The Facts

Underwriters are no longer just responsible for risk selection and pricing, they are now expected to:

- Support Sales function and increase new business
- Significantly decrease the loss ratio
- Increase retention rates of existing customer base

The information used by underwriters can vary widely. Also, underwriting actions are not always truly risk-based, but instead influenced by:
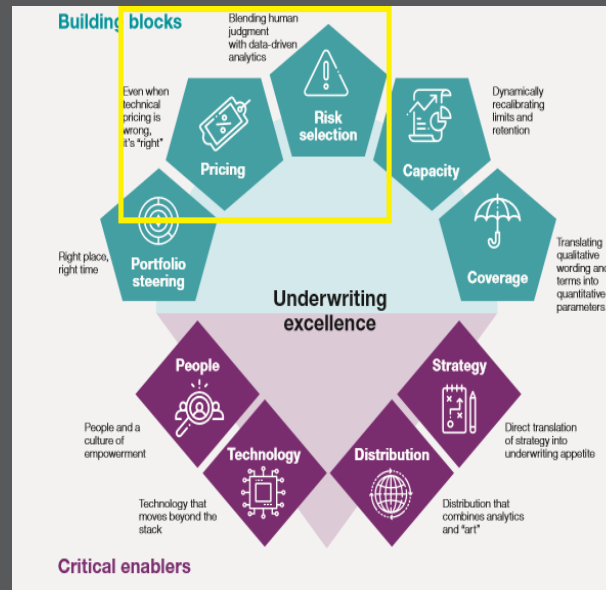
Market dynamics

Subjective decision making

External competition

Other Challenges

- Uniqueness of applicant's data from a risk assessment standpoint
- Inefficiencies while handling huge datasets related to risk profiles
- Risk selection and competitive pricing to avoid under/over pricing
- Deciding between risk averseness and applicant's propensity to buy

Analyst View

Building blocks

Blending human judgment with data-driven analytics

Even when technical pricing is wrong, it's "right"

Pricing

Risk selection

Dynamically recalibrating limits and retention

Capacity

Right place, right time

Portfolio steering

Coverage

Translating qualitative wording and terms into quantitative parameters

Underwriting excellence

People and a culture of empowerment

People

Strategy

Direct translation of strategy into underwriting appetite

Technology

Distribution

Technology that moves beyond the stack

Distribution that combines analytics and "art"

Critical enablers

Data-driven AI/ML based policy pricing and risk selection help control the Loss Ratio and contribute to Underwriting excellence

Augmenting Underwriting with AI/ML

>50%

Of respondents believe that predictive model solutions are amongst the top 3 technological investments for underwriting

Machine Learning is extensively used across the Insurance value chain

PROPERTY/CASUALTY		LIFE/ANNUITY	
New Business/Underwriting	56%	New Business/Underwriting	39%
Claims	40%	Customer Experience	26%
Product Development	36%	Product Development	26%
Policy Servicing	32%	Policy Servicing	26%
Distribution	32%	Claims	26%
Customer Experience	32%		

SMA Research, 2016 Innovation and Emerging Technologies, n=84

Introducing Smart Quote, Powered by Pega AI

Business Problem | It is widely acknowledged within the Insurance industry that data-driven analytics based human judgement would help minimize the subjectivity in Underwriting decisions and significantly improve business efficiency

New Customer Quote Request

Underwriter

- Collect Customer Data
- Validate Inputs
- Quotation Step
- Create Policy
- Update Systems of Record

- Pega Decision Strategy
- Pega Predictive Model
- Historical Quotation data

Solution Overview

Powered by Pega AI/ML based decisioning models, Smart Quote will augment the Underwriting process by:

- Providing real-time quote acceptance propensity
- Underwriter decision feedback loops into the predictive model
- Customer risk data from D&B and Pitney Bowes
- Data driven Pega Predictive models

Future State/ Strategic Benefits

- Higher hit-ratio, lower loss-ratio with a more mature and self-learned predictive model
- Improved CSAT scores with possibility of offering new and highly relevant product mixes

Differentiators

- Pega predictive and adaptive modelling covering the real-time aspects of business
- Providing a holistic risk assessment of the act to aid better business decisions

Adoption of Smart Quote

Scope of Activities

Duration for Discovery (1 week) and Dev: 4 - 5 weeks

> Understanding of AS-IS workflow and business use case
> Extract historic data and create the prediction model
> Create the Pega Decision Strategy and link to data model
> Link Decision Strategy to Underwriter workflow
> Creation of Underwriter UI components

SIT/UAT/Go-Live: Along with next release of the Underwriting application

Team: 1 Business Analyst, 1 Pega Developer, 1 Data Analyst

Commercials

> Smart Quote framework provided free of charge
> 4-6 week framework customisation cost to be provided to the customer as part of consultation process

Pre-requisites

> Pega 7.x or 8.x platform license, Pega Decisioning license

> Datasets with good Data Quality and Quantity of data of at least 1 - 2 years

> Unbiased data which is representative and balanced

Customer **Engagement**

PEGA

Digital Process **Automation**
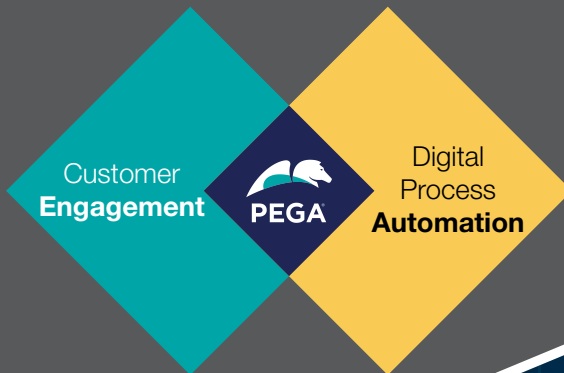
Smart Quote Case Study

This client writes more than U$1.2 billion of property and casualty insurance around the world and provides over 80 products through 18 lines of specialty insurance including most complex risks from Olympic athletes to offshore oil rigs.

Business Challenges

> Low premium growth esp. in soft market
> Low quote to policy conversion rates
> Lack of targeted segmentation of customers based on various risk factors

What we did

> Cleansed and analysed historical data to understand the patterns
> Identify the key predictors that are impacting the Underwriter's decision making
> Built an analytical model to provide actionable insights to Underwriter

Business Benefits

> Significantly improved hit ratio
> Enhanced Underwriting with data driven risk factors to ensure accurate pricing
> Reduced cost of risk assessment with better understanding of risk exposures

Program details

Technology stack: Pega 7.3, Pega DM 7.3 | **Engagement Model:** Onshore (15%) – Offshore (85%) | **Time to Development:** 5 weeks

Transforming the **Customer Experience** through **Intelligent Automation**