

# **Comparison of Mobile Communications Service Industry: Finland vs. China**

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# Agenda

- Background
- Research Problem
- Methodology
- Mobile Service Market
- Five Forces Analysis
- Value Network Analysis
- Conclusions
- Future Research



# Research Problem

How is the Finnish mobile communications service industry different from the Chinese mobile communications service industry?

- What are the characteristics of the mobile service market?
- What is the current competitive situation of the mobile service market?
- How is the mobile value network changed?
- What are the reshaping forces and the revenue sharing model of the new mobile value network?

# Methodology

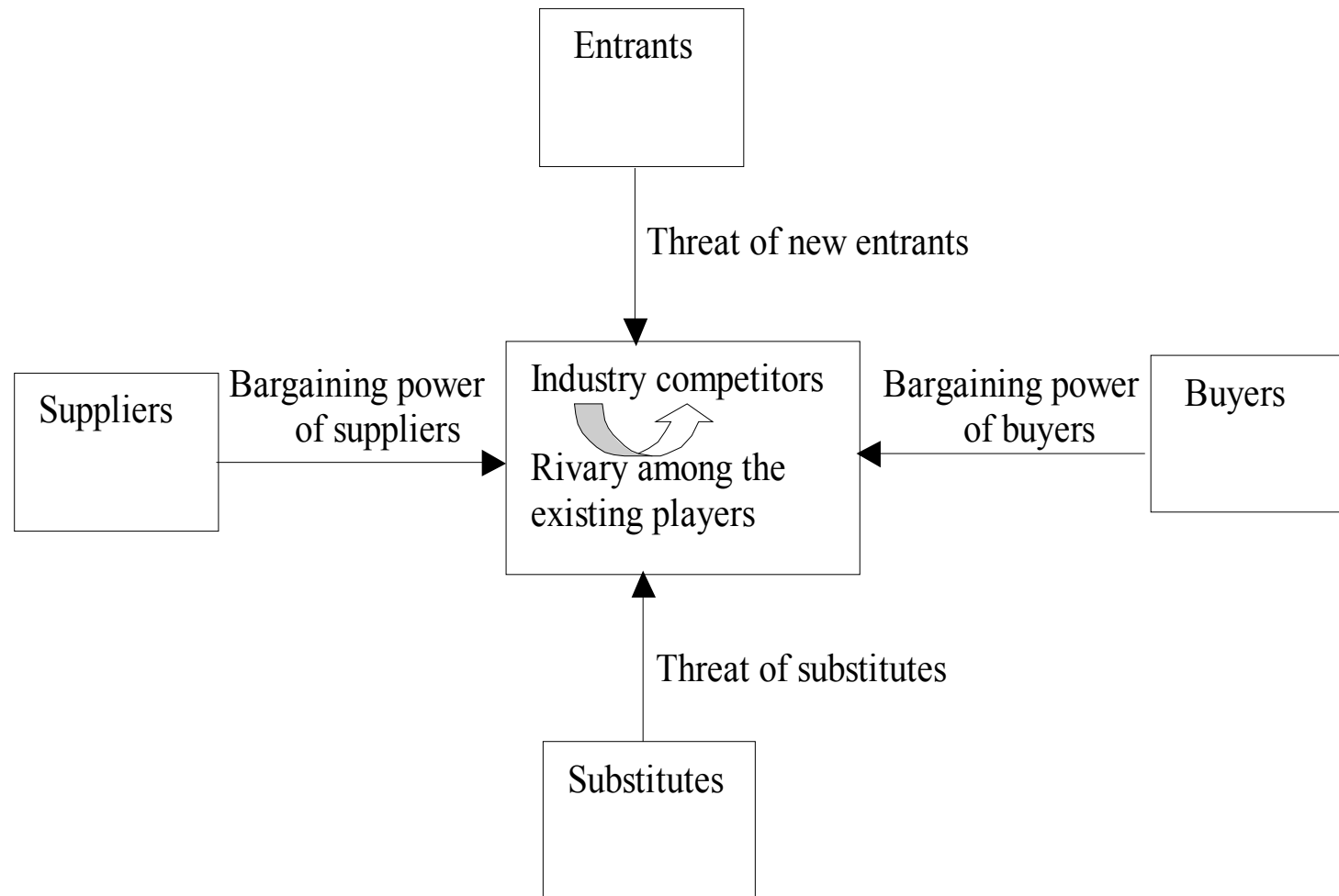
## Data Collection

- extensive literature reviews and a series of qualitative interviews

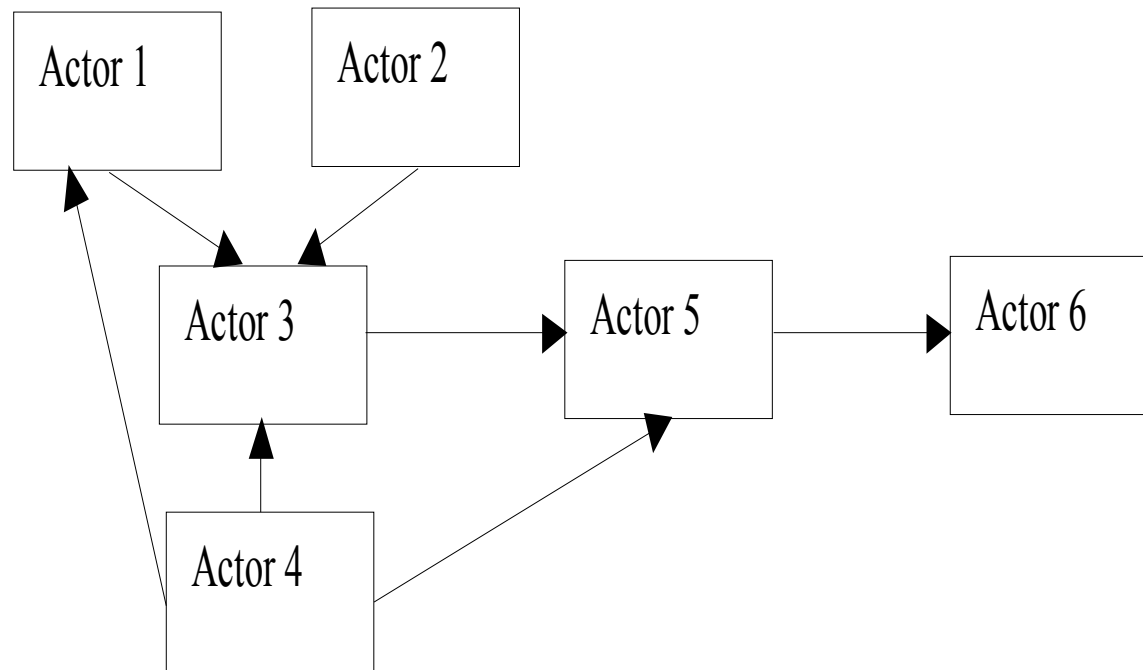
## Research Approach

- The deductive approach was selected.
- Two theoretical models: Porter's Five Forces, Value Network

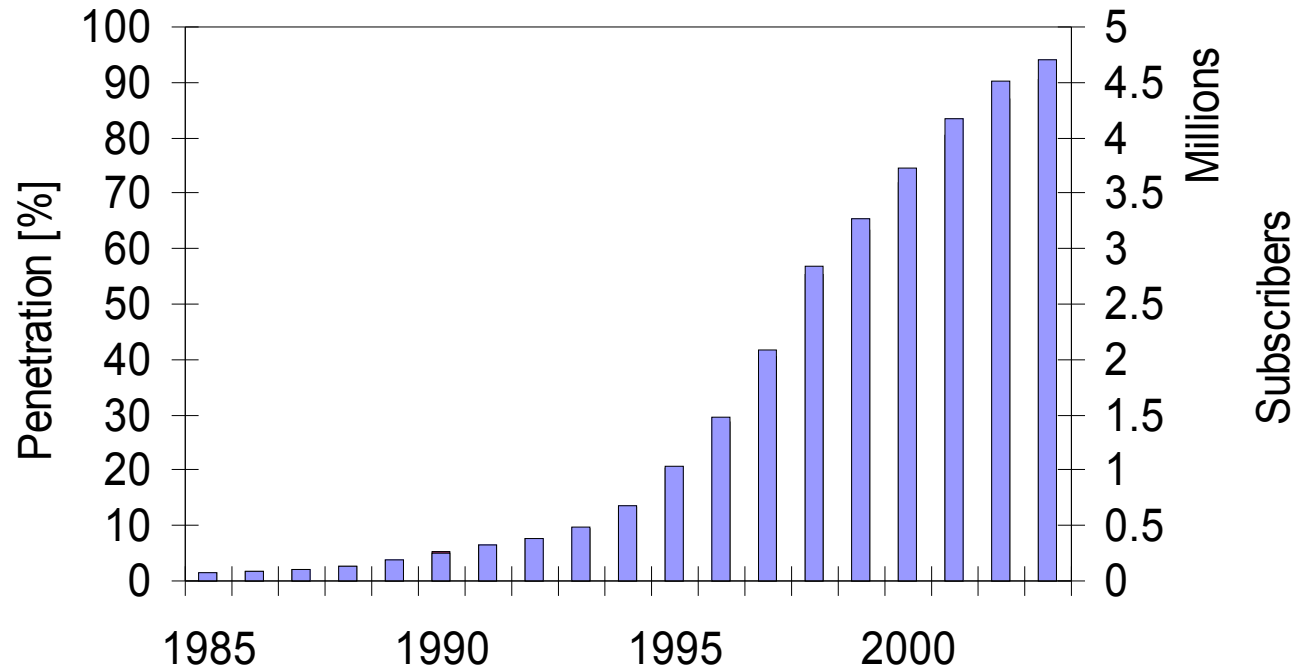
# Porter's Five Forces Model



# A value network example



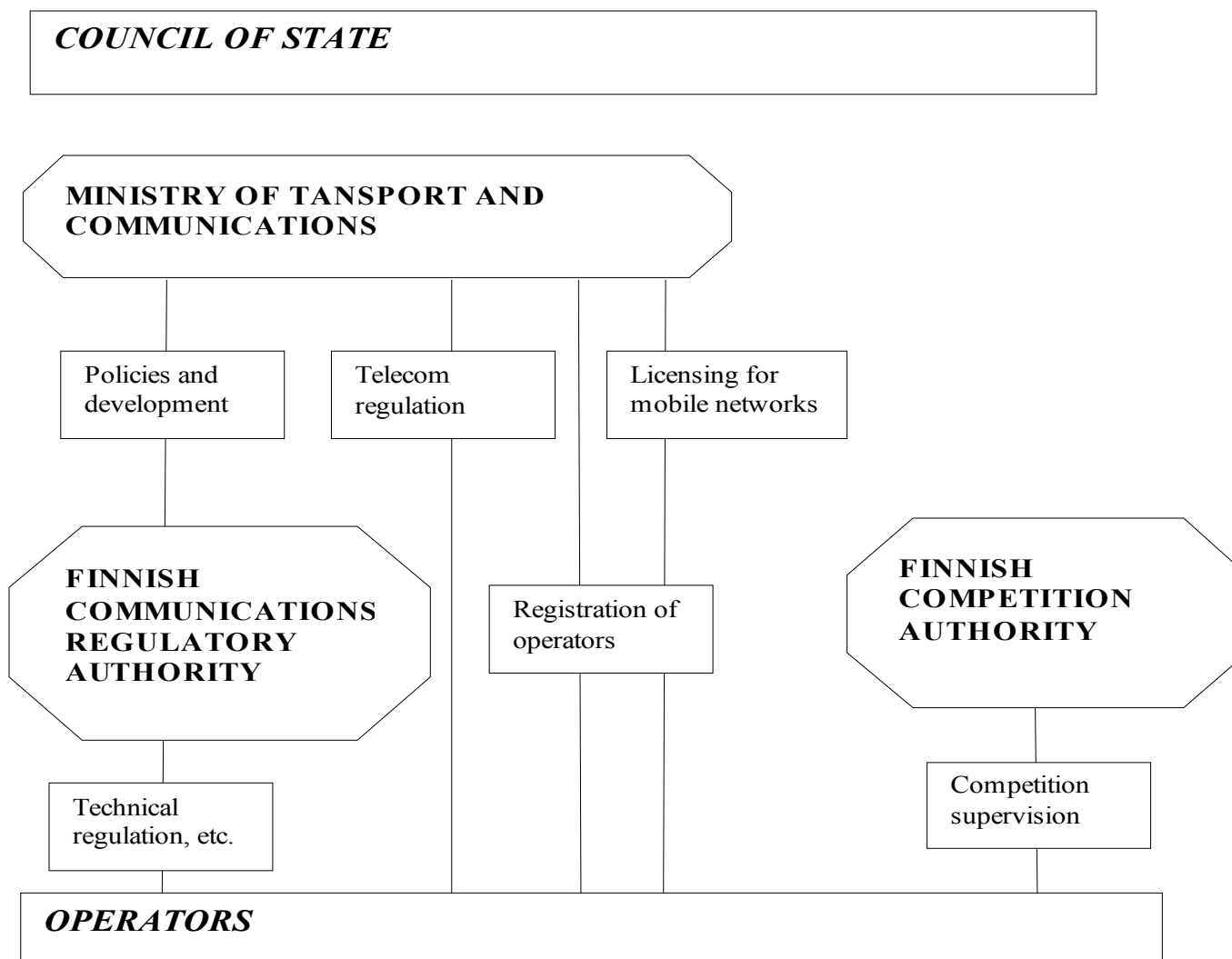
# Mobile Service Market in Finland (1/5)



Mobile subscriber numbers and penetration in Finland

# Mobile Service Market in Finland (2/5)

## Regulatory Restructuring





# Mobile Service Market in Finland (3/5)

## Price Regulation

- Tariff structure
- Tariff setting principles
- Regulation of individual tariffs

## Billing Models

- Postpaid & Calling Party Pays (CPP)

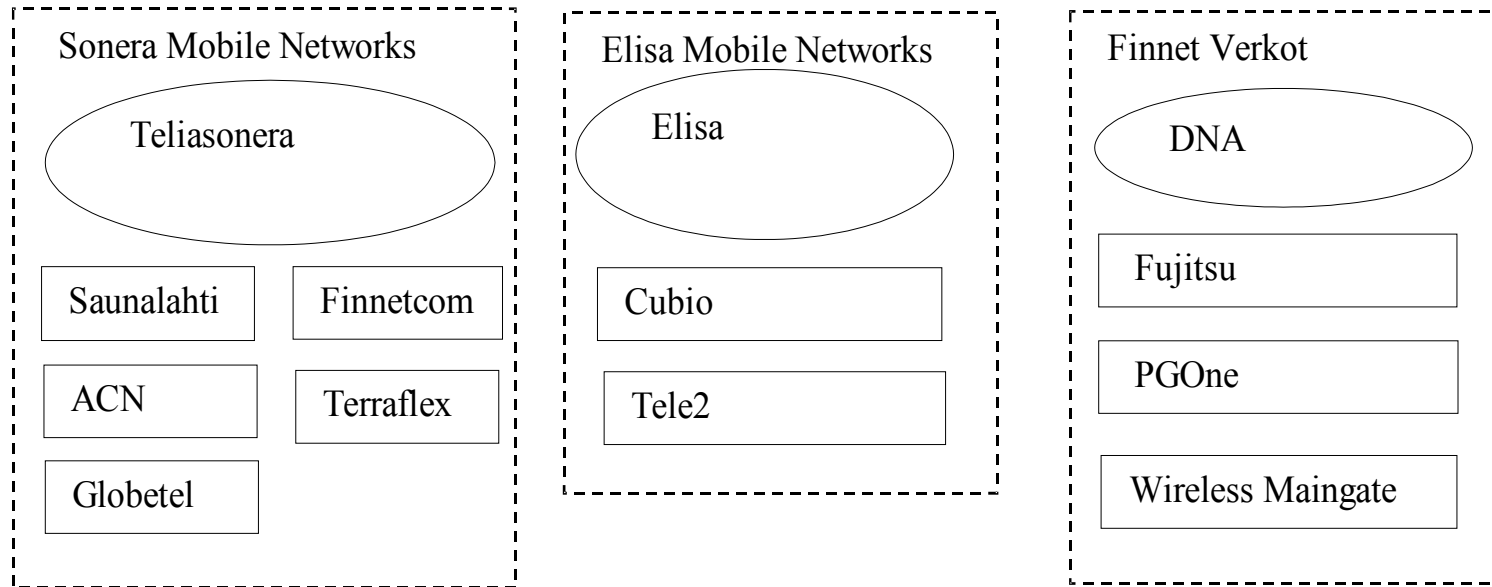
Unbundling of mobile phones and subscriptions

Mobile Number Portability (MNP)

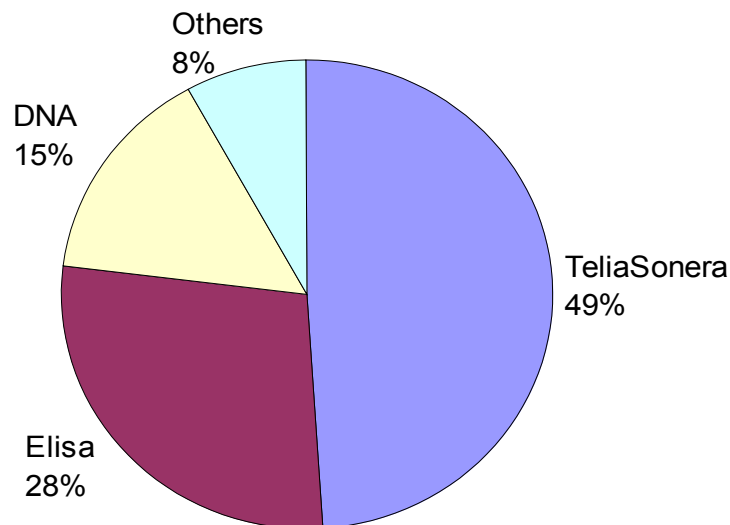
## 3G Licensing

- Beauty contest

# Mobile Service Market in Finland (4/5)

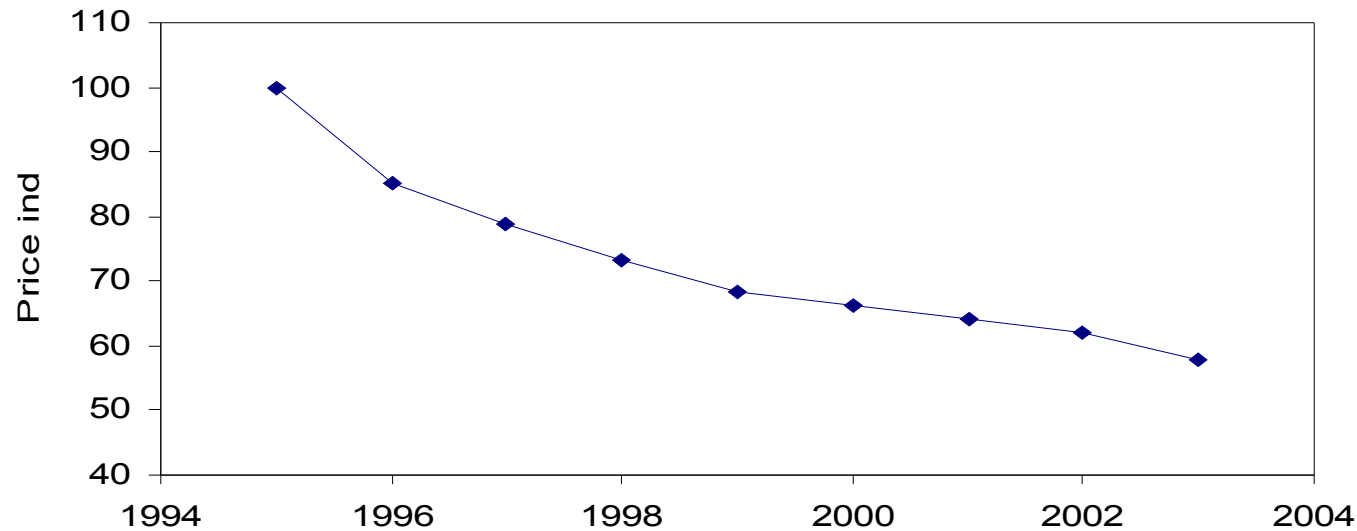


The landscape of Finnish mobile operators



The Finnish mobile service market share, in March 2004 (Kiiski & Hämmäinen, 2004)

# Mobile Service Market in Finland (5/5)

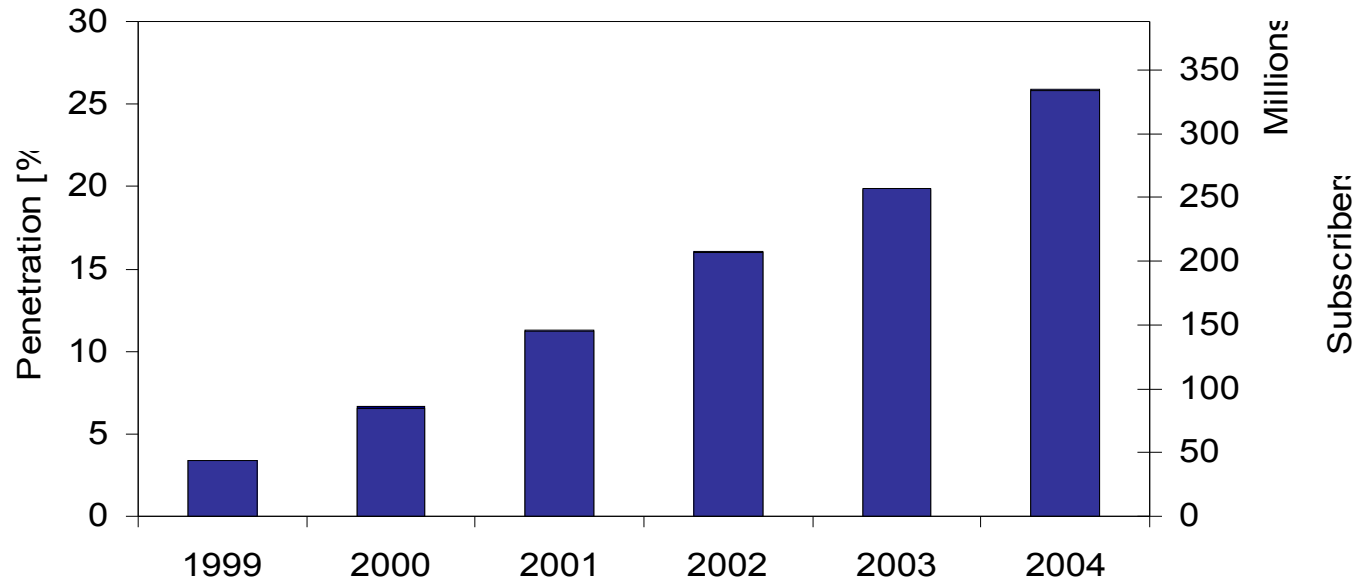


The price changes of mobile calls during 1995 – 2003 in Finland. The price changes have been calculated using the price index (1995=100).

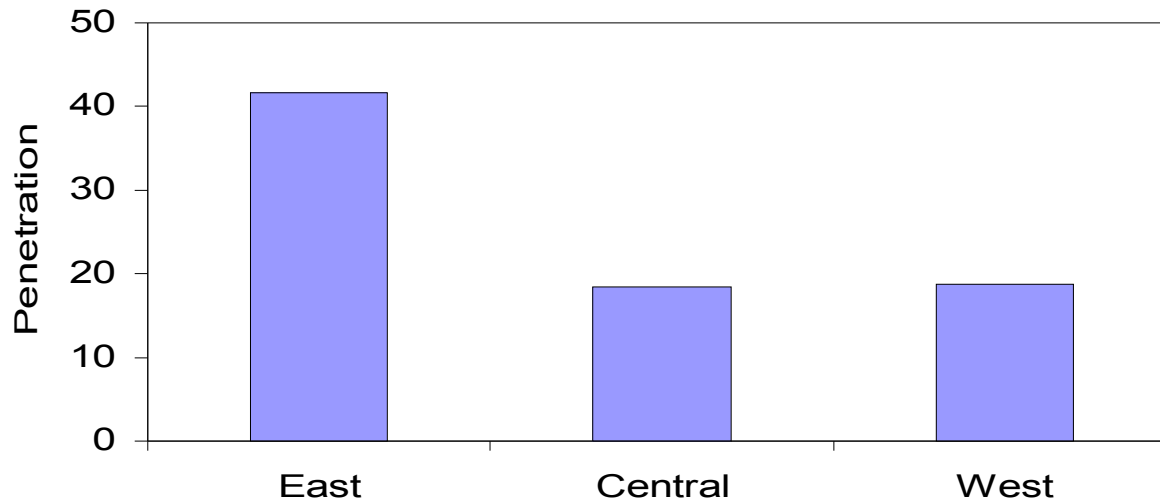
<i>Average income in Finland (2002)</i>	<i>2223euro/month (source: statistics Finland)</i>
Mobile charge	3.99euro monthly charge + 0.13euro/min (source: TeliaSonera One's voice charge, see Appendix 1)
Total time = Average income/mobile charge	$(2223-3.99)/0.13 = 17069$ minutes = 284hours

The affordability of the mobile services in Finland.

# Mobile Service Market in China (1/6)

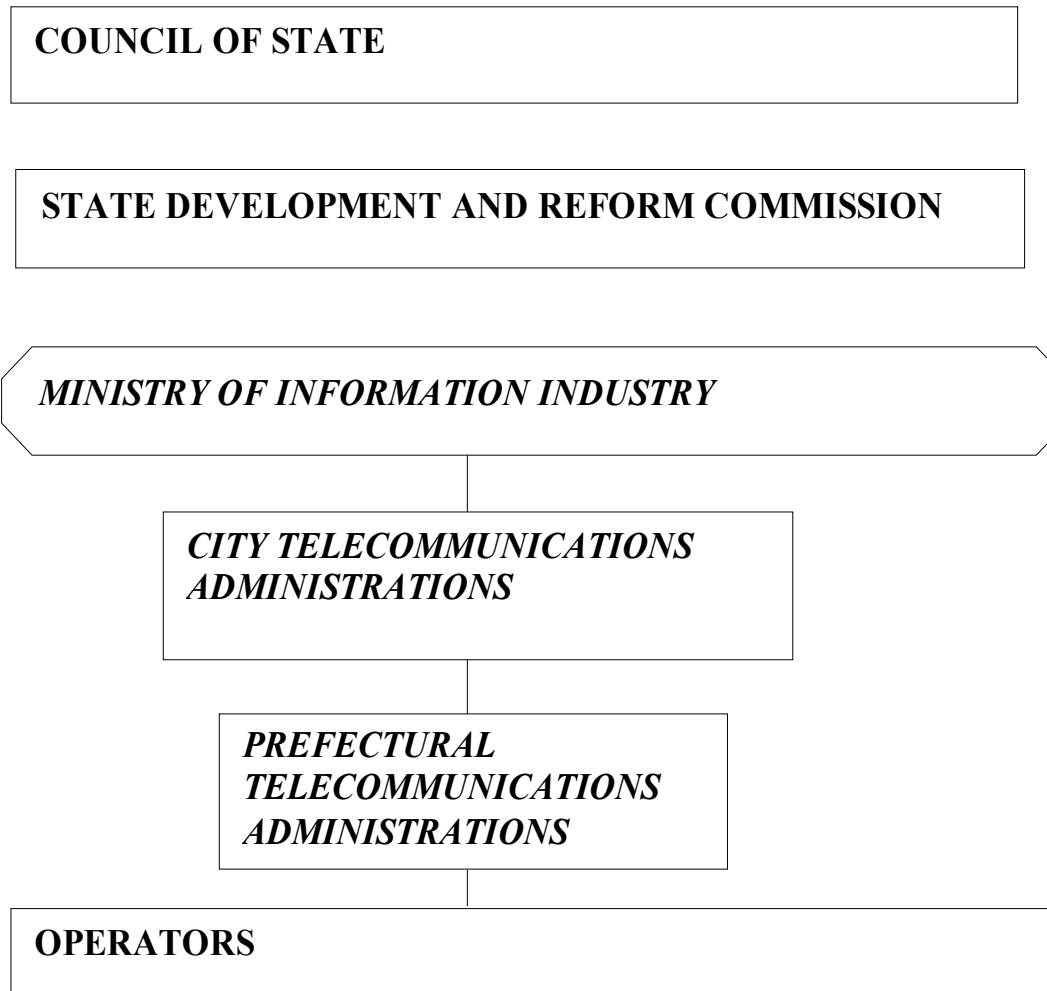


Mobile subscriber numbers and penetration in China



Distribution of the mobile penetration

# Mobile Service Market in China (2/6)



Hierarchical telecommunications regulatory framework in China

# Mobile Service Market in China (3/6)

## Price Regulation

Table 4: Mobile Voice Charges in China by the MII (RMB Yuan)

	<i>China Mobile</i>	<i>China Unicom</i>
Monthly Charge	50 (= 4.6€)	45 (= 4.14€)
Communications	0.40/min (= 0.0368€/min)	0.36/min (=0.0331€/min)

## Billing Models

- Prepaid & Calling Party Pays (RPP)

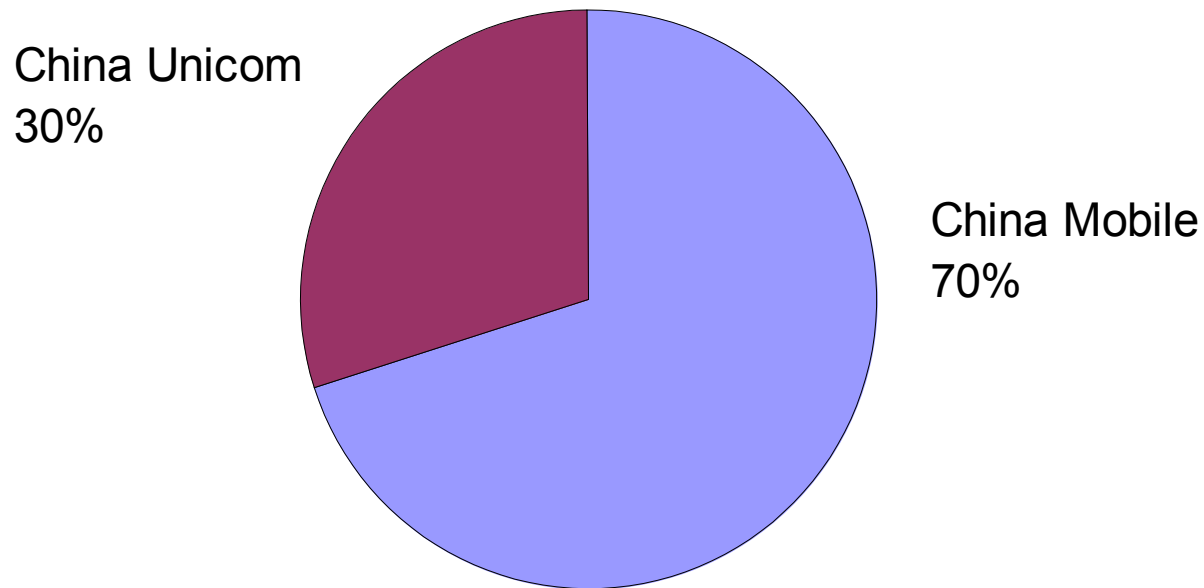
Bundling of CDMA mobile phones and subscriptions

Mobile Number Portability (MNP)

## 3G Licensing

- WCDMA, CDMA 2000, TD-SCDMA

# Mobile Service Market in China (4/6)



The market Share of China Mobile and China Unicom in 2003

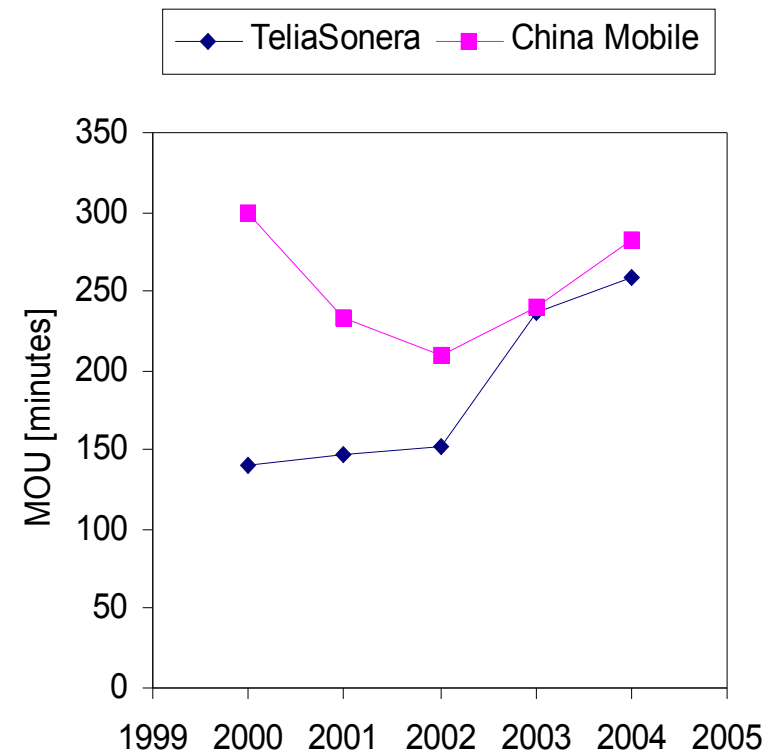
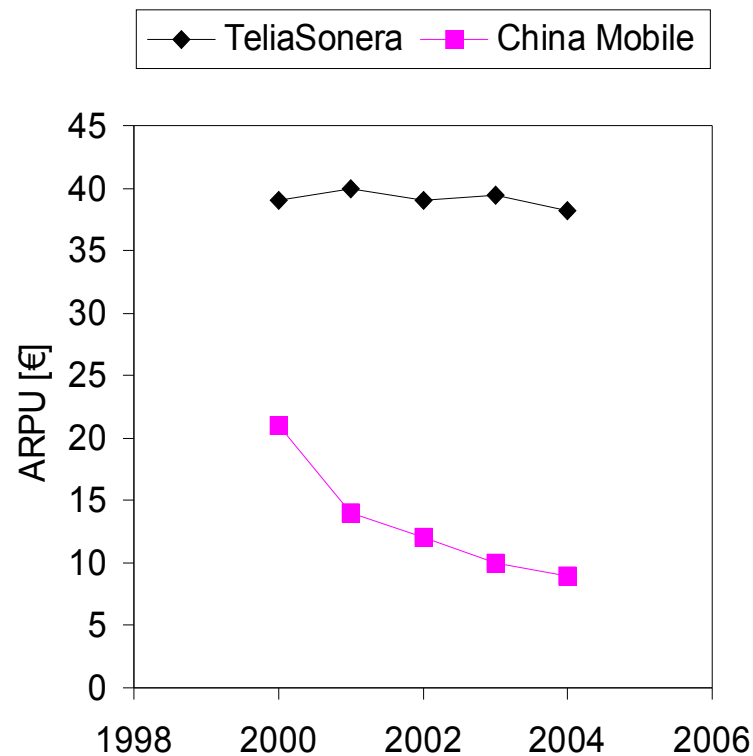
# Mobile Service Market in China (5/6)

<i>Average income in China (2002)</i>	<i>134euro/month (source: The People's Bank of China)</i>
Mobile charge	4.6euro monthly charge + 0.0368euro/min (Source: China Mobile's voice charge, see Appendix 3)
Total time = Average income/mobile charge	$(134-4.6)/0.0368 = 3516$ minutes = 58.6 hours

The affordability of mobile services in China.



# Mobile Service Market in China (6/6)



ARPU & MOU in China Mobile vs. in TeliaSonera Finland

# Five Forces Analysis (1/5)

## Rivalry among the existing players

### Finland

- Highly competitive
- Characteristics of a mature market
- Switching cost – MNP
- Government role
  - Light-handed regulatory approach

→ High intensity

### China

- Strongest economy growth in the world
- Only two mobile operators – CM and CU
- Different strategies
- Substitutability – Little Smart service

→ Medium intensity

# Five Forces Analysis (2/5)

## Threat of new entrants

### Finland

- MVNOs
  - Economies of scale
  - Regulatory support
- ➔ High threat

### China

- Entry barriers from the government
  - Huge investment
  - The expected retaliation from CM and CU
  - Who is the new entrant?!
- ➔ The threat of new domestic entrants is high, but the threat of new foreign entrants is low

# Five Forces Analysis (3/5)

## Bargaining power of buyers

### Finland

- Few buyers
- Little or no switching cost for the buyers
- Free choice
- Market information
- Value added service
- ➔ High bargaining power

### China

- Market segment
  - High-end, middle-end, and low-end
- Large volumes of buyers
- The degree of undifferentiated mobile service
- High switching cost
- Intervention of the regulator
- ➔ Medium bargaining power

# Five Forces Analysis (4/5)

## Bargaining power of supplier

### Finland

- More concentrated
  - No direct threat to cellular technologies
  - Close tie to mobile operators
  - Reduction in the size
  - 3G launch
- ➔ Medium bargaining power

### China

- High fragmented suppliers selling to extremely concentrated buyers
- ➔ Low bargaining power

# Five Forces Analysis (5/5)

## Threat of substitutes

### Finland

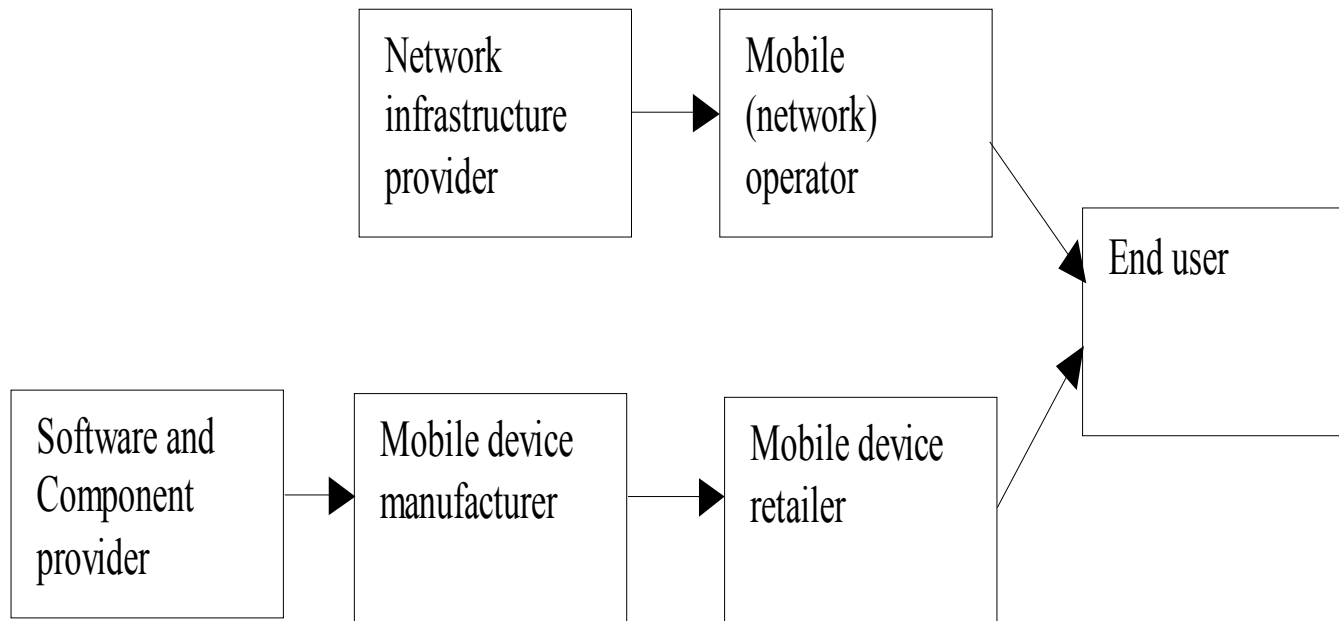
- No direct threat
- WLAN with fully developed VoIP
- View WLAN as complementary to mobile technology  
➔ Low threat

### China

- Little Smart – PAS
- Pros
  - Cheap
  - CPP billing model
- Cons
  - Lower mobility
  - Poor quality of service
- ➔ Medium threat

Five forces	Finland	China
Rivalry among the existing players	High	Medium
Threat of new entrants	High	The threat of new domestic entrants is high, but the threat of new foreign entrants is low.
Bargaining power of buyers	High	Medium
Bargaining power of suppliers	Medium	Low
Threat of substitutes	Low	Medium

# Value Network Analysis (1/5)



The traditional mobile value network

(1) All actors are shown as equally large, and (2) the distances between two actors are arbitrary.

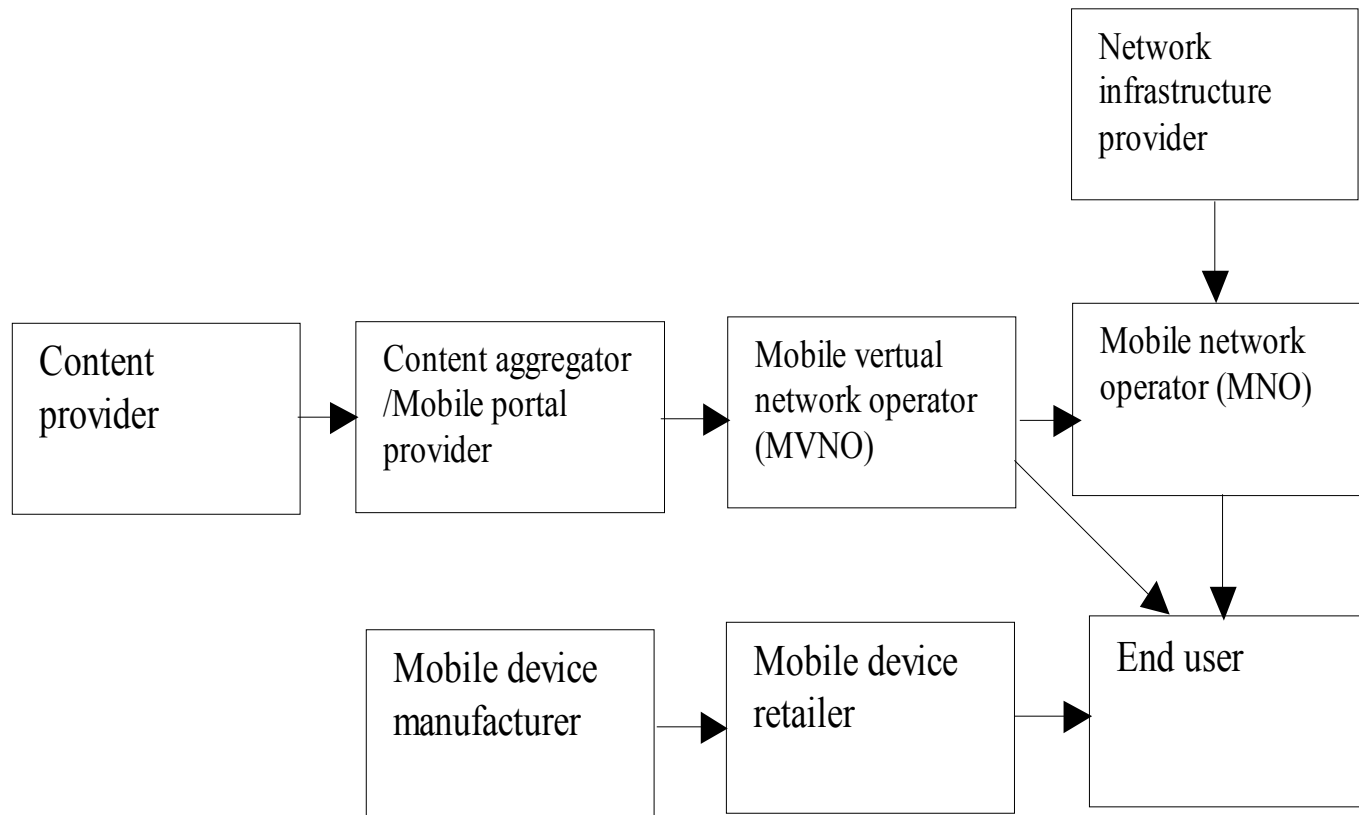


# Value Network Analysis (2/5)

Three main forces reshape the value network.

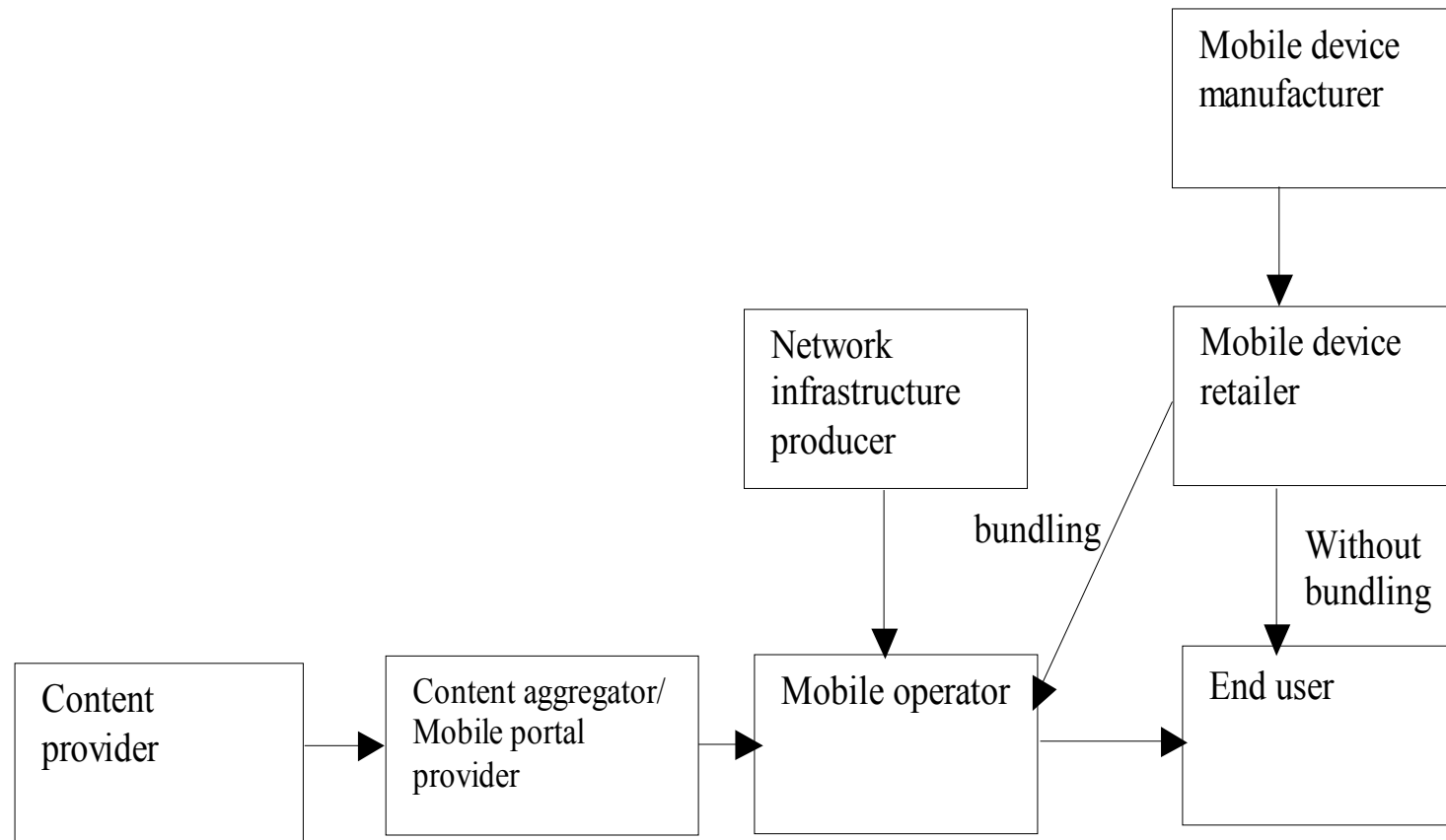
- The changes in the roles of value network members, which cause power shift within the traditional value network.
- The customer preference for personal customization.
- The effect of convergence between different actors.

# Value Network Analysis (3/5)



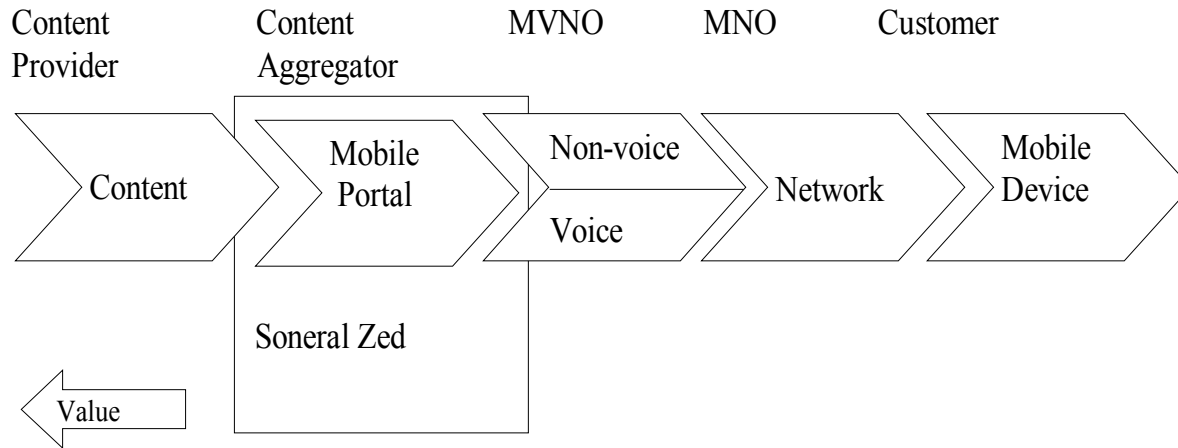
The current mobile value network of the core actors in Finland

# Value Network Analysis (4/5)

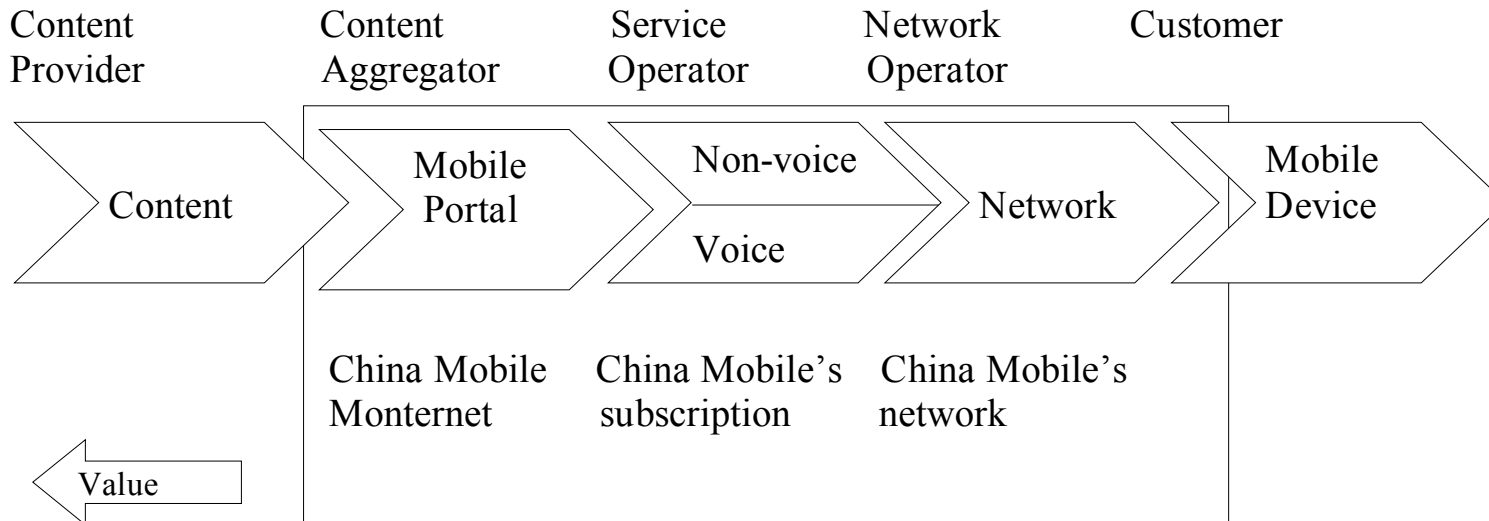


The current mobile value network of the core actors in China

# Value Network Analysis (5/5)



Sonera Zed revenue sharing model, modified from Helin, 2002



China Mobile Monternet revenue sharing model

# Conclusion

- The analyses find that a higher degree of competitiveness is displayed in the Finnish mobile communications service industry
- *The change in the roles of the value network members* is believed to be the most important force reshaping the current mobile value networks in both countries.

# Future Research

An in-depth analysis of the 3G market dynamics in these two countries in the near future should be done as a further study.