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BETTER FINANCIAL SERVICES THROUGH a Better Connected World

The rise of Fintech

Digital platforms are fueling the on-demand economy by matching supply and demand in an accessible, low-cost way. Uber, Amazon, and Alibaba show the disruptive power of these “sharing” technology platforms, where buyer-seller interaction is high, a diverse range of goods are on offer, and the marginal cost of rolling out a new product or service is approaching zero. In essence, digital platforms seed trust.

Fintechs are disrupting the industry by both cooperating and competing with banks for customer attention and thus their wallets. Customers no longer have to engage with their bank or purchase goods or services separately. Shared marketplace platforms are injecting more

relevance for customers, letting them navigate the buying experience from end-to-end and make and pay for purchases on-demand.

Challenges in the digital age

As banks move into the third digital revolution and as the lines are blurred even further as we enter the fourth industrial revolution, customer experience is transforming. Banks are faced with the following challenges:

Growth and profits: This is the number one challenge – banks need to keep their customers and current profits, but also offer new products and services.

Customer experience: Digitally enabled, the customer experience has been transformed. Customers are now valued clients who engage with banks

on a level above transactions. Banks are an extension into other areas of their lives, and so the relationship needs to broaden and deepen.

Compliance: The rapid change and broad impact of the digital revolution means that banks, legislators, and regulators are being challenged to an unprecedented degree, and for the most part, can't cope.

Fraud and cyber security: No longer a “behind the data center firewall” issue, diligent focus is required to develop a cyber security ecosystem.

New technologies: Customers are quickly adopting new technologies, pressuring banks into deploying digital solutions in a customer-facing way. But, not all banks are agile enough to do so quickly. Some big multinational banks



The financial services industry is feeling the impact of the digital revolution. Maintaining growth and profitability is an enormous challenge for banks as they need to keep tinkering with the customer experience, not only to provide financial services for their customers, but also to stay more relevant in customer's lives and keep their attention.

are partnering effectively with Fintech start-ups and providers, while smaller regional and community banks have different

challenges. They can move quickly and are partnering with Fintechs to solve resource, skills, and capability challenges.

A paradigm shift

To accommodate their customers' digital journeys, banks are undergoing

A Paradigm Shift in Banking to Accommodate Customers' Digital Journeys





their own paradigm shift.

In the past, a customer typically interacted with a bank within its walls or boundaries, either physically in a branch or virtually in a call center or by accessing certain online services. Characterized by slow analog manual processing, the old system saw products, admin, and infrastructure centralized and siloed. Today's customers expect everything, anywhere, anytime, with an experience that's seamless, integrated, and mobile. The bank's walls and boundaries are no more.

Near instant experiences are available for services like savings, instant financing, and purchases for non-traditional banking goods or services from an integrated marketplace retail account. Integrated payment and transaction processing augmented by artificial intelligence is providing recommendations and delivering highly contextual and relevant services for customers.

Banks' business strategies and service delivery models are changing. The interesting questions are how will the new monetary system be organized and structured, and how will it transition and change from what it is today?

One change is disintermediation. IT is

reducing search costs and enabling demand and supply to meet directly, regardless of distance, so online intermediation platforms are taking over from business models where an intermediary creates value.

In banking, disintermediation began in the late 1970s with the securitization of loans. In the 90s, banks established transaction platforms that were off-balance-sheet as legal entities, because they were much more flexible in terms of securitization. However, the financial crisis and its resulting increase in regulation ended the disintermediation trend.

Banks are now creating platforms and infrastructure that enable open banking based on hybrid APIs and web-based intermediation platforms. They can then integrate their legacy, centralized computing stacks with decentralized, shared platforms. As we enter the fourth industrial revolution, what technologies are banks turning to?

Five big accelerators

Game-changing technology convergence is happening. Big data, AI and advanced learning, and the digital and mobile experience we see today, will enable open API banking, blockchain, biometrics,

and adaptive security. These technologies, adopted in priority order, will shape the bank of the future and create a stable and secure customer experience.

The future of banking

As banks transform into a marketplace of services, the destination of the digital journey, so will the customer experience.

The typical customer will enjoy real-time, online, anytime services. Enhanced AI will advise customers in real time, for example, by providing instant alerts on higher-interest accounts or possible savings on goods or services based on previous spending patterns. Bank-provided apps will give way to the “push” of information to customers via connected and integrated partner services rather than customers having to “pull” information.

Innovation will extend past single enterprise borders into an ecosystem of services offered by banks' partners.

Priority Sequence of the Five Accelerators for Digital Maturity

Big data, AI and advanced learning **2**

To use data from social structure

Actionable insights from data

Analytics and rules-based automated decision making, real-time marketing

Artificial intelligence

Machine learning and robotics

Internet of Things

Open API banking **3**

Open API and fintech partnership

Regulatory impetus and better data protection

Cloud: operational efficiency, shared resources

1 Digital and mobile experience

Payments: mobile NFC, QR code, social media, cashless digital payments

Expanding digital payments, digital sales

Virtual and augmented reality

Integrated digital experience

Biometrics and adaptive security **5**

Biometrics: e.g., fingerprint, voice, face, and iris

Cybersecurity and total cyber defence

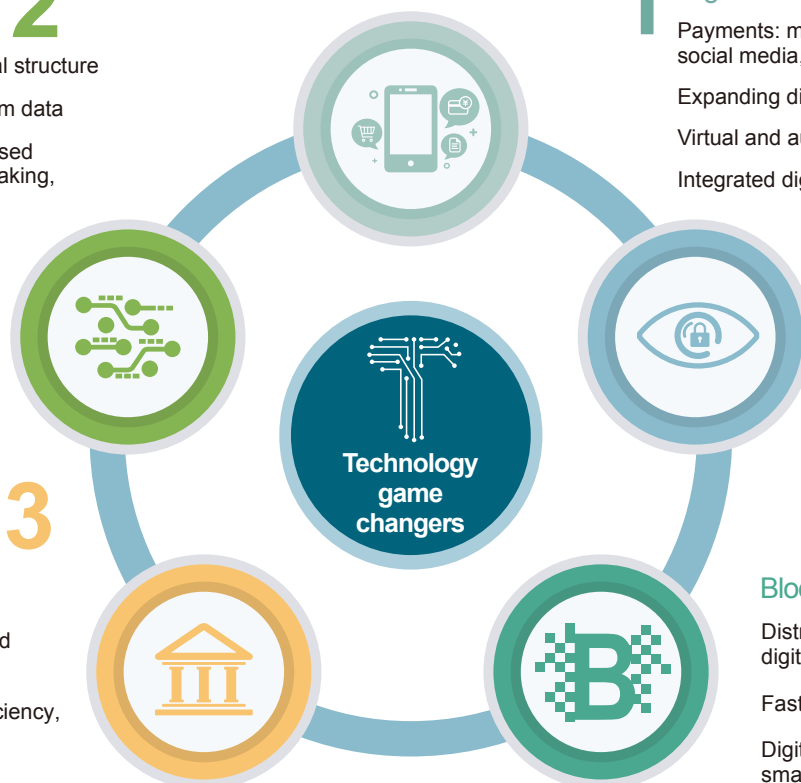
Adaptive security architecture

Blockchain **4**

Distributed ledger technology, digital records

Faster and efficient processing

Digital currencies and smart contracts



Source: The Asian Banker



Where and how to begin the transformation journey are crucial questions. There's no standard or magic recipe in terms of sequencing to achieve digital maturity.

AI, predictive analytics, and data management will be commonplace and pushed content will be highly relevant and personal. Innovation will extend past single enterprise borders into an ecosystem of services offered by banks' partners.

Automation, RPA (Robotic Process Automation), machine learning, and smart contract engines with blockchain will amplify human potential, enriching and simplifying daily life.

Starting the digitalization journey

Where and how to begin the transformation journey are crucial questions. There's no standard or magic recipe in terms of sequencing to achieve digital maturity. However, it's important to note that this journey is not just influenced by technology factors – organizational, geographical, cultural, and people factors all come into play.

Non-Technology Measures and KPIs for Digital Innovation Readiness

ANNUAL PROFITABILITY	Based on annual and quarterly reports
CUSTOMERS & BRANDING	Vendor size in the retail sector based on customer numbers (digital, mobile, and online). Vendor brand and marketing strength based on reviewing its website
ECOSYSTEM ENABLEMENT	Vendor success at integrating with other stakeholders, regulatory compliance, and innovation in business models and tech platforms/solutions.
DIGITAL ENABLEMENT & OFFERINGS	Breadth of retail banking offerings based on platform, tech, and channels. Includes success to date measured by mobile and next-gen device offerings.
DIGITAL INVESTMENT	Investment in tech (e.g., next-gen analytics, machine learning, automation) and in enabling customers and employees.
INNOVATION & PERSONALIZATION	Vendor success based on scale of innovation with digital tech, platforms (back-end and front-end), and customer solutions (for a seamless user experience).

Source: Juniper Research

Different organizations are at different points in their journey to digital maturity, but all must focus on stability and security. Huawei has helped banks accelerate towards digital maturity by focusing on the generation, transmission, processing, and storage of information through optimization of the pipe, device, and cloud.

Transformation in action

Gemini securities trading platform: Following the approval of the Shanghai-Hong Kong Stock Connect, a scheme to allow trading between the Chinese mainland and Hong Kong, Huawei and Infocast jointly launched Gemini in late 2014. The solution's application layer ensures trading speed and efficiency, enabling huge numbers of concurrent transactions in real-time with zero faults. At the facilities level, Huawei's FusionCube applied ultra-low latency flash-memory technology and dual-layer architecture to improve the processing capability of the HKEx Business Support System (BSS) for single customers to 1,000 orders per second, double the next highest level in the industry. Gemini can connect to more than 10 BSSs concurrently to process up to 10,000 orders per second, and has slashed the processing latency of each trade by 90 percent.

Huawei has helped many enterprises

in the financial industry accelerate their business and improve scalability through smart and intelligent network optimization, improving user experience at the device level and boosting retrieval, processing, and transmission via the Huawei Cloud and underlying Huawei servers and storage solutions.

The rules of the game are changing as financial services extend past the brick and mortar walls of banks and integrate more deeply with e-commerce. The industry will have to continue to accelerate digital readiness and the transformation journey, through innovative people, processes, culture, and technology to increase relevance and personal context. This can lead to a better life for individuals, better business for enterprises and ecosystems, and a better society where divisions are bridged and everyone benefits.

If banks avoid digital transformation, the customer experience will continue to erode, which will cripple growth and hand profits over to non-traditional financial service entrants to the market who can and will disrupt the traditional market.

One thing is clear: Financial services companies that invest in the digital ecosystem of partnerships can accelerate digital transformation. 