## Introduction to mobile markets and services, actors and roles

Jan Markendahl IK1330, 25 Februari 2016

# Punkter idag Intro to mobile markets & services, actors &roles Examples: Mobile media and mobile payments Introduction to IoT and MTC Examples of IoT services O&A for the case study

### Punkter idag



Intro to mobile markets & services, actors &roles

- Examples: Mobile media and mobile payments
- Introduction to IoT and MTC
- Examples of IoT services
- Q&A for the case study

2013-03-15

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### Some expressions

- Actor
- Role
- Connectivity services <> Value added services
- Value chain -> Value network (configuration)
- Vertically integrated value chain
- Supply chain network
- Distribution network

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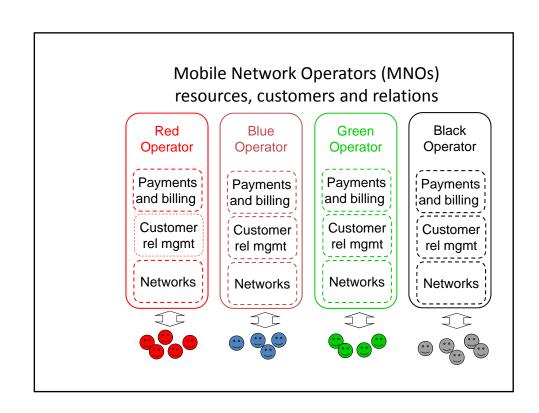
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### Mobile Network Operators (MNOs)

- MNOs have different resources (capabilities) and functionality to control the resources
  - Networks
  - Customer relation management
  - Billing and payment platforms

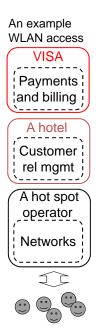
Black Operator

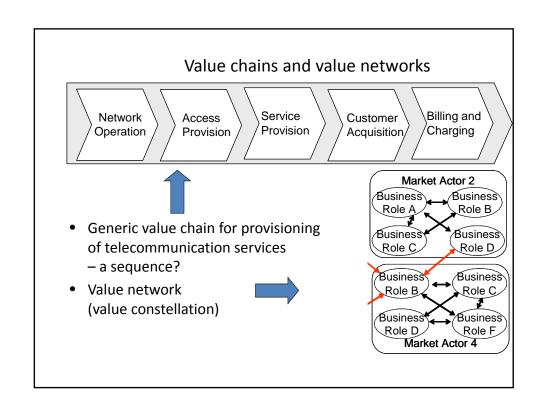
Payments | and billing | Customer | rel mgmt | Networks |



### Cooperation or not

- Traditionally mobile operators have been responsible for all or most of the resources (a vertically integrated value chain)
  - No need to cooperate
- The vertically integrated value chain is "opened up" and the activities and resources can be controlled by different actors
- BUT Many technical solutions imply cooperation with other actors
  - Roaming
  - Network sharing
  - Indoor wireless solutions
  - SMS ticket services
  - Mobile payments





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### Important for mobile(digital) services

- The services is NOT produced in a sequence!
   It is composed of many activities in a network
- Everything is "made" at the same time
  - Production
  - Distribution
  - Consumption

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### Punkter idag

- Intro to mobile markets & services, actors &roles
- Examples: Mobile media and mobile payments



- Introduction to IoT and MTC
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### Hur många använder/har använt senaste året?

- SWISH
- WhyWallet
- Izettle
- SMS betaining
- ICAs kontaktlösa kort









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### The Bank of Walmart: Cell Phones Replace Credit Cards

+ Comment Now + Follow Comments

It was only a  $\underline{\text{few paragraphs}}$  in last Friday's  $Wall\ Street\ Journal$ , yet it's likely the biggest retail story of the year so far.

We're referring to reports that some two-dozen industry leaders, including Walmart and Target, are discreetly working together to develop a mobile-payments system that essentially turns cell phones into credit cards. On the one hand, it's an old-fashioned cut-out-the-middle-man strategy, as these systems would compete against numerous "wallet platforms," including Google Wallet and the Isis initiative launched by a coalition of wireless carriers, as well as the credit card networks offered by major banks such as JPMorgan Chase and Barclays.

" to develop a mobile-payment system that essentially turns phones into credit cards

### The Digital Wallet's Future Is Now

+ Comment Now + Follow Comments

Technology has shaped the way we live in nearly every facet of life. One aspect that's poised to have the most impact, though, is the digital wallet.

Consumers are transitioning from paying with credit cards and cash to using whatever is easiest and most convenient for them, potentially saving a few dollars or earning rewards in the process.

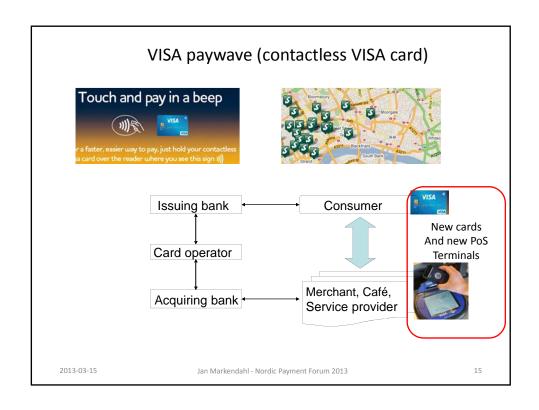
Companies like **eBay** (EBAY), **Square**, and potentially  $\underline{\mathbf{Apple}}$  (AAPL), are changing the way we pay for everyday goods and services.

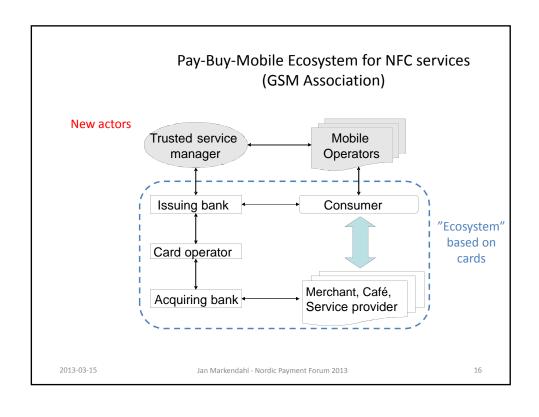
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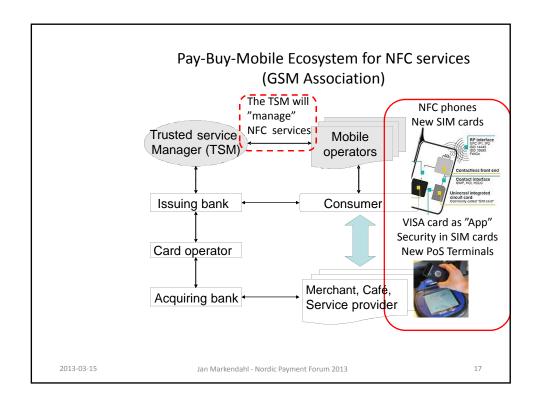
" Consumers are transitioning from paying with credit cards and cash to using whatever is easiest and most convenient for them"

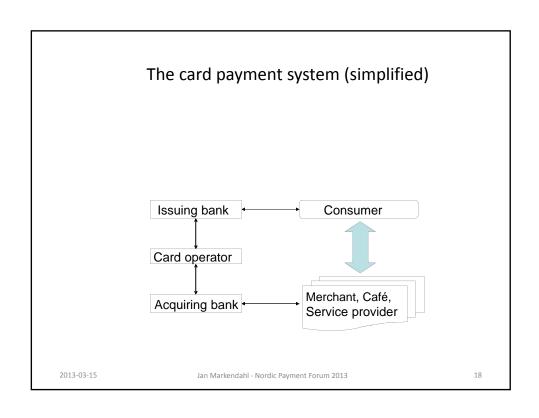
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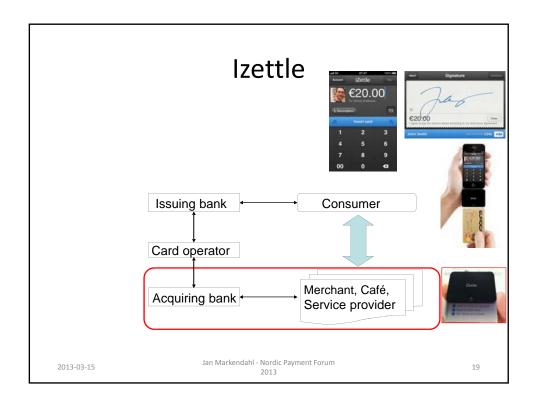
## The card system (simplified) Issuing bank Consumers Card operator Acquiring bank Merchants Jan Markendahl - Nordic Payment Forum 2013

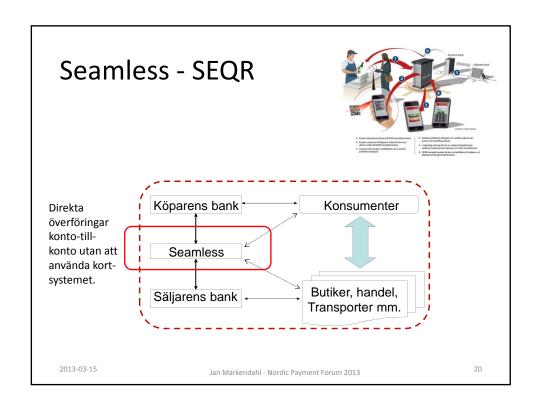


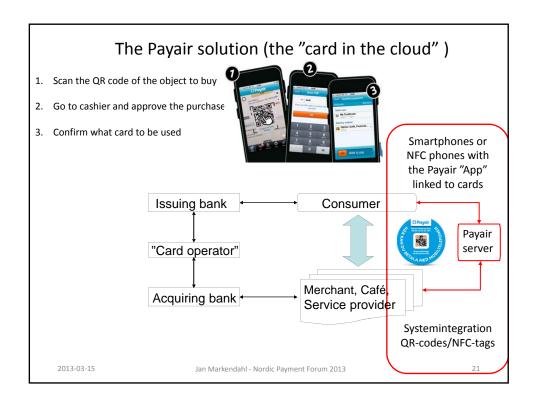










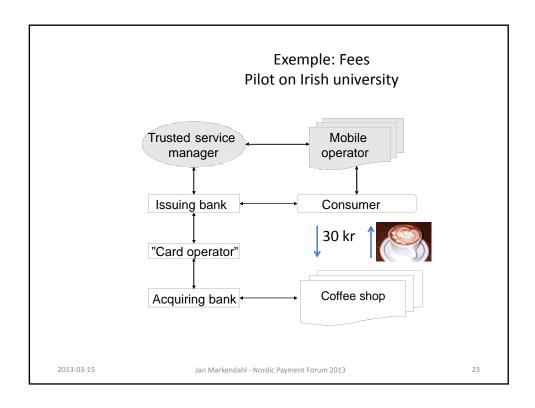


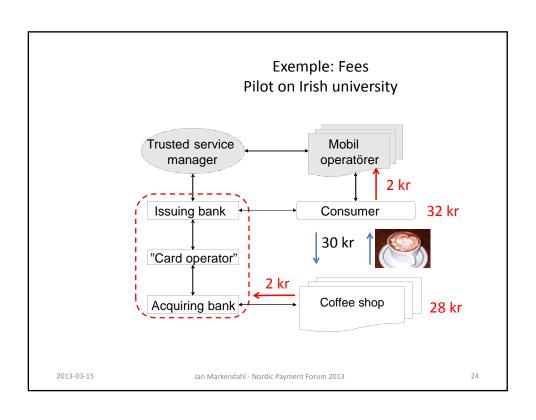
### Aspects to consider

- Customer value
- · What actors are involved
  - Who is doing what?
  - Who has customer relations?
  - Who has relations with merchants, public transportation actors?
- Who manages revenue streams?
- How is the solution designed?
  - How to access the money (accounts) of the consumer?
  - How to manage the transactions?
  - Is it a completely new solution or based on existing solutions?
- Are there obvious problems?
  - Fees
  - Relations
  - Agreements
  - Investments

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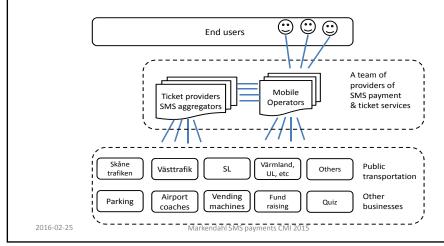
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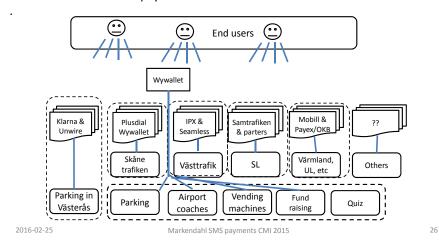
### SMS payments 2007 -2013

- Together with a number of mobile services and ticket providers the mobile operators offers SMS payments where the mobile phone subscription and bill are used for charging of the consumers.
- The main application area (90%) is single tickets for public transport



### SMS payments after February 2013

- WyWallet did not bid for the new contracts and were not involved in the public procurement of new ticket solutions initiated by the Swedish transport companies.
- A number of new actors (in new constellations) have got these contracts and entered the mobile payment market.



### What happened?

Consumers who wants to use SMS tickets in the four major cities need to register with four different payment providers and to keep track of four different user accounts and bills

SMS payments did drop 50-90% after 2013

Most public transport in Sweden now do NOT offer SMS payments

2016-02-25

Before 2013 All SMS payments on the mobile phone bill



Markendahl SMS payments CMI 2015

From 2013 SMS payments on many different bills



## Readings

- Two papers about mobile payments
  - J. Markendahl, T. Apanasevic, Trends towards fragmentation of the mobile payment market in Sweden, 29th annual IMP Conference 2013, Atlanta, USA
  - J. Ondrus, K. Lyttinen, Y. Pigneur, (2009), "Why Mobile Payments Fail? Towards a Dynamic and Multi-perspective", 42nd Hawaii International Conference on System Sciences, 2009.
- One paper about Mobile media
  - Aidi, Markendahl, Tollmar, Selvakumar, Huang, Blennerud.
     "Mobile Music Business Models In Asia's Emerging Markets",
     Int Conf on Mobile Business (ICMB), Berlin, 2013

2016-02-25

Markendahl, CMI summer school 2015

Aidi, Markendahl, Tollmar, Selvakumar, Huang, Blennerud. "Mobile Music Business Models In Asia's Emerging Markets", Int Conf on Mobile Business (ICMB), Berlin, 2013

- Case studies with interviews on location in
  - China
  - Indonesia
  - India
- Possible main actor for Mobile media services
  - Spotify type of company
  - Google or Facebook actor
  - Mobile operator

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