FIS

Trends in Banking Modernization

2017-2018

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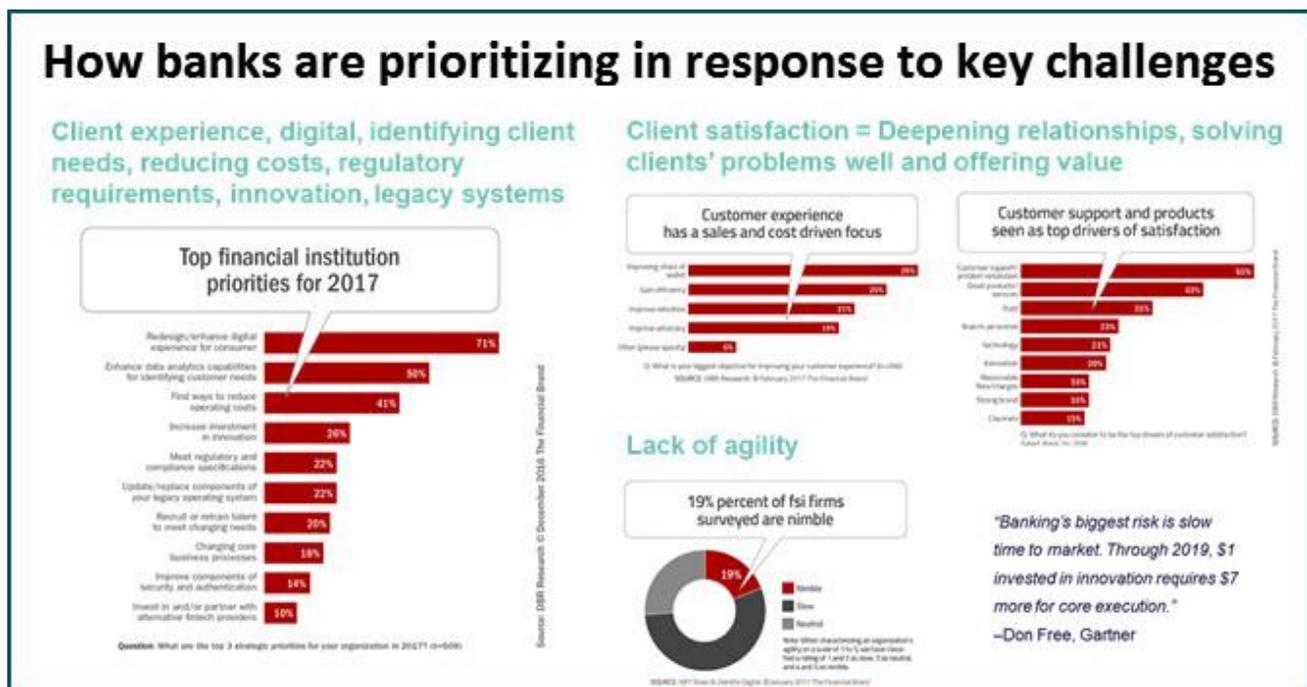
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Trends in Core Banking Modernization

This white paper highlights banking modernization trends that FIS™ is exposed to across all of our varying banking clients. These trends are the catalyst for banks to pursue targeted modernization strategies. We will explore how componentized strategies for core banking transformation enable banks to modernize and innovate in a low risk progression, while preserving their IT investments.
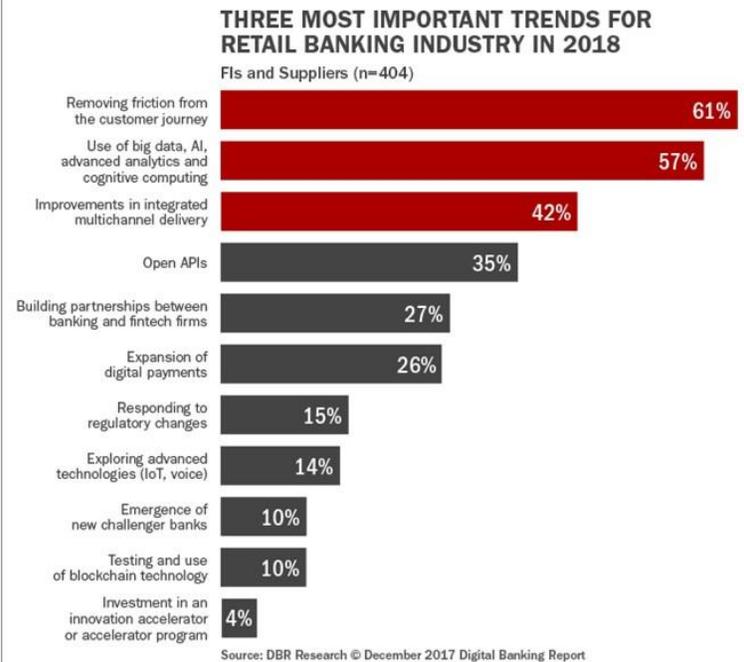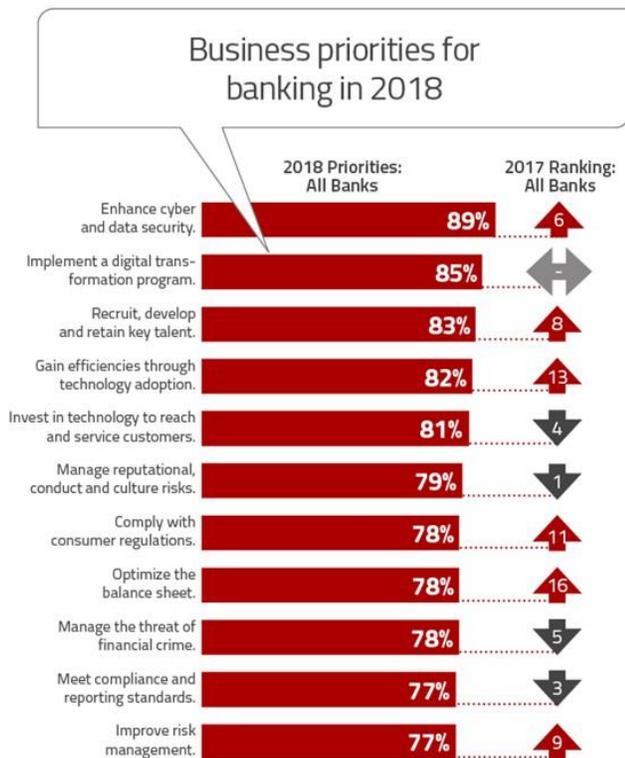
Banking Modernization Trends and Initiatives

While tactics may differ, banks of every geography and asset size are modernizing, and they are experiencing gains in customer satisfaction from their modernization initiatives. These transformations are fueled by NextGen Componentization and Digital Enablement. Financial institutions of all sizes must become more digitally mature, investing in back-office processes and infrastructure rather than front-end tactical projects that only impact the consumer experience on a superficial level. True modernization requires banks to build from within and partner externally to optimize digital enablement.

Consider the following:

Credits: DBR Research © December 2016 The Financial Brand; DBR Research © February 2017 The Financial Brand;
MIT Sloan & Deloitte Digital © January 2017 The Financial Brand – www.thefinancialbrand.com

Business priorities for banking in 2018

	2018 Priorities: All Banks	2017 Ranking: All Banks
Enhance cyber and data security.	89%	6 ▲
Implement a digital transformation program.	85%	↔
Recruit, develop and retain key talent.	83%	8 ▲
Gain efficiencies through technology adoption.	82%	13 ▲
Invest in technology to reach and service customers.	81%	4 ▼
Manage reputational, conduct and culture risks.	79%	1 ▼
Comply with consumer regulations.	78%	11 ▲
Optimize the balance sheet.	78%	16 ▲
Manage the threat of financial crime.	78%	5 ▼
Meet compliance and reporting standards.	77%	3 ▼
Improve risk management.	77%	9 ▲

SOURCE: Ernst & Young © January 2018 The Financial Brand

THREE MOST IMPORTANT TRENDS FOR RETAIL BANKING INDUSTRY IN 2018

FIs and Suppliers (n=404)

Removing friction from the customer journey	61%
Use of big data, AI, advanced analytics and cognitive computing	57%
Improvements in integrated multichannel delivery	42%
Open APIs	35%
Building partnerships between banking and fintech firms	27%
Expansion of digital payments	26%
Responding to regulatory changes	15%
Exploring advanced technologies (IoT, voice)	14%
Emergence of new challenger banks	10%
Testing and use of blockchain technology	10%
Investment in an innovation accelerator or accelerator program	4%

Source: DBR Research © December 2017 Digital Banking Report

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www.thefinancialbrand.com

Drawing a comparison between 2017 and 2018, we see a major shift in priorities since 2017 regarding the importance of increasing efficiency through the adoption of modern secure technologies. Other significant upticks pertain to financials, regulatory compliance, risk management, and the development and retention of key talent. One priority that remained a constant – and continues to be of dominant importance to banks – is implementation of a digital transformation program.

According to The Financial Brand[1], the top reasons driving investment in technology in 2018 are to:

- Strengthen competitive positioning and grow market share (70%)
- Acquire, engage and retain customers (67%)
- Generate cost savings and operational efficiencies (62%)
- Mitigate cybersecurity threats (58%)

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[1] The Financial Brand, *Banking Trends 2018* report (www.thefinancialbrand.com)

High Level Banking Modernization Trends

The following high-level trends pertain to core banking modernization:

- Banking componentization

- Digital-only banks challenge retail banks at their own game

- Banks strive for differentiated and timely product introductions

- Customer-centricity and implementation of new models

- Significant investments in advanced digital capabilities (Digital 2.0 Transformation)

- Increased collaboration between banks and fintechs

- Deployment of AI and RPA to increase productivity and efficiency

- Conversational banking

- Use of analytics to transform end-to-end customer journeys

- Increased confidence in cloud security

- Leveraging the cloud to streamline processes as security improves

These trends are discussed in further detail in the **Targeted Core Banking Modernization** *white paper published by FIS.*[2]

A Closer Look: Detailed Market Trends

This white paper delves into further detail about the specific key trends that are shaping the banking core system market and are likely to influence future core system replacement decisions.

Moving from "Rip And Replace" to Componentized Approach and Targeted Modernization to Core Transformation

Targeted modernization provides a low risk alternative to full "rip and replace" deployments. Componentized solutions enable institutions to take a phased replacement approach, opening the core and replacing systems/functionality supporting areas of the bank with the greatest levels of urgency. Through a progressive implementation, financial institutions can roll out their new core solutions in logical phases based on their business requirements, adding value during each step of the transformation.

Expanding Definition of "Core"

Historically, institutions looking for a core system have been looking for a deposit and loan servicing system, general ledger, and customer management system. These legacy systems were often inefficient and not customer-focused, with multiple records existing for the same customer and that customer's family members. Today, as financial institutions place the customer front and center and focus greater attention on the overall

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[2] Foest, Marvin W. FIS™ white paper. *Targeted Core Banking Modernization: Digitally-enabling banks with tailored transformation journeys.* September 2018.

customer experience, factors such solution integration, consistent and normalized data, 360-degree customer views for better servicing, and a consistent customer experience across channels are rising in importance. It is therefore not surprising to find that most financial institutions are now deploying multiple products as part of their core system replacement; as a result, the depth of core system Request for Proposals (RFPs) is broadening.

Many financial institutions feel that it is no longer sufficient for ancillary products to simply interface with the core system. Instead, a growing number believe it is now imperative that these products completely integrate with the system, especially as financial institutions look for real-time data updates across the organization. Additionally, institutions are looking for greater efficiency through complete end-to-end processes; this is critical as institutions become more customer-centric and less product-centric.

In the United States, the products most often deployed with a new core solution include the following:

- Item/image processing
- CRM/sales and servicing
- Account origination (deposits and loans)
- EFT
- Teller systems

FIS is seeing similar trends in the GBS market, but channel solutions are particularly critical and most often requested at the time of solutioning.

Additionally, RFIs, RFPs, and Asset Optimization engagements increasingly highlight the need for multi-entity/multi-country support, regulatory compliance capabilities, multichannel integration, and – outside the United States – universal banking platforms covering retail and corporate banking, treasury, securities processing, and insurance.

Multi-country support is especially important for institutions looking to expand and to offer the same "look and feel" to customers regardless of where in the world they bank. Whereas banks once had different platforms or different instances of a solution running in different areas, single global platforms are in greater demand today.

Conversational Platforms Become the New Digital Banking User Interface

In the past, digital banking was focused on building an experience that led a customer to a product or service as quickly as possible. With conversational platforms, the art is designing a great experience centered on words. How do you move from designing around content, graphics, and buttons to recognizing what a customer is asking, maintaining the context of the conversation, providing relevant responses, and executing actions for the customer? More importantly, how do you communicate with customers in the way that they describe financial concepts and terms? In the past, digital experiences took a user down a steep path to find an answer. This assumed the customer has enough knowledge (and patience) to make the right choices throughout the digital journey to find the answer. With conversational platforms, FIs will have to consider the many ways that customers may ask a question, with no clear starting or ending point. Modern customers do not speak in bank jargon but use acronyms, slang, and emojis, and weave in and out of topics when they communicate. In conversational platform design, information architecture must consider the many ways a customer can ask a question or give a command.

In the next several years, the industry will see a hybrid approach to user interface design. Conversational platforms will continue to use traditional website graphics (e.g., such as charts, graphs, and videos) and other content to complement the experience. As these solutions get smarter over time, and as consumers grow more accustomed to using voice and text to communicate with brands, the dependency on traditional user interface components to fill the communication gap will lessen.

Identities Become Dynamic and Anonymous

Digital identity management plays a pivotal role in financial services. FIs need to assert the identity of a digital customer requesting a service in real time while keeping friction in the transaction to a minimum. Static authenticators, such as passwords, are vulnerable to fraud and will increasingly be replaced by dynamic factors representing the individual's digital identity and transactional behavior.

The answer is to build a digital identity that is dynamically linked to the customer's digital life. A variety of technologies are making this a reality by leveraging the vast amount of data connected to customers' transactional history, their device use, and their online behavior to build a unique digital identity. The combination of static elements captured during onboarding with a large number of dynamic elements is nearly impossible to fake. When the customer requests access to a financial service (e.g., to access an account or make a payment), the FI can match the digital parameters against the stored digital identity and apply a risk score based on the result. If the score is within acceptable boundaries, the transaction can be approved automatically without any user intervention.

Building such a detailed profile of an individual can raise concerns about privacy and data protection. However, the elements constituting the digital identity can be tokenized, replacing personal data with randomized strings of characters that are meaningless to fraudsters. This way, it becomes possible to authenticate a person with high accuracy without knowing who they actually are. This "pseudonymization" of personal data is a technique that significantly reduces the risk of such data being exposed and helps to meet the data protection requirements of regulations such as GDPR.

Dynamic digital identities are highly reliable, and their use will become ubiquitous in securing transactions in the financial services and digital commerce businesses. The technology could conceivably provide great value in the Know Your Customer process as well. However, this would require the standardization of digital identity management to enable regulatory scrutiny and approval of such methods, which is not on the agenda in the foreseeable future.

Rewards Find the Fast Lane

The days of introductory offers with over-the-top credit card rewards are coming to an end. In an effort to drive customer acquisition in the extremely competitive U.S. market, multiple issuers have been offering a combination of large sign-up bonus points and/or rewards based on a specific amount of spend in the first 90 days, a waiver of the first annual fee, and/or 0% APR for the first year. The marketing strategy appears to be bringing in new business. Based on a Q4 2017 consumer survey conducted by Aite Group on credit card rewards programs, 54% of U.S. consumers say they had applied for a credit card in the last 24 months based on its rewards program. In the same survey, 72% state the last rewards credit card they applied for and received became their primary card.[3]

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[3] Aite Group, *Retail Banking and Payments Trends, 2018 Acceleration Evolution*, January 2018 (www.aitegroup.com)

While these offers promote card usage in the short term, there could be long-term retention risk with these new customers. Short-term incentives promote short-term use and can also tempt the consumer to engage in a type of "gaming" to take advantage of the initial incentive offers, then close the account and move on to the next opportunity. Leveraging a strong card rewards program to maintain cardholder retention will be critical.

The other key capabilities needed to ensure long-term rewards card retention will be the ability to earn and redeem rewards in the evolving digital transaction process. As contactless wallet transactions continue to ramp up, and as consumers' expectations of real-time redemptions grow, having an integrated loyalty/rewards payment option will be important.

Real-time reward-point redemption is a key capability, and the limited variations currently in the market already show promise. The ability for a consumer to convert loyalty or rewards currency and then redeem in real time at the point of sale (POS) addresses current process friction for the customer and increases potential for the merchant to see higher transaction volume and/or increased spending.

Single Sourcing and Price Compression

As the definition of "core" grows, customers on average are using a larger number of products than they once did. Financial institutions, especially smaller ones, are increasingly looking for a single provider to meet most of their needs, and this trend, called "single sourcing," has been growing in recent years. Financial institutions find it increasingly difficult to deal with multiple vendors – especially with regard to regulatory requirements and vendor due diligence – and to pay additional fees for integration.

Technology providers that are best positioned to succeed in the current market are those that can offer the most complete suite of products for the lowest price and with the greatest security. It is growing increasingly difficult for monoline vendors to remain competitive with their limited product portfolios. This trend is leading to mergers and acquisitions by leading global core vendors, which seek to broaden their product portfolios and fill product gaps.

Greater Demand for Real-Time Solutions

Real-time solutions offer a level of transparency to customers that many banks have not until recently been able to offer. Batch processing and day-two accounting create a black box for customers, thus making it more difficult for them to manage their funds as effectively as possible. In today's challenging economic environment, customers need truly accurate and timely information to make smart financial decisions.

New Regulations and Compliance

GBS clients are dependent on FIS to build regulatory and compliance capabilities into their core banking systems. This has helped with GBS client retention, and also slows the new entrants as they are not fully compliant or are deemed as a high-risk solution.

Access to Core Data is Critical for Personal Financial Management

While PFM tools are still maturing, banks are in a discovery phase and learning what consumer preferences are with such tools. PFM tools drive customer retention and bring customers to online banking platforms.

Interaction Management Must Work in Conjunction with Analytics

While internet banking is getting more user friendly and intuitive, it is still not as easy as it should or can be. Although signs of change are clearly on the horizon, many banks still impose their own internal view (Inside-Out) of processes and language on the way customers do their online banking.

Banks have developed online services to mirror their internal products and services, largely to replicate what the bank has done in the past, rather than adopting human-centric design that is based upon what customers really want. Functionality also has been limited by the capability of backend systems.

Solutions Must Provide Improved User Experience

The development of online banking is also now being impacted by user experience platforms (UXPs), which are fueled by lean portal technology. Such technology is characterized by leveraging web application hybrids (combining data, presentation, or functionality from two or more sources) and creating online platforms that have many of the characteristics of desktop application software, also called rich internet applications. For example, this includes frontend mashups, enabling third-party apps or widgets to be pulled into the online interface; and data mashups, enabling the creation of composite applications that present and pass data to multiple back office systems. The development strategy is geared toward leveraged HMTL5 to support a digital, multichannel strategy, and consequently to support a wide spectrum of devices, such as PCs, smartphones, and tablets.

Customers Desire End–to-End Online Account Origination and Speed

With a growing focus on reducing costs from operations, banks are expected to direct their short-term efforts at removing overlapping account origination systems wherever possible. This may entail consolidating origination systems across channels and/or across different products in which underlying business processes are largely similar. In the medium to long term, however, Ovum believes that many banks will have to replace outdated origination systems and standardize on a single enterprisewide account origination platform that spans all products and can be accessed by any channel, ideally in the self-origination mode (without human intervention).[4]

The ideal account origination solution should be adaptive, with broad product support and functionality, and a high level of technical flexibility to avoid workarounds. In the current IT environment, business processes and rules are often embedded within the program code and are therefore highly inflexible. Better workflow and business process management, giving business users the ability to flexibly define processes, will therefore be crucial within a next generation account origination system.

Create a Single View of the Customer

One of the fundamental requirements for enhancing online sales and marketing is the creation of a single view of the customer across the multiple product silos, in terms of what relationships customers already have with their banks. Banks will need to correlate this with the information about the individual to better understand the customer profile (e.g., their stage of professional or academic life; relationship/household information; significant life events such as having a child or buying/selling a house).

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[4] Ovum, *Online and Mobile Banking in the Context of Multichannel Delivery and Social Media*, January 20, 2017 (www.ovum.informa.com)

To optimize online service, sales, and marketing, banks need dynamic CRM and enhanced KYC systems that are integrated with information from across the enterprise, together with real-time or near real-time analytics (analytical CRM) to create timely, next best actions (such as product offers or service changes for customer retention). Ideally, banks should move to a well-integrated and SOA-based infrastructure, and introduce web-oriented architecture to integrate with their internal networks as well as with external sites.

Retail Banks Have Yet to Discover the Digital Marketing Power that Social Media Offers

A number of banks are either implementing or considering social media strategies to facilitate communication with customers via social networking, and are integrating social digital marketing efforts with digital channels. If Facebook, with its one billion plus users, were a country, it would be the third most populous country after China and India. Twitter has approximately 500 million active users, and they generate ~340 million tweets daily.

Having first taken the consumer world by storm, social networking is fast becoming pervasive in the corporate environment as organizations attempt to leverage its power for external and internal activities. Consequently, the financial sector, and retail banking in particular, is not immune to the rapid consumerization of the workplace, and institutions are being compelled to develop social media strategies to connect with customers, prospects, and employees. A number of banks are either implementing or considering social media strategies to facilitate communication with customers via social networking and are integrating social digital marketing efforts with digital channels. This involves seamless integration of a digital banking platform with social CRM, which is an extension to traditional CRM, and involves an organization monitoring, engaging, and managing conversations and relationships with existing and prospective customers across the internet, social networks, and digital channels. A marketing campaign run within social media sites needs to lead to either selling new products or services (online account origination) or servicing (online self-service).

It is still too early to accurately predict how social media will integrate with online and mobile channels, but it is clear that digital marketing campaigns need the tools for closing sales and customer servicing, and digital channels are best positioned to perform these functions.

Banks Focus on Enriching Functionality

Mature online banking markets show a significant potential for technology vendors to sell more advanced functionality into banks, taking them beyond the servicing of transactions into selling more through their online channel. Many institutions are indeed investing now to refresh their online channels, by simplifying user interfaces (in many cases borrowing from successful mobile apps), by enabling more functionality in self-service mode, by adding personal financial management tools, and by extending the functionality onto mobile devices – in general creating a greater online experience regardless of device used (e.g., whether PC or mobile). In many cases banks describe a vision of an internet banking service in which the user is presented with the ability to build his or her own services (e.g., via widgets), combining information from the bank with the relevant information from external sources (e.g., account data aggregation).

Online portals may essentially become personal financial management tools, from which customers can initiate payments and tax returns, make and manage investments, purchase retail products at a discount (e.g., via targeted coupons), and more. Consequently, banks are looking at technologies and third-party services that allow for a rich user experience with a simple user interface and access via various devices.

The Rise of Fintechs

The success of fintechs can be attributed in part to people's attitudes toward banks at the time, as well as the acceptance of using phones and tablets as tools in our financial lives. But, truthfully, the fintechs also provided a "faster, cheaper, better" alternative to traditional banks.

- *Faster:* Fintech services can provide same-day or next-day access to funds versus banks that could take several days to complete a transaction.
- *Cheaper:* Fintechs were more transparent and affordable compared to banks that charged high fees and commissions on relatively simple transactions such as ACH and wire transfers.
- *Better:* Fintechs focused on creating good digital user experiences with ease-of-use and simplicity.

Following the success of early fintechs, new fintechs such as Orange, Kickstarter, Skrill, and TransferWise entered the payments space. We now have a wide array of payment and lending alternatives that range from cross-border money transfers to peer-to-peer payments and lending services. Many of these technologies are now firmly rooted in our daily lives (the digital wallet, for example).

Fintechs: From Competitor to Collaborator

When fintechs successfully entrenched themselves in the payments space, competition between banks and fintechs heated up. Before long, fintechs then emerged in the deposits, financial planning and finance domains. They proudly marketed themselves as "not being a bank" and established relevance by focusing on their strengths developing innovative solutions that appeal to consumers' increasingly technology-centric expectations. The successful fintechs proved adept at reacting quickly to emerging trends in the financial services space.

In contrast, far too many traditional banks continued to rely on outdated back-office technologies, mainframe-based systems, and SORs that lack easy integration capabilities. To mediate these types of limitations, banks added layers of technology over the years in an attempt to pseudo-modernize, but this often resulted in a convoluted mess of technology and siloed systems.

Finally, after years of competing with each other, banks and fintechs are starting to collaborate. Banks are recruiting fintech experts and executives, launching accelerator programs, and announcing fintech partnership deals.

Platform Giants – The New Challengers

There are new bank challengers in town: platform companies such as Amazon, Alibaba, Apple, and Google have all launched offerings that compete directly with banks and can win customers by cutting costs and delivering convenience. In fact, a Bain & Company survey of more than 133,000 banking customers in 22 countries found that consumers trust Amazon and PayPal with their money nearly as much as their banking providers. Some 55% of U.S. consumers said they are open to buying financial products from established tech firms, and 73% of millennials said they would be more excited about a new financial offering from Amazon, Google, PayPal or Square than from their bank.[5]

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[5] Aite Group, *Retail Banking and Payments Trends, 2018 Acceleration Evolution*, January 2018 (www.aitegroup.com)

Platform companies are very adept at bridging the value chains of various industries, blurring sector boundaries, and reshaping one industry after another. Significantly, platform companies have tremendous customer data and know how to make the most of it.

The platform giants pose major threats to traditional banks in the following key areas:

- **Disintermediation** – banks lose access to customers who switch to non-banking channels.
- **Unbundling** – products and services are no longer integrated or the exclusive domain of the bank.
- **Commoditization** – banks struggle to stand out as customers compare banking products online with greater transparency.
- **Invisibility** – banks are losing brand awareness and becoming invisible as customers can access financial services without even knowing the brand.

Studies indicate that the platform companies expanding into financial services are targeting the origination and sales side of banking, which produced 47% of global banking revenues and 65% of profits for banks in 2017.[6] If platform companies can establish a beachhead in financial services, it could prove very costly and potentially fatal for traditional banks.

FIS Response to the Platform Challengers

With ongoing investments in core banking modernization, FIS has opened up our core system offerings, and introduced a componentized next generation solution that can be phased in as appropriate for each bank's unique modernization journey. A key aspect to the success of this strategy is the FIS Code Connect online API gateway and developer portal. This is a game changer. It allows FIS clients to access FIS and FIS fintech partner APIs, as well as publish their own APIs to develop and test innovative new solutions.

The initial launch of FIS Code Connect in 2017 included more than 300 APIs in the areas of banking, payments, and consumer finance. The amount of available APIs now exceeds 1,000 (encompassing Banking, Payments, Wealth, Institutional & Wholesale, and Corporate solutions) and the inventory continues to grow. Through Code Connect, clients can develop and test innovative solutions to better serve their customers, reduce costs, and achieve their business goals.

Code Connect puts our clients squarely at the forefront of the open API revolution and allows them to tap the vast ecosystem of technologies and solutions being developed by FIS and our partners. Code Connect gives developers access to the FIS product catalog in one central marketplace and allows banks to:

- Implement API solutions from FIS, the world's largest provider of core processing, card issuance, and transaction processing services
- Innovate in real-time
- Minimize technology restraints and integrate complex environments efficiently
- Achieve standardized access throughout their enterprise

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[6] Ovum, *Online and Mobile Banking in the Context of Multichannel Delivery and Social Media*, January 20, 2017 (www.ovum.informa.com)

- Rapidly bring open APIs to market, empowering innovation

- Utilize the provided "use case approach" to quickly understand the applicability of the API services (including access to innovative application use cases such as Enterprise Customer, Mobile Banking, and Account Opening)

Get Core Banking Ready for The Future Now!

IT plays a significant and foundational role in whether banks will succeed. Adopting **multi-speed IT** – while incrementally and strategically hollowing out the core on the way to true digital banking enablement. Modernizing in this manner will help banks grow cost-to-income ratio and increase return on equity; banks can continue sharpening their focus both on delivering a relevant customer experience and managing continuous business innovation which powers that experience.

Two big existential questions will play out for banks in 2018 and beyond. First, will tech firms be able to manage the burden as they increasingly undergo direct regulatory scrutiny? While there are many reasons that banks are traditionally slow to evolve, regulation is certainly one of the top two factors (legacy technology being the other). Second, will banks be able to overcome their technology hurdles and more nimbly leverage two of their greatest assets – customer data and customer trust? Not all banks will be able to do so, but those that do will not only survive, but truly thrive.

FIs need to change, and the time is now. This requires fundamental shifts to mindsets, business models, and operating models. Banks must be equipped and prepared to fight for the modern consumer — consumers who, because of technology, have a whole new set of expectations. Today's modern consumer has little regard for traditional branch banks, they want to quickly and easily complete transactions whenever and wherever they want, typically on their mobile devices and always in real time and on-demand – any day, any time, anywhere.

- **Essential improvements to the customer experience:** User interface development has moved beyond designing just for clicks, taps, and screens; it now includes voice-enabled interactions and AI-powered digital assistants. In this context, banks will continue to focus on improving the customer journey and offering enhanced digital interactions.

- **Strong agile development adoption and continued increase in API consumption:** Software companies such as in Silicon Valley have been utilizing an agile development methodology rather than the more traditional waterfall approach for quite some time, developing products with incremental releases and focusing on a satisfying customer experience. To date the agile methodology has not been in wide use with financial institutions, but this is changing rapidly. The increased adoption of agile development practices will accelerate to better meet customer needs and decrease time to market. In addition, FIs will continue to increase API usage and consumption with their providers, partners, and customers.

As more banks embark on the journey to transform, large FIs especially may launch digital-only subsidiary banks, partner with or acquire fintech companies, and hire strong technology talent outside of the banking industry to gain technology leadership. Forward-thinking FIs are recruiting talent from the digital giants to help accelerate this process, though merging these two disparate cultures is not always easy.

Core Banking Modernization with FIS

The result of all these market trends is a highly competitive vendor and fintech landscape that drive core banking solution renewal – a market that emphasizes business agility as an overarching priority, but also closely scrutinizes the capacity of vendors to deliver over the long term. FIS is strategically positioned to deliver modern componentized core banking solutions, tailored to our clients around the globe, with a proven capability to provide industrialized and creditable transformation program management and the necessary implementation resources.

Our next generation componentized solution represents a significant evolution in the highly successful FIS core banking systems. Banks can incrementally adopt componentized modules and latest fintech capabilities to expand real-time processing enablement and the promise of compelling banking transformation opportunities.

The capability of easy-to-configure enterprise business components and a next generation component core banking solution provides increased simplicity in terms of delivering business agility. In certain markets, standard support of regional regulation and local requirements is becoming a key capability for global retail core banking.

FIS' strong financial viability – a decision point that was largely overlooked in prior core banking renewal efforts – now bears significant weight in the decision matrix, as well as in the product viability assessment that determines whether a product will survive an acquisition.

The established FIS next generation strategy continues to be **Invest, Evolve, Transform, Componentize, and Acquire** solutions and product portfolio with the aim to grow an ever-stronger market presence. We work for our clients' success, ready to lead your bank on the pathway to the future, **Core Banking Modernization with FIS**.

Glossary of Terms

Analytics	Business Intelligence (BI) data output including reports, dashboards, graphics, metrics, etc.
API	Application program interface.
APR	Annual percentage rate.
Artificial intelligence (AI)	A field of computer science that emerged in the 1950s and continues to evolve today. The goal is to emulate human thinking. Early approaches produced very modest outcomes. However, recent improvements in hardware and statistical algorithms have made AI a sophisticated technology.
Business Intelligence (BI)	Refers to the technologies, applications, and methodologies that are utilized to collect, integrate, analyze, and present business information for the purpose of supporting the business and making better business decisions.
CRM	Customer Relationship Management.
Disintermediation	Loss of access to customers who switch to non-banking channels.
EFT	Electronic funds transfer.
EU	European Union.
FI	Financial institution.
GBS	FIS Global Banking Solutions.
GDPR	General Data Protection Regulation (data protection law framework applicable across the EU).
HTML	Hyper Text Markup Language.
IT	Information Technology.
KYC	Know Your Customer (regulation).
Machine learning (ML)	A method of data analysis that automates the building of analytical models. It is a branch of AI which is based on the premise that systems can learn from data, identify patterns, and make decisions with minimal human intervention.
PC	Personal computer.
PFM	Personal financial management.
POS	Point of sale.
RFI	Request for Information.
RFP	Request for Proposal.

Robotic Process Automation (RPA)	The automated processing of typically labor-intensive processes. The idea is that RPA tasks can be completed faster, with fewer errors, and without human involvement. An example in the banking industry is the process flow of loan request, approval, and onboarding.
	RPA is similar in nature to an earlier technology called *process choreography*, and it is different from *workflow* in that it attempts to avoid human intervention. While primarily rules-based, AI enters into RPA as a way to support better decision making and alternative processing.
SOA	Service-Oriented Architecture.
SOAP	Simple Object Access Protocol.
SOR	System of Record.
UXP	User Experience Platform.

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