

More on markets, actors, roles and value networks + Q&A session for Home work 1



Jan Markendahl
November 7, 2013

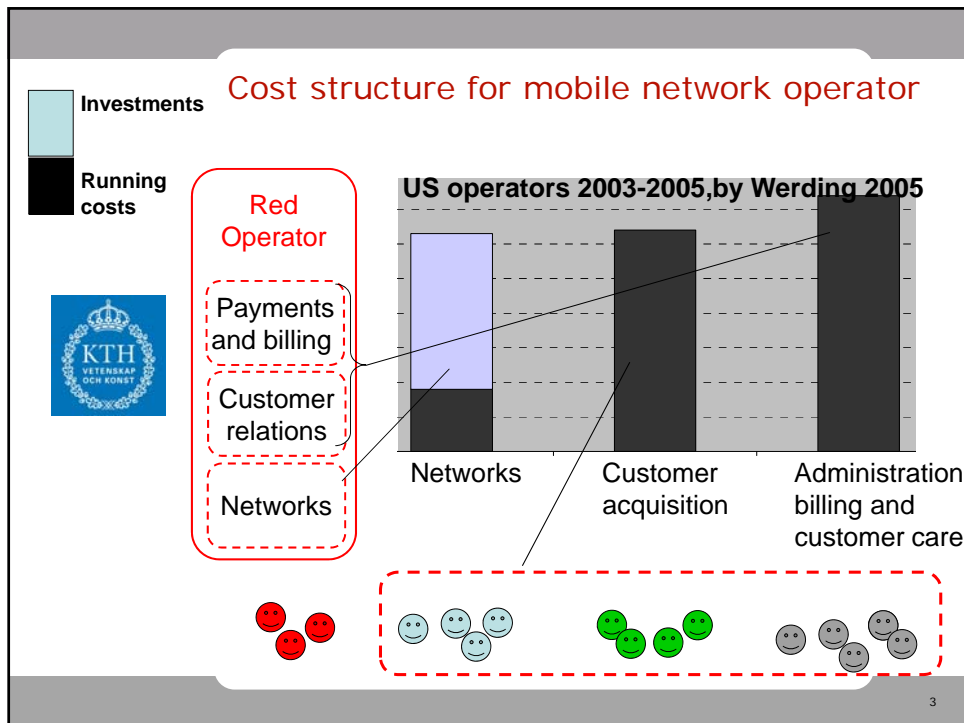
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Components in the telecom business - or any business

- Networks/Infrastructure
To build and operate the networks
- Customers
To acquire, manage and keep customers
- Services
To develop/offer services, operate platforms
- Money
To handle revenue streams, to make money



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- ### Aspects to discuss
- Actors and business roles
 - Actors and business relations
 - Distribution of business roles
 - Value chains, value networks and value constellations
- 
- Lecture on business model theories in part 2
 - Per Andersson Stockholm School of Economics
 - November 26, 10-12
- 4

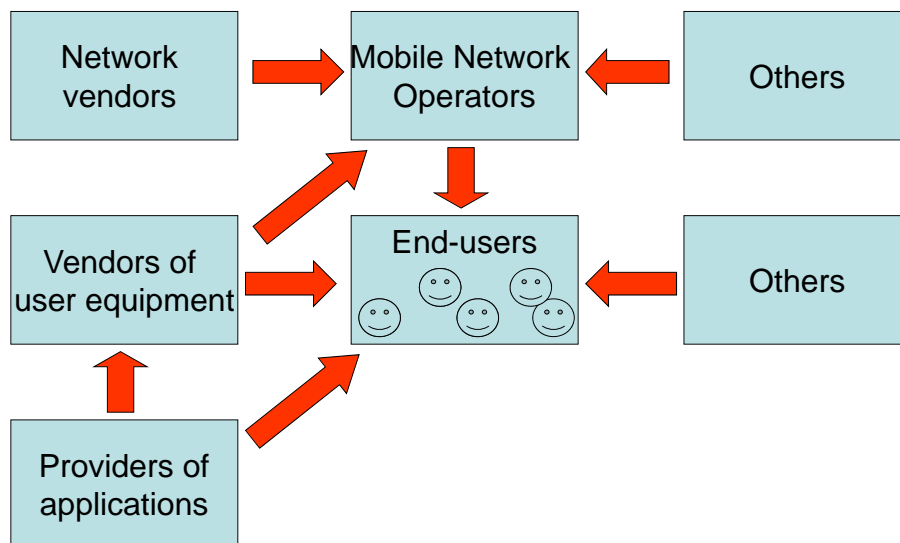
Two observations

- 1. There are totally different types of business logic within the telecom sector
 - A network business
 - A user equipment business
 - A service provisioning business
- 2. Wireless Internet access can be provided
 - By mobile operators
 - That control all (most) resources
 - By other cooperating actors
 - That contribute with different resources



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About actors and businesses

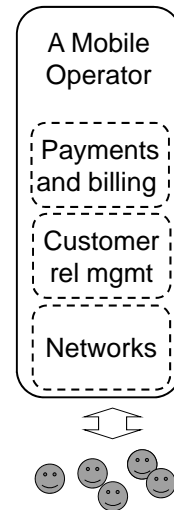


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Cooperation or not



- Traditionally mobile operators have been responsible for all or most of the resources (a vertically integrated value chain)
 - No need to cooperate



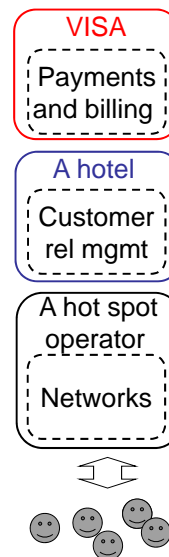
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Cooperation or not



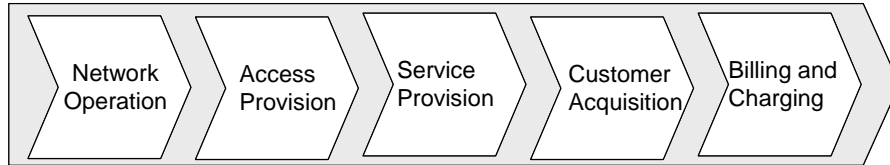
- Traditionally mobile operators have been responsible for all or most of the resources (a vertically integrated value chain)
 - No need to cooperate
- The vertically integrated value chain is "opened up" and the activities and resources can be controlled by different actors

An example
WLAN access

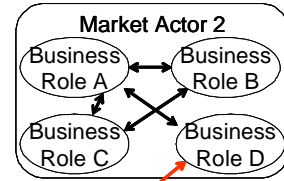


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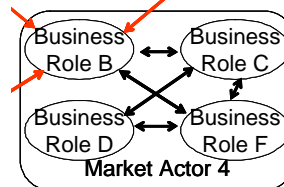
Value chains and value networks



- Generic value chain for provisioning of telecommunication services – a sequence?

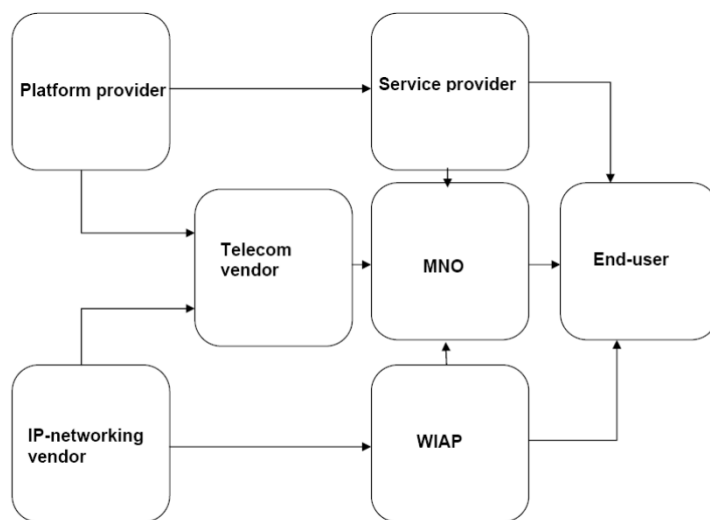


- Value network (value constellation)



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Telecom industry value system and groups of stake holders (Enqvist & Casey)



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Goncalves & Dobbelaere, "Business scenarios for M2M applications",
9th Int Conf on Mobile Business/9th Global mobility Roundtable, 2010

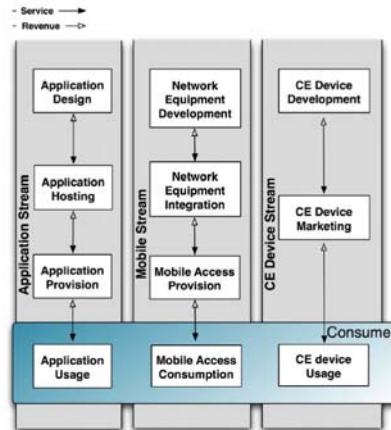


Figure 1. Generic Value Chain

Goncalves & Dobbelaere, "Business scenarios for M2M applications",
9th Int Conf on Mobile Business/9th Global mobility Roundtable, 2010

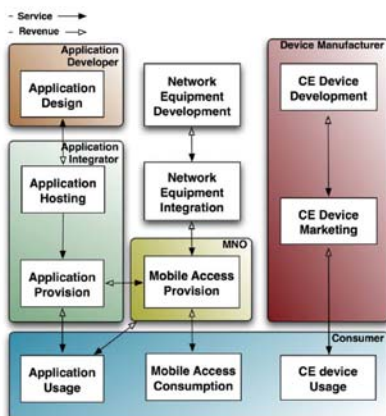


Figure 3. Application Integrator scenario

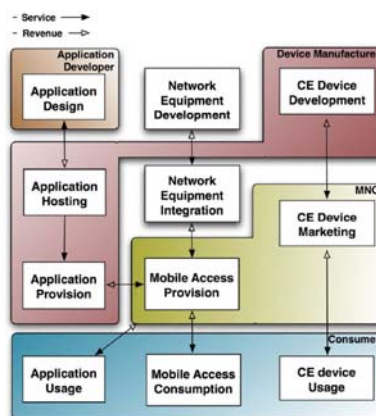


Figure 9. Device Manufacturer holds application provision to MNOs scenario

Typical research questions for analysis of actors, roles and value networks

What business roles can be identified?
What kind of market actors will be involved?
How can the value network be composed?
~How are the roles distributed among actors?









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My laptop at Stockholm Central Station

Choose a wireless network

Click an item in the list below to connect to a wireless network in range or to get more information.

	WLAN Zone - The Cloud Unsecured wireless network	Connected 	
	SJ Unsecured wireless network	Manual 	

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Stockholm Central Station at the train to Uppsala

The screenshot shows the 'Internet ombord' website. At the top left, the 'SJ Internet ombord' logo is circled in red. The main header features a scenic image of a snowy mountain range with the text 'Välkommen till Internet ombord' and 'Här hittar du information om hur du kan koppla upp dig på tåget'. Below this, there are several sections: 'Aktuell position' with a map, 'Logga in på internet' with a 'Surfa på internet' section containing a login form and a 'KÖP KOD' button, and 'Svar på vanliga frågor om inloggning'. On the right side, there are two promotional banners: one for 'Internet ombord' with the text 'Du får poäng när du köper Internet ombord, på dina resor, och allt i bistro.' and another for 'InterRail tågluffa i Europa'. The page number '15' is visible in the bottom right corner.

Stockholm Central Station at the train to Uppsala

The screenshot shows the 'the cloud' website. At the top left, the 'the cloud' logo is visible. Below it, there is a login section for 'Arlanda Express - Stockholm C' with a red circle around the 'Anslut mig' button. The login form includes fields for 'Användarnamn:' and 'Lösenord:', a 'Kom ihåg mig' checkbox, and a 'Köp access tid nu' button. Below the login form, there is a section titled 'Konto hos en av våra tjänsteleverantörer?' with a dropdown menu. A red circle highlights the dropdown menu, and a red arrow points from it to a larger, expanded view of the menu on the right. The expanded menu lists the following service providers: Telenor, iPass, Skype, Sprint PCS, Trustive, Echovox SMS (Nordics), AT&T, and KeyConnect. The page number '16' is visible in the bottom right corner.

Typical research questions for analysis of actors, roles and value networks

- ➔ What business roles can be identified?
- ➔ What kind of market actors will be involved?
 - How can the value network be composed?
 - ~How are the roles distributed among actors?



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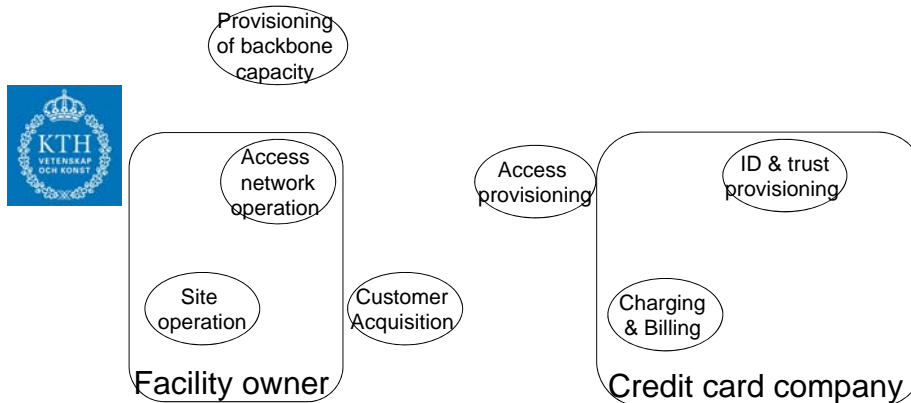
Examples of business roles The case local access provisioning

- Site operation
- Customer Acquisition
- ID & trust provisioning
- Charging & Billing
- Access provisioning
- Network operation and maintenance
- Provisioning of backbone capacity



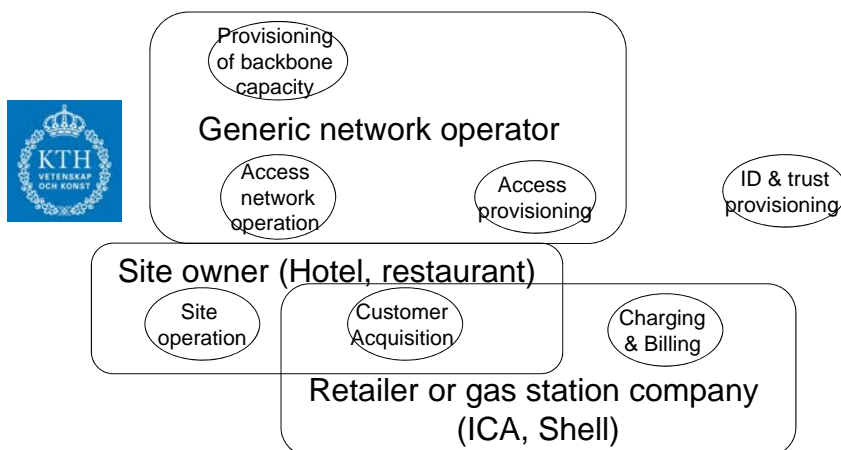
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What actors have resources to take specific business roles?



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What actors have resources to take specific business roles?



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Typical research questions for analysis of actors, roles and value networks

What business roles can be identified?

What kind of market actors will be involved?

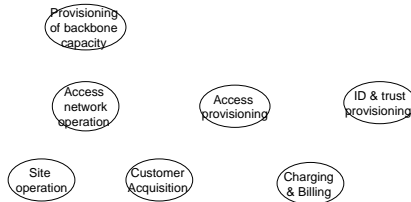
How can the value network be composed?



How are the roles distributed among actors?

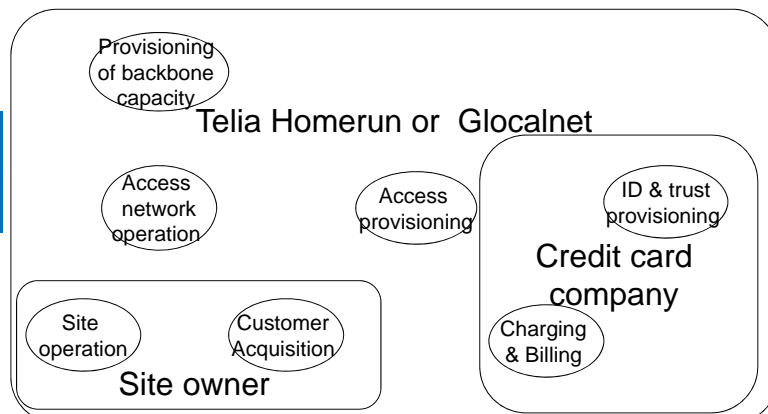
EXERCISE:

Come up with two proposals on how roles can be distributed among actors



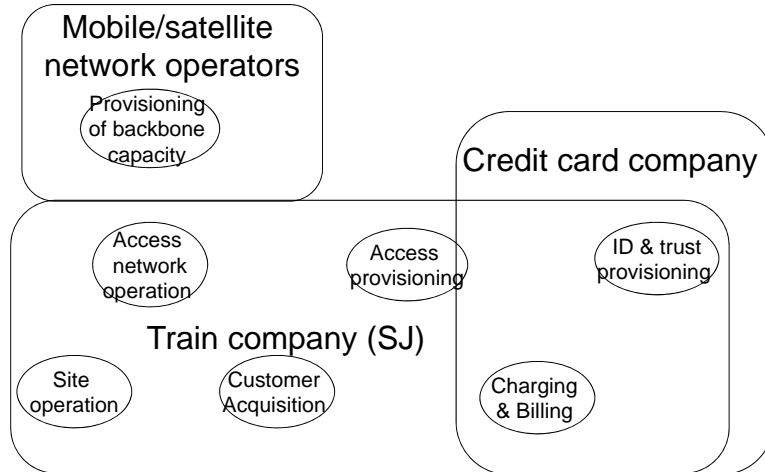
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Network operator takes most business roles



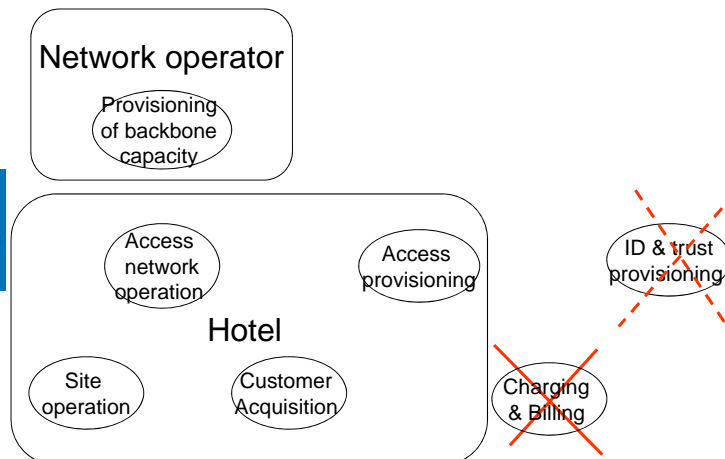
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The site owner takes most business roles



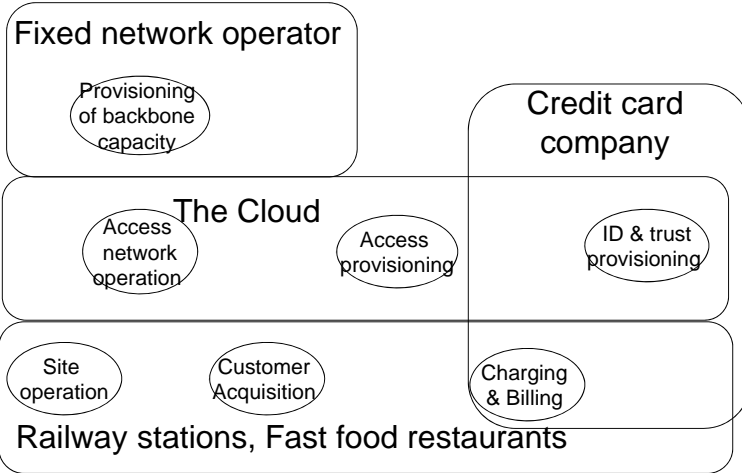
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Open access provided by the site owner



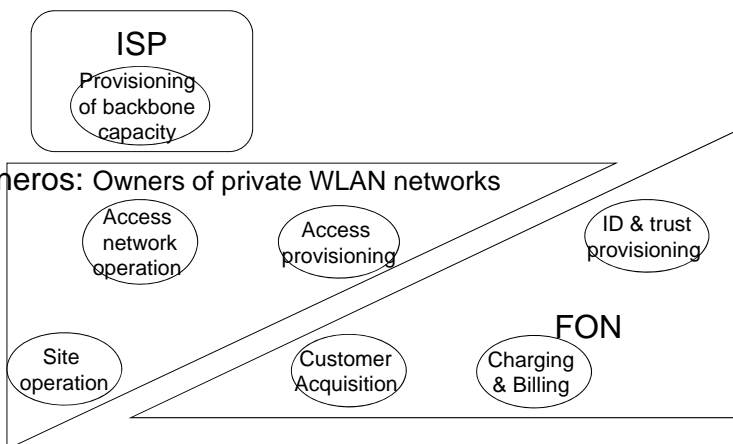
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Shared responsibility between the site owner and the network operator



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Cooperating private networks with business overlays



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Different ways to distribute roles

- Open access provided by the site owner
- The site owner takes most business roles
- Shared responsibility between site owner & operator
- Network operator takes most business roles
- Cooperating private networks with business overlays



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Summary local access provisioning

- Different ways to provide wireless access (the service is "local" connectivity)
- Different type of actors (within/outside telecom)
 - Network operator
 - Site owner (hotel, fast food, train/bus company)
 - Credit card companies
- Different types of business role groups
 - Network related
 - Customer related
 - Payment related
- Different ways to configure the value networks



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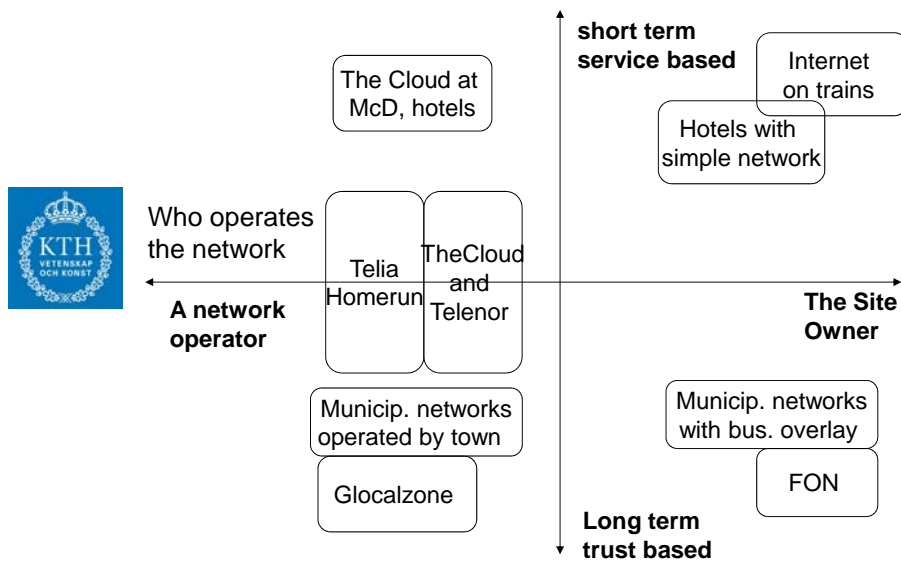
What else can we see?

- Who is "in charge of" the networks?
- Who is "in charge of" the customers?



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Type of customer relation



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Payment options - example GANAG

GANAG
GlobalAirNet Aktiengesellschaft

HIGHSPEED INTERNET

Ganag Home
Preise
AGB
Support
[English version]

Use short-term business relations
1. One-time subscription
2. Add to the room bill

QuickLoginBox
Providerauswahl: bitte wählen ...
Username:
Passwort:
Login

Herzlich willkommen am GANAG HotSpot
Bitte wählen Sie hier Ihr gewünschtes Abrechnungsverfahren

Login mit Zugangsdaten
erhältlich an der Rezeption
GANAG
Highspeed Wireless Network

Mobilfunkrechnung
30 min Takt
O₂

Voucher
30 min / 120 min

Mobilfunkrechnung
30 min / 120 min
vodafone

Kreditkarte
30 min / 120 min
VISA MasterCard AMERICAN EXPRESS

Minutengenaue Abrechnung
direkt auf Zimmerrechnung

Reise- und Tagungsplanung
mit **GANAG HotSpotFinder**

Weltweit minutengenaue Abrechnung
mit **GANAG iPass GlobalConnectivity**

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Payment options - example GANAG

GANAG
GlobalAirNet Aktiengesellschaft

HIGHSPEED INTERNET

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vodafone

Kreditkarte
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direkt auf Zimmerrechnung

Reise- und Tagungsplanung
mit **GANAG HotSpotFinder**

Weltweit minutengenaue Abrechnung
mit **GANAG iPass GlobalConnectivity**

Use long-term business relations
3. The mobile phone bill or subscription
4. Credit cards

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Vending machine and SMS payments



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One of the companies offers SMS payments for parking tickets



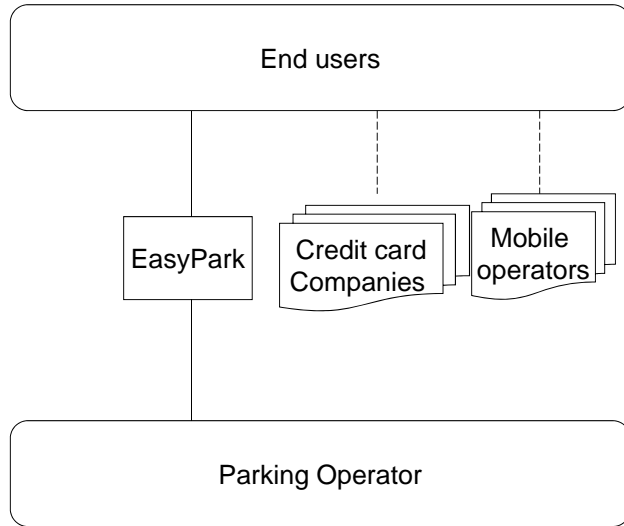
Ticket machine for parking services



2 companies offer mobile parking subscriptions

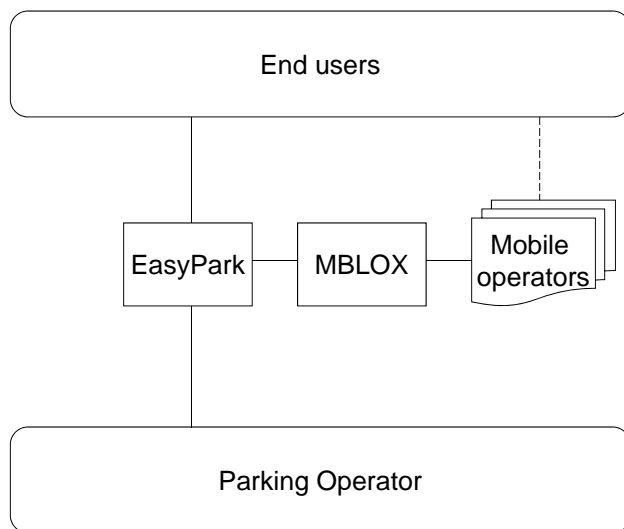
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Actor map for the case of Mobile parking subscriptions



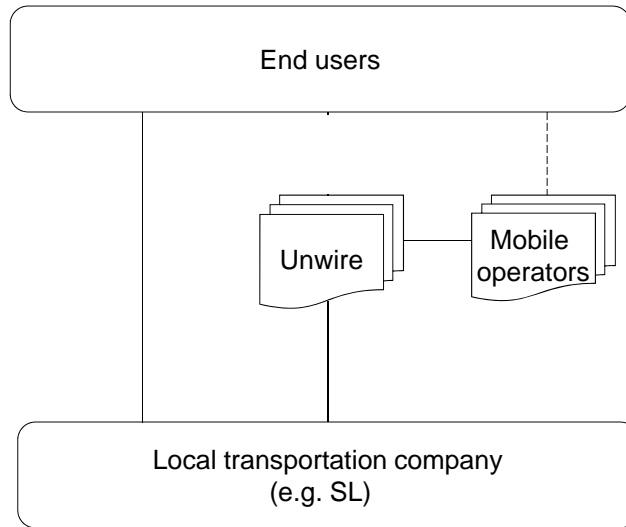
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Actor map for the case of SMS tickets for parking services



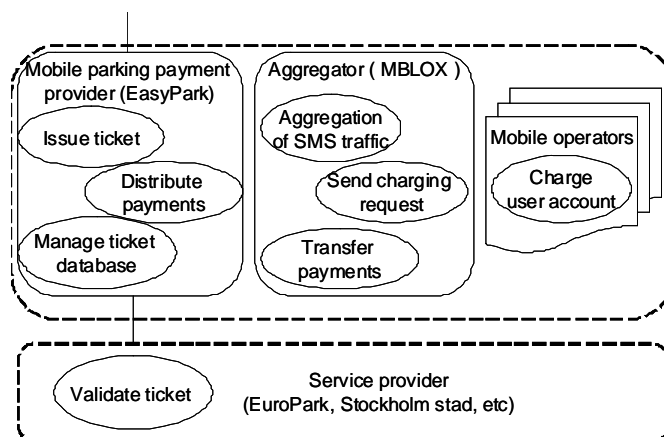
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Actor map for the case of SMS tickets for local transportation (SL)



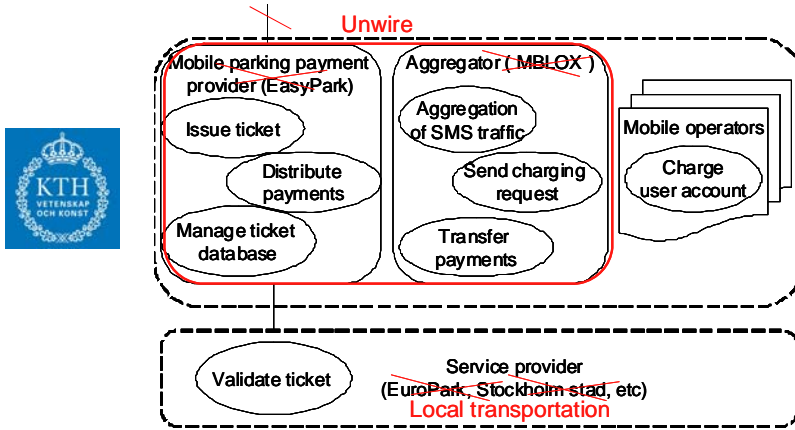
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Example of business roles and actors - SMS parking tickets



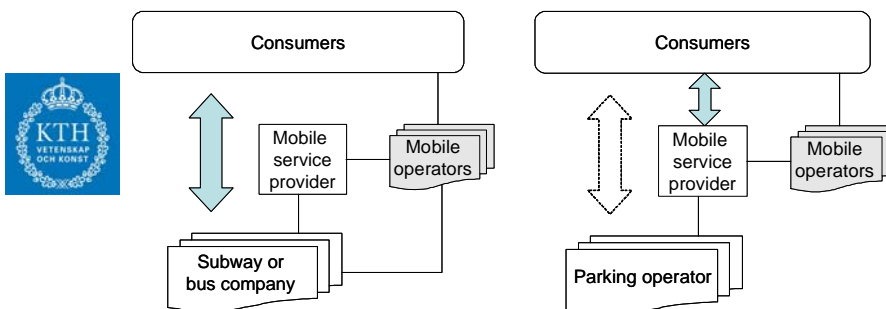
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Example of business roles and actors - SMS tickets for bus and subway



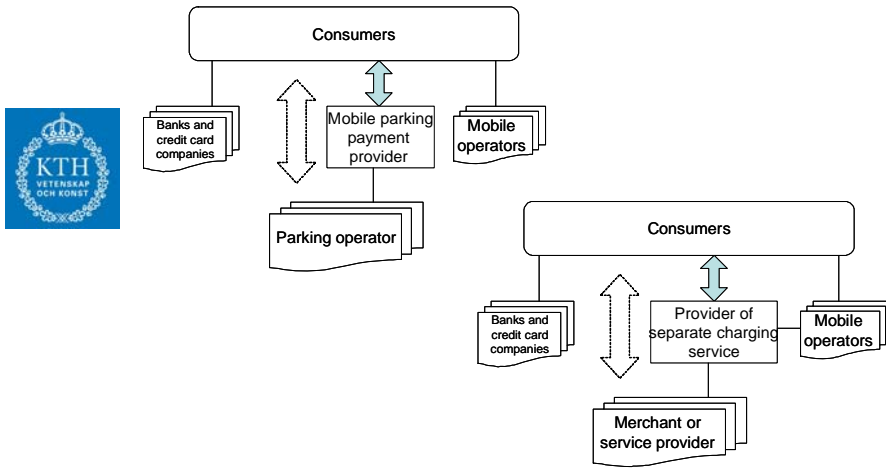
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Actor map for SMS ticket services



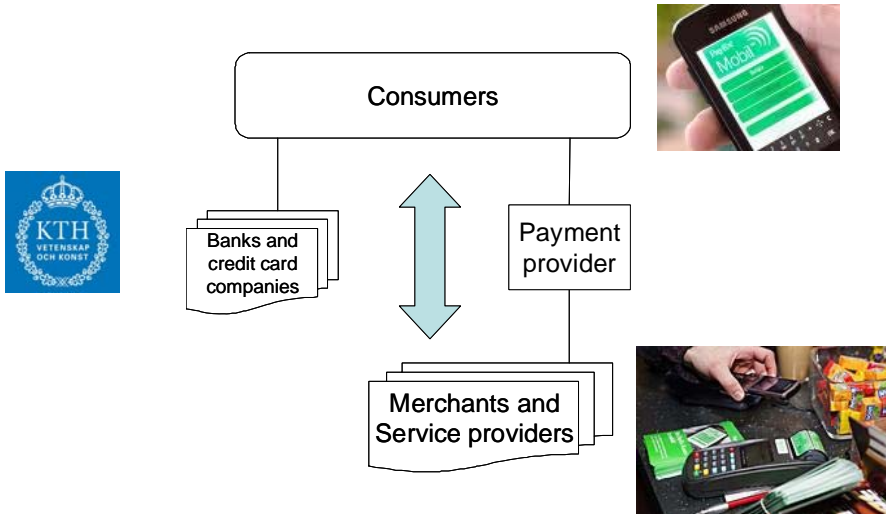
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Actor maps for Parking subscriptions and "separate charging" services



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Actor map for Payex Mobil



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and now it's time for something completely different



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Home work 1: Country study

THE TASK

- Each of you will get a country to analyze
- Describe the mobile telecom market i country X
 - Identify key actors and their characteristics
 - Identify the main challenges for the key actors
- Prepare written report according to guideline
- Send draft version for review
- Review other reports
- Prepare short oral presentation and slides
- Prepare the final report



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Home work 1: Country study

WHAT TO DO

- Deadlines for review, draft/final report->KTH social
- Prepare a 3-5 minute presentation with 2 slides
 - 1 about "your" country and the market
 - 1 about the most important challenges
- Send the slides to janmar@kth.se
 - Latest November 13 at 14.59
- Oral presentation at seminar
Thursday November 14, 08:00-12:00



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How to look for information

- Look at regulator web pages for market overviews, activity reports, consultations
- Examples
 - Sweden www.pts.se
 - Thailand <http://www.ntc.or.th/TTID/>
- Find operator webpages and look for
 - annual reports
 - Investor relations web pages and presentations
- Check the ITU web page, see the link below
"Statistics" and "publications"

<http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx>



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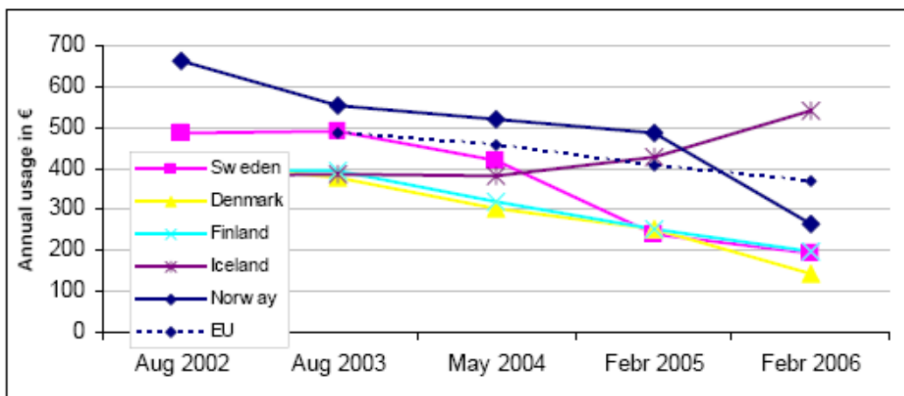
About challenges: Think about the three "C's" consumers, competition and cost



- Can we identify problems for consumers?
 - High prices
 - Bad service availability or quality
- Can we identify problems for the society?
 - No or low broadband penetration
 - No mobile broadband
- What is the focus of the regulator?
 - To "control" big actor(s)
 - To ensure fairness
 - To support market entry

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Example 1. Prices for voice calls in Nordic countries - why did prices at Iceland increase?



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Example 2. Prices for voice calls in India + market structure



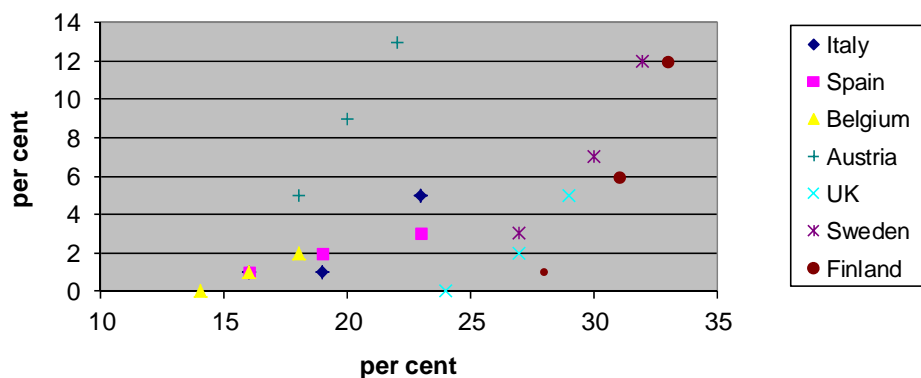
- In India 10-14 operators in each region
- Number of Voice minutes per subscriber = 10 x Sweden
- Minute price for voice calls = Sweden /10
- Many low ARPU users

⇒ High level of competition

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Example 3. Penetration of mobile vs fixed broadband - why is there high/low MBB penetration?

**penetration of mobile broadband versus penetration
for fixed broadband - during three years**



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Example 4. Spectrum allocation

- What is the impact on the competition on the MBB market depending on how spectrum is allocated
- 800 MHz auction in Sweden
 - In total 2*30 MHz
 - Caps 20 or 10 MHz?
 - Operators can get 20, 10, 5 or nothing
- What is the impact for operators on
 - network costs?
 - service offer?
 - Market position



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Example 3 (cont'd): Sweden 3G/4G spectrum allocation

Operator	2.1 GHz	2.6 GHz	800 MHz
Telia	0	20 MHz	10 MHz
Tele2	15->20 MHz	20 MHz	} 10 MHz
Telenor	15->20 MHz	20 MHz	
Tre (3)	15->20 MHz	10 MHz	10 MHz
Orange	15-> 0 MHz	-	-



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Review Groups



- Group A
Belarus, Iran,
Ukraine, Turkey
- Group B
Argentina, Brazil
Colombia, Mexico
- Group C
Egypt, Kenya,
Nigeria, Sudan
- Group D
Australia, France,
Germany, UK
- Group E
Estonia, Denmark
Finland, Norway
- Group F
Austria, Greece,
Ireland, Portugal

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About review of the homework reports



- Below is a short check list with key aspects to consider when reviewing the HW reports
 - Are the key aspects of the analysis covered?
 - Is there a relevant methodology section?
 - Are the results and analysis clearly described and supported by a convincing argumentation?
 - Is the report OK when it comes to layout, presentation style and language
 - Are there sections with “cut and paste” material from webpages, reports, etc?
 - Are relevant references used?
 - Is there any self-assessment and is it relevant?
- Each student should reviews 2 other students
- Send your reviews to all in the review group and to Jan (janmar@kth.se)

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