THE DIGITAL TRANSFORMATION of Banking

Introduction

Almost everywhere, customers are using digital banking instead of visiting physical branch locations for their everyday transactions. Companies that are late to the digital game and falling behind, in terms of keeping pace with technological advancements, have scarce time to respond with quick adjustments and adaptations. However, it is a requirement for meeting the needs of today's bank customers, attracting new customers, and avoiding the loss of existing ones.

The hallmark of the current IT era is "being digital," and the face of banking is rapidly changing to assume this identity. Systems enabled by digital technologies yield faster, more efficient and convenient ways of performing transactions, all of which today's banking customers demand. Remaining stagnant—or refusing to deviate from past operational methods in search of innovation—will ultimately lead to the downfall of many banks, suffering a fate similar to that of companies in other industries that are unable to transform as quickly as necessary.

Research suggests that banks have three to five years, maximum, to become digitally proficient, and many banks are only in the infancy stage of addressing underlying system infrastructure and updating legacy systems.

Banks that choose not to implement digital transformation will not only suffer negative consequences from customers but also from financial markets and sometimes regulators. The benefits and rewards banks will receive from implementing digital technologies are substantial, so it's in their best interest to see this type of transformation come to fruition. Revenue will increase and profits will migrate at scale toward banks that successfully transform their digital strategies; other improvements that digital technologies can yield are centered on creating new products, automating and increasing the speed of core processes, managing risk and enhancing regulatory compliance. Essentially, this will cause an all-encompassing effect on the overall manner and method of collecting, accessing and analyzing data.

The ultimate goal of going digital is not just to create a fancy or trendy app, but to restructure the foundation for future success of the company.

According to research, companies that resist digital transformation could stand to lose up to 35% profit. Banks that do align with the changing technologies could achieve an increase of 40% or more.[1]

The only way for banks to reach these goals is to rethink strategies, tailoring them to follow a digital-centric path, and deliver great customer experiences across various mediums and channels on a consistent basis. This will drive loyalty and contribute to setting the groundwork for future business success. Encountering challenges with the implementation of digital advancements is inevitable, so it's paramount for CEOs to start from the top in positioning their companies to gain a competitive advantage throughout their entire transformative journey.

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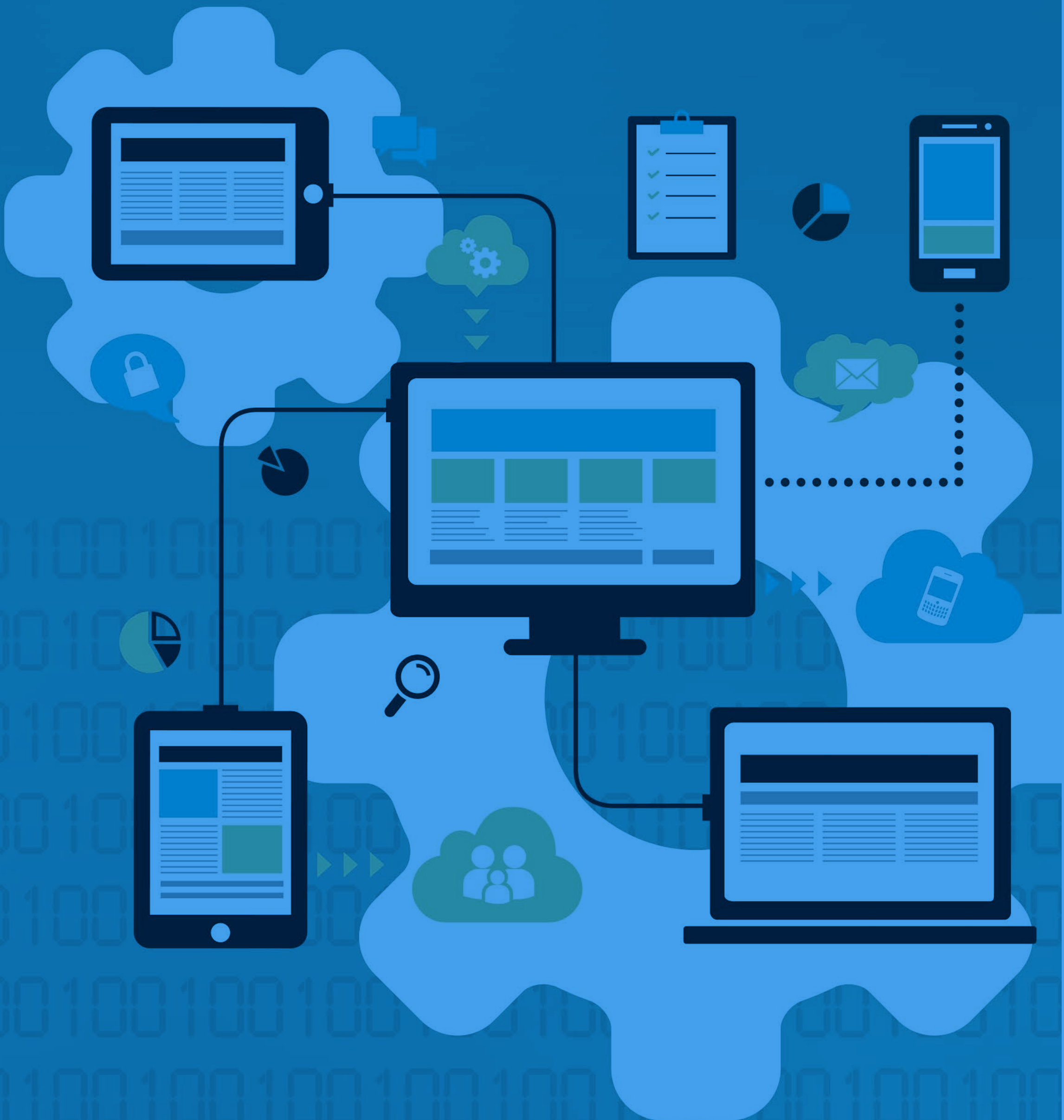
To facilitate the reading, we will divide the material into five sections:

1

New world.
New challenges.



New world. New challenges.

In addition to the fact that global technology is assuming a "digital" identity at an accelerated rate, the banking industry is currently facing several other significant challenges. Rapidly shifting economic conditions, growing regulatory oversight, skyrocketing customer expectations, top-line progress, and transparency are just a few of them. Today's business is largely influenced by lower growth margins, extreme volatility, and increasing regulations. Banks need to take all of these issues into consideration when offering new client solutions. Meeting these customer expectations involves restructuring the business and reorienting people, processes, and technology—therefore addressing the most monumental challenges.

The Changing Culture of Companies

Within any banking organization, change has to begin internally to ensure business and technology work together in an improved, harmonious relationship. The most challenging aspect of this means that there must be a much closer alignment between both groups, synchronizing strategy tactics; this means obtaining an adept, forward-thinking approach and focusing on releasing new products quickly, absorbing feedback and re-releasing products—as opposed to focusing solely on the development of long-term and slower paced projects. In other words, it's necessary to alter the current mindset so it's focused on quickly reacting to change, adapting, and producing effective solutions.

The first step toward ushering in effective digital initiatives is to reduce the gap between business and technology, working towards an overlap and ensuring that each group is fluent and proficient in the methodology of the other. In other words, companies need more business-enabled professionals within IT groups, and more IT-enabled professionals within business groups—essentially an amalgam of the two. However, these types of transformation aren't simple: the key is for banks and other financial institutions to change their perspective, viewing it not strictly as an IT project but a way for everyone to work together to weave digital customer engagement throughout the entire organization. This can only occur by adhering to a new technology roadmap, and senior IT executives must devise the correct strategies and organizational models for the rest of the business to follow suit.

Changing the mindset of traditional banks can be a difficult feat to accomplish, but with dedication and effort from all, it can successfully shift a company to follow a digitally driven trajectory. For banks to reach digital transformation successfully, it is paramount to change a product-centric point of view to a client-centric one. The overall way of thinking about the current IT setup needs to change, evolving from simply accepting the current structure—because it's enough to suffice—to vigorously promoting the creation of a full-fledged, technologically innovative environment. Another transition that must occur is the shift from "test and learn" and silos to inclusiveness. Bank leaders will be the catalysts in shifting to a digital-focused culture, initiating and leading conversations about digital vision, and increasing the bank's ambition.

The Arrival of Fintechs

Metaphorically placing the competitive banking landscape of today side-by-side with the landscape of the past reveals considerable differences. Previously, the main contender retail banks had to pit themselves against was fellow retail banks. Now, however, there is a new threat to their entire existence: fintechs. Retail banks are on the verge of falling into obsolescence as fintechs, a blended service sector of finance, technology, and innovations, quickly gain prevalence.

According to a report, fintechs will soon pose a global threat to traditional retail banks, as social media networks (29%), telecom companies (29%), and retailers (22%) will all be seriously competing for their business.[2] Additionally, by 2020, retail banks believe that they will have bigger competition—besides other retail banks (40%)—with private label banks (57%) and alternative payment method providers (56%). However, since fintechs are already aligned with the digital movement in technology, it is in the best interest of traditional retail banks to provide these services, as more and more customers demand them and it will ultimately promote growth and an increase in revenue.

The Surge of Millennials

The changing customer landscape in banking stems from the influx of millennial users. The largest demographic in the world is now millennials, or people who were born after 1980. Perhaps the most identifying feature of this age group is the need for speed and convenience, in terms of instant communication through social media and one-click, 24-hour delivery services through online retailers, for example. If many customers can't find a company that provides the nearly split-second service they desire, they will simply find another one that does. The medium through which most millennials

Millennials want to keep their bank at a distance, and many share the following views:
71% would rather go to the dentist than listen to what banks tell them.
33% believe they will have no need for a bank in five years.
71% view their relationship with banks as simply transactional, as opposed to relationship-driven.
33% are open to switching banks within the next 90 days.
Source: FirstData, 2015

find this type of lightning-fast support is smartphones, or mobile technology.

While mobile banking is definitely becoming more widespread, millennials realize that the convenience and efficiency of banking on the go doesn't come without security risks. A report from Deloitte Center for Financial Services says that 54% of consumers younger than 35 are concerned about the security of using mobile devices for banking.[3]

Millennials are using banks for very specific and limited purposes, including checking account balances, paying bills and transferring money. By 2025, millennials are expected to generate 46% of all U.S. income; this generation also controlled $2 trillion in liquid assets in 2014, with that amount expected to grow to $7 trillion by 2020.[4] This underlines the importance of leveraging this monumental moment pertaining to the millennial generation in order to create and provide ways of meeting their changing banking needs.

With the majority of millennials aged 25 to 34 using smartphones, or 86%, many of them may be hyper-dependent upon their phones in certain ways, even substituting them for wallets. This goes hand in hand with the notion that virtual/digital is overtaking tangibility/physicality in certain aspects of today's society. There is no longer a need to print boarding passes for flights, or scrounge around in a wallet for plastic debit, credit or loyalty cards: all of this information can easily be stored on smartphones. Walking into a physical bank branch or writing out a check by hand are thoughts that have never even crossed the minds of many millennials, as peer to peer computing (P2P) is growing in acceptance. Mobile

Some of the ways millennials use their smartphones:
38% - use apps and mobile tools for paying bills
38% - look at statements
43% - look at bills and transaction histories
24% - set up automatic, recurring payments
Source: FirstData, 2015

banking apps and similar digital services are the only methods of performing these transactions that many have ever used, with 94% of consumers under age 35 being active users of online banking. Over one-fifth of all millennials have never written a physical check, and 63% of adult millennials don't even have a credit card.[4] Likewise, 41% of millennials prefer to communicate electronically rather than face-to-face at work. All of these reasons contribute to the need for financial institutions to bolster their digital banking services and differentiate themselves.

"Innovation will be the single most important factor driving sustainable top and bottom-line growth in banking over the next five years. Innovation is doing things differently. Not just new products or a new customer experience, but doing things differently across the entire business model, including transforming the business model itself."

– Retail Banking 2020

Retail banking 2020 findings: Innovation within the banking industry is considered to be somewhat important or very important by 87% of respondents. Yet, in stark contrast, only 11% believe they are very prepared.

Source: PwC, Retail Banking 2020: Evolution or Revolution?

2

Trends Impacting the Banking Business

Mobile Banking

The evolution of retail banks into digital is not exactly new, since the implementation of online banking services first started around the beginning of the 21st century. However, as constant improvements and advancements in internet connections are occurring, and mobile devices are changing to match the speed of 4G LTE and beyond, a vast majority of banks are altering the focus of their strategies to encompass a digital view—since mobile is often the first avenue that customers take in performing their banking transactions.

Internet of Everything

Another huge factor affecting change in the banking industry is the Internet of Everything (IoE). The way of uniting people, data, processes, and devices through networked connections makes up IoE, and this interconnectedness has the potential to increase economic growth up to $19 trillion.[5] With household and everyday objects gaining more intelligence, like smart refrigerators and self-driving cars, the opportunity for banks to build upon these transformations and provide further enhancements to customers' lifestyles is huge. However, it's necessary to ensure the proper analytics are in place to convert the required data into financial experiences that are tailor-made for customers' convenience. Banks that are able to make the first footprints in this sphere will gain the prestige that comes with being immensely innovative in terms of digital, and also become influential players in the market.

Some of the ways to apply IoE span beyond simple retail banking. For example, the fintech innovation fund from Santander

Group, Santander InnoVentures, fused IoT data-capture devices and Blockchain's smart contract functionality, illustrating a successful case of multi-use.

In essence, IoE is a disruptive opportunity for the banking industry that is exhibiting the potential for more monumental change than what the internet revolution accomplished. Weaving this type of connection throughout everything ensures an expedited transformation period, and it is up to banks to latch on to this opportunity to leverage the power of this revolution.

Banking on the Cloud

When it comes to using the cloud, many banks know they need it but aren't sure how to make it happen. The transition to a cloud-first model is gradual, and the first step should start by shifting over non-critical environments; examples of such could be development and testing. After moving these to the cloud, the next step would be to optimize infrastructure and performance, followed by transitioning the production environment to the cloud. Once this is accomplished, all future technology sourcing decisions should be made with the cloud in mind.

Instead of looking at the cloud through strictly a technology lens, banks should focus on it being a business model. It not only provides technological benefits but can provide considerable value for stakeholders, something which should be taken into consideration when determining the cloud's degree of functionality and utility. Utilizing the cloud doesn't come without security concerns, but strong banking strategies must include a cloud component.

Switching Banks

The lines of separation among banks in the finance industry are quickly blurring and even disappearing altogether, making it increasingly difficult for customers to make differentiations and determine what is of value to them. The competition among banks is likened to a never-ending battle where they constantly try to outdo each other, matching discount and product offers, but one never really emerges victorious over the other. The cycle continues, and this lack of a clear differentiator is what makes banks interchangeable to many customers.

Perhaps the central area for banks to place their focus is on service, ensuring that each channel or medium provides the same level of high quality and efficiency. Many customers look for banks that are capable of producing simple, easy and stress-free transactions while providing excellent customer service. To illustrate further, many consumers said they would consider paying more for a loan if they received great end-to-end customer service throughout the loan process.[6] Providing customers with banking value means to effectively balance service with savings, delivering the best of both.

The number of people switching banks has increased, as 11% of North American customers left their banks in the last year.[6] This may be occurring because switching banks has become an easier process, losing the complications with which it was once associated. Similarly, the simplicity of the bank-customer relationship is one of the defining factors, as customers are always looking for quick and easy transactions. Alternative banking options have further broadened the pool of customer choices and made switching banks more attractive and accessible.

Skyrocketing Customer Expectations

With a high level of confidence in technology, customers expect to have the ability to find available channels to suit their needs at any time. The key is to realizing that all customers are now digital customers, even though some may still rely on traditional tools or move at varied paces and take different paths to reach the "digital" point.

Comparing a bank's promises to what it actually delivers is one area of focus that customers particularly prioritize, especially in terms of whether the service they receive matches their expectations of their banks. With new technologies always emerging for customer adoption, customers' expectations are constantly changing. This constant evolution forces the market to create models that yield closer connections with customers, highly personalized services, and an unparalleled degree of customer care.

3
Evolving into a Digital Bank

Evolving into a Digital Bank

Digitally transforming a bank is not a simple task. The key to accomplishing this is to prioritize electronic mediums and online platforms, pushing them to the forefront, and moving physical bank branch locations to second place. This can be difficult, though, since traditional banks are structured and organized around the money and products in branches.

An organizational overhaul is necessary, meaning a bank's way of thinking—along with its technology, incentive systems, and knowledge about customers—must change. Electronic branches and data should be the core focus, so electronic platforms must be integrated and old core systems replaced; middleware is available as a bridge and technology workaround.

It is predicted that the area of coverage for customers per bank will expand to 1 branch per 250,000 customers—an increase from 1 branch per 20,000.[7] This means that physical branch locations will decrease as more customers will be served through digital channels, using smartphones, tablets, and computers. In addition to the fact that it will be cheaper to perform banking transactions through electronic mediums, it will be more convenient and relevant as most of today's population is familiar and proficient with all things digital.

4

Business Transformation By Way of IT

To keep up with modern business demands, most banks utilize complicated IT architecture that has been altered and patched, instead of starting the slate clean with entirely new infrastructure. While this would be the easy way to do it, realistically it's not feasible for many companies. However, an overall update and overhaul of sorts are necessary for all banks to complete within the next few years, setting a more flexible groundwork that is capable of adapting to rapidly changing digital technology and methods. Research suggests that only 8% of companies have committed to completely replacing their core systems, thus signifying their lack of readiness for digital transformation.[8]

While the thought of completely transforming or making changes of a large scope to any IT architecture sounds intimidating, there are certain ways of effectively accomplishing this that reduce the chance of risks. Some of these include following an approach that is carefully paced and separates systems of record from systems of engagement, focusing primarily on enabling straight-through processing and creating a single view of the customer.[8] Additionally, it's paramount to retire or consolidate applicable legacy systems and transition non-mainframe workloads and new development to the cloud.

Many financial and banking companies are taking innovative approaches to accelerating the transformation process, increasing flexibility and promoting cost reduction as well as simplification. To illustrate, a British bank has built a platform that enables a single view of the customer; at the point of interaction and account opening, it also digitally captures client documentation and biometric data.[8] Another example is a leading global insurance company that has implemented a multi-tenant architecture while decreasing its legacy footprint from 11 separate stacks to a single, well-designed and modular stack, with the goal of doubling its business. No matter the method or approach of conducting such architecture transformation, projects of this caliber typically require intensive planning and maintenance and span several years.

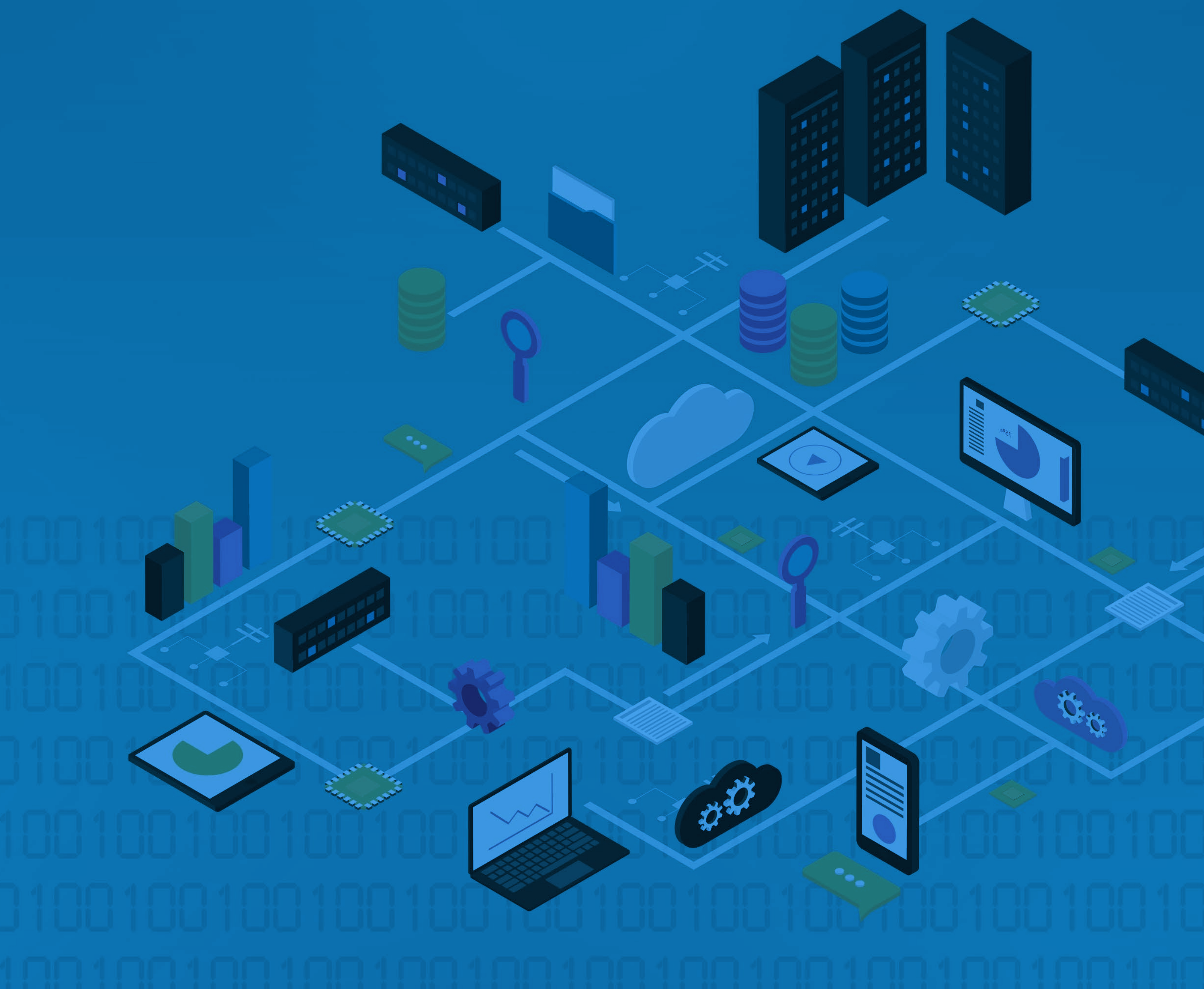
Another trend that is gaining prevalence in the goal of completing digital transformation entails switching infrastructures to cloud-based architectures and software-designed data centers (SDDCs).

A dual method can be effective, using an on-premise private cloud for performance and workloads that are highly susceptible to risk, in addition to vendor-hosted virtual private clouds for bursty workloads and public clouds for generic workloads with little risk.8 Banks and other financial companies are considering using the cloud as an avenue to deliver services, and IT vendors are beginning to make enterprise-grade cloud capabilities more accessible and widespread, to provide the high levels of security, performance, and control that the finance sector requires. The adoption of hybrid cloud and SDDC technologies is thought to possibly reduce costs of infrastructure and software delivery.

Rebooting IT is comprised of a multi-phase structure, and the formation of this should begin with C-level executives emphasizing the importance of technology and understanding its strong effect on the business model. Additionally, acknowledging the urgency of taking action to begin a digital transformation is essential. When senior executives grasp the importance of building upon this transformation initiative, it becomes imperative to incorporate this vision of the future throughout the entirety of the company. Such an alignment involves defining what specific needs customer have and identifying whether the business capabilities of the company can meet them. Also, analyzing the company's technology and performing diagnostics on the current model in operation are essential for pinpointing what changes will be needed.

Following alignment, activation should occur, which involves focusing on small portions of the changed model to start. Activation entails weighing technology capabilities against each other, determining which particular ones must be top of the line and which ones can suffice as they are. Focusing on the future and mapping the changes necessary is also an important aspect of this step. Finally, deployment and achievement follow, at which point it's required to ensure C-level executives maintain focus on the program of change and establish methods of tracking and monitoring its success.[8] The main challenge in deploying this model is to remove complexity in design but also maintain an innovative approach. However, retiring legacy products and resource-consuming services that are inefficient and hardly add any value to future business is an achievement that should be commended on its own.

5
Stefanini's Services and Security Solutions



Almost half (49%) of global respondents indicate that their digital strategy is either under development or fails to align with corporate strategy.

Source: PwC's Global Digital Banking Survey, 2013

Some may associate the idea of going digital with spending and investing millions of dollars as well as taking a metaphorical wrecking ball to a current IT environment, in order to start rebuilding from scratch. This isn't the case, however. Many of the elements banks need to fully build upon this opportunity may already be where they need to be, meaning that the next step is to concentrate on leveraging them better and investing in these targeted methods.[9]

Our Banking Capability

Based on the expertise of almost three decades serving tier-1 global banks with over 8,000 consultants worldwide, we leverage our prevalent domain and technical proficiency to deliver solutions to the leading banks and financial institutions across the globe.

Positioned as an important business partner of our clients, we invest in financial services of the future for mobility and social networks to offer innovative, proactive services. Our banking solutions are aligned with the need for digital transformation, addressing issues of developing new business models and defining new business architecture. In addition, we rationalize technology, upgrade systems, and automate processes. Our offers assist banks with expanding their customer base, delivering better services and providing an enhanced customer experience that meshes well with changing technology.

Stefanini's end-to-end solutions are tailored to retail banking, wealth management, capital markets, residential and commercial lending, and regulatory compliance.

Banking Consulting Services Digital Transformation

Seeing the future of banking today

- We work with banks to apply the digital transformation, manage risk, and drive profitability.
- Changing customer demands require a prompt, scalable delivery. Consumers are pushing the digital boundary to the limits.
- With our interactive offers, we provide strategy and design, customer marketing and personalization, digital commerce and client services.
- Mobility services include connected devices and products, Stefanini IoT solutions, and enterprise mobility.
- With analytics, we identify ways to improve and provide the needed solutions. Our offer includes the creation of bank loyalty segmentation toolsets, winnable share models, customer state management, experimental design and rapid cycle testing, and channel preference modeling. Stefanini co-provides these solutions with our partner, Fulcrum Analytics, an industry leader in analytics, database marketing, and CRM solutions. Through one package of solutions, we provide an assessment to identify and prioritize improvement opportunities; develop a transformation roadmap; and optimize, modernize, migrate, and sustain all the services related to the banking market.

IT Operations & IT Strategy

Optimizing and aligning to keep up with the future of business and technology

- With a focused IT operations strategy, our advisory consulting offer is designed to help CIOs optimize IT operations to "unlock" value and align with future trends.
- Our business consulting competency center is able to integrate with the North American market and bring our expertise in management consulting to the table, which enables us to provide a more business-focused solution to clients' needs.

Development Projects

Reducing costs with Stefanini nearshore mainframe services

- Based on customer requests, we are able to ramp up resources to a project in two weeks' time and provide banking solutions on various technology platforms. We provide a flexible delivery model across onsite, offsite, and nearshore locations, and we have a seamless hub-spoke integration model that will ensure local competency leads will be integrated with our global banking financial solution centers of excellence in Brazil and the United States.
- Consultants start projects in the nearshore delivery model out of our centers and can be leveraged for short- and long-term assignments. This helps retain the knowledge base, and this type of cross-fertilization is essential to

the success of our flexible delivery model. These senior resources are not just technically focused but also bring in a strong understanding of the banking financial services platforms, domain, and processes.

Managed Services Delivery

Globally-reaching capabilities

- Among our unique characteristics, we are present in 39 countries across the Americas, Europe, Africa, Australia, and the Pan-Asia Region. Stefanini is ramping up in Europe, especially in Germany, Romania, and Poland, which can handle cross-border transactions.
- We have delivery centers throughout the globe in different time zones, which is a huge advantage. In relation to others, we are more nimble and quick to adapt. For clients who demand a cost-effective, follow-the-sun model, we are able to offer our solution to centers in Manila and India; they can complement the offer provided in centers in the United States, Brazil, or Mexico.
- This is an important differential, especially with the 24/7 type of agile support engagements which need continuous handovers and global support.

Mainframe Solutions

Managing and maintaining legacy systems

- We have a robust, younger generation of mainframe resources in Brazil—90% of which work with bank-related clients. This is an important skill when you look at the U.S., where there is an aging workforce problem with many of the banks and financial institutions. Most of the legacy banking systems are on the mainframe and will continue to be on the mainframe. We can offer a unique model for our clients that is able to reduce the costs and risks associated with supporting legacy mainframe systems.

Anti-Money Laundering (AML)

Protecting against financial fraud

- Our AML (anti-money laundering) solution is comprised of software specifically designed to prevent and detect money laundering by providing real alerts and reducing false positives. The solution can be implemented in 8 weeks (compared to 1-1.5 years) at 25% of the budget that is currently necessary to implement commercial services of this kind.
- The solution allows compliance officers to reach more reliable conclusions about each potential case. However, the software does more than simply generate alerts. If alerts are generated and cannot be processed, the problem persists. The objective of our AML system is not only to generate alerts but to provide the elements to solve them as well.

Solutions Tailored to Banks of Any Size

With a goal of providing these benefits for any size of bank or institutional company, we have solutions tailored specifically for small to medium-sized financial institutions. We are flexible enough as a mid-size player but have the scale needed to truly provide a global experience for our clients. Capabilities such as detailed analytics are now available for small banks, and we can provide them the ability to utilize the benefits of this technology. Our aim is to digitally transform banking solutions to stay up to date in a rapidly-evolving technological sphere, and our global capabilities and technical expertise ensure we get the job done.

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