

OPERATIONALISING BASEL IV POTENTIAL INTO PRACTICE



1 ABOUT MONOCLE

Monocle is an independent, results-focused management consulting firm specialising in banking and insurance with two decades of experience working alongside industry leading companies around the world. With offices in London, Amsterdam, Cape Town and Johannesburg we service our clients across the United Kingdom, Europe, Scandinavia, Asia, South Africa and much of Sub – Saharan Africa.

The Basel regulatory framework set out by the Basel Committee on Banking Supervision (BCBS) over 30 years is critical to modern bank capital management and financial stability. Our extensive finance, risk and regulation expertise coupled with our deep understanding of our clients' operations enables us to optimise their capital management.

However, just as important is Monocle's capability to effectively operationalise the Basel requirements across our clients' regulatory capital functions. Banks now have the opportunity to use their allocated reform budgets to overhaul weak capabilities in their end-to-end regulatory capital function.

Download our [full insights paper](#) for detailed impacts of the Basel IV revisions and how to effectively operationalise Basel IV throughout your regulatory capital solution.

2 OVERVIEW OF BASEL IV

The **Basel III reforms** released in 2017 include the following revisions and requirements:

- ◆ Revisions to the standardised approach for credit risk
- ◆ Revisions to the internal rating-based approach for credit risk
- ◆ Revised credit valuation adjustment framework

- ◆ Revised operational risk framework
- ◆ Revisions to the leverage ratio framework
- ◆ Output floors

*The revised market risk framework (**Fundamental Review of the Trading Book**) was released separately in 2016. **However, these revisions are often grouped together to form what is colloquially known as Basel IV.** The BCBS has set the implementation date for January 2023 with the output floors being transitioned in from 2023 to 2028.

Basel IV specifically addresses the significant variation of RWA calculations across banks – which has previously eroded comparability and credibility. While the impact of Basel IV will be different based on each bank's circumstances, generally banks that rely on internal models for more accurate calculations of their RWAs compared to the standardised approaches (SA), are likely to be impacted far more by the reforms.

[See our full insights paper for detailed impacts of Basel IV.](#)

3 KEY OPERATIONALISATION PROBLEM AREAS

- ◆ Correctly interpreting the Basel IV revisions and translating the requirements as per the bank's internal product and data conventions
- ◆ Sub-optimal data models that require continual manual intervention while leading to increased processing time
- ◆ Data model rigidity that accommodates a particular downstream process to the detriment of scalability
- ◆ Inadequate calculation engines without the capability to calculate more than one regulatory approach or other regulatory updates (input/output floors, ad hoc stress testing, quantitative impact studies, etc)

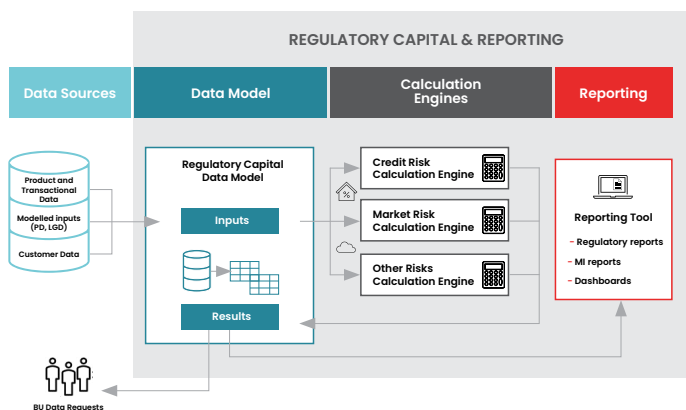
- ◆ Suboptimal in-house engines with “spaghetti” code and tactical updates leading to technical debt
- ◆ Highly manual reporting processes without a central data model to standardised data for reporting
- ◆ Key man dependencies and skill shortages

4 OPERATIONALISATION OF BASEL IV

As banks continue to implement regulatory capital changes, a tunnel vision approach of building a rigid Basel IV solution that ticks the box of compliance must be avoided.

Regulatory capital requirements are constantly being revised while regulators are pushing for agile impact studies and ad hoc stress testing. **Therefore, a regulatory capital solution must prioritise flexibility and scalability across their data and data model, calculation engines and reporting capabilities.**

TARGET-STATE REGULATORY CAPITAL FUNCTION



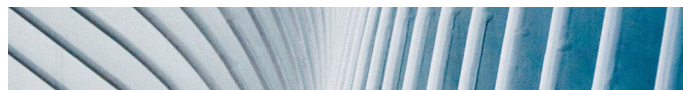
DATA MODELLING

The regulatory capital data model must correctly capture and standardise all of the data elements needed as calculation and reporting input. Basel IV requires increased data points at a granular level and should not be solved for using poor data modelling practises.

It is therefore important that, as banks update their data models, they have a strong balance of knowledge and expertise regarding:

- ◆ Basel revision regulation
- ◆ Bank product idiosyncrasies
- ◆ Data principles

The use of a system and process “agnostic” data model provides a simplified and consistent translation layer between up- and downstream systems without being beholden to any one source, calculation engine, or reporting process’s data needs, resulting in more flexible integration capability.



CALCULATION ENGINES

Basel IV, with the introduction of the revised output floors, will increase the calculations required for IRB-reliant banks. Therefore, banks should re-evaluate their in-house engine capabilities and consider the cost/benefit of outsourcing to a vendor calculation engine product.

Calculation Engine Minimum Capabilities:

- ◆ Handle the portfolio and specific product mix (asset classes) of the bank
- ◆ Calculate using more than one regulatory approach/method
- ◆ Flexibility to handle new products and changes in approaches by the bank
- ◆ Optimisation of credit risk mitigant (CRM) allocations

- ◆ Perform netting, do minimum checks and apply regulatory defaults
- ◆ Ad hoc stress testing or scenario analysis
- ◆ Transparent and auditable

The success of vendor calculation engines is, however, often dependent on the realisation of a well-executed installation.

REGULATORY REPORTING

Banks have onerous regulatory capital reporting requirements both internally and externally to their relevant regulators.

Once again, a standardised data model in which results across the various calculation engines can be fed back is critical. This will also better enable data lineage mapping and improve the transparency of the process, resulting in better auditability.

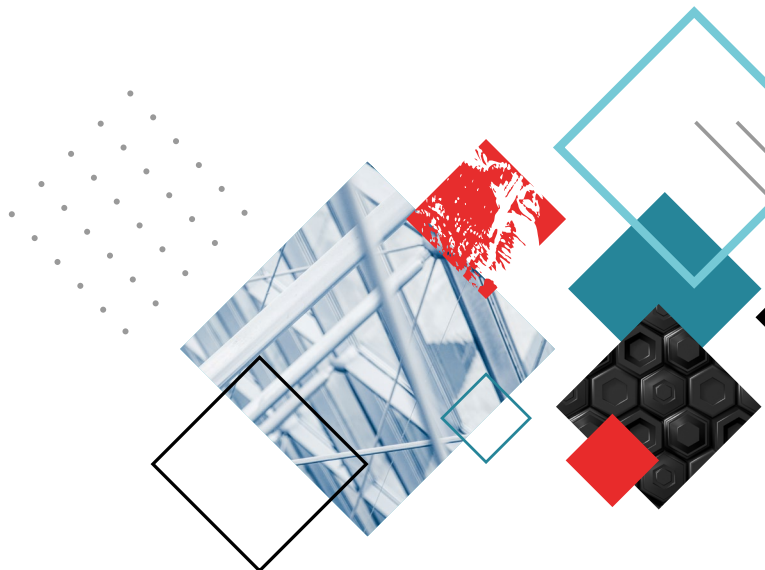
Automation of these reporting processes – usually offered in dedicated reporting tools – can reduce manual, repetitive reporting processing, such as data quality checks, reconciliations, validations, aggregation and classification, which are often completed and reconciled through inappropriate tools such as Microsoft Excel.

5 MONOCLE'S APPROACH

We design fit-for-purpose, regulatory data models that adhere to best practice data principles, as well as assisting with implementation and integration of vendor provided solutions, such as regulatory calculation engines. We conduct process auditing to vet and confirm data quality, as well as process and code efficiency, to ensure the validity and reliability of regulatory capital results. We design and build reporting solutions and the reporting tasks required. This includes external regulatory reporting, business intelligence visualisations and management information system dashboards, in order for banks to better visualise and analyse their results.

Taking into account our client's specific product offerings, balance

sheet composition, regulatory approaches and requirements, we provide regulatory advisory services to simplify and solve for regulatory compliance, allowing our clients to focus on optimising their capital allocations and executing insight driven strategic business decision making.



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