#Digital: A Delayed Banking Reality?

Disruption Disciples Whitepaper #02

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Executive Summary

Digitalization is changing the very way banks operate. In order to build and maintain a sustainable competitive advantage, banks must embrace new business models and technologies that support innovation, creativity, clear and simple processes, and reduced hierarchical control.

New digital tools and platforms are enabling companies to directly engage their customers and improve their experience. When combined with powerful data analytics, these tools and platforms can give companies valuable data at every point during the customers‘ interaction with their products and services.

Companies that go digital are going alongside with the evolution of technology and are able to provide their customers with services such as virtual payments and virtual correspondence. By switching to the digital system, banks can enlarge their customer base by being able to reach them anywhere at any time. Additionally, by placing the customer at the center and using analytics to identify the customer and his needs, banks are able to offer tailored products and services. Finally, digitalization means automating processes and workflows (Robotic Process Automation) which provides cost savings across the whole value chain (automating and integrating channels, information and communication).

But what is at the bottom of this phenomenon? In the past, communication was more or less unidirectional; from top to bottom (Figure 1).

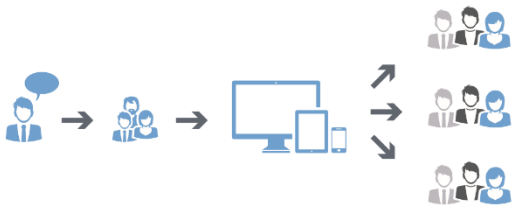

Figure 1: Communicated top-down information exchange

With the rise of social media platforms, communication and information exchange is done one-to-one, one-to-many, and many-to-many, making it a multidirectional information exchange (Figure 2).

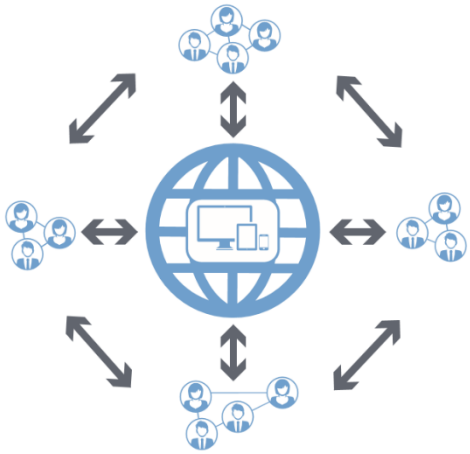

Figure 2: Multidirectional information exchange

What’s changing

Before the global financial crisis, the banking industry created shareholder value primarily through financial leveraging. Today, the conditions have changed. Increased regulations and competitive challenges are forcing banks to deleverage and to identify alternative sources of value creation. This demands a new banking business model based on customer relationships, where the bank is the preferred provider and focuses on regaining trust and, more importantly, on building customer engagement.

Digital has become omnipresent across all customer segments, especially when talking about millennials, and it is becoming a necessity to develop a digital model. Service quality and ease of access have become crucial for most customers, and in order to attract and hold on to them, banks must make adjustments to their business models and transform them to digital. Still, despite the ongoing debate on how to deal with the low net interest rate crisis and concepts proposed for the future of banking, no concrete banking business model that would effectively deal with the constantly increasing customer demand for digital banking has evolved.

This white paper elaborates on the emerging trends in the banking industry and illustrates their impact on the future of banking. It explains how banks can achieve sustainability with digital transformation and offers insights on key challenges and possible solutions to those challenges.

Defining Digital Banking

Digital banking goes beyond basic mobile and Internet banking. It entails a top-to-bottom innovation-driven business strategy (i.e. from customer needs to product model and strategy, down to the functional strategy and system landscape) with digital services as one of its core methods. These digital services include user experience, mobile devices and networks, social media and collaboration, customer analytics and channel integration. With the help of digital technology, banks are able to strengthen the customer relationship and uncover new sources of revenue through technology-based innovation (Lettig, S., Davidovski, V., 2013).
In order to achieve this, banks must offer innovative services that enable mobile payments, marketing services, sophisticated authentication mechanisms and location-based personalization.

As a result, they must use digital, e.g. internet, social media, mobile devices (Figure 3) to create superior customer experiences.

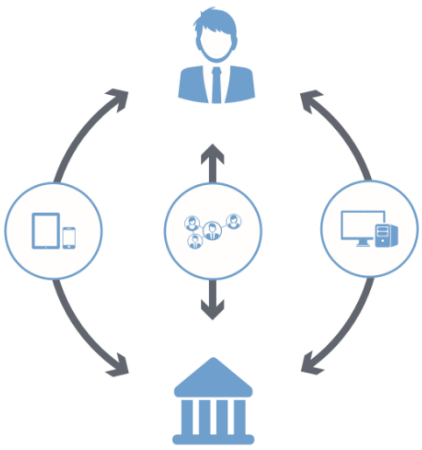

Figure 3: Digital user experience

Drenched in Digital

Given that digital communication today ranges from mobile phones and tablet computers to digital financial transactions via m-wallets (Lettig, S., 2013), the world today has become completely digital:

- Game-like interactive interfaces that improve the user experience by merging reality and virtual reality, which will be used by the banks in the future, are utilizing large amounts of data through rich visualizations.
- Advanced mobile services and networks provide digital security and enhance reachability for both the customer and the bank.
- Social and collaborative media empowers customers and employees and is shifting the brand message from business to consumers.
- Innovation in digital analytics and predictive models gives banks deeper insights into markets, i.e. consumer behaviors.
- New technology enables a seamless channel integration that translates into a seamless end-to- end experience for the customer, and a seamless and interrelated business for the bank.

Banks that digitize their processes will experience long-term revenue growth through increased customer loyalty and acquisition of new customers (Lettig, S., 2013).

Millennials' Expectations and Behaviors

Considering that the way of life is becoming faster, more dynamic, interactive and interchanging, the customers' preferences are changing accordingly. Today's customers want to spend less time interacting with traditional bank channels and expect quick and high-quality digital communication: comprehensive content and accurate context, instant search results and interactive features, paired with sophisticated design.

The bank's access channels are expected to offer a highly functional and convenient user experience. This means allowing a 24/7 digital or mobile access to banking services from everywhere at any time. The digital customer today does not shy away from quickly sharing positive as well as negative experiences, which can have a rapid and intensive effect on the brand. Banks must acknowledge the importance of the customer experience, which influences decisions regarding customers' choice of their primary bank. Any long-term personal decision or

choice of a bank is based on opinions of friends, peers and collaborators. Thus, any digital service offering should be built on the understanding of the following (Arns, F. and Schild, G., 2010):

- Customer behavior is changing faster than ever and is continuously evolving.
- Customers prefer digital services.
- Millennial generation's lifestyle has been completely digitized which makes digital a key aspect when choosing their primary bank.
- Digital is continuously spreading and renders old means of communication obsolete.

Technology Enables More Intuitive Customer Interactions

Banks have to do more than simple online banking if they want to cultivate customer relationships. Knowing the customers and their needs is the key which requires banks to use digital channels to mine user profile data, navigation flows and identify their preferences and behaviors. This can be achieved through an appropriate digital strategy, including modern systems and digital product/service offerings.

Figure 4: New customer's digital lifestyle

By augmenting the user-experience via seamless digital banking, banks have the opportunity to brand themselves anew, influencing customer opinions to deepen their relationships and even acquire new customers (Figure 4). Data from a seamless digital banking environment should provide the bank insights to their customers' lifestyles, opinions and behaviors. Doing it right will provide them sustainability, whereas doing it wrong can result in extensive damage to their revenue and customer base.

Security: Digital Banking's Foundation

Offering a wide range of digital banking products/services everywhere at any time requires more than just a seamless user experience but having a reliable and more robust security that will ensure safety of information and customer data and keep it safe from advanced cyber threats. Key features to elaborate on are:

- Security is the basis for building customers' trust and loyalty.
- Security has to be adapted to digitalization and its challenges (data and services should be available anytime and anywhere).
- Banks have to make sure that the information of the customer is safe at all times.
- Security measures have to be constantly improved to successfully tackle the rise and severity of cyber threats.
- Security is more than just a technical issue; it is a basis for business continuity and survival.

Backed by social media, nowadays customers have more visibility and knowledge about the markets and their offerings. Therefore, any digital banking product and service offering should be built on a solid understanding of the behavior of its customers.

Customers Know Good Banking Service

Backed by social media, nowadays customers have more visibility and knowledge about the markets and their offerings. This makes companies more vulnerable to customers who are generally very open to changing their service providers. With this and the fact that the banking industry is heading towards customer-centricity, banks must adjust their business and operational model to put their customers into the center and stay competitive.

Any digital banking product/service offering should be built on a solid understanding of the behavior of its customers, as well as on how to create and extend the brand. Unique customer service offerings are key for creating long-term relationships. To devise a successful technology, security and digital banking strategy, banks need to take into account both the current and future customer behavior.

Digital Banking Sweet Spots along the Value Chain

Going digital will allow banks to secure and extend their market share, acquire new customers and move into adjacent markets. This can be achieved by integrating sales channels, rearranging branch networks, modernizing organizational structures and IT systems, and strengthening their uniqueness (Lettig, S., 2013).

Challenge and Recipe

Given the magnitude of change, banks should consider appropriate measures for handling global macroeconomic changes (Siggelkow, N., 2001). Performance, choices of activities, policies, organizational structures, capabilities and resources should be part of the initial focus. The right internal fit among these choices can lead to sustainable competitive advantage because it will make imitation difficult. When considering a specific stage of change, particularly upstream, Nicolay Siggelkow (2001) identifies – through the concept of a performance landscape – environmental change signals that affect the fit of activities within the bank. Adopting this framework indicates how the fit of activities influence the link between macroeconomic changes and subsequent changes in the firm. Changes in the macroeconomic environment can thus be detected and their effect on the internal logic of a bank can be interpreted. Therefore, a change in the customer preference of service offerings such as m-wallet in terms of accessibility indicates a beginning fit-destroying change with a lower internal fit. Thus, a bank is forced to reassess its business model, because the changing environment (demand for digital products/services) indicates a flaw on the set of choice (existing offering-products/services) (Siggelkow, N., 2001), which in turn imposes that the set of activities (funding, product/service innovation, marketing, sales, transaction) along the value chain are no longer appropriate for distributing products/services to the market (i.e., the customer).

It is infeasible to offer "the" banking business model, because time and circumstances are constantly changing the macroeconomic as well as microeconomic dynamics. But observing various strategy mandates over the last 24 months, a trend of an innovative approach within the banking sector could be identified regarding business modeling. Because of the costumer moving more and more into the center of the game, it implies that first it is important to understand the customer's latent and expressed needs. From that, an according product model based on the "way of life" or "Lebensform" (Ulfig, 1966) is developed to meet those needs. A strategy is then defined to redefine or adjust the business model. This differs from the classical approach of first defining a firm's set of choice (Siggelkow, N., 2001), from which a business model and a strategy are defined. Ultimately, products and services were offered in a "branch-driven mode", i.e. imposed on customers.

This trend of an innovative approach mentioned before, also called Customer-driven Product Development (CDPD), from a demand chain management perspective has been applied by other industries beforehand. It can be seen as an evolution. Compared to the classical approach, CDPD can be seen as the counterpart approach to traditional R&D processes, which neglect direct customer involvement. Thus, the customer not being at the center, whereas in the CDPD approach the customer is being placed at the center. Research has been investigating on this

phenomenon from various perspectives: potential source of new products to feed into the existing product portfolio (Childerhouse, P., et al., 2002), actively including the customer through Quality Function Deployment (Cristiano, J. J. L., 2000), companies‘ role in relying on customer demand for new products, including different contingent factors (Kumar, S. and J. Wellbrock, 2009), not actively including the customer through Quality Function Deployment (Souder, W.E.B., 1997).

In sum, a recipe for “the” banking business model does not exist, because of the aforementioned arguments. But hope is provided at least by continuously searching the environment for signals/innovation (Nelson, R.R. and Winter, S.G., 1982) affecting their business model, as in the case of digitalization caused by “customer-centricity”, and the provided above innovative approach: 1) identification of customer needs 2) product/pricing model development 3) strategy definition 4) business model redefinition or adjustment. Here Berman (2012) argues that “Engaging with customers at every point where value is created is what differentiates a customer-centered business from one that simply targets customers well” (p. 21). Finding an appropriate solution can be challenging. However, some degree of hope is provided by using a design thinking approach. This allows for so called design-specific cognitive activities, which are applied during the design process (Visser, 2006). It comprises of “building up” ideas without limitation during “brainstorming” (Robson, 2000). Design thinking encourages participants to move out of their comfort zones and start to talk about their ideas. Here Simon (1969) provides seven stages: define, research, ideate, prototype, choose, implement, and learn, whereas Plattner et al. (2011) provides a five-phase approach: (re)defining the problem, need finding and benchmarking, ideating, building, and testing. Overall, the key is moving out of one’s comfort zone.

In their core, current banking business models are disrupted by digitalization, and need to be adjusted accordingly; which means that moving out of the comfort zone in order to adjust with the changing demands is of utmost importance.

Shortcomings of Current Systems

Currently, banks do not have a complete, complementary and integrated digital banking system that would function as a seamless platform for digitalize their value chains. Most banks operate more or less in silos and do not offer integrated digital service offerings that utilize all the information available. For the most part, they remain mired in branch-driven mode, where centralized product teams develop products/ services that are distributed to customers at the branch. In digital banking, the customer is at the center of the universe and is served products and services with “product and service, or channel wrappers” via omnichannels (self-service, branch, ATM, web, apps, contact center, social and collaborative media).

Fragmented Data

As a result of the constantly changing demands of organic and inorganic growth, most financial services IT platforms have evolved in an unplanned manner. A lack of integration is among the most difficult obstacles hindering operational synergies; multiple technologies, infrastructures and vendors are the norm, creating a data ecosystem that is highly fragmented. To operate in real time, on a global basis, banks must consolidate systems. Transformation, over the long run, will only come about through envisioning different transitional architectures. This clarity is required to establish a foundation for proper data analytics practice, which will allow banks to learn from operating, to increase efficiencies by automating business processes as well as covering new requirements, related to reporting and transparency, imposed by new regulations, especially in the area of privacy.

Data Management Challenges

To understand user behavior and embrace more agile ways of working, banks must create personalized digital services that use precise information in real-time. However, financial instruments and their transactions are a highly complex process that typically involves the exchange of large amounts of data from multiple sources. The process is so complex that it has been estimated that 92% of the cost of financial services business is related to data management activities such as acquisition, storage, retrieval, distribution, delivery and processing of data

(Rubin, H., 2011). Thus, banks need to develop, execute and supervise plans and policies that advance digital banking by controlling, protecting and enhancing the value of the data and information assets at their disposal. This is the key to creating a more efficient cost model.

Missing Complementary Collaboration

Autonomous units, or silos, can be found in most organizations. While silos have certain advantages such as enablement of risk management specialization by business units, they have down-sides as well. These business units can work in physical isolation and inhibit collaboration with other business units. In extreme cases, silos can become miniature ecosystems with its own business culture and processes. Since non-digital banks operate as silos – they often function without having an integrated and seamless system infrastructure – it is impossible to achieve fundamental complementary collaboration.

Infrastructure

Most banks rarely have a fully integrated infrastructure that allows them to seamlessly retrieve, store and distribute information and data – both up- and downstream – and to make seamless conclusions (analytics) on customer and market behavior. Personalization of Products and Services Banks that operate without a digital mindset and infrastructure in a branch-driven mode are unable to develop and deliver personalized products and services to customers systemically (Figure 5).

Figure 5: Personalized products and services

Without a customer-centric approach (Figure 6), a digital business model, and a suitable system landscape and infrastructure, it is not possible to conduct appropriate analytics for predicting digital customer behavior and needs, nor is it possible to develop digital products and services for generation Y, Z, digital affine and others.

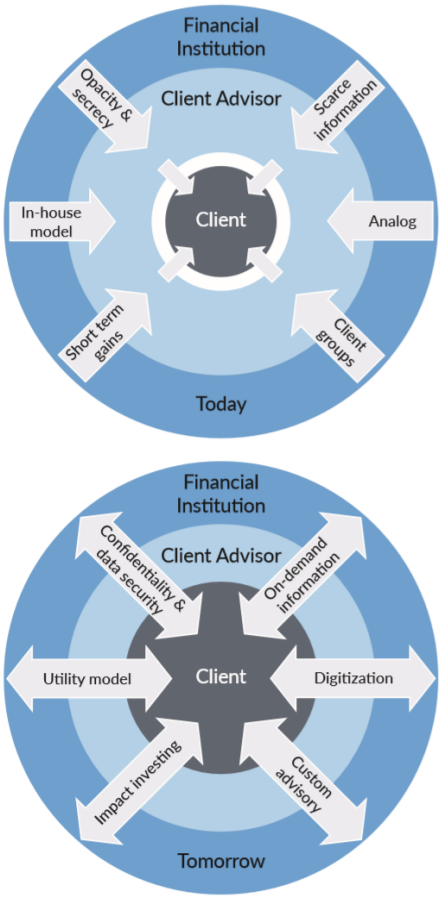

Figure 6: Tomorrow - customer-centricity

Overall, banks are unable to create a seamless and personalized digital banking customer-centered user experience without the appropriate business model, system landscape and infrastructure with related analytics. Given that, most banks lack these attributes, digital banking remains a dream for many of them and their customers. Thus, the future of banks will not be determined by advisors or by software. Instead, it will be entirely determined by their clients.

Seamlessly Integrated Digital Banking System Across the Value Chain

To better serve the digitally banking customer at any time, everywhere with everything he

wants, a seamless and integrated digital banking system that delivers appropriate and relevant services and products must be realized, i.e. integrated and deliberate services (Figure 7). Remember, then, only then, a bank is digital.

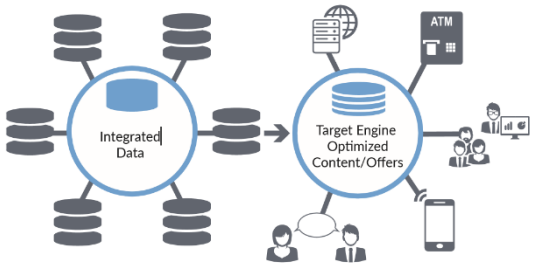

Figure 7: Integrated and deliberate services

Thus, the bank is able to interact up- and downstream with the environment (i.e., customer and peers, suppliers) to ultimately conduct proper analytics for tailoring personalized products and services to the customer. As such, putting the customer at the center of the banking experience. As organizations, products, customers and technologies continue to change, managers have been looking for an overview which allows them to understand how everything within their organization fits together.

Bossert et al. (2015) argue that "traditional consumer-facing organizations first need to 'address the need for alignment' if they want to be 'up-to-date'". This can be done by "adopting a two-speed IT architecture – one that decouples the management of customer-centric front-end systems and applications from the management of existing transaction oriented" (p. 2). Second, they need to address the "need for accountability", which means "adopting the same focus on digital product management that digital companies demonstrate – that is, empowering managers to incorporate users' feedback into their product development efforts and hold managers accountable for results. Traditional companies therefore need to emulate online companies' best practices in governance and talent development" (p. 2). Bossert et al. (2014) call this the "Two-speed architecture", including "a fast-speed, customer-centric front-end running alongside a slow-speed, transaction-focused legacy back-end. For software-release cycles and deployment mechanisms, the customer-facing part should be modular in order to enable quick deployment of new software by avoiding time-consuming integration. In contrast, the transactional core systems need to be designed for stability and high-quality data management, which lead to longer release cycles" (p. 3). This results in advantages for both the company and the customer, but requires commitment to implement (Bossert et al., 2015). They argue that "a central impediment is getting all stakeholders aligned on just how to synchronize front- and back-end systems, processes and where to decouple them in the interest of speed" (p. 2).

Conclusion

The goal of this white paper was to provide a generic outline of digitalization in the context of conceptualization of changing product and pricing models and making adjustments to both strategy and business model to make them more customer-centric.

Currently, banking business models are in misalignment with the customers and with their move to online. The adoption of a digital banking business model based on a seamless and integrated value chain allows a bank to provide, retrieve and store information and business and customer data up- and downstream. Additionally, it allows them to carry out relevant analytics on customer behavior, preferences and needs. With these insights, banks are able to maintain, deepen and extend their customer relationships. They are also able to ensure their competitive advantage and achieve sustainability.

Therefore, making strategic decisions involves consciously doing something differently (Porter, M.E., 1996), which leads to sustainable advantage or disadvantage. In this respect, competitive strategy requires a differing approach based on a different choice and set of activities (Siggelkow, N., 2001). This allows an actor to deliver a unique mix of value that is requested by the market, i.e. according digital product and service offerings. Hereunto, an imperative factor is the impossibility of imitation by a competitor. Such uniqueness is reached through complex interactions between various activities in a firm that are not reducible to the sum of the individual activities (Lettig, S., 2013). It is these synergies between the activities that result in value, and not the activities themselves.

Thus, choice means determining which activities a firm will perform and how individual activities are configured. Fit, the central component of competitive advantage, locks out imitators by creating a chain that is as strong as its strongest link (Souder, W.E.B., 1997).

An integrated and seamlessly digital value chain also enables the bank to consolidate its branch network at any time to reduce costs particularly when margins are on the decline. Simultaneously, processes can be optimized, business activities and service portfolios tightened and aligned to adjust to customer needs; i.e. service automaton and more efficient and straight-through processing of financial transactions. In addition, digitalization opens up new communication streams such as social networks, allowing instant communication, one-click purchases and 24-hour delivery. This in turn results in increased customer loyalty and improved profitability for the bank (Figure 8).

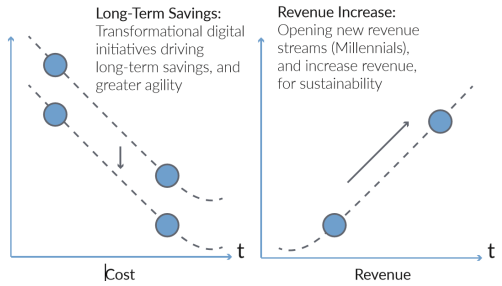

Figure 8: Advantages for the bank

Therefore, banks need to willingly start thinking about their readiness and their capabilities for digital transformation. In order to stay successful and to keep track of their customers, banks need to make the transformation as quickly as possible.

The purpose of this paper was to present the challenges banks are facing in terms of the new emerging needs and demands of the information age and the upcoming millennial generation. The white paper also covers the areas of the bank's business and operational model that can be affected by those changes.

Furthermore, it addresses the challenges and gives possible solutions to these challenges.

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Disruption Disciples
Disruption Disciples is a global movement that promotes the critical exchange of ideas and knowledge and fosters collaboration. We strive to ignite a new dynamic to advance civilization in large steps. Our circle includes those who give priority to change over optimization. Every building block that guarantees this disruption of the status quo is valuable irrespective of background or origin. We create an intellectual barrier-free environment and a countermovement to the echo chambers of our times. Disruption is a state of mind.

Today, different fields are converging at an increasingly rapid pace and value is created at their intersections. At the same time, there are social, economic and ecological challenges that can only be met by mastering complexity and collaboration. Technological progress enables us to do this on a hitherto unimagined level. We are confronted with many barriers that limit us in achieving our potential: lack of knowledge, creativity and collaboration. To reverse this, we need to reorient and inspire the synapses of the system. We are here to do exactly this: tear down the barriers and accelerate change.

We are a volunteer-run, chapter-based community. Starting with the genesis node in Zurich, we grow as our members establish new chapters all around the world and as we interconnect and meet. The congregations are inspired by the salons of the Enlightenment and are global social nodal points for silo breakers, transformers and disrupters under the patronage of inspiring hosts to expand the participants' knowledge through discussion and create opportunity for cooperation.