

Solvency II in Psicle

Psicle ('saik/)

Psicle® is a flexible, robust, 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.

Insurers across a multitude of geographies have chosen Psicle to help them overcome tight deadlines and resource constraints, in order to efficiently meet all three pillars of their Solvency II requirements.

The Psicle base platform allows users to easily transform, adjust, cashflow and discount data obtained directly from source systems to produce Solvency II Technical Provisions. This can be coupled with our proprietary Standard Formula Gadget which calculates the Solvency Capital Requirement, Minimum Capital Requirement, and simplified Risk Margins in line with the Solvency II technical guidance.

KEY BENEFITS



Compliance: calculates the SCR and MCR according to the methodologies, parameters, stresses, and correlations specified by EIOPA.



Integration: Psicle integrates seamlessly with upstream and downstream data sources and systems. It enables users to integrate their best estimate reserve results directly with their Technical Provisions and Standard Formula calculations to ensure data consistency.



Drill-down: Psicle models at your most granular level and supports consolidation across multiple bases. Multiple entities can be run at the same time with the possibility to report at solo or group levels.



Automated reporting: supports full automation of internal and external reporting requirements such as analysis-of-change, Pillar 3 and Lloyd's specific forms.



Sensitivity testing: allows user to automate otherwise time-consuming auxiliary analysis such as sensitivity testing.



Operational risk: significant reduction in operational risk due to robust and automated processes within a well governed environment.



Speed: rapid model runs from source data through to reporting, freeing actuarial time to focus on the "so-what" of the results.

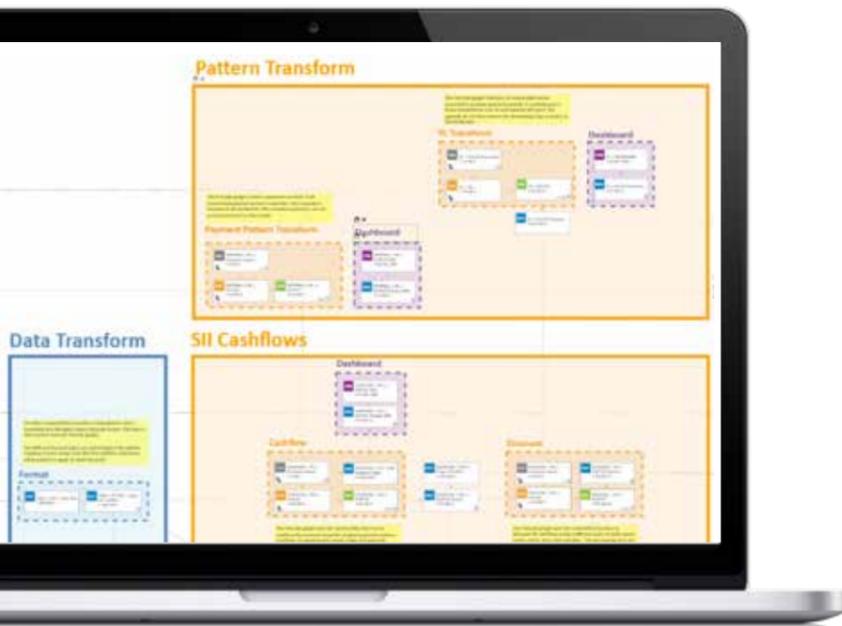
“ Fast forward to the future:
7 days to 7 seconds. ”

Technical Provisions

Psicle includes functions that make it effortless to apply actuarial transformations to produce the best estimate Technical Provisions and Risk Margin.

Features

- Customisable approach to build your Technical Provision methodology
- Actuarial cashflow engine, including mortality modelling, to generate undiscounted cashflows at any granularity
- Actuarial discounting engine to apply any cashflow set and any number of yield curves
- Seamlessly share cashflow engine across other bases, including IFRS 17
- Rich transformation functionality to map, allocate or aggregate modelled information to lower levels of granularity
- Automates Pillar 3 QRT reporting, Lloyd's TPD reporting and other internal or external reporting requirements



Psicle's automated approach enables rapid production of results across multiple entities at the most granular level, with the possibility to aggregate and report at any level.

Gadgets provide Psicle with its actuarial and statistical capabilities.

SFG

Gadgets:

Psicle Gadgets are blocks of domain specific functionality that can be used on the Psicle canvas. The Standard Formula Gadget calculates the Solvency Capital Requirement in line with the Solvency II EIOPA technical guidance.

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

Model and process governance is becoming increasingly crucial. 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's Standard Formula Gadget is user-friendly off-the-shelf module which calculates the Solvency Capital Requirement and Minimum Capital Requirement as specified by EIOPA. The gadget also provides functionality to calculate the Risk Margin under simplified approaches.

The gadget's regulatory calculation and parameters are maintained by Dynamo Analytics, with changes to parameter sets being reflected in software updates. Users also have the option to run the calculation according to prior guidance versions to assess the impact of regulatory updates on their capital.



Auxilliary calculations

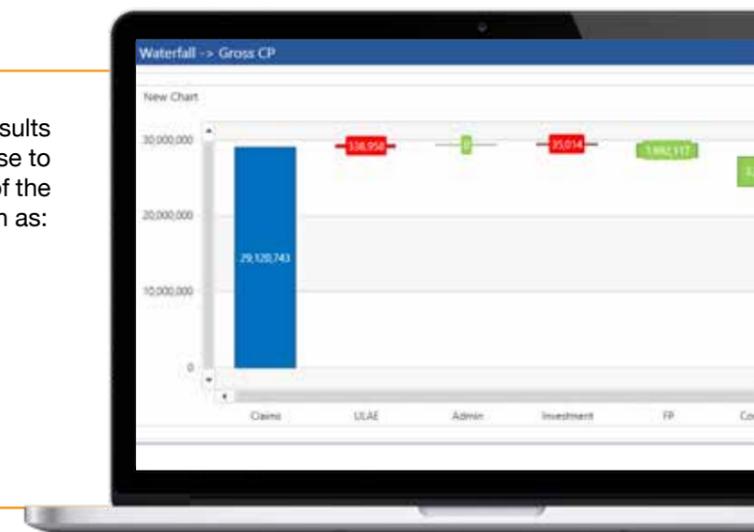
It is also possible to fully automate otherwise time-consuming auxiliary analysis around the core Standard Formula calculations such as analysis-of-change, sensitivity testing, capital allocation and ORSA scenarios. Auxiliary calculations can be turned on or off for any given model run to maximise model efficiency.

Visualisation objects: can be used to visually display results in the form of charts and graphs which the user can choose to display on the Psicle canvas to give a live representation of the model results. The dashboard module offers features such as:

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

Features

- Robust data validation engine
- Multiple entities can be run at the same time with the possibility to report at solo or group levels
- Users can build processes around the Standard Formula and input override parameters to calculate capital requirements under a Partial Internal Model
- Detailed outputs by SCR components and sub-components allow drill-down into the results
- Configuration of results allows automated QRT production



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 Technical Provisions, Solvency II SCR, IFRS 17 and associated 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 experience in configuring automated Technical Provisions models across a range of insurer types, sizes and geographies and 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.

“ Fast and transparent: Psicle enables true process automation which allows actuaries and finance managers 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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