

XTECH INNOVATION: ACHIEVING SPEED WHILE MANAGING RISKS

Alan Thorogood, Research and Member Engagement, AsiaPac Stephanie L. Woerner, Director and Principal Research Scientist MIT Center for Information Systems Research (CISR)

A common concern of CIOs and CTOs is how best to work with the nimble tech companies we call xTechs¹ to help business colleagues realize the benefits while also managing risks.

This briefing on xTechs is the second in a series identifying what executives and xTech entrepreneurs want out of partnerships and how xTechs can add value safely.² In the first briefing, we reported that in our research, senior executives from large organizations aspired to deliver innovation, speed to market, and the internal adoption of an agile mindset through partnerships with xTechs.

In a digital world, no organization can thrive on its own, and xTechs offer potent capabilities to deliver quickly and agilely. In a recent survey,³ more than 75 percent of the financial services leaders who responded expected xTechs would deliver innovation and enable their organizations to move quickly. At the same time, the executives were concerned with brand, regulatory, and compliance risks. Forty-eight percent of respondents reported that the due diligence necessary to protect the brand and ensure compliance is extensive—and expensive.

- 1 MIT CISR defines xTechs as businesses that use technology to modify, enhance, or automate an area of services (e.g., financial, legal, marketing) for organizations or consumers.
- 2 This study continues research begun by the author in 2021 (see A. Thorogood and P. Reynolds, "Growing with xTechs," MIT CISR Research Briefing, Vol. XXIII, No. 2, February 2023). The author began this study by administering a survey (MIT CISR 2023 Survey of Copenhagen Fintech members, N=52) which included twenty-seven responses from large established financial services organizations and twenty-five from fintechs. Copenhagen Fintech is a global fintech hub for corporate and start-up innovators; see Copenhagen Fintech.

The author then conducted a qualitative case study with Bendigo and Adelaide Bank in 2023 on its use of xTechs, interviewing 11 executives and collecting substantial secondary data. Finally, he administered two surveys in the US, one to established firms (MIT CISR 2023 xTech Survey, Establishment View, N=172) and one to xTech companies (MIT CISR 2023 xTech Survey, xTech View, N=166). In all phases of the study, the author asked questions about the value the interviewees sought to achieve and the risks they encountered.

3 MIT CISR 2023 Survey of Copenhagen Fintech members (N=52).

We spoke with both financial services executives and xTech entrepreneurs to investigate if organizations that apply methodical risk management to partnerships with xTechs see more successful product and service innovations. We found that working slowly is a significant obstacle both for the executives, who want their organizations to be faster, and the entrepreneurs, who must maintain growth of their valuations.

To better understand what it takes to get increased innovation from xTech partnerships, at the end of 2023⁴ we surveyed 172 large companies that engage with xTechs. We asked a number of questions about the mechanisms these companies used to enable partnerships with xTechs. We ran regressions to identify which mechanisms contributed to increasing innovation (measured by the percentage of revenues from new products and services introduced in the last three years). We found that three mechanisms were statistically significant for increasing innovation:

- Using collaborative innovation teams that have decision rights
- Incorporating risk management into the innovation process
- Partnering with xTechs where there are existing relationships, which builds a base of trust

In this briefing, we describe how to innovate quickly and safely through delegated decision-making, risk management, and trust, and illustrate it with a case study of Bendigo and Adelaide Bank.

BENDIGO BANK AND ITS XTECH PARTNERS

Bendigo and Adelaide Bank (Bendigo Bank) is a midsize retail bank in Australia with a reputation for excellent customer service.⁵ For over 165 years, the bank has been offering people services and products to meet their financial goals. Bendigo Bank's total 2023 revenues were AU\$1.9 billion, a

⁵ In 2022, Bendigo Bank's NPS was 26.3 points higher than the average for the Australian banking sector. Jayden Fennell, "Bendigo Bank voted Australia's most trusted bank again," Australian Broker, September 1, 2022.



⁴ MIT CISR 2023 xTech Survey, Establishment View (N=172).

14 percent increase over 2022, while investing in substantial digital transformation.6

In 2018, Bendigo Bank began offering a new smartphone-only banking service called Up. Up acquired 700,000 customers by the close of FY2023, capturing nearly AU\$1.5 billion in customer deposits. Bendigo Bank developed Up as a joint venture with its xTech partner Ferocia.

xTech Speed and Innovation

In 2016, Bendigo Bank recognized it would benefit from having more customers in the 18-35-year-old age bracket. The bank joined forces with Ferocia, an xTech that had previously developed the bank's mobile banking app, to develop Up. Ferocia, a software engineering company with a staff of twenty-seven people at the time, had skills in customer-centricity, product design, continuous delivery, and agility. The company defined its mission as improving people's financial well-being.

Up has a clean interface and gamification features that encourage ongoing customer engagement and improved customer financial outcomes. Most of Up's customers are under 35; almost 50 percent of customers make at least one purchase per month, and the customer churn rate steadily sits in the single digits.

Ferocia and Bendigo Bank's partnership on Up has yielded many innovative features. Among them are Up's colorful and quirky interface that stimulates interest and supports fast referrals and setup, enabling rapid customer acquisition by word of mouth.

Maybuy, another Up feature, encourages saving. Up allows customers to create Maybuy accounts instantly from their smartphones, each associated with a financial desire. Customers give each account a name, an emoji, and a goal. Built using design principles and with the customer at the center, these accounts use images evocative of the customer's desires and goals to encourage saving.

The bank also engaged two other xTechs—Tic:Toc for home loan origination, and Wise for international transactions to build on the Up product offering. Tic:Toc, a fintech that reduces the time to approval for a mortgage, linked its online mortgage approval service to Up. After some tweaks, the results were so successful that Bendigo Bank's core bank moved to integrate Tic:Toc's service with its digital mortgage process.

Wise, a UK fintech, helps Up offer market-leading experience and rates for foreign exchange in international transactions.

Risks in a Complex Organization

Bendigo Bank has a high-performing brand and reputation and a low tolerance for adverse impacts on the bank's operations. In 2019, Bendigo Bank's managing director Marnie Baker appointed Ryan Brosnahan as the bank's chief transformation officer to lead Up and Bendigo's digital transformation. Growth by merger and acquisition had left Bendigo Bank with eight core banking platforms, complex technology silos, and technological spaghetti. The goal of the digital transformation was to reduce costs and increase flexibility.

We are in the midst of unwinding the labyrinth of technology we have and rebuilding it in a way that is digital-first, run in the cloud, API-enabled, and driven by microservices.

-RYAN BROSNAHAN, CHIEF TRANSFORMATION OFFICER, BENDIGO AND ADELAIDE BANK

Brosnahan knew that managing a large-scale digital transformation while innovating increased the risks for the transformation and for Up, which needed to be agile. The xTechs had to move fast, and the bank had to deliver on the transformation. Further, the Up product had to conform to regulatory requirements for financial services and customer privacy regulations, and to protect Bendigo Bank's reputation.

Empowerment Through Delegation and Structure

Fast delivery was in Ferocia's genes. But the cadence and velocity of the Up collaborative team—composed of both Bendigo Bank and Ferocia staff—were different from that of the core bank. Enabling the team to maintain this speed when working with the core bank required that the bank substantially delegate decision-making to the collaborative team. This also enabled the bank to dedicate the attention of its core teams to keeping the transformation project on track.

Bendigo Bank accomplished all this by doing three things. First, Baker and Brosnahan made sure the vision for Uphelping 18–35-year-olds achieve financial well-being—was clear to its team. Second, decisions about product features, launch dates, requirements, and Up strategy were made by the Up team, but within specific guardrails—such as using only a pre-built set of APIs to link to the core banking engine, and complying with cybersecurity. Third, the Up team reported directly into Brosnahan's organizational structure rather than indirectly through the bank's product, distribution, technology, and operations teams. An advisory group was

⁶ Bendigo and Adelaide Bank, Annual Report 2023, August 30, 2023, p. 23, from the Bendigo and Adelaide Bank Investor Centre website.

⁷ Bendigo and Adelaide Bank, Results Presentation, August 14, 2023, p. 9, from the Bendigo and Adelaide Bank Investor Centre website.

also established for Up that included CXOs to enable rapid feedback loops and fast decision-making.

Managing Risks Up Front

In the initial setup and design stages for Up, the bank managed credit and technology risks up front. During the design stages for the Up home loan product and before product feature elaboration, credit risk was built into the requirements for the new product to increase confidence in the assessment of Up home loan applications.

Similarly, technology risk requirements were part of the initial setup for Up. The bank wanted to avoid creating another technology silo, so it required that Up operate on the core technology architecture under development as part of the bank's digital transformation project. Limiting access to existing APIs and requiring that requests for technological changes to operations go through the Jira ticketing system were among the mechanisms the bank used to achieve this. Although the Up team found these constraints frustrating at first, it adapted quickly.

Temporary staffing assignments were one more point of risk management for the bank. Baker approved assigning one product and one risk person each to the Up collaborative team, which made those communities more comfortable with the Up team's ways of working. Cybersecurity and marketing people also took part in Up team sprints.

Building on Existing Relationships

Partnering with other organizations is an established practice at Bendigo Bank, and it has produced decades-long relationships with small businesses. The bank's relationship with Ferocia began in 2012 when it developed the bank's mobile banking app. Marnie Baker was Bendigo Bank's chief customer officer at the time and championed Ferocia as a partner to the bank. Following that first successful engagement, the partnership continued to grow.

So when the bank set out to grow its under-35 market share, interpersonal trust, a belief that their strategies were aligned, and substantial goodwill underpinned an ongoing partnership between Bendigo Bank and Ferocia. Shared confidence in the alignment between the companies allowed the relationship to continue to mature, leading first to a joint venture to develop Up and then to the bank's eventual acquisition of Ferocia.

As of 2023, the bank maintains separation between its core business and the Up team. Even though Up shares its governance and management processes with Bendigo Bank, the Up team maintains its own culture and ways of working.

Partnering to Accelerate Transformation

Bendigo Bank reports that it has a fraction of the investment budgets of the large banks in Australia. But spurred by high customer advocacy (i.e., customer brand promotion), with a market-leading NPS of 23.28 and following on its ranking as Australia's Most Trusted Bank,9 its customers expect a superior experience and proposition. Therefore, the bank has to do things differently from its competitors to be successful in the market and realize high levels of customer satisfaction and advocacy.

The bank will continue to partner with xTechs to accelerate improvements to its customer and employee experience and increase the speed of execution and adaptability while improving its risk posture. The next stage for Bendigo Bank is to further leverage the success of its innovations with xTechs. Bendigo is using the shared capabilities it has developed with xTech partners such as Ferocia and Tic:Toc to innovate quickly, safely, and at scale to help accelerate the digital transformation of the broader Bendigo Bank proposition.

THREE ACTIONS FOR FAST, RISK-MITIGATED **INNOVATION**

Large organizations work with xTechs primarily for innovation and speed. However, brand, compliance, and other risks are severe inhibitors to engaging. The following three mechanisms, illustrated in our statistical analysis and the Bendigo Bank case, make a significant difference.

- 1. Use collaborative innovation teams with the delegated power to move quickly, which requires a clear vision, strong and simple guardrails, 10 and direct access to executives.
- 2. Bake risk management into the environment when setting up a project, and leverage existing processes to maintain alignment between the organization and the xTech.
- 3. Partner where existing relationships have established mutual trust, based on time working together, alignment of the partners, and results.

Besides innovation and speed, working with xTechs also offers a way for large organizations to transform. An organization can work with xTechs in different areas of the enterprise, bringing in new capabilities and intellectual property. Look at your organization and decide where xTechs can make a difference—but ensure you manage the risks up front.

⁸ Bendigo and Adelaide Bank, *Results Presentation*, August 14, 2023, p. 34.

^{9 &}quot;Bendigo Bank Wins 2023 Most Trusted Bank Award," October 26, 2023, on the Bendigo Bank website.

¹⁰ For more on delegating decision-making, see N. van der Meulen, "Realizing Decentralized Economies of Scale," MIT CISR Research Briefing, Vol. XXIII, No. 1, January 2023.

MIT CENTER FOR INFORMATION SYSTEMS RESEARCH (CISR)

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. Our member consortium comprises more than seventy five organizations.

CISR RESEARCH PATRONS

AlixPartners Avanade

Axway, Inc.

Collibra

Pegasystems Inc.

The Ogilvy Group

CISR SPONSORS

Allstate Insurance Company

Amcor

ANZ Banking Group

(Australia) Ascend SC AustralianSuper

Banco Bradesco S.A. (Brazil)

Banco do Brasil S.A. Bank of Queensland

(Australia) **Barclays**

BlueScope Steel (Australia)

BNP Paribas (France) Bristol-Myers Squibb

Bupa (Australia) **Cabot Corporation**

CarMax

Caterpillar, Inc. Cemex (Mexico)

Cencora

CIBC (Canada)

Cochlear Limited (Australia)

Commonwealth Superannuation Corp.

(Australia)

Cuscal Limited (Australia)

CVS Health Dawn Foods

DBS Bank Ltd. (Singapore)

Doosan Corporation (Korea)

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

Fortum (Finland) General Mills, Inc.

Gilbane Building Company Henkel AG & Co. (Germany)

Johnson & Johnson (J&J)

Kaiser Permanente King & Wood Mallesons

(Australia)

Koc Holding (Turkey)

Mercer Nasdaq, Inc. National Australia Bank Ltd.

Nomura Holdings, Inc. (Japan)

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

OCP Group

Pacific Life Insurance

Company

Posten Bring AS (Norway)

Principal Financial Group

QBE

Ramsay Health Care

(Australia)

Raytheon Technologies

Scentre Group Limited

(Australia)

Schneider Electric Industries

SAS (France)

Stockland (Australia)

TabCorp Holdings (Australia)

Telstra Limited

Tetra Pak (Sweden)

Truist Financial Corporation

UniSuper Management Pty Ltd (Australia)

Uniting (Australia)

USAA

Webster Bank, N.A.

Westpac Banking Corporation

(Australia)

WestRock Company

Wolters Kluwer

Xenco Medical

Zoetis Services LLC

CISR ASSOCIATE MEMBERS

MIT CISR wishes to thank all of our associate members for their support and contributions.

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

Membership and benefits: cisr.mit.edu/content/member-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

cisr.mit.edu | h



Team | Isobela Byerly-Chapman, Margherita Di Pinto, Christine G. Foglia Associate Director, Dorothea Gray-Papastathis, Cheryl A. Miller, Ina M. Sebastian, Alan Thorogood, Nick van der Meulen, Austin Van Groningen Engagement Director, Peter Weill Chairman, Barbara H. Wixom. Stephanie L. Woerner Director