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Financial market infrastructure firms: Exploring data monetization opportunities

Abstract

Amid prevailing uncertainties, unconventional competition, and disruption, global financial market infrastructure (FMI) institutions have a unique opportunity to transform into an ecosystem-aligned 'multi-sided marketplace' and deliver innovative customer-focused services. FMIs, with their rich enterprise data estates, are in an enviable position to fulfill the emerging needs of investment management industry with value-enriched insights. These insights must also be leveraged for making intelligent business decisions to ensure organizational agility. Driven by open data and the application programming interface (API) economy, FMI firms can harness the abundant non-contextualized data to create insights-based, distinct strategies for business expansion and customer engagement opportunities. To shift the demand curve, FMI firms must consider a data-driven ecosystem and inventive service offerings across investment value chains for long-term business sustainability. This white paper outlines the data monetization opportunities that FMI firms can leverage to unlock exponential value.

An ecosystem of opportunities

The increasing emphasis on business model resilience and product innovation is pushing financial market infrastructure firms to re-align their business vision beyond traditional boundaries. FMI firms are leveraging an evolving ecosystem to explore new opportunities around enhancing business value amid volatile market dynamics, a spate of regulatory requirements, and a new form of startup-led competition. The market dominance of FMI firms and an assimilative business model allows them to explore an extensive network comprising bridging and intermediation opportunities in an expanded ecosystem. This futuristic construct of a securities marketplace enables FMI firms to cash in on ecosystem opportunities and co-create data-led inventive solutions across business service layers. FMI firms can exploit enterprise data for insights-driven business expansion and customer engagement strategies.

Unlocking the value of captive data repositories

With the rising influence of data and insights on investment management decisions and underlying processes in recent times, the increased application of soft information – contextual, qualitative, and non-public data – offers a new shift. Further, environmental, social, and corporate governance (ESG), sustainability, green investment, and climate impact sensitivity cause radical changes in the investment paradigm and demand advanced analytics and monitoring tools.

Advanced big data, artificial intelligence (AI), and machine learning (ML) technologies as well as cognitive analytics help unearth deeply embedded multi-dimensional business insights from abundant non-contextualized data in FMI firms' business landscape. A plethora of fragmented, structured, and unstructured datasets in various dimensions offer significant opportunities to derive incisive business intelligence by connecting, correlating, and creating distinct insights across functional areas. This includes market data, turnover and velocity statistics, transactional and historical information, corporate announcements and disclosures, participant filings, market news, regulatory circulars, and many other operational datasets. Further, the vast mass of data flux within the enterprise, blended with diverse external non-market and alternative datasets, presents numerous opportunities to create and monetize non-conventional, insights-based solution offerings. Orchestrating a client-centric investment value chain with analytics-augmented customized strategies can expand the current scope of FMI utility services in emerging domains of the investment ecosystem.

The potential spectrum of data monetization opportunities in the FMI landscape

There are a wide range of possibilities in both external client services and internal enterprise contexts for data monetization (see Figure 1). These can enable entirely new and innovative data and insights-based services and enhance existing service areas with novel insights-led value-added propositions for customers. FMI firms can unravel data values to augment internal processes and explore strategic insights for crucial business decisions.
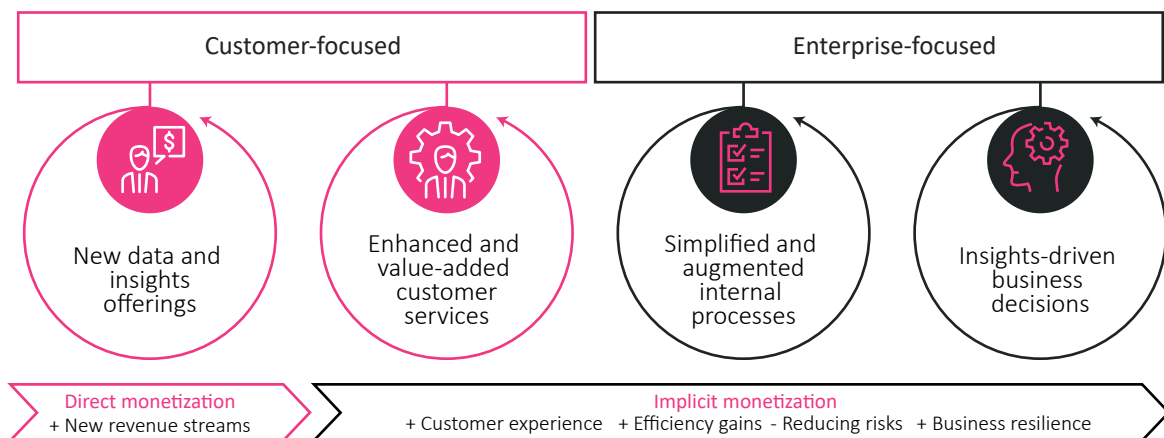

Figure 1: Data monetization opportunities for FMI firms

New data and insights offerings

Advanced insights and data visualization solutions across the investment management value chain can create new revenue streams through service portfolio expansion for different target groups:

• **Market participants:** Insights on order and trade flow dynamics, market liquidity, returns, and costs analysis can aid better trading decisions. Risk stress and impact simulation model and margin and collateral optimization analytics are potential opportunities. Additionally, intelligent insights covering trade operations and compliance can effectively enhance process control.

- **End clients and investors:** Investment intelligence, trading dynamics, private markets liquidity, and opportunity insights can be offered to clients. Further, customized ESG, thematic, real-estate, and crypto assets-linked indices, exchange traded funds (ETFs), non-formal data-driven investment decision tools, multi-factor performance, and cost analytics can also enhance value.

- **Issuers and corporations:** Financial performance benchmarking, capital formation and fundraising analytics, corporate actions, and mergers and acquisitions (M&A) related intelligence are potential opportunities. Additionally, listed entities disclosures, ESG disclosures and governance benchmarking, media impact, and market sentiment analysis are effective tools for gaining insights into investors' reactions.

Enhanced and valued-added customer services

Contextualized insights facilitate intelligent investment decisions and enhance existing customer services with diverse sets of descriptive, diagnostic, predictive, and prescriptive analytics:

- **Market participants:** Intelligent tools for real-time insights of intra-day volatility, liquidity, spread and execution quality forecasting for the trading desks. Additionally, cross-central counterparty (CCP) and product margin analyzer, position, and lifecycle events-based real-time cashflow analytics enable augmented insights in the position management area.

- **End clients and investors:** Data-led analytics are effective tools to optimize financing costs, multi-locational collateral optimization, and liquidity forecasting. Corporate actions, entitlements, benefit options, tax insights, and sustainability-factored performance attribution are ideal analysis tools in the investment servicing area.

- **Issuers and Corporations:** Periodic financial and stock performance analysis, corporate governance scorecard, corporate actions, and periodic result impact on market activity are valuable data-driven tools to gain insights into investor sentiment.

Simplified and augmented internal processes

Market and operational dynamics-based insights can enhance business processes through increased operational agility, improved efficiency, and preventive risk control measures:

- **Clients and products:** Product and service improvements, feature customization, customer service request insights, customer retention, preferences analysis, and fee and pricing analytics open novel ways into customer segments. Further, insights on participants' changing credit credentials and behavior and market standing profiling add new values in managing participant-related risks.

- **Operations:** Transactional process analytics (for example, liquidity management, collateral, margins, settlement), insights-based autonomous workflow rules and threshold setting significantly enhances process capabilities. Predictive views of multi-locational liquidity bridging, post-trade failure, and compliance failure add new data-driven abilities to improve process resilience.

- **Risk and compliance:** Integrated market surveillance across asset classes, risk exposure and concentration insights, member delinquency and default-related predictive analytics provide enhanced risk management and control capabilities. Targeted at market participants and corporates, compliance disclosures and qualitative evaluation tools enable improved insights to avert compliance breaches.

Insights-driven enterprise business decisions

Distinctive insights can fulfill business strategy and competitive positioning considerations and support differentiated product and service design ideas as shown below:

- **Clients and products:** Insights into forward-looking business scenarios covering competitive positioning, new markets, and product portfolio expansion offer valuable decision support. Additionally, data-driven new product ideas, segmentation insights, acceptability sentiments, and pricing analytics can deliver distinct competitive advantage.

- **Operations:** Key performance index (KPI) benchmarking and optimization analytics, capabilities planning, and resource provisioning insights support agile operating structure.

- **Risk and compliance:** Non-financial and non-traditional risk insights and early warnings, market news, events, and disclosures impact-based analyses provide valuable insights to define a proactive risk management approach.

Data monetization: An action plan for success

The transformational journey toward a hyper-connected, multi-sided securities marketplace or platform will depend on FMI firms' ability to reinvent their inherent values for re-establishing a new core and creating non-linear value propositions. Deriving value from captive data and enabling insights-driven decision-making and monetization is an incremental journey for FMI firms. Expansion of product portfolio with data-driven differentiated offerings requires adaptive recalibration of the business model and agile technological capabilities.

We believe, an effective data monetization strategy (see Figure 2) must embrace a cloud-hosted, on-demand data and analytics service composition that includes data-as-a-service, analytics-as-a-service, customized indices, and analytics design. A futuristic platform can be designed leveraging emerging technologies to support plug-and-play capabilities. Complete with white-labeled service packaging, it can support seamless partner collaboration and ensure a consistent end-user experience.
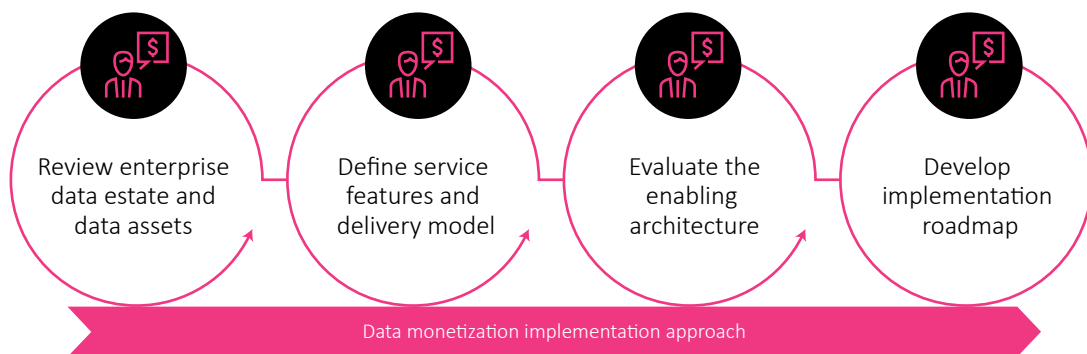

Figure 2: Data monetization strategy

Review enterprise data estate and assets: Conduct reviews of internal (including historical and hidden) and external data store, structure, context, and related capabilities to recalibrate data strategy, operations, ownership, governance, and re-platforming needs.

Define service features and delivery model: Align new service opportunities with the strategic vision and competitive market positioning by adopting innovative use cases with unique features for each customer segment.

Evaluate the enabling architecture: Evaluate architecture options and data strategy (ownership, quality, security, availability) considering data sources, processing, and distribution requirements as well as partner integration options for deploying specialized analytics, visualization, and design tools.

Develop implementation roadmap: Run a pilot for sample use cases to evaluate the business case, assess risk, validate architecture and service delivery assumptions, and finalize an implementation roadmap with major control points.

Conclusion

In the face of unconventional and disruptive market forces, FMI firms need to evaluate the need for new capabilities and scale to exploit aspirational opportunities in the data-driven ecosystem. Design contours of a central data and analytics platform with aggregation-based intermediation capabilities will help harness innovation and resource pooling from ecosystem partners. FMI firms must act fast to shift the demand curve by leveraging data-driven innovative service offerings across investment value chains to ensure long-term business sustainability.

About the author

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Indra Chourasia is an industry advisor in the Chief Data Officer (CDO) Strategic Initiative group of the Banking, Financial Services, and Insurance (BFSI) business unit at TCS. With over 25 years of global experience in business and IT advisory and implementation projects, he designs solution offerings and drives thought leadership and client engagements in capital markets. He has a Bachelor's degree in Civil Engineering from Nagpur University, India, and a Master's degree in Financial Management from Magadh University, India.

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