

Auto-rating and Portfolio Feedback

Let technology do the heavy lifting so you can focus on the metrics that matter.

Traditional pricing processes are painstakingly slow and fragile, and often rely heavily on actuarial resources stitching datasets together regardless of the size or importance of the risk. There is a better way.

AUTO-RATING

Auto-rating is technology-enabled, top-down, and diagnostic led. It takes an algorithmic rules-based approach to pricing risk which frees up the expert's time so that they can focus on aspects where there will be real business gain from actuarial insight.



FEATURES

- ✓ Auto-rating involves taking an algorithmic rules-based approach to pricing and underwriting risk. It relies on a granular underwriting strategy, risk appetite, appropriate methodologies, rating factors and assumptions being coded upfront.
- ✓ Each risk is initially priced through a rapid “mechanical” end-to-end run with no human intervention.
- ✓ In most cases straight-through-processing (STP) occurs, with the risk being declined or quoted without any intervention being required from the actuary or underwriter.
- ✓ However, the automated system uses a materiality framework to exceptionally direct the underwriter or actuary to areas that require their attention.
- ✓ The system produces rich diagnostics and dashboards add context to flags and focus the experts’ attention on the points that need their intervention.

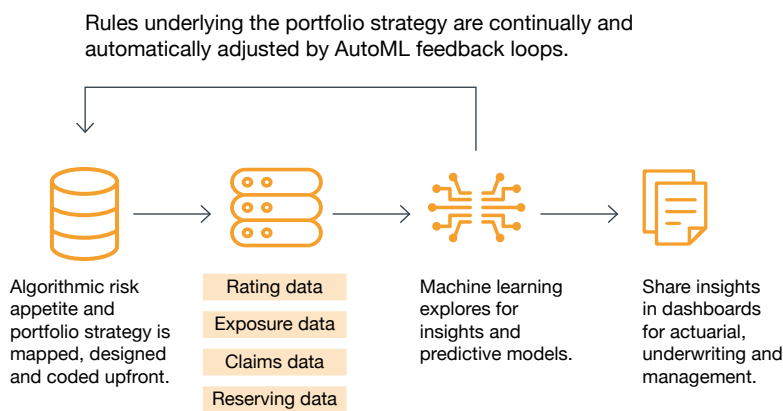
“ Auto-rating facilitates the complete automation of uncomplex risks via straight-through-processing, allowing the actuary to optimise their time based on risk complexity and value. ”

FEEDBACK FOR PORTFOLIO MANAGEMENT

Automated feedback loops and machine learning identifies trends in rates, claims and exposure and uses this to adjust, and continually optimise the underwriting strategy feeding the auto-rating algorithm.

Advantages

- Limits the actuary's involvement to a small portion of the insurer's book allowing them to optimise time.
- More capacity for stakeholder engagement and input into decision making, which empowers the actuarial team to boost their contribution to the business strategy.
- Significant reduction in operational risk due to build of robust, automated processes within a well governed environment.
- Rules underlying the portfolio strategy are continually optimised by feedback mechanisms.
- Prioritises writing risks that have optimal marginal impact on the portfolio to better control risk capital.
- Lower frictional costs will bring about a higher profit margin and/or cheaper products, making carrier more competitive.
- Technology stack and design principles support scalability and provides the flexibility to adapt models for evolving needs such as new lines of business.
- Integrates with upstream and downstream data sources and systems to ensure consistency of data.
- Supports full automation of internal and external reporting requirements.



Technical pricing features

Gadgets provide our software Psicle with its actuarial and statistical capabilities.

RAT

Gadgets:

Psicle Gadgets are blocks of domain specific functionality that can be used on the Psicle canvas. Gadgets that are useful for pricing include our Exposure Rater, Experience Rater, Simulator, and Python Gadget.

PSC

PsiCode suite:

PsiCode is the native functional language of Psicle, which allows users to perform complex data transformations and calculations using powerful statistical calculation engines.

Governance

Psicle is backed with best-in-class features to support:

- ✓ Workflow management to restrict, approve and sign-off calculations, including full and partial model lockdown.
- ✓ Full audit tracking and user permissions management.
- ✓ Detailed logging to view software access, any changes made, model run times and more.
- ✓ Notes functionality for in-model documentation.

Psicle ('saik/)

Psicle® is a flexible, robust and fit-for-purpose modelling environment with rich statistical, data management and audit functionality, enabling the industrialisation of a wide variety of actuarial and financial models.

From simple monoline insurers to the most complex books – Psicle is the primary modelling platform for insurers across a growing range of geographies and use cases, including Business Planning, Pricing, Reserving, Solvency II Technical Provisions, Solvency II SCR, IFRS 17 and associated reporting.

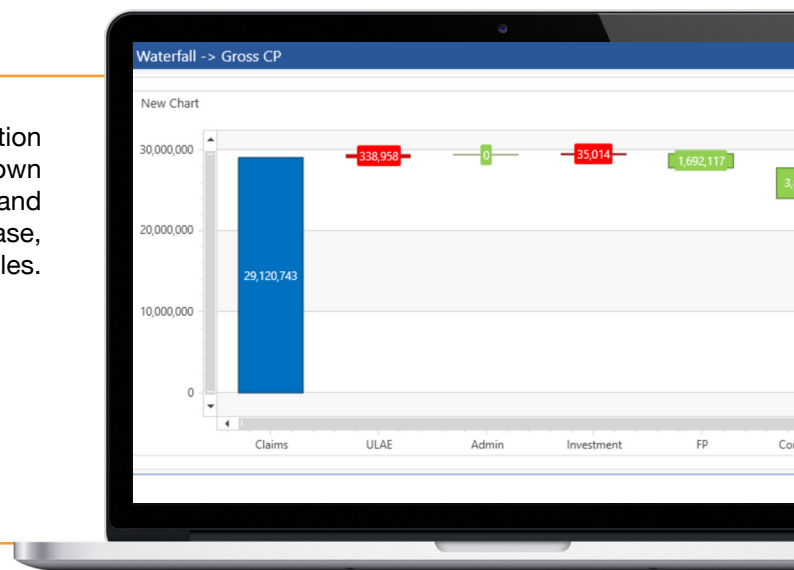
	Data quality	Risk materiality	Loss history	Price adequacy	Rate change
Risk 1	●	▲	●	▲	▲
Risk 2	●	●	●	●	●
Risk 3	●	▲	●	▲	▲
Risk 4	▲	●	●	●	●

Psicle facilitates auto-rating and portfolio feedback through:

- end-to-end data processing which allows it to efficiently transform, combine and process data from a variety of data sources.
- its ability to house complex rule-based pricing algorithms and feedback mechanisms.
- options to utilise Psicle’s in-built dashboard object or to integrate with external dashboarding software, through Psicle’s API.

Visualisation objects: Rich visualisation tools and integration with PowerBI allows users to quickly create their own bespoke dashboards with produce compelling analytics and visualisations. This enables them to track exposure with ease, interrogate trends and respond quickly to changing risk profiles.

- ✓ Dynamic visualisation
- ✓ A range of chart and table options
- ✓ Drilldowns
- ✓ Cross-filtering
- ✓ Flexible formatting and layout management



Implementation

Dynamo's consulting team has deep and varied experience in technology-enabled process transformation, including target state process design, technical model development and driving cultural change. This experience combined with our award-winning technology platform has inspired our experts to think beyond the constraints of traditional pricing processes.

Dynamo can help you realise the potential of auto-rating and portfolio feedback.



Integrations

Psicle integrates well with your existing systems, including on-premises and cloud data stores, ledgers, reporting systems and visualisation packages.



Data

Psicle can read or write directly to relational database storage platforms, including MS SQL, Amazon Redshift, Oracle or via drivers provided by other software providers enabling ODBC connections.



API

Psicle has its own API that can be called to run batched processes configured by edit users of the software and return results to other software via standard restful API calls. Psicle also integrates with other web APIs with minimal bespoke configurations.



File-based transfer

An automated process for reading and writing data files from network locations can be enabled via the batch process module.

“ Psicle enables true process automation, empowering actuaries to make smarter use of their time. ”

About Dynamo

Experience, expertise, and service. All part of our DNA.

We are actuaries, problem solvers, and strategic thinkers. As a highly innovative team, we are passionate about understanding how the world of business-critical modelling is evolving, and how organisations need to adapt. We apply our mathematical skills, professional expertise, and intelligent automation platform to help our clients navigate their transformational journey with confidence. Brilliant at building relationships and driving change through innovation and a culture of teamwork, we deliver robust, insightful solutions to modernise and industrialise a client's technical models and processes. We give clients greater certainty in increasingly complex times.

For further information on Dynamo and Psicle, including case studies, visit www.dyna-mo.com or email us at psicle@dyna-mo.com

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