quantiphi

UNDERWRITING

MARKETING

SALES

DISTRIBUTION

PRODUCT

PRICING

CLAIMS

SERVICING

LOSS CONTROL

INSURANCE 2.0

Reinventing the Traditional Insurer

LOW TOUCH UNDERWRITING

Underwriting Challenges:

Submission Intake

Large volume of applications are stacked without any prioritization

Quality & Eligibility Check

Documents are in the form of **scanned images and are completely disorganized**

Manually looking for each document and **assessment of application completeness is a cumbersome and time consuming process**

Risk assessment

Events/reports to be manually sorted based on chronological order
Risk parameter fulfillment differs for each case and **requires multiple audits**

Onboarding - Quote:Bind:Issue

Manual data entry into disparate systems for proposal creation

Lack of insights into the performance of overall portfolio

Introduction:

Need for an underwriting transformation

The insurance industry is undergoing a tremendous transformation and underwriting, the heart and core of an insurance company, is no exception to it.

Underwriting has always been the focus for Insurers with its performance considered paramount to the financial performance. With new business opportunities arising from complex risks and market dynamics evolving at a rapid pace, it has become even more vital for insurers to adopt strategies focused on transforming the underwriting process.

Underwriting is a rare skill to master. It needs deep industry expertise combined with acumen to work with lots of data. While underwriters are expected to make near perfect risk evaluation decisions, it is often assumed that underwriters have complete and standardized information at their disposal and have plenty of time to make accurate assessments. In reality, underwriters are plagued with multiple challenges.

One of the key challenges faced by underwriters is that almost 80% of the data they receive is unstructured - data residing in the form of emails, PDFs, forms and images. It takes a long time and a significant amount of effort to go through large volumes of documents and extract meaningful insights.

It is estimated that most underwriters spend only half of their time processing core information and instead are burdened with mundane tasks such as validating and preparing submission data.

This becomes a burden for an underwriter, and also reduces the efficiency of an underwriting team, which leads to increased processing time and potentially weakened risk assessment.

On the other hand, customer expectations are changing rapidly. Insurers should understand that the digital customers of today compare experiences with not just among insurance companies but rather benchmark service standards provided by customer-centric organizations from other industries such as retail and banking. Customers expect a convenient, frictionless and quick service, and are ready to switch carriers if they feel their needs are not met.

However, if we look at the application life cycle of a traditional non-life insurer, customer waiting time consumes at least 95% of the insurance application process. While the scenario has improved over recent times, insurance is still lagging behind their banking and retail peers in terms of meeting customer expectations.

Needless to mention, a new wave of technology disruption is enabled through the rise of data, devices, and InsureTechs. InsureTech companies don't carry the burden of legacy systems and are addressing these pain points through innovative solutions.

The insurance sector must quickly adapt to this reality. Transforming the underwriting process not only improves efficiency but also impacts customer expectations positively, which is highly crucial to stay relevant in the industry.

Source :

1) BCG (customer waiting time consumes 95% application processing time) https://www.bcg.com/en-us/industries/insurance/customer-centricity-in-insurance.aspx

2) Accenture (underwriters spend only half of their time processing core information) (https://insuranceblog.accenture.com/3-insurance-underwriting-predictions-for-2019-and-beyond#_edn1)

Benefits from leveraging AI/ML solutions:

Reduction in manual effort required to process the documents by almost 85% leading to improved operational efficiency.

Application prioritization and automated processing for risk quotes lead to faster fulfillment, thereby improving the overall customer experience.

Ability to process both structured and unstructured data, thereby enabling insurers to be resilient to market changes.

Increased accuracy in risk identification and assessment leading to improved underwriting excellence and cost savings.

Embracing the power of Digital:

The key to transforming the underwriting process is to adopt a 'bottom-up' approach and evaluate the complete lifecycle by understanding the pain-points through an underwriter's lens.

Insurers should identify solutions to address these key pain-points and reimagine their existing processes to make their underwriting team more efficient and effective.

Digital technologies such as Big data, AI and ML provides disruptive solutions for insurers that will ease the burden on the underwriters and provide more bespoke information this not only saves effort but will also augment underwriter's capabilities to make more efficient decisions.

Adopting an AI-assisted underwriting lifecycle:

Quantiphi's offering includes a suite of AI integrated solutions, primarily driven through QDox, that provides underwriters the 'superpower' to process the high volume of applications swiftly and focus on critical tasks, thereby enabling them to make more informed decisions with better accuracy and efficiency than ever before. Integrating these solutions into the underwriting journey will provide insurers with a wide range of benefits.

Your new AI-assisted workflow: (1/2)

Submission Intake

Quality & Eligibility Check

QDOX
Automated processing through QDox

Upload Case documents

Underwriter uploads the case documents through a web portal or batch process

Provides input on entities to be highlighted/ bookmarked

Data extraction & Ingestion

Data such as form fields, checkboxes, signature/ handwriting presence, tables are extracted, transformed and loaded into a database

Document Categorization

Intelligent Classification of documents such as medical reports, credit reports, etc present in the application

Application Validation

AI augmented check to identify missing documents and data fields in individual documents

Incomplete applications are dealt with agents through a virtual chatbot assistant

Data Augmentation

Documents are converted to searchable PDFs

Entities are highlighted and bookmarked based on predefined user inputs

Events of interest are sorted based on the chronological order

Your new AI-assisted workflow: (2/2)

Quality & Eligibility Check

Risk Assessment

Onboarding - Quote:Bind:Issue

Detection of Anomalies

Extracted data is compared against different levels of fulfillment parameters and anomalies are highlighted

Risk Scoring

Applications are scored and prioritized through an ML based initial risk assessment

QDOX
Automated processing through QDox

Review Risk

Underwriter reviews application with the highest priority

Automated insights provided from customer's data

All low risk applications are routed through an automated underwriting workflow

Proposal creation

Recommendation engine provides suggestions on policy and coverage options

Underwriter reviews information and creates a quotation

For low risk applications, ML based quotations are created in real-time and forwarded to agent/customer

Bind & Issue

Accepted quotes are automatically bound, premium payments are scheduled and forwarded for policy issuance

AI driven solutions for low touch underwriting:

QDox:

QDox is a deep learning based, template-free solution that seamlessly automates the end-to-end document processing in underwriting. All that underwriters have to do is upload the documents and the information will be readily available in a digitally convenient format, be it structured or unstructured data along with curated insights.

Straight through processing:

The low-risk quotes are passed through an automated workflow that uses a combination of ML based algorithms and rules engine to provide a quotation in almost real-time. This process enables faster fulfillment for customers. For underwriters, this saves a lot of manual effort as they can spend their time and effort on assessing more complex risks.

Virtual assistant for underwriters:

An AI-powered virtual agent that can provide 24x7 assistance to underwriters by providing them with bespoke information throughout the lifecycle and also interact with agents and customers through human-like conversations in case of dealing with missing information or incomplete applications.

Computer vision for house and neighborhood assessment:

Using Computer Vision, underwriters can now uncover deeper insights required for risk assessment through images and videos submitted by the customers. For home insurers, a video of the customer's home can help them quickly detect items such as electronic devices, and other valuable items, in real time. Integration with external data such as GIS, GMaps, etc. can help them to do a quick risk assessment of the neighborhood

Recommendation Engine:

Recommendation engines use customized rules engine and ML-based algorithms - such as loss likelihood and claims litigation likelihood - to create a risk profile based on customer's history and external data including data from IOT devices , and suggests relevant policy and coverage changes, along with insights that will aid underwriters in their decision-making process

Underwriting impact dashboard:

Underwriters can visually see and evaluate the impact of their decisions on the overall financial performance of the portfolio, thereby enabling them to make an informed decision on the contract and support business targets.

Roadmap to adoption

Meeting your specific business needs

Quantiphi's approach to transforming your underwriting cycle starts by defining your underwriting journey and identifying the key challenges associated with your current process. From there, we help you visualize how AI/ML solutions can enhance the overall underwriting journey and improve operational efficiency and customer satisfaction. No two insurance companies are alike, and the processes vary based on the product offerings. This is why each journey is analyzed separately and then aligned with the AI-based solution that will achieve your overall business objectives.

From there, we work with you to implement and scale these assets across your organization. Our highly collaborative engagement journey ensures faster adoption and accelerated speed to market.

Show me the future of insurance

Customer demographics and expectations are changing. InsureTech can take advantage of companies gaining ground on traditional insurers by leveraging machine learning and intelligent solutions that meet those needs.
AI and ML can be game changers for your business and early adopters will come out on top. Connect with one of our insurance experts today for a private consultation on how you can shake up the industry.

Connect with an expert

How do I get going?

The four key stages

To fully reap the benefits of AI and ML, think of it as a journey rather than a point implementation. Our recommendation can be best summarized in a four-step journey:

STAGE 1: HACK IT

The ideation phase. Here, we help you select a solution with high feasibility and impact potential and develop a prototype.

STAGE 2: PROVE IT

The proof-of-concept phase. In this phase, we fully define the problem and set targets to prove it can be solved with AI.

STAGE 3: NAIL IT

The product-development phase. Here we ensure upstream and downstream processes are functioning and that you're seeing ROI.

STAGE 4: SCALE IT

Once we validate the AI solution in a sub-segment of your business, we help you expand the scope to encompass the full spectrum of opportunities across the enterprise.

Real world results: Case study

Business Objective:

The client is a leading start-up in the financial services industry and works with a huge repository of financial documents that need to be processed manually. While being prone to human negligence, the current process was also highly cumbersome and time-consuming. The client wanted to develop an solution that can eliminate manual effort and improve the overall process efficiency.

Impact:

Quantiphi built an AI integrated solution that enabled automated classification & extraction of content from scanned financial documents. The solution successfully digitized the processing of 7,500 pages per hour with a significant reduction in human effort and enabled a potential savings of 30 percent.

About Quantiphi

Quantiphi is an award-winning applied AI and big-data software and services company driven by the desire to solve transformational problems at the heart of business. Its unique approach combines deep industry experience, disciplined cloud and data-engineering practices and cutting-edge machine-learning research to achieve quantifiable business impact.

Solutions for the entire insurance value chain

We specialize in guiding insurance leaders toward the right AI and ML solutions, customizing their data-transformation journeys to their maturity and business needs. Our portfolio includes several differentiated solutions across the broader insurance value chain. Some of the recommended solutions are highlighted below.

- Recommendation Engine
- Predictive Analytics
- Time Series
- Natural Language Processing
- Reserve Forecasting
- Computer Vision
- Speech Recognition

Marketing, Sales & Distribution	Product, Pricing & Underwriting	Servicing, Loss Control & Claims
Marketing effectiveness models	Price elasticity	Fraud analytics
Sales forecasting	Smart operations - document processing	Auto damage estimation
Cross-selling/ Up-selling	Churn models	ChatBot-driven FNOL

Connect with an expert