TOP-PERFORMING COMPANIES REUSE FOUR DIGITAL PLATFORM DESIGNS

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"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 (PaaS), multisided marketplace, internal platform, and X as a service (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,[1] a designless state that 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.[2] 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[3] had revenue growth of 10.2 percentage points (pp) above their industry average (versus 12.1 pp below industry average in the bottom quartile) with net profit margins of 6.2 pp above (versus 7.1 pp 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 (see the figure).

1 MIT CISR defines **platform reuse** as *using existing platform infrastructure, components, or services across multiple applications to save development time and cost, and to improve time-to-market and performance*.

2 This research is based on the 2022 MIT Future Ready survey (N=721) plus four MIT CISR case vignettes based on 57 interviews (21 interviews conducted for the study and 36 other interviews used as background) and two vignettes from public sources. Based on the interviews and a review of literature, we identified the four dominant platform designs. We represented the state of a lack of design or a focus on local innovation (i.e., silos and spaghetti) as a platform design, resulting in five designs. Next, we hypothesized key dimensions of and constructed a variable for each design. We then categorized a company into a dominant design if it was in the top quartile of the design variable (or for silos and spaghetti, in the bottom quartile). Finally, we represented companies without a dominant design (no dominant design, N=183) as a sixth platform design. This coding rubric allowed companies to have more than one of the designs. All financial performance numbers were adjusted for industry.

3 2022 MIT Future Ready survey (N=721). Reuse was measured as the combination of the number of business components reused, the percentage of APIs that enabled data sharing, and percentage of APIs that enabled platform reuse.

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 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 of 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 in any dominant platform design had below industry average financial performance, with revenue growth and net profit margin of 6.2 and 1.8 percentage points below industry average.

Platform as a Service

A PaaS is designed to commercialize an integrated suite of services to support a specific customer domain[4]—such as how ecommerce platform Shopify enables running an online store. 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,[5] and an 11 percent share of the market globally.[6] Companies in the research that were in the top quartile in excellence at running a PaaS 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 to Salesforce's revenues.[7] 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

4 A **customer domain** describes a customer's end-to-end need in an area such as home, mobility, energy, education, corporate services, or secure supply chain; see P. Weill, S. L. Woerner, and A. Diaz Baquero, "Hello Domains, Goodbye Industries," MIT CISR Research Briefing, Vol. XXI, No. 1, January 2021, https://cisr.mit.edu/publication/2021_0101_HelloDomains_WeillWoernerDiaz.

5 BuiltWith, "Market share of e-commerce software platforms in United States as of January 2025," Statista, January 10, 2025, accessed May 04, 2025, https://www-statista-com.libproxy.mit.edu/statistics/950591/united-states-ecommerce-platforms-market-share/.

6 Datanyze, "Market share of leading e-commerce software platforms and technologies worldwide as of 2024," Statista, January 23, 2025, accessed May 04, 2025, https://www-statista-com.libproxy.mit.edu/statistics/710207/worldwide-ecommerce-platforms-market-share/.

7 M. Mocker and I. M. Sebastian, "How Salesforce Built Its Platform Business," MIT CISR Working Paper No, 462, April 2024, https://cisr.mit.edu/publication/MIT_CISRwp462_SalesforcePlatformBusiness_MockerSebastian.

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 (NPS) of 74, represents 65 percent of the company's total sales.[8]

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 10.0 percentage points above industry average.

X as a Service

The XaaS 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. XaaS 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 XaaS design had the best financial performance of all companies in the research, with revenue growth and net profit margin of 17.0 and 11.0 percentage points above industry average. XaaS 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.[9] ANZ platforms revenue grew from AUD$187 million in 2021 to AUD$410 million in 2023.[10]

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 either owned by the CIO and the IT unit or there's joint accountability with one or more business units and the CIO. Is your platform strategy on track to deliver top performance?

8 Stephanie L. Woerner, Peter Weill, and Ina M. Sebastian, *Future Ready: The Four Pathways to Capturing Digital Value* (Harvard Business Review Press, 2022), https://cisr.mit.edu/publication/future-ready-four-pathways-capturing-digital-value; "Cemex Presentation," fourth quarter 2024 investor presentation, Cemex, February 26,2025, https://www.cemex.com/documents/d/cemex/4q24-cemex-investor-presentation-eng.

9 Used with permission.

10 "2023 Full Year Results," ANZ Group Holdings Limited, November 13, 2023, https://www.anz.com/content/dam/anzcom/shareholder/ANZGHL-full-year-2023-results-investor-discussion-pack.pdf.

Figure 1: Each Platform Design Has Distinct Attributes and Performance

	Silos and Spaghetti	No Dominant Design	Platform as a Service	Multisided Marketplace	Internal Platform	X as a Service
Goal	Innovate locally	Seize opportunities	Start a new digital business	Build an ecosystem	Reuse capabilities	Create new revenues
Mindset	Pursue local fast wins, disregarding the enterprise	Fulfill today's need	Commercialize an integrated suite of services	Create a marketplace	Share capabilities when politically possible	Sell core competencies
Charging Model(s)	Each BU pays from its own budget	Distinct charging model per platform	Per-module access transaction or license or as a subscription	Listing fees, percent of revenue	Shared service, chargeback, capital investment	Fee for service, fee per transaction, reporting fee
Growth/NPM pp +/- ind. avg.	-12.8/-10.6	-6.2/-1.8	7.7/1.8	13.2/7.6	12.4/10.0	17.0/11.0

Source: 2022 MIT Future Ready survey (N=721) plus four MIT CISR case vignettes based on 57 interviews (21 interviews conducted for the study and 36 other interviews used as background) and two vignettes from public sources. The six platform "designs" in the table include four dominant designs identified in the research, plus design states representing a lack of design (silos and spaghetti) and no dominant design. Based on a variable we constructed for each design, we categorized companies in the research into one or more designs. All financial performance numbers are adjusted for industry.

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