Speaker 1: Welcome to the MIT CISR Research Briefing series. The Center for Information Systems Research is based at the Sloan School of Management at MIT. We study digital transformation.

Stephanie Woerner: Hi, I’m Stephanie Woerner, principal research scientist and director of MIT CISR. Today I’m pleased to share with you the May 2025 research briefing that I co-authored with Peter Weill—

Top-Performing Companies Reuse Four Digital Platform Designs

“Digital platform” might be the most ambiguously used term in the business lexicon in 2025. People use the term to mean lots of different things—including an internal business capability, a business model, a technology, a business service, a mindset, and more. To help executives discuss, design, and manage digital platforms, we studied platform designs and the financial performance of companies using them. We identified four dominant digital platform designs—platform as a service (or PaaS), multisided marketplace, internal platform, and X as a service (or XaaS)—and found that the 51 percent of companies in our research that effectively managed one or more of the designs had above-average financial performance. The 24 percent of companies in the research that focused on local needs and were poor on platform reuse—a designless state we call silos and spaghetti—had the worst financial performance. The remaining 25 percent of companies hadn’t yet excelled in managing any platform design, a state that we call “no dominant design;” these companies performed worse than industry average. In this briefing, we describe the four dominant platform designs, each illustrated with a brief company description, and share the financial performance of companies using each design. For clarity, we compare the designs with the silos and spaghetti and no dominant design states.

How Platforms Help Increase Performance

Platforms help companies be top performers due to one key feature: they enable reuse. Successful platform businesses take a business capability the company is great at and build a platform of business processes, data, technology, and expertise, all increasingly AI-enabled, to execute that capability, leveraging the platform across the company in as many places as possible. Platforms vary in scale from one business capability (like anti-money laundering in a bank) to a full suite of business capabilities for internet businesses (with features like inventory management, payment processing, and multichannel marketing). Companies in our research in the top quartile of platform reuse had revenue growth of 10.2 percentage points above their industry average (versus 12.1 percentage points below industry average for bottom quartile) with net profit margins of 6.2 percentage points above (versus 7.1 percentage points below) industry average. This huge premium is driven in part by identifying a strategic capability and optimizing the platform to execute that capability repeatedly at low cost and high reliability. The four dominant platform designs, excluding the silos and spaghetti and no dominant design states, had higher than average reuse in our research; silos and spaghetti had reuse that was lower than average; and no dominant design had reuse slightly below average.

Types of Platform Designs

The four dominant platform designs we identified capture value from digital platforms. In the following sections we detail the designs, along with silos and spaghetti and no dominant design, in order of increasing performance.

Silos and Spaghetti

In this state, each product and service the company offers has its own set of systems, with little technology reuse and integration across the organization, no restriction on distinct products and services, and little platform governance. The goal is to encourage local innovation with fast wins, but with little concern about overall enterprise performance or multiproduct customer experience. Typically, each product and service leader has their own budget and decision rights and, intending to go as fast as possible, makes locally optimized technology decisions. The result is local silos for each product or service, and when integration across those products and services is required, spaghetti-like middleware connects the silos. Despite thinking they will go faster, companies that were identified as following silos and spaghetti had the lowest financial performance of companies in the research, with revenue growth and net profit margin being 12.8 and
10.6 percentage points below their industry average.

No Dominant Design

A quarter of the companies we analyzed adopted different platform designs for different purposes across the company but weren’t excellent at any design. This approach often results from decentralized governance, where business units have more decision rights about not only WHAT they will do but also HOW they will build the technology. Without the CIO or IT unit owning or sharing decision rights on how the technology will be built, the company is unlikely to become excellent at reuse with any of the platform designs and may fall into the silos and spaghetti state rather than moving to a dominant platform design. Companies in the research not excellent at any dominant platform design had below industry average financial performance, with 6.2 percentage points revenue growth and 1.8 percentage points net profit margin below the industry average.

Platform as a Service

A platform as a service is designed to commercialize an integrated suite of services to support a specific customer domain—such as how ecommerce platform Shopify enables running an online store or the cloud-based accounting platform Xero helps a business manage finances. Customers purchase a set of services or individual modules and pay a fee or subscription for use. Shopify, for example, supports the launch, growth, and management of an online business with modules for website creation, online payments, checkout, reaching and retaining customers, social media integrations, inventory and order management, and analytics and reporting. In early 2025, Shopify was the number 1 ecommerce platform in the US, with a market share of 30 percent, and an 11 percent share of the market globally. Companies in the research that were in the top quartile in excellence at running a platform as a service design had good financial performance, with revenue growth and net profit margin of 7.7 and 1.8 percentage points above industry average.

Multisided Marketplace

A multisided marketplace platform matches buyers and sellers and serves a company’s entire ecosystem of customers and partners. For example, Salesforce’s AppExchange marketplace allows Salesforce platform third-party developers to distribute cloud apps they have created to allow Salesforce CRM customers to customize their system. In FY 2023, AppExchange contributed roughly 500 million dollars to Salesforce’s revenues. Revenues from multisided marketplaces are typically generated from various fees including ad and listing fees and revenue sharing. Companies in the research that were top quartile in excellence at the multisided marketplace design had strong financial performance, with revenue growth and net profit margin of 13.2 and 7.6 percentage points above industry average.

Internal Platform

The most common and arguably most important dominant platform design is an internal platform, created to codify and reuse what the company is great at. Companies build internal platforms for all kinds of business activities ranging from large integrated multifunctional capabilities, like running a line of business in a country, to smaller platforms that are modular and reused in multiple settings, such as onboarding a customer or credit scoring. The result is a reusable repository of business, technology, and data services facilitating rapid innovation and lower unit cost that is nurtured and governed as an important digital asset.

The global cement company Cemex developed its platform Cemex Go to improve commercial and order fulfillment, with the goal of creating a great customer experience. The company then incorporated production and management processes into Cemex Go. Cemex has leveraged Cemex Go to create capabilities that include product exploration and ordering, real-time delivery tracking, invoice and transaction management, and support for decision-making. The Cemex Go platform, which has helped the company achieve an outstanding net promoter score of 74, represents 65 percent of the company’s total sales.

Companies in the research that were in the top quartile in effectively managing an internal platform design had strong financial performance, with revenue growth and net profit margin of 12.4 and 10 percentage points above industry average.

X as a Service

The X as a service design often involves developing distinct services for internal use as part of an internal platform, then commercializing them externally; for example, common services in banking include payments, anti-money laundering, and lending. X as a service is an increasingly popular approach to capturing new value from core capabilities by providing them as services to other companies. Companies that were in the top quartile in effectively managing an X as a service design had the best financial performance of all companies in the research, with revenue growth and net profit margin of 17 and 11 percentage points above industry average. X as a service often offers a new revenue stream for companies, which helps explain the performance impacts. For example, Australian bank ANZ reimagined its institutional business by shifting focus from corporate finance to transaction banking. As part of the move, the bank targeted fewer, more profitable customers through more integrated services delivered via a digital architecture. ANZ platforms revenue grew from 187 million Australian dollars in 2021 to 410 million Australian dollars in 2023.

Platform Strategy and Managing Decision Rights

We found strong evidence that companies that are excellent at one or more of the dominant platform designs we identified have higher performance than their competitors. Being top quartile in more than one platform design is achievable: 36 percent of companies in our research were excellent at managing multiple platform designs. To get started, pick which of the platform designs you want to follow from those we describe, then implement decision rights models that will not only help achieve the chosen designs but also encourage reuse. This typically means that decision rights on how the platforms are built are owned either by the CIO and the IT unit or that there’s joint accountability with one or more business units and the CIO. Is your platform strategy on track to deliver top performance?

Speaker 1: Thanks for listening to this reading of MIT CISR research, and thanks to the sponsors and patrons who support our work. Get free access to more research on our website at cisr.mit.edu.