The Development of Mobile Banking Services in a Large Finnish Financial Organization

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Abstract

The chapter, based on an ongoing qualitative study, provides answers to the following questions: what are the case organizations rationales in developing mobile banking services, how are customer perspectives considered in developing them, and what are the implications of digitalization and m-banking for the bank and the client? Based on the findings, m-banking is seen to allow ubiquitous availability and efficiency of service provision, offering a sound rationale for their development. The flipside is that digital and m-banking services dilute the

human interaction, which challenges the rationale of improving the customer experience. The service development follows the software industry mode: customers are involved in the later phases of development to test and improve the usability of the service. This means service ideas are fitted to the needs and use habits of customers' after-the-fact. The increased use of m-banking services pave way to a self-service culture in banking services, and transforms customers to self-service operators providing many of their banking services themselves on technological platforms provided by financial institutions. The availability of m-banking services and automation of routines improve the life of the customer, and by streamlining the internal processes of the bank, provide efficiency gains for both parties. The increasing use of digital and mobile banking services heightens the importance of deeply understanding the customers, calling for active listening and dialogue, as well as bearing in mind the customers' role as active participant in developing and launching new services.

Introduction

It has been said that the digital revolution has challenged traditional business models in most industries (e.g., The Economist 2012), and banking is no exception. With the pressures caused by digitalization (e.g., Sajasalo, Auvinen, Takala, Järvenpää and Sintonen 2016), financial institutions have recently invested considerable resources into developing their mobile financial service offerings (Shaikh, Hanafizadeh and Karjaluoto 2017). The entire financial sector seems to be undergoing a transformation in which the overall digitalization of business and resulting digital service provisions have paved the way for new ways of interacting with clientele.

Migrating customers from face-to-face transactions to computer-mediated transactions—more recently, to mobile device-based transactions—has been ongoing in banking for some time (cf. Koenig-Lewis, Palmer and Moll 2010). The first wave of digital transformation took place at the turn of the millennium when the use of online banking services exceeded face-to-face interactions in physical bank branches. Online banking services grew steadily and peaked around 2010, at which point mobile banking (m-banking) services[i] were rolled out (OP Financial Group 2015). The swift technological development and end-user adoption of m-banking services aptly highlights the revolutionary nature of m-banking. To maintain their relevance in the economy, banking incumbents must remain at the developmental forefront of

m-banking services to fend off threats posed by newer, more agile players in their traditional domain.

In general, digitalization is portrayed as one of the major megatrends of our time that affects businesses and societies alike (Hajkowicz 2015, 107). OP Financial Group (henceforth OP Group), the largest Finnish-owned financial organization and the principal company studied herein, estimates that as much as 30–40% of current financial services' business volume will be wiped out in the next five to ten years as digitalization continues (OP Financial Group 2016). In response to this projected development, OP Group crafted an updated long-term strategy in summer 2016, stressing the importance of customer experience enhancement by digitizing services and processes (OP Financial Group 2017a). According to OP Group, the rationale for the chosen strategy lies in "… the changing customer behavior and the dramatic and fast digital disruption underway in the financial sector which will attract new market entrants on an ongoing basis." At the same time, digitalization is seen to provide "… an opportunity to improve customer experience, create new business and streamline the current processes" (OP Financial Group 2017a).

OP Group's chosen strategy coincides with the industry's current developments. For instance, Deutsche Bank announced not only a reduction in its bank branches in Germany from 700 to 500 to adapt to digitalization, but also an investment program of one billion Euro into developing digital services (Banking Technology 2016). Furthermore, Banco Santander in Spain announced a closure of 450 bank branches (Financial Times 2016) and contracted an advisory team to lead their transformation towards digitalization (OP Financial Group 2016).

The explosion in customers' use of m-banking services (Yen and Wu 2016) highlights the importance of understanding how m-banking service development takes place in financial institutions, as well as show they integrate customer perspectives into the development of these services. This massive increase is also reflected in the usage statistics of our case organization's m-banking services: its m-banking application called OP-mobile, which was launched in 2012, surpassed its internet-based e-banking service (OP.fi) in March 2016 by hitting 14.5 million monthly instances of use compared to OP.fi's 10 million (OP Financial Group 2017b). Furthermore, the fast-paced changes in consumers' use of banking services is all the more evident by examining how OP.fi initially developed in 1995, as it took five years for patrons to use OP.fi more than traditional physical banks for accessing their banking

services (Tivi 2016; OP Financial Group 2016; OP Financial Group 2017b). This makes the transition from physical to electronic, and later to mobile banking, rather striking.

As the number of smartphone users worldwide is forecast to pass five billion by 2019 (Statista 2017), actors in the financial sector will have to monitor this development closely. M-banking appears to be the fastest-growing digital banking channel worldwide (Wonglimpiyarat 2014; Shaikh, Hanafizadeh and Karjaluoto 2017), and this is why we focus on the development of OP Group's mobile financial services in this chapter. The specific goal is to shed light on how developers regard and incorporate consumer perspectives into m-banking services so that service adoption can take place effortlessly, thereby encouraging the use of m-banking services. Previous studies (e.g., Koenig-Lewis, Palmer and Moll 2010) have pointed out that perceived risks and trust-related issues, such as fears of personal information or funds being given to third parties without consent, have formed barriers in the adoption of mobile financial services (e.g., Chen 2013; Laukkanen 2016; Kim, Shin and Lee 2009; Hoehle, Scornavacca and Huff 2012).

Despite such barriers, this chapter dissects the rationale for the continued promotion and development of m-banking services as expressed by developers within our case organization, as well as those operating at the front line. Among other things, earlier research has pointed to saved time and costs (on the sides of both service providers and end users), a lack of limitations from time and space (cf. Moser 2015), ease of access, and increasing customer demand, especially among younger generations (Calisir and Gumussoy 2008), as driving forces behind increased m-banking service usage.

Theoretical framing

Mobile banking and payment systems (MBPS)

Mobile banking and payment systems refer primarily to new channels of distribution for regular bank customers or account holders (Shaikh, Hanafizadeh and Karjaluoto 2017). In this chapter, we primarily focus on OP Group's two existing MBPS services and their development. These services are OP-mobile, a secure service channel to manage banking and insurance transactions, and Pivo, a mobile service app that allows OP Group customers to keep track of all account transactions. Unlike OP-mobile, Pivo is open to customers from all

banks, regardless of their patronage to OP Group. In addition, Pivo gives users access to various offers from OP Group's partners, as well as the opportunity to perform instant payments using the recipient's mobile phone number.

Digital service design and development

The competitive setting in banking services is rapidly transforming from one containing few established local service providers into one with seemingly innumerable providers, all unlimited by time or space (see Sajasalo et al. 2016). As such, digitalization poses major challenges for incumbents of the financial sector. The digital revolution has challenged several established business tenets that financial institutions have relied on for decades. For instance, changes in regulation, such as the directive on payment services in the internal market (PSD2), are projected to revolutionize the relationships between banks and their customers by allowing third-party agents, the so-called Payment Initiation Service Providers (PISPs) and Account Information Service Providers (AISPs), access to consenting customers' banking information without incumbents having a say in it (see EUR-Lex 2015).

Furthermore, the digital revolution in banking services is predicted to elevate customers' influence on banks by setting them at the center stage of future banking services. Instead of simply being *provided* banking services, customers are in a new position of being able to *demand* services that fulfill their current and future needs. Banks must find ways of catering to such needs to build and secure outstanding customer experiences and relationships (OP Financial Group 2016). The financial landscape favoring customer influence has placed heightened pressure on financial service providers; they must offer innovative new services to not only retain their current clientele, but also to attract new customers.

Several service innovation models have been proposed in existing literature with varying emphasis on the drivers of such models, whether external or internal to the organization (e.g., Darmanpour, Walker and Avellaneda 2009). For instance, Barras (1986, 165) proposes that service innovation follows what he calls a "reverse product cycle," and he ended up applying the model to innovation in financial services (Barras 1990). Instead of following the Schumpeterian model of technological revolution progressing from radical product innovation to more incremental process innovation—which is typical in manufacturing industries—Barras (1986, 1990) argues the following process cycle in service industries: first

are incremental process innovations meant specifically for boosting productivity and driving down costs, then comes innovation meant to improve efficacy and quality, and the final step is emphasis on radical service innovation aimed at generating new and competitive services; this creates differentiation from other firms trying to enter and capture new markets.

Research setting

Our research task is to empirically dissect the development of OP Group's mobile financial services. The goal is to shed light on how customer perspectives are regarded and incorporated in the development of m-banking services by their developers so that adopting services—and eventually using them—would be effortless for consumers, thereby encouraging them to use m-banking services. We seek to complete our research task by obtaining answers to the following research questions:

1. What are OP Group's rationales in developing mobile banking services?
2. How are customer perspectives considered in developing mobile banking services?
3. What are the implications of digitalization and m-banking for the bank and the client?

Our research strategy follows qualitative thematic analysis (e.g., Eriksson and Kovalainen 2016) to analyze the data. Empirical data were collected from interviews to access in-depth information about the processes involved in the development of m-banking services. To investigate the phenomena of interest empirically, we have constructed a qualitative data set.[ii] Using purposeful sampling (Flick 2007a, 2007b), we invited members of the organization involved with digital and m-banking to participate in our study. Table 1 categorizes our interviewees by organizational rank and professional field.

[Insert Table 1 about here]

The interviews lasted 30–60 minutes each and resulted in some 220 sheets of transcriptions. Moreover, in addition to the interview data, our analysis is supported by internal documents (management strategy presentations, e-banking and m-banking usage statistics) provided by OP Group. We have covered several organizational echelons' perspectives on m-banking services and their development to better understand various actors' roles in developing their services, as well as how the developers make sense of their customers' perspectives.

Findings

We structure our analysis and present our findings following our research questions. For clarity and concision of presentation, we will present our answer(s) to each question at the end of each theme.

Rationales for developing mobile banking services

In late 2016, two financial professionals in private banking characterized the role of digital and m-banking in their line of business as follows:

> We encourage the use of m-banking to boost customer satisfaction and efficiency, as we see it as a better tool for customers than those our competitors have to offer.

> Our clientele are accustomed social media users. We need to keep up with our competitors and provide solutions at a fast pace. From an efficiency perspective, routines, such as automated credit checks, can be robotized to smooth out work processes. Automation makes life a bit easier for customers, and us too. That's efficiency.

Internally, digitalization and mobile services are means of improving the efficiency of back-office routines and reducing the chances of human error. Combined, they can fend off competitive pressure from various sources. For instance, the PSD2 directive taking effect in early 2018 is projected to intensify competition since new competitors riding the wave of digitalization are entering the industry (e.g., Sajasalo et al. 2016). As financial markets grow, incumbents are preparing for the post-PSD2 world by intensifying m-banking development. OP Group has also expended considerable effort in developing m-banking applications for all major mobile operating systems (Android, iOS, and Windows) to make both the OP-mobile and Pivo apps widely accessible, thereby increasing their use. A senior manager in m-banking service development describes the evolving competitive landscape and the transformation of business logic in banking:

> In 2018–2019, new regulations [PSD2, GDPR, MiFID II] will dramatically change competition. Banking will experience the same transformation as many other already digitalized industries; there will be service platforms, marketplaces and applications utilizing customer data. This is a totally foreign model for the financial sector … the new reality is that you have 8,000 financial service providers right at your fingertips to pick and choose from.

While there are sound reasons for an organization and its customers to transition to digital and mobile services, equally sound counterarguments appear in organizational discourse. Even some financial professionals in top management take a critical stance toward the digitalization trend that has taken over organizations, highlighting some potential risks and drawbacks:

> There's a fast-paced plan in place to make OP.fi the main sales channel by 2019. I got rather discouraged in a TMT meeting when even younger colleagues fluent with the digital world had their reservations with the plan. Our internal reporting services [Fall 2016] show merely 1.5% of sales originating from OP.fi. Is it due to lack of credibility, or just failed communication?

> Many have parroted the idea that "more will change in the next 3–5 years in this business than in the last 50 years," but are our systems able to keep up with the pace? What if OP.fi fails to turn into our main sales channel? Yes, housing loan applications have started coming in through OP.fi, but still, every single loan is finalized manually.

Furthermore, it appears that some members of the organization believe that the less routine solutions the customers require, the harder it is to handle their needs via digital and mobile means. This highlights the continued need for human interaction in various transactions and the importance of human expertise, as explained by two private banking professionals:

> Digitalization won't replace everything "old." You're able to perform various transactions digitally, but it is more important for people to have a real person to discuss and weigh alternatives to determine which is advisable. It's situations like those when you need expertise and caring people.

> If you're already knowledgeable of the ropes of investments and loans, it's basically just a modification of your previous transactions. In such cases, digital transactions might work well. But if it's your first time, nothing beats personal face-to-face contact. If we have the resources to combine the two, doing so would undoubtedly be our competitive asset.

Clearly, the risks associated with transforming business models and related processes causes apprehension: even those already immersed in the digital world have doubts regarding the transformation and its speed. Moreover, while digitalization and mobile services appear to be competitive weapons, so too did personal face-to-face service provision. It therefore appears that both are needed, and finding a balance between the two is likely critical in the emerging competitive landscape, as a senior manager in service development notes:

> We are currently juggling two balls: we have the new digital world with its own operating logic, and we have the old world whose operating logic must be optimized. To survive, you really must win both battles.

The answer to our first research question—"What are OP Group's rationales in developing mobile banking services?"—has multiple facets. From the organization's point of view, the rationales stem from competition-related aspects; keeping up with established competitors, preparing for challenges posed by new entrants (cf. Sajasalo et al. 2016), efficiency, automating functions that are invisible to the customer as much as possible, transferring routine daily banking transactions to be performed by the customers themselves, as well as customer benefit-related issues; flexible 24/7 access to services, and ease of use. The most prominent counter-discourse about digitalization's positive aspects cite the need and longing for human interaction, which may be jeopardized by the transformation to digital and mobile service provision.

Thus, digitalization and m-banking are seen to allow ubiquitous availability and efficiency of service provision, and therefore, offer a sound rationale for developing technology-assisted means of interaction with clientele. However, digital and m-banking services dilute the human interaction that has a heightened importance in establishing and maintaining trust,

thus challenging the rationale of improving the customer experience. This particular tension remains unresolved and neglected in the OP Group's official strategy.

Taking the customer perspective into account

Enhancing customer experience is an integral, strategy-derived rationale for promoting m-banking in the OP Group, and more generally, an integral part of developing such services is to involve the customer in service development. The idea of integrating various customer inputs into developing software products/services is not new—quite the contrary (e.g., Alam and Perry 2002). Software development as a field of science and practice have developed numerous models for the process of software development, and in virtually all of them, probing the existing or potential customers' needs and preferences features prominently, even to the extent of referring to co-creation, a concept popularized by service dominant logic thinking (e.g., Ordanini and Pasini 2008; Vargo and Lush 2004).

To take the customer perspective into account in developing m-banking services, OP Group utilized the following established modes of engagement with the customers: 1) customer committees having a more official nature in that the members of the committees are nominated from among the customer-owners of the individual cooperative banks making up the OP Group; 2) feedback channels embedded in both the e-bank and m-banking applications allowing a more unofficial and direct channel of communication between the customer and the developers; 3) face-to-face interaction as part of both scheduled and unscheduled customer appointments with tellers in which the current services used by the customer and future needs are regularly charted as part of the meeting agenda; and 4) invited focus group panels summoned by the service design and development teams consisting of either existing customers, or a random sample for probing customer needs or conducting usability testing of m-banking applications, for instance.

The effort to involve customers in the design and development of m-banking services features recurrently in our informants' thoughts, as exemplified by two IT professionals:

> It's the customer we want to hear from how a given service should function. But then, we want to launch the first version through agile development ASAP.

> We refer to MVP [minimum viable product], a version that is sufficiently good for its intended use to attract the interest of the clientele.

> Design thinking has made a breakthrough recently. I'm not sure if our recently implemented workshop-based approach of working on ideas was copied from Google or someone else, but we now bring in actual customers to test our ideas with quick prototyping to see how they fly. It's the service designer's job to integrate customer perspective in all development. If both the designers and customers agree on the benefits, only then will a new service proceed to technical analysis and production.

Service developers, describing their work and the process through which new services are introduced to the clientele, not only emphasize the importance of involving the customer over the entire development cycle, but also refer to the need for the process to proceed quickly from idea generation to the launch of a new service. A change in the development logic is evident, as a service development manager comments:

> The unwritten rule in banking was to never launch an unfinished product/service. Ever. But even as we speak, we are running end user pilots of the new OP.fi service [fully functional alongside current service]. Previously, we would have finalized the new service and tested it in the lab to a T, and only then transitioned from the existing to the new at once. Now we get feedback from the pilot to determine issues, and fix them on the go.

Regardless of the customer appearing frequently in the developer excerpts above, these thoughts at the same time implicitly highlight the limited role of customers in service development when it comes to innovation. There are no instances in our data of genuinely new services initiated by customers, but instead, their role is to become involved in the development of already brainstormed services. As the excerpts above demonstrate, the role of the customer in service development could be best characterized as either a beta-tester or initiator of requests for additional features to be added to already existing services and applications. Thus, this kind of customer involvement may be seen as more about supporting the usability development of the services and applications offered by the bank, rather than

initiating idea generation, which is generally the case in service development processes (e.g., Vargo and Lush 2004).

As the OP Group itself states, integrating customer perspectives serves as the guiding principle in developing m-banking services. However, even the Pivo application was originally coined by a developer of the mobile development unit of OP Group; obviously, the "end product" is a result of a long-term mutual development process. Typical of mobile applications, Pivo is also undergoing constant updates and feature additions as new versions are rolled out. While customers are placed at center stage in the parlance of the service developers, the idea of developing new services differs somewhat between customer-initiated and developer-initiated service development. A service developer characterizes the idea of the influence of customer feedback on development:

> The inclusion of the client in the product development, ensuring that the services meet the clients' needs, and that their perspective serves as the starting point of development, is my job [as a service designer]. We constantly monitor customer feedback and wishes as we go. For instance, an e-mail billing feature was just added in OP-mobile for business users based on the wishes of our customers.

The answer to our second research question—"How are customer perspectives taken into account while developing mobile banking services?"—is multipart, similar to our first research question above. On the level of organizational discourse, the customer appears as the central figure in service development. Putting the customer at center stage in organizational discourse may be seen as rooted in the customer orientation discourse dominating both academic marketing discourse (see Skålén, Fougère and Fellesson 2008; Skålén 2009) and more generally, business practitioner discourse stemming from the service marketing paradigm (see e.g., Grönroos 1978, 1982). Customer discourse offers a source of legitimation for both the organization itself and for those responsible for developing e-banking and m-banking services within the organization.

Moreover, the cooperative roots of the OP Group make the centrality of the customer in organizational discourse, especially that of the customer-owner, understandable. After all, the goal of cooperatives is to create benefits for their members (Jussila, Tuominen and Saksa

2008), or more generally, to promote the economic wellbeing of their members (see Puusa, Mönkkönen and Varis 2013). However, while the customer appeared prominently in organizational discourse in relation to service development, the actual role of customers was less pronounced than the discourse would suggest. Instead of being true co-creators of services, the role assigned to the customer was to provide feedback for the improvement of existing services, as discussed above.

In terms of the development process, while various established channels for customer participation do exist, they may be characterized as developer-initiated rather than customer-initiated, apart from some instances regarding service features reportedly added based on customer demand. Therefore, from the customer's perspective, there is an interesting tension: on the one hand, ease of use and assisting customers with their daily banking needs by allowing access on a 24/7 basis appear as driving forces for development, but on the other hand, the customer's belief is not necessarily the initiator nor the true beneficiary of the development. The customers may be seen as having been "forced" participants in the process of digitalizing their banking services, first in the form of e-banking and more recently, in the form of m-banking. A private banking financial professional reminisces on the process of transformation to e-banking and draws a parallel to the ongoing transformation:

> Back in the day, we taught the customers—by force, in truth—to use the online services. This [m-banking] may be the next similar thing.

The mode adopted by the OP Group in e-banking and m-banking service development reflects the tendency of much of the software industry in general: rather than involving the customer in the idea generation phase, customers are involved in the later phases of development with the aim of testing and improving the usability of the service developed by IT professionals. Service developers are, in other words, testing and improving their own service ideas to make them fit the needs and use habits of customers after-the-fact, instead of actually eliciting user needs or problems at the beginning to build appropriate services from the ground up.

Implications of digitalization and m-banking for the bank and the client

Digitalization appeared as an inevitable phenomenon, akin to a force of nature, for the members of the organization. To survive among the competition, financial institutions are portrayed as desperately needing to develop digital services for their customers—m-banking services in particular—to provide essentially ubiquitous banking and payment services to benefit the customer. While m-banking is often seen to support equality and availability, it is not universally so. In particular, some financial professionals were concerned about the exclusion of certain customer groups, most pronouncedly, the elderly, who may not possess high-speed internet access and smartphones, nor the technological savvy required to make use of digital services. Moreover, in terms of customer feedback, there appears to be one other segment in the dark: the socially excluded. While in need of banking services in order to be able to function as members of society, they have no voice. Senior ranking financial professionals raise the following concerns:

> [Involving the older generation] is a major challenge … those with wealth tend to be in their 70s or over, retired entrepreneurs and such. They are not heavy users of smart phones. Instead they tend to treat our private bankers as their personal secretaries who will get the job done.

> I don't think the customers relying on the physical branch for banking services will change their ways anytime soon. They may have limitations: age-related, unwillingness to learn new ways, or other. The reasons may relate to social exclusion too. These people are unable to take on new services. We encounter them at the till.

As discussed above, from the perspective of the OP Group, the development of m-banking services and digitalization of services more generally centers on two main rationales: competition and efficiency. Pressured by competition, no bank can divert from the trend of introducing more m-banking services. As more m-banking services are introduced to keep them in the race, it increasingly leads to services becoming commoditized, and as a result, they do not offer a source of sustained competitive advantage to any of the competitors in the long run (cf. Barney 1991). Moreover, developing additional services means that vast amounts of resources need to be invested in improving customer experience and security.

The implications of digitalization and increased provision of m-banking services for the customer experience, elevated to top priority in the strategy of the OP Group, are twofold. It is likely that for the representatives of the younger generation, invariably referred to as Generation Y, the Internet Generation, Millennials, or Digital Natives, digital services enhance the customer experience due to this population being at ease with the digital world comprised of tools and processes—such as m-banking services—rather than technologies (Booth 2009, 3, 15). Being at ease with digital services and utilizing them almost as an extension of the individual him/herself obviously paves the way for the adoption and use of m-banking services. However, digital natives have grown very demanding of their applications through their extensive use, which places extra pressure on the development of m-banking applications in terms of their ease of use, appearance, and speed of performance (see e.g., Ickin et al. 2012). For the older generations, the digital immigrants (Prensky 2001), the push for m-banking services may at first diminish the customer experience, but with increased use and habituation with the use logic of the applications, it is also likely that the digital immigrants' customer experience will be enhanced. A middle management financial professional points toward the importance of truly knowing the needs of customers and what affects their experience:

> We want deeper understanding, we are on top of NPS [net promoter score] ratings as it is. That's great, but we want to know how we are able to improve even further. A single rating [NPS] doesn't help much if we want to know why someone would not recommend us; what should be done better so that s/he would? We want to tap into authentic customer feedback so that we know which aspects we need to improve.

To elaborate on the importance of knowing the customer, as well as receiving customers' first-hand feedback and fresh top-of-mind responses related to their physical or digital service encounters with the organization, the middle manager outlines ways in which a more thorough understanding of the customer experience is obtainable through relying on low-tech measures like personal contact with the customer:

> What does being customer-centered and managing customer experience mean in practice? It means, for instance, that tomorrow morning, I will pick up the phone and call several customers who have had appointments over the past

> couple of days. I will ask them, "How did we fare, what could we improve on, and what are your future expectations on our business hours or service channels?" and those sort of things. We, us managers and senior management alike, need to generate a true understanding of the customers' wishes by getting in touch with them personally and talking things over.

Furthermore, the development of m-banking services appears to resonate with our case organization's values. Most financial professionals from our data agree that one of the OP Group's core values, humaneness, can be fulfilled more effectively with m-banking services because mobile devices provide customers with a real-time connection to the bank. As one manager states, "[T]he bank is closer to people than ever before; it goes along in your pocket wherever you go." Therefore, the new ways of building an even stronger sense of community than was previously available to financial institutions appear as particularly interesting findings based on our data. Through m-banking, financial institutions have the capacity to employ new, virtual means for community building and engaging clientele in a meaningful dialogue to further develop such services. While m-banking promises new means of community-building, it has also raised some criticism. Two senior managers comment on the discordance between digitalization and traditional humane cooperative values and challenge the perception of fit:

> There are not enough value discussions conducted at the moment … will there be a robot holding the hand of a senior citizen … how will we care for our customers when everything is changing?

> Those who are unable or unwilling to use digital bank services are mentioned just once in our strategy. That's all. Someone made a slightly sarcastic comment in a meeting: "Does that mean that we'll send them a Christmas card?"

Thus, the unresolved challenge is how to interact with, maintain, and further develop various services for customers who are unwilling or unable to use digital banking services. Should they be left to their own devices, or, as suggested by the cooperative value base of the organization, be cared for through either existing or new tailored services? This may be another issue to be considered explicitly in the strategy, as the issue clearly puzzles even senior managers within the organization.

The answer to our third research question—"What are the implications of digitalization and m-banking for the bank and the client?"—distills into three main points. First, digitalization paves the way to a self-service culture in banking services. This process leads to an increasing number of customers becoming self-service operators who provide themselves the banking services they need by working with technological platforms and tools provided by financial institutions. In a world characterized by increasing self-servitude, customers have effectively become part of their service provider's workforce. They not only constitute an unpaid workforce, but they are also paying service providers to be a workforce as service charges apply for the use of the technology platform.

Second, according to our findings, the availability and flexibility of m-banking services and the automation of routines—such as credit checks and managing properties and wealth—improves the life of the customer and streamlines the internal processes of the bank, thus providing efficiency gains. However, several informants express concern that there is also an inherent risk of losing real-life interaction and humane caring—integral parts of the value base of a cooperative organization. The real competitive advantage may therefore lie in taking both aspects into account in the development of new digital m-banking services.

Third, the change facing banking due to digitalization is likely to be dramatic as a potentially almost infinite number of competitors can enter the industry, which makes truly knowing the customer more crucial than ever. Therefore, there is a heightened need for deeply understanding the needs of the customers, be they digital natives or digital immigrants. No customer group can be neglected. Truly understanding the customer requires both quantitative and qualitative feedback, active listening, and engaging in dialogue—without forgetting the customer's role of active participation in developing and launching new services.

Discussion

It appears that the financial sector is on the verge of a major disruption brought about by digitalization. In preparation for the new competitive landscape just around the corner, in early 2018 with the PSD2 directive opening up payment services, all major banks, not just the OP Group, our case organization, have resorted to m-banking as the latest step in the

digitalization of banking services in order to cushion the blows of the turmoil that is projected in the near future. The opening of financial markets through the PSD2 directive allows entry to banking for not only the incumbents of the industry worldwide, but countless other organizations outside the traditional industry boundaries, allowing customers a new kind of leverage in their relationships with financial institutions.

Furthermore, as customers have grown used to the various applications available to them in the hundreds of thousands, they have at the same time grown increasingly demanding, which further increases the leverage of customers toward financial institutions. Sub-par performance of or user experience with any application will not be tolerated for long. This obviously places enormous pressure on banks and the m-banking applications they develop, as gold standards against which they are measured are the topmost rated applications of the Android, iOS, or Windows platforms, not necessarily other m-banking applications. The m-banking applications offered by the banking industry incumbents cannot fall too far behind in this new competitive landscape because customers will have a myriad of choices among m-banking applications; in the future, as the market opens, they will not be content with the application offered by the bank they patronize.

Furthermore, the changing relationship between the bank and the customer may be perceived to be, partly at least, a generational issue. The CEO of the OP Group recently pointed to a salient prevailing tension related to the issue: according to this CEO, the Finns love their bank branches more than they actually use them. Thus, even if customer feedback demands bank branches be retained, people still use m-banking as their primary, e-banking as secondary, and bank branches only as the last resort channel to handle their bank affairs. Whereas digital immigrants, the older generations, have become used to physical bank branches, ATMs, and later on learned to use e-banking, and most recently are learning to cope with the technological wonders of m-banking, digital natives may never have set foot in a bank branch.

However, as they live their lives online and inhabit the application space, m-banking applications offer a natural way of connecting with a bank—more specifically, the services they offer (see Booth 2009). Unlike older generations, digital natives not being attached to a bank as an institution, may well be at ease with a possible future state in which digitalization, intensified competition, and a search for lower cost and prices lead us toward a scenario in

which banking becomes permanently and irrevocably self-servitized through technology-assisted ubiquitous services operating on mobile platforms. Whether this actually leads to the dissipation of personal service by financial experts, and to a situation where all human contact is removed as we connect with banks solely via applications, service robots and artificial intelligence (AI) systems, remains to be seen.

This gloomy future—depending on the observer's viewpoint—is most likely a concern to advanced Western economies in which time and cost savings, or more generally, efficiency, is highly favored. Similarly, ease of use, 24/7 availability, individuality, and similar features dominate the development of m-banking services in advanced economies. The rationales driving the development of m-banking services in advanced economies is therefore, apart from competition, convenience, whereas the rationale in developing economies driving their development and promotion may be said to be a necessity. To be able to provide banking services at all, these services must be available on mobile platforms through partnering with mobile operators and banks (e.g., Aker and Mbiti 2010).

While the use of m-banking services has increased almost exponentially, one must be careful when interpreting usage trends and their implications. While the use of e-banking (especially m-banking) appears to have skyrocketed recently and has seemingly displaced all other forms of interaction between banks and their customers, face-to-face human interaction—either within a physical bank branch or assisted by technology in various ways—is unlikely to disappear in the future. This is due to the different channels and forms of interaction different consumers need; the simple, routine tasks that customers have already grown used to performing themselves using self-service technology require no intervention from financial professionals. However, for the time being, e-banking and m-banking services fall short in providing customer solutions to more demanding, non-routine tasks that require true expertise and "a second opinion" to be helpful in making financial decisions. Although artificial intelligence (AI) is projected to provide such solutions, it cannot provide the degree of insight currently offered by seasoned professionals in the field.

Whether the future of banking will be application and AI-driven or something else, banking and the financial industry on a whole will inevitably change. Bill Gates reportedly made the following observation in the mid-1990s (see e.g., Filkorn 2016): "We need banking, but we

don’t need banks anymore. Do you think someday we can open a bank account or ask for a loan without physically having to come to the bank?”

While we have yet to see the demise of banks, the ways in which banking is conducted have transformed considerably since the mid-1990s, and some aspects of Bill Gates’ speculation are already a reality; with some limitations, one can open a bank account and apply for a loan without physically being at a bank branch. While, the claim made nearly a quarter of a century ago has not been fully realized, in that financial institutions are still necessary, ongoing technology-enabled digitalization highlights the development of m-banking services as a critical factor in the future of all financial institutions. The issue to be solved now is how to balance future digital influences on banking with the established traditional operating logics and societal norms. This requires balancing the needs of both digital immigrants and digital natives and actively immersing both groups in developing future banking services, whether they consist of e-banking, m-banking, or another form of banking entirely. As put by our informant: “To survive, you really must win both battles.”

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[i] In this chapter, we understand mobile banking services as financial services whose access relies on cell phones, smartphones and tablets (cf. Shaikh & Karjaluoto 2016).

[ii] This chapter is part of an ongoing research project. The project, which the Strategy, Accounting and Leadership as Practice (SALP) research group of the Jyväskylä University School of Business and Economics (www.jyu.fi/jsbe/en/research/groups/salp) started in 2012, examines strategy-related issues in banking. To date, ca. 150 interviews within OP Group have been conducted. In this chapter, we utilize data collected between 2016 and 2017.

List of Tables

Table 1: Interview data

Description	Middle/top management	Specialist/ teller	Total
Financial professionals	15	3	18
IT professionals	2	3	5
Total			23