

Practical Exercise 2

Economic Basics

Mobile Business I (WS 2011/12)

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- Exercise 1: Mobile Economy
- Exercise 2: Mobile Business Market
- Exercise 3: Value Creation
- Exercise 4: Business Models
- Exercise 5: Pricing Models

a) Explain the phenomena of mobility.

What is mobility?

Lat. *mobilitas*:

- (1) Flexibility, velocity, motion;
and as "mobilitas animi": (mental) fitness
- (2) But also (and quite ambivalent to (1)) changeability,
inconstancy, unstableness



[SkustowPets1998]

- Social implications

**Mobility is not just
“humans’ independence from geographical constraints”**

- Spatial Mobility
- Temporal Mobility
- Contextual Mobility

[KakihaSorens2001]

b) Name the characteristics of the Mobile Economy and explain them.

What are the characteristics of the Mobile Economy?

	Electronic Economy	Mobile Economy
Automation / digitization	●	●
Time flexibility	●	●
Interactivity	●	●
Individualization	●	●
Location independence		●
Personal sphere		●
Continuous reachability		●
Context sensitivity		●

Based on [ReicMeieFrem2002]

- Automation / digitization
 - Value proposition of Internet services is provided electronically (digital)
- Time flexibility
 - Internet services are accessible 24 hours per day
- Interactivity
 - Users are integrated into the provision of Internet services
- Individualization
 - Personalisation of Internet services according to individual user preferences

Based on [ReicMeieFrem2002]

- **Location independence**
 - **Provision of mobile services is independent of a user's current location**
 - **Examples**
 - **Mobile E-Mail Services**
 - **Mobile Information Services**
 - **Mobile Sales Force Services**
 - ...

Based on [ReicMeieFrem 2002]

- **Personal sphere**
 - **Mobile devices as personal accessories**
 - **Mobile device is part of a user's personal sphere such as keys, data books, clothes, etc.**
 - **Users carry mobile devices with them most of the time**

Based on [ReicMeieFrem2002]

- Continuous reachability
 - Location independent network access
 - Users are instantly addressable.
 - Always-on-Functionality

[Based on ReicMeieFrem2002]

- **Context sensitivity**
(Detection and evaluation user's environment information)
 - **Local context**
(user's current place / time)
 - **Action context**
(user's current place / time combined with geo data)
 - **Time context**
(user's current time combined with time relevant information)
 - **Interests specific context**
(local, action and time context combined with personal user preferences)

Based on [ReicMeieFrem2002]

- Exercise 1: Mobile Economy
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- a) Name the different players in Mobile Business markets.

- Players: *
 - Device manufacturers
 - Infrastructure manufacturers
 - Network operators
 - Mobile virtual network operators
 - Service providers
 - Content providers
 - Customers

*** One possible segmentation!**

b) Describe the functions of these players.

- Mobile device manufacturers
 - Manufacture and distribute mobile terminals
 - Examples: Apple, Nokia, Sony Ericsson, Samsung, HTC, RIM, earlier Siemens, ...



- Infrastructure manufacturers/providers
 - Produce and provide infrastructure, necessary for network operation, such as GSM base stations.
 - Examples: Nokia-Siemens, Motorola, Ericsson, ...



- Network operators
 - Operate mobile networks and provide access
 - E.g. Telekom, Vodafone, E-Plus, O₂, Orange, ...
 - Competition on national and international level



Definition:

A **mobile virtual network operator** (MVNO) is a company that does not own a licensed frequency spectrum and wireless infrastructure, but resells wireless services under their own brand name, using the network of another mobile network operator.

Explanation:

- An MVNO's roles and relationship to the mobile phone operator vary by market.
- In general, an MVNO is an entity or company that works independently of the operator and can set its own tariff structures.

Based on [Wikipedia2010]

- Service providers
 - Provide different kinds of services, e.g.
 - Billing and customer management
 - Acquisition of customers
 - Advertising campaigns
 - Server-hosting
 - Communication management
 - ...

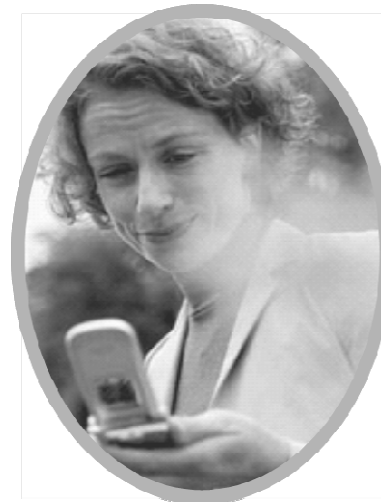
- Content providers
 - Provide information to customers:

Examples

- Banks, shops
- Media-companies
- "Game-stations"
- ...



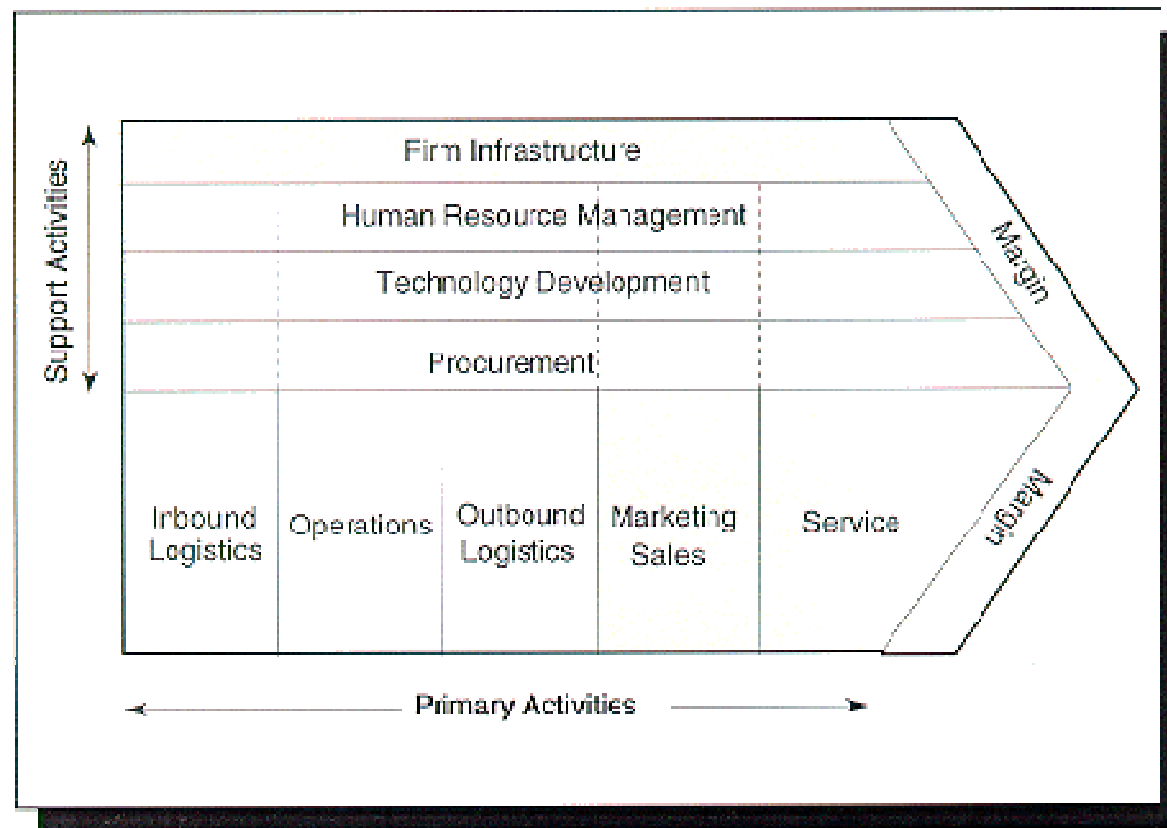
- Use...
 - infrastructure,
 - network,
 - devices,
 - service and
 - information
- High market power because of full market penetration [Bundesnetzag2010]
- Customers are...
 - Private customers
 - Corporate customers



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a) Explain the classic value chain by Porter.

Classic value chain by Porter:



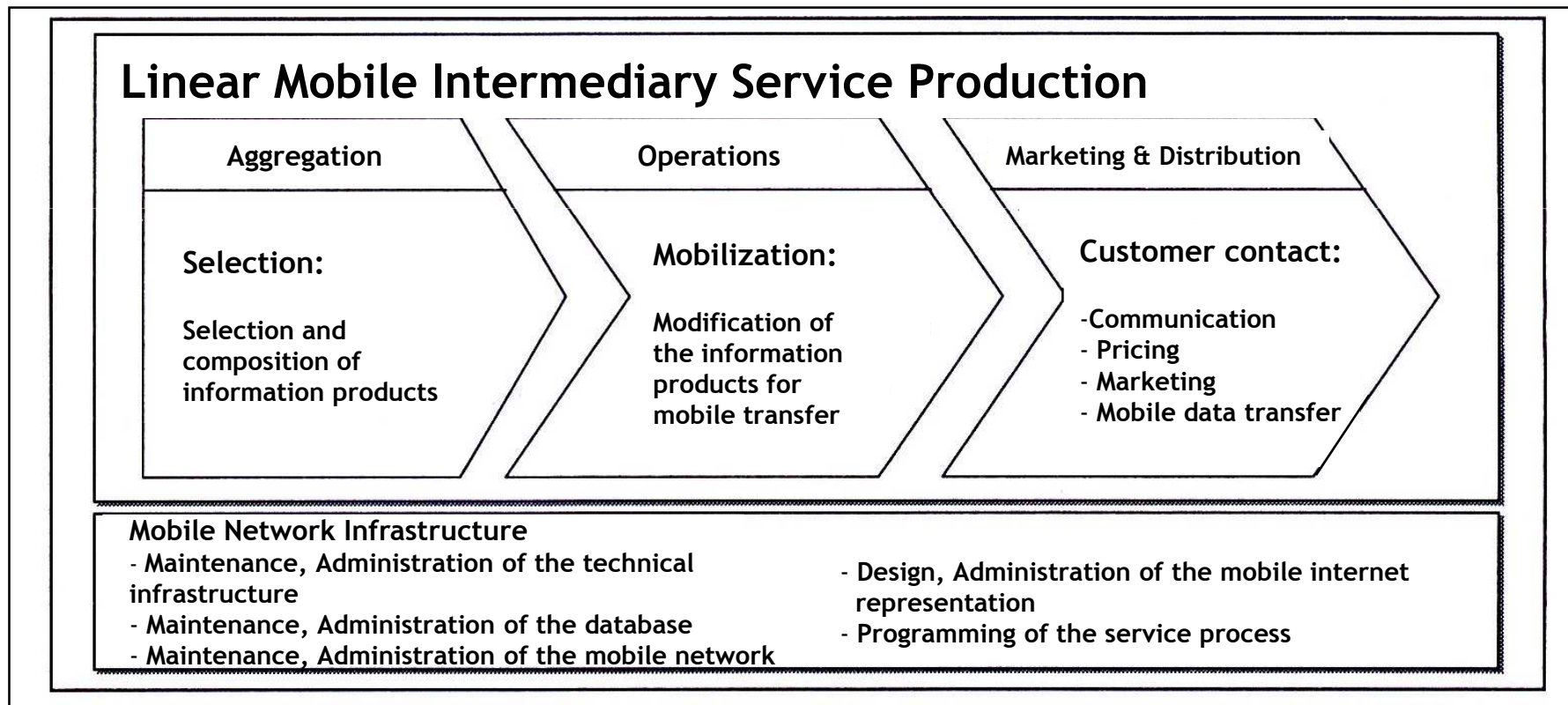
[Porter1985]

Classic value chain by Porter:

- Illustrates the value creation of an product manufacturer.
- Suitable for illustrating input-output-oriented value-adding activities for the linear creation of products (resp. mobile services).
- Not applicable for linear mobile intermediary service settings.

- b) Make a draft of the modified value chain for mobile intermediary service production.
What does this value chain illustrate? For what purpose is it not usable?

Modified value chain for linear mobile intermediary service production :



[ReicMeieFrem2002]

Modified value chain for linear mobile intermediary service production:

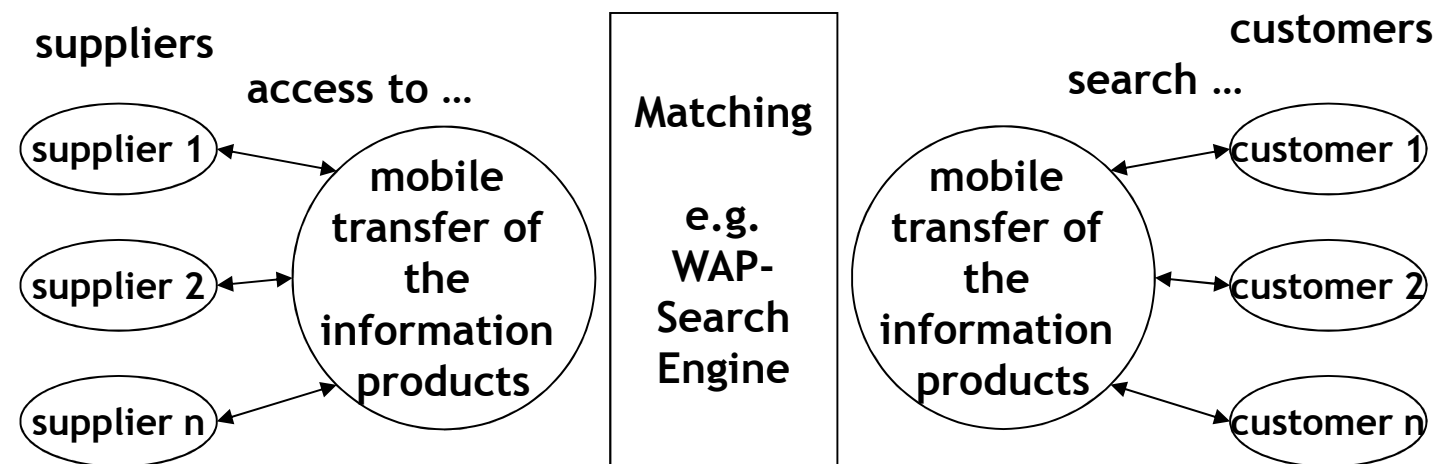
- Illustrates the value creation of an intermediary:
 - Selection and composition of information products
 - Modification of the information products for mobile transfer
 - Communication, pricing, marketing, mobile data transfer
- Suitable for illustrating linear mobile intermediary service production.
- Not applicable for networked mobile intermediary service settings.

- c) What are the characteristics of a distributed value creation?

Network Marketing

- Acquisition of network members (information product customers and suppliers)
- Promotional activities
- Charging

Networked Mobile Intermediary Service Production



Mobile Network Infrastructure

- Maintenance, administration of the technical infrastructure
- Maintenance, administration of the database
- Maintenance, administration of the mobile network
- Design, administration of the mobile internet presentation
- Programming of the service process

[ReicMeieF
rem2002]

Networked Mobile Intermediary Service Production:

- Illustrates a non-linear distributed value creation which involves a network of several actors at the same time.
- Suitable for illustrating distributed mobile intermediary service settings.

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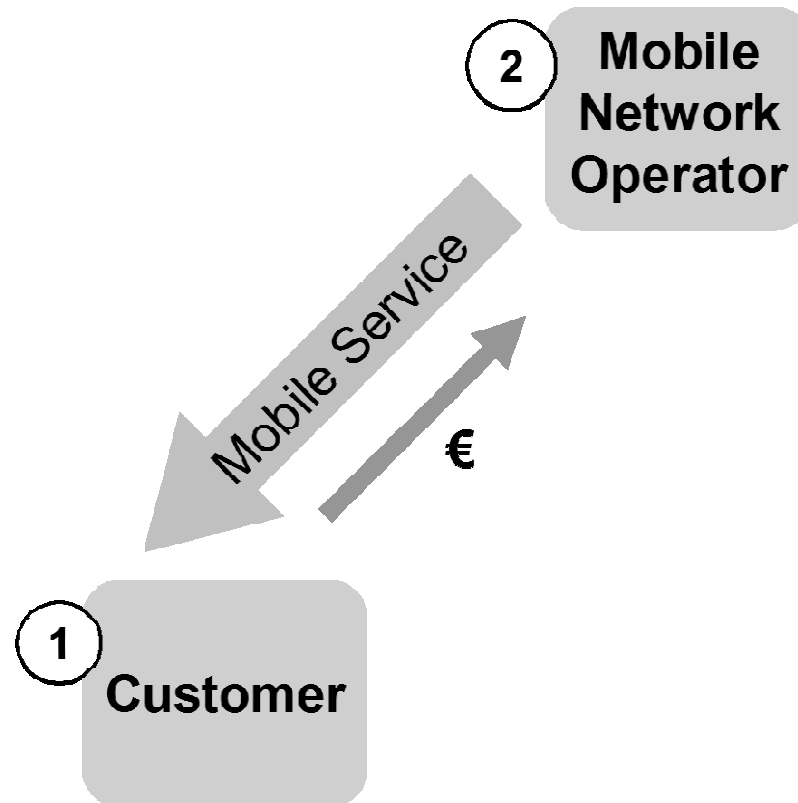
a) Define the term “business model”.

- A business model is the abstract description of a business.
- A business model consists of three main parts:
 1. Value Proposition (Nutzenversprechen)
 2. Value Creation Architecture (Wertschöpfungsarchitektur)
 3. Revenue Model (Ertragsmodell)

[Based on Stähler2001]

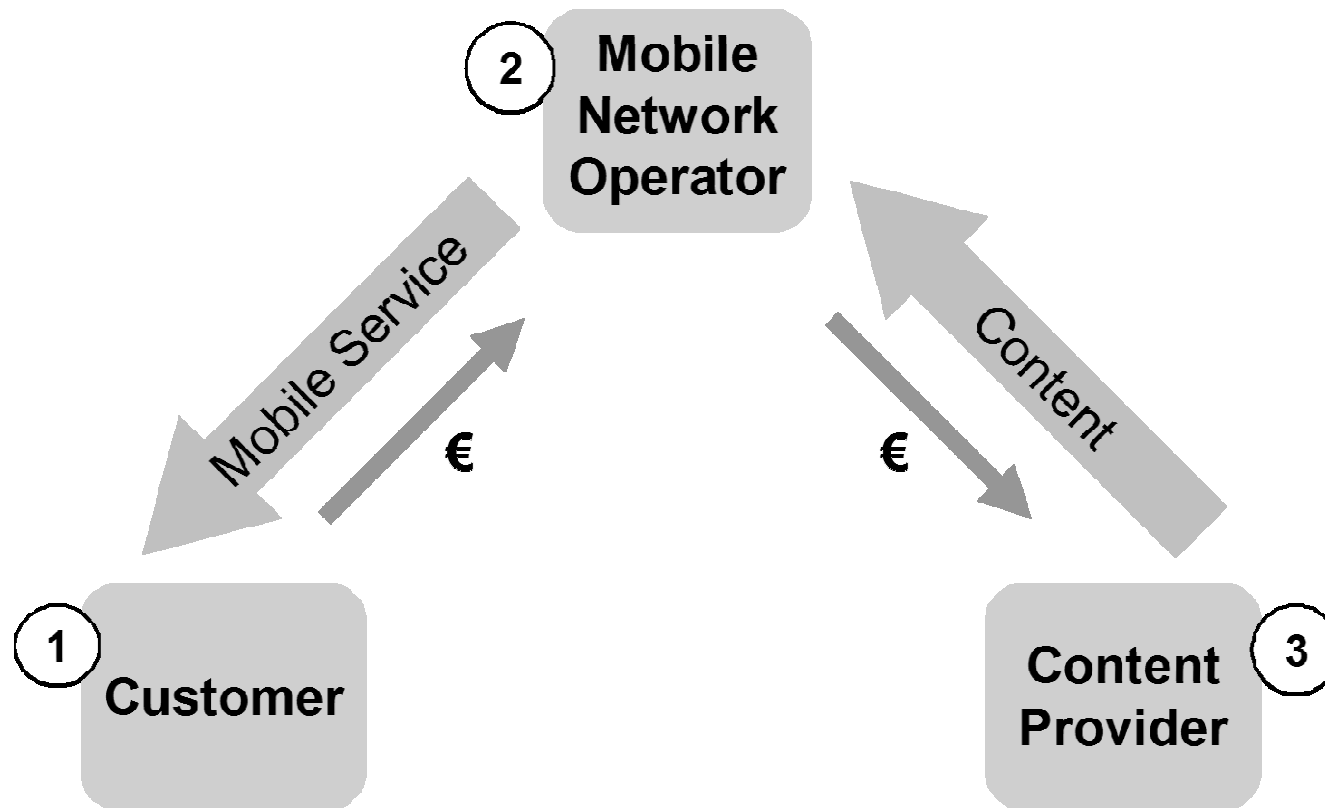
- b) Outline a classic business model for a mobile service (while paying special attention to stakeholders, money and service flows).

- Classical business model I:



- Classic business model I:
 - Two parties: customer, mobile network operator
 - Operator provides communication services and possibly contents to the customer.
 - Possibly the operator manufactures these contents himself. Providing contents is not his core competence.

- Classical business model II:



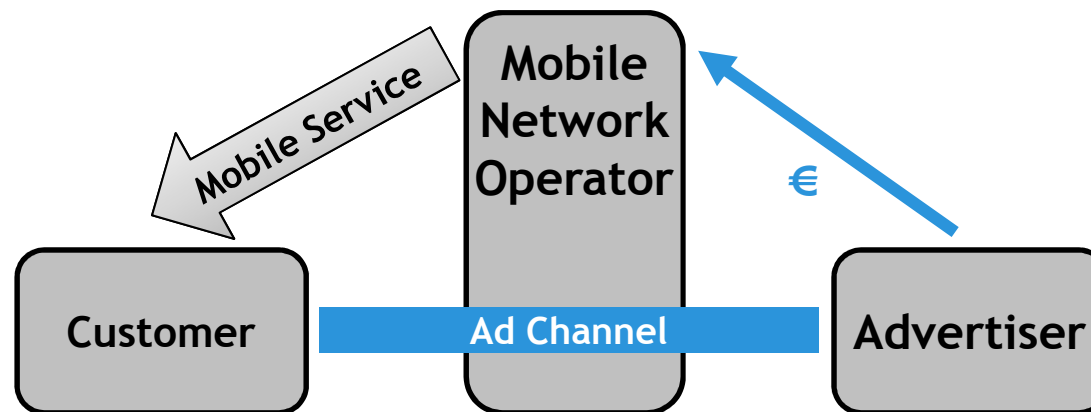
- Classic business model II:
 - Three parties: Customer, mobile network operator, content provider.
 - Operator purchases content (from the content provider) and passes it on to the customer.
 - Content Provision is not the core competence of the network operator.

- c) Name a new business model for a mobile service and describe why it is capable of competing.

- New business model

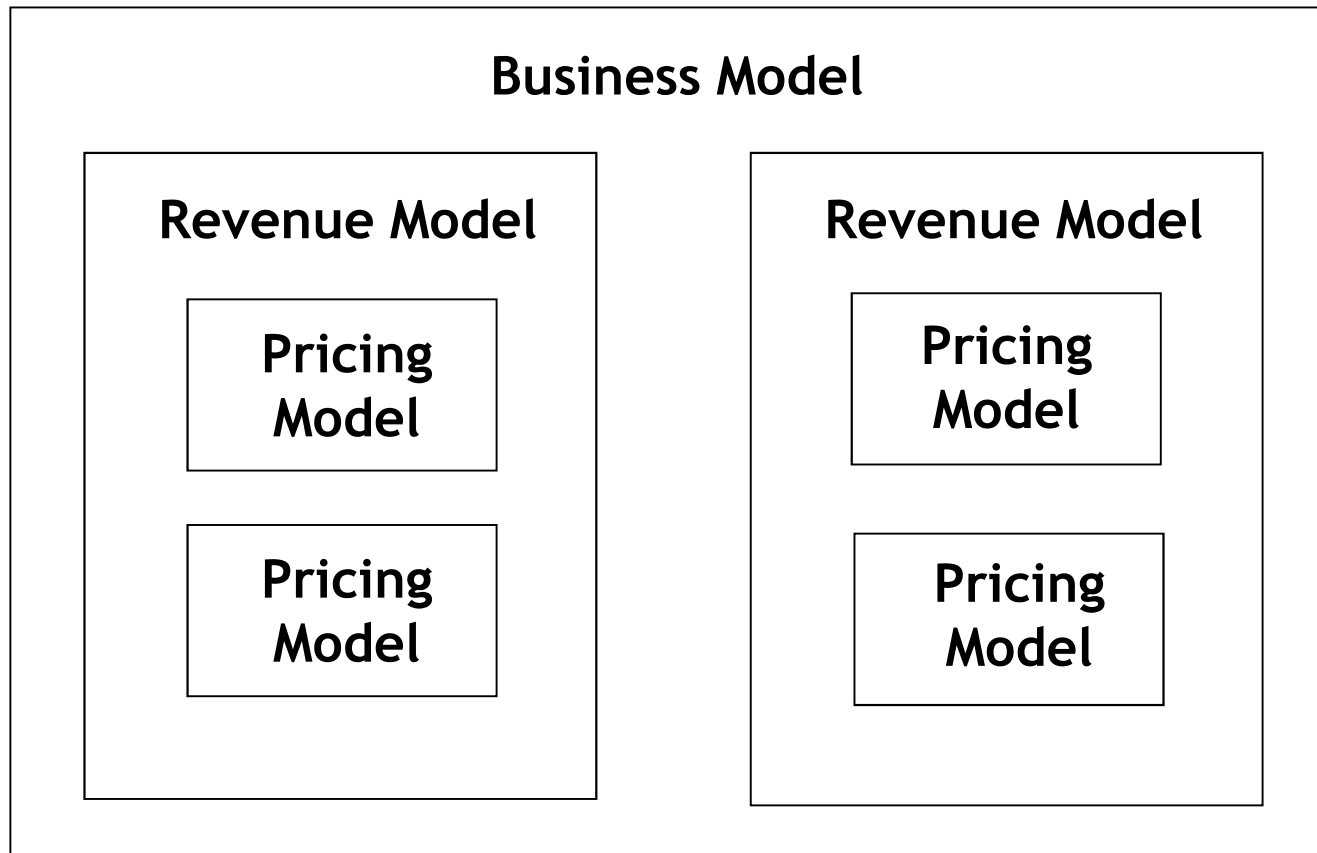
- “Reverse” approach: instead of charging the customer, the service provider contacts the customer and offers free access.

→ Sponsoring of interesting (profitable) customers by advertising service providers



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- a) Put the terms business model, revenue model and price model in context to each other.



Example

- b) Name the similarities and differences between a price model in Mobile Business and Electronic Business.

- Mobile Business Commonalities with Electronic Business
 - Network effects imply a penetration strategy in order to build an installed base
 - High price transparency implies little space for pricing decisions
 - Heterogeneity/differences in Willingness-to-Pay (WTP) encourage differential pricing
 - Low transaction costs facilitate flexible price adjustments and variable pricing mechanisms

[AlbersSchäfe2002]

- Differences to Electronic Business
 - Cooperation of equipment and terminal manufacturer and operators allows new revenue models
 - Very low WTP for internet services, higher WTP for mobile services
 - Mobility, availability, localization and identification allow new forms of product and price differentiation
 - Services may be offered just-in-time on the mobile phone (e.g. flights) ➔ variable pricing mechanisms.

[AlbersSchäfe2002]

- c) Explain the difference between product and price differentiation. Give one example for each in the context of Mobile Business.

- Product differentiation
 - Offering variations of the same product to different consumer segments.
 - Example: Different types of cell phones

- Price differentiation
 - Offering the same product (or products with small variations) to different consumer segments at different prices.
 - Example: Mobile Tariffs

d) Name at least two requirements for price differentiation.

- Segmentation / separation must be possible
- Different willingness-to-pay among segments

- e) What chances result from price differentiation especially for Mobile Business?

- Many tools at hand in order to individualise mobile information products and thereby ensuring separation of segments.

- This set of slides is based upon the following Economic Basics lectures:
 - **Lecture 5:** Electronic Business vs. Mobile Business
 - **Lecture 6:** Market Structure and Value Creation
 - **Lecture 7:** Business Models