Developing innovative digital banking business models

Breaking free from traditional constraints to embrace truly digital opportunities

In association with

11FS
Infosys®
Finacle
Banking is changing faster than most banks are aware.

Digital technologies and new entrants have unleashed innovation in banking, driving rapid improvements in the quality of services delivered to customers, increasing competition, and raising customer expectations.

Traditional banks are struggling to innovate fast enough.

Traditional banks are struggling to keep pace. Why? Too often, hierarchical, centralised systems, processes and practices that served the banking industry well for decades now slow the pace of innovation.

Banks need new business models to thrive in digital business ecosystems.

Digital technologies unlock opportunities to create, deliver, and realise value in new ways. Few banks will succeed alone. Instead, banks must define the roles they want to play in digital business ecosystems and seize new opportunities.
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Banking is changing faster than most banks

Digital technologies have unleashed innovation, driving rapid improvements in the quality of services delivered to customers, increasing competition, and rising customer expectations.
Many forces are driving disruption in banking

**Customers**

Customers are becoming more demanding as their needs evolve and competitors raise expectations with new services.

**Competitors**

New competitors like fintech and big tech are making banking better, faster and cheaper, undermining existing business models.

**Digital technologies**

Digital technologies are unleashing innovation by enabling firms to build new capabilities and scale faster and cheaper than before.

**Evolving regulations**

Regulators are gradually giving customers more control of their data, forcing transparency and capping fees, often eroding industry profits in the process.

**The world's economies**

Low interest rates in most large economies have pushed both banks and customers to seek alternative sources of returns.

**The pandemic**

The pandemic has forced customers to adopt digital touchpoints, accelerating changes in behaviour.
Customers' needs and expectations are changing

➔ Customers are becoming more informed, connected and demanding.

➔ Customers increasingly expect more than generic, one-size-fits-all banking services:
   ◆ Instant fully digital experiences.
   ◆ The ability to manage finances on-demand, 24/7.
   ◆ Flexibility in products and payment options.
   ◆ Data-driven, personalised insights and advice.
   ◆ Empathetic product design and personal tone of voice.
   ◆ Transparent, ethical and socially responsible services.

➔ New entrants have reset expectations for the whole industry and incumbents must adapt their services to compete.
Banks are failing to attract new customers because most customers across all age brackets and all kinds of demographics want the convenience of internet banking, mobile banking, transactions, payments anywhere. The traditional branch-led banks... are ageing very rapidly."

Sankarson Banerjee
CIO, RBL Bank, India
Digital competitors are undercutting incumbents with better, faster and cheaper solutions to customers’ problems

Better
New digital competitors:
➔ Offer simple and intuitive user experiences and a holistic view of finances.
➔ Help customers manage their finances from smartphones.
➔ Help customers monitor and predict their cashflow.
➔ Increase access to finance by using new sources of data to assess credit risk differently.
➔ Automate processes from end to end to reduce errors and delays.

Faster
New digital competitors:
➔ Help customers find relevant products more quickly.
➔ Enable customers to open accounts in minutes, rather than days.
➔ Make credit decisions in minutes, not days.
➔ Enable immediate domestic bill payments and money transfers.
➔ Accelerate cross-border transfers.

Cheaper
New digital competitors:
➔ Often offer better interest rates and lower fees.
➔ Have cut the cost of domestic and cross-border payments.
➔ Have cut or eliminated the cost of buying and selling stocks and cut investment management fees.
➔ Offer lower-cost or free financial advice to mainstream customers.
➔ Enable transparent comparisons between different products and services to find the best price.
Avinash Raghavendra
Head of Information Technology, Axis Bank, India

The competitive landscape has evolved. Now we have all these fintech and global IT companies backed by deep pockets. The model they work on is very different. A lot of these companies are working in terms of future potential. Their balance sheet and P&L are different to ours as well. It's a very different competition.”

Avinash Raghavendra
Head of Information Technology, Axis Bank, India
Digital technologies are unleashing innovation by enabling firms to build entirely new capabilities

Mobile
Mobile devices have become the primary touchpoint for a majority of customers worldwide, offering customers anytime, anywhere services at a much lower cost, while banks gain context and closer engagement with customers.

Cloud computing
Cloud-based services enable banks and fintechs to launch and scale up services rapidly, becoming a catalyst for innovation.

Open technologies
Flexible architectures and APIs enable standardised exchange of real-time data. The growing maturity of API-based digital ecosystems enable new opportunities like embedded finance.

Artificial intelligence
Artificial intelligence mimics our ability to sense, think and act, enabling faster data processing, and augmenting human decision making.

Sources: Infosys Finacle; IIIFS
“Our artificial intelligence function can predict your default rate, your cash flow, your repayment capacity, based on specific and regulated data... and we are able to do underwriting based on that.”

Kaspar Situmorang
CEO, Bank BRI Agro, Indonesia
Regulations are gradually shifting in customers’ favour, reducing industry revenues

Regulators are levelling the playing field in favor of customers by:

➔ Encouraging greater competition, such as new digital banking licences in Hong Kong, Malaysia, Singapore, South Korea, Taiwan and Turkey.

➔ Capping banking fees, such as limits on card interchange fees and investment management fees.

➔ Giving customers greater access to their data through open banking and open finance regulations, such as the European Union’s Payment Services Directive (PSD2).

➔ Giving customers more control of their data through privacy regulations such as Europe’s General Data Protection Regulation (GDPR) and Australia’s Consumer Data Right.

➔ Forcing price transparency and outlawing hidden product commissions, such as the UK’s Retail Distribution Review.

The result is rising compliance costs, reduced industry revenues and, often, reduced profits.

Sources: Infosys Finacle; IIIFS
Low interest rates in many economies are driving banks and their customers to seek alternative sources of returns

Low interest rates have squeezed bank revenues:

➔ Record low, and in some countries negative, interest rates.

➔ Increased customer deposits and reduced customer borrowing.

➔ Government-backed business loans come with regulated low interest rates.

Low interest rates have boosted investment in venture capital:

➔ Venture capital funds have raised record amounts.

➔ Valuations of larger fintechs have skyrocketed.

Low interest rates have driven investors to seek alternative returns:

➔ Direct stock investing.

➔ Crowdfunding.

➔ Bitcoin and other crypto-currencies.
The pandemic has accelerated changes in both customer behaviour and banks' thinking

**Changed customer needs**
- Greater attention paid to finances by most consumers and businesses.
- Growing division between consumers with more disposable income, and those with less.
- Companies in sectors like retail, travel and hospitality struggling with restrictions on trade.
- Greater focus on building up a cash buffer for future crises.

**Accelerated digital adoption**
- The closure of branches and call centres forced customers to adopt digital touchpoints.
- Increased adoption of digital payment methods, including contactless payments.
- Banks prioritised modernising legacy systems to cope with rapid growth in digital transactions.

**Encouraged purpose-driven brands**
- Growing consumer interest in sustainability, fuelling demand for ethical and environmental products.
- Growing consumer interest in providers that align with customers’ beliefs, in some markets.

Sources: Infosys Finacle; IIFS
Traditional banks are struggling to respond fast enough.

Traditional financial products are commoditised and not sufficient to meet customers’ needs. Yet many traditional banks aren’t able to keep pace. Why? Hierarchical, centralised processes and practices and legacy technologies that served the banking industry well for decades are no longer fit for purpose.
“You do not have a choice anymore to be in a status quo mode. 
So either you change for good to stay relevant, or probably you will perish. 
But staying where you are is no longer even a choice.”

Deepak Sharma
President and Chief Digital Officer, Kotak Mahindra Bank, India
### Traditional banks still face many hurdles to innovation

<table>
<thead>
<tr>
<th>Situation</th>
<th>Problem</th>
<th>Change</th>
<th>Solution</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>Top-down, command-and-control culture results in sluggish, business-centric change.</td>
<td>Talent &amp; Skills</td>
<td>Traditional banks often lack digital talent and skills and find it hard to compete for the best people.</td>
<td>Governance</td>
</tr>
<tr>
<td>Funding &amp; Metrics</td>
<td>Short-term funding and return on investment targets hinder long-term transformation.</td>
<td>Risk Management</td>
<td>Regulatory requirements for partner due diligence slow innovation.</td>
<td>Technology &amp; Data</td>
</tr>
</tbody>
</table>

Sources: Infosys Finacle; ILFS
Many banks are struggling to overcome the hurdles to innovation

In which parts of the innovation and digital transformation process does your financial institution struggle with the most?

<table>
<thead>
<tr>
<th>Issue</th>
<th>Much or very much</th>
<th>Little or very little</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time/cost required from concept to reality</td>
<td>71%</td>
<td>29%</td>
</tr>
<tr>
<td>Systems integration challenges</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Legacy technology challenges</td>
<td>62%</td>
<td>38%</td>
</tr>
<tr>
<td>Budget constraints</td>
<td>58%</td>
<td>42%</td>
</tr>
<tr>
<td>Deployment of new technology</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Culture/structure of your organisation</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Lack of skills and expertise</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Evaluating/prioritising new ideas</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Lack of data</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Market adoption of the new innovation</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Gaining executive sponsorship and buy-in to prioritise innovation</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Legal, risk or compliance issues</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Market intelligence/keeping up with new ideas in the market</td>
<td>35%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Base: 347 banks and credit unions worldwide
Source: Efma Infosys Finacle 'Innovation in Retail Banking Report 2020'
It’s like the slow boiling frog. The banks were quite comfortable, but they didn’t sense that the temperature was very slowly going up. The positions in the market were so strong that banks didn’t see the need to react. I don’t think anyone is thinking that any more.”

Juan José Cebrián  
Head of Digital Banking Technology, United Overseas Bank, Singapore
Top-down cultures can result in sluggish, business-centric change

Traditional banks often struggle to overcome the cultural, process and structural barriers to innovation.

Cultural barriers
→ Rigid, formal hiring processes.
→ Lack of diversity and inclusion.
→ Risk aversion.
→ Rewards for conformity, rather than creativity.
→ Habitual thinking.

Process barriers
→ Rigid, centralised budget processes and ROI expectations.
→ Risk management and compliance processes.
→ Implicit behaviour patterns and expectations.

Structural barriers
→ Senior executive reluctance to change.
→ Middle-management hierarchy.
→ Siloed teams and departments.
→ Business-centric or siloed performance goals and metrics.

Sources: Infosys Finacle; 11:FS
“Where culture needs to change is at the bottom of the banks. They are used to one way of working. I wouldn’t say there’s a hesitancy. There’s a lag and a delay. They are taking time to adapt.”

VV Balaji
Chief Technology Officer, ICICI Bank, India
Traditional banks often lack digital talent and skills

Banks find it hard to attract people with crucial digital skills, particularly as competition for talent from well-funded fintechs and tech firms increases.

Customer understanding
Customer research skills help companies understand customers’ Jobs to be Done and empathise with customers.

Data science
Data skills including data collection, data mining, insight creation and customer analytics help firms make informed decisions about customers.

Design
Design-thinking skills help companies design intelligent services and solutions that customers will value and use.

Product management
Product management skills drive cross-functional problem solving to develop products that work for customers now and in future.

Agile development
Agile practices enable firms to accelerate design, development and delivery of new products and services.

DevOps
Software development, operations and quality assurance skills enable delivery of a continuous stream of innovation into production.

Sources: Infosys Finacle; 11:FS
“Access to talent is a challenge, as it is for many traditional types of organisation. We need data scientists, CX experts, API engineers and so on. Competing for that talent requires us to be clear and compelling. What is our purpose and ambition? What’s our proposition? Who are we as an organisation? That’s something we work on a lot. We’re looking to hire over 180 people in these newer skills areas.”

Tom Hayes
Group CTO, Permanent TSB, Ireland
Hierarchical, centralised governance hinders rapid innovation

The majority of processes at traditional banks are still not agile:

➔ Large central strategy teams work across organisational silos to agree a road map.

➔ This road map then has to run through a gauntlet of governance processes to get budget and resource allocated.

➔ Once allocated, any change must run through several more governance processes before the new product can be approved.

Source: 11:FS, in association with Infosys Finacle - 24

From an 11:FS report: 'Rebuilding financial services from the inside'
“The biggest hindrance is changing the mindset of the way products are developed. Many banks still work in a world where more or less everything is a project governed by cost and timelines. That hinders innovation and creativity to a big extent. The product mindset is not there.”

Sanjay Khanna
Chief Information Officer, RakBank, United Arab Emirates
Short-term funding and ROI targets discourage long-term investment

Annual funding cycles and return on investment (ROI) goals discourage long-term investment in digital business foundations.

Funding processes in traditional banks are obsolete:

➔ Rigid centralised budget processes and ROI expectations hinder innovation.
➔ Funding is allocated by business or product line and driven top-down by strategy teams.
➔ Funding is often allocated in 12-month cycles, and usually weighted towards in-year returns.
➔ Business-centric and/or siloed department performance metrics measure the wrong things.
➔ Inflexible and exhausting request for proposal (RFP) processes bias partner selection towards large incumbent providers at the expense of smaller specialists.

Source: 11:FS

From an 11:FS report: ‘Rebuilding financial services from the inside’
Because of the funding model that we had, we’d built up a lot of technology debt which, to my mind, has to be brought onto the balance sheet. You spent a lot of money on maintaining a legacy platform. You have to systematically shift the spend from maintenance of a legacy platform to spending on growing the business.”

Septimus Blake
CEO, National Commercial Bank, Jamaica
Risk controls and regulations prevent banks breaking things, but also hinder moving fast

Regulation is a necessity to protect customers from bad actors in the industry. However, regulations:

➔ Slow the pace of innovation by obliging regulated firms to conduct thorough risk management and due diligence on partnerships.

➔ Can give unregulated companies an unfair competitive advantage in some areas.

➔ Are used as an excuse to sideline innovation by those hostile to change for other reasons.

Meanwhile, substantial regulatory and compliance costs at traditional banks weigh down operating costs.

Sources: Infosys Finacle; IIFS, in association with Infosys Finacle – 28
As regulated financial services firms, we constantly have to balance between risk and innovation. Innovation cannot be at the expense of ignoring or overlooking the risk aspects. And that means that, unlike a lot of other industries where innovation is more around customers, or technology, we have a third axis here which is risk.”

Deepak Sharma
President and Chief Digital Officer, Kotak Mahindra Bank, India
Siloed, monolithic legacy technology stacks are not fit for purpose

Traditional banks are spending billions on maintaining inflexible legacy technology stacks, with diminishing returns on that investment.

Traditional banks are hampered by:

➔ Siloed systems that mirror the organisational design, with limited re-use and repeated duplication.
➔ Multiple systems introduced by mergers and acquisitions.
➔ Decades of technical debt, as newer systems have been built on top of older systems, often to compensate for legacy constraints.
➔ Hard-to-change blocks of code with hard-wired business logic and data stores, all hosted on premises.
➔ High cost and risk of change.
➔ Limited ability to use modern, best-in-class SaaS offerings.

From an 11:FS report: 'Rebuilding financial services from the inside'
“Banks have more data about their customers than most companies. But banks have just started the journey of using data crunching and understanding how to personalise using data.”

VV Balaji
Chief Technology Officer, ICICI Bank, India
Digital business ecosystems are reshaping banking

The impact of digital technologies is far more disruptive, transformative, and pervasive than many banking leaders realise. Digital business ecosystems are changing banking irrevocably. Vertically integrated banking monoliths are being displaced by ecosystems formed around customers. Few banks will succeed alone, and no part of banking will be left untouched.
“The only way is to go digital. Go to where the customer is.”

Avinash Raghavendra
Head of Information Technology, Axis Bank, India
Truly digital businesses operate differently, shifting from selling commodity products to delivering intelligent services.

1. **Start with customers’ Jobs to be Done**

   Digital businesses focus relentlessly on their customers’ Jobs to be Done: the outcomes customers want to achieve. They design intelligent services around end-to-end customer journeys.

2. **Partner to create more value, faster**

   Digital businesses partner with adjacent businesses to create more value for customers, add capabilities, gain scale, enter new markets and deliver better customer outcomes faster.

3. **Develop new business models**

   Digital businesses use technology to change the economics of existing business models and create new business models, such as digital marketplaces and embedding their services into partners’ services.

Sources: Infosys Finacle; IIIFS
Change is never easy, especially when you’ve done certain things a certain way for a period of time. But having your clients at the centre of everything you do is what drives those changes in mindset. You want to remain relevant to them, and to do so, you need to listen closely to them. If you are true to that, then everything you do will evolve around those existing and future needs.”

Faisal Ameen
Head of Global Transaction Services, Bank of America, Singapore
Truly digital businesses start with customer outcomes

Traditional banks tend to start at their business model: to take deposits and lend. Then they look for technology to reduce the cost of distributing this existing business model.

Truly digital businesses start with the customer problem and then seek adjacent problems to solve to create more value for customers. In the process, they develop new business models around this joined-up problem solving.

From an IIFS report: ‘Better banking business models: embedded finance and the path to growth’
Banks have understood with Covid that they cannot sit on operating models and business models that don’t scale to digital. Banks have to play in ecosystems. If you want to do business, at least in the ASEAN region, we are not talking about doing business by yourself. You can't compete if you don’t have partners.”

Juan José Cebrián
Head of Digital Banking Technology, United Overseas Bank, Singapore
Truly digital businesses partner to create and deliver more value, faster

Serving customers better drives truly digital businesses to partner to:

➔ Build new capabilities better and faster than they could alone.
➔ Add adjacent capabilities that serve more of the customer job (or outcome).
➔ Deliver better customer outcomes faster.
➔ Reach new customers through their partners.
“How do we reach out to a wider pool of potential customers, without having to do that directly? Wherever these collaborations between financial services and a popular large platform happen, it seems to lead to success with customer acquisition.”

Tana Pothikamjorn
CEO, Kasikorn Line, Thailand
Digital business ecosystems form around customer domains as companies work together to deliver better customer outcomes.
Some of the digital banks in China, like WeBank and MYbank, and in South Korea, like KakaoBank, have already made profits because they are very highly, deeply integrated with specific ecosystems. Therefore, their customer acquisition costs are lower than the customer lifetime value.”

Kaspar Situmorang
CEO, Bank BRI Agro, Indonesia
Digital businesses are reshaping banking by layering intelligent services on top of commoditised financial products

### Customer contexts

<table>
<thead>
<tr>
<th><strong>Embedded journeys</strong></th>
<th>Package many services and products, embedding finance at the point of need</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intelligent services</strong></td>
<td>Solve customer problems with digital solutions</td>
</tr>
<tr>
<td><strong>Financial products</strong></td>
<td>Deliver regulated financial products, either directly or indirectly</td>
</tr>
<tr>
<td><strong>Capabilities</strong></td>
<td>Provide supporting capabilities required to deliver financial products to customers</td>
</tr>
<tr>
<td><strong>Transactional rails</strong></td>
<td>Use transactional rails to move money, connecting to the whole market</td>
</tr>
</tbody>
</table>

**Engaging customers with great experiences**

**Manufacturing economies of scale**

**Enabling other businesses with operational efficiency**

Source: 11:FS
More and more partners are willing to share risk. That makes it very interesting. Now you have more skin in the game, as opposed to a transactional fee. Now they are looking more at building a proposition. They are also willing to share their data for risk and for hyper personalisation.”

Kalidas Ghose  
CEO, FE Credit, Vietnam
Industry value chains are being reshaped as companies combine capabilities through digital ecosystems.

### Customer contexts
- **Shopping**
  - Buy, insure, and service my car
- **Transport**
  - Discover, buy and protect my home
- **Home**
  - Protect my family’s health
- **Health**
  - Build up my savings
- **Wealth**
  - Set up & run a business
- **Business**

### Embedded journeys
- **Money management**
- **Cashflow forecasting**
- **Automated savings**
- **Automated investing**
- **Personalised financial advice**
- **On-demand insurance**

### Intelligent services
- **Loans**
- **Cards & payments**
- **Deposits**
- **Funds**
- **Insurance**

### Financial products
- **Know Your Customer**
- **Credit scoring**
- **Card issuing**
- **Payment processing**
- **Securities trading**
- **Identification & authentication**

### Capabilities
- **Bank transfers**
- **Card networks**
- **Foreign exchange**
- **Bond markets**
- **Equity markets**
- **Reinsurance markets**

Source: 11:FS

11:FS, in association with Infosys Finacle
“The suppliers that we rely on, many of them are established companies that are not moving as quickly as we’d like. So we’ve started working directly with the suppliers to say we will co-innovate it. You do the tech engineering part, we do the use cases part, and we’ll try and move together.”

Sankarson Banerjee
CIO, RBL Bank, India
Digital banking is evolving through four stages

1. Traditional analogue banking
   Doing *old* things in *old* ways:
   - Using paper notes, metal coins and ATMs.
   - Serving customers face to face in branches and by telephone.
   - Requiring paper documents and signatures on paper.

2. Digitised banking
   Doing *old* things in *new* ways:
   - Using digital touchpoints to improve service.
   - Using digital touchpoints to reach customers in new markets.
   - Giving employees digital tools to increase efficiency.
   - Cutting out intermediaries with direct distribution.

3. Truly digital banking
   Doing *new, adjacent* things in *new* ways:
   - Using new sources of data in pricing models.
   - Automating business processes and customer journeys.
   - Using AI to augment human decision making.
   - Selling insights to monetise data.

4. Digital business ecosystems
   Co-creating new sources of value:
   - Partnering to create new embedded services.
   - Building marketplaces to connect buyers and sellers.
   - Delivering capabilities as a service.
   - Personalising experiences and advice in context at scale.

Sources: Infosys Finacle; IIFS
Digital ecosystems enable new business models

Digital technologies can improve the economics and capabilities of every business model, creating opportunities to innovate by delivering new value for customers, earning customer loyalty, driving down operating costs and generating new revenues. Banks must adapt to thrive in a world of digital business ecosystems.
New business model archetypes play in different layers of the industry value chain

Customer contexts

- Shopping
- Transport
- Home
- Health
- Wealth
- Business

Embedded Journeys

- Super apps
- Non-finance marketplaces
- Embedded finance

Intelligent Services

- Digital financial advisors

Financial Products

- Finance marketplaces

Capabilities

- Traditional banks

Transactional Rails

- Banking as a Service

Source: 11:FS, in association with Infosys Finacle
New banking business archetypes are emerging that create and deliver value to customers in new ways

1. Digital bank
Digital banks deliver banking services entirely (or almost entirely) through digital touchpoints.

2. Digital financial advisor
Digital financial advisors deliver financial advice by using AI to understand customers’ financial situation and recommend actions.

3. Embedded finance
Companies with frequent engagement and deep customer understanding are embedding banking and payments into non-financial products and services.

4. Banking as a Service
Banking as a Service (BaaS) offers complete banking processes, typically through APIs, that third parties can embed into their products and services.

5. Banking curator
These digital banks aim to offer best-of-breed products by combining basic accounts with financial advice and a curated set of third-party products.

6. Finance marketplace
Finance marketplaces build infrastructure to help customers choose financial services from multiple third-party suppliers in an open environment.

7. Non-finance marketplace
Non-finance marketplaces build infrastructure to help customers choose goods and/or services from multiple third-party suppliers in an open environment.

8. Banking industry utility
Banking industry utilities specialise in delivering non-differentiating services by pooling resources, expertise, and capabilities to increase efficiency.

Sources: Infosys Finacle; IIIFS
Digital banks compete for customers with better digital experiences and lower operating costs

1. Digital bank

**Brazil's Nubank has won millions of customers through word of mouth.**

Brazil's leading digital bank serves consumers and SMEs in Brazil, Argentina and Mexico

Nubank has grown from 12 million customers in 2019 to 34 million in 2020 largely by word of mouth: 80% of customer sign-ups come from unpaid referrals. 20% of Nubank's 34 million customers never had a credit card before.

**A bank launched by South Korea's dominant messaging app.**

Kakao Bank borrowed the customer-centric characteristics of Kakao Talk to transform banking.

Kakao Bank won a quarter of a million customers in its first 24 hours. The bank now has more than 10 million customers, with US$8.4 billion in deposits by 2018 and US$7 billion in loans.

**WeBank is an affiliate of WeChat, China's leading messaging app.**

WeBank has won more than 80 million customers since it launched in 2014. Operating costs per account are only 3.6 RMB (US$0.50).

**Sources:** KakaoBank, Nubank; WeBank; 11:FS

Other prominent examples:
## Digital banks rely on more efficient operations to undercut traditional banks

<table>
<thead>
<tr>
<th>Partnerships</th>
<th>Activities</th>
<th>Value propositions</th>
<th>Customer relationships</th>
<th>Customer segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology partnerships with best-of-breed vendors, for e.g. core banking, identification, fraud detection, rewards programmes.</td>
<td>Delivering digital banking with sharply lower operating costs.</td>
<td>➔ Better pricing and better digital experiences than traditional banks. ➔ Serve customers primarily or entirely through digital touchpoints. ➔ Use data to offer simple, personalised, and engaging digital banking experiences.</td>
<td>Typically begins as a secondary bank relationship. ➔ Small initial portfolio of products, gradually expands.</td>
<td>Typically target digital natives and tech-savvy consumers and small businesses. ➔ Some digital banks focus on specific customer segments (e.g. underbanked consumers). Gradually expand into adjacent customer segments or countries.</td>
</tr>
<tr>
<td>Business partnerships for adjacent capabilities such as ATM access, investment products and insurance.</td>
<td>Resources</td>
<td>Channels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>➔ Banking licence. ➔ Modern front to back technology stack. ➔ Typically cloud-based tech operations.</td>
<td>Mobile first, sometimes with online banking. Chatbots, with limited human chat support. No branches.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cost structure
Sharply reduced cost structure compared with traditional banks:
- No branch network; no ATM network.
- Limited contact centre operations.
- Extensive use of automation to cut processing costs.
- Substantial marketing costs needed to win new customers.
- Risk management, analytics, fraud and regulatory compliance costs.

### Revenues
- Net interest margins on savings and loan products.
- Card interchange fees.
- Interbank payments processing charges.
- Fees and/or commissions for insurance and investment products.
We are morphing from a consumer finance company to a neo-bank. The level of acceptance is much higher than we expected. The way we have designed it is to serve customers much better than the traditional banks because the cost structure is different. It doesn’t suit the branch-heavy, people-heavy model of traditional banks.”

Kalidas Ghose
CEO, FE Credit, Vietnam
Digital financial advisors use open finance data to help customers take better financial decisions

RBC’s Nomi digital assistant provides intelligent services to customers.

Royal Bank of Canada offers its customers a suite of intelligent services integrated into mobile banking. Nomi offers automated savings, a budgeting tool based on insights about each customer’s situation and a text-and-voice activated chatbot.

Results include greater customer engagement with mobile banking, customer attrition reduced to 2%, 250,000 new savings accounts and customers saving C$225 a month.

Money management app Plum helps users automate savings and investments.

UK fintech Plum, founded in 2016, links with customers’ bank accounts via open banking. It then uses AI to analyse customers’ spending and automatically identify how much they can afford to set aside into a savings pot or investment account each month.

Plum has identified more than US$500 million in savings for its 500,000 regular users.

Vanguard Personal Advisor Services combines automation with human advisors.

Vanguard Personal Advisor Services provides strong personalised and automated investment advice and selection with guidance from human advisors for a 0.3% annual management fees and a US$50,000 account minimum.

With over $200 billion in assets under management, Vanguard’s Personal Advisor Services is the largest direct-to-consumer digital financial advisor.

Situation | Problem | Change | Solution | Action
---|---|---|---|---
TMRW by UOB gives customers personalised insights and advice.

TMRW is a mobile-only bank account, debit and credit card designed to give customers greater control over their finances. It enables users to track their spending and saving patterns, helping to avoid overspending or missed payments.

Since its launch in August 2020, TMRW has acquired over 310,000 customers, 70% of whom are new to the banking group. Cost per customer acquisition (CPA) has fallen over 40% in the same period.

Sources: RBC; Personetics; Plum; Vanguard; 11:FS

Other prominent examples:

Charles Schwab
Intesa
Snam
Snoop
TMRW by UOB
# Digital financial advisors earn loyalty and long-term revenue with better customer experiences

<table>
<thead>
<tr>
<th>Partnerships</th>
<th>Activities</th>
<th>Value propositions</th>
<th>Customer relationships</th>
<th>Customer segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Technology partnerships with best-of-breed vendors, for e.g. advice, personalisation, core banking, identification, fraud detection etc.</td>
<td>➔ Manufacture and deliver tailored financial advice at scale to improve customers' financial well being.</td>
<td>➔ Bringing private banking style experiences to retail customers at scale.</td>
<td>➔ Hybrid of self service (e.g. chatbots) combined with human assistance.</td>
<td>➔ Digital natives and tech-savvy consumers.</td>
</tr>
<tr>
<td>➔ Product providers for savings, investments and insurance.</td>
<td></td>
<td>➔ Use data to offer tailored financial tips, advice and recommendations.</td>
<td>➔ Extensive personalisation.</td>
<td>➔ Mass market wealth management customers.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th></th>
<th></th>
<th>Channels</th>
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</thead>
<tbody>
<tr>
<td>➔ Open finance data.</td>
<td></td>
<td>➔ Tax optimisation.</td>
<td>➔ Chatbot.</td>
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<tr>
<td></td>
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<td></td>
<td>➔ Human support via telephone or video.</td>
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</table>

<table>
<thead>
<tr>
<th>Cost structure</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Contact centre operations to provide human support.</td>
<td>➔ Fee or subscription-based revenue model; may charge fees for assets under management.</td>
</tr>
<tr>
<td>➔ Extensive use of automation to cut processing costs.</td>
<td>➔ Net interest margins on savings and loan products.</td>
</tr>
<tr>
<td>➔ Substantial marketing costs needed to win new customers.</td>
<td>➔ No hidden product commissions.</td>
</tr>
<tr>
<td>➔ Risk management, analytics, fraud and regulatory compliance costs.</td>
<td></td>
</tr>
</tbody>
</table>

**Sources:** Strategyzer; Infosys Finacle; IIFS
Embedded finance distributors offer finance at the point of customer need

GrabPay is a digital wallet created by Southeast Asia’s largest ride-hailing company. Grab customers can make payments for hailing a ride or ordering food within the Grab app using a wallet linked to their credit or debit card, as well as paying in stores, earning rewards, and sending and receiving funds instantly.

Registered GrabPay merchants nearly tripled in the year to Q2 2021, with total payments volume of US$2.9 billion, up 66% on a year earlier.

Shopify offers payments, point of sale systems and loans to merchants. Shopify began with a buy now/pay later option for consumers and a business debit card for merchants, helping merchants get paid immediately. Shopify has announced it will integrate with Stripe Treasury to offer a business bank account, Shopify Balance, to its merchant customers.

Shopify Capital lent $308.6 million Q1 2021, up from $162.4 million a year earlier.

WeChat Pay is embedded into China’s ubiquitous messenger app. WeChat Pay is a digital wallet embedded into WeChat. WeChat Pay enables customers to make a wide variety of payments for goods and services, including bill payments and in-store payments, as well as send ‘red envelope’ gift payments to friends and family.

WeChat Pay has 900 million users. In 2019, Tencent generated RMB101 billion (US$16 billion) from its fintech and business services.

Sources: Grab; Shopify; WeChat; Infosys Finacle; IIFS

3. Embedded finance

<table>
<thead>
<tr>
<th>Situation</th>
<th>Problem</th>
<th>Change</th>
<th>Solution</th>
<th>Action</th>
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</thead>
<tbody>
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<td></td>
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</tbody>
</table>

Other prominent examples:

- Amazon
- LINE
- Rappi
- Uber
- Udaijan Capital

IIFS, in association with Infosys Finacle
Embedded finance distributors earn a share of the revenue generated from customers

<table>
<thead>
<tr>
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<th>Customer segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Specialist BaaS providers like Galileo, GPS, Marqeta, Railsbank and Synapse.</td>
<td>➔ Integrate finance into existing customer journeys.</td>
<td>➔ Offer financial services, primarily lending or payments, at the point of customer need.</td>
<td>➔ Deepen relationship with existing customers by offering finance and/or payments at the point of customer need.</td>
<td>➔ Consumers and/or businesses who are already customers of the brand.</td>
</tr>
<tr>
<td>➔ Bank or banks that offer their balance sheet, regulatory compliance and products as a service.</td>
<td>➔ Provide additional data to BaaS providers to help price risk more accurately.</td>
<td>➔ Embed lending and/or payments into the customer journey.</td>
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<td></td>
</tr>
<tr>
<td>Resources</td>
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</tr>
<tr>
<td>➔ Brands sometimes have additional data and insights about their customers that can help to price risk.</td>
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<td></td>
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<tr>
<td>Channels</td>
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<tr>
<td>➔ Distribute through existing customer touchpoints.</td>
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<tr>
<td>Cost structure</td>
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</tr>
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<td>➔ Substantial marketing costs needed to win new customers.</td>
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<tr>
<td>Revenues</td>
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<tr>
<td>➔ Typically earn a share of the revenue generated by lending or payments.</td>
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</tr>
</tbody>
</table>

Sources: Strategyzer; Infosys Finacle; IIFS
“We’re an ecosystem play as part of a big platform. Platforms have a lot of different priorities. You’re trying to cram all of these services into one app. It’s not so easily done, both technically and business-wise. Line is a messenger, but it’s also everything else: news, video streaming, food delivery, e-commerce, and a whole lot more.”

Tana Pothikamjorn
CEO, Kasikorn Line, Thailand
Banking as a Service (BaaS) offers capabilities that partners can embed into customer journeys.

**Goldman Sachs**

US financial powerhouse with everything to play for.

Goldman Sachs’s collaboration with Apple put it on the map as a BaaS player, using its banking licence, deep industry expertise and modern technology to deliver BaaS capabilities. Goldman has built a new cloud-based banking infrastructure and released access via APIs for developers to easily integrate new financial products on top of the platform.

Global Transaction Banking APIs offer speed and flexibility in launching new financial products and services, generating revenues through new business lines from existing clients.

**ICICI Bank**

An innovative Indian bank with an extensive range of banking APIs.

ICICI Bank offers a wide range of APIs for retail and business customers, partners, and developers, powering everything from digital banks to payments on WhatsApp.

The bank offers some 250 APIs through its developer portal, helping partner companies to co-create quickly and easily.

**Solarisbank**

A German technology company with a banking license.

Solarisbank’s Banking-as-a-Service platform powers digital banks Penta and Tomorrow Bank, and propositions from Samsung Pay, German retailer Otto and Dutch car marketplace CarNext.com. Solarisbank has its own licence and has coupled regulated activities with clean APIs.

Solarisbank has raised more than €350 million in funding since its founding in 2016.
Banking as a Service (BaaS) models share revenues between the brand and the underlying bank

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>➔ Specialist BaaS providers like Galileo, GPS, Marqeta, Railsbank and Synapse.</td>
<td>➔ Support API banking channel. ➔ Develop and modify APIs to support new use cases conceived by partners.</td>
<td>➔ Easy integration of complete banking processes that partner brands can use to embed financial services into their customer experience. ➔ Enables partners to build banking offerings using the bank’s secure, regulated infrastructure. ➔ Modern API-driven platforms offer brands more control over the customer experience and higher conversion rates.</td>
<td>➔ Relationships are managed through partner brands.</td>
<td>➔ Brands in a wide variety of sectors that wish to embed financial services into their customer propositions. ➔ Fintechs that are seeking to diversify their customer propositions. ➔ Established financial services firms seeking a specific product.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Banking licence. ➔ Modern front to back technology stack. ➔ Cloud-based tech operations.</td>
<td>➔ Delivered primarily or exclusively through APIs and a developer portal.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost structure</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ No distribution costs. ➔ Fee sharing with distribution partners (brands). ➔ Marketing costs limited to marketing capability to partners. ➔ Substantial technology infrastructure costs. ➔ Risk management, fraud and regulatory compliance costs.</td>
<td>➔ Net interest margins on savings and loan products. ➔ Card interchange fees. ➔ Partners may pay a fee to access BaaS platform infrastructure (either monthly fee or a la carte). ➔ Monetisation of customer data.</td>
</tr>
</tbody>
</table>

Sources: Strategyzer; Infosys Finacle; 11:FS

IIFS, in association with Infosys Finacle – 59
Banking curators offer customers a limited choice of third-party products on a single platform

**N26**

German digital bank N26 offers a curated list of third-party products. N26 built a series of partnerships to offer more products to its customers, including cross-currency transfers from Wise, deposits from Raisin, investments from Vaamo and insurance from Clark. N26 unwound its partnership with Vaamo after it was acquired by MoneyFarm in 2018 and ended the partnership with Clark in July 2020.

**Starling Bank**

The UK’s Starling Bank has built an ecosystem of product partnerships. Starling Bank offers a picked selection of both consumer and business services for its customers, including investments, pensions and insurance that can be integrated into Starling’s app. Starling also offers its own API developer portal to let third parties access customer data and build on top of its platform using Starling APIs. Starling Bank’s customer account numbers more than doubled to 2.1 million in the year to March 2021.

**Monzo**

UK digital bank Monzo also curates products for its customers. Like its rival Starling, Monzo has built a series of partnerships to broaden the range of products it offers its customers. Monzo’s partnerships including savings accounts from OakNorth Bank and Shawbrook Bank and international payments through Wise. Monzo earned £2.9 million in partnership commissions in the year to February 2021, double the previous year.

Other prominent examples:

- Paytm
- Revolut

Sources: Monzo, N26, Starling Bank, Infosys Finacle, IIFS
Banking curators generate commissions from third-party product sales through their platform

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<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Technology partnerships with best-of-breed vendors, for e.g. core banking, identification, fraud detection, rewards programmes.</td>
<td>➔ Delivering digital banking with lower operating costs.</td>
<td>➔ Offer a one-stop-shop for a customers’ finances.</td>
<td>➔ Self service.</td>
<td>➔ Multi-sided platform.</td>
<td>➔ Banking licence.</td>
<td>➔ Serve customers primarily or entirely through digital touchpoints.</td>
</tr>
<tr>
<td>➔ Relationships with selected third-party financial product and services suppliers.</td>
<td>➔ Operating a closed platform to help match buyers with third-party suppliers.</td>
<td>➔ Better pricing and better digital experiences than traditional banks.</td>
<td>➔ Little or no human support for buyers.</td>
<td>➔ Typically target digital natives and tech-savvy consumers and small businesses.</td>
<td>➔ Modern front to back technology stack.</td>
<td>➔ No branches.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>➔ Use data to offer simple, personalised, and engaging digital banking experiences.</td>
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<td></td>
<td>➔ Typically cloud-based tech operations.</td>
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<td>Value propositions</td>
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<td>Customer relationships</td>
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<tr>
<td>➔ Self service.</td>
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<td>➔ Little or no human support for buyers.</td>
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<tr>
<td>Customer segments</td>
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<tr>
<td>➔ Multi-sided platform.</td>
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<tr>
<td>➔ Typically target digital natives and tech-savvy consumers and small businesses.</td>
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<tr>
<td>➔ Gradually expand into adjacent customer segments or countries.</td>
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<tr>
<td>Channels</td>
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<tr>
<td>➔ Serve customers primarily or entirely through digital touchpoints.</td>
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<tr>
<td>➔ No branches.</td>
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<tr>
<td>Cost structure</td>
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<tr>
<td>Sharply reduced cost structure compared with traditional banks:</td>
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<tr>
<td>➔ Substantial marketing costs needed to win new customers.</td>
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<tr>
<td>➔ No branch or ATM network; small contact centre.</td>
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<tr>
<td>➔ Extensive use of automation to cut processing costs.</td>
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<tr>
<td>➔ Substantial technology infrastructure costs.</td>
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<tr>
<td>➔ Risk management, fraud and regulatory compliance costs.</td>
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<tr>
<td>Revenues</td>
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</tr>
<tr>
<td>➔ Net interest margins on savings and loan products.</td>
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<tr>
<td>➔ Card interchange fees.</td>
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<tr>
<td>➔ Interbank payments processing fees.</td>
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<tr>
<td>➔ Fees and/or commissions for third-party products, such as foreign currency, insurance and investments.</td>
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</tbody>
</table>

Sources: Strategyzer; Infosys Finacle; 11:FS
Finance marketplaces are platforms that match buyers to sellers in an open environment.

Deposit marketplace Raisin gives savers the best rates across Europe.

Pan-European savings marketplace Raisin partners with banks across Europe to offer savers access to the best interest rates.

Raisin has 320,000 customers across 31 European countries and has brokered €30.5 billion in savings across Europe.

A personal loan intermediary service set up by Ping An Group

China’s Lu.com started as a peer-to-peer lending platform. It now serves both individual and small business borrowers and offers investors not only P2P lending products, but also wealth management and insurance products from Ping An Group.

By June 2021, Lu.com had facilitated RMB600 billion (US$94 billion) in loans to a cumulative 15.5 million borrowers.

India’s finance marketplace BankBazaar offers customised quotes for loans and credit cards.

More than 50 of India’s leading financial and insurance firms participate on the BankBazaar platform, which lets customers check their credit score, compare offers and apply for products online and via mobile app.

The platform has over 40m registered users and has so far raised US$116 million in funding from investors such as Experian, Eight Roads and Amazon.

Other prominent examples:

Sources: BankBazaar.com; Lufax; Raisin; Infosys Finacle; 11:FS

Situation | Problem | Change | Solution | Action
---|---|---|---|---

11:FS, in association with Infosys Finacle
Finance marketplaces earn fees and commissions by matching buyers to sellers

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>➔ Relationships with multiple third-party financial product and services suppliers. ➔ May have partnerships with brands in other sectors (e.g. media companies) to extend marketplace reach and provide content.</td>
<td>➔ Build open platform to help match buyers with third-party suppliers. ➔ Manage supplier relationships.</td>
<td>➔ Match buyers with multiple sellers on an open platform. ➔ Help financial buyers find products and services that suit their needs. ➔ Help sellers reach new customers. ➔ Multiple parties can work together on the same platform.</td>
<td>➔ Self service. ➔ Little or no support for buyers. ➔ Relationship managers for sellers.</td>
<td>➔ Multi-sided platform. ➔ Typically focused on a single customer segment, such as retail customers, small businesses or corporations. ➔ Gradually expand into adjacent product markets and countries.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Value propositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Marketplace platform infrastructure. ➔ Large, established customer base.</td>
<td>➔ Match buyers with multiple sellers on an open platform. ➔ Help financial buyers find products and services that suit their needs. ➔ Help sellers reach new customers. ➔ Multiple parties can work together on the same platform.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost structure</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Substantial marketing costs to attract both buyers and sellers. ➔ Platform infrastructure development and maintenance (e.g. product databases; filtering and comparison tools; Cloud infrastructure; APIs) ➔ Fee sharing with distribution partners. ➔ Risk management, fraud and regulatory compliance costs.</td>
<td>➔ Fees for introducing buyers to sellers. ➔ Product commissions or advertising fees depending on legal structure. ➔ Cross-selling opportunities.</td>
</tr>
</tbody>
</table>

Sources: Strategyzer; Infosys Finacle; 11:FS
7. Non-finance marketplace

Bank-operated non-finance marketplaces help customers find suppliers for a range of goods and services

Indian payment app Paytm has built a huge goods and services marketplace. Paytm’s marketplace offers everything from electronics, clothing and movies to taxis, train tickets and flights. Paytm embeds financial products into the customer journeys, including credit cards from Citibank, term deposits from IndusInd Bank, and unsecured loans from various lenders.

Paytm has 333 million customers and 21 million merchants across India, processing Rs4 trillion (US$54 billion) in gross merchandise volume in the past year.

Russian digital bank Tinkoff offers third-party services through its marketplace. External partners can connect to the Tinkoff marketplace via open APIs and offer services to customers within the Tinkoff app. The marketplace encompasses cinemas, taxis, restaurants, holidays, food delivery and cleaning services, with customers receiving cashback on purchases through the app.

Tinkoff has around 10 million customers. Fee & commission income grew by 90% in 2018 and accounts for 30% of revenue.

Xero has built a marketplace of small business services for its customers. Xero makes accounting easier for small businesses with its marketplace of 1,000 third-party software apps that connect to Xero’s core accounting software. Customers can manage their subscriptions through Xero, with Xero taking a 15% cut.

Xero grew its total subscribers by 20% to 2.74 million in the year to March 2021, growing operating revenue by 18% to NZ$848 million.

Other prominent examples:

- Paytm
- Tinkoff
- Xero
- Paytm
- Tinkoff
- Xero

Sources: Paytm; Tinkoff Bank; Xero; Infosys Finacle; IIFS
Non-finance marketplaces earn small fees from introducing their customers to goods and services

<table>
<thead>
<tr>
<th>Partnerships</th>
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</thead>
<tbody>
<tr>
<td>➔ May have partnerships with brands in other sectors (e.g. media companies) to provide content and extend marketplace reach.</td>
<td>➔ Manage supplier relationships.</td>
<td>➔ Help customers find other relevant products and services.</td>
<td>➔ Relationship managers for sellers.</td>
<td>➔ Typically start in a single domain or sector and gradually expand into adjacent product markets and countries.</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Resources</th>
<th>Value propositions</th>
<th>Customer relationships</th>
<th>Customer segments</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Large, established customer base.</td>
<td>➔ Help customers find other relevant products and services.</td>
<td>➔ Relationship managers for sellers.</td>
<td>➔ Typically start in a single domain or sector and gradually expand into adjacent product markets and countries.</td>
</tr>
<tr>
<td></td>
<td>➔ Help sellers reach new customers.</td>
<td></td>
<td>➔ Usually focused on a single customer segment, such as retail customers, small businesses or corporations.</td>
</tr>
<tr>
<td></td>
<td>➔ Multiple parties can work together on the same platform.</td>
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<table>
<thead>
<tr>
<th>Cost structure</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔ Substantial marketing costs to attract both buyers and sellers.</td>
<td>➔ Fees for introducing buyers to sellers.</td>
</tr>
<tr>
<td>➔ Platform infrastructure development and maintenance (e.g. product databases; filtering and comparison tools; Cloud infrastructure; APIs).</td>
<td>➔ Revenue share, commissions or advertising fees depending on regulation and legal structure.</td>
</tr>
<tr>
<td>➔ Fee sharing with distribution partners.</td>
<td>➔ Cross-selling opportunities.</td>
</tr>
</tbody>
</table>

Sources: Strategyzer; Infosys Finacle; 11:FS
Banking industry utilities pool resources and capabilities to increase efficiency in delivering non-differentiating services

**ClearBank**

The UK’s ClearBank offers real-time payment processing to partners including JP Morgan and Tide.

Startup ClearBank is the UK’s first new clearing bank in 250 years, aiming to make banking and payments faster, safer, more reliable and accessible. Other services include liquidity management, fraud detection and money laundering detection.

ClearBank’s infrastructure enables partners to streamline customer acquisition and speed up account opening processes.

**Stater**

Dutch mortgage processor
Stater serves banks across the Benelux region.

Stater offers a complete range of services across the mortgage and consumer lending value chain with deep capabilities in digital origination, servicing and collection.

Stater is the largest mortgage service provider of the Benelux. Stater services 1.7 million mortgage and insurance loans for about 50 financial institutions in the Netherlands and Belgium.

**IBBIC**

Indian blockchain consortium working to make trade finance more efficient

The snappily named Indian Banks’ Blockchain Infrastructure Co (IBBIC), owned by a consortium of Indian banks, is using blockchain to automate trade finance processes across different banks.

The utility is poised to reduce cycle time, operational costs and trade frauds, while also helping to grow the market. For instance, the previous 9 to 10 day for a letter-of-credit (LC) cycle has been cut to 2 to 3 days.

Sources: ClearBank; Infosys Finacle; IIFS
8. Banking industry utility

Banking industry utilities earn fees by being more efficient at manufacturing non-differentiating capabilities

<table>
<thead>
<tr>
<th>Partnerships</th>
<th>Activities</th>
<th>Value propositions</th>
<th>Customer relationships</th>
<th>Customer segments</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Channels</th>
<th>Revenues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain and technology experts. Robust, scalable, secure infrastructure. Banking licence for some activities.</td>
<td>Relationship managers. Developer portal and APIs. File based integration channels</td>
<td>Fees for access and/or membership (either monthly fee or a la carte). Processing fees. Onboarding fees. Additional income from monetising industry data</td>
</tr>
</tbody>
</table>

Sources: Strategyzer; Infosys Finacle; 11:FS
How to drive business model innovation

Traditional banks need a radical break away from the hierarchical cultures and structures that hinder or crush innovation. Banks that fail to adapt won’t be able to compete with faster-moving digital competitors. Only truly digital firms will thrive.
How to drive business model innovation

1. Rethink business models for digital ecosystems
   - Target business model
     - Customer segments
     - Value propositions
     - Distribution channels
     - Revenue streams
     - Cost structure

2. Create new customer value
   - Customer experience
   - Operational efficiency
   - Ecosystem partnerships

3. Deliver with a truly digital organisation
   - Culture
   - Talent & skills
   - Governance
   - Funding & metrics
   - Risk management
   - Technology & data

Sources: Infosys Finacle; IIFS
Rethink business models with a clear vision of customers and the outcomes they want

**Vision**
Why we exist

**Mission**
How we get there

**Values**
What we stand for

**Customers**
Who customers are, what their needs are and the outcomes they want

**Business model**
How the business creates, delivers and captures value

Banks must decide what role they wish to play in tomorrow’s digital business ecosystems.

Starting with the firm’s vision, mission and values, leaders must articulate clearly which customers the bank will serve, what outcomes the bank will help those customers achieve and how the business model will create value for both customers and shareholders.

Different business units within a banking group may serve different customers with different business models.
Define how to create new customer value

Truly digital businesses continuously iterate their propositions to create and deliver more customer value through better experiences, greater efficiency and smarter partnerships.

**Customer experience**
Based on your company’s vision, define the future-state experiences that you want your customers to have, anticipate their expectations and deliver the outcomes your customers need.

**Operational efficiency**
Cut operating costs by using digital solutions to automate, streamline or completely eliminate manual or paper-based processes. Empower employees with tools and insights to augment human decision making and help them deliver better customer outcomes.

**Ecosystem partnerships**
Identify partners with best-in-class digital capabilities that will help you deliver better customer experiences faster and more efficiently than before.
The way we need to think about delivering products in the future needs to materially change. There has to be a shift from a bank being a product provider to becoming an active player in strategic platforms. We would want to sit behind relevant experiences provided by our partners, while also building out proprietary propositions where it makes sense.”

James Scott
Chief Digital Officer – Wholesale, ABSA Group, South Africa
Deliver innovation with a truly digital organisation

Truly digital businesses create the culture, skills, governance, funding, risk management, and technology needed to understand customers, make decisions and act quickly.

**Culture**
Build a customer-centric culture focused on solving for customer outcomes.

**Talent & Skills**
Organise autonomous multi-disciplinary teams focused on delivering customer outcomes.

**Governance**
Empower employees to take decisions fast by delegating decisions as close to customers as possible.

**Funding & Metrics**
Use gated, iterative funding with customer-led metrics to measure success.

**Risk Management**
Work with regulators and risk managers, not around them.

**Technology & Data**
Rebuild with flexible modern technology architectures to increase the pace of change.

Sources: Infosys Finacle; 11:FS
Increasing the pace of change requires a truly digital culture

Build a customer-centric culture focused on solving for customer outcomes

➔ **Purpose & mission:** Businesses that have clearly defined their customer outcomes create focus on the common goal: the customer. Incentives, metrics and team alignment flow from the purpose and mission.

➔ **Incentives & metrics:** Truly digital firms align incentives to customer outcomes regardless of role. Cohesion between “business and tech” follows.

➔ **Empowerment:** Executing at pace requires pushing as much decision making to the edges as possible, including budgets, compliance and strategy.

➔ **Ways of working:** Modern tooling (e.g. Slack, Notion) drives team productivity, but only if teams are empowered to use them.

➔ **Org design:** Multi-disciplinary teams organised around solving for customer outcomes.

➔ **Tech:** Cloud, artificial intelligence and machine learning all have a huge impact if used the right way.

> From an 11:FS report: ‘Rebuilding financial services from the inside’
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It’s up to the banks to really understand the customer need. We need to intently listen. It’s about continuing to seek the input from the customer, the testing of concepts and acting on the feedback.”

Tom Hayes  
Group CTO, Permanent TSB, Ireland
Empower multi-disciplinary teams with purpose, autonomy and mastery

Organise autonomous multi-disciplinary teams focused on delivering customer outcomes.

➔ Purpose
Align around a clear vision and purpose. Banks that have clearly defined their customer outcomes create focus on the common goal - the customer. The incentives, metrics and team alignment flow from the purpose and mission.

➔ Autonomy
Decentralise decision making to autonomous teams that can respond to changing customer and business needs. Executing at pace requires pushing decision making to the edges, including budgets, compliance and strategy.

➔ Mastery
Cross-functional teams embed the multi-disciplinary skills that they need to deliver better outcomes for customers, including customer understanding, design, data science, risk management, compliance and DevOps.

Sources: Daniel Pink, "Drive"; 11:FS
"If an entire team owns a product's development, and works with a product mindset, prioritisation becomes easier because they will sit down together and look at it as a product, and not a project."

Sanjay Khanna
CIO, RakBank, United Arab Emirates
Delegate decision making closer to customers to accelerate change

Digital governance plays three roles in helping digital teams make decisions and act on them quickly:

1. Create alignment between strategy and execution by ensuring that all digital activities tie back to strategy and customers’ Jobs to be Done.

2. Co-ordinate across teams to allocate resources, drive collaboration, standardise processes, ensure consistency, and avoid redundancy.

3. Manage risks and security, so that neither the bank’s safety nor that of customers is compromised.

Truly digital businesses develop governance models that emphasise customer outcomes and delegate authority closer to the customer, letting teams make decisions and act on them quickly.

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How many traditional banks work today

- Waiting for governance
  - Waiting for governance
  - Productive work
  - Productive work
  - Productive work

How a truly digital business works

- Productive work

From an 11:FS report: ‘Rebuilding financial services from the inside’

Source: 11:FS
I’ve seen a massive transformation from ‘perfect’ business cases that were never really perfect and 5-year projections to categorising predictable initiatives and governing them appropriately. We run proper portfolio sessions focused on platforms as well as core value streams. So the conversations we’re having quarterly are around how we can help clear the path for execution.”

James Scott
Chief Digital Officer – Wholesale, ABSA Group, South Africa
Use gated, iterative funding with customer-led metrics to measure success

From big bets to a diversified portfolio
Traditional central planning results in one or two big strategic bets. Truly digital firms build a diversified portfolio of innovation combining incremental products with the occasional moonshot.

From investing in silos to investing in platforms
Truly digital businesses shift their mindset from product silos to platforms that support customers across business lines.

From internal metrics to customer-led metrics
Internal metrics are a lagging indicator of success. Customer-led metrics are a leading indicator. By the time most products make sense on traditional ROI metrics, the market has already moved on.

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<thead>
<tr>
<th></th>
<th>Traditional banks</th>
<th>Truly digital businesses</th>
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</thead>
<tbody>
<tr>
<td><strong>Portfolio</strong></td>
<td>Big bets</td>
<td>Diversified portfolio</td>
</tr>
</tbody>
</table>
| **Funding** | Investing in silos  
→ Funding for projects with proven in-year ROI  
→ Annual budgets by business line | Investing in platforms and mission teams  
→ Gated, iterative funding by product or customer segment  
→ Investment in platforms |
| **P&L**    | Business line P&L                                                                  | Customer segment P&L                                                  |
| **Metrics** | Internal-only financial metrics  
→ In-year ROI  
→ Annual revenue by business line | Customer-led & financial metrics  
→ Customer experience and engagement  
→ Customer lifetime value  
→ Average revenue per user  
→ Unit economics |
“98% of innovation is about focus and funding. The big banking groups have the muscle. If they put a clear focus on something, they have the funding and the capability to drive innovation forward.”

Juan José Cebrián
Head of Digital Banking Technology, United Overseas Bank, Singapore
“Previously the business decided what they would fund, but they held IT accountable for the outcome. Now we put technology and business in a box, jointly accountable for the investment and the outcomes.”

Septimus Blake
CEO, National Commercial Bank, Jamaica
“We look at our overall market share, in each segment. If we’re increasing that, we’re doing something good. Our aim is not putting in a system; it’s winning more market share.”

VV Balaji
Chief Technology Officer, ICICI Bank, India
Work with regulators and risk managers, not around them

Risk management and regulation play crucial roles in keeping customers—and banks—safe.

Regulations need not inhibit banks from delivering innovation:

➔ Include risk managers and regulatory compliance experts in innovation initiatives from the outset.
➔ Know exactly what the regulations say and do not say.
➔ Talk with regulators to understand the spirit of the regulations, not just the letter of the law.
➔ Work with regulators and compliance colleagues to deliver the intent of the regulations.
➔ Identify appropriate customer protection safeguards to build into new financial products and services.
➔ Test new products and services with customers in a controlled environment, such as a regulatory sandbox.

Sources: Infosys Finacle; IIFS
Banking needs clear and strong regulation. Part of the muscle you must have as a banking organisation is to keep on top of the regulation and apply it in a correct way. Rather than looking at it as an inhibitor in any way, you have to look at it as part of doing business and protecting customers.”

Tom Hayes
Group CTO, Permanent TSB, Ireland
Technology & Data

Rebuild with modern, flexible technology architectures to accelerate the pace of change

Often incumbents lift-and-shift their old code and infrastructure to the cloud. This can cost more, be less reliable and not improve speed. To get the benefits there are three fundamentals of a flexible modern technology architecture:

➔ **Fundamental 1**: Breaking monoliths into *primitives* to reduce the size of services, reduce the size of every change, and reduce the cost and risk of each change.

➔ **Fundamental 2**: Shifting vertical silos into *horizontals* to maximize the re-use of capabilities (like digital onboarding) and reduce the complexity of all changes.

➔ **Fundamental 3**: Moving from *whale* vendors to *school of fish* providers to take advantage of new specialist providers that have turned cost centres into best-in-class operations.

> From an 11:FS report: ‘Rebuilding financial services from the inside’
What we want is to deconstruct the capabilities in our core banking platform so that all of those capabilities and services can be converted into APIs and micro services that can be consumed internally or externally.”

Septimus Blake  
CEO, National Commercial Bank, Jamaica
Evolve your culture, skills, governance, funding and technology as you mature

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<tr>
<th>Culture</th>
<th>Talent &amp; skills</th>
<th>Governance</th>
<th>Funding</th>
<th>Risk mgmt.</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top-down culture focused on siloed business results.</td>
<td>Teams arranged in department &amp; product silos.</td>
<td>Hierarchical, centralised command and control.</td>
<td>Annual funding cycles and in-year ROI targets.</td>
<td>Risk-averse security and compliance operate in silos.</td>
<td>Inflexible RFP processes and legacy technology stacks.</td>
</tr>
<tr>
<td>Hierarchies give way to cross-functional teams.</td>
<td>Small, empowered, cross-functional teams.</td>
<td>Alignment around common customer-centric metrics.</td>
<td>Iterative funding and delivery.</td>
<td>Analytics and AI accelerate risk detection and decisions.</td>
<td>Shift to a modular microservices architecture.</td>
</tr>
</tbody>
</table>

Sources: 11:FS; Infosys Finacle
"Companies that really want to innovate fast need to accept that maybe the investment won’t work out. It’s all right to not have all the answers all of the time for every scenario. You have to test and iterate and fail in some scenarios. I’ve seen a lot of success from companies that are OK with that, and understand that going into an initiative."

Annie DeStefano
Director, Fintech, Silicon Valley Bank, USA
Reach out to us

Infosys Finacle is an industry leader in digital banking solutions. Our cloud-native solutions and SaaS services address the core banking, digital engagement, payments, cash management, wealth management, and treasury requirements of banks globally. We are differentiated by our functionally-rich solutions, composable architecture, and an impeccable track record of delivering value.

Today, banks in over 100 countries rely on Finacle to serve more than a billion people and millions of businesses.

edgeverve.com/finacle

11:FS

Digital financial services are only 1% finished. 11:FS is building the next 99%. 11:FS makes financial services businesses truly digital through next-generation propositions.

It delivers UX benchmarking through 11:FS Pulse, a Financial Services Operating System through 11:FS Foundry, research and consulting services, as well as industry-leading content and events.

11fs.com

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- Avinash Raghavendra
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- Deepak Sharma
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  Head of Global Transaction Services, Bank of America, Singapore

- James Scott
  Chief Digital Officer – Wholesale, ABSA Group, South Africa

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