



# Blueprint for FRTB

## Building a future-state business strategy

There are no silver-bullet solutions to the myriad challenges of FRTB. Numerix believes institutions should restructure and re-strategise not just for today, but with an eye on FRTB's business impact in the years to come

As the 2019 FRTB implementation deadline draws nearer, financial institutions around the globe are toiling to more effectively analyse and understand the massive implications of FRTB from a business impact, cost and profitability standpoint. With the new FRTB regime paving the way for transformational, industry-wide shifts among banks – which will, in many cases, include the restructuring of trading desks, business lines, IT architectural designs and market risk and data management systems – a key differentiator for success will be the development of a next-generation blueprint, outlining an FRTB business strategy for an organisation's future state.

### Optimising business lines and trading-book composition

When it comes to FRTB's impact on individual business lines and trading desks, capital requirement implications need to be thoroughly analysed to determine whether particular desks and business lines will remain profitable. Decisioning and business impact assessment software will be an important component to enable closer examination of capital and other costs to help determine which business lines and asset classes will be most viable moving forward. Alternatively, this type of analysis will also enable institutions to discern which lines may need to be restructured or discontinued. For example, the increased capital charges on non-modellable risk factors, as finalised in the FRTB January 2016 regulation, will lead to higher charges. Will it still be profitable for the business to trade certain exotics or structured products – or to support certain asset classes? Are there any offsetting benefits to keeping these business lines that should be taken into consideration? As the new FRTB regime unfolds, siloed, fragmented and black-box approaches will become costlier and less effective in meeting FRTB requirements. Banks will need to embark on a more holistic, enterprise approach for IT transformation with a clear understanding of the complex interdependencies that exist between departments, legacy systems and data management infrastructures.

### Managing escalating costs: A closer look

Implementing FRTB is proving to be a herculean task for banks. Research and advisory firm Celent reports that FRTB implementation costs for a Tier 1 bank are likely to be between \$60 million and \$150 million over the next three years, while Tier 2 and regional banks are still embarking on structuring their FRTB programmes and mobilising the necessary resources to assess what it means for them.<sup>1</sup>

Faced with the challenge of tons of additional calculations – including computing sensitivities under the FRTB sensitivities-based approach, internal model approach (IMA), credit valuation adjustment (CVA) and profit-and-loss attribution calculations – the trend emerging among many financial institutions is to mitigate costs by leveraging cutting-edge technologies.

Cost-saving trends are emerging industry-wide through the use of cloud-based FRTB technology solutions that enable fast deployment, enhanced speed and a lower total cost of ownership. In addition, using vectorised models for extremely fast compute times, speeding up model performance with graphics processing units (GPUs) and using adjoint algorithmic differentiation (AAD) to calculate FRTB and FRTB-CVA sensitivities can all potentially enhance calculation and increase cost efficiencies.

### Decision-making: Finalising strategy and blueprint implementation

While the future state for most financial institutions is still ambiguous and emerging, market participants realise there is no silver-bullet solution.

On a path towards developing an FRTB implementation strategy, the band-aid approach will not be effective for long-term success. Institutions must ensure their transformation strategy is optimal from both an investment and capital perspective. Banks must take ownership of rising costs and understand the business impact of FRTB. Financial institutions must make key decisions to support the front office, risk, market data and product control more holistically – and some of these decisions could be painful for management, especially in terms of transforming analytics and technology frameworks.

Before strategic decisions are finalised, institutions can take clear first steps to assessing the overall business impact of FRTB, including understanding capital charges, how FRTB is impacting each of their desks from a profitability standpoint and how operational risk and market risk are coming into play. Which business lines will utilise the standardised approach versus the IMA, and what would be the potential business impact of each?

By asking the right questions and having the right strategy in place, executives and heads of trading and risk can quickly and efficiently obtain a clear picture of FRTB business impact today and into the future.

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<sup>1</sup> Cubillas Ding, FRTB and the upcoming renaissance in market risk management, *Celent, August 2016*.