Transformation of Banks in the Digital Era

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The proliferation of mobile devices and Information Technology (IT) has changed corporate landscapes and business models, as customers seek electronic, virtual, and mobile experiences. Banks need digitization and IT support to transform channels, products, services, and customer service methods. New strategies include omnichannel, cross-sector ‘intelligent’ banking platforms. Because Agile IT capabilities are the foundation of digitization, banks must build flexible, accurate, innovative, communicative, and secure IT, and improve cloud computing, Data, and channels.

The Internet is a critical part of people’s daily lives. Between 2000 and 2014, the global Internet penetration rate has increased from 6.7 percent to 40.4 percent, with a Compound Annual Growth Rate (CAGR) of 17 percent. Global Internet usage is expected to reach approximately 30 billion by the end of 2014.

Smartphones are projected to become the primary mobile connection terminals in the next five years, and the number of smartphones with Internet connections is predicted to grow from 18 billion in 2013 to 52.32 billion in 2019, with a CAGR of 19 percent. Usage of other devices will drop from 50 billion in 2013 to 38.31 billion in 2019, with a CAGR of minus four percent. Global monthly data usage should grow from 1.5 Exabytes (EB) in 2013, to 24.3 EB in 2019, with a CAGR of 57 percent.

More than 50 percent of consumers use their mobile devices — principally smartphones and tablets — at least once a day, establishing them as an important part of daily life.

The Internet is changing the relationship between consumers and physical money. With technology companies providing more convenient financial services via the mobile Internet, customers prefer to conduct transactions over their mobile devices. However, the lack of investment in technology innovation and limitations imposed by regulation provide new entrants an opportunity to compete in the financial markets.
process and provide direct banking, and 2) Build application-based gateways that link customers’ daily lives to financial services.

• Explore Mobile Banking: 1) Promote mobile banking with built-in features, 2) Develop mobile financial applications that incorporate both parties’ products and services, and 3) Develop mobile money/payment solutions.

• Leverage Social Media Platforms: 1) Enhance and improve the efficacy of branding channels and launch marketing campaigns, and 2) Learn customers’ needs and expectations through social media platforms and enhance the overall experience.

• Multi-Channel Integration

Banks should ensure that customers in different channels are presented with a consistent user experience. The future omni-channel should be focused on the mobile Internet with support from branches, ATMs, call centers, and the PC Internet.

Cross-Sector Platform Strategy

Banks should develop cross-sector platforms that include the following components:

- Integrated customer resources to promote customer acquisition and retention
- An Online-to-Offline (O2O) service advantage, distinct from Internet companies
- One-stop financial services tailored for the Internet channel
- Function platforms that integrate up and downstream businesses, including products, lifestyles, consumption patterns, and investment management.

Smart Bank Strategy

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Smarter Computers

Banks now have superior customer experiences via touch-points discovered through the use of Big Data analytics.

• Cloud Computing

Cloud computing and open platforms provide optimal solutions for banks’ business systems. An open platform IT system supports a bank’s real-time transactions and provides dynamic, continuous operation.

Cloud technology is a shared, demand-driven service, which includes the following service types:

- SaaS: Software-as-a-Service customers run finished applications directly from the cloud service provider without local installation. Banks reduce costs for desktop system management, and customer and product management by using SaaS in software applications.
- PaaS: Platform-as-a-Service business models provide server-side applications. Customers use or develop platforms via the Internet without installing local software. Banks apply PaaS to internal safety controls to protect the security and integrity of data at low cost.
- IaaS: Infrastructure-as-a-Service customers access services via the computer infrastructure on a cloud platform. Banks use IaaS as an agent to implement private cloud platforms. Cloud platforms have the following classifications:
  - Public Cloud: A public cloud is external to a client’s premises, subscription-based, and shared by multiple tenants. It is scalable, elastic, and can be accelerated via the Internet.
  - Private Cloud: A private cloud is exclusive, controllable, and mostly managed internally. It is scalable, with elasticity constraints, and mainly accessed via private links.
  - Hybrid Cloud: A hybrid cloud is a mixture of private and public cloud environments. For example, data is stored in private premises, but other infrastructure is shared in the public cloud.

Cloud technology introduces the following competitive advantages to the financial industry:

- Cost Reduction: Cloud technology transfers large capital expenditures into small-scale operational expenses and provides higher-quality storage and backup services with lower costs. By rebuilding the traditional data warehouse and offering distributed services via a centralized resource pool, banks integrate application systems, significantly lower the IT development and operating costs, and improve the utilization rate of servers.
- Business Continuity: Cloud technology delivers advanced data protection, repair, and disaster recovery: 1) Usage-by-need reduces disaster recovery costs, 2) No need for a self-constructed data center reduces the inconvenience of hardware purchases, applications, and maintenance, and 3) Fault-tolerant cloud architecture shortens recovery time and speeds recovery objectives.

Deloitte believes that IaaS could be an entry point for banks to build private cloud platforms and structure an IT resource pool that serves the entire bank via virtualization and subsequent “migration to the cloud.”

Many banks and suppliers in China are promoting cloud technology applications. For example, Huawei plans to employ cloud-computing, business transformation from mainframes and minicomputers to constructing x86-based open-source platforms for many major banks and financial institutions.

• Big Data

To fully support a digitization strategy and transform into an “intelligent” bank, banking institutions must use Big Data technology to support cross-sector platforms and omni-channels.

The challenges with implementing Big Data are as follows:

- Business Objective and Knowledge Gap: 1) Objectives of CEOs don’t align with Big Data ideas, 2) Gaps in the data storage and processing strategies, 3) Lack of CIO direction, and 4) Lack of knowledge of Big Data management tools or training.
- Cost Overruns and Budget Constraints: 1) Banks’ traditional data governance and management practices did not anticipate and do not support Big Data requirements, which can lead to costly and delayed data analytics projects, and 2) Cost-benefit models require significant upfront costs, including the incorporation of new tools such as Hadoop.

Omni-Channel Long-Distance Banking

Banks should provide three-dimensional, consistent services with multiple touch-points. However, the construction and operational costs are high, while services and cross-selling efficiencies are low. IT manufacturers should promote remote banking system solutions to implement omni-channel technology, accelerate bank branch transformation, and satisfy the following business needs:

- Fuse different business types and methods; provide remote, fast, and timely service; and share top expert resources.
- Extend service to physically remote branches.
- Build new branches quickly and share business among branches; replace 90 percent of branch activities to self-service IT to reduce operating costs.
- Coordinate with other banks within the country; implement a self-service banking strategy; provide 24/7 “one-stop” services; and raise customer satisfaction significantly.

Huawei has helped many local banks extend services to airport waiting rooms, hotels, office buildings, and residential and remote areas. These banks offer various banking services, such as opening accounts, ordering checks, financing, etc., ultimately satisfying customers’ desire for anytime, anywhere service.

Conclusion

Development and technological change is moving our society to a digital world. The Internet and interactive models are shifting customers’ behavior and expectations. With innovative financial service models, IT development outside of the banking industry has disaggregated the value chain of traditional banks, with a large impact on corporate assets, liabilities, and intermediary business activities.

Technology is the future for banks — in short, banks must implement digital strategies, construct a digital ecosystem, and promote digital transformation to become super powers in the Internet financial realm.>>