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& *Capabilities-driven IT*

How financial-services firms can become more agile by bringing IT out of the back office

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Executive summary

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The rise of digital technology has dramatically affected the financial-services landscape. Businesses now demand that technology provide faster speed-to-market, enhanced functionality, and improved customer experience, while at the same time maintaining or reducing costs. Yet most firms have not kept up, in part because they are still using a traditional, centralized IT operating model. IT centralization has achieved many successes: Chief among them, costs are down and compliance is up. But this model is not adaptable enough or agile enough to support firms as they compete in a continuously evolving digital marketplace.

Many high-tech firms and startups — in financial services and other industries — are taking a different approach, not just decentralizing but integrating technology capabilities directly into the business, with a model that we call capabilities-driven IT. In this model, blended, colocated teams contain all the business, operational, and technology skills needed to deliver a specific capability. These teams can deliver fast, flexible solutions, because IT development is no longer in the back office, but directly linked to the business's needs, while IT governance and infrastructure services remain centralized to maintain benefits of scale.

Moving to this new model presents challenges. Financial-services firms will have to start thinking about IT as part of the business, rather than a function. They may require an IT reorganization, different governance approaches, new investment processes, and new talent. A complete shift may take years rather than months, as the underlying technology architecture continues to evolve. But the benefits are significant, and the right approach makes the challenge manageable: Think big but start small, in a few carefully chosen areas where capabilities-driven IT can provide fast results and create momentum for a full transition.

The rise of digital

Financial-services customers in a digital world have high expectations. Social media and mobile apps have created an environment in which customers expect constantly improving products and real-time access to information. To compete, business leaders now need to push out new product features in days or weeks rather than months or years, and these products have to provide an integrated and user-friendly experience. Company leaders are well aware of the challenge. According to PwC's Global Digital IQ Survey, 86 percent of CEOs say it's crucial to incorporate digital technologies into their businesses.[1]

Pressure is also increasing to improve efficiency in business units, operations, and technology. New digital tools such as robotic process automation, big data, and machine learning offer new opportunities for firms to leverage IT throughout their businesses; they can increasingly automate manual tasks and create a digital workforce.[2] The technology itself is also becoming easier to deploy, with software-as-a-service (SaaS), cloud computing, and intuitive interfaces. This user-friendly technology increasingly permits operational and business partners to "code" functions with little or no involvement from IT.

Yet the IT departments at some financial-services firms have not capitalized on these developments, in part because they are still using centralized operating models (*see Exhibit 1, next page*). Centralization has been largely successful in increasing efficiencies, reducing costs, and managing risks and the regulatory environment. But these centralized IT departments are ill-equipped to handle the new pressures and opportunities that digital technology creates. More than a third of IT and business leaders see inflexible or slow processes as the main barrier in successfully executing a digital strategy.[3]

Some financial-services companies have tried to respond by keeping IT centralized but changing their development methodology. Instead of the traditional, one-size-fits-all "waterfall" delivery methodology, which defines requirements and draws up detailed plans before development begins, they are using more agile development. Some now have a formal bimodal IT setup: They use agile development in areas where

Centralized IT cannot handle the pressures and opportunities of digital technology.

speed and flexibility are crucial, and traditional waterfall IT where reliability and stability are the priority.

But bimodal IT has flaws. The need for multiple IT structures increases bureaucracy and slows down product development and time-to-market. Teams often fail to coordinate or share tools and knowledge. Culture clashes can arise, and architectures may even diverge. Since agile IT, by its nature, is difficult to scale, centralized IT departments can spread it only so far. And the gap between IT and the business remains. As traditional financial-services firms struggle with these challenges, smaller, nimbler firms are encroaching on their markets.

Exhibit 1
Many financial-services (FS) firms still have a centralized approach to IT
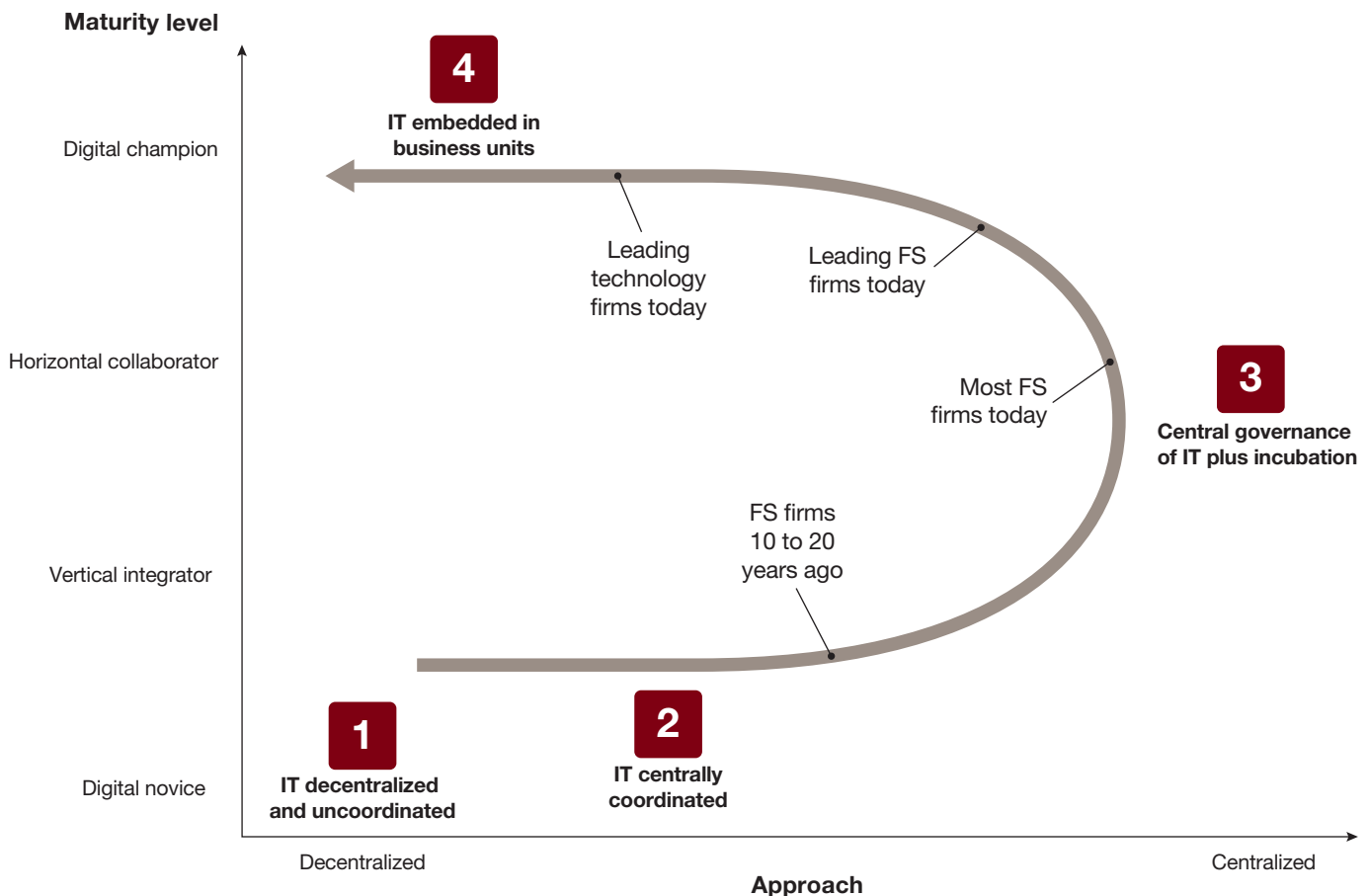
Source: Strategy& analysis

The next step: Capabilities-driven IT

A better solution is available: integrating technology directly into business units, through a model we call capabilities-driven IT. In this model, teams combine business, operations, and technology skills to deliver a specific capability. These teams — called capability pods — contain all the talent and tools necessary to deliver the capability and are responsible for all its aspects, including product ideation, product management, operations, technology design, and development. The pods contain technology specialists, but they also leverage IT's evolution to SaaS, service-based architectures, and increasing user-friendliness to permit team members without formal technology backgrounds to contribute to IT development. The technology specialists also provide insight to and receive feedback from business and operations.
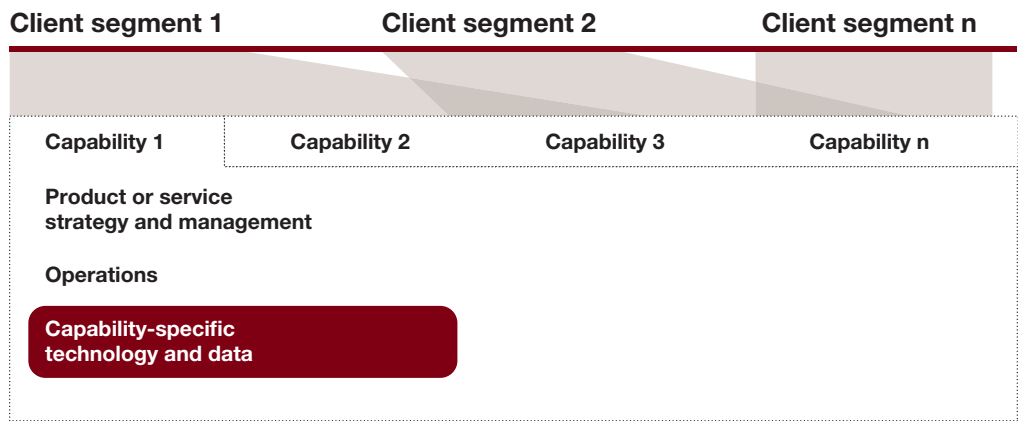
Instead of a business unit sending a request "over the fence" to a centralized IT department, which is fielding requests from all over the company, each pod decides how best to deliver its technological capability. The pods are responsible for the technology's business case and are accountable for it as business leaders, running IT as part of an integrated unit with the rest of the business. Capability pods both develop new products and services and improve existing offerings. They use agile software development when appropriate but typically draw on the best of both agile and traditional methodologies. They also use third-party technology and service providers as needed. (Already, IT spending in other industries is reflecting this shift: More than two-thirds of total IT spending now comes from budgets outside IT, compared with 47 percent in 2014.[4])

At the same time, some foundational services remain in a new and smaller centralized IT department, including technology and data governance; firm-wide privacy and security; some core applications and data services that cut across clients or business segments; shared legacy platforms; enterprise architecture; and IT infrastructure, such as the data center, network, help desk, and end-user computing (*see Exhibit 2, next page*). External providers such as cloud infrastructure companies often play an important role in these services.

Capability pods both develop new products and services and improve existing offerings.

Many technology companies and fintech providers are already using this approach, with organizational structures that combine technology and product development. These firms have often had a head start: Because they began with service-based architectures in the cloud, they had no legacy mainframes or integrated architectures to upgrade or adapt. But as financial-services companies increasingly compete on the strength of their technology offerings, they, too, will find advantages in adopting this next-generation IT operating model.

Exhibit 2
The next-generation IT operating model

Client segment 1   **Client segment 2**   **Client segment n**

Capability 1	Capability 2	Capability 3	Capability n

Product or service strategy and management

Operations

Capability-specific technology and data

Foundational services

Cross-segment capabilities
(including large platforms that cut across all clients or business segments)

Foundational technology and data
(e.g., governance, common application and data services, enterprise architecture)

Shared business operations
(e.g., call centers, billing)

Other shared functions
(e.g., HR, finance)

Software-as-a-service

■ Technology and data functions

Source: Strategy& analysis

The benefits of capabilities-driven IT

With capabilities-driven IT, large financial institutions can begin to operate with the agility of fintech startups, since technology is no longer a bottleneck but instead a fully integrated part of the business. Here are some of the benefits this approach will bring:

- **Business needs met quickly and effectively.** Since pods own both the technology and the talent needed to deliver each capability, and even non-technology specialists participate in IT development, collaboration is continuous. There is no more bureaucracy related to approvals or fights over priorities. Each capability pod decides how best to utilize its own resources to meet the business unit's needs.

- **More customer-centric products, delivered faster.** Because technology developers in the pods work closely with client-facing segments, they have greater insight into client feedback and can incorporate those insights into the development process. They can set and change priorities to meet evolving client expectations, develop products that are more tailored to customer needs, and get these products to market faster (and, if preferred, incrementally).

- **Better-engaged IT employees.** The reduction in intermediate steps between IT and business units does not just improve efficiency. It also makes employees more effective. Few things discourage technology personnel more than excessive bureaucracy. With less time spent on back-and-forths between different divisions, software developers can spend more time developing.

- **More efficient capital allocation.** No longer do business and IT make plans in isolation. Instead, capability pods define their own technology needs, allowing management to better align investments to meet business objectives. Instead of monolithic technology investment processes, management allocates discretionary funds to capability pods in line with their needs and ability to generate incremental value.

- **Better use of outsourcing and automation.** Since the pods are no longer required to use the company's centralized IT services, they can take advantage of software and infrastructure from external providers, and their combined business, operational, and technology skills enable them to assess with a business lens the trade-offs between third-party software's functionality and costs. That assessment is often challenging in current models, where IT is separate from the business.

Moving to the next generation of IT

Shifting to capabilities-driven IT does not have to be a shock to the organization. If planned carefully, the transition will be an incremental process that gradually realigns IT's operating model, including its talent, processes, and governance. Already, as technology has become more modular and service-based, many financial-services firms have begun to distribute IT teams across geographies and time zones. Many are starting to use more cloud infrastructure and third-party platforms, and to experiment with more flexible methods for developing and delivering technology products, often changing requirements and plans during the development process in response to feedback from the business.

As a result of these trends, many financial-services companies will find that parts of their IT operations are already positioned to make the transition to capabilities-driven IT in a manner that will be seamless and start paying for itself quickly. That transition will also further facilitate the implementation of these new technologies and methodologies.

The move to capabilities-driven IT will still be challenging, since it will require changes throughout the company. IT will still have to fulfill its current role while implementing, piece by piece, its own reorganization. The leadership team will also have to manage customer expectations during this transition. But the right preparation can aid in managing all these challenges. Addressing the following considerations will increase the odds of a successful transition:

IT will still have to fulfill its current role while implementing its own reorganization.

Mind-set

Business and technology specialists will need to shift their mind-set about technology. No longer will IT resources be a commodity that one part of the company demands and another part supplies. With direct collaboration between business and technology, teams will be collectively responsible for both supply and demand. Technology experts will have to focus more on the needs of their assigned capability and less on a specific slice of technology.

Leadership and accountability

The organization will need clear leadership and accountability during a process in which roles and responsibilities of many leaders — including the CIO — will change. IT departments will have to reverse some centralization and reassign resources to business units. Many IT personnel will move to new teams, and company politics may slow the implementation, requiring the leadership to step in.

Governance

With largely autonomous capability pods responsible for most IT development, IT governance will be critical. Firms will need central governance structures to supervise the distributed development and ensure that the pods meet firm-wide architecture standards, maintain transparency, and integrate with each other and the rest of the company. In larger companies with giant mainframes and tightly integrated applications, this aspect is especially important.

Talent

Each IT team that moves from a centralized IT department to a business unit will need the right talent. Finding well-prepared individuals for team leadership will be a particular challenge, especially for the first pods that are launched. Pod leaders will need a blend of business, operational, and technical skills — a rare combination. Financial-services firms will be increasingly competing with high-tech firms for talent.

Demand and financial management

Companies will have to adopt more just-in-time demand planning to handle the demands on capability-specific technologies. That aligns with the main advantage of capabilities-driven IT: a greater ability to adapt to changing business needs. More flexible demand planning requires more flexible investment decision making, so the company's financial management function will need a different capital allocation model. Finance departments will need tools to track and manage overall technology and data spending in this more agile environment.

Collaboration tools and automation

Firms will need to deploy tools and automation to enable collaboration among the different teams as they determine product requirements and then design, develop, and deliver solutions. These structures for collaboration will make it easier to share and adopt effective processes.

Getting started

Despite the challenges of this transition, for many firms the pressures of the digital marketplace make this move a matter of when, not if — and ongoing changes in underlying technologies may make the shift easier than expected. A clear plan can provide a manageable beginning and create momentum for subsequent stages. These five steps are a good place to start:

- **Assess the current level of IT maturity.** Is your IT primarily traditional, agile, or bimodal? Which units are already using newer technologies and IT methodologies? Which IT staff has the right skills, including a focus on customer and market needs, to move to capabilities-driven IT? Do you need to develop or acquire talent?

- **Identify pain points.** Which business units are most dissatisfied with your current IT department's performance? Where is IT failing to deliver the right capabilities at the right cost and pace? Where does this underperformance most impact customers?

- **Make a case for change.** Use the results of the first two steps to show need and tangible benefits, and to set a time line for moving to capabilities-driven IT. Articulate a vision of how the whole company will function better.

- **Identify pilot processes.** The first two steps will help identify key initiatives suitable for pilot processes: units where IT is already in a good position to make the shift, or which have problems that capabilities-driven IT can solve, or both. Business leaders who understand technology and the impact it can have on their units are more likely to support this transition and make it a success.

- **Define a road map.** A road map for the move to capabilities-driven IT should include stabilizing elements so the business continues to operate smoothly, clear objectives with measurable outcomes, and an outline of which IT functions should be integrated into which business units, and in what order. The pace at which different units are already adopting new technologies will help determine the road

map, which will also show which foundational IT services will remain centralized and how IT governance will function.

The pace of technology change is accelerating, and for the financial-services industry, IT is moving out of the back office. It is becoming a critical means of differentiating how firms go to market and interact with their customers. The business model of fintech firms is based on technology's centrality to financial services, and these firms are competing in more and more sectors of the industry. Traditional firms will have to match these startups' nimbleness with technology, or they may fade into irrelevance. Yet many traditional financial-services firms are still applying an outdated — and increasingly unsustainable — IT model that keeps business units and technology in separate silos. By shifting to capabilities-driven IT, firms can dramatically improve their speed-to-market, employee effectiveness, capital planning, and customer satisfaction.

Why not get ahead of the curve, instead of struggling to catch up later?

Endnotes

[1] 2015 PwC Global Digital IQ Survey.

[2] "Payback time: Improving ROI from digital labor in financial services," PwC, Oct. 2016.

[3] "Organize your future with robotic process automation," PwC, 2016.

[4] 2015 PwC Global Digital IQ Survey.

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