dyna·mo

Reserving in
Psicle

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.

Tightening deadlines, resource constraints, mounting regulatory and governance requirements, increasing business complexity - these are just some of the challenges that have led to a growing number of insurers worldwide adopting Psicle as their reserving platform of choice.

Psicle's award-winning Reserving Gadget is a user-friendly interface for actuaries to set reserves, and includes pre-configured methodologies, a range of diagnostics to support assumption setting, and interactive selections. The integration of the gadget within the base platform allows actuaries to leverage the customisation, speed, automation, and governance of the Psicle platform to transform reserving into a modern and efficient end-to-end process that goes beyond regulatory needs to add value to your business.

KEY BENEFITS

Automation for rapid model runs, from source data through to reporting outputs, enabling more actuarial time to be spent on expert analysis and judgement, and less on data wrangling and model setup.

A comprehensive feature set with a range of available actuarial methods for deterministic and stochastic reserving, with the backing of class-leading governance features.

End-to-end processes which include triangulation, earnings, reporting and dashboards (AvE, AoC and many others), IBNR allocations, PPOs, expense methodologies, reinsurance modelling, discounting and more.

Better information to support richer MI and rapid responses to ad hoc requests. Processes can be developed to enable diagnostic-led reserving.

Drives consistency across reporting bases (for example, IFRS 17 and local solvency regimes), products and geographies.

Reduction in operational risk due to robust and automated processes within a well governed environment.

Future minded with the flexibility to adapt models for evolving needs and new regulatory requirements.

> " Psicle brings together slow, disparate processes into a single efficient and governed platform. "

In addition to all the automation and governance features of the base platform, Psicle's reserving capabilities include:

Methodologies

- ✔ A comprehensive range of pre-configured deterministic and stochastic reserving methods.
- ✔ User-specified custom methodologies and parameterisations.
- ✔ Selections and adjustments in origin and development period dimensions, with calendar period overlays.
- ✔ R/Python integration for user-specified scripts including, machine learning.

Interface

- Point-and-click selection of factors, exclusions, weightings and overrides.
- Pre-built and user-configurable visuals and metrics to assist reserve setting, including dynamic dashboards.

Automation

- Flexible triangle generation, including attritional/large splits and other banding.
- Automated data point exclusions and curve fitting.
- Gross-up and roll-forward functionality.
- Multiple granularities, cascading selections and IBNR allocations with optional user override.
- Automated analysis of change and sensitivities / scenarios.

Governance

- Easily track, restore and report on deviations from starting assumptions.
- Notes functionality and review/approve/sign off workflows.
- Full audit tracking, user permissions management and model sign off/lockdown.

Reserving Gadget

The interactive mode of the gadget displays the key diagnostics for each pre-configured reserving method to identify issues and assist selections, including traditional diagnostics as well as heatmaps, residuals, back-testing, goodness-of-fit and analysis of change.

The software provides configurable, algorithmic identification of outliers and areas of concern to help to cut through the noise and add confidence to the reserving process.

Reserving Gadget diagnostics update live as selections are made, allowing users to instantly see the impact of changes to the reserving basis.

Native Dashboarding

Users can also build their own diagnostics into Psicle models via the point-and-click dashboard module, which offers:

- dynamic visualisation
- a range of chart and table options
- drilldowns
- cross-filtering
- flexible formatting and layout management.

By connecting to the rich outputs of the Reserving Gadget, as well as supplementary data sources, actuaries, management and stakeholders can configure the views they need. Psicle's integrations with visualisation tools such as PowerBI allow for broader circulation of results.
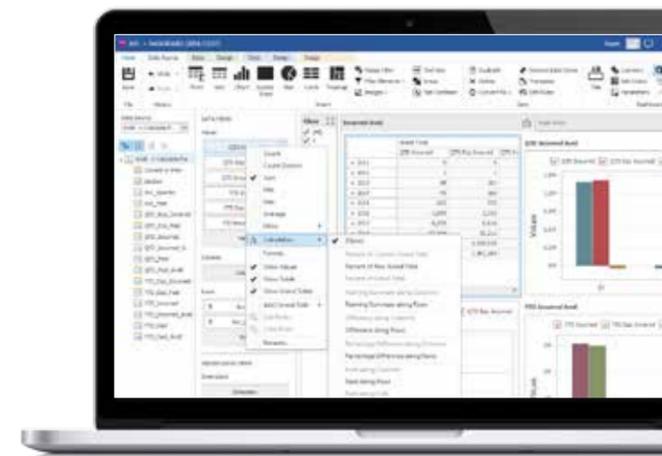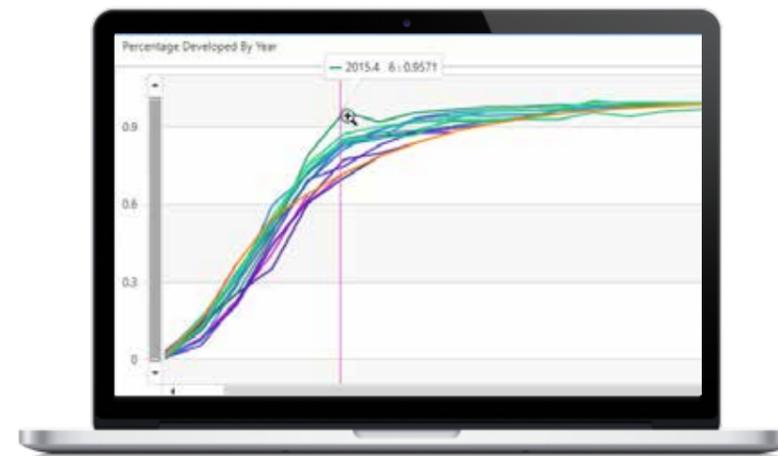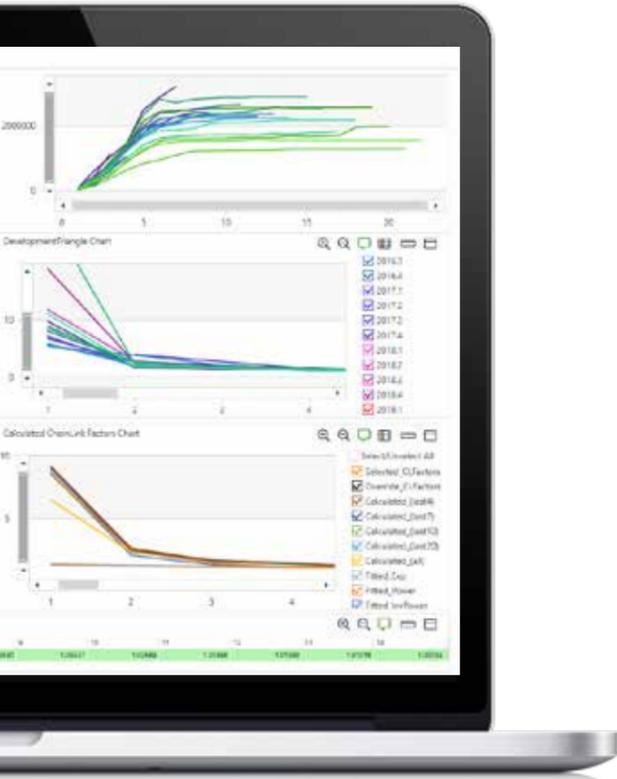
Diagnostic-led reserving

Top-down, diagnostic-led reserving is an appealing target state for many insurers, as it offers greater efficiency, better information, reduced risk and a more engaged team. Psicle is the perfect tool to meet the key technical requirements: automation, modelling and dashboarding.

This can be complemented by Dynamo's expertise on the frameworks, team and culture needed to support and embed the target state.

Reporting

Outputs of a Psicle reserving process can seamlessly feed downstream Psicle models and processes covering other reporting bases, such as Solvency regimes, capital models and IFRS 17 calculation engines.

This is complemented by flexible reporting functionality, including population of pre-defined Excel templates, output of visualisations/ documents and configurable links to a wide range of downstream reporting systems.

The Psicle platform

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 TPs, Solvency II SCR, IFRS 17 and reporting.

Psicle is a server-based application that can be hosted in the cloud or on-premise, and leverages the latest technology stacks.

Implementation

Dynamo's consulting team has deep and varied experience in tech-enabled reserving process design, from migration to transformation, across a range of insurer sizes, geographies, regulatory regimes and product portfolios.

We offer various support options to suit each project's scale, timelines and resource availability. Throughout implementation and beyond, our consulting and technical support teams stand ready to make your program a success.

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.

> " Dynamo Analytics is an entrepreneurial actuarial and software consultancy. We have deep expertise in building, validating and industrialising actuarial, statistical and technical processes and models. "

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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