



MobilePay versus Swipp – Main insights from a Nordic country for mobile payment apps

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MobilePay versus Swipp – Main insights from a Nordic country for mobile payment apps

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Abstract

We describe the development of the market for mobile payments in Denmark. In the first step, we explain the two main competing products as well as their underlying technologies. In the second step, we also analyze the competition within the Danish market from debit card companies and the competition which stems from outside of the banking industry (Apple Pay). Based on our analysis, we derive some managerial as well as policy implications.

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Contents

1	Introduction	1
2	The birth of the industry and competition at an early stage (2013–2016)	2
2.1	The birth of the industry	2
2.2	Characteristics of the two products: MobilePay versus Swipp .	3
2.3	Why did the two players opt for different underlying technologies?	5
3	The development of the market (2016–2018)	5
3.1	The situation at the end of 2016	5
3.2	Beginning of 2017: The market entry of Nets' Mobile Dankort: The mobile phone as an electronic wallet	7
3.3	End of 2017: Apple Pay enters the market	8
4	Conclusions and recommendations	9

List of Figures

1	MobilePay: Open as a business model	14
2	Swipp: Closed as a business model	14
3	Mobile Dankort: The mobile phone serves as an electronic wallet	15
4	Usage of MobilePay in 2015	16

1 Introduction

Two sided markets are an important phenomenon of today's market dynamics and are also a crucial driver of technologies, products and services in the global economy. An important characteristic is the interdependency between at least two different groups of customers and the provider of the platform (Rochet and Tirole, 2003). The establishment and operation of such a two sided market requires coordination and integration between organizational units within one firm, between independent firms, as well as the private households as the end user (Kretschmer et al., 2018).

An operator of a two sided market has to consider its own capabilities, strengths, and weaknesses in terms of technologies and processes. In addition, it also has to incorporate the capabilities of its suppliers, rivals, and providers of complementary products and services. The business model has to show how the two sided market is generating value in the form of revenues and profits. Furthermore, the business model should explain how much of the value created can be appropriated by the market organizer and how much value will be extracted by third parties. As Kretschmer et al. (2018) point out in the context of platform ecosystems, 'managers must understand the nature of competition and collaboration [...]. Such strategic decision-making goes beyond issues such as critical mass, switching costs, compatibility, and network effects, and encompasses a broader set of social, cognitive, and technical considerations that affect innovation outcomes and the division of labor, control rights, and firm profits.'

In this paper, we use the example of the Danish banking sector and describe the dynamics of the market for mobile payment services. We shed light on the underlying technologies, competition, and success factors over time.

2 The birth of the industry and competition at an early stage (2013–2016)

In this section, we describe the birth of the industry for mobile payments, characterize the two technologies of the main competing brands, and elaborate the question, why these two different technologies were chosen.

2.1 The birth of the industry

Before 2013, several Danish banks cooperated in their activities with respect to e-banking and mobile payments. However, in 2013 the Danske Bank terminated the co-operation and came up with a product called ‘MobilePay’ on its own. To be more specific, the product was launched on 7 May 2013 (TV2, 2013a). About two months later, the remaining co-operation partners (Nordea, Jyske Bank, and 70 regional banks) also launched their product, called ‘Swipp’ (TV2, 2013b). While MobilePay took the market by storm, Swipp never took off. One market observer characterized MobilePay as being hip, new, and unique, while Swipp was regarded as being the ‘overweight young brother’, who tries to copy the behavior of the older brother, but slowly and clumsily (Løw, 2017).

In the fall of 2016, the development of Swipp was ended and all banks switched to MobilePay, developed by Danske Bank (Finextra, 2016).

Hence, it seemed that Danske Bank and its product gained the ultimate victory. Several articles asserted that Danske Bank was regarded as the winner of this war (Mathiasen, 2017). However, from the perspective of 2018, Danske Bank cannot be regarded as the winner anymore. In Section 3, we describe the most recent development of the market.

However, in the next two subsections, we will highlight the main product characteristics of MobilePay and Swipp. Furthermore, we will also explain why the two market players opted for different technologies.

2.2 Characteristics of the two products: MobilePay versus Swipp

The MobilePay app can be downloaded free of charge. After the download, the user has to initialize the app by choosing their own four digit pincode and typing in the debit card information. In Denmark, all banks rely on a debit card system called Dankort, which is operated by the company Nets. A key feature of MobilePay is that it is open to all customers who have a Dankort, irrespectively of which bank operates the checking account.

– Insert Figure 1 and 2 about here –

Since MobilePay is not restricted to customers of the Danske Bank, it is an example of an ‘open as a business model’ pattern described by Osterwalder and Pigneur (2010).

The competitors used a different underlying technology for the Swipp product: After the download of the app, the customer had to type in an identification code, which is called ‘Nem ID’. More or less it was impossible to install Swipp on the go, because a lot of Danes store their Nem ID transaction codes at home. Afterwards, one had to connect the app with the banking services and, in particular, type in the account number. This app is not open to customers of banks which are not part of the cooperation. This implies, for example, that customers of the Danske Bank cannot use Swipp.

After the initial set-up, the usage of both products is relatively simple: One has to type in the amount of money which should be transferred as well as a mobile phone number of the person who should receive the payment. After confirming the transaction by swiping a button, the receiving person gets a kind of SMS message that the transaction is completed.

The handling of the transaction is relatively easy compared to a traditional account-to-account transfer. The sender/payer has no need to type in the name of the bank, bank code, account number, or the name of the receiving person. Nor a very long and error-prone IBAN number. The sender/payer does not even need to know this kind of information! The only information needed is the counterpart's mobile phone number.

The transaction is free of charge for private transactions, despite initial plans to charge a very small even for private transactions.¹

A lot of private transactions are performed with the MobilePay app: For example, collecting small amounts of money for a birthday present at work, splitting the bill in a restaurant, or even homeless people write their mobile phone number on a sign in order to receive a donation. In its annual report 2015, Danske Bank (2015) reports that 35% of all smartphone users in Denmark use MobilePay at least once a week. As Figure 4 reveals, MobilePay was the third most frequently used app, after Facebook and Facebook Messenger, but ranking above Google Maps, Instagram, YouTube, and Snapchat!

¹Danske Bank announced in 11/2014 that it would drop a plan to introduce a service fee of 10 Øre per transaction (Danske Bank, 2014). Jyske Bank announced in 2013 that initially the Swipp service would be gratis, but a transaction fee of 25 Øre would be introduced in 2014. However, these plans were never put into practice (TV2, 2013b). At an exchange rate of 7.45 DKK/EUR, the amount of 25 Øre represents an amount of about 3 Euro Cents.

– Insert Figure 4 about here –

2.3 Why did the two players opt for different underlying technologies?

Danske Bank has only a limited market share. This is the reason why this bank relied on an *external* partner in order to create a product that is open to everyone.

Swipp is the cooperation of several banks with a larger market share. Therefore, these banks opted for a technology where transfers were transferred directly from account to account, without relying on an external partner.

The success of MobilePay can be explained by two factors:

1. First mover advantage and
2. open as a business model.

3 The development of the market (2016–2018)

3.1 The situation at the end of 2016

Despite the fact that Danske Bank was regarded as being the winner of this competition, one big problem remained in 2016: A lot of transactions were performed between private customers (C2C). For each transaction, Danske Bank had to pay a small commission fee to the underlying Nets company, because the MobilePay app was relying on the Dankort debit card system. Hence, the more successful Danske Bank was in this segment, the more money it was losing. This is because the MobilePay system is free of charge

for private transactions.²

After the fall of 2016 – when Swipp was abolished and all banks switched to MobilePay – this problem also became valid for all of the banks.

To sum up: The main winner does not seem to be Danske Bank, but Nets.

This is because the market opted for MobilePay as the winner, which relied on the external partner and the debit card system instead of using the account to account system.

As elaborated above, the C to C market is to some extent problematic, since Danske Bank neither charges the sender nor the receiver of a payment. It is problematic because the Danske Bank has to pay a service fee to the NETS company for using the underlying debit card. Therefore, Danske Bank switched into the commerce sector to try to get a market share, for example, in the supermarkets.

However in this market segment, Danske Bank directly competes with the Nets company, because these transactions are predominantly performed with the debit card.

In the first phase, Nets claimed to be not very impressed by this movement. We either earn money with the Dankort directly, or we earn money when customers use the MobilePay app and receive at least part of the charge

²One market observer came up with the following back of the envelope calculation in the middle of 2015: He estimated that 240,000 of the 260,000 daily transactions are private transactions. While the bank neither charges the sender nor the receiver, The bank itself has to pay an amount between 70 Øre and 1.39 Kroner (Seerup 2015). Multiplying these figures by 365 days and converting it into Euros, the loss per year is between 8 and 16 million EUR.

indirectly via the Danske Bank. However, Nets actively defended its market in the beginning of 2017 when it introduced its own payment solution called ‘Mobile Dankort’.

3.2 Beginning of 2017: The market entry of Nets’ Mobile Dankort: The mobile phone as an electronic wallet

In the beginning of 2017, the Nets company – which was issuing the Dankort for all Danish banks – itself entered the mobile payment market with an app called ‘Mobile Dankort’.

This product works as follows: Instead of using a debit card and typing in a security code at the supermarket terminal, the signal of the mobile phone itself serves as the identification signal. As a consequence, the customer does not need to get the debit card out of their wallet – instead the mobile phone is used as an electronic wallet.

With this app, Nets was trying to defend its original market debit cards and supermarkets against MobilePay (Boye, 2017).

What are the main differences between MobilePay and Mobile Dankort? Mobile Dankort is easier to handle within a shop because the mobile phone will send the identification signal and confirm the payment directly. With MobilePay, you need to open the app, type in the phone number of the recipient – or at least scan a QR-code. Hence, within a shop, Mobile Dankort is easier to handle.

However, in order to use Mobile Dankort, the receiving party needs to install a payment terminal. For very small companies, with low turnover rates,

MobilePay still has an advantage. Furthermore, Mobile Dankort can not be used for private transactions (C to C transactions) at all.

3.3 End of 2017: Apple Pay enters the market

In October 2017, ‘Apple Pay’ entered the Danish market (Olsen, 2017). Danske Bank was reluctant to offer Apple Pay as a service to its customers, because this product stands in direct competition with MobilePay. However, two of the former co-operative partners, namely, Nordea and Jyske Bank, were more open to the market entry of Apple Pay and offered their private customers the opportunity to use it. In 2013, these two banks were involved in the launch of the Swipp product, which afterwards turned out to be unsuccessful.

In the first months, several, but not too many, retail shops signed a contract for the use of Apple Pay. For example, the German supermarket chain ‘Lidl’, the gas station company ‘Cicle K’, and ‘7-Eleven’ co-operated with Apple Pay.³

In the meantime, the Jyske Bank opened the door for Apple Pay even wider: Since August 2018, all Danish households can use Apple Pay irrespectively of which bank they are a customer of. The ‘only’ prerequisite is that one has to apply for a VISA debit card of Jyske Bank (Birkeslund, 2018).

Since it was only Danske Bank which developed MobilePay, Jyske Bank might have thought ‘MobilePay is *not* my baby’ – and open wide the door for the market entry of Apple Pay.

The most recent development of the market structure looks as follows: In the

³See Olsen, 2017) for a full list of co-operation partners as of October 2017.

end of October 2018, Google Pay entered the Danish market. It was once more the two players Jyske Bank and Nordea, which opened the door for the new player (Jyske Bank 2018, Nordea 2018).

4 Conclusions and recommendations

In this paper, we described the development of the market for mobile payments in the Danish market. The solution which dominates the app market right now (MobilePay) suffers from the fact that the underlying technique uses a debit card system. Consequently, the app is – despite a huge market share – not profitable, but a loss bringer.

We are able to derive the following managerial implications:

- One idea to receive a positive benefit from C to C transactions is to charge a small transaction fee. Another idea could be to use the customer base for advertising to receive advertising revenues.
- Without a service fee, each and every transactions is ending up in a loss for Danske Bank and a profit for Nets. Hence, one drastic solution could be to abolish ‘MobilePay’ completely. Of course, Danske Bank could argue that it gets a positive reputation for its overall operations from the success of MobilePay. However, the improvement of reputation is a very soft measure compared to a loss in this segment measured in hard Danish Kronas.
- In the retail industry (commerce/supermarkets), the competition is very fierce: Nets, with its debit card system ‘Dankort’, as well as the ‘Mobile Dankort’ app, has a much better position in the market. Furthermore, Apple Pay entered this market segment in October 2017. We don’t believe that this segment will be profitable for MobilePay, so Danske Bank should stop all activities to acquire new customers.

- The Danish solutions can only be used within the Danish market. Larger international players like PayPal or Apple Pay are in a much better position when it comes to international transactions.

With respect to policy implications for other international markets which perhaps have a much higher rate of cash payments and where mobile payments do not play a major role right now: It seems to be important that the national banking sector co-operates as much as possible. The Swipp solution to transfer money from account to account without a third party in between (the Nets company) seems to be much more suitable for keeping the potential profits within the national banking sector. 'If this cooperation is impossible, it would be highly likely that larger players from outside the banking sector would take over the mobile payment business in the future.

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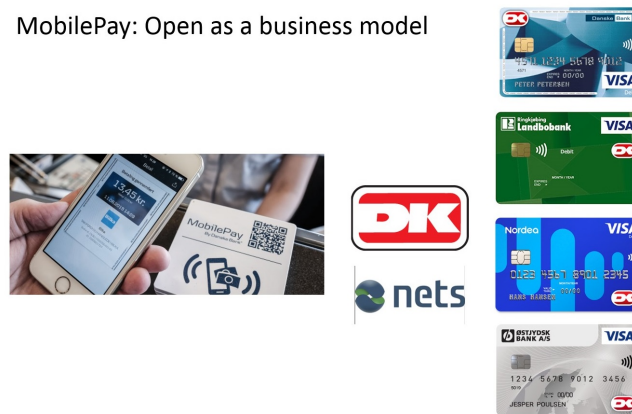
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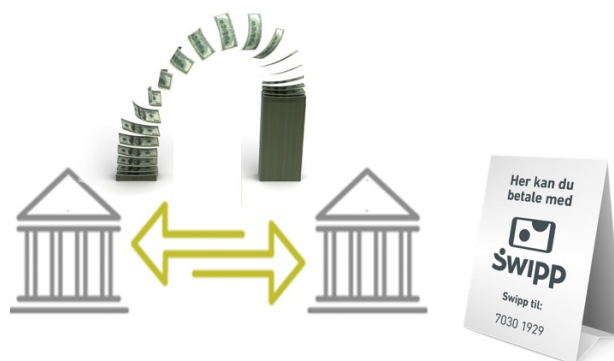
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Figure 1: MobilePay: Open as a business model



MobilePay relies on an external partner (Nets). A debit card (Dankort) is used as the underlying infrastructure in order to connect customers. Irrespectively of which bank issued the card, the MobilPay app is open to all customers of all Danish banks.

Figure 2: Swipp: Closed as a business model

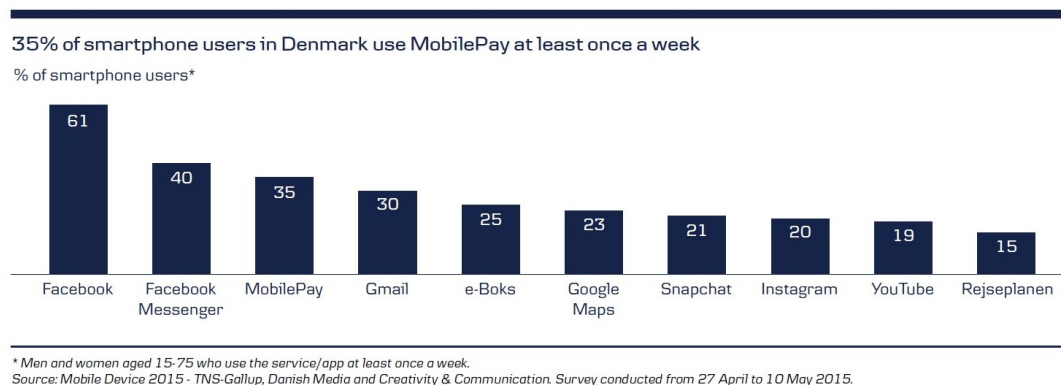


Swipp transfers money directly from account to account. Only customers of the partner institutions can use this app.

Figure 3: Mobile Dankort: The mobile phone serves as an electronic wallet



Figure 4: Usage of MobilePay in 2015



35% of all smartphone users in Denmark use MobilePay at least once a week. Only Facebook and Facebook Messenger are used more frequently.

Source: Danske Bank (2015), p. 10.