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Microsoft Services

The future banking ecosystem

Evolution and innovation in the digital era











Trust is the new currency when it comes to digital technology.

Satya Nadella
CEO, Microsoft

Microsoft Australia
Developers Conference



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Introduction

HELPING CUSTOMERS achieve their financial goals **is in the very DNA of banking—and trust is the basic unit of inheritance that makes it possible.**

Since their inception, financial institutions have been uniquely positioned as the source of economic empowerment. Whether it's maintaining a stable currency, managing systemic risk, providing venture capital, enabling home ownership, or administering retirement portfolios, banks have been central to helping businesses and consumers reach their goals.

A defining moment for financial services

The confluence of technology advances, cultural shifts, and regulatory change has brought the industry to a pivotal moment. New breeds of customers and competitors are seeking radical alternatives to the established order, jeopardizing profitable business lines and revenue streams previously taken for granted.

But in the face of these challenges and threats—and in no small measure because of the energies they have unleashed—banks and other financial institutions have a unique opportunity to redefine their role as trusted brokers in the new economy.

The innovation imperative

For financial services organizations, success in the coming decade depends on how well they transform “business as usual” with technology to create new value, becoming indispensable partners in increasingly interdependent networks and complex value chains that cross business and industry boundaries.

To get there, they must embrace entirely new business models that combine agility and security in dynamic tension, with trust at the center. And this goes for all segments of the industry—from retail to wholesale banking, and from capital markets to wealth management.

The business imperative—in an industry of inherently and increasingly abstract products—is to innovate, demonstrate relevance, and deliver value on a foundation of trust.



The whole reason money has worked is that there is **trust**, but **the concept of money is changing**.

Carlos Menendez

President of Enterprise Relationships, MasterCard
At Sibos 2016



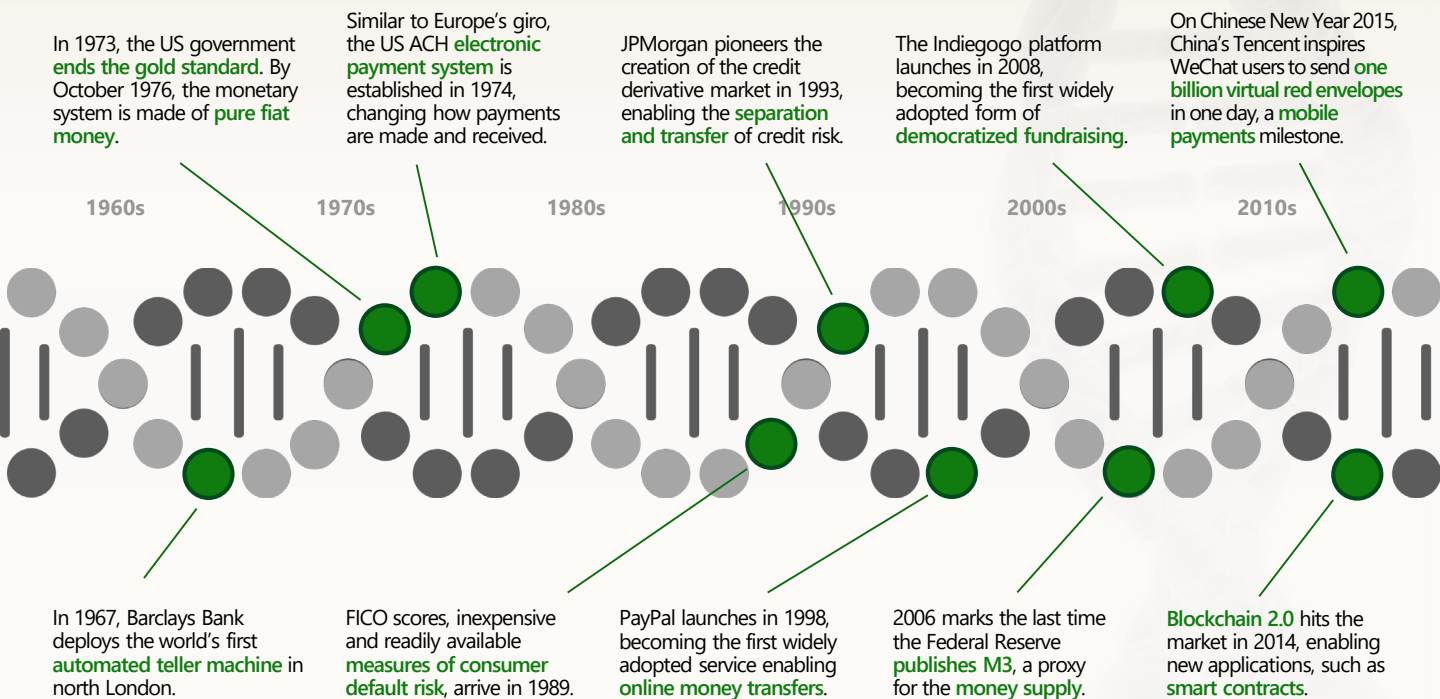
WHILE BANKING HAS ALWAYS ADAPTED to cultural, regulatory, and technological shifts, the pace of change has accelerated dramatically within the past half-century. When changes happen quickly, the bigger picture is often overlooked.

Each incremental innovation in the industry has served to enable greater flexibility and finer control. At the same time, this has decentralized core banking functions and made them more abstract. Take, for example, how money has evolved from a commodity basis to one established by fiat, and how institutions have thus been able to manage it better or profit from its flow. Similarly, we may think of what derivatives have done for the management of risk.

The long history of innovation in the industry suggests that current challenges can be met with equal creativity.

Genetic mutations

The past 50 years of evolution in banking



There are hundreds of startups with a lot of brains and money working on **various alternatives to traditional banking.**

Jamie Dimon

CEO, JPMorgan
2015 Letter to Shareholders



Adaptive dynamics

IN NATURE, ADAPTIVE DYNAMICS refers to the introduction of new species into what was previously a stable ecosystem. This can lead to drastic change—new entrants have fundamentally different traits, often displacing or causing the extinction of native species. Financial institutions find themselves in a similar environment: new competitors are challenging orthodoxies and rewriting the established rules that have long governed the banking landscape.

This has occurred in many other industries: who could have foreseen the hospitality or transportation industries upset so abruptly by a couple of user friendly apps and well-designed platforms, like Airbnb or Uber? Or that the venerable newspaper industry, that once relied on classifieds for over 70 percent of their revenue, would be decimated by the likes of Craigslist and eBay?

Events like these dramatically reshape industry landscapes, establishing an entirely new order. And, when this happens, it isn't always the strongest who survive, but rather those who are the quickest to adapt and most willing to rethink their existing, profitable lines of business.

An empowered generation

Millennials have a decidedly more entrepreneurial mindset than any previous generation. They want to be in control of their own finances and are far more willing to embrace a self-service model. They are more likely to question prevailing wisdom, eschewing a one-size-fits-all mentality, preferring instead to assemble their own solutions from diverse service providers.

Simple, intuitive experiences

In our fully mobile, app-driven world, customers demand simplicity and are far less complacent when confronted with structural inefficiency. They want services that are on-demand, integrated, and friction-free. They expect consistent, intuitive, and meaningful experiences.

Non-banks and challengers

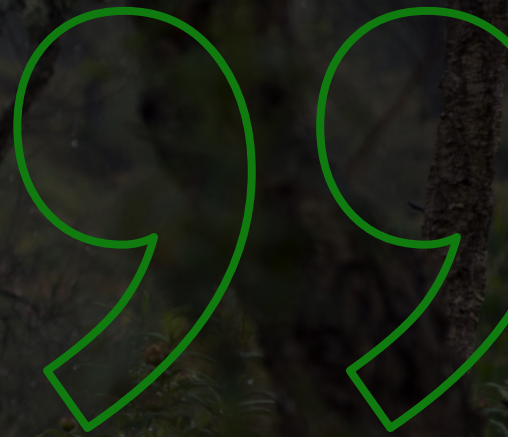
Technology companies such as Facebook, PayPal, and Apple offer products that were once the exclusive domain of financial services. From an *ad hoc* digital wallet to real-time payments, the blurring of industry lines and encroachment into traditional banking territory is the new reality.

In an era when the irony of “too-big-to-fail” is lost on few, credit unions and community banks are capitalizing on consumer sentiment by focusing on niche market segments, such as those who align their wallets with their values, or those who prefer a local flavor of banking.

Rise of the fintechs

Fintech startups, born in the cloud and far less constrained by regulatory requirements and legacy costs, represent a special challenge to incumbents. They target some of the most profitable areas in financial services while also delivering better customer experiences.

In extreme cases, fintech solutions offer services completely outside of the monetary system, such as bitcoin that, if successful, may call into question the very need for banks.



We have to ensure we adapt as well. If we don't do so effectively, we might not be able to do our jobs. Central banks, just like everyone else, can't afford to be Uber'd.

Andrew Hauser
Executive Director, Bank of England



Biochemistry

The foundations for progress

Contained within financial institutions are all the organic components necessary to transform and compete in the new digital ecosystem.

Master the data.

Leveraging breakthroughs in technology—such as the evolutionary leaps forward in cloud platforms, analytical capabilities, and [augmented intelligence](#)—can create a level of customer engagement and operational efficiency that was unimaginable a few years ago. Using information in meaningful and straightforward ways has become the new standard in this digital era. But first, internal and external data must be aggregated, integrated, and made available to the right person at the right time via the right channel.

Focus on experiences.

Longstanding methods of customer interaction have created general apathy and disengagement. Younger generations in particular are much less likely to have patience for time-consuming processes and sub-par customer service experiences; these expectations have influenced those of other age groups. Understanding this customer behavior and offering tailored products and responsive services, lays the foundation for a more relevant and trusted relationship. Rebuilding confidence fuels trust—leading to adoption and, ultimately, loyalty.

Agility. Agility. Agility.

What if a bank combined data from multiple sources to predict when a small business would need to expand and proactively extended credit? Or, what if a bank used telemetry, biometrics, and AI-powered facial recognition to immediately identify a customer and offered customized products and services? Customers are looking for an intuitive experience—a partner who understands their needs and offers anticipatory assistance.

Digital transformation

... is not about writing
a better application; it
is about fundamentally
rewriting your
company.

Aaron Levie, CEO, Box
Fintech Ideas Festival 2017



Adaptation

Mastering today's data for tomorrow's needs

PRIOR TO BIG DATA AND PREDICTIVE ANALYTICS joining the modern banking lexicon, few individuals understood the true value of the contextual information surrounding data. Data points were viewed as discrete, historical objects—unmoored from context, collected and processed in an isolated manner.

Rich in data, poor in insight

The wealth of bank information gathered over decades of interactions and transactions was originally collected to serve in large measure as an audit trail—a confirmation that transactions had processed as intended. This explains the current situation in which most banks find themselves: each data silo has evolved to serve a specific function. Banks have become rich in data, yet poor in insight.

Confidence requires mastery

Consumer confidence in the financial institution depends on data mastery; customers are acutely aware that their data is valuable and expect it be used to their benefit. And while outright security breaches damage consumer confidence, the daily frustrations surrounding data mismanagement have an ongoing detrimental effect on customer experience and trust.

The promise of data properly employed

These vestigial systems can hinder progress as their original purposes no longer match the competitive pressures that financial services face. Unused data is a liability for banks: it must be stored and protected. But, properly employed—whether for the purpose of looking back, taking action now, or anticipating future needs—it holds immense promise for securing the future of financial services.

Adopting secure and scalable solutions allows for the advanced analytics and [augmented intelligence](#) capabilities once considered science fiction—simultaneously removing inefficiency and permitting greater customization and improved customer experience. With such capabilities, even the beast of regulatory complexity might be tamed and threats such as fraud, money laundering, and cybercrime detected and suppressed.

Information about transactions, at some point in time, will become more important than the transactions themselves.

Walter Wriston

Former Chairman and CEO, Citicorp, 1984



Selection pressures

Customer experience: where only the fittest survive

82% of executives say that customer expectations outpace internal adaptations.

Source: Celent

BANKS PERFORM AN ESSENTIAL FUNCTION, but are neither the beginning nor the end of the value chain. After all, the family wants the house, not the loan; the alleviation of risk, not the insurance policy. Banks and other financial institutions can demonstrate their value by acting as a trusted intermediary and focusing on outcomes.

Digital solutions can also serve the needs of unserved or underserved markets. Note the example of Vodafone's M-Pesa, which has made mobile transfer and microfinancing services available in Kenya, Tanzania, and elsewhere—empowering entirely new constituencies with convenient, user-friendly tools and support.

It is no longer about financial muscle or being the only game in town. In a global digital marketplace, customers are free to choose the financial institution that best caters to their individual needs, and the keys to survival in this new world are facilitation and ease of use.

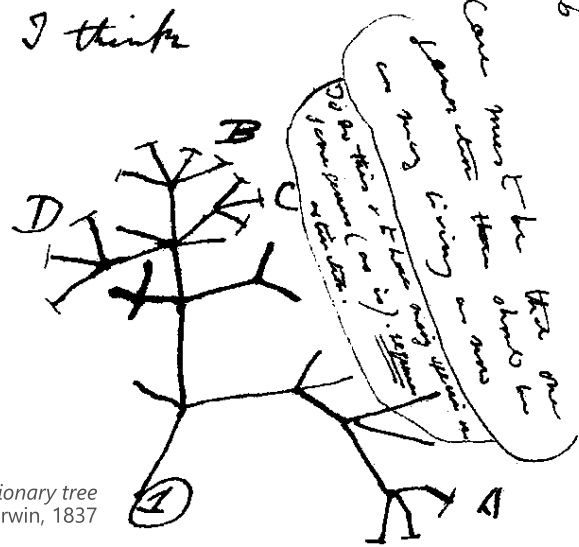
Simplification is taking hold in many other industries and contexts. Purely digital experiences have streamlined customer workflows, providing an intuitive interface for engagement and leading to higher levels of customer satisfaction.

The shift in customer preferences to mobile experiences and self-service banking requires a corresponding shift in the business model for financial services. Banking needs to take place where, when, and in the manner the customer wants.

Restore the confidence and the trust will return. Actively demonstrating that outcomes and experiences are at the heart of the bank's value proposition will broaden the customer base and, ultimately, improve customer loyalty.

In the long history of humankind, those who learned to **collaborate and improvise most effectively** have prevailed.

Charles Darwin, *The Origin of the Species*



Sketch of evolutionary tree
Charles Darwin, 1837

Symbiotic relationships

Embracing collaboration and enabling agility

THE CUSTOMER DATA, RELATIONSHIP, AND TRUST are the most valuable assets and provide an enduring competitive advantage in financial services. Banks can link various networks, serving as both a trusted advisor and an experienced intermediary.

Creating an ecosystem of trusted platforms also creates a win-win situation: the bank has an opportunity to be part of many different value chains, and the customer receives services in a seamless, reliable, and secure manner.

The API economy

By embracing the shift towards open APIs, the financial institution of the future could become the preferred provider for a myriad of companies in other industries. A truly open bank could enjoy increased market share and an opportunity to capture revenue that would otherwise go to a competitor.

As-a-service opportunities

Traditional financial institutions have many decades of experience in security, regulation, risk, and compliance—a decided advantage over new market entrants.

An agile, secure platform

With a banking platform that can be adapted to mobile, branch, or whatever the future may require, an agile bank could empower other firms and capture value anywhere, at any time.

The trust broker

As the trusted connector for the larger ecosystem in a connected and trusted network, banks could assemble bespoke solutions in real time by leveraging partner resources and offerings.

Three visions

Scenarios for the future of banking

LIKE THE GROWTH OF A STURDY TREE, it takes time to cultivate a profitable customer relationship and establish a business model that can weather the elements. Understanding customer motivations and needs, crafting a resilient business model, and continuing to deliver value in a radically different landscape are essential to success for financial institutions, no matter which way the wind blows in the future.

And what does the future hold?

With respect to these ambitions at a time of accelerating change in the industry, consider the potential implications of these three interrelated visions of tomorrow.

• Vision one



Ubiquity

As the boundaries between industries fade, banking services are distributed across markets, leading to a more pervasive role for financial institutions. Far more than simply partners, banks of the future actively embed their services within commercial and institutional clients and perform essential functions unbound by the branch's four walls.

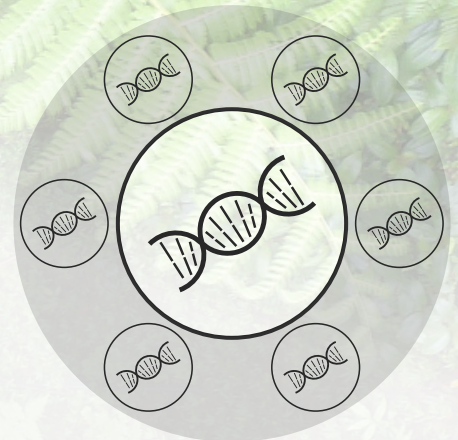
In this vision, banks' primary focus will be on modularity and agility: the financial services they offer to customers are plug-and-play, seamlessly integrating themselves into more value chains. Combined with secure cloud solutions and advanced data analytics, banks can deliver highly tailored and profitable outcomes to the end customer.

• Vision two

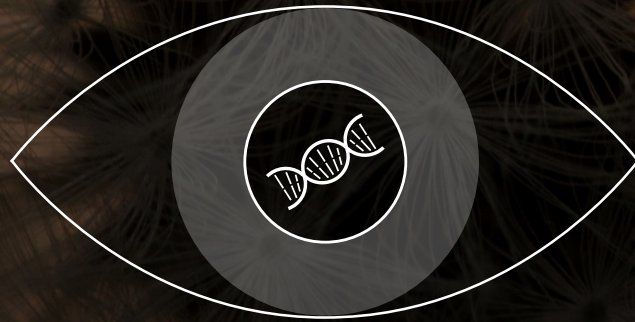
Centrality

An open banking platform both spurs innovation and fundamentally changes the relationship between fintechs and banks. No longer just competitors or partners, fintechs become paying customers by a combination of paid API calls and subscription service revenue. New entities like ClearBank, an innovative clearing bank in the UK based entirely on the cloud and offering an open-standards connection API, are showing the way to a future of distributed, hyper-efficient core banking services.

In this context, commoditization becomes a virtue: low-value offerings and tasks are completed via automation, predictive analytics, and AI. Financial institutions now focus on the high-value opportunities and maximizing the core competencies of banking. The shift to a platform-based business model creates a self-reinforcing ecosystem around the bank while creating new monetization opportunities using intelligence, security, and compliance, and acting as a trusted intermediary.



• Vision three



Nodality

The move towards an empowered, self-service model has reached its logical end-point: customers now perform many of the traditional functions of a bank (those that have yet to be automated), and in some cases function as a bank themselves. In this scenario, the value remains with the customer. Financial institutions provide the necessary infrastructure and serve as trusted nodes connecting individuals and small groups in a global network of “micro-banks.”

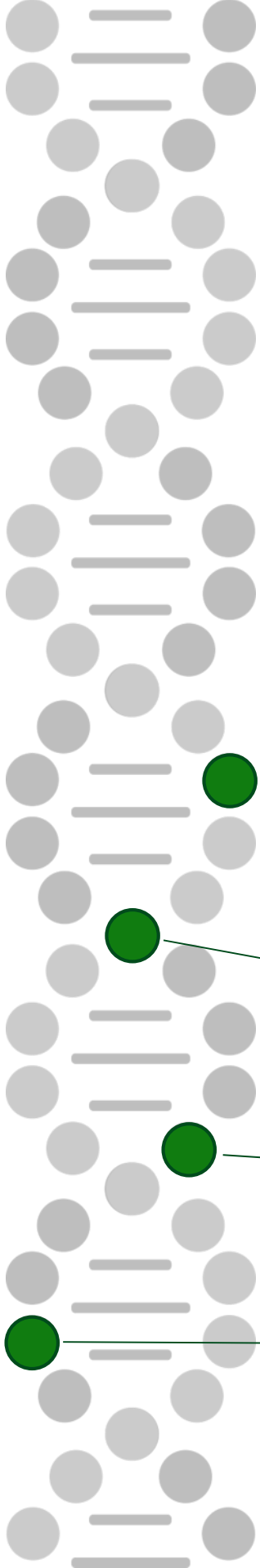
Powered by blockchain, these new entities lend, trade, and finance ventures at small scale or aggregate resources in crowds to meet larger-scale financial objectives. Financial institutions profit through subscription-based offers and value-added services, while using the data flowing through their systems to build relationships with their customers, deliver improved service, and uncover new business opportunities.

A new ecosystem

DNA CONSISTS OF FOUR basic building blocks: adenine, thymine, cytosine, and guanine. However, the virtually infinite number of combinations of these four building blocks is responsible for the millions of unique, differentiated plants and animals in nature. Similarly, combinations of the four elements of the future of financial services—the API economy, as-a-service opportunities, open and agile platforms, and trust brokerage—will make possible new business models and differentiated customer outcomes.

Innovation is in the Microsoft DNA, and we understand from our own experience that transformation, though challenging, is a necessary and healthy process. Rapidly changing customer expectations and needs, new competitors, and increasing regulatory pressures are the new normal. To survive and thrive in this business ecosystem, you must be prepared for whatever the marketplace throws at you.

This is where Microsoft can help. We would like to be your experienced technology partner, offering you both industry know-how and enterprise-grade solutions. **Our approach applies technology in novel ways—empowering business agility with tools to enable the future of banking.**



We offer a secure, flexible way to embrace the API economy and foster innovation.

In the digital economy, APIs enable financial institutions to deliver connected experiences to customers, enabling innovation at low cost and low risk. Microsoft provides a complete cloud platform for quickly extending services, content, and data to third-parties in a reliable, compliant, and highly secure way.

We understand the as-a-service business model and can help you monetize such opportunities.

Embedding technology directly into products and services is evolving how financial institutions deliver value, enabling new business models and disrupting established markets. Financial institutions can capitalize on emerging trends with reimagined offerings—and build digital wrappers around traditional functions.

We provide financial services-ready solutions to help banks create an open, agile, and secure platform.

Remove silos and drive engagement—be more agile, collaborative, and client-centered. Underpinned by productivity, collaboration, and unified communication tools, Microsoft enables widely distributed and highly regulated financial institutions to build the environment needed to function as agile, innovative organizations.

We can help financial services organizations deliver new client value and connected experiences to win customer loyalty.

Regain customers by delivering connected, meaningful experiences across all touchpoints. Microsoft helps banks to empower customers, achieve focused outcomes, improve brand reputation, and increase customer satisfaction.

What's next?

No matter where you are on your digital transformation roadmap, Microsoft can help.



Engage your customers

Reimagine the client experience for a digital world and deliver more value through insights and relevant offers by engaging clients in natural, highly-personal, and innovative ways throughout the customer journey—driving increased relevance, loyalty, and profitability.



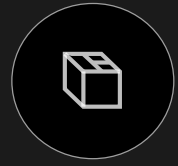
Empower your employees

Empower a high-quality and committed digital workforce to work and collaborate as a team anywhere on any device with modern productivity tools that provide seamless access to your data—helping you innovate faster, meet compliance requirements, and deliver exceptional client experiences.



Optimize your operations

Gain breakthrough insight into risk and operational models with advanced analytics solutions and act on real-time intelligence to optimize risk management and meet regulatory requirements.



Transform your products

Drive agility with open and connected systems and highly-automated digital processes to support new product development and optimize distribution channel strategies, while meeting the security, privacy, and transparency expectations of customers, regulators, and shareholders.

Contact us today for more information.

What's next?

Bylines

Byl



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Microsoft Services empowers organizations to accelerate the value imagined and realized from their digital experiences.

Imagine.
Realize.
Experience.

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