Mobile payment services in Sweden
PoS and P2P mobile payments, mobile ticketing

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Outline

- Trends in Sweden
- Mobile payment services in retail
- P2P mobile money transfer services
- Mobile ticketing services

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Example of Sweden: Main trends

- **High level of mobile smartphone penetration**

  - About **83%** of all mobile phones in use in 2015

  (Statista, 2016)

  ➡️ **Big market segment of potential customers**
Example of Sweden: Main trends

- Cashless society
  - Bank cards are the most common type of payment
  - $\frac{2}{3}$ of all payments at Point of Sale
  - The average value of card payment goes down:

  1998 – 700 SEK
  2011 – 400 SEK

Bank card payments replace cash

Example of Sweden: Main trends

- Many actors

<table>
<thead>
<tr>
<th>Banks</th>
<th>Mobile operators</th>
<th>Payment service providers</th>
<th>New payment providers</th>
<th>Local transport companies</th>
<th>Retail chains</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordea</td>
<td>Telia</td>
<td>Klarna</td>
<td>Payair</td>
<td>värstrafik</td>
<td>coop</td>
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<td>Handelsbanken</td>
<td>TELE2</td>
<td>unwire</td>
<td>iZettle</td>
<td>axfood</td>
<td>ICAMarknadsföreningen</td>
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<td>accumulate</td>
<td>Skånetrafiken</td>
<td>Bergsandels AB</td>
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<td>easyPARK</td>
<td>Seamless</td>
<td>Östgötatrafiken</td>
<td>Best of Brands</td>
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<td>SL</td>
<td>McDonalds</td>
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</table>
### Example of Sweden: Main trends

- **Use cases of available services**

<table>
<thead>
<tr>
<th>Actors / Solutions</th>
<th>Person-2-Person</th>
<th>Retailing</th>
<th>M-commerce</th>
<th>Transport</th>
<th>Parking</th>
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<tbody>
<tr>
<td>Swish (banks)</td>
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<td>Bart (banks)</td>
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<td>SEQR (Seamless)</td>
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<td>WyWallet (4T Sweden)</td>
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<td>Mobill</td>
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<td>Tele-P Easy park</td>
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</tbody>
</table>
The main actors and their roles

- **Mobile payment providers**
  - Technology platform and payment infrastructure provision
  - Customer (B2B and B2C) acquisition
  - Consumer billing
  - Money transfers between merchants and consumers

- **Banks or Financial companies**
  - Consumer billing
  - Money transfers

- **Merchants, retailers**

- **Consumers**

Mobile payment services in the retail
(payments at Point of Sale, PoS)

**Service provider:** Swedbank

- Payment option only
- A bank card based service
- Separate payment terminal
- Existing card payment infrastructure was used
Mobile payment services in the retail

Service introduction in the market

**Merchant:** Afood (The third largest Swedish retailer)

- **2012:** Installed at in 400 Afood's stores all over Sweden
- **28th of February 2014:** The service ceased due to low number of users
Mobile payment services in the retail

Bank-card based service

Later service was opened to customers of other banks

Bank card in the mobile
Mobile payment services in the retail

**Service provider:** Seamless

Financial credit companies (Gothia and Collector) manage payment transfers and customer billing

- Service integrated with the cashier system
  LS Retail => **no need for payment terminals**
- Separate service account, own payment service network
Mobile payment services in the retail

Service introduction in the market

Spring 2012: The service launch
2012–2013: Development of a network of merchants
- No need to invest: service roll out is free of charge
- Service transaction fee is 50% less compared to credit card
End of 2013: Targeting consumers
- Loyalty accounts and coupons integrated with the service
- Cachback payment
Spring of 2014: The service is accepted at more than 800 stores and coffee shops

Separate service account
Direct transfers from one service account to another

Issuing bank
Gothia, Collector
Seamless
Acquiring bank

Consumers
Merchants
Smartphones with the SEQR app
System integration QR-code

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18
P2P mobile money transfer services

P2P (person-to-person or peer-to-peer)

**Service owners:** 6 biggest Swedish banks
Swedbank, SEB, Handelsbanken, Danske Bank, Nordea, Länsförsäkring

- Unified solution built on existing bank payment network
- Phone number used as identifier
- Alternative to cash
- **Most popular use cases:** bill splitting, collecting money at schools, sport events, small merchants, second hand things, on-line payments

![Swish logo]

P2P mobile money transfer services

**Service introduction in the market**

- **Spring 2010:** Discussions of the service idea
- **December 2012:** Service launch – P2P money transfers
- **June 2014:** Launch of Swish service for a firm (C2B, customer to business) with integration to web-shops
P2P mobile money transfer services

P2P service

Mobile ticketing services

SMS for single tickets: The main actors and their roles

Before January 2013:

- Transport companies
- Technology solution providers
- Mobile network operators
- Consumers
Mobile ticketing services

- SMS ticketing service integration
- SMS ticket issuing
- Sending it to the end-user
- SMS ticket data-base management
- SMS ticket validation
- Charging request
- Payment transfers

Technology solution providers, SMS ticket aggregators

Public transport companies

MNOs

End-users

- SMS ticket validation
- SMS tickets

In January 2013

Change in legislation: The Payment Service Directive

The mobile operators are no longer allowed to handle payments and transactions for non-telecom services without being a payment providers => Otherwise they need a license for financial activity

The payment providers need to know the identity of their users making transactions

But: due to public procurement other payment service providers entered the market
Mobile ticketing services

SMS for single tickets: The main actors and their roles

Before January 2013:
• Transport companies
• Technology solution providers
• Mobile network operators
• Consumers

After January 2013:
• Transport companies
• Technology solution providers
• Payment solution providers
• Consumers
Mobile ticketing services

Change of market structure
SMS payments before January 2013

End-users

SMS payments → Technology solution providers, SMS aggregators → MNOs

Parking | Vending machines | TV voting | Charity | Airport coaches | Other public transport companies

Issues for users:
- If you had to travel across different regions, you needed to have subscriptions of different services
- Negative reaction to a need to register for SMS tickets

Mobile ticketing services

Change of market structure
SMS payments after January 2013

End-users

SMS payments

Samtrafiken & partners | IPX & Seamless | Plusdial & WyWallet | Mobill & Payex/OkB | Payex & Payex

Parking | Vending machines | TV voting | Charity | Airport coaches
Mobile ticketing services

SMS tickets in a form of a mobile app

Starting from 2015 – change of SMS tickets to mobile apps

Mobile apps: The main actors and their roles

- Transport companies
- Technology solution providers
- Payment processors handle Visa/MasterCard payments
- Consumers

Mobile ticketing services

Mobile apps:

- Travel information
- Trip planner
- Not only single tickets
Future of mobile ticketing services

Questions