Setting course in a disrupted marketplace

The digitally-enabled bank of the future

KPMG International

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Introduction

A marketplace under siege

Today’s leading financial services companies are operating in a new and more complex environment; one where the fundamental definition of how customers experience and interact with a bank is being challenged and redefined. Leading companies are also facing competition from a myriad of nontraditional providers who threaten to disintermediate the traditional banking business model. Finally, in response to the most recent global financial crisis, banks of all sizes have been burdened with increasing regulations, a reduction in available capital and mounting demands for skilled resources. One bank executive summarized the environment best — we are operating in a marketplace under siege.

The goal for leading banks is twofold. First, to proactively capitalize on disruption by growing market share and increasing margin; and second, to vigorously protect high-value segments and clients. Banks who are successful at both will create shareholder value and a long term competitive advantage.

While simple in concept, the path to implementation requires a keen understanding of digital disrupters and enablers, customer experience, and strategic value drivers. The purpose of this paper is to discuss these and other themes, and to provide insights into a successful digital strategy.

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Disrupters and enablers

The transition to a digital economy is largely driven by new technologies and changing consumer preferences. These factors, which are common to nearly all banks, can have a dramatically different impact on customers and returns. These factors can represent a threat, an opportunity or in some cases, both.

Banks who embrace the digital economy welcome these factors as change agents and opportunities to better serve customers and create shareholder value. To these companies, these factors are “enablers.” Other banks see the digital movement as a threat to their customers and a “disruption” to their business model. Regardless of your bank’s unique position, we invite you to consider each factor and the role each plays in your digital strategy.

The demographic shift

A great deal of attention has been given to one of the globe’s largest demographic cohort groups, the millennials¹. Unlike any other group, this group has demonstrated dramatically different buying patterns and consumer expectations. Millennials have truly set a new standard for consumer and digital experience. This new standard represents “table-stakes” that consumer banks must recognize and adopt in order to win and retain customers. A bank’s ability to crack the customer experience code will have a long lasting and profound impact on future success.

Current US population by age

While the term ‘millennial’ is commonplace when describing this demographic segment, their characteristics have been largely adopted by generations before and after, particularly their expectations relating to their preferred customer experience.

Source: US Census Department, 2014

¹ Millennials, also known as Generation Y, are the demographic cohort following Generation X. There are no precise dates for when this cohort starts or ends; demographers and researchers typically use starting birth years ranging from the late 1970s to early 1980s and ending birth years ranging from the mid-1990s to early 2000s.
While the term millennial is common place when describing current-day customer experience standards, their expectations have been largely adopted by all generations. This point is particularly apparent in countries such as Japan and sections of Europe, where banks are aggressively pursuing Generation Y experiences despite a relatively low percentage of younger populations.

In light of this shift, banks must first recognize how customers view their services. While banks take many approaches to solve this question, one proxy is the NPS score.² The NPS score gives banks a unique perspective into customer sentiment using an 11-point loyalty scale. Customers are asked to assess their willingness to recommend the bank to a friend or colleague. Results allow banks to evaluate period over period changes, peer comparisons and through inference, assess experience.

One interesting comparison is the difference between bank and Fintech company NPS results. According to information provided at a LendIt conference, at least one marketplace lender’s NPS score was approximately 57 points higher than collective regional bank results and 75 points higher than national banks. Regardless of whether you agree with the benchmark, the overarching message is clear — many of the non-traditional providers have established greater customer loyalty (in a very short time frame) and a more valued experience.

Net promoter score (NPS)

| Source: Bain, Lending Club, 2016 |

<table>
<thead>
<tr>
<th>National banks</th>
<th>Credit cards</th>
<th>Regional banks</th>
<th>Community banks</th>
<th>Credit unions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>9</td>
<td>21</td>
<td>48</td>
<td>64</td>
</tr>
</tbody>
</table>

NPS is a commonly used measure of customer loyalty and satisfaction, ranging from negative 100 to positive 100, based on direct questions to borrowers.

² NPS, Net Promoter Score, a customer loyalty metric developed by (and a registered trademark of) Fred Reichheld, Bain & Company, and Satmetrix Systems, measures the current state of customer loyalty across the US banking sector.
The next obvious question for banks is which experiences are most valued by millennials and the expanded demographic group. To answer this question, banks perform customer outreach efforts, conduct focus group sessions, and assess experiences through customer journey maps. Sample millennial preferences shown below are based on KPMG innovation lab research and studies.

<table>
<thead>
<tr>
<th>Experience category</th>
<th>Priority</th>
<th>Description</th>
<th>Associated capability build — illustrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anytime, anywhere banking</td>
<td>H</td>
<td>Allow users to access and engage banking services through all available “glass” platforms (e.g., smartphone, smart pads, computer, ATM, etc.)</td>
<td>Omni-channel capabilities</td>
</tr>
<tr>
<td>Cyber security</td>
<td>H</td>
<td>Ensure state of the art cyber security measures</td>
<td>Cyber encryption, monitoring, etc.</td>
</tr>
<tr>
<td>Digital authentication</td>
<td>H</td>
<td>Authenticate digital users using the most effective and expeditious methods (e.g., retinal, facial, etc.)</td>
<td>May include retinal, facial, voice or other digital recognition methods</td>
</tr>
<tr>
<td>Customized products</td>
<td>H</td>
<td>Offer customers customized products and services based on buying patterns, transactional data and in bank portfolios</td>
<td>Advanced data and analytics and customer segmentation</td>
</tr>
<tr>
<td>Customized pricing</td>
<td>H</td>
<td>Offer customers product and service pricing based on user risk profiles, use patterns, and other characteristics</td>
<td>Product and price optimization models</td>
</tr>
<tr>
<td>Digital work flow</td>
<td>M</td>
<td>Allow users to execute transactions digitally with limited manual or paper-based processing</td>
<td>Digital labor, robotic process automation, digitization and/or cognitive</td>
</tr>
<tr>
<td>Data aggregation</td>
<td>M</td>
<td>Offer a digital platform which allows users an “Amazon” or “Mint”-like experience</td>
<td>Web design</td>
</tr>
<tr>
<td>Faster credit approvals</td>
<td>M</td>
<td>Review and make credit decisions as close to real time as operationally possible</td>
<td>Advanced modeling incorporating enriched data e.g., proprietary cross departmental data or unstructured data</td>
</tr>
<tr>
<td>Real time payments</td>
<td>H</td>
<td>Allow sellers and users to distribute and receive real time payments</td>
<td>Adopt proposed faster payment technologies; consider Fintech build, buy or align strategies</td>
</tr>
</tbody>
</table>

H = High  M = Medium

New and non-traditional competitors

Competition is not a new concept for banks. What is new is the type and volume of new entrants since 2015. The first wave of entrants included largely unknown companies offering expanded connectivity and customer insights through new technologies, data and advanced analytics. Future waves included larger, more established but non-traditional banking competitors such as PayPal, Walmart and investment banks.
The landscape is further evolving to include platform providers such as Amazon, mobile payment services such as Venmo, and e-commerce companies such as Alibaba.

So what can be taken from these trends, and how can one remain competitive? We offer a couple of points. First, foster a culture that is innovative and inquisitive. To this end, empower teams to research and invest in new technologies and data. While integration may not be the end goal, familiarity with the latest tools and advancements is critical. Next, keep an open mind to alliances and relationships with unconventional players. For example, very few banks would have taken a meeting with Amazon seriously just a few years ago if offered an agenda around platform partnerships.

**New technologies to ingest and apply unstructured data**

The advent of social media has given way to new and increasing interest in unstructured data.

Unstructured data refers to “information that either does not have a pre-defined data model or is not organized in a pre-defined manner. Unstructured information is typically text-heavy, but may contain data such as dates, numbers, and facts as well”.³

Unstructured data has become commonplace in our personal lives through daily text messages, web searches, images and PDF documents containing legal information (birth, wedding certificates), public records, and contracts (e.g., home title).

Banks who have successfully combined this information-rich data source with advanced analytics have gained valuable insights into their customer behaviors, preferences and life events. Armed with a more complete picture of their clients and segments, these banks are better equipped to offer new products, improve margins, and reduce attrition.

One of the greatest barriers to unstructured data use is often the uncertainty around what data and how much to buy. Banks have also been slow to adopt this data type given challenges in converting unstructured data to a useable form and the high cost of attracting data scientists to detect patterns and trends.

While the industry is still scratching the surface, common unstructured data applications include:

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**Experience and capabilities**

<table>
<thead>
<tr>
<th>Use case</th>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segmentation</td>
<td>H</td>
<td>Utilize unstructured data to more accurately predict customer behavior and buying patterns. Banks also use this data to reduce segment size and characteristic dispersion.</td>
</tr>
<tr>
<td>Credit scoring</td>
<td>H</td>
<td>Utilize unstructured data to a) improve credit score, reserve and loss forecast accuracy and b) predict and proactively manage credit events.</td>
</tr>
<tr>
<td>Reporting</td>
<td>H</td>
<td>Ingest and digitize key regulatory data elements for subsequent regulatory, financial and other management reporting.</td>
</tr>
<tr>
<td>Compliance</td>
<td>H</td>
<td>Combine unstructured regulatory PDFs with data lineage and rules to improve compliance and monitoring speed and accuracy.</td>
</tr>
<tr>
<td>Lead generation</td>
<td>H</td>
<td>Use unstructured data to predict and offer products consistent with life events (e.g. birthday, anniversary), asset ownership, and other buying behaviors.</td>
</tr>
</tbody>
</table>

H = High  M = Medium

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³Wikipedia.org
Digital labor

There is a growing sentiment that all activities requiring a keyboard stroke, manual process, or repetitive activity will eventually be replaced by automated algorithms or robotics (otherwise referred to as bots). This view is gaining traction based on rising bank efficiency ratios and in particular the highest cost contributor — labor.

Between 2009 and 2012, the average efficiency ratio of the top 15 US banks had grown by roughly 23 percent. In addition to rising efficiency ratios, the chart on the next page shows a concerning trend in higher salaries and benefit costs as a percentage of total non-interest expense. These trends have contributed to an industry-wide interest in robotic process automation and more advanced cognitive practices.

Compensation as a percentage of non-interest expense

The benefits achieved through process automation are extremely compelling. According to KPMG analysis, many bots (automated processes) can eliminate between three and five full-time employee equivalents. The cost to implement each bot is typically low with numerous service providers focused on journey mapping, design, and implementation. The sheer volume of implementation growth has spurred interest from regulators and other governing bodies.

Interest in digital labor has expanded beyond core processes to include use cases involving machine learning and cognitive thinking. For example, financial services clients are developing chatbots and other smart assets which gather client, economic, social and other internal data to formulate customized marketing and service recommendations. Banks are even exploring opportunities to leverage artificial intelligence assets enabled with natural language processing, such as Amazon’s cloud-based personal assistant Alexa, to provide banking services.

While banks have successfully implemented robotic process automation (RPA) solutions, many are still in the exploratory phase including pilots and proof of concept implementations. Areas of digital labor interest include:

Experience and capabilities

<table>
<thead>
<tr>
<th>Use case examples</th>
<th>Priority</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call centers</td>
<td>H</td>
<td>Involves process automation and machine learning (e.g. learn and predict customer complaints and offer solutions)</td>
</tr>
<tr>
<td>Functional areas</td>
<td>H</td>
<td>Banks review functional areas (typically at the process level) and evaluate opportunities for automation (again, highly manual and repetitive processes)</td>
</tr>
<tr>
<td>Wealth</td>
<td>H</td>
<td>Automate beneficiary change processes</td>
</tr>
<tr>
<td>Compliance</td>
<td>H</td>
<td>Identify and digitize critical data elements embedded in hard copy documentation, move key data elements through defined lineage and detect anomalies, data conflicts or non-compliance (missing fields)</td>
</tr>
<tr>
<td>Security</td>
<td>H</td>
<td>Automate cyber security threat monitoring</td>
</tr>
<tr>
<td>Client onboarding</td>
<td>H</td>
<td>Automate data ingestion, key term identification and report production</td>
</tr>
<tr>
<td>Trade monitoring</td>
<td>M</td>
<td>Apply machine learning to detect and review potential fraudulent activities</td>
</tr>
<tr>
<td>Credit product processing</td>
<td>H</td>
<td>Automate mortgage and other manual process workflows</td>
</tr>
<tr>
<td>Investing</td>
<td>H</td>
<td>Automate investing analysis, options and advice (robo advising)</td>
</tr>
</tbody>
</table>

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New payments infrastructure

US banks process payments using methods largely in place since the first bank charter in 1791 — those being cash and basic checks.

The aging US payments infrastructure has many limitations — namely one-way payment information flow, multi-day settlement, limited to no information rich metadata, and high operating and maintenance costs.

Despite a general slowness by the US to adopt new capabilities, other countries including England, Mexico, and Australia have moved to faster payment technologies. That said, nearly all banks and many larger countries are evaluating or are in early stages of implementing faster payment platforms, most notably, Canada, Hong Kong and Germany.

As a consequence, many banks are evaluating the impact of faster payments and compiling analysis to evaluate the associated return on investment (ROI). This analysis typically includes a business case forecasting new products and revenues resulting from the new rail and estimated avoided costs. In addition to hard dollar estimates, the business case may discuss strategic value associated with early adoption and positive impact to customer experience.

Cyber strategy, security and digital identity

Cyber discussions are much different today than in the past. The cyber discussion is now shared between infrastructure, risk and revenue-generating personnel. Business unit leaders have realized the impact cyber has on nearly all components of a digital bank’s value chain — including onboarding, user authentication, user account access, settlement, and online services.
Digital identity

The Indian government is noteworthy for its efforts in the digital identity realm. In 2009, the Indian government issued 12-digit Unique Identification Numbers (UID/Aadhaar) for Indian residents. Since its inception, the government has issued more than one billion UIDs.4 While the UID functions as a convenient method for government officials to verify identity and deliver state services, it also serves as valid ID for opening a banking account — a process many Indians could not previously perform without electronic identification documents.

The Indian government has also introduced a Unified Payment Interface (UPI) to enable person-to-person and e-commerce transactions.5 The National Payments Corporation of India (NPCI), which governs all retail payments in the country, aims to shift the economy to cashless transactions, and the government is considering strategies to leverage citizens’ smartphones as the computing platform for the UPI. Other countries, including Russia and a number of African states, have demonstrated considerable interest in the Indian UID and UPI roll-out.4

Speed

A key question from many bank executives is “how much time do we have before digital banking is adopted by the masses”? If we turn to consumer data, the answer is somewhere between 7 and 10 years from the date the disruptive force was first introduced.

This hypothesis is driven from consumer patterns covering music, video and travel trends; in particular, the rate at which consumers transitioned from records, to CDs, to buying music online; the time to adopt Apple TV and Netflix over VHS cartridges; and the time to transition from physical travel agents to booking online travel.

If consumer data is applicable to banks, we may be nearing the fourth year of the 10-year digital disruption cycle and only six years remaining to adoption. If you take a more conservative view and acknowledge early advancements in digital and mobile banking, the runway to adoption is much shorter and the imperative more urgent.

![Physical market share (% value) vs. Year of disruption](image)

Source: Lendit, 2016

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5 Mashable, August 30, 2016.
Strategy

Common elements of a successful strategy

a. Consensus, or at a minimum, a point of view, regarding the likely future state digital banking operating model.
b. A clear view towards the customer and their desired experience, products and services.
c. Use the 9 Levers of Value* methodology to determine where to play and where to win.
d. Consensus regarding key performance factors and capabilities required to be successful in the desired space.
e. A culture promoting innovation and rapid prototype success and failure.
f. An empowered executive team with sufficient influence to affect agreed-upon change.
g. A clear vision and forward-looking blueprint.

Success factors leading to disruptive change

Future state bank

Some reading this will likely think, my job is not to predict the future but rather position the bank for multiple outcomes. While this is true, a point of view regarding the future operating model may help to formulate your strategy. As an example, some banks believe millennial buying patterns are less aligned with the traditional full-service bank and more consistent with a disintermediated model. Here, the millennial selects the best product and service from the perceived best or least expensive provider. Others, believe this trend is short lived and the consumers will return to a relationship-driven model. Your view on this point will have a dramatic impact on your bank’s strategy to invest in loyalty programs or continue to develop relationship managers. Other future state considerations include the value of physical (i.e. branch) distribution channels, the future role of application program interfaces (APIs), the viability of platforms as a service model, the concept of an “every day bank” and the long term viability of non-traditional competitors.

Preferred positioning

Not all banks are equal, and as such, banks should have a clear point of view regarding where they intend to develop and defend businesses. For example, banks wishing to increase fee income may set course towards robo investment programs to develop or add wealth customers. Banks with a relative weakness in unsecured or small business clients may pursue lower cost digital acquisitions strategies, faster credit approvals, and customized digital credit products. Banks with retention concerns may develop advanced analytics coupled with digital platforms to empower portfolio managers to provide improved customer experience. Finally, banks may leverage digital to expand and improve key messages.

Capabilities assessment through innovation

Each strategy will inevitably include a list of capabilities the bank is currently not equipped or not sufficiently skilled to provide. This list will likely include strategy-to-capability gaps in systems, human capital, data and analytics, process and governance.

Once defined, banks typically subject each “gap” to a build, buy or align process. The analysis typically centers on which capabilities are core to the bank and therefore should be built, and those where an alliance or purchase decision offers faster ROI and implementation speed. A recent trend is for banks to create innovation centers to assist with potential build analysis through rapid prototyping. Innovation centers are also used to evaluate and fund potential buy and align alternatives — including but not limited to Fintech.

Innovation

Banks must learn to be more innovative in a digital economy. Fortunately there are many companies we can turn to for examples of “what looks good.” Successful innovative companies seek out and invest in new technologies and ideas. Innovative companies recognize not all ideas are “good” ideas and controlled failure is expected. These companies are agile, promote collaborative thinking and embrace change.

While we don’t expect banks to evolve overnight, a commitment to innovation and a recognition that the shift may be culturally and operationally challenging is paramount. Innovation should also be viewed beyond financial services. In fact, many digital best practices can be taken from industries such as auto, insurance and entertainment.

Leadership

Change is difficult. If not managed in a positive manner, change can become toxic to the organization and its mission. A bank’s ability to successfully navigate through digital disruption is predicated on strong senior management and attention to large scale change management. Simply put, a digital migration will impact employees’ lives. It may result in personnel displacement, relocation, or retraining. Regardless of the result, strong leaders must be visible and their digital strategies known.

Closing thoughts

Digital disruption will create winners and losers. Winners will be characterized as those with a clear strategic vision, an appetite for customer analytics and technologies, and a stomach for volatile innovation returns. In addition, winners will recognize and actively manage the material impact digital will have on its people and culture. Finally, winners will embrace digital not simply as a disrupter, but as an agent for change and an opportunity to better serve their clients and segments.

We invite you to reach out to us to continue the conversation.
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