

By leveraging AI in insurance claims processing and insurance claims automation, Hexaware's solution offers faster, more consistent triage and settlement decisions with fewer rework cycles. It would also result in higher agent productivity and a better customer experience, because AI handles repetitive tasks, allowing humans to focus on judgment-intensive work.

Projected benefits:

- **30–40% reduction** in email management effort and improved case triaging.
- **50% faster** document processing via AI/ML extraction and metadata indexing (incremental efficiency realization per enhanced accuracy with the self-learning module).
- **35–40% decrease** in manual operational effort through workflow automation and STP for rule-based tasks.
- **50% improvement** in data quality by standardizing ingestion, validation, and reconciliation.
- **30–40% reduction** in fraudulent transactions through predictive fraud models and duplicate checks.
- **3× faster** customer query resolution via AI-enabled interaction and agent assistance.

Our solution also ensures responsible AI and governance practices through:

- Model transparency and explainability: Model cards, decision logs, and explainable outputs for high-risk decisions.
- Human oversight for critical decisions and clearly defined escalation thresholds.
- Data privacy and security controls: Data minimization, encryption in transit/at rest, role-based access, and audit trails.
- Operational governance: Versioning, testing, performance monitoring, and a risk register for AI models.



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End-to-end insurance claims transformation with AI

Hexaware addressed ongoing claims management issues for a US-based global specialty insurer by proposing an AI-driven solution integrating process re-engineering, automation, analytics, and centralized control.

We suggested an AI-based, modular architecture (comprising case management, AI/ML extraction, orchestration, predictive analytics, and conversational AI) to facilitate rapid value capture while minimizing technical debt. Our proposed solution emphasized pragmatic automation, with targeted RPA only where APIs were unavailable, and STP for straightforward rules – combining automation with human judgement where appropriate.

A phased flight plan (lift and shift > stabilization > process reengineering > analytics and enhancement) would reduce operational risk and ensure measurable ROI at each stage.

Moreover, this modular, API-first design could be easily adapted to other lines of business – e.g., underwriting, policy servicing, and billing.



Optimize Your Insurance Operations.

Unlock faster, smarter insurance claims management. Visit <https://hexaware.com/services/business-process-services/> to learn how our AI-enabled solutions deliver seamless, secure, and high-impact operations transformation.

About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>.

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