

GROWING WITH XTECHS

Alan Thorogood, Research and Member Engagement, AsiaPac MIT Center for Information Systems Research (CISR) Peter Reynolds, EVP, Real Time Payments, MasterCard and MIT CISR Industry Research Fellow

To become future ready, organizations improve their customer experience and operational efficiency; those that succeed on both fronts have an estimated average revenue growth of 17.3 percentage points above their industry average. Large future-ready organizations leapfrog competitors by using partners that bring speed, innovation, and lower cost. These partners include what are known as xTechs: businesses that use technology to modify, enhance, or automate an area of services (e.g., financial, legal, marketing) for organizations or consumers. One example is fintechs, which produce innovative financial offerings or reduce back-office costs and complexity for financial services organizations such as banks.

Many xTechs are smaller than their customers and can be fast because they don't face the process, scale, and governance burdens that large organizations do.

We set out to explore successful partnerships between large organizations and xTechs to gain an understanding of the rewards and challenges. This briefing, the first in a series on xTechs, shares our early findings on successful partnering strategies.

GETTING TO KNOW YOUR PARTNER

Our study began in financial services,² where partnerships between large organizations and fintechs are mature. Focused on banking partnerships, we interviewed banking executives and fintech entrepreneurs to learn about their motivations for working together and its outcomes and challenges. Using qualitative research techniques, we documented the motivations and calculated their relative strengths.³

Executives and Risk

The bankers we interviewed cited innovation, development of an internal agile mindset, speed to market, problem-solving, experimentation, and talent among the more powerful motivators for engaging with fintechs. Efforts regarding innovation and speed to market had been successful; changing the mindset inside large organizations was less so. A key obstacle for the banks in engaging with fintechs was regulatory and compliance risks and brand risk. While the fintech might have little invested and little at risk, as one bank manager said, "We have a multibillion-dollar capitalization and a lot to lose." Other obstacles included due diligence costs, exclusive access to IP, and cannibalization of existing products.

Entrepreneurs and the Need for Speed

Time is everything for xTechs; for them the biggest risk is moving too slowly. Entrepreneurs we interviewed wanted a partnership that would improve their financial position and scale quickly. They asked us to tell the bankers they are constantly working on raising capital: "Capital raising is intense; eighty percent of my time is spent on it," one entrepreneur said. Each round of an xTech's capital raising needs to demonstrate progress over the last round or the valuation of the xTech will drop. There is no better evidence of progress than an increase in scale, such as more customers on the platform, funds under management, or transactions per second.

Entrepreneurs unsurprisingly told us their motivators included capital, revenue, and cash flow; scaling quickly; and helping with compliance and industry knowledge. They

³ We calculated the strength of each motivation based on how frequently subjects mentioned it and our interpretation of their emphasis, assigning each motivation a strength from 1 (lowest strength) to 5 (highest strength). Subsequently, we shared the relative strengths with the subjects, who confirmed our findings.



¹ Stephanie L. Woerner, Peter Weill, and Ina M. Sebastian, Future Ready: The Four Pathways to Capturing Digital Value (Boston: Harvard Business Review Press, 2022).

² The lead author of this research briefing commenced the study, which is focused on the Australian financial services industry, with colleagues while at the University of New South Wales (UNSW) in Sydney, Australia. In 2021 the UNSW researchers conducted and analyzed sixteen interviews with bankers from the "Big Four" Australian banks and fourteen interviews with entrepreneurs from the Australian fintech sector. See findings from this phase of the research in David Hwang, Alan Thorogood, and Christine Van Toorn, "The FinTech Perspective on Banks: Collaboration, Challenges and Recommendations," PACIS 2022 Proceedings 12 (July 2022); and Charlotte Kwong, Alan Thorogood, and Christine Van Toorn, "Banks Responding to FinTechs in the Digital Era," PACIS 2022 Proceedings 12 (July 2022). In 2022 the authors of this briefing continued the research by analyzing the findings and reflecting on their experience as executives in financial services.

cited obstacles such as slow speed and cost in engaging with large banks, mismatched expectations, the everchanging stakeholders in banks, and high cost to meet standards. One entrepreneur expressed desire for partnerships with large established organizations but conceded that engaging with them can be a "hug of death."

FOUR XTECH PARTNERING APPROACHES

Our analysis surfaced four types of partnerships between large organizations and xTechs, each with different challenges and considerations.

1. Exploring Technology

A large organization can leverage new technology, new digital platforms, and new ways of working by partnering with an xTech, with many xTechs offering deployment in just ninety days. One example is JPMorgan Chase's UK bank's partnership with 10x Banking, which went from announcment to launch in months.4 Chase UK uses rewards to attract and retain customers,5 with rapid development and speed to value enabled by new technology, agile processes, and off-the-shelf offerings provided by its xTech partner. With an all-digital approach,⁶ Chase UK opens current accounts⁷ the same day for ninety-six percent of its customers, issues a physical debit card in six days, and provides internet banking the same day.

In our research, managers reported that ninety days to a new, fully functioning system is rare. While standing up a new cloud-based platform may be quick, it does not account for parallel implementation of support processes such as continuous integration and continuous delivery, fraud protection, compliance, governance, security, and full system testing. An organization may need twelve- to thirty-six months to stabilize such processes before it is comfortable with the risks. At the same time, xTechs can see such processes as overly complex. The reality of a partner's longer-term buildout of supporting operations can stretch the resources of an xTech, all while it must pursue new customers to scale itself.

We found organizations that isolated xTech partners from core platforms during the operational buildout to reduce risk and associated governance and thereby accelerate the process. In this approach, the xTech builds a platform with minimal viable integration. This approach can be more costly but it holds fewer risks than other types of engagement (because there is no direct customer impact) and permits easier separation.

2. Incubating Business Models

In the business model approach, partners build a model and customer value proposition. They offer a product to customers, and the owners of business operations curate the supporting processes. In this way, the partners test the value creation and who will capture that value.

A key motivator for a large organization to partner with an xTech is new product innovation that addresses customer needs. The launch could be on either the organization's or the xTech's platform and involve competing products or channels. For example, ANZ Bank worked with Lendi Group, an Australian-owned fintech, to launch OneTwo,8 which created a new type of home loan where the interest rate reduces as the loan is paid off. OneTwo launched in March 2022 and was already nearing AUD\$100 million in loans by May.9

The launch of such a product is typically to a smaller target market segment, with usage and performance closely watched. Advanced business intelligence reveals customer preferences and demand, enabling product and marketing teams to revise and relaunch the product to the same or different segments. Products with limited risk can then go ahead to scale.

However, a core product with a mass marketing launch is risky from a brand and compliance perspective and could cannibalize existing product revenues. The organization, to protect its capital and reputation, may require many careful iterations of the product before scaling can occur—an approach incompatible with an xTech's desire to scale quickly.

Regarding technology, we found organizations using a robust API layer to protect the core platforms and the people and projects associated with core systems work.

3. Scaling

Scaling an application's new product or process offers substantial rewards that may move the needle for an organization. Time to value, integration, and operational efficiency are the motivators affecting scale strategies. One approach to scaling is to migrate significant workloads—such as customer

^{4 &}quot;10x Banking teams up with Chase to create next generation digital banking platform," September 30, 2021, 10x Banking.

^{5 &}quot;Say hello to rewarding banking," Chase UK.

^{6 &}quot;Information about current account services," Legal, Chase UK.

⁷ A current account, specific to countries with a UK banking heritage, is a type of transaction account: a deposit account held at a bank or other financial institution with funds available on demand to the account owner. A current account is similar to a US checking account. Wikipedia, The Free Encyclopedia, s.v. "Transaction account."

^{8 &}quot;OneTwo is here to reinvent the Australian home loan," About Us, OneTwo.

⁹ Ryan Smith, "Online mortgage start-up nearing \$100 million in loans," MPA, May 10, 2022.

accounts, transactions, decisions, and products—from the organization's existing platforms onto the new xTech platform. Another approach is to launch the new platform and allow workloads to migrate organically. Of these, migration is faster, while the organic approach has easier change processes.

Integration affects customer experience and the time to scale. Greater integration with existing products and systems produces powerful complementary services that are greater than the sum of their parts because information flows naturally from one service to another. A standalone silo approach can be quicker to market but slower to scale because it offers fewer benefits.

Operational efficiency factors into decisions on scaling because xTech innovations must not distract from large-scale simplification work or introduce environmental complexity. Often the temptation is to introduce a new xTech platform and leave the original platforms alone, which increases operating costs.

Bendigo and Adelaide Bank offers an interesting example of scaling customer engagement while improving efficiency. The bank acquired seven other banks in the past and is now consolidating their core banking platforms in a multiyear serial approach. Making changes to products while merging the ledgers is difficult. However, product managers at the bank were keen to capture market share among aspiring homeowners by scaling the dynamic digital offering Up, a digital bank that targets younger customers. While IT simplified core platforms, existing APIs let the bank's xTech partners, Ferocia and Tic:Toc, help to deliver and launch Up Home—an Up-linked simple home loan. The velocity of change at Up is extraordinary, at more than six production releases per day. Up has a Net Promoter Score (NPS) of 63, while competitors have negative NPS scores. Meanwhile, the consolidation of one bank is complete, and five others are underway.

4. Investing for Returns

Large organizations typically have an incubator or investment branch that invests in innovative startups to mitigate the risk of them capturing core new business. Some organizations set up specialized investment companies, sometimes in partnership with competitors, that pick and invest in small innovative businesses. For xTechs, the capital from such a hands-off investment is welcome.

GROWING WITH XTECHS

xTechs help large organizations compete by accelerating improvements in customer experience and operational efficiency. Our research has demonstrated ways of increasing value from partnering with xTechs (see table) and provided some key lessons.

- Customer Experience: xTechs specializing in customer-centric approaches make good partners. Their delivery velocity is fast, and they enable experience that fulfills changing customer expectations. Using xTechs can provide new capabilities and speed for greenfield development of new businesses with new customers. Where APIs exist, xTechs can help launch new products to existing customers without disturbing core systems. And xTechs can help to enhance existing products with new features—although this can increase complexity in the digital architecture.
- Operational Efficiency: Many xTechs help to improve operations; being able to roll out the technology across the whole organization achieves scale quickly compared with demand-driven customer experience approaches. However, the impact of negative consequences can be significant.
- Both: xTechs that bring in general technology, such as AI, may be useful in improving both customer experience and operational efficiency. The challenges are in coordinating the multiple initiatives to maintain longer-term strategic goals.

Growing with xTechs is working in many industries. We will continue exploring this dynamic field in the next xTech briefing.

Table.	Value from	Partnering	with xTechs
Table.	value II oii	i i ai tiiciiiig	WILLIAMECIIS

Future-Ready Dimensions	Value Add from xTechs	
Customer Experience (CX)	xTechs help to deliver fast when: • Creating new businesses with new customers • Creating new products for existing customers without disturbing core systems • Enhancing existing products with new features without adding complexity	
Operational Efficiency (OE)	xTechs offer process improvements such as: Fraud prevention and complianceQuick enterprise scale up of technology	
Both CX and OE	xTechs may supply general technology to the organization that improves both CX and OE	

MIT SLOAN CENTER FOR INFORMATION SYSTEMS RESEARCH

Founded in 1974 and grounded in the MIT tradition of rigorous field-based research, MIT CISR helps executives meet the challenge of leading dynamic, global, and information-intensive organizations. We provide the CIO and other digital leaders with insights on topics such as business complexity, data monetization, and the digital workplace. Through research, teaching, and events, the center stimulates interaction among scholars, students, and practitioners. More than seventy five firms sponsor our work and participate in our consortium.

CISR RESEARCH PATRONS

AlixPartners Avanade Axway, Inc. Collibra

Pegasystems Inc.

PricewaterhouseCoopers Standard Bank Group (South Africa)

The Ogilvy Group

CISR SPONSORS

Allstate Insurance Company

Amcor

AmerisourceBergen ANZ Banking Group (Australia)

AustralianSuper

Banco Bradesco S.A. (Brazil)

Banco do Brasil S.A. Bank of Queensland

(Australia)

BlueScope Steel (Australia) BNP Paribas (France) Bristol-Myers Squibb

Bupa (Australia)

Cabot Corporation

CarMax Caterpil

Caterpillar, Inc.
CEMEX (Mexico)

Charles River Laboratories,

Inc.

CIBC (Canada)

Cochlear Limited (Australia)

Commonwealth Superannuation Corp. (Australia)

Cuscal Limited (Australia)

CVS Health

DBS Bank Ltd. (Singapore)
Doosan Corporation (Korea)

Fidelity Investments Fomento Economico Mexicano, S.A.B., de C.V.

Fortum (Finland) General Mills, Inc.

General Motors Corporation Gilbane Building Company Henkel AG & Co. (Germany)

Johnson & Johnson (J&J)
Kaiser Permanente
King & Wood Mallesons

(Australia)

Koç Holding (Turkey)

Mercer

Nasdaq, Inc.

National Australia Bank Ltd.

Nomura Holdings, Inc. (Japan)

Nomura Research Institute, Ltd. Systems Consulting Division (Japan)

Pacific Life Insurance

Company

Pioneer Natural Resources

USA Inc.

Posten Norge AS (Norway) Principal Financial Group

Procter & Gamble

QBE

Ramsay Health Care

(Australia)

Raytheon Technologies Reserve Bank of Australia SC Global Tubular Solutions

Scentre Group Limited

(Australia)

Schneider Electric Industries

SAS (France)
State Street Corp.
Stockland (Australia)
Suncorp Group (Australia)

Teck Resources Limited (Canada)

Tetra Pak (Sweden)

Trinity Health

Truist Financial Corporation UniSuper Management Pty

Ltd (Australia)

USAA

Webster Bank, N.A.

Westpac Banking Corporation

(Australia)

WestRock Company

Wolters Kluwer

Zoetis Services LLC

MIT CISR is funded by Research Patrons and Sponsors, and we gratefully acknowledge their financial support and their many contributions to our work.

Sponsorship and benefits: cisr.mit.edu/community/sponsor-and-patron-benefits

MIT CISR research publications: cisr.mit.edu/research-library



MIT Sloan School of Management

Center for Information Systems Research

245 First Street, E94-15th Floor Cambridge, MA 02142 t 617-253-2348 | e cisr@mit.edu Team | Christine G. Foglia Associate Director, Nils O. Fonstad, Dorothea Gray-Papastathis, Cheryl A. Miller, Ina M. Sebastian, Nick van der Meulen, Alan Thorogood, Austin Van Groningen Engagement Director, Peter Weill Chairman Emeritus, Barbara H. Wixom, Stephanie L. Woerner Director



