

**INTELLIGENT OPERATIONS:
TRANSFORMING THE
FINANCIAL MARKETS
BACK OFFICE TO BE
FUTURE-READY**



Summary

Capital markets firms are under pressure and must transform.

Capital markets firms are burdened with compressed margins, the need for increased digitization and an unsustainable cost structure where more than one-third of costs are spent on areas that only indirectly add value. At the same time, technology is changing the role and expectation of operations. Many areas are ripe or even overdue for automation and augmentation.

The back office will become front and center.

In the near-future, operations will increasingly engage customers directly, enabling, enhancing and to some extent even mirroring today's front office. Data-driven analysis will see operations become more client-focused and able to contribute directly to top-line growth. To become future-ready, firms must act to transform to Intelligent Operations.

Data and automation are key to Intelligent Operations.

An Intelligent Operations solution provides options that use data and automation to cut costs and boost service levels. It deploys six building blocks:

- Create an effective organization design
- Design value-driven processes
- Invest in intelligent automation tools and solutions
- Institute multi-speed, scalable architecture that supports decoupling and flexibility
- Create an expanded ecosystem with strategic partnerships
- Pivot the workforce to be future-ready

Efficient + agile = future-ready

Firms can significantly cut costs by taking these steps. For example, applying intelligent automation tools can reduce costs by up to 30%. A successful transformation depends on a firm's ability to establish a structured delivery model with a high-level steering board, a data-driven process, and a reporting mechanism.

Unsustainable cost structures in a changing world

The financial markets industry faces an array of challenges, including compressed margins, the need for increased digitization, a changing workforce and significant inefficiencies in the operating costs of investment banks (IBs) and corporate & investment banks (CIBs). **By 2022, every capital markets firm should expect these challenges to impact its future business and economic models.¹ They must respond by tackling the sector’s unsustainable cost structure.²**

Industry structures were born in times of “lucrative inefficiency” when there was little incentive to change and where quick responses were more important than scalable solutions. Subsequent regulatory requirements added to the challenge. Firms spend exponential costs to achieve compliance in a fragmented functional and technical architecture.

Our research highlights the inefficient cost structure of IBs and CIBs. More than one-third of their costs originate in areas that provide only indirect value, such as asset-servicing and settlements, compliance and overhead (see Figure 1).³ **The total was \$58 billion in 2017 for top firms and \$38 billion for others.⁴**

Figure 1: Industry Cost Structures

E2E INDUSTRY COST STRUCTURE FY2017 - \$BN*	TOP IB & CIB	OTHER IB & CIB
Investor Distribution	23	9
Investment Product Manufacturing	6	2
Corporate Advisory & Financing EDM & DCM	27	20
Trade Execution, Clearing, Risk Management	53	35
Asset Servicing, Settlements	25	13
Legal, Risk & Compliance	27	19
Overhead	6	6
Total Operating & Capital Costs	167	104
Core Value Add		

Source: Accenture (2018). Capital Markets Vision 2022: Relevance, Value and Growth in the Digital Era.

Moreover, firms must take action as the work changes. Our 2018 research found that around three-quarters of executives said their workforce would become more flexible and multiskilled by 2020, which would improve innovation. A similar number said corporate bureaucracies stifled productivity and innovation and future work would be structured

¹Accenture. (2018). Capital Markets Vision 2022: Relevance, Value and Growth in the Digital Era. <https://financialservices.accenture.com/rs/368-RMC-681/images/accenture-capital-markets-vision-2022.pdf>

²Accenture. Capital Markets Vision 2022.

³Accenture. Capital Markets Vision 2022.

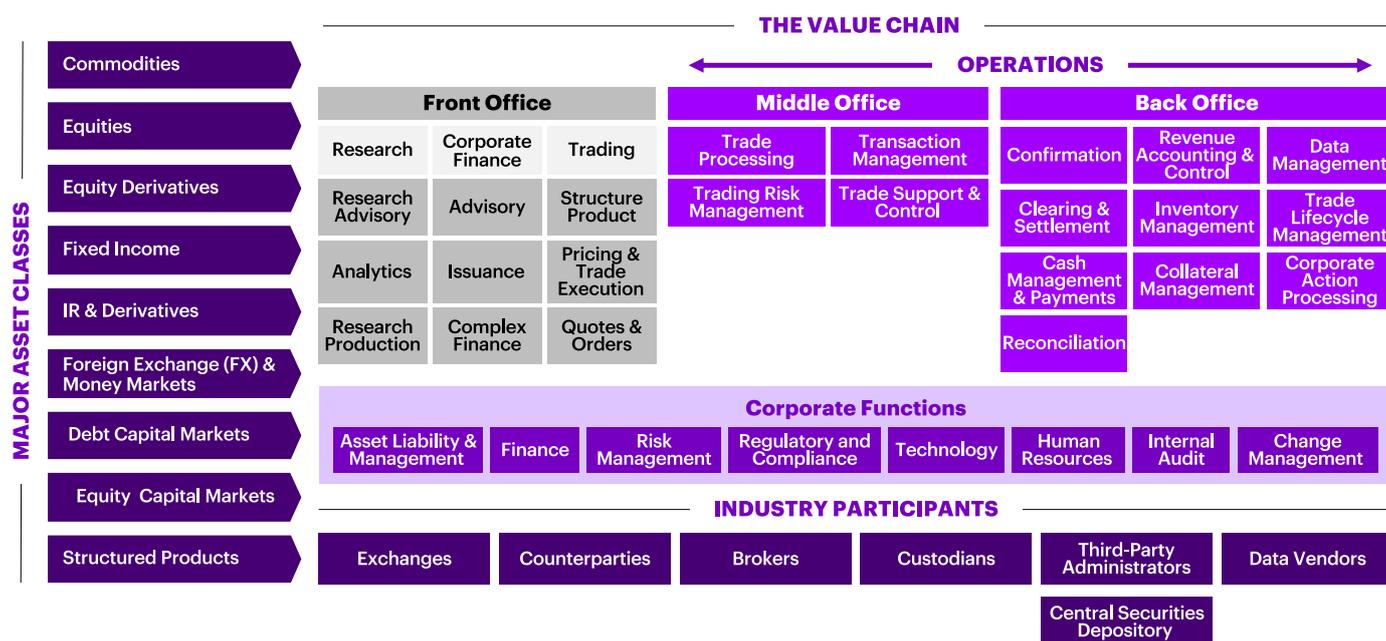
⁴Accenture. Capital Markets Vision 2022.

more by projects than job functions.⁵ Only one in five CFOs felt their company’s operating model aligned to fuel strategic growth initiatives, and three-quarters said they were not well-positioned to meet the needs of tomorrow’s digital business.⁶ There is clearly room for improvement, even before the COVID-19 pandemic made action urgent.

Transforming financial markets operations, which can account for up to 15% of the total cost base, is central to meeting this challenge. We will examine the key themes, assets and accelerators that firms can use to transform their operations, making them more efficient, client-focused and supportive of front, middle and back office functions (see Figure 2).

Figure 2: Financial Markets Operations

WHAT IS FINANCIAL MARKETS OPERATIONS?



Source: Accenture (2020). Financial Markets Operations: Transforming to Future-Readiness.

Digitization and a customer-first approach

Five trends and challenges are changing the role of operations and expectations about the function. First, operations are becoming the firm’s intelligence engine, focused on straight-through-processing (STP) and leveraging customer and transaction data.

Second, operations must adopt a “customer-first” approach by optimizing the customer experience, replacing core systems and building organizational agility. Third, operations must unlock trapped value to improve the customer experience, which can be done by using digital technologies and creating better front-line interfaces and customer journeys.

⁵Accenture. Capital Markets Vision 2022.

⁶Accenture. Capital Markets Vision 2022.

Fourth, banks are collaborating to externalize undifferentiated “commodity” services and providing these services as market utilities. This fundamentally transforms the operating model.

Finally, legacy IT systems hold back change and impede digital transformation. Fragmented systems pose significant challenges to delivering STP. The implications are profound and go to the heart of why transforming operations is essential.

To start, operations will increasingly engage with customers directly, making it more like the front-office with continuous improvements to digital touchpoints. Second, operations will move from being a pure cost center to contributing directly to top-line growth. And third, operations will become far more client-focused, supporting differentiating products and services. Emerging technologies will also change staff roles and responsibilities. That’s why firms need to institute Intelligent Operations (see Figure 3).

Figure 3: Intelligent Operations – A New Beginning

In the past, financial services firms looking to transform their back office and operations moved to a shared service. Today, other options are available. Intelligent Operations provides an array of levers and solutions that can trim costs and boost service levels, enabling the front office to work more efficiently by incorporating agility, data insights and right-sized transactional work.

Broadly speaking, financial markets operations will move away from being transactional and focus on:

- Hyper-automation, moving from fixing to preventing failures and overseeing automated solutions
- Business experience, shifting from improving parts of the puzzle to improving the end-to-end value chain
- Operating teams of data scientists in data centers of excellence, generating insights for the front office and clients
- Agile pods with cross-technology skills, automating the value chain
- Regulatory impact predictions from multiple data sources, informing firms of penalties so they can fine-tune remediation investments

The journey to becoming an agile organization with Intelligent Operations starts by deploying six building blocks:

- 1.** An effective organization design with a flexible, lean structure that consolidates and places services in appropriate locations
- 2.** Value-driven processes that streamline or eliminate inefficient processes and outsource repetitive, routine-driven processes
- 3.** Intelligent automation tools, solutions and analytics that drive process efficiencies and enable insight-driven decisions with analytics

4. Modern systems with multi-speed, scalable architecture that supports decoupling and flexibility
5. An expanded ecosystem that uses open banking APIs and forms strategic partnerships to create an integrated, client-centric digital ecosystem that drives value and saves costs
6. A future-ready workforce that stems from a robust talent strategy to encourage flexibility, adaptability and innovation

In our experience, IBs and CIBs that apply these six building blocks see significant savings. Applying intelligent automation tools and leveraging an ecosystem, including the use of utilities, can save up to 30%. Distributed ledger technology (DLT) in areas of the trade process can reduce or eliminate aspects like reconciliation, confirmation and trade-break analysis (and that is before considering further DLT technology breakthroughs), potentially saving up to 50%. And client segmentation, process streamlining and rationalizing client-support operations can save tens of millions of dollars.

Moving to an agile enterprise: The six building blocks of Intelligent Operations

1 Effective organizational design

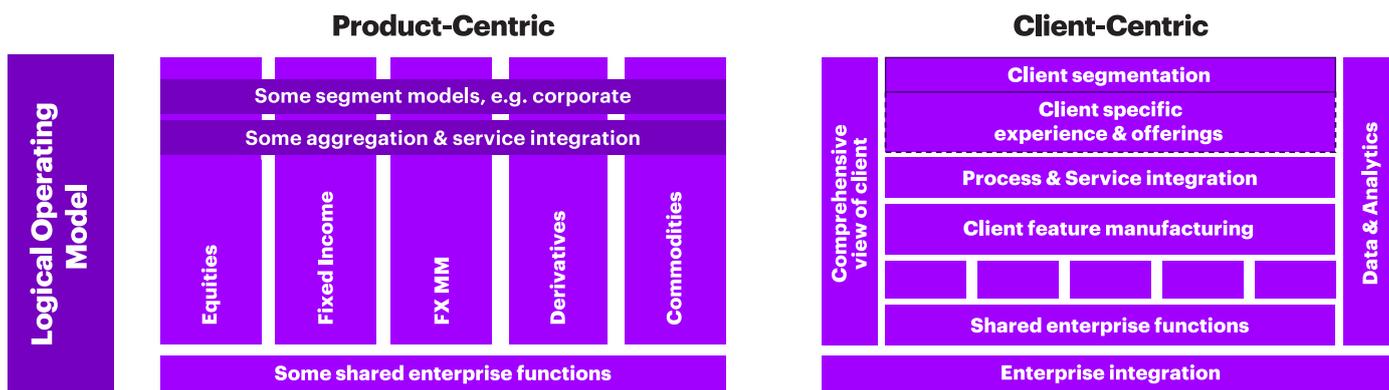
The purpose of the first building block is to ensure the firm's operating model and organizational structure are aligned with strategy. This alignment requires balancing a client-centric approach with an efficient cost structure, using three components.

First, firms should **reorganize teams** to focus on specific client segments and their experience. They should scrap the product-push model that matches products to a client's functional needs and instead, develop a client-centric model that seeks to understand and then match services to a customer's desires and goals. This model goes along with clear client segmentation to craft relevant services and ensure important clients receive the best possible care.

In this way, the firm can construct a two-way partnership between clients and advisors, where advice is central to the value proposition and products are an enabler – not the core proposition. Additionally, they build the product portfolio together while technology provides client visibility, access and control and helps firms make informed decisions. This reorganization puts client-facing and service execution teams in each of the front, middle and back offices. In this way, "frontstage" teams in each office can provide a consistent client experience while "backstage" teams provide the services necessary to support the client.

A data-driven, client-centric approach underpinned by data analytics and accelerated by open ecosystems brings greater cross-selling opportunities, higher client retention rates and improved client self-servicing capabilities (see Figure 4).

Figure 4: Product-Centric vs. Customer-Centric operating model



Source: Accenture (2020). Financial Markets Operations: Transforming to Future-Readiness.

Secondly, firms should **right-size operations teams** and deploy top talent across geographies. They can do so by moving back-stage staff to low-cost locations and determining the location of frontstage employees based on factors like proximity to clients and the front office, operational flexibility, language and culture, and business acceptance.

Four main approaches achieve this goal and each has advantages and drawbacks. A global approach uses a single operations center for all processes. A regional approach puts an operations center in each region. A process approach sets up one operational center for each end-to-end process. And lastly, a hub-and-spoke solution has one global hub and one operational center for each region. The hub-and-spoke approach is the most popular, combining low-cost opportunities with near-shore service. But it requires increased management and operational diligence.

Thirdly, firms should **establish operational units to deliver data-driven insights**. While many firms want to become more data-driven, they find that different factors complicate this journey. These include the exponential growth of data volume, poor data quality, trust and security issues, data locked in legacy systems and data management not viewed as a business asset. In addition, many firms manage data governance, protection and analytics separately, adding further challenges.

The good news is that each aspect can be solved. Accenture’s Analytics Operating Model, for example, shows how a dedicated Analytics POD – a Center of Excellence (CoE) under the data management division – can use technology and data to deliver value.

While such CoEs are an enterprise-wide concept, a CoE dedicated to operations and back office data can be considered for operations alone. The Analytics POD’s role is to leverage the vast datasets in operations to generate client insights that will help frontstage teams while driving efficiency improvements for backstage teams.

Case Study: Relocating Operations and IT

A global bank wanted to cut operational and IT costs by relocating staff and improving the client experience. It transferred 4,000 staff to lower-cost locations in Asia and used segmentation to differentiate clients. Additionally, it cut the onboarding time by two-thirds.

2 Value-driven processes

Optimizing operational processes is crucial for efficiency and value delivery. Most banks struggle to achieve this goal because their operations are highly driven by manual processes and span systems, data sources and teams.

Process optimization and best-in-class STP are fundamental if firms are to become client-centric and cost-effective. It will also lower operational risk and diminish the chance that firms fall afoul of regulatory penalties. Succeeding, however, requires clear business outcomes so they can then identify which process flows need to be fixed.

Banks should start with an analysis of existing processes. For example, if FX transactions are not all fed into the post-trade processing system in real-time because outside dealing-room flows are received only in batches during the day, then operations must enter manual adjustments later. Achieving an optimum end-to-end STP rate – the key value-driver and KPI in operations – requires decomposing the value chain and processes to identify and resolve intervention points.

Accenture's wide range of business process management (BPM) assets specific to investment banking can be used in process architecture, documentation and re-engineering initiatives. These can serve as a foundation for process architecture and modeling activities, which accelerate the work effort and reduce business impact.

Our BPM assets identify gaps in process inventories and steps, model validated processes at an appropriate level of detail and rely on industry benchmarks, value drivers and metrics to quickly identify efficiency opportunities.

Case Study: Preparing for Regulatory Change

A global investment bank needed to understand its settlements efficiency in order to limit the potential for late settlement penalties when the Settlement Discipline Regime of the European Union's Central Securities Depositories Regulation (CSDR) takes effect in February 2021.

Accenture's CSDR analytics tool helped improve the bank's operational setup by analyzing past settlements and highlighting the root causes of late settlements with an interactive analytics dashboard. Accenture contextualized a gap analysis by simulating late settlement penalties and mandatory buy-ins, helping proactively identify adverse impacts of late settlements.

We also helped the bank reduce the costs of late settlements. With a large-scale revamp of its operational systems, we supported digital automation and replaced manual, spreadsheet-based reporting with tableau tools, leading to increased scalability and efficiency.

3 Intelligent automation tools, technologies and analytics

Automating and augmenting existing processes are key to building a more efficient, customer-centric firm. **By automating existing tasks, Accenture calculates firm savings of \$15 to \$23 billion between 2018 and 2025. Augmentation would also boost productivity \$72 to \$117 billion in the same time. While these are industry-wide figures for North America, capital markets still account for up to \$25 billion in cost-savings and productivity gains.**⁷

There are a range of intelligent tools and technologies that firms can use to lower risk, improve efficiency, cut costs and ensure a better client experience:

- **Robotic process automation (RPA)** allows firms to automatically execute repetitive processes such as pre-matching instructions, identify client trades eligible for trade-off and distribute tasks between robots and back-office staff.
- **Natural-language processing (NLP)** ensures unstructured documents can be automatically processed and classified, enabling chatbots to provide customer insights as well as front-to-back-office communications.
- **Machine-learning** provides automated learning based on historical trade details and data patterns and can predict failed deals and trades by generating cash/stock breaks based on past events.
- **Analytics** brings a data-driven approach that can suggest recommendations and next-best actions. With client segmentation, for instance, analytics can determine cross-client settlement, provide assessments of clients with the highest fail rates and help with data reporting and visualization.

Case Study: Accenture Post-Trade Processing (AFTP)

AFTP is a back-office operations utility that provides an outsourced trade settlement service for securities. It supports global clearing and settlement, asset servicing, data management and accounting for securities instruments such as equities, bonds and notes.

AFTP uses RPA and artificial intelligence (AI) to automate various scenarios in the post-trade lifecycle, bringing efficiencies in post-trade processing. With around 65 bots, AFTP leverages RPA for processes related to settlements, reconciliation, corporate actions, reference data and billing. It reduces the full-time equivalent operational hours worked and boosts efficiency by augmenting and assisting staff.

⁷Accenture (2019, December 10). Workforce 2025: Financial Services skills and roles. <https://www.accenture.com/us-en/insights/financial-services/workforce-2025-skills-roles-future>

4 Multi-speed architecture

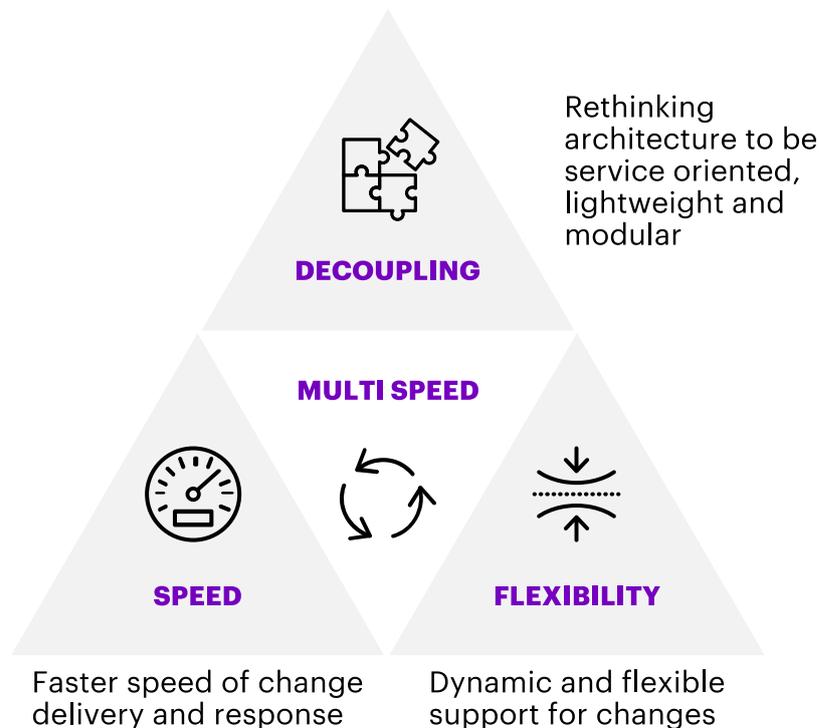
Multi-speed architecture allows firms to pursue opportunities for agility and change while maintaining the rhythm of their business operations (see Figure 5). It is essential for managing business priorities and regulatory pressures, keeping existing systems functional, managing risk and improving cost efficiencies.

Firms must address underlying architectural challenges, such as legacy systems and infrastructure, fragmented systems and data, and the cost of changing systems of record. Doing so will create a service-oriented, lightweight and modular architecture that is dynamic and flexible, more responsive to the demands of the business and allows faster change-delivery. Success requires three shifts:

- **From monolithic to microservices**, bringing scalability, resilience, speed and the possibility of customized requirements
- **From slow to rapid time-to-market**, ensuring agile development, continuous operations and effective management of the environment with cloud computing;
- **From static to dynamic**, using cloud migration and “as-a-service” solutions for lower cost, improved scalability and operating model, better business continuity and workforce transformation

Figure 5: Building blocks of a multi-speed architecture

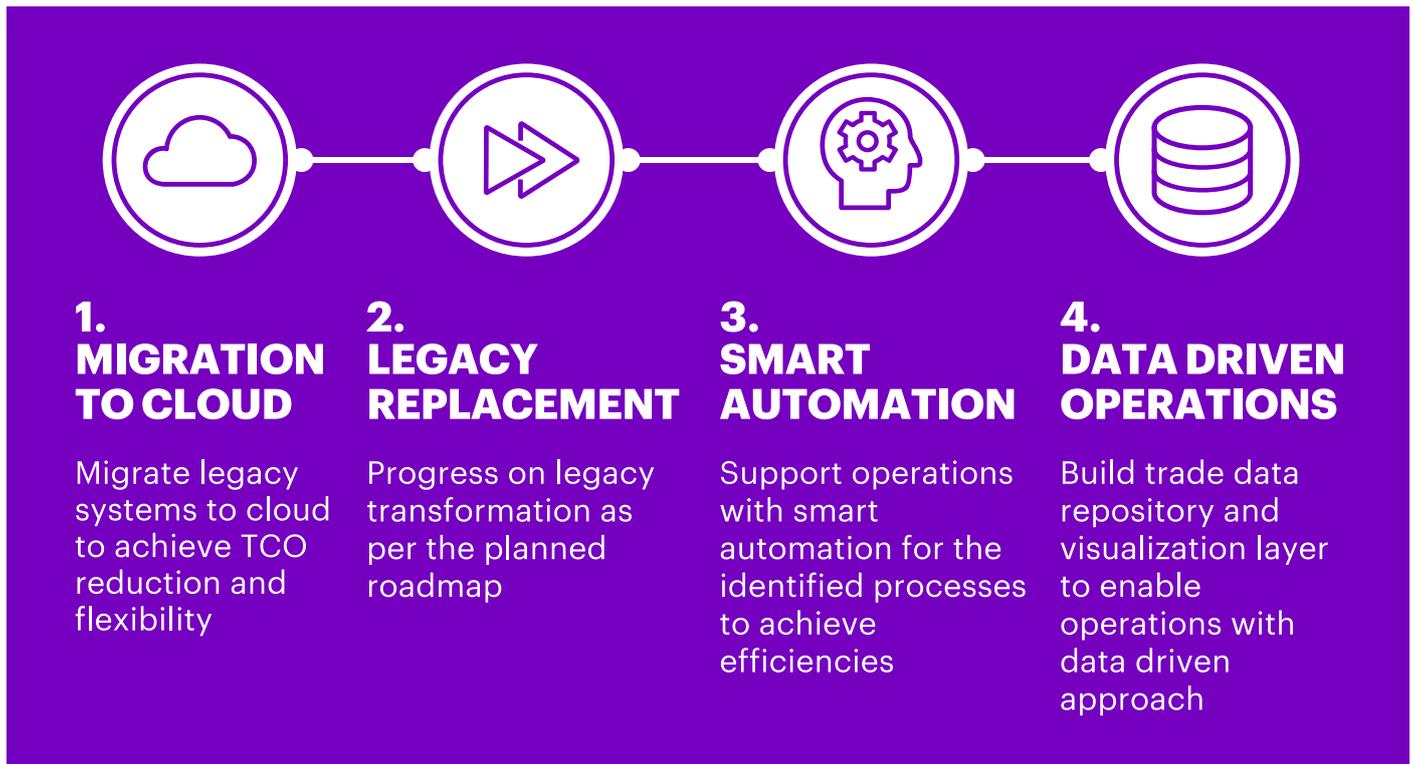
BUILDING BLOCKS OF MULTI-SPEED ARCHITECTURE TO OVERCOME CHALLENGES



Source: Accenture (2020).

Although some firms will look to embrace a holistic transformation to ensure true decoupling, flexibility and speed, most will take a more selective approach and implement one or more steps in the Intelligent Operations journey (see Figure 6).

Figure 6: The journey to Intelligent Operations



Source: Accenture (2020).

Each can bring significant benefits. Migrating to the cloud, for example, can cut the total cost of ownership (TCO) in half for a range of workloads and patterns, including web applications, environment optimization and transaction processing. It can also reduce the TCO of big data analytics by 40-70%, grid computing by up to 80% and storage optimization by up to 90%.

Case Study: Legacy Transformation Program

Accenture partnered with a global investment bank to transform and migrate products on to a unified trading platform. We used Murex as part of a multi-year program by the bank to simplify a range of product areas, including FX.

The migration goal was to realize economies of scale by retiring legacy applications and using a common trading platform globally. As a result, the bank instituted a simplified platform and replaced its legacy system for its rates and credit business.

5 An expanded ecosystem

Ecosystems are at the heart of a successful transformation strategy because they drive innovation on an industry-wide scale. Ecosystem partners can also collectively boost the value of goods and services delivered to clients.

Investment banks should position themselves as ecosystem leaders in order to chart the necessary course. Leveraging the capabilities and technologies built by ecosystem partners can fill their own innovation gaps and drive down their cost structure with outsourcing. For operations, the key ecosystem players are fintechs and market utilities.

The cost-structure analysis previously described shows where investment banks can leverage ecosystems to remove activities that add little or no value. Partners at the top of the value chain can increase client engagement and drive top-line growth, while market utility service providers can take on non-core operational processes, mutualize change costs and drive reductions to bottom-line costs.

The purpose of these ecosystems is to deliver a client experience at the point where functional areas and technologies intersect. Fintechs are central to this drive for innovation. Another key area is the use of industry utilities, which Accenture research shows could save 30% or more in areas like post-trade processing.

Despite the potential savings, many investment banks are in the early stages of adopting market utilities, largely because many offerings are still maturing. But we expect most investment banks will use market utilities to fulfill at least some of these functions in the coming years. And they would be wise to do so. **The industry spends \$133 billion on post-trade settlement and servicing – costs driven by high levels of inter- and intra-firm reconciliation, a lack of operational scale and an archaic and overly complex asset-servicing stack.**⁸

Many players also feel they are nearing the maximum efficiency gains they can realize on their own. Yet, regulation continues to raise the compliance bar and costs. Utilities can help by offering three cost-saving benefits: cost efficiency, scalability and regulatory compliance.

There are numerous opportunities across operations for partnerships with fintechs and utilities – from confirmations to trade lifecycle management, from cash management and payments to collateral management, and from inventory management and data management to clearing and settlement.

6 Future-ready workforce

Research shows the potential for up to 10% of financial services tasks to be automated by 2025 and that technology will augment up to 48% of these tasks.⁹ **The potential savings for firms is significant: up to \$140 billion of cumulative value for the industry in North America alone.**¹⁰

Building a future workforce is a comprehensive undertaking that will create a more productive and adaptive workforce. Digital technologies will reinvent the employee experience and redesign organizations to be more agile.¹¹ For investment bank operations, the workforce will need to rely on technology to focus on client needs, flexibility and increased operational efficiency.

⁸Accenture. (2018). Capital Markets Vision 2022: Relevance, Value and Growth in the Digital Era.

⁹Accenture. (2019, December 10). Workforce 2025: Financial Services skills and roles.

¹⁰Accenture. Workforce 2025.

¹¹Accenture. (2018). Capital Markets Vision 2022: Relevance, Value and Growth in the Digital Era.

<https://financialservices.accenture.com/rs/368-RMC-681/images/accenture-capital-markets-vision-2022.pdf>

Increased flexibility brings increased agility in how firms introduce new products and business models in their operational workflow, meaning they can adapt faster to the value chain. Greater operational efficiency comes as a result of using technology to augment workforce capability and efficiency, ensuring an enhanced focus on value-added activities and driving down the overall cost of operations. A data-driven approach, for example, can allow operations to look only at exceptions.

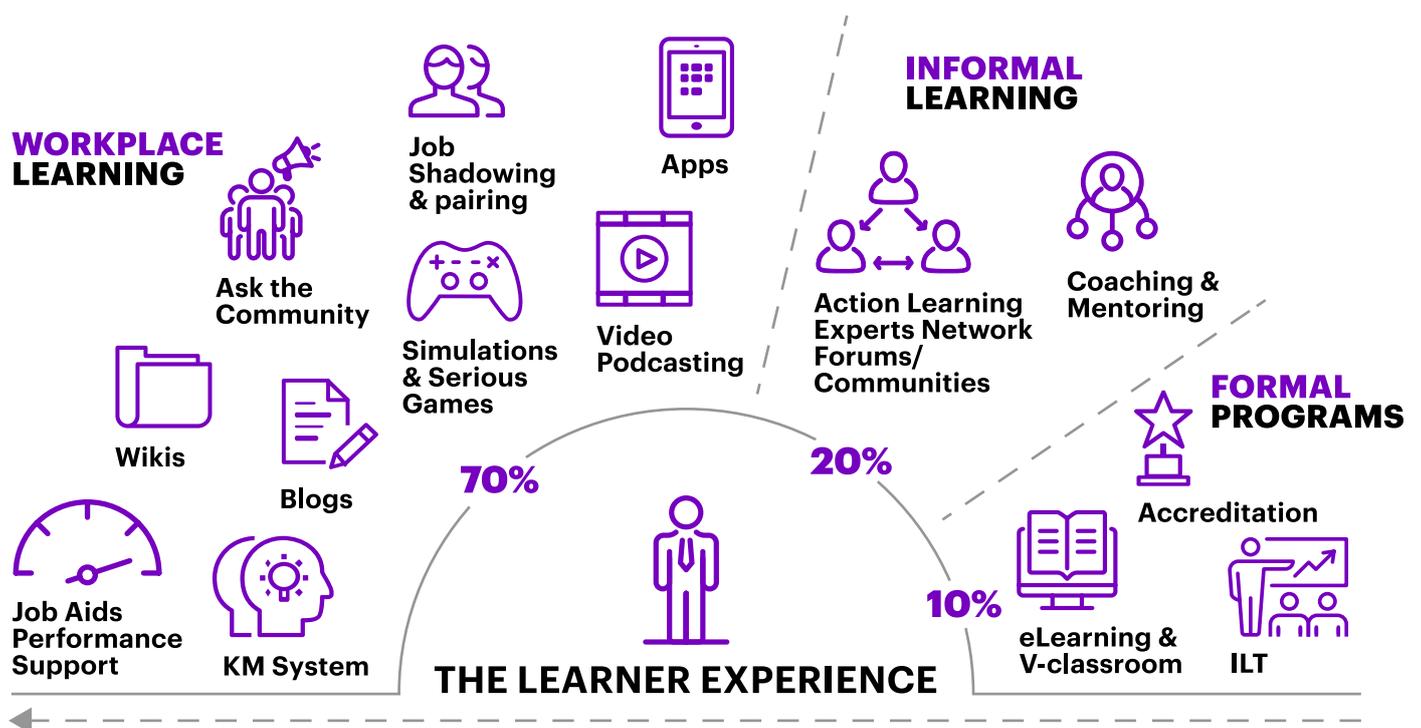
A client-centric focus in operations uses data to provide recommendations, resulting in better client service. Data scientists, for example, can transform existing data into insights for the front office and clients to become a more cost-efficient custodian or ecosystem partner.

Day-to-day work and tasks will also change. Operations teams will use analytics more frequently and staff will transition from performing specific activities to monitoring work via a dashboard. Additionally, there will be more interactions with technology and automated processes.

This implies changes in the workforce too. Firms can introduce centers of excellence to support new technologies or establish a dedicated team to manage the ecosystem. New roles have emerged – from data scientists to RPA specialists and from AI trainers to utility managers.

Finally, to adopt the workforce to these changes, firms will need to provide innovative ways of learning that are digitally enabled and hyper-personalized. This type of learning requires shifting away from the classroom and into the realm of bite-sized, on-demand talent development (see Figure 7).

Figure 7: How the workplace learns



With strong, visible leadership driving the process, firms can train, reskill and build a future-ready, agile and capable workforce. And they can augment those capabilities with technologies such as AI, data analytics and machine-learning.

Getting to Future-Readiness

There are compelling benefits in transforming financial markets operations to future-readiness. But getting there is neither simple nor guaranteed. Academic research over the past two decades has shown that up 70% of transformation and change programs fail.

A number of reasons explain this breakdown. A lack of support by leadership being among the most important. Other obstacles include:

- A lack of employee trust in the transformation
- Too few resources to support the program
- A high prevalence of hidden and unstructured data
- Insufficient funding
- No accountability for tracking and driving benefits
- Siloed agreements and a tendency for self-interests to create friction and hinder the overall program

With these challenges, transformation programs risk losing momentum and in-house support for adopting change. They are fragmented, unaligned and fail to deliver value or scale.

However, firms can mitigate or eliminate these obstacles by putting in place a structured delivery model with the following interactive components:

- A program-level steering board that approves and oversees all transformation initiatives and ensures sub-initiatives stay on track;
- A data-driven qualification and diagnostic process that focuses on value and outcome and through which all transformation initiatives are onboarded;
- An agile iterative process that begins once initiatives are approved and reports progress to the steering board.

With a properly designed, managed and monitored process, financial markets firms can transform their existing operations into Intelligent Operations, leaving them prepared for a digitized, customer-centric and highly efficient future.

AUTHORS



RALF BEMMANN

Principal Director,
Accenture Capital Markets,
Financial Markets & Trading Platforms,
ASEAN, ANZ and Middle East



NICOLE BODACK

Managing Director,
Accenture Capital Markets,
APAC

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