THE ULTIMATE GUIDE TO DIGITAL BANKING TOOLS AND STRATEGIES
This paper provides advice and outlines best practices to prepare businesses to effectively tackle digital disruption. To keep their competitive advantage, banks need to develop the right strategy and organization, use the appropriate digital methods and tools, apply the latest fintech developments, understand customers better, form the right partnerships with expert contributors and get proactive with clients.

Banks are increasingly advised to adopt new approaches to their traditional workflow and redesign their organizations to meet the challenges of digital transformation. Flexibility and rapid response to changes have never been more important for financial institutions to remain ahead of the competition. This mindset should be at the very heart of businesses, especially when it comes to digital development, where a variety of solutions and novel approaches are already available.

**USE CLOUD-BASED SERVICES**

Many financial institutions use cloud-based applications today for non-core business areas, such as HR, CRM and accounting. But as the cloud environment improves and enterprises get comfortable with the new technology, the cloud ecosystem is gradually becoming a primary tool for core activities as well. Core service infrastructures in areas such as consumer payments, credit scoring, and statements and billings for asset managers’ basic current account functions will be well on the way to becoming utilities by 2020, PwC predicts.¹

Using cloud-based services could help banks respond to growing competition, expand their brands, avoid risk and better manage security, according to a study by Accenture.² Considering the operational advantages and cost-effectiveness of cloud technology, banks should look into ways to restructure their IT infrastructure and realign business processes.

**FIND A GOOD MOBILE APP**

With the number of smartphone subscriptions projected to increase to 6.8 billion by 2020 from 3.9 billion in 2016 ³ and mobile internet use exceeding desktop,⁴ banks should focus on mobility and offer dedicated applications to their customers.

When it comes to banking and finance, a survey by Google suggests that people increasingly turn to their smartphones and use applications to handle several aspects of their finances.⁵

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1. Financial Services Technology 2020 and Beyond: Embracing disruption, PwC, 2016
3. Ericsson Mobility Report, November 2016
5. How people use their phones for finance activities, Google, 2016
Most companies focusing on e-commerce have already turned to mobile apps enabling incremental sales. Adidas, for example, reported a 59% growth year-over-year in its e-commerce division after sales hit the €1 billion mark for the first time in 2016. According to the German sports brand, the growth can partly be attributed to its efforts in mobile commerce, particularly the successful introduction of a mobile application which is based on a model where growth comes from direct consumer referrals and the company rewarding those people who bring in new customers. Adidas expects e-commerce to be the fastest-growing sales channel within the company, with revenues expected to reach €4 billion in 2020.6

API, Open API:
An open API (often referred to as a Public API) is a publicly available application programming interface that grants developers programmatic access to a proprietary software. APIs are sets of requirements that govern how one application can communicate and interact with another.
Figures from Virgin America show that mobile conversion rates tripled in less than three months when the company launched its first mobile application in 2014 that enabled purchasing tickets. Additionally, more than 200,000 users downloaded the app in the same period. \(^7\)

**DO NOT FEAR OPEN APIS**

Mobile phone ecosystems were built on and boosted by the notion of third-party software development: third-party applications add value to existing software. Banks and financial institutions also increasingly adopt this approach, although many shy away from third-party developments because of security and other concerns. Banks should prepare for regulatory changes, like the introduction of PSD2 in the EU, \(^8\) which also stimulate the banking sector to accommodate the trend.

Many major players have already decided to share their data: in November 2016, Citi launched an API Developer Hub to connect with developers and enable them to build innovative client solutions. Also, the company announced collaborations on specific development projects with several partners, including Mastercard and Virgin Money.

HSBC launched its Open Banking API project in December 2016, which provides up-to-date information about the location and facilities of HSBC branches and ATMs, detailed product information for personal and business current accounts, lending to small to medium enterprises and commercial credit cards. HSBC plans to deliver new APIs by early 2018 to allow personal customers and small businesses to share data securely with other banks and trusted third parties. Besides, in June 2017 HSBC started a digital B2B platform for its business clients to connect with each other. The solution, titled HSBC Connections Hub, is designed to let the bank’s clients to use HSBC’s network to interact with potential business partners around the world. Customers create a business profile for their brand, including company information, products, locations and activities. A smart search algorithm will then highlight potential buyers and sellers in other markets. Alternatively, customers can look up the profiles of specific businesses using search variables.

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7 Work&Co, 2014

8 Payment services (PSD2) - Directive (EU) 2015/2366
HUMANS CAN’T SCALE, MACHINE LEARNING CAN

Many decision-makers might still consider the need to apply machine learning technology negligible. But a recent study by Juniper found that the integration of artificial intelligence (AI) is likely to gain substantial benefits – due to the highly data-driven nature of the banking market – and spending on machine learning in fintech may grow tenfold by 2022.  

Several AI-based solutions are expected be fully integrated into the core processes of financial institutions in the next 3-5 years. These may include intelligent chatbots, fraud prevention and detection methods, market abuse and rouge trading recognition, automated customer journey analytics based on pattern analysis and smart predictions for personalized offers.

In 2016, JPMorgan launched a predictive recommendation engine to identify those clients who should issue or sell equity. Given the initial success, in 2017, the company expanded it to other areas, like debt capital markets, similarly basing predictions on client financial data, issuance history and market activity.

AI-based marketing automation systems can perform many of the resource-consuming tasks related to marketing activities and enhance outcomes. One recent example from Harley Davidson NYC shows how teaming up with a fintech company to develop an AI-based marketing intelligence software helped boosting digital sales to an all-time high. Prior to using this new technology, Harley-Davidson NYC’s all-time sales record was eight motorcycles in a single weekend. In its first two-day campaign, the AI almost doubled this record, selling 15 bikes. After six months, the company credits 40% of its motorcycle sales to AI-supported marketing efforts.

Using campaign goals, advertisements and KPIs provided by the brand, key features of the system include:

- Identifying new audiences
- Defining top-performing ad concepts and elements, and prioritizing them across channels
- Discovering unique behavioural patterns that trigger specific actions
- Predicting optimal pricing and reallocating budget to the best-performing channels
- Optimizing millions of keywords and test thousands of ad variations simultaneously

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AGGREGATE DATA FOR BETTER CUSTOMER INSIGHTS

Information gathered from transactions, customers and other business-relevant sources may help banks reinforce customer relation management, boost offer conversion rates and even increase up-sell rates.\(^\text{12}\) It is key to understand the nature of data and develop a strategy to use it effectively. To get better customer insights, banks should aggregate data captured via a number of channels. All personal information and banking data, including transactions history, could be available in one single portfolio, making it possible for banks to better understand their customers and offer tailor-made banking experience.

Collecting and aggregating information from traditional and non-traditional data sources will enable financial institutions to create in-depth customer insights via detailed client profiles.

\(^{12}\) Banking on Digital Simplicity, Boston Consulting Group, 2016
To realign marketing activities, banks should develop a company-wide analytics strategy, driving a shift towards a truly data-driven customer relationship management. This also means embedding analytics into core business processes and hiring people or third-party service providers with skills to apply the right data science methods, as well as envision well-defined and actionable insights.

A valuable component of complex customer insights incorporating non-traditional data could be geo-location information, which may include specific co-ordinates of general locations or merchants customers regularly visit, routes they travel daily or everyday habits they developed. These data are based on signals of mobile devices and could be visualised in the form of detailed maps to help better understand customer behaviour.

**ENHANCE YOUR CRM CAPABILITIES**

Based on accurate, dynamic and well-structured client insights, banking CRMs should be able to take that next step. For example, in 2013 Hungarian bank MKB decided to channel all customer-related processes to a new, third-party application, which improved customer service times by 25 percent, decreased customer churn by 5 percent and increased profits on the primary banking customer segment by 20 percent within a year.\(^\text{13}\)

On top of business-as-usual thinking, customer analytics and CRM leaders are now able to take their operations to the next level using various strategies:

- **Mapping customer journeys**: deploying third-party applications or developing in-house tools, banks will get a deeper understanding of how their customers think and feel when interacting with them. Identifying the high and low points of the customer journey offers opportunities for business evolution.
- **Building cross-selling capacities**: businesses tend to forget about their existing customers. However, knowing the behaviour and preferences of existing clients enables banks to create highly personalized offers. Precisely targeted campaigns towards customers will not only result in incremental revenue, but will also support retaining clientele.
- **Keeping up the dialogue**: businesses often overlook the importance of ‘just’ talking to their customers. Through a wide range of channels (newsletters, live video chat, social media etc.) today’s CRM systems enable companies to provide feedback, educate and distribute all kinds of information and content. These efforts will create accountability and develop trust in the brand.

\(^{13}\) Banks put customer first with Microsoft Dynamics CRM, Microsoft, 2013
Organizational Choices for Digital Development

Banks have a wide range of day-to-day IT requirements, including managing infrastructure, maintaining a high-security environment for financial data and serving the specific needs of various departments. When it comes to any kind of new digital investment, one obvious question arises at the very beginning: who will do the job?

**FIGURE 3:** Digital development: In-house vs external

<table>
<thead>
<tr>
<th></th>
<th>In-house</th>
<th>External</th>
</tr>
</thead>
</table>
| **Advantages**| • Easier to oversee project management  
• More efficient communication  
• Core knowledge remains in-house  
• Reduces behavioural conflicts  
• More cost-effective in the long term  
• Easier to own and secure proprietary source code | • Substantially reduces initial costs by eliminating expenses on developing workforce and infrastructure  
• Easier to access highly specialized expertise  
• Allows more flexibility in project management  
• Advanced scalability: easier to adjust resources to unexpected changes and situations in the development process  
• Specialized agencies own know-how, even pre-existing components and tools for developing niche projects |
| **Cons**      | • Might require expanding workforce and restructuring the organization  
• More expensive in the short term (payroll, training, organizational development, workspace, software licenses, equipment etc.)  
• Steep learning curve for existing employees and new hires  
• Less economic to employ highly specialized experts with unique knowledge and skills | • Communication with external contributors might require more resources  
• Requires creating accurate legal framework defining work processes, response times, liability, ownership of intellectual property etc.  
• Third-party access to highly secure banking data and processes might require elevated security protocols |

Source: W.UP, 2017
Historically, companies had usually opted for keeping development in-house, but some factors, including finding novel financial strategies to deal with expense cuts and the speed at which technology progresses have driven more and more enterprises to outsource development projects or specific tasks to external providers.

Outsourced vs in-house software development is a debate that has been going on for a long time. Both approaches have their benefits, and the right answer depends on the actual strategy, project or situation: companies should consider many factors (corporate culture, long-term strategies, product development itineraries, costs etc.) choosing either way. In a lot of cases a hybrid approach is legit.

Serving the individual, not the masses – Digital transformation enables companies to obtain more detailed and relevant customer data, and use it for analytic intelligence to determine and align customer interaction.

Today, basic profiling and segmentation of the customer base is a part of every customer relationship management system. However, sourcing and applying additional information can elevate marketing capabilities to a higher level. One specific method is using life events of customers to prompt individualized actions or messages: based on the concept that major changes in life might affect buyer behaviour, marketers need to understand the current personal situation of the consumer and treat them accordingly.

A variety of life events can be captured and used as a trigger point for contextually relevant marketing activities:

- Graduating
- Starting a career
- Having a child
- Losing a job/career changes
- Selling or buying property
- Buying a car
- Getting sick
- Retirement
- Overspending
- Travelling abroad
Identifying a trigger point and using it appropriately offers a reason to engage with the customer, might open up a new sales opportunity, allows for updating customer data and might lead to increased likelihood for customer action.

Companies can gather their own actionable customer insights via multiple channels (personal meetings, surveys, direct phone approaches etc.), while specialized fintech agencies are able to supplement other non-traditional data like weather information, social media interaction and customer behaviour patterns.

Proactive banking – Besides offering a personalized banking experience, a deeper understanding of customers allows banks also to switch to a proactive attitude in customer service and sales activities. With relevant data and smart insights integrated with marketing automation, companies will be able to send better targeted messages, provide premium services and even initiate transactions.

**FIGURE 4:** Example of proactive bank-to-customer approach based on actionable insights and situational awareness

<table>
<thead>
<tr>
<th>1. Campaign: how to increase credit card usage?</th>
<th>A customer is near a sportswear store</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. The customer’s bank reacts in real-time</td>
<td>Relevant data available:</td>
</tr>
<tr>
<td></td>
<td>• Personal profile</td>
</tr>
<tr>
<td></td>
<td>• Transaction history</td>
</tr>
<tr>
<td></td>
<td>• Location data</td>
</tr>
<tr>
<td></td>
<td>• Leisure/sports profile</td>
</tr>
<tr>
<td></td>
<td>• Current discounts at partner stores</td>
</tr>
<tr>
<td></td>
<td>Push notification: 15% off on running shoes</td>
</tr>
<tr>
<td>3. Immediate action</td>
<td>The customer walks into the store and uses bank card to activate the offer on the purchase</td>
</tr>
</tbody>
</table>

Source: W.UP, 2017

Additionally, going proactive, companies can enhance service convenience to a premium level. Let’s say a customer is at the airport near their area:

- They are likely to be travelling abroad
- Bank uses basic customer profile, card information and location data
- Bank identifies that the customer’s bank card is not set to an adequate limit
- Via a push notification, the mobile banking app offers a one-tap solution to adjust limit to a pre-calculated value
SUMMARY

With the recent and ongoing shift to digital sales channels in finance, banks aspiring to stay competitive must adapt to a swiftly changing business environment. Accommodating a relatively slow and overly deliberate approach to digital development, many banks cannot keep up with today’s rapid transition. Financial institutions need to rethink their working schemes and implement more agile development processes.

The rise of fintech agencies might contribute to this crucial transformation: banks, using the different approaches and know-how of these companies, can easily gain and retain a competitive edge over other industry players.
W.UP is a next-generation digital banking software company, delivering cutting-edge products and services. Our products help bridge the gap between what banks can do and what customers wish they would.

If you would like to learn about **SALES UP**, W.UP's insight-driven sales and engagement tool for financial institutions, contact us for a demo!