



InsurTech Pricing Panel Discussion

CAS 2022 Spring Meeting

What is Insurtech?

McKinsey: Technology-led companies that enter the insurance sector, taking advantage of new technologies to provide coverage to a more digitally savvy customer base

Service Providers



Tech Enabled Carriers





XCEEDANCE



Matt Duke

SVP & Chief Actuary

Global Actuarial & Analytics Services

About Us

Focus on digital technologies, data science, and specialized automation



Clients on four continents representing more than 250 strategic engagements

Diverse client profiles across all property and casualty (P&C) and life and annuity (L&A) lines of business



Offices across nine global locations with annual staff growth of 30%

500+ certified industry professionals across the insurance lifecycle



Solution Provider - Xceedance



XCEEDANCE® RE/INSURANCE LIFECYCLE CAPABILITIES

The Xceedance team is here to help your insurance organization succeed, with deep industry acumen across the lifecycle of insurance operations.



XCEEDANCE® DATA & ANALYTICS

With its insurance data and analytics focus, the Xceedance team is constantly exploring ways to innovate and serve insurers that require a future-ready data strategy.



XCEEDANCE® TECHNOLOGY

Xceedance technology services span the entire insurance value chain to help businesses digitize and reinforce end-to-end processes, future-proofing their core operations.



XCEEDANCE® DIGITAL

Harnessing the power of artificial intelligence, robotic process automation, and more, Xceedance delivers digital solutions to streamline processes and increase efficiencies.



XCEEDANCE® RE/INSURANCE CONSULTING

The Xceedance team understands the risks and opportunities of insurance and works to streamline risk management, optimize critical business workflows, and reimagine the policyholder journey.

Actuarial & Analytics Offerings

Enablement

Staff Enablement

- > Part Time Resources
- > Full Time Resources

Technology Enablement

- > Cloud Based
 - Partner solutions
 - In-house solutions
- > Single Sign-on
- > One Data Upload - unlocks multiple solutions

Advisory & Consulting

Pricing & Growth Analytics

- > Business Planning
- > Product Launch
- > Product Maintenance
- > Price Monitoring
- > Profitability Studies
- > Rate Adequacy

Reserving & Claims Analytics

- > Quarterly Reserving
- > Annual Reporting (SAO, AOS, AR)
- > Loss Adjustment Expense Studies
- > Claims Studies

Data Science

- > Growth Analytics
- > Pricing Driven By Predictive Models
- > Claims Analytics
- > Business Intelligence Tools & Dashboard Integration

Admitted Market Management

- > State Filings
- > Regulatory Compliance
- > ISO Circular Monitoring
- > Bureau Monitoring

Actuarial & Analytics Tech Enablement Partners



ChainThat





ChainThat[®]

Beyond Ideas

ChainThat creates insurance technology products that deliver on the promise of innovation, working with brokers, carriers and MGAs to use technology to unlock the full potential of their business

Core Products

BMNP – Multinational insurance management

BPA – Policy Administration

BCM – Claims Management

Nucleus – Reinsurance Administration and insurance marketplace platform

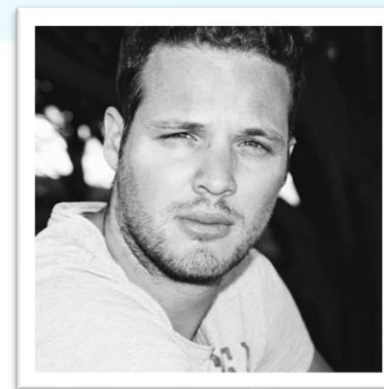
RDES – Reinsurance Data Extraction System



AKUR8

Insurance Pricing powered by ML

2022



Bruno Becha
Head of Actuarial Data Science

Company overview



Founded
2018



Global offices
NYC, Paris, London,
Munich, Milan, Tokyo



Employees
100



Nationalities
20+



Activity

Non-Life Insurance Pricing
(e.g. P&C, Health, Travel)



Customers




50+

Akur8's mission

Empower actuaries
To make better decisions,
faster.



5 years of R&D to develop the only ML algorithms that can automate modeling while keeping a fully transparent output

	 Traditional approach	 Generic ML Algorithms	 AKUR8
MODELING PROCESS	MANUAL	AUTOMATIC	AUTOMATIC
OUTPUT MODEL	TRANSPARENT (GAM/GLM ¹)	BLACK BOX (GBM ² , Random Forest)	TRANSPARENT (GAM/GLM ¹)

(1) Generalized Additive Models / Generalized Linear Models

(2) Gradient Boosting Machines

The Akur8 Modeling Process

CREATE PROJECT

Choose project settings: **Type** (Freq, Sev,...), **Goals** (Target, Exposure, Year, Stratification variables)

ENRICH MODEL

Add **interaction effects** and **geographic modeling**, automatically generated by Akur8.

RATE MAKING

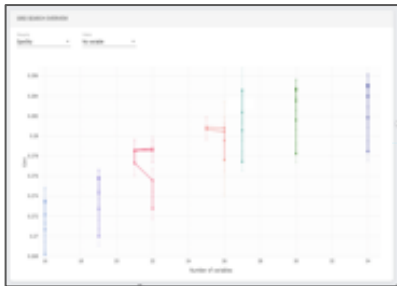
Aggregate your models, **evaluate** different rating scenarios and perform **dislocation analyses**.

1

INGEST DATA

Pre-process to remove anomalies.

2



3

GENERATE & SELECT MODELS

Based on Performance vs. complexity trade-off; **Inspect models** and adjust smoothness/ parsimony to toggle between models

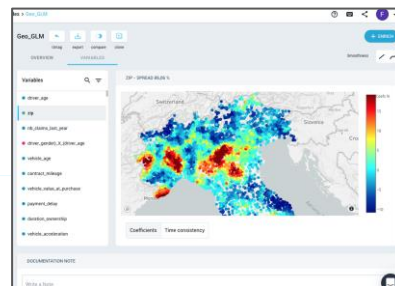


4

ADJUST MODELS

Adjust on a **variable-by-variable** basis, based on actuaries' judgement. Account for small sample size in certain segments.

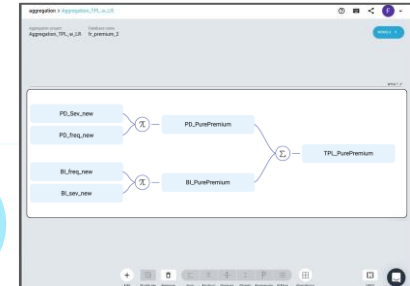
5



6

CHECK MODEL STABILITY

Check stability of model, e.g., **performance** on different years' of data. Drill down into variables driving any volatility.



8

EXPORT MODEL DOCUMENTATION

Including **model** itself and **documentation** to use with management.

7

We are proud of our customers

Some of our public official references

Akur8 is the leading pricing platform for insurtechs...

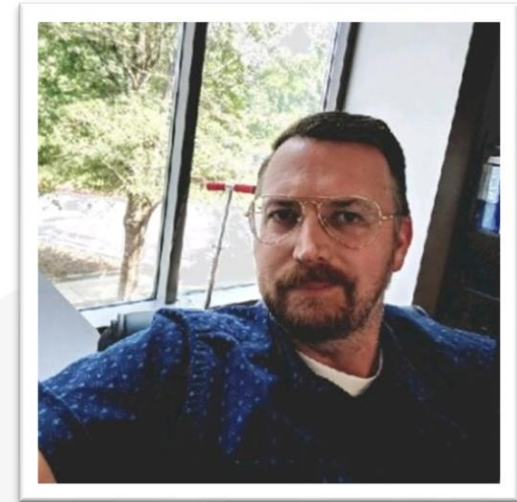


...and trusted by leading insurance carriers worldwide





Coterie Insurance



Jimmy Gallagher
Pricing Analytics Director

Coterie's mission is to build and foster a world-class team to bring *speed, simplicity and service* to commercial insurance.



Small Business Insurance, Simplified.

Speed. Simplicity. Service.



What if commercial insurance could be easy?

- Coterie set out on a mission to simplify small business insurance through data, technology and insurance expertise
 - Meeting small businesses where they already do business (agent/brokers, SaaS platforms, marketplaces)
 - Enabling insurance agents & brokers with the tools they need to better service each unique business faster and more profitably
- We uncomplicate the buying & selling of small business insurance
 - Leveraging accurate underwriting data to eliminate application data entry
 - Avoiding errors and underwriting approval wait times (saving 75%+ of time!)
 - Delivering accurate coverage recommendations & pricing
 - Providing world class customer support

Root Insurance



Ryan Peiffer
Senior Actuarial
Analyst

About Root



Root Insurance is the nation's first licensed insurance carrier powered entirely by mobile.

- Root Insurance Company is a subsidiary of Root Inc, a technology company.
- Many carriers are insurance companies that happen to leverage technology in their processes, Root flips the script as a technology company that applies its products and expertise in the insurance industry.

We focus on fairness in pricing, with an emphasis on using telematics data to drive insurance pricing rather than traditional rating variable



“Drop The Score” campaign, supporting legislation that prohibits the use of credit score to price insurance, and a public commitment to removing credit from Root’s rating plans.