FINASTRA

Fusion Optimum: Data-driven decision making for better business lending

Banks need to make money from lending: Many businesses are desperate for credit. Globally, there's a $5 trillion dollar gap between the funding organizations need and the funding they get. Yet only 25% of business owners feel that their bank is supporting them.

> *America's 28 million SMEs have accounted for nearly two-thirds of private net new private sector jobs in recent decades.*

Federal Reserve Bank study

There's an obvious opportunity here. What's holding it back? Strict capital regulations are part of the problem, forcing banks to evaluate credit risk in detail in a sector that often does not have enough collateral or transaction and credit history. There's also banks' inertia – and the fact that low interest rates make it difficult to generate any kind of return on lending. By Q4 2019, the net interest margin for all US banks stood at 3.31.

However, fintech lenders and challengers are going after the corporate opportunity with innovative lending models, from peer-to-peer and crowdfunding to equity finance. While banks still provide businesses with basic banking services, they could be losing out on the lending opportunity.

The power of advanced AI
Analytics and data science have the answer. Most banks are sitting on a goldmine of customer data that can provide vital insights to drive business. Finastra's Fusion Optimum Solution transforms this data into intelligence, using advanced AI to predict customer events, identify patterns across thousands of transactions, augment customer business plans and offer tailored treasury hedging products while also enabling corporate customers to manage their cashflows and balance sheets.

The context of 2020's pandemic makes AI even more relevant. No historic data could have forecast how it would unfold: the only way to prepare is by using advanced AI, that has been trained using synthetic data, to analyze multiple scenarios that blend a bank's own data with market and macroeconomic inputs.

From gut feel to science
Digitalization is sweeping through many aspects of banking. But its potential in capital allocation and risk and balance sheet management is yet to be fully realized.

In a typical, non-digitized scenario, CFO strategic plans are by necessity based on "gut feel" due to a lack of data intelligence, leading to sub-optimal capital allocation. With static rate matrices, relationship managers are unable to predict customer needs and are prone to conservative policies and the underpricing of loans. Corporate clients – as the "funding gap" shows – struggle to raise funds.

Powered by AI, Fusion Optimum changes the game. It can optimize balance sheets for returns and other goals, within regulatory constraints. Relationship managers see proactive, predictive information about client accounts and are positioned to make the best lending decision taking into account their bank's risk appetite and their customer's financial situation. Corporate customers, for their part, can get competitive quotes and proactive advice, and can self-service in real time.

Fusion Optimum uses machine learning to create better corporate customer relationships. It identifies client needs, learns their behavior and then integrates supply costs so loan pricing and customer retention can be optimized.

Predictive technology

- **Strategic balance sheet optimization**
  Here, we partner with fintechs to offer optimization based on dynamic stochastic programming. This science-based approach determines dynamic multi-period strategies for managing the balance sheet in line with regulatory and internal policy constraints. Offering improved performance and efficient control of future uncertainty, it helps managers analyze trade-offs between multiple conflicting goals.

- **Machine learning (ML)-based predictive models**
  We use ML models to capture non-linear relationships between customer behavior and the marker environment: these models are used for or modeling contingent risk on a bank's balance sheet.

- **Improved hedging and optimization using deep reinforcement learning**
  This new approach to hedging and balance sheet optimization strategies applies deep neural networks trained using the reinforcement learning paradigm. It involves calculating improved strategies within the target environment, created using a combination of historical and model data and therefore accounts for multi-dimensional impacts such as market frictions, transaction costs and extreme events. We partner with ETH Zurich to deliver this element of Fusion Optimum.

Funds Transfer Pricing

In the current interest rate environment, the only way for banks to analyze profitability is by understanding where they are making money: and the only way to explore this is with a robust funds transfer pricing (FTP) mechanism.
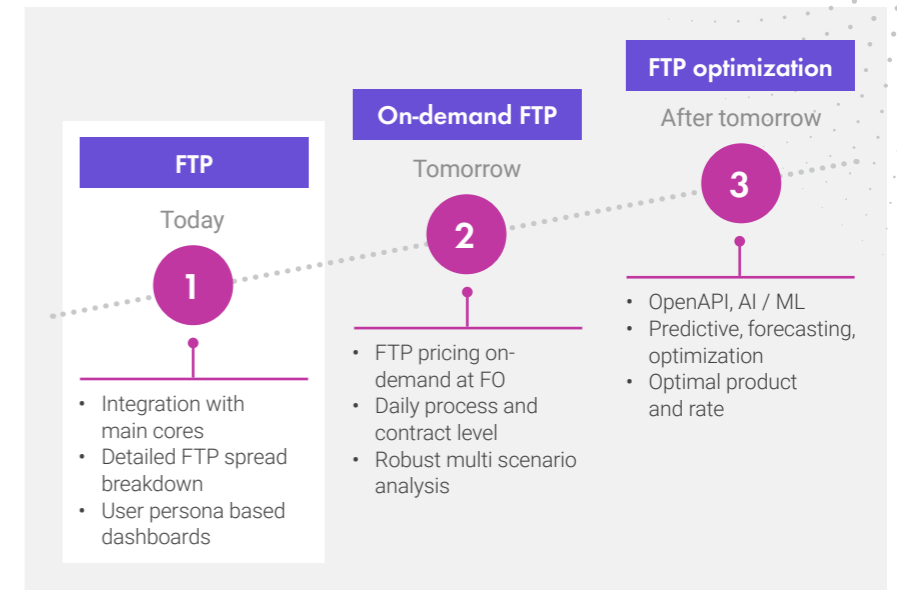
In addition, with the impact of Coronavirus, it is now key that banks understand the business center's profitability using different scenarios.

Fusion Optimum's FTP module goes beyond analysis to help banks on a three-step journey to FTP optimization:

Step 1: Defining the risk-adjusted cost of generating returns, for every business segment

Step 2: Supporting "on demand" requests so the front office can assess profitability as they write loans

Step 3: Showing the incremental commercial margin for every business segment, taking into account costs.

This way, banks' total cost of doing business is reflected in the final lending optimization to ensure a robust understanding of profitability.

Your FTP journey

FTP

Today

1

- Integration with main cores
- Detailed FTP spread breakdown
- User persona based dashboards

On-demand FTP

Tomorrow

2

- FTP pricing on-demand at FO
- Daily process and contract level
- Robust multi scenario analysis

FTP optimization

After tomorrow

3

- OpenAPI, AI / ML
- Predictive, forecasting, optimization
- Optimal product and rate

Building resilience

In the current pandemic situation where risk assessment and management are more important than ever before, Finastra supports the essential components of a resilience strategy:

- **Scenario analysis**
  Our ecosystem partners provide macroeconomic scenario analysis and advanced portfolio modeling to identify portfolio vulnerabilities and shape strategies.

- **Contingency planning**
  Finastra's liquidity management systems help to identify "war chest" reserves to deal with losses.

- **Governance and monitoring**
  Our suite of services allow for daily monitoring of portfolio returns.

Create a tailored scenario

Execute stress-test and simulations

Daily monitoring

Recommended set of interventions

Resilience platform

For more information about how Fusion Optimum can help you, please contact us at capitalmarkets@finastra.com

About Finastra

Finastra is building an open platform that accelerates collaboration and innovation in financial services, creating better experiences for people, businesses and communities. Supported by the broadest and deepest portfolio of financial services software, Finastra delivers this vitally important technology to financial institutions of all sizes across the globe, including 90 of the world's top100 banks. Our open architecture approach brings together a number of partners and innovators. Together we are leading the way in which applications are written, deployed and consumed in financial services to evolve with the changing needs of customers. Learn more at **finastra.com**

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