IN THIS WHITE PAPER

In this White Paper, IDC Financial Insights discusses how new technologies and devices are fundamentally changing the expectations and behavior of the modern consumer and triggering the rise of new segments, such as the digital-only customer. Customers in these new segments do not want a face-to-face relationship with their bank, but expect a seamless, interactive, and consistent interaction with a bank through remote channels. New strategies, such as omnichannel, mobile optimized, or data-driven decisioning have emerged, but their implementation requires more than just the latest technology or a lean process; they call for a genuine cultural change within the bank. While today's technology can enable digitization, financial institutions have to prioritize the development of their digital strategy and pay more attention to today's and tomorrow's customer needs to stay relevant amid the increasing competition.

Key findings:

- Digitization is not only transforming the interaction with the customer and the customer experience, but it has also triggered the rise of new customer segments, such as the "digital-only" customer.
- Digital is now and for everyone. The use of digital financial services is not a generational phenomenon but has been widely adopted across all customer segments.
- The 25- to 35-year-old segment is the most digitally active. Not only is the number of channels increasing, but so is the frequency of interaction with a bank.
- Leading banks are responding with a combination of three strategies: the omnichannel strategy, the big data analytics strategy, and the mobile optimized strategy.
- Given the internal and external competitive pressures, IDC expects the industry to move towards a lifestyle banking model, moving from providing products towards delivering services, such as advisory, facilitation, and aggregation.

SITUATION OVERVIEW

Asian consumers have been on the forefront of the digital revolution, particularly with the advent of the smartphone. While the smartphone has become omnipresent in many aspects of daily life, it still has only marginally made its way into the financial services industry.
Nonetheless, digitization has given rise to new banking customer segments. The digital-only customer for instance is defined as customers that have not interacted with branch personnel in the last six months. IDC Financial Insights estimates that North America leads the way with 7.2% of banking customers falling into this category, while digital-only customers account for about 4.5% in the Asia/Pacific region in 2015. IDC Financial Insights expects this segment to grow to about 15% of banking customers by 2020 – thanks to greater usage of sophisticated mobile devices, improved Internet bandwidth, and better application quality from banking apps and micro-apps.

**FIGURE 1**

How Digital has the Asia/Pacific customer become?

CHARACTERISTICS OF THE *ONLY DIGITAL* CUSTOMER
- Primarily online transactions/behavior.
- First channel is mobile, using mobile for personal and business.
- Only digital: hasn’t spoken to anyone, do not want to speak to anyone.
- Demands products/services delivered digitally
- Embracing online shopping

Composed mainly of the Generation Y and Z demographic, the digital-only customers have several shared characteristics: their first channel is mobile, they use mobile for personal and business, and they conduct a lot of online transactions – not just through banking channels, but also through online shopping and social media platforms. A digital-only customer demands products and services to be delivered digitally, and increasingly has a preference to not speak to anyone in the bank.

Digital is now and for everyone. In general, the use of digital financial services is not a generational or income specific phenomena, but digital banking has been widely adopted across all customer
segments, with the exception of social media. Moving forward, IDC Financial Insights expects the share of non-digital customers to be increasingly marginalized, while the digital-only segment to rise to 15% by 2020.

FIGURE 2

Channel usage by age group

Q. What are the ways in which you interact with your bank?

A new trend differentiating the generations is the growing frequency of bank interactions. Looking at the mobile channel, almost 50% of respondents below the age of 35 say they interact 5 to 6 times or more with their bank. The most active segment is the 25 to 35 segment in which 20% conduct more than 10 interactions per month. The same trend goes across all channels, including physical channels such as ATMs and branches. This puts a challenge to bank core systems and channels to deliver this promise without outages and in a consistent manner across channel siloes.
Stringent and aging regulatory requirements, introduced with the rise of online banking and anti-money laundering legislation over the last 15 to 20 years, have barely been updated to address new possibilities brought about with today's technology. This is one of the reasons why many transaction types, such as account opening, still require the physical presence of the account holder for know your customer (KYC) in many markets.

Nonetheless, times are changing and banks as well as their regulators are under pressure to move into the digital age by popular demand from the consumer. Internet companies, social media platforms, ecommerce marketplaces, messaging services and other innovative start-ups, operating outside the regulatory influence sphere keep expanding their value proposition into the financial services space while banks are forced to wait on the sidelines.

**Needs of the digital customer**

With digital banking technology coming of age, the traditional balancing act between security and convenience still dominates much of the discussion and customer concerns. However, other issues such as data privacy, user experience, remote problem resolution, as well as the dealing with the pace of change and the loss of the personal interaction have become important as well.
Banks have not done a great job positioning themselves as a trusted advisor for financial planning and wealth-building in the past. While friends and family have traditionally been the most important sources for advice, the Internet today has become another primary source of information and opinions for the digital customer.

With independent financial management tools, investment advice forums, and robo advisors gaining traction, banks have come under ever more pressure to improve their advisory capabilities, particularly in the mass and affluent segments. Digital technology can play an important role to help customers better manage their finances and to position banks as an independent information broker, rather than a profit-oriented product pusher.

Another change driven by digital technologies is the anytime, anyplace, any device mentality demanding access to real-time account information, instant payments and transfers, and a high level of support and availability around the clock. Banks are still struggling to bring their infrastructure up to speed in order to deliver this promise across a channel architecture that has been built in silos and with data warehousing capabilities that cannot deliver real-time access.

**How are banks responding?**

The emergence of the digital-only customer raises the urgency for banks to change their channel strategies and deploy 3rd Platform technologies to deliver value to their customers. Most of their focus is on the digital channels, but many strategies are still premised on how physical formats are of equivalent importance too.
Omnichannel: Banks still come up with new channels and new channel types. The list includes interactive digital engagement through video and teleconferencing technologies, smart TVs, roaming direct agents, personal Internet of Things (IoT), and a host of mobile-based applications that are in vogue at the moment. New "things" such as wearables are also pioneering in the financial services space, for instance biometric authentication for online services being launched by St Georges Bank in Australia, which also just launched the first application for account checking, notifications, and directions on Android smartwatches.

3rd Platform technologies such as Big Data, cloud and social will serve as crucial catalysts of this development. Social, for instance, is gaining ground as a channel by itself, with banks looking to match profiles from internal customer records with active social media accounts. The rollout of social payments via Facebook, Tencent's WeChat, and other social platforms takes banking to where customers are and gives banks a wealth of data of their customer's networks. In China, most of the larger banks have launched WeChat branches delivering customer service, payments, marketing and promotions, and loyalty programs through this platform. Moreover Tencent is the first private bank in China with the launch of WeBank in January 2015.

The emergence of new channels does not mean that old channels necessarily will go away. IDC Financial Insights expects banks will have to maintain an increasing number channels while under pressure to be more efficient in allowing the customer to switch between them. An omnichannel capability will allow a customer to switch channels during a transaction; for instance, doing mobile research on a product while commuting, continuing formfilling on a desktop at home, enquiring potential questions via the call center or online chat, and completing the transaction in the branch providing the signature and KYC requirements.

Another emerging theme is the potential shift towards an omni-presence approach. With the consumer in the driver seat, it is not sufficient for a bank to dictate the availability of channels, but to take the bank where the consumer is. Therefore the social channel will grow in importance and relevance to address the consumer at a place, time, and occasion that is relevant. Examples include the integration of BuyNow/LoanMe buttons by banks on e-commerce sites, or the extension of loyalty schemes and white-label services to change purchasing experience.

Big Data and analytics (BDA) holds the promise of providing new and potentially game-changing insights into customers, products, markets, operations, and competitors. Banks aim to understand customers better while providing relevant information at the right time and in real time to engage the individual in a personalized and needs-based interaction.

The digital experience is driven by data, whereas traditionally banks have defined broad segments such as retail, mass affluent, SME, corporate and delivered a "one-size-fits-all" experience to these segments. With the help of more powerful analytics, banks can personalize the customer experience through microsegmentation around life stage, age, risk, profitability, friends and relatives, transactional behavior, social activity, such as likes and page visits, to move away from today's one-size-fits-all approach. Eventually digital will no longer be regarded as a mere transaction enabler but increasingly as an experience enabler.

DBS sought to provide more relevant market and product information to its private customers, leveraging Big Data analytics to provide targeted market insights directly to the client, as well as to
help advisors to stay on top of these market developments and customer interests. Westpac entered a strategic media and data partnership with online retail platform onthehouse.com.au in an effort to connect digitally with customers. The platform aggregates data on Australia's real estate market including available units in a particular neighborhood, prices, sales and rental history, various reports, as well as financial tools such as loan repayment calculators.

**Mobile-optimized:** In the Asia/Pacific excluding Japan (APeJ) region, IDC Financial Insights expects established organizations as well as new market entrants, to leverage a mobile-optimized strategy in innovative ways to create an internally efficient organization and externally create new dynamic customer engagement models that will work in tandem to gain market share from less agile competitors.

Since device sophistication has changed over the years, it is imperative that banks change how they approach their customers. The shift to even greater mobility should change how an organization creates its customer experience. Internally, mobility should change the way that an organization interacts with its employees, including the methods and processes that the employees use to work. Externally, there should be a wider range of feature-rich, more specific, and more targeted applications that engage with the banking customer. In essence, the shift to mobility should change the customer experience, moving beyond a purely transactional model, and should focus on how to support banking customers by providing access to the most salient information based on their needs at that particular moment, which will ultimately drive greater revenue generation.

It is about how organizations can leverage mobility to improve their total value proposition to streamline the process of communication through the entire supply chain, including external customers, and internal customers. Going forward, it is imperative that all organizations begin to strategically assess how best to incorporate enterprise mobility across the enterprise. Those that fail to do so will risk losing out to current industry competitors that are incorporating mobility as a core strategy, as well as new market entrants that are able to leverage the power of enterprise mobility to take market share.

*Changing bank interactions and requirements of digital banks*

The impact of digitization has far reaching consequences on how banks interact with their customers across multiple areas:

**Research:** Banks are losing touch and influence with their digital customers as product research increasingly has moved online. While in the past the comparison of financial products was a tedious and labor-intensive process for the customer, many relied on their prime banking relationship. Today, with independent comparisons of credit cards, mortgages, deposits readily available on the Internet, with investment forums offering a deeper insight into market developments and independent expert opinions than the regular advisor in a branch could ever offer and with social media the amplifier of bad sentiments, banks are increasingly in a position where customers already know what they want before they come to the branch – if they come.

**Sales:** Asian consumers are opening to mobile advertising, particularly in China, India or Hong Kong. An IDC research also found that approximately 9% of APeJ mobile Internet users make purchases from their mobile device, and this "mobile buyer" purchases US$556 worth of products yearly (source:
However mobile spending on online banking and finance has fallen far behind spending on email, apps purchases, social media, navigation and online gaming.

Nonetheless, banks have been slow to move towards mobile/digital product marketing and distribution as banking applications remain predominantly transactional. Sales remain branch-centric and marketing messages through digital media are usually untargeted. First movers in this space, such as OCBC Bank deploying in-memory processing technology to increase the accuracy and relevance of digital marketing will clearly have an advantage given higher conversion rates and lower cost.

**On-boarding** in branches has remained a regulatory requirement in many Asian markets mainly for KYC verification. KYC regulations have become significantly heavier over the past 20 years due to FATF AML reporting requirements and CIP requirements emerging from the post-terrorist financing push after 9-11 in the United States. However, technology has matured so that these harsh account establishment rules to prevent money-laundering or suspicious transactions are not necessary, given that prevention should primarily be based on monitoring account activity. Of course, there is a need to uniquely identify customers to prevent identity theft, but in today’s age, face-to-face verification is not the only way to ensure this and a more progressive model for identity verification, and KYC based on behavioral learning around the customer may be more effective. Behavioral models are essential for predictive analytics around fraud and in place in most banks. Shifting the emphasis of suspicious transaction reporting towards behavior, instead of a one-time event that can be gamed and is no longer efficient or effective, will result in a more convenient, effective and reliable KYC process.

OCBC is among the first banks in Southeast Asia to introduce a three-step mobile account opening process for Singapore citizens with a national ID (NRIC) and central provident funds (CPF) records leveraging imaging technology to securely capture and transmit documentation.

**Deposit-taking**: While remote deposit capture has had great success in the United States, the use of imaging technology for cheque capture is still uncommon in Europe and Asia. Citi sees the technology as promising and has introduced cheque capture at ATMs in Singapore.

**Lending**: Digital lending is slowly emerging. However, the comprehensive documentation required to secure a loan remains a main obstacle. Pre-approved loans are one way to go, using digital as the lead generation platform. Australian banks have partnered with real estate platforms to place loan offers in relevant domains. Loan calculators that can right away put together a loan offer are a great way to position the bank at a time andplace relevant to the potential customer. Standard Chartered’s Dash application offers seamless personal loan application entirely mobile promising approval-in-principle within 60 seconds. The loan, however, is subject to approval of supporting documentation afterwards.

**Advisory services**: Digital wealth management today is primarily transactional, providing access to trading activities and portfolio overviews. Some banks are also providing and distributing research and market information to clients. More interesting initiatives have been on the mobile advisor front, with advisors being equipped with tablet devices that empower the advisor in the client discussion, for instance providing real-time portfolio information, pricing and product information, but also the ability to guide through a financial planning process or run through scenario modeling. First banks, such as Citi, have also introduced social components, for instance for education and networking for next-generation high-net-worth-individuals (HNWI).
Client servicing: Traditionally, digital has had more of a self-service connotation, but more banks are using it as an interactive channel via social media sites. ASB Bank in New Zealand launched a Facebook branch offering online chats and services, just like in a regular branch. IndusInd Bank in India has introduced a mobile video telephony app that allows customers to reach the call center or a relationship manager 24/7.

FUTURE OUTLOOK

From products to services – over the next five years – IDC Financial Insights expects a shift towards a new lifestyle banking concept, adding comprehensive advisory-, aggregation-, and facilitation services to a bank’s value proposition.

Lifestyle banking will be driven by two key factors; firstly a bank's ambition to stand out of a sea of sameness given increasingly commoditized products, services, and channels. Secondly, the wish for simplicity in a complex world that gives consumers a myriad of choices. In order to sell a product, it surely is not enough to have it in one's portfolio, but to offer it at a time when it is relevant, at a place, where it is needed, and in a way that is easy and readily consumable.

FIGURE 4

The industry is shifting towards a lifestyle banking model

Source: IDC Financial Insights, 2015
In the same way that Internet providers are pushing into the financial services space, banks may consider to push back and help consumers filter through the data avalanche of offers, brand messages, opinions, products, and spam.

IDC Financial Insights sees this development starting in areas that are still closely related to the financial services space, but over time this development should move further and further away from the core of banking. A great example for aggregation services is Commonwealth Bank of Australia's Real Estate Radar, allowing consumers to take a picture of a property with a smartphone app to get more information about its availability, similar postings in the neighborhood, prices, amenities, and most importantly – a loan offer. Likewise, banks are becoming facilitators, for instance, by driving traffic to their partner merchants through card offers or their mobile apps. Taking this a step further could involve comprehensive travel planning, for instance, by following up on an air ticket purchase by offering promotions for hotels, merchants, or other services at the planned destination. Advisory services are likely to expand from a pure financial planning perspective, to include other sensitive areas such as education, health and insurance, tax optimization and more.

The new role of banks in lifestyle banking will likely be supported by new technology themes, such as the Internet of Things (IoT), which facilitates the delivery of services and collection of data. Kasikornbank, for instance, offers corporate customers a fleet management service, linking the purchase of petrol to an RFID chip in the car. This service not only reduced petrol theft, but also reduced time spent for refueling. Similarly new payment services for the shared economy, such as car or bicycle rental, or usage-based fee models can be provided.

The adage, "attack may be the best form of defense," demonstrates a new approach for innovative banks to venture out of their traditional business environment by offering new lifestyle banking services, at a time when entry barriers protecting the financial services environment are fading and the banking sector is threatened by new competitors. If there is a need for the provision of these services, other industries will move quickly and potentially develop mechanisms to bypass core financial services. Moving towards lifestyle banking will require partnerships outside the financial services and first movers will gain a big advantage in positioning themselves as primary services provider. With success of the first use cases, IDC Financial Insights expects a rapid expansion of the scope of services provided by banks, particularly in the mature markets.

**Bank Challenges and Opportunities**

**Legacy infrastructure:** The siloed nature of distribution channels in banks today are one of the key challenges for banks to deliver a continuous, interactive and engaging communication with the customer. Also with banks striving for a single view of the customer existing infrastructures have to adopt to new requirements, such as real-time data availability or omnichannel capabilities.

Moving forward the integration of core and data applications will form the foundation for digital. If these integrations cannot be achieved banks will continue to face the risk of system outages and poor performance.

**Efficient application development:** Creating apps for multiple mobile and desktop devices has been difficult as banks have tried to minimize application development costs and tackle discrepancies between app store requirements, while still providing a rich user experience. Larger banks still
maintain large application development teams making the cost of keeping applications up-to-date across multiple OS platforms a big challenge. Cross-platform Web-based apps leveraging HTML5 or Java can help, but may not deliver the same performance and user experience as native apps. Cloud testing environments are another increasingly popular method to reduce costs in application development, while ensuring scalability and reusability.

**Quick response and time to market:** In today's time and age, speed has become a competitive advantage for banks. The ability to roll out new services and products, target customers with relevant promotions and information at the right time, and to respond to constantly changing market conditions, regulations and emerging new channels is increasingly sought after.

**Security:** In light of the digitization of financial services and omnichannel banking, protecting sensitive customer data and networks has become a complex proposition today. Yesterday's network perimeter model fails to defend against advanced attacks and ensure that data is contained within traditional environments. New channels and devices force banks to find new ways to secure entry points and to embrace new identity and credentialing solutions, while at the same time enhancing user experience.

**HOW TEMENOS CAN HELP**

There are many paths toward customer centricity and customer satisfaction, and happiness will not be determined by a simple technology upgrade. It is a complex combination of many factors reflecting in different cultural and demographic nuances of the consumer differing from market to market. These factors also vary from bank to bank, given the unique customer segmentation of each bank, the maturity of the marketing resources within the bank, the maturity of bank technology, executive buy-in, organizational support, and so on.

Today technology has become an enabler on this path and its importance to deliver a better customer experience will further increase with the ongoing digitization of the consumer. Taking banking to the next level and taking it where the customers are, will require banks to change the way they see and manage channels and how they deliver their products and services.

Supporting this journey of the banking community is a major challenge for vendors like Temenos in order to deliver large, enterprise-class solutions to the unique requirements and needs of each player. IDC believes that 3rd Platform solutions and service-based solutions will be the way forward to enable this change, while keeping cost in check. IDC Financial Insights believes that Temenos has put together a suite of solutions that respond to the broad needs of financial institutions in their pursuit of an increasingly digital customer, corresponding to the key imperatives that we highlighted earlier.

**Overcome siloed channels and integrate legacy applications**

Temenos edgeConnect Web-enables legacy core applications and provides a rich user experience that is integrated to, and decoupled from the constraints of the back-end systems. The system collects data from multiple source systems. It provides a run-time environment, delivering performance and scalability, as well as stringent security features. The system is built on open standards, enabling integration to third-party vendor platforms or in-house legacy systems.
Quick and easy customization of digital real estate
Temenos edgeConnect works on a presentation layer architecture that enables multiple products and services to be accessible by multiple users. Applications can be rapidly created and managed, optimized and tailored, not just across all channels — such as Web, mobile, call center — but also across all interaction points, including desktop, smartphone and tablet. This accelerates application development and reduces costs, while enabling business users to design and customize the screen without need for coding experience.

Develop once, use many times
Temenos mobile solution is built on SmartHybrid technology for developing mobile applications that provide a near-native experience with fully optimized performance and security. Once an application has been developed it is wrapped with native skins for iOS, Android and Windows phone devices.

Context-driven engagement to the customer
edgeConnect takes context driven sales and marketing to the next level, by not only looking at the customer's segment or device information, but also at a wide range of relevant information such as location, profile, social interaction, and history.

A layered architecture also makes it easy to change a process, automatically replicating it across all presentations. This not only allows time savings, but also enables financial institutions to stay on top of changes to the ecosystem, providing agility and competitive advantage.

"Out-of-the-box" security
The edgeConnect Run Time Environment (RTE) leverages an industry standard Web server and provides many security facets "out of the box" to protect users, data and systems from deliberate and inadvertent intrusion or destruction. edgeConnect's security features are reviewed constantly and addresses the most critical vulnerabilities of software applications defined in the Open Web Application Security Project (OWASP) Top Ten Concerns.

Overall, Temenos has come a long way reducing the complexity of its solutions and making it easier to integrate and customize its solutions. Putting business users in control of the customer experience and providing contextual information at the right time is a crucial step forward to deliver more relevant products and services to the banks' customers.

CONCLUSION
Banks must avoid mismanaging client expectations at all costs, and after more than a decade of promising to put the customer first, it's high time to start turning this vision into reality. Making material improvements to the customer experience is rightly occupying a prominent position on the operational agenda, but changes must be more than skin deep and instead permeate the front, middle, and back offices.

Channel investment has been much in evidence in recent years, with institutions allocating a portion of their transformation budgets to both physical (branches/stores, ATM networks, and contact centers)
and digital (online, mobile, and social) assets. In 2015, this trend will continue to manifest itself, with additional differentiation being sought through the adoption of advanced technologies.

However, success will not be founded on technology alone. In common with other areas of financial services, transformation activities must also extend to overhauling legacy channel-related business processes (such as customer onboarding and account management). And it is important to acknowledge that while the two elements of technology and process can be implemented relatively quickly (with sufficient funding and adequate resources), achieving genuine cultural change takes appreciably longer.
About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world’s leading technology media, research, and events company.

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