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The Investment Bank of the FutureConnected Flow – Differentiated Insights

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The Investment Bank* of the Future - A 'Connected Flow Model' with Differential Insights



Investment banks' markets activities face significant challenges; return on equity has not reached pre-crisis levels and margins remain low, largely due to changing market structure, increased capital requirements, structural pressures on cost and unfavourable markets



Against this tough backdrop, we think that there are real opportunities for firms to drive towards previous levels of return, but to achieve this business models and operational platforms need to be retooled around the changing market dynamics. Specifically, firms need to transform their service delivery around a connected flow model - moving capacity and processes to an ecosystem of market providers - and to optimise the use and value of data to generate differentiated insight:

- Connected flow consists of a simplified, agile, connected, client-centric operating model that augments the capabilities of an institution with those of a partner ecosystem, creating cost efficiencies by standardising and centralising provision of non-differentiated services across the industry
- Differentiated insight will harness organisations' data to optimise performance across revenue and cost drivers, and target usage of financial resources on the most valuable activities and clients



To deliver on this agenda, firms will need to prioritise client centricity, disruptive technologies, regulatory recalibration and workforce evolution



To understand where to focus and drive change, firms should 'zoom out' to visualise the future beyond immediate constraints, and 'zoom in' to translate this vision to prioritised initiatives for today, with a framework of principles to steer their journeys



The goal is to move from fragmented and complex to a centralised and flexible model, with service and product innovation embedded in process and platforms

^{*} Note – in using the term 'investment bank' in this report, we refer to the broker/dealer business of firms and not the corporate advisory business.

The challenges Investment Banks face

Despite achieving their political and regulatory objectives post-financial crisis, return on equity and margins have not reached pre-crisis levels. Why?



Market structure and transparency

With increased choice of trading venues and regulation focused on price transparency, pertinent trading information enters the public domain faster, resulting in a more egalitarian and competitive trading environment.



Capital requirements

Regulation backing the political policy of "too big to fail" has directed capital previously used for investment to safeguard against default scenarios. An increase of 40% in capital costs over the past few years further diminishes the weak returns that banks face.



Upward pressure on costs

In addition to the cost of achieving compliance with regulation, these changes have also increased ongoing costs, with multiple new control and reporting functions, frequently duplicated due to sequencing and regulatory overlap. Also many institutions have retreated from their pre-crisis breadth of platform, but still retain aspects of the legacy cost base associated with former ambitions.



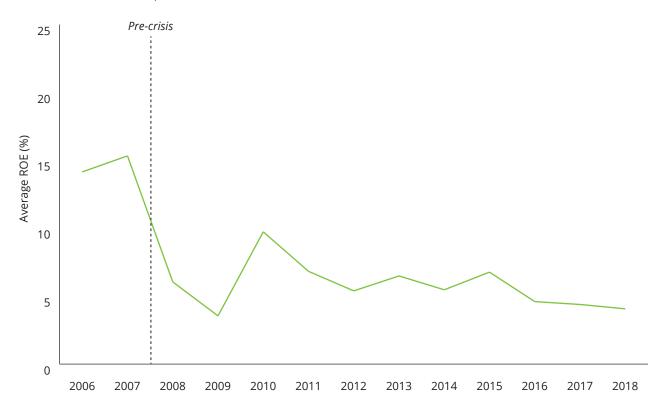
Macro and micro economic changes

Post-crisis governmental use of quantitative easing, interest rate management and the buy side shift to passive management has reduced volatility, caused spreads to tighten and trading volumes to decrease.

The challenges Investment Banks face: Return on Equity (ROE) ROE has not reached its pre-crisis levels over a decade later

Average return on equity (ROE) of 12 global investment banks

Average ROE remains below pre-crisis levels of 15%, and despite a recent rise for certain firms, this is unlikely to be sustainable and hit pre-crisis levels.



Source: Macro-Trends database, January 2019 Note: ROE = Return on Equity

Why is ROE unlikely to achieve pre-crisis levels?

Despite the prospect of interest rate normalisation, the market structure, trading environment, technology and regulatory environment have systemically changed compared to pre-crisis levels. Therefore, investment banks must deploy an ambitious strategy in order to achieve pre-crisis ROE levels.

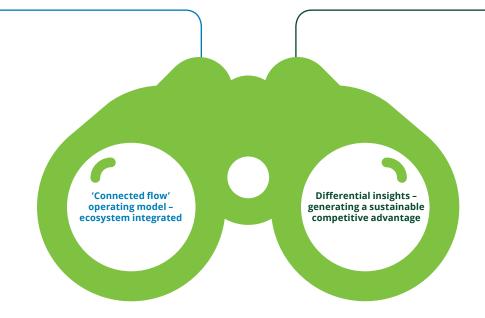


The Investment Bank of the Future – a grounded hypothesis

Investment banks remain relevant; to maintain their relevance we propose that firms should relinquish expensive internal infrastructures and move towards a 'connected flow' model where outside providers offer services for both critical and non-critical functions. The investment bank's ability to create and harness differential insights from data becomes its competitive advantage in this new environment

'Connected flow' – augmenting investment bank capabilities with those of their partner ecosystem

- For return on equity and margins to reach pre-crisis levels, we propose that the *investment bank of the future* must embrace the changing market dynamics to adopt a 'connected flow model' an ecosystem-enabled operating model where outside providers offer services for both critical and non-critical functions. Such a model requires firms to relinquish the in-house service delivery model to one that draws on the capabilities of the ecosystem partners.
- The 'connected flow' model is a simplified, agile, connected, client centric operating model that augments the capabilities of the investment bank with those of their partner ecosystems. This creates cost efficiencies and risk mutualisation, acting as an antidote to the increased capital and operating cost environment.
- Adopting the connected flow model will allow investment banks to reimagine their business along the four broad themes (technology modernisation, workforce of the future, client centricity and regulatory recalibration). Ultimately, the model will increase efficiency, addressing cost challenges through increased automation and enhanced tooling, and deliver results with reduced inventory and revenue leakage.



Why investment banks are still relevant

With considerable barriers to enter the market remain in place (capital requirements, regulatory scrutiny, conduct risk and long standing client relationships), investment banks are, therefore, still unique and unlikely to have their market share challenged by a digital disruptor.

Differential insight – the competitive advantage

- Traditionally, investment banks were differentiated by relationships, coverage, and by a willingness to deploy capital. These factors will remain important to operate at the top tier in the industry; however, as execution is increasingly digitised, maximising the value of data will be ever more critical to drive and enhance returns.
- The key capabilities to optimise in this environment will be the ability to capture and store proprietary data arising from market activity in a usable manner, integrate it with external data, apply ever-evolving data science techniques to generate actionable insight, and the agility to act on these insights.
- Getting this right will require continued blending of traditional and new skill sets into business teams, integration of cloudscale compute power into front office analytics suites, and imagination and daring to challenge and change current practices.
- The reward will be to enable marketing beating returns in some areas of the business, as well as the normalisation and potential increase of margins. Human insight augmented by Al could also deliver improved alpha and quick to follow beta generation.

Shifting market dynamics are creating competitive advantage opportunities that are aligned to focus on a 'client first' investment banking business



Client centricity - elevating the client relationship and experience

As large corporations build their corporate finance teams, the client broker-dealer relationship is changing. Investment banks are increasingly instructed as opposed to consulted. Investment banks, therefore, need to address client-centricity in both product and execution advice and experience.

With increasing digitisation, clients' experiences with sales, trading and execution services are being shaped by other industries. For example, transparency, self-service, speed and personalisation are key elements of digital disruptors. Such firms provide on-demand and customised products at scale, elements that are vastly becoming the expected standard in capital markets. Customers are, therefore, won and retained through focussing on meaningful insights and overall client experience. A unified and consistent cross-asset class experience at all stages of the lifecycle is fast becoming the expected standard.



Regulatory recalibration - driving business model decisions

During the period following the financial crisis firms' agendas were often dominated by regulatory change, with major revisions of frameworks around prudential, conduct, and capital regulation, carried out in varying sequences in different jurisdictions. While regulatory factors will always be a major consideration in the wholesales financial services industry, the focus now is shifting to optimising compliance alongside increasing emphasis on business and platform driven change. Balancing competing priorities will be key, as will effectively leveraging ecosystem provision of operational regulatory activities, and effectively considering regulatory factors in assessing client profitability.



Workforce of the future - harnessing new talent models

With rapid evolution and penetration of disruptive technologies, investment banks face an urgent need to build tech fluency across their workforce. The skills required to harness these technologies are highly specialised and often scarce within their existing staff. As a result, a talent model that draws on both internal and external resources will be an important part of talent strategies going forward.



Technology modernisation - increased choice

Technology breakthroughs are offering up new ways of collaborating with clients. The market now consists of FinTech firms, utilities, and incumbent technology and service providers, creating a robust and diverse partner ecosystem that can offer differentiated services, such as software-as-a-service models for technology, and away from the previous norm of heavily customised bespoke offerings.

Regulatory requirements and stronger industry bodies have led to increased standardisation of processes across the industry (e.g., ISDA CDM), leading to increased opportunities to have a single source of data on shared ledgers.

Our Insight – the 'connected flow' operating model with differential insights The Investment Bank of the Future – imagine, deliver and run the future of Capital Markets



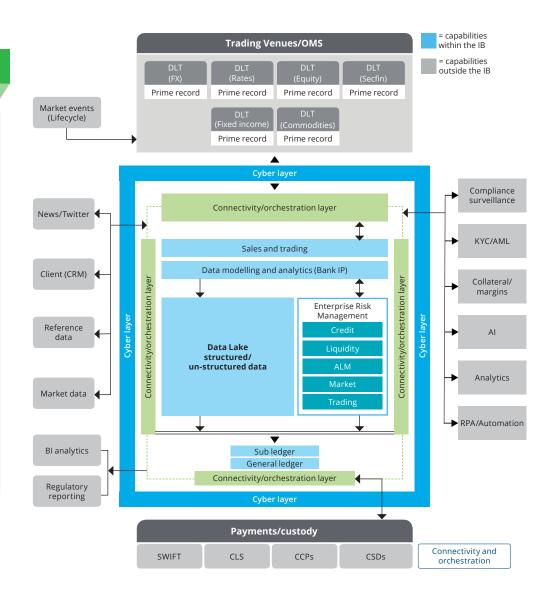
Overview

The investment bank becomes a data centric organisation focusing on the client journey, moving middle- and back-office functionality, into market utilities or FinTech partners (e.g., Cobalt for the FX market). A rich data set (e.g., Apache Spark) will allow the bank to model client behaviour, and use AI, Natural Language Processing, Machine Learning (e.g., IBM Watson, DeepMind) to predict their client trading activities and risk appetite. The investment bank is now a data centric, agile participant in a sophisticated eco-system addressing the four market trends of today and focussed on differentiators, such as risk models and customer experience.

Ultimately, only a few, value-add functions would need to be implemented on an investment bank's systems: risk systems, payment systems, internal and external data (e.g., client data and regulatory reporting data) and general ledger.

The technology exists today to deliver this vision:

- Distributed ledger technology can provide the basis for shared ledger that minimise reconciliations
- Open source technologies enable data lakes that store the vast quantities of data generated by the business.
- Advanced analytics and cognitive technology is now able to derive value from this data.



Principles to build the 'connected flow' operating model with differential insights The Investment Bank of the Future



Technology principles

Simplification

Rationalise the application landscape, moving away from a product-specific infrastructure to a functional
architecture.

Commoditisation

 Move to at-market solutions where available and identify future directions for utility offerings, freeing up scarce resources to focus on differentiated IT service rather than routine maintenance and bug-fixes.

Industrialisation

Achieve a sustainable cost transformation by triggering a bottom-up approach that focusses on reducing
costs through process change, automation and digitalisation (e.g., Robotic Process Automatic (RPA) through
BluePrism, UIPath).

Modularisation

• Open up new ways to deliver services using scalable high performance infrastructure links and common data formats while harnessing the power of artificial intelligence and blockchain (e.g., R3 and SETL).

Agile orchestration

 Achieve service differentiation by separating workflow from core capability and retain the ability to coordinate core capabilities intendent of vendors.



Regulatory recalibration principles

Managing the regulatory environment as part of the business model

 Short-term, one-off initiatives designed to meet an upcoming deadline must give way to a forward-looking, analysis-driven approach at an enterprise level. This will help identify interdependencies, overlaps, incompatibilities, and business impact upfront while mitigating execution risks.

Regulation should be used as a vehicle to accelerate innovation creating revenue generation

• Some computation-intensive regulations requiring simulations, stress testing, and trade data reporting can be ideal candidates for public cloud adoption (e.g., Pega, CloudMargin), such data creates the opportunity to be monetised for its insights.

Balancing different regulatory regimes

The priorities of the domestic regulator with international regulators may compete and conflict. For
instance in the US and UK. Navigating the recovery and resolution priorities of each regulator, and
optimising the liquidity and capital needs within each jurisdiction, require continued investment in data
integrity and real-time data transparency.



Workforce of the future principles

Workforce rationalisation

- As the market moves towards self-service, full straight-through processing, and machine driven research, the size of the sales and trading desk will continue to shrink while trending toward more junior talent – who must build expertise across products to succeed.
- These trends mean that the front office will require a new breed of traders who are skilled at programming, supported by data scientists providing deep analytics support.
- Middle and back office will require a hybrid 'techno-ops' talent with abilities to configure automations and workflows.

Tech fluency

As technology permeates every aspect of the investment banking process, a minimum level of proficiency
in technology concepts will be critical for the workforce to add value. Investment banks are addressing
this issue through a critical revolution that embeds 'agile' and develops methodologies in how work gets
done. Indeed, accelerator programs for non-IT staff often now include innovative topics, like cloud, machine
learning and micro services.

Digitally-enabled advisory workforce

 Increasing realisation that digital tools and smart workflow technologies can enhance bankers' capabilities and allow time to become more efficient and client focussed (e.g., Tableau).

Obtaining the best talent

- As banks compete with Silicon Valley for the best talent, they will need to create two types of tech careers:
- Operational tech running the business.
- Disruptive tech changing the business.
- The latter can be met with more flexible work schedules, new impact based compensation models.
- Talent will also be sourced differently with external, gig-based talent brought in for various projects.



Client centricity principles

Delivering customer-focused insights and experiences

With increasing digitalisation, clients' experiences with sales, trading, and execution services are
being shaped and influenced by other industries. For example, transparency, self-service, speed, and
personalisation — which are key elements of digital disruptors — are now expected in global markets as
well. The battleground for customers has shifted to a focus on insights and experiences. In fact, a unified
and consistent cross-asset class experience at all stages of the lifecycle are fast becoming table stakes.

Using data to generate better client outcomes

• The key capabilities to optimise in this environment will be the ability to capture and store proprietary data arising from market activity in a usable manner, integrate it with external data, apply ever-evolving data science techniques to generate actionable insight, and the agility to act on these insights. As the ability to generate Alpha and quick follow to Beta improves.

How to build the *Investment Bank of the Future*

In order to overcome the obstacles, investment banks must have a principled approach to strategic planning and delivery



Obstacles to deliver the investment bank of the future

- Local market structures are so complex and nuanced that an industry solution in the near term requires significant collaboration and co-operation
- Uncertainty as to the role individual market participants, incumbent service providers, utilities and FinTechs should play
- Uncertainty around optimal operational and ownership structures of services provided within the ecosystem
- · Ability to develop a convincing strategic business case with incremental benefit realisation within the early years of investment



Principles to deliver the investment bank of the future

• To overcome such obstacles, investment banks must stick to three core principles:

1

Industry-wide collaboration

Continue working with market participants to collectively resolve industry problems, including further partnerships with FinTechs, utilities and incumbent service providers.

2

Further standardisation

An opportunity exists to create standards that support innovation and promote the adoption of new technologies.

3

Design the vision, understand key investments whilst continuing to simplify

Firms should continually invest in the journey to realise benefits on an ongoing basis and avoid an investment trap.

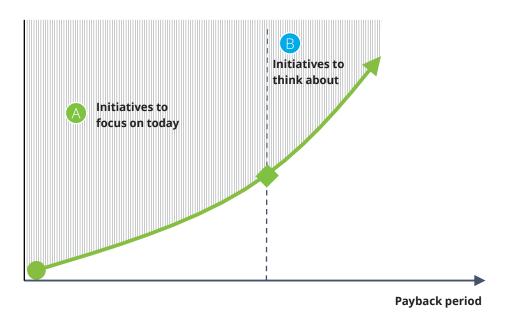
How to build the *Investment Bank of the Future*

Zoom out to define the future and zoom in to translate this vision into prioritised initiatives for today

Zoom out: Define your future Θ Zoom in: Inform your future state planning Θ

The Investment Bank of the Future....Imagine, deliver and run....

Achievement of future state



Examples of initiatives to commence the journey could include:

- Identify the utilities to either outsource or develop internal bank-wide shared services functions (e.g., for data management, KYC, etc.)
- Consider the governance arrangements required to allow for a utility based model to be successful
- Make a decision on industry led standardisation and consider how it will impact the ecosystem
- Consolidate operations processes and activities across asset classes (e.g., single post-trade processing)
- Create seamless connectivity and develop the capability to be flexible, by centralising data management and investing in API
- Consider using a scalable cloud based infrastructure for faster time-tomarket and reduced cost of ownership
- Explore the art of the possible with emerging technologies such as Artificial Intelligence (e.g., for analytics, virtual assistants etc., blockchain)

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