Service delivery optimization in banking

Meeting new customer expectations and competitive threats
Banking institutions today need to be able to quickly deliver easy-to-use, highly tailored services to address shifting consumer preferences and differentiate from competitors—all while maintaining high levels of quality and efficient operations. As financial services organizations go mainstream with modern technologies, service delivery optimization is no longer an option; it’s a requirement.

Most banks still rely on outdated systems and architectures that were not designed to support the core banking capabilities and services of the future. With pressure to reduce costs and risk, many banks are reluctant to invest in improving service delivery capabilities. But these investments are worthwhile—and arguably inevitable—enabling banks to deliver services at a faster rate and meet the ever-changing needs of the customer.

Nontraditional banks are poised to offer banking services with strong consumer appeal that could capture a large share of the Millennial market. Finally, frequent changes in regulatory guidelines and market factors are forcing banks to rethink value chains and develop more componentized operating models.
Four core components of service delivery optimization

To succeed in today's market, banks should consider fundamentally reshaping value propositions and improve software product and service delivery through the following key capabilities.

**Simplified banking business architecture**
Steps to simplified architecture:
- Rationalize product portfolios based on what clients value most.
- Take advantage of modular product architecture.
- Reduce customization efforts where customers do not see significant value.
- Align cost and complexity trade-offs with the strategic direction of the business, particularly around simplification.
- Standardize processes and platforms to reduce costs and lead times and improve experience.

Rationalization of applications by leveraging enterprise-class components can help banks achieve two broad improvements: reduced duplication of applications across business groups and greater business agility. Having centralized business operations across product lines can help increase operational efficiencies and reduce maintenance costs. Componentized application design helps banks meet demands for rapid modernization and upgrades, providing a modular product architecture that allows for decoupling of front-end and back-end capabilities for faster innovation.

**Reusable banking API solutions**
Reusable APIs enable banks to share data with internal developers, partners, and third parties, helping improve efforts to release new features. With reusable APIs, banks can reduce costs, deliver projects faster, and compete under pressure from outside developers. APIs enable decentralized access to data and capabilities, while ensuring compliance, security, and governance. Banks can leverage APIs to unlock siloed data that developers can then reuse and access independently without compromising visibility. Banks will be well positioned for the API revolution and more empowered to create IT architecture that emphasizes agility and innovation.

**Customer-backed process redesign**
Process redesign can help banks enhance customer experience, provide services faster, and reduce costs to implement and deliver software. Redesigning end-to-end processes should be driven by the desired customer experience. This approach can help financial services institutions generate new functionality in relatively shorter time frames. Redesign includes reevaluating and removing all obsolete and redundant processes and resources. New and redesigned processes should increase efficiency and significantly improve customer service—faster resolutions, better information availability, and increased convenience along the journey. A consistent and well-structured methodology is essential, as is a balance between customization and perceived customer value. In the age of digital disruption, all financial organizations will have to rethink and innovate operations to deliver a measurably enhanced customer experience.

**Process-centric IT operations**
Many banks are moving to shared services or utility models to maximize scale and reduce costs. As part of this transition, banks integrate and align process-centric IT operations capabilities, enabling more streamlined creation of software systems for essential business processes. It also enables banks to better organize to meet strategic and tactical goals around standard, repeatable, and actively managed business processes, greatly increasing predictability. Process-centric IT operations can help banks be more innovative and nimble, while reducing surprise and risk.
Key requirements for successful transformation

To address ever-changing customer and business needs, banks will need to transition successfully on three fronts: cloud, data, and technology operations.

Achieving the goals and realizing the benefits of service delivery optimization will require banks to modernize and transform in multiple domains, chiefly cloud, data, and technology operations. Reorganizing IT for faster software and product delivery will be essential. Programs will need to be structured with enablers to drive service delivery optimization, coupled with transformation capabilities.

Enablers

**Agile**
Agile methods enable banks to deliver frequently in small batches and promote a consistent culture across service delivery teams. Frequent delivery also creates an increased sense of transparency and collaboration.

**DevOps**
DevOps adoption will enable collaboration and communication among software developers and other IT professionals, while automating the process of software delivery and deploying changes across application and infrastructure.

**Enterprise architecture (EA) transformation**
Enterprise architecture (EA) is required to sustain established goals. EA is the “glue” that binds and aligns business strategy with technology design and delivery. EA is structured around four goals: effectiveness, efficiency, agility, and durability.

**Workforce modernization**
When business processes are reengineered, technology or system upgrades are implemented, business models are changed, or jobs are redesigned, people are affected. Addressing the “human” side of transformation is crucial for successful delivery.

Capabilities

**API**
Adoption of APIs equips banks to deliver high-quality, reusable assets that can reduce cost and effort while improving the customer and developer experience. Availability of resilient APIs can also enhance security and improve the overall architecture.

**Cloud**
Establishing cloud infrastructure provides highly available platforms that enhance security, elasticity, and availability while improving end-user experience and speed to market. The cloud can help banks meet customer satisfaction and revenue goals.

**Enterprise data**
Data analytics is becoming a primary driver of innovation and performance in banking. Data-driven decisions can enhance performance and enable efficient customer service by decreasing time to market, cost, and risk.

**Process automation**
Process automation has become a powerful and effective tool for finding efficient ways to deliver the best possible user experience while maximizing efficiency, keeping costs as low as possible, and maintaining acceptable security levels.
Four major areas for improvement

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<th>Focus area</th>
<th>Action</th>
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<td>Prioritize strategic decisions</td>
<td>Acting on decisions that deliver the most strategic value to the business</td>
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<tr>
<td>Reduce technical debt span</td>
<td>Refactoring poorly designed, difficult-to-manage software to improve development efforts</td>
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<tr>
<td>Alleviate technology constraints</td>
<td>Identifying technology that slows down promotion of software to production</td>
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<tr>
<td>Drive better business and IT collaboration</td>
<td>Increasing communication and transparency across the business and IT functions</td>
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In addition, five key habits should be visible signs that an organization aspires to achieve excellence in delivery agility.

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<th>Treat releases as nonevents</th>
<th>Maintain continuous feedback</th>
<th>Focus on finishing</th>
<th>Improve everything</th>
<th>Communicate without meeting</th>
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<tr>
<td>Deploying products as small and frequent minimum viable product (MVP) releases</td>
<td>Gathering real-time feedback from customers and end users; business KPI monitoring; using solution validation to inform decision making</td>
<td>Balancing capacity with demand; proactively managing WIP and bottlenecks; prioritizing on a regular basis</td>
<td>Maintaining an improvements backlog; running improvement experiments; measuring on a regular basis</td>
<td>Teams communicate in real time and don’t need meetings or ceremonies to force communication</td>
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## DevOps transformation

A successful DevOps transformation helps enable better service delivery with the increased speed, quality, and reliability banks need to stay ahead of competition.

### Key pillars for DevOps transformation

Four primary pivots are required to transform an organization from current-state spend and capacity and enable modernization.

#### Organization and workforce as many autonomous engineering teams

**Today** - Legacy workforce of thousands, without the capacity, skills, and organizational structure to undertake modernization  
**Tomorrow** - Restructure, upskill, and repurpose labor and capacity with higher ratio of engineering talent working in small, customer-focused teams

#### Applications as microservices and cloud native

**Today** - Technical debt across thousands of legacy applications comprising a large percentage of spend for operations, maintenance, and infrastructure  
**Tomorrow** - Migration of low-touch applications to the cloud and replatformed and refactored applications to nimble, secure, scalable microservices

### Ways of working as agile, DevOps, and automation

**Today** - Legacy delivery and operational processes that require high manual labor and administrative overhead taking time away from engineering  
**Tomorrow** - Redesign processes to enable a rapid test-learn-improve culture with two-week release cycle times as the new norm, with automated delivery

#### Infrastructure as code and cloud

**Today** - High manual labor and high cost for legacy infrastructure that is change resistant, slow to provision, and hard to maintain and scale  
**Tomorrow** - Public or private cloud infrastructure that is automated, managed as infrastructure as code, and scalable with reduced TCO

### Addressing barriers to DevOps transformation

Based on “breaking through barriers,” this approach helps reduce organizational debt and free up spend and capacity by focusing on alignment and quick wins followed by rapid scaling to improve ROI and impact.
Phase 1: Launch
Barriers – Lack of alignment or focus, framing of transformation case is not compelling
Solution – Alignment: Reimagine the future state as a modern delivery engine
Define and align leaders around a new vision for the organization that is built on speed, innovation, and modern cloud-native architecture with fast, hard-dollar payback

Phase 2: Pilot
Barriers – “Will not work here” mind-set, workforce needs help to get started
Solution – Prove it: Demonstrate the art of the possible with pilots
Initiate three modernization pods, and modernize applications and infrastructure to cloud through a lab-based sprint environment

Phase 3: Transform
Barriers – High manual labor, aging legacy apps, high costs, unscalable infrastructure
Solution – Create capacity: Move 1,000+ apps through a migration pipeline
Rapid assessment of applications and infrastructure portfolio, and rehost, replatform, and secure applications through a DevOps cloud platform (DCP)

Phase 4: Scale
Barriers – Legacy workforce is not ready for modern delivery; functional silos and suboptimal role ratio
Solution – Upskill the workforce: Create the product and engineering workforce
Formalize a new organizational design that follows a modern architecture and engineering-first mind-set based on small, autonomous product teams

Phase 5: Operate
Barriers – Inflexible, bloated legacy applications, old user experiences, poor end-user adoption, and cyber exposure is more complex than before
Solution – Accelerate modernization: Refactor and rewrite to cloud-native architecture
Refactor and rewrite applications toward cloud native, with improved experiences and loosely coupled microservices
Role of enterprise architecture (EA) and the workforce

As part of any service delivery optimization effort and to support Agile and DevOps adoption, it is imperative to transform EA and the workforce into partners and champions of an evolutionary future-state architecture.

Transforming the role of EA

EA needs to transform and respond to emerging business challenges.

**Traditional role** – Viewed as gatekeepers of archaic rules

**Future role** – Increase collaboration and transparency leading to better decision making

**Traditional role** – Unable to provide a forward-looking vision

**Future role** – Responsible for designing the future-state architecture

**Traditional role** – Lacks the ability to steer, integrate, and align the enterprise

**Future role** – Links business mission and strategy to IT strategy through portfolio architecture roles

**Traditional role** – Causes roadblocks for teams leveraging new and modern technologies

**Future role** – Champions new and modern technologies and removes impediments

**Traditional role** – Spends efforts on controls and perfection of documentation

**Future role** – Coaches for excellence in architectural and engineering practices

Benefits of a transformed EA function

An effective EA practice delivers business value by producing several measurable and useful results.

**Increased transparency** of functions and responsibilities for EA leading to faster and better decision making

**Better compliance** with security, controls, and industry regulations that are ever changing

**Less complexity** due to overall reduction of the architecture landscape complexity, leading to significant reduction in TCO

**Greater agility** of business, leading to increased innovation and long-term viability of organizations

**Easier transformation** for strategic and tactical business initiatives, granting increased flexibility

**Effective organization** due to improved business and IT alignment, enabling the effective support of business goals through IT solutions

**Increased support** and action from teams in progression to defined future-state visions

**Well-designed blueprints** and patterns for capabilities to accelerate service delivery

Workforce modernization to aid transformation

Shifting from legacy hierarchies to a network of teams requires enterprises to become more digital and enable the workforce to thrive in the new digital reality. Workforce modernization efforts need to include design and execution of activities such as communications and learning that will drive a smooth and successful end-user adoption experience. Empowering the modern workforce happens through creation of a digital workplace experience that is always available, is on the cloud, enables collaboration, and provides secure access to applications, resources, and data as needed.
Summary

Legacy systems and processes often limit capabilities of banks to support future core banking capabilities and services. This can be a huge risk: Customer expectations are continuously changing, and many nontraditional banks are entering the market to offer banking services. Service delivery optimization can help banks zero in on some of their toughest challenges by converging business and technology. It can help ensure effective and efficient delivery of technology offerings in support of changing needs by providing a methodology for managing the complexity of large-scale technology change.

Banks have many compelling reasons to transform and optimize software and product delivery. By instituting key behaviors to help drive the transformation, banks can successfully modernize and tap into the vast range of opportunities opening up in the future of finance.

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