McKinsey Digital

The platform play: How to operate like a tech company

For tech to be a real driver of innovation and growth, IT needs to reorganize itself around flexible and independent platforms.

by Oliver Bossert and Driek Desmet



"The question is not how fast tech companies will become car companies, but how fast we will become a tech company." This is how the board member of a global car company recently articulated the central issue facing most incumbents today: how to operate and innovate like a tech company.

The tech giants of today have been some of the most innovative companies in the past generation. A handful of industry leaders, such as Ping An and BMW, are fast joining their ranks by reinventing their core business around data and digital. What distinguishes these tech companies is that their technology allows them to move faster, more flexibly, and at greater scale than their competitors. IT is not a cumbersome estate "that gets in the way," but an enabler and driver of continuous innovation and adaptation.

The reason this is a competitive advantage for tech companies is because their IT is organized around a set of modular "platforms," run by accountable platform (or product) teams. Each platform consists of a logical cluster of activities and associated technology that delivers on a specific business goal and can therefore be run as a business, or "as a service," as technologists say. These platforms are each managed individually, can be swapped in and out, and, when "assembled," form the backbone of a company's technology capability. Just as important is that the business and tech sides of the company work closely together and have the decision-making authority to move quickly.

This modular, platform-based IT setup of tech companies is what enables them to accelerate and innovate. They can experiment, fail, learn, and scale quickly: they can get products to market 100 times faster than their more lumbering peers (think weeks instead of months). With this kind of speed and flexibility, IT can and should become a focus for innovation and growth at the executive committee and board level. With new technologies and ways of working coming online, tech should be a competitive advantage, not a burden as it is in far too many companies today (see sidebar, "Why now?").

What a platform-based company looks like in practice

One of the global leading banks created about 30 platforms. One such platform was payments, which consisted of more than 60 applications that previously had been managed independently from each other. The top team decided to bring the 300-plus IT people working on development and maintenance of payments together with the corresponding people on the business side. Under joint business/IT leadership, this entity was empowered to move quickly on priority business initiatives, to modernize the IT structure, and to allocate the resources to make that happen.

The team shifted its working model and started running the payments platform as an internal business that served all the different parts of the bank (think payments as a service). This approach made it clear where to focus specific tech interventions: removal of nonstrategic IT applications; modernization and accelerated shift of the target applications into the cloud; connectivity to enable swapping solutions in or out easily; and, most important, a major step-up in feature/solution development for the internal business clients. This platform-based way of running the business was then progressively rolled out across the group. Prioritization is set by the top team (because empowerment does not mean anarchy), and all IT interventions are run the same way, to ensure consistency and replicability.

This is in stark contrast to the way large organizations normally act. Just establishing a business unit to manage a new offering or running a typical large IT project generally becomes a multiyear endeavor.

A closer look at the platform-based company

Think of a platform not just as technology but as a service, or what Silicon Valley calls a "product."

Platforms focus on business solutions to serve clients (internal or external) and to supply

Why now?

The notion of flexible, modular IT has been in vogue for ten years or so. But it largely remained a concept on paper, at least for many large incumbent companies. That has now completely changed because IT itself has changed, and important management practices such as agile and cross-collaboration are increasingly mainstream.

	Before	Today
Connectivity	 Lack of well-established connectivity protocols 	Application programming interfaces allow blocks of functionality to talk easily
Deployment	Slow and physical effort	Cloud enables instantaneous deployment
Software language	Static and hard to change	New languages that are clean, structured for data usage, and easy to adjust
IT solutions	Big monolithic solutions, which were hard to change even within explicit parameters	Discrete blocks of functionality (eg, microservices), enabling much faster build and delivery
IT architecture	 Overly complex "spaghetti of systems" (often managed by independent business units) 	 Technology ecosystems (internal and external), making it easy to pick and choose

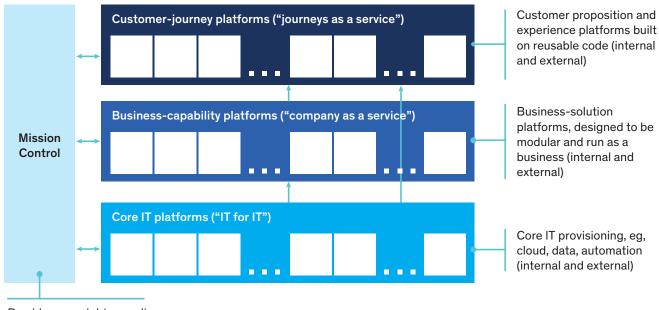
other platforms. They operate as independent entities that bring together business, technology, governance, processes, and people management and are empowered to move quickly. They are run by a platform owner, who takes end-to-end responsibility for providing the solution and operating it like a service. Platform teams are crossfunctional, with business, IT, and anything else that is needed, such as analytics, risk management, and so on. (Some companies call this a "tribe.") They

work in an agile manner, delivering the solution itself, enabling continuous business-led innovation, and developing and running all necessary IT.

A platform-based company will have 20 to 40 platforms, each big enough to provide an important and discrete service but small enough to be manageable. To simplify platform management, it helps to group them into three broad areas:

Exhibit 1

Platforms are grouped into three broad areas.



Provides oversight, coordinates, allocates resources, sets standards

customer journeys, business capabilities, and core IT capabilities (Exhibit 1).

For example, in personal banking, the customer-journey platforms cover the customer experiences of searching, opening an account, getting a mortgage, and so on. The business-capability platforms deliver the banking solutions, such as payments and credit analytics, and the support capabilities, such as employee-pension management, visual dashboarding, and management information systems (MIS). Finally, the core IT platforms provide the shared technology on which the journeys and business capabilities run, such as the cloud platform, the data analytics environment, and the set of IT connectivity solutions (Exhibit 2).

Mission Control to manage across platforms

Platforms are distinct units, but their value is based on how effectively they work together. Most companies overlook the criticality of making all IT components work together seamlessly because their attention is focused on individual projects. While most organizations understand the need to coordinate, the best ones develop a Mission Control capability with the resources and authority to lead and manage across platforms in three ways:

1. Make strategic and allocation decisions. The best Mission Control teams take a "clean sheet" approach to allocation decisions every year, prioritizing spend and effort on those platforms that can best support

Exhibit 2

Retail and banking examples show the services offered on each platform.

Retail example **Banking example** · In-store browsing and shopping Searching for weekend Account opening Customer- Clicking and collecting Transacting journey Same-day home delivery · Buying house (from valuing platforms house to getting mortgage) Subscribing • ... • . . . "Retailer as a service" "Bank as a service" Store- and warehouse-inventory Payments **Business-**· Real estate valuation management capability Merchandising Credit underwriting platforms (to enable journeys) · Employee-pension management · Employee-pension management · In-store live video data-· Omnichannel IT platformmanagement platform development environment • ... Core IT platforms · In-branch face recognition · In-store face recognition · Cloud platform Cloud platform · Access and identity management Access and identity management

business goals and/or are in most urgent technical need. This means much more radical reallocations in budgeting and resourcing across platforms (and business units) than the typical 5 to 10 percent increase or decrease that dominates allocation decisions at many companies. Mission Control needs to work directly with the executive committee to secure resources and make these difficult trade-

offs, while diving deep enough into the IT to manage critical path dependencies (cloud migration may require application rationalization first). In one case, the executive committee reduced the IT budget for one business unit by a third to prioritize platforms in the other two business units, based on the understanding that the following year's allocation would be a clean sheet again.

- 2. Set and enforce standards for speed and interoperability. The team establishes business standards, such as how teams work together in an agile way. It also sets technology standards, such as platform and application interfaces for seamless connectivity, the way code is written and logged in service libraries to ensure easy access, and what IT tools should be used for agile team management. Clear standards empower teams because they no longer have to worry about redoing work, miscommunication, or wasted effort in creating applications that won't work well with other applications. Mission Control has the authority to enforce the use of standards by, for example, not releasing any budget for project elements that deviate from them.
- 3. Manage and coordinate programs that cut across platforms. This function is more critical than previously understood, because working in a more agile and iterative way means that many requirements and dependencies, such as data access for a given business platform, for example, become clear only as work progresses. This reality is the blind spot of program managers and systems integrators because they understandably focus only on their own tightly defined mandate and project. Mission Control acts as the design authority and oversight team to drive consistency and critical path delivery. Our research shows that not doing this severely slows down IT programs and wastes 30 to 40 percent of IT project spend.

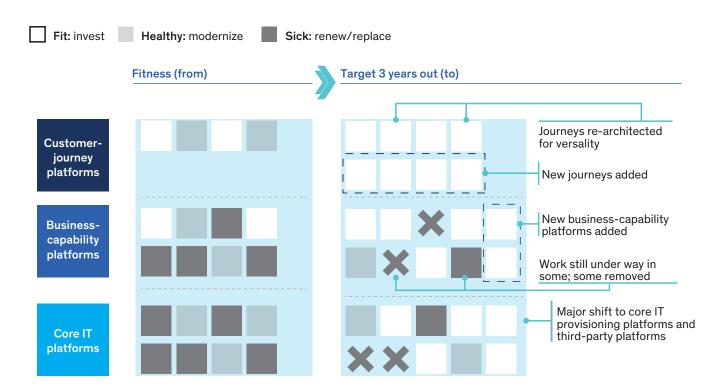
How to take a platform approach

Becoming a platform-based company goes a step further than what most think of as traditionally transforming IT. It is a fundamental organizational and operational change to create an IT environment that runs as a set of platforms. As with any major transformation, it requires strong CEO leadership, quality teams, strong project management and communication, as well as value assurance. We've found that the following four actions have an outsize importance to successful completion of the shift to platform-based IT:

- 1. Assess the fitness of the platform portfolio. Business and IT should together quickly cluster the company's activities and associated IT into a set of 20 to 40 platforms that cover customer journeys, business capabilities, and core IT. This does not have to be definitive, just a useful starting point. Then conduct a fitness check on each platform: "fit" platforms are in good shape and only need investment to innovate and capture more value; "healthy" platforms work now but need modernization to prepare for future requirements; and "sick" platforms are no match for what competitors can do. They need a complete overhaul. DBS, one of Asia's leading banking groups, used a similar approach and communicated the assessment to the whole market at the end of 2017. Visualizing the fitness of all platforms is powerful because it enables an executive team to have the right debate on tough trade-offs and priorities and to then assertively reallocate resources (Exhibit 3).
- 2. Set up the initial platform teams and Mission Control. A successful transformation is about putting the right people in place at this stage. Establish teams for two to three priority platforms. Typically, a platform team will start with 20 to 30 people, which can then quickly ramp up to hundreds. It includes specific roles:
 - Platform leader—either a business or IT
 executive, or sometimes both as coleaders; a
 platform leader should be able to act like a real
 "product owner," a mini-business CEO with an
 IT engineering mind
 - Business members, who share responsibility with the technical team for all the design and the ongoing management as a business
 - Technical members, who manage all the IT applications associated with the platform and take full responsibility for modernization, renewal, ongoing feature development, and day-to-day operations
 - People with necessary functional skills, from analytics to finance

Exhibit 3

Companies need to perform a fitness assessment of their platforms.



In parallel, start building out Mission Control with eight to ten of your very best finance, IT architecture, and program-management people. They need to constitute the most influential team working directly with the CIO, sometimes even reporting directly to the CEO. Mission Control needs to have decision rights (or at least veto rights) on all IT spend and all platform budget requests.

3. Transform platform by platform. The transformation approach should progress platform by platform, focusing on top priorities. Platform teams take full responsibility for their work. They move quickly, using agile to carry out fast iterations of discrete pieces of work. With guidance from Mission Control and following prescribed standards, they are spared traditional alignment meetings, formal approvals, and other dependencies that

slow everything down and create unnecessary complexity. Platform teams generally focus on a few core activities:

- Converting platform capabilities to serve customers and other platforms. Affecting this shift requires a complete focus on the user experience through design thinking and digitization/automation, and on interoperability by putting in place application programming interfaces (APIs) based on established standards and by creating service catalogs.
- Evaluating and managing existing and necessary applications. This means decommissioning old and infrequently used applications; updating, renewing, or replacing

core applications; and building value-added features outside of old applications. This is often where most of the work is needed. In conjunction with this effort is an acceleration into the public/private cloud.

- Injecting data analytics into all possible activities of the platform. This means piloting and scaling use cases and explicitly accessing the company's analytics and data platforms (or starting to build them).
- Writing (or rewriting) code as self-contained blocks or modules that can be easily swapped out and replaced wherever possible. Extensive use of APIs can help to provide the necessary flexibility to existing code.
- 4. Manage through the executive committee. While Mission Control plans and tackles the

platform transformations day to day, allocating resources (the best people and the total IT budget) away from less productive platforms to those that are more productive and critical, the executive committee enforces the big decisions, sets a high business bar for transformation goals, and mediates all group-level issues. For example, during the transition, Mission Control may decide to deprioritize a platform but be overruled by management on the business side. This is when the executive committee needs to intervene.

Becoming a platform-based company is ultimately a question of mind-set. It requires both the determination to stay the course and the flexibility to change and adjust based on what platform teams learn. By committing to this approach, IT can stop slowing down change and start accelerating it.

Oliver Bossert is a senior expert in McKinsey's Frankfurt office, and Driek Desmet is a senior partner in the London office.

Designed by Global Editorial Services Copyright © 2019 McKinsey & Company. All rights reserved.