

# MASARYK UNIVERSITY FACULTY OF ECONOMICS AND ADMINISTRATION

## Mobile Commerce In The Czech Republic

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#### What can you expect

- 1. What is m-commerce
- 2. Why should it be important
- 3. Trends in m-commerce



#### **Terms**

#### Landline,

- main line or fixed-line - a telephone line which travels through a solid medium, either metal wire or optical fibre

#### Mobile network carrier

- mobile network operator (MNO), also known as carrier service provider (CSP), wireless service provider, wireless carrier, mobile phone operator, or cellular company, is a telephone company that provides services for mobile phone subscribers



#### **Terms**

#### **Postpaid**

- on plan, tariff, tariff plan - use and than pay model. Usually period of one month and at least "base" fee has to be paid.

#### **Prepaid**

- pay and than use model. Doesn't involve obligation to pay if you don't use the service, usually doesn't require a contract.

#### Mobile technologies

Infrastructure operated by mobile network carriers



#### M-commerce: definition

Set of processes which result in financial obligation and where at least one part is executed via mobile technologies



#### Importance of m-commerce

- For economy
  - Expenses on mobile services (70 bil. CZK)
  - Investments into mobile infrastructure (4.7 bil. CZK)
  - Employment (20 thousand employees in this sector)
- For businesses and individuals
  - Optimization of processes
  - New applications (new services)



#### Importance for the economy

Example: Marketing spendings by mobile network operators

1992: Czech telecomunications to SPT Telecom 10 mil. CZK

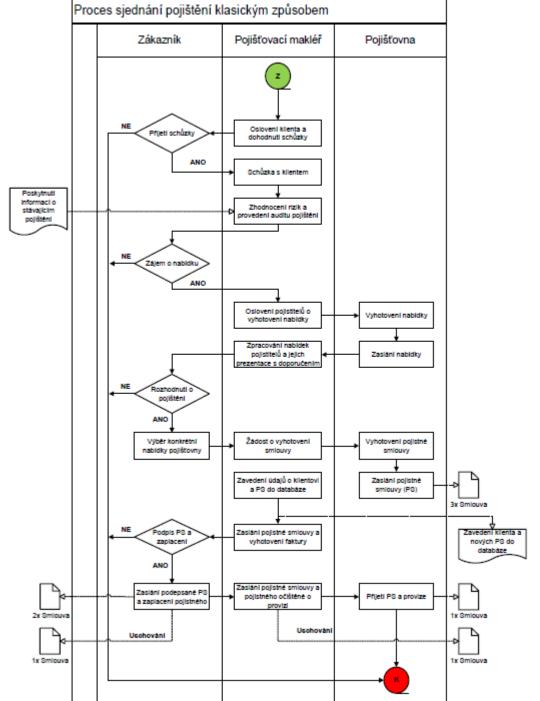
2000: SPT Telecom to Czech Telecom 250 mil. CZK

2002: Czech Telecom to Telefonica O2 500 mil. CZK

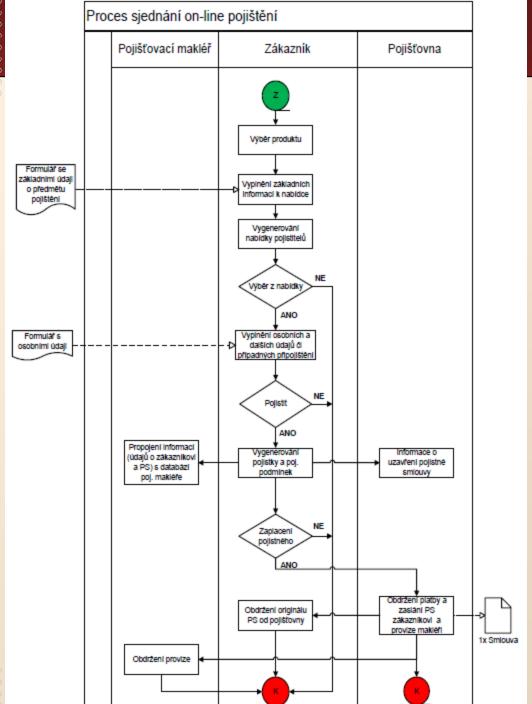
2002: Paegas to T-mobile 500-600 mil. CZK

2005/6: Oskar to Vodafone 500 mil. CZK









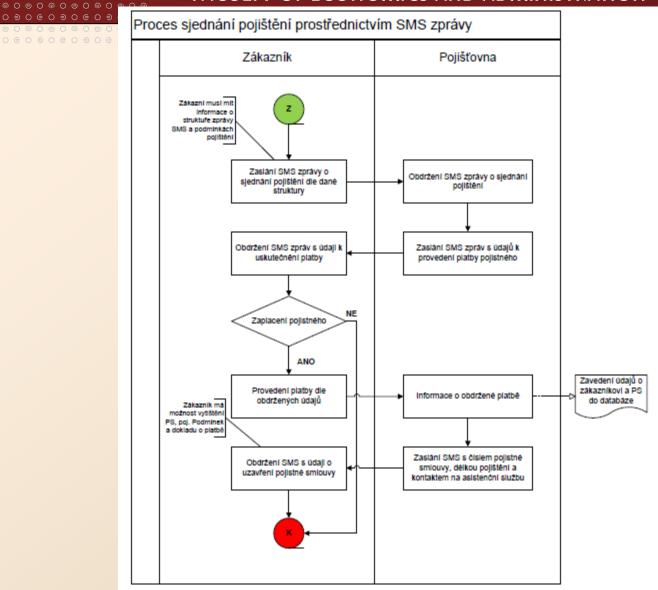
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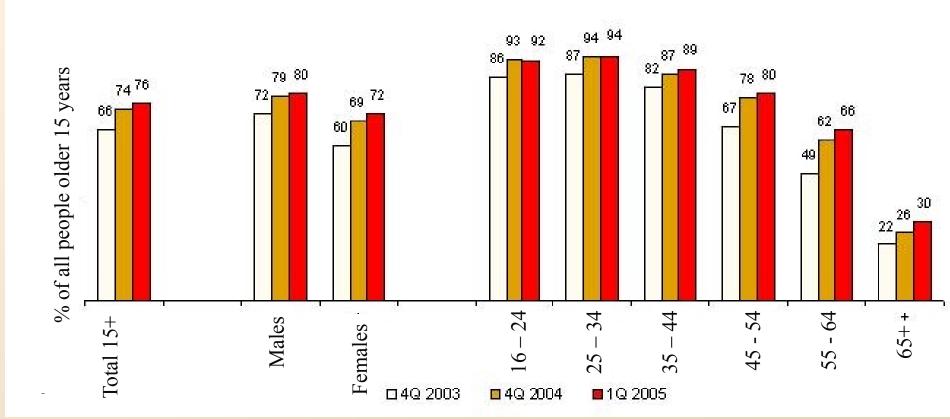


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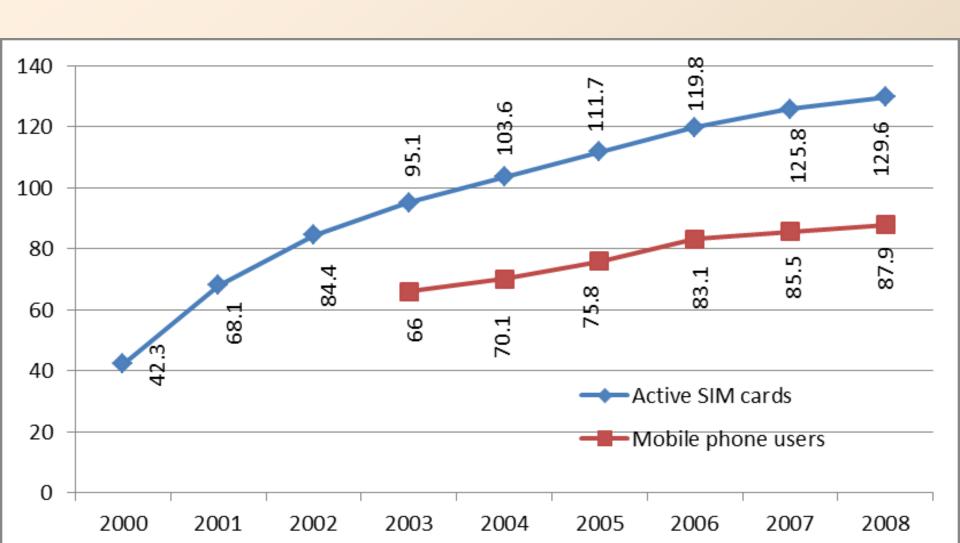
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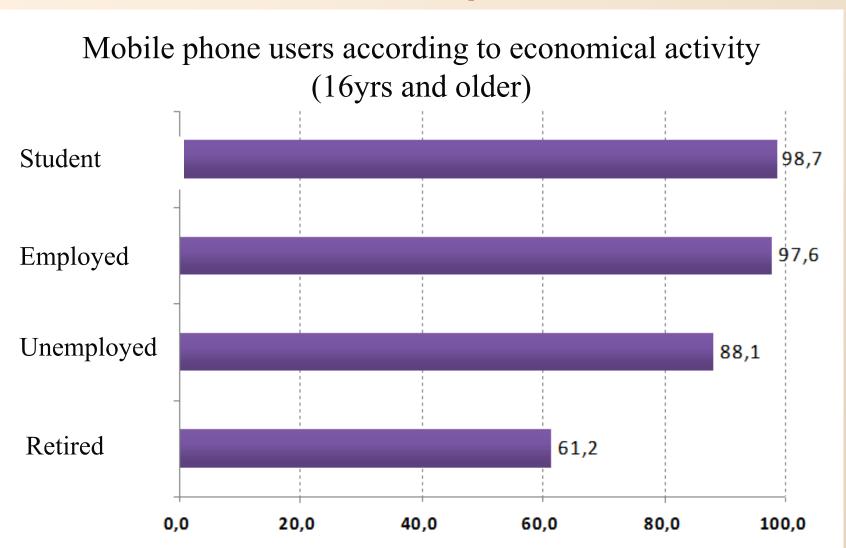
- Penetration CZ: 128.5 %, developed nations 117.8 %, Europe 119.5 %.
- Real penetration: CZ in 2005: 76 %, 2008: 87.9 %



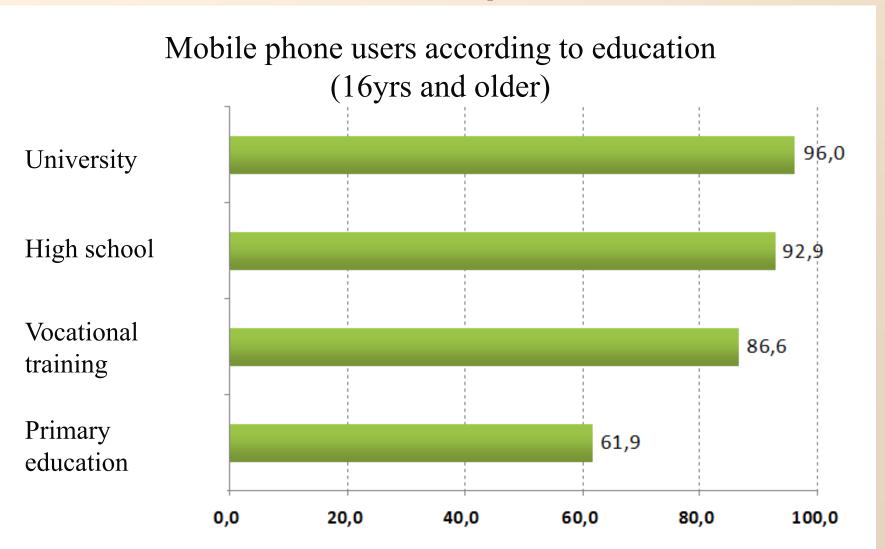








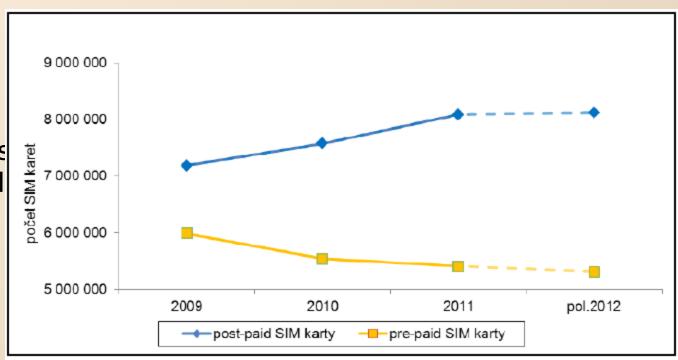






#### Trends in m-commerce: prepaid vs. postpaid

- Postpaid customers are much more profitable
  - In 2008 Vodafone had about 50% customers on plans (= postpaid) and the ARPU of them was 966 CZK monthly. Compare to ARPU of prepaid customers 342 CZK
- Customers on plan are more likely to be loyal
  - That is important because full portability of phone numbers was introduced



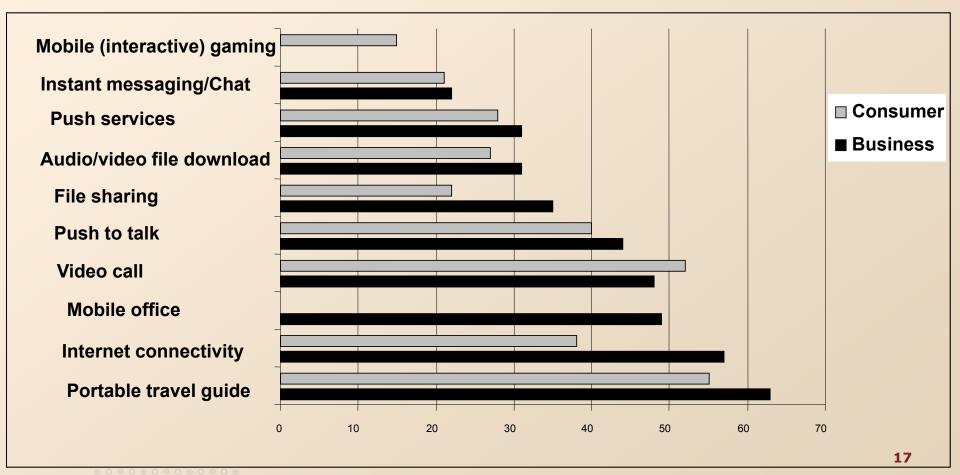


#### Trends in m-commerce: data services

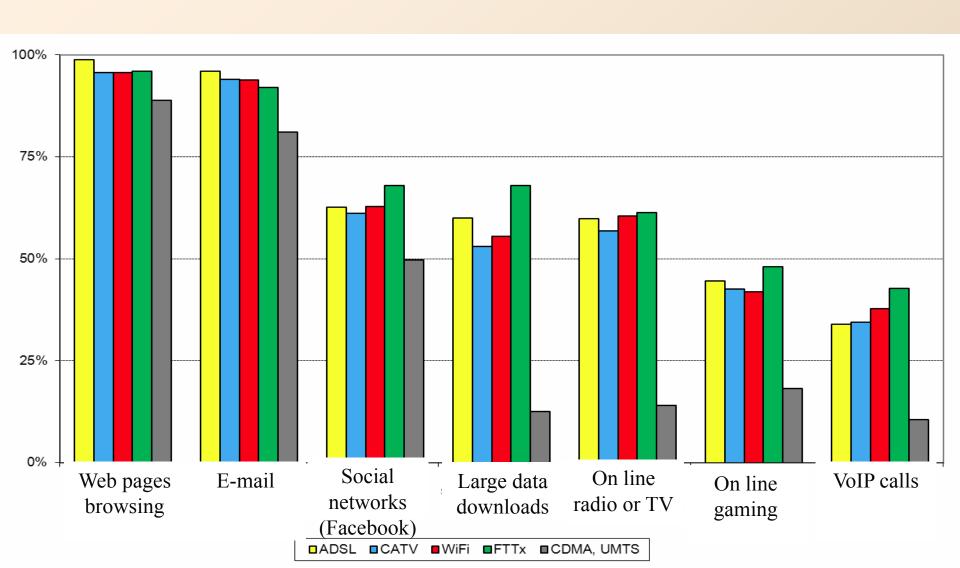
- Nowadays accesses to the internet from mobile network account for cca 20 % (in CZ in 2011)
- There are more and more services based on fast internet connection offered for mobile phones
- Coverage with fast networks (3G) is higher and higher



## **Expected services in 3G networks** (Milvard Brown survey, CR 2005)



#### Trends in m-commerce: data services



#### **Trends in m-commerce: data services**

Standard	Download speed theoretical	Download speed real	
GSM	14,4 kbit/s	14,4 kbit/s	
HSCSD	115,2 kbit/s	43,2 kbit/s	
ISDN	1920 kbit/s	128 kbit/s	
GPRS	171,2 kbit/s	85,6 kbit/s	
EDGE	236,8 kbit/s	150 kbit/s	
CDMA2000	2457,6 kbit/s	300 – 1500 kbit/s	
UMTS	384 - 10  Mb/s	200 – 1800 kbit/s	



#### Trends in m-commerce: Use of mobile phones

The start of use of mobile phones

Age	Cumulative frequency (%)
13	10,5
14	52,6
15	92,1
16	98,7
17	99



### Why and how do people use mobile phones: Social connectivity (Morley, 2003)

Mobile phone (MP) intensifies the social connectivity of the owner. To have MP means to be connected, to be a part of social network, to be available everywhere by everybody.

When do I switch MP off	(%)	
Never	69,9	
Night	17,8	
Other	6,8	
Night + school	1,4	

76 respondents between 17-18, 2007



#### Why and how do people use mobile phones: Attitude toward MP

1. If others had not have it, I would not have it too

> The determinant here is the social network, social connectivity

2. I am addicted to MP

Saves time, is personal, not to have it is boring



## Why and how do people use mobile phones: MP – strongly personal thing

■ Ishii, 2006: MP is not as much issue of mobility as issue of personalization and localization.

50 % of calls are made from home, 40 % from work and only 10 % outside these places

Mobility is matter of place, time, and context



#### Why and how do people use mobile phones:

#### **Mobility: place**

Physical motion from place to place

#### **Mobility: time**

- Results from physical mobility, means accelerating of processes, saving time, flexibility.
- Micro-coordination, softening of time

#### Why and how do people use mobile phones:

#### **Mobility: context**

Communication face to face has to comply with context: environment, particular situation, mood. Mobile communication frees the participants of this.

Case: SMS vs videocalls

Does m-communication mean greater or lesser freedom?



#### Why and how do people use mobile phones: **Mobility**

- Disconnectivity anxiety (Jim Taylor)
- Feel of safety if in reach of own mobile phone
- Own world in the pocket



# Why and how do people use mobile phones: Domestication of MP (Silverstone, Silverstone & Haddon)

- Innovation is a process, not a single event Assumptions:
- look behind function
- (1) imaginativeness, (2) acquiring,
  - (3) materialization, (4) transformation

#### M-business applications: forms

- 1. m-Presence
- 2. m-Payment
  - m-Banking
- 3. m-Purchasing
- 4. m-Procurement
- 5. m-Shop
- 6. m-Auction
- 7. m-Care
- 8. m-Marketing



#### **Trends in m-commerce: M-marketing**

- Form of direct marketing
- Still in its beginning
- Any form of marketing activity via mobile phone

#### Trends in m-commerce: M-marketing (forms)

- 1. SMS messages
- 2. SMS competitions, voting, inquiries
- 3. Advergaming (via SMS, WAP, Java games)
- 4. Logos, ringtones
- 5. Bluecasting, cell broadcasting
- 6. Mobile tagging

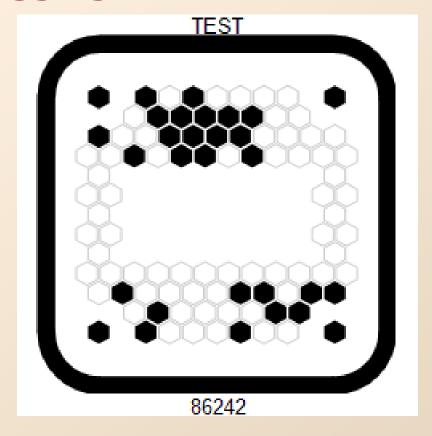


#### **Mobile Tagging**

- A product bears a tagg
- User takes a picture of the tagg by mobile phone
- Application in mobile phone translates the picture into unique ID code, connects to server and provides link to webpages (or wappages) of product in question



#### Mobile tagging - 2D code





#### http://is.muni.cz/



#### Trends in m-commerce: mobile payments

- 1. Premium SMS/MMS
  - Most known, most used, most expensive
  - Mobile originated, mobile terminated
- 2. M-payment
  - Through gateway like with credit card on internet, but phone number instead of cc number
- 3. M-purse (M-wallet)
  - Connected to bank account, credit card or prepaid amount.
- 4. NFC (near field communication)
  - Non contact short distance payment
- 5. M-banking



#### **Trends in m-commerce: mobile payments**

Method		Credit/d ebit card	contact		NFC SIM	
	20	2.6	_	_		0.4
Time (s)	29	26	5	5		



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#### Thanks for attention