

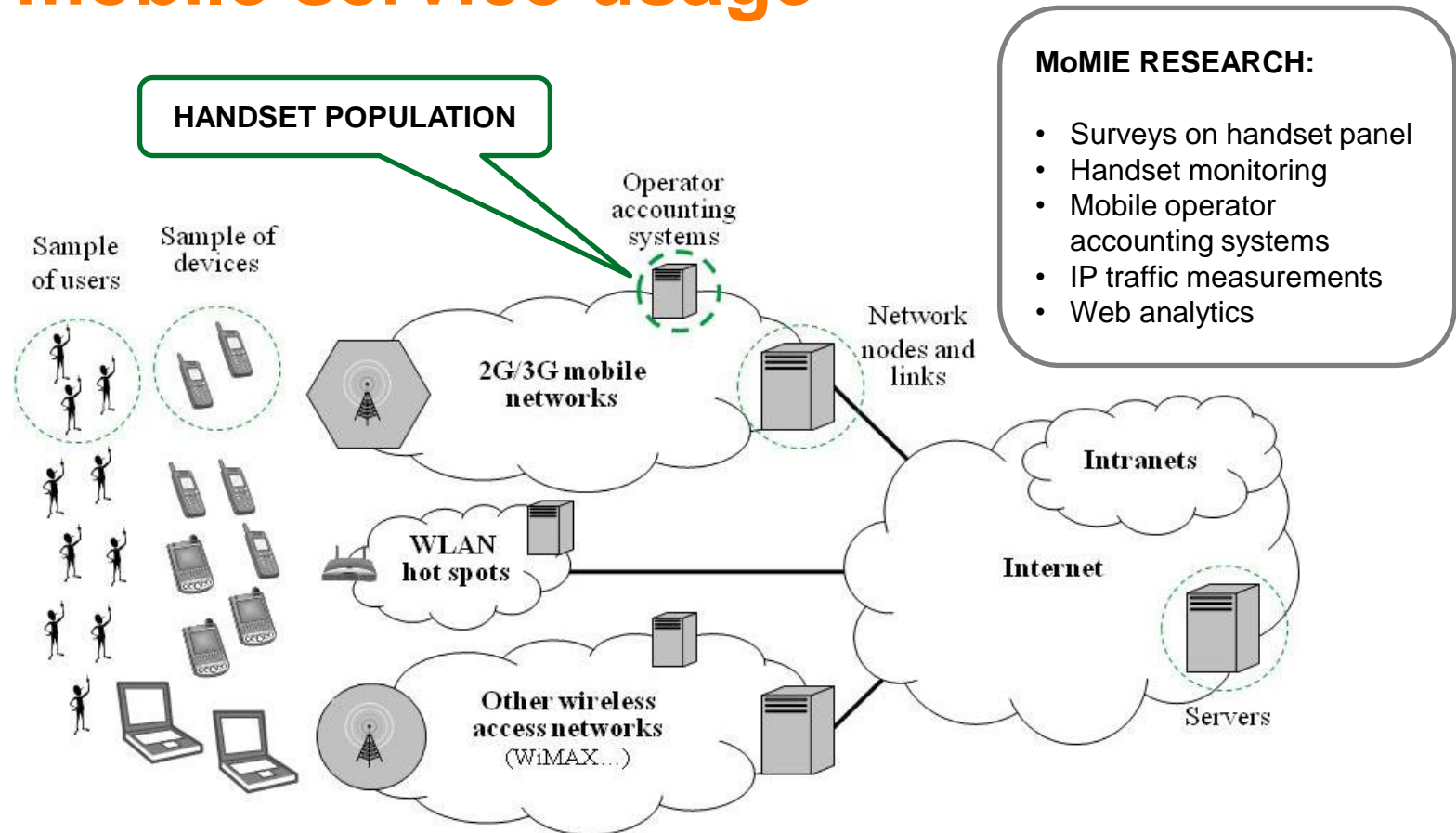


Aalto University
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Mobile Handset Population in Finland 2005-2010

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MoMIE: Comprehensive view on mobile service usage

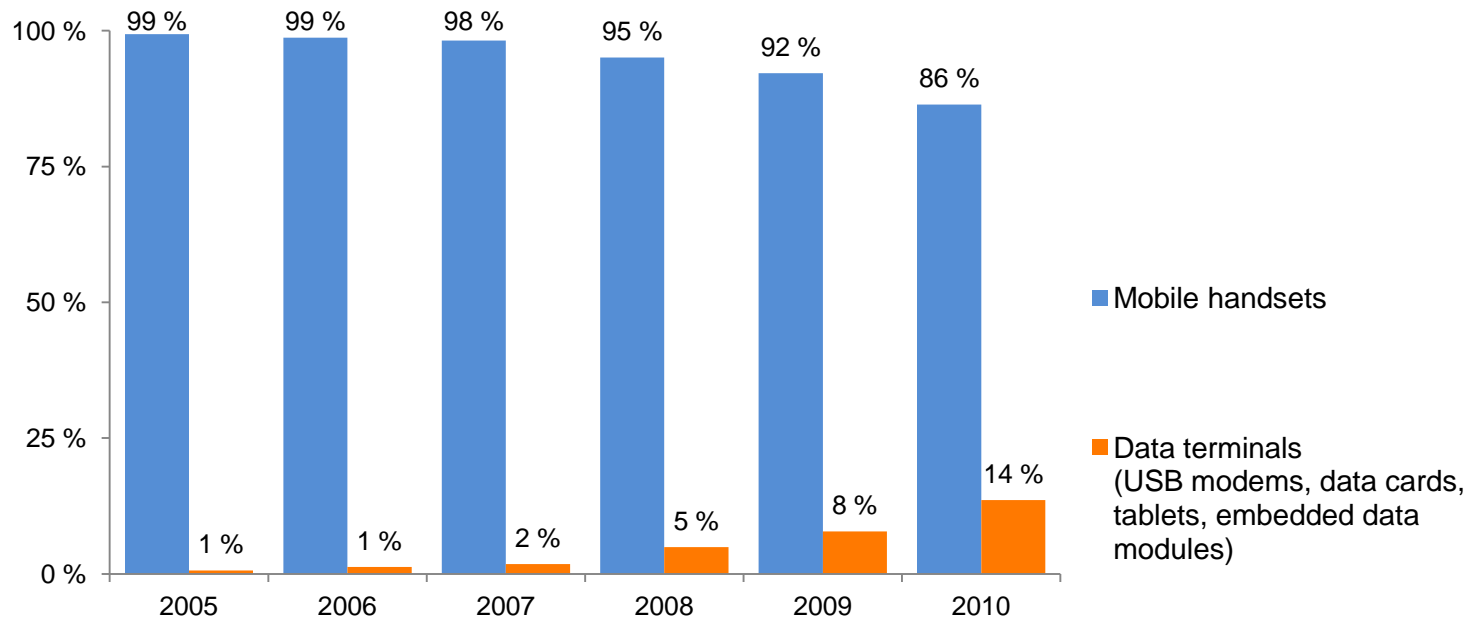


Source: Modified from Kivi, 2009

Data collection: handset population

- Mobile operators' accounting systems
 - Data from end of Q3, annually 2005–2010
 - Feature information: from GfK and public sources
- Represents 80-99% of mobile terminals used in Finnish mobile networks annually
 - Data from DNA, Elisa, and TeliaSonera
 - Includes mobile terminals observed at operators' network
 - Some error due to
 - No data on Apple iPhone from TeliaSonera
 - Mobile subscriber churn during the observation period
 - Slight differences in operator-specific data sets
 - Unidentified terminals and missing feature-data of handset models

Share of data terminals growing



- Increasing amount of also other device types than mobile handsets
 - Data terminals mostly USB modems (large scale introduction: fall 2007)
- Other device types (e.g. desktop phones) excluded from the analysis

Top mobile handset models in Finland

- **Features of Top 15:**

- Packet data in 12
- Six WCDMA devices
- Symbian OS in three

- **First smartphone 4th**

- Symbian S60
- Touch screen, GPS
- Price < 150€

- **Top 10 smartphones**

- Symbian OS handsets
- 8/10 with HSDPA

Top 15 handset models in use in Finland (Q3/2010)

Rank	Model name	Share of all handsets	Change from 2009	Packet data*
1	Nokia 2760	3.8%	➡	GPRS/EDGE
2	Nokia 3120 Classic	3.5%	➡	WCDMA
3	Nokia 1100	2.7%	➡	-
4	Nokia 5230	2.0%	⬆	WCDMA
5	Nokia 2730 Classic	2.0%	⬆	WCDMA
6	Nokia 3720 Classic	1.9%	⬆	GPRS/EDGE
7	Nokia 2600 Classic	1.8%	⬆	GPRS/EDGE
8	Nokia 3710 Fold	1.7%	⬆	WCDMA
9	Nokia 3110 Classic	1.7%	⬆	GPRS/EDGE
10	Nokia 2330 Classic	1.7%	⬆	GPRS/EDGE
11	Nokia E75	1.6%	⬆	WCDMA
12	Nokia 3310	1.6%	⬆	-
13	Nokia 1600	1.6%	⬆	-
14	Nokia E71	1.6%	⬆	WCDMA
15	Nokia 2610	1.6%	⬆	GPRS

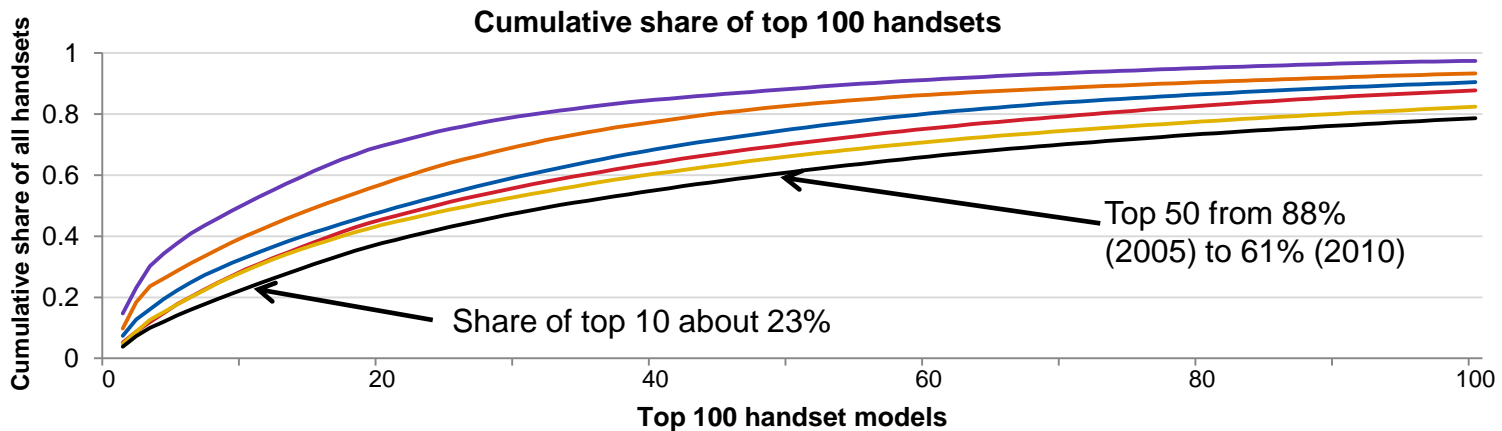
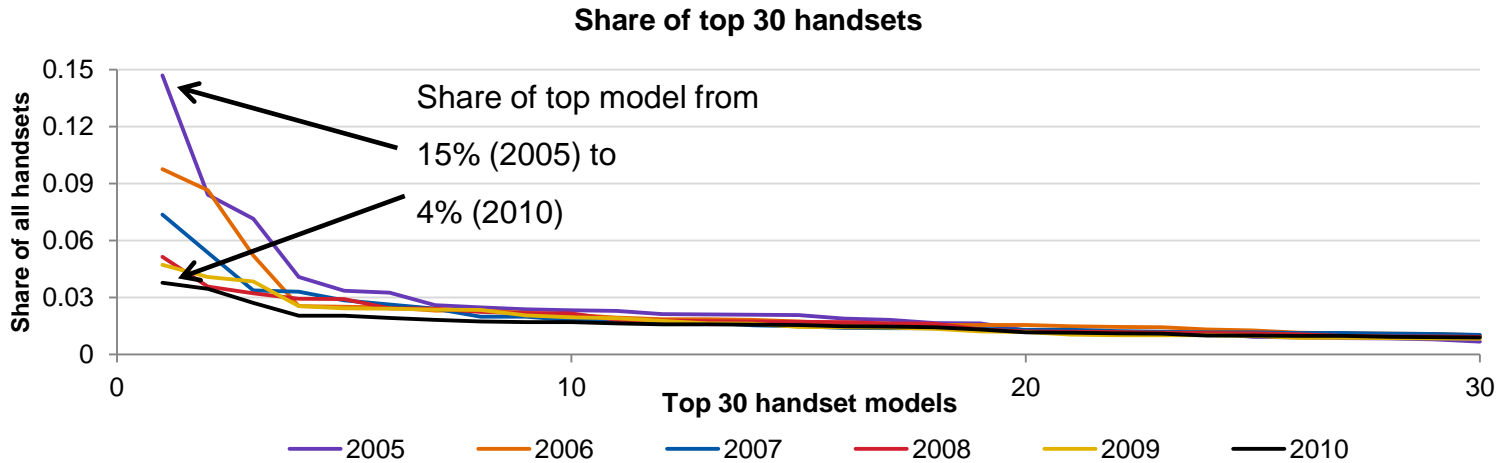
Top 10 smartphone models in use in Finland (Q3/2010) **

Rank	Model name	Share of all handsets	Change from 2009
1 (4)	Nokia 5230	2.0%	⬆
2 (11)	Nokia E75	1.6%	⬆
3 (14)	Nokia E71	1.6%	⬆
4 (17)	Nokia E51	1.5%	⬆
5 (19)	Nokia N95 / N95 8GB	1.3%	⬆
6 (21)	Nokia E90 Communicator	1.1%	⬆
7 (23)	Nokia E52	1.1%	⬆
8 (24)	Nokia 5800 XpressMusic	1.0%	⬆
9 (31)	Nokia N73 / N73 Music Edition	0.8%	⬆
10 (33)	Nokia N97	0.8%	⬆

* All WCDMA handset models have GPRS/EDGE/WCDMA capability

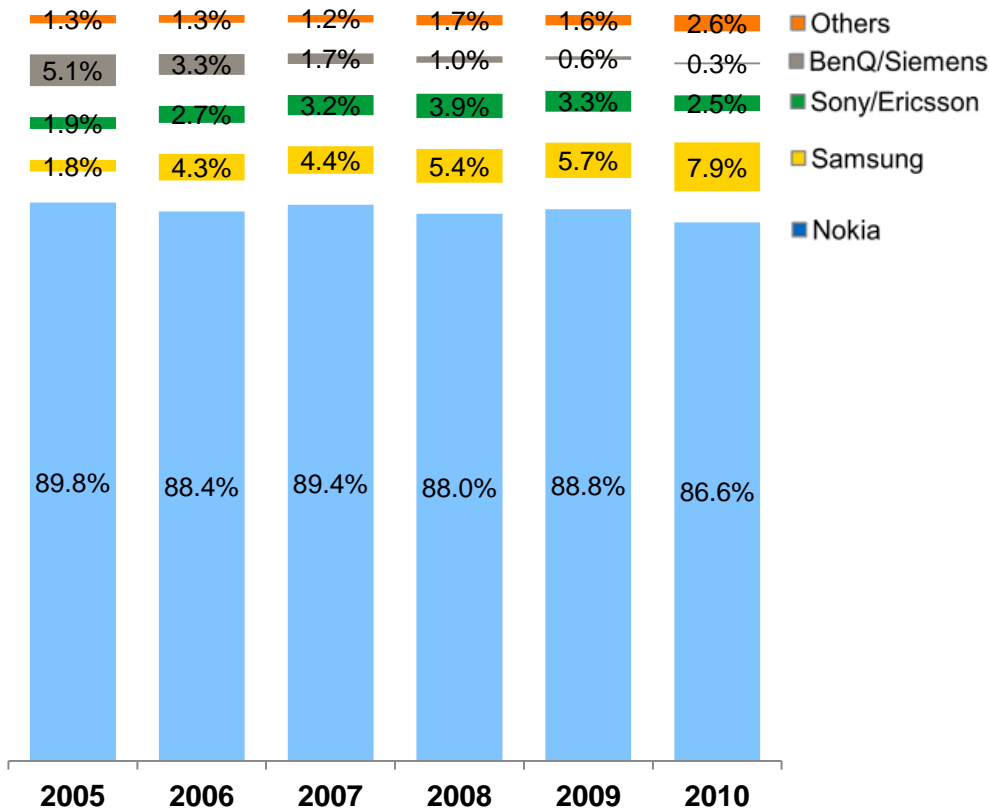
** All top 10 smartphones have GPRS/EDGE/WCDMA capability

Fragmentation of handset population



Nokia dominates handset population

Mobile handsets by manufacturer 2005-2010



Others

- "Others", Sony/Ericsson, and BenQ/Siemens combined share 5,4%
- HTC and LG with largest shares in "Others", both < 1%

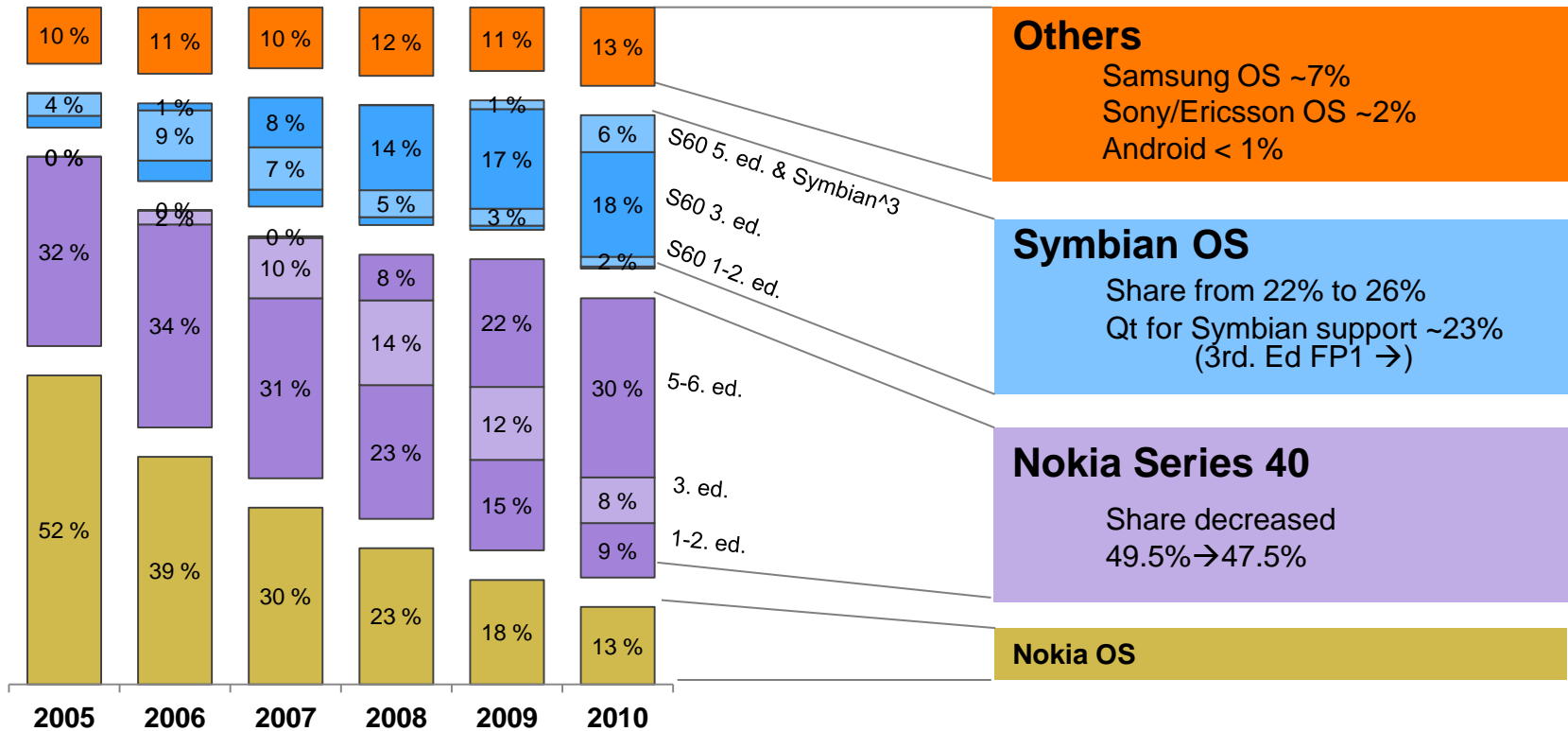
Samsung

Second with ~ 7.9% share

Nokia

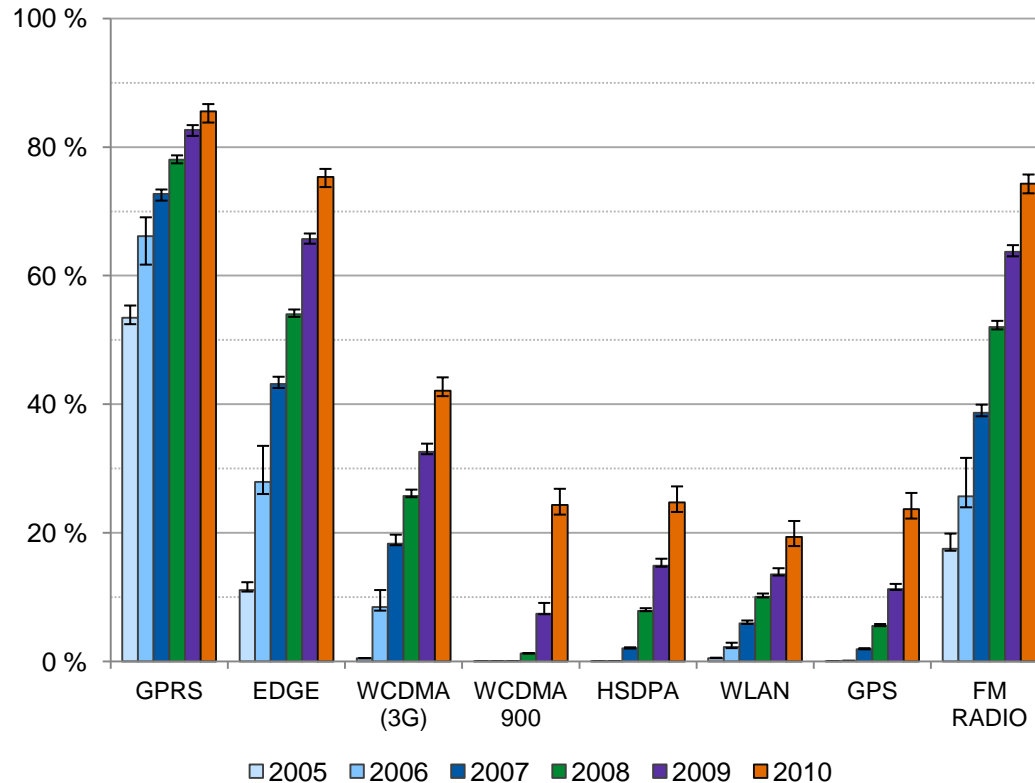
- 86.6% of devices
- First non-Nokia ranked 29th

Mobile handsets by operating system



Higher data transfer speeds spread fast

Penetration of handset features in Finland 2005-2010 (1)



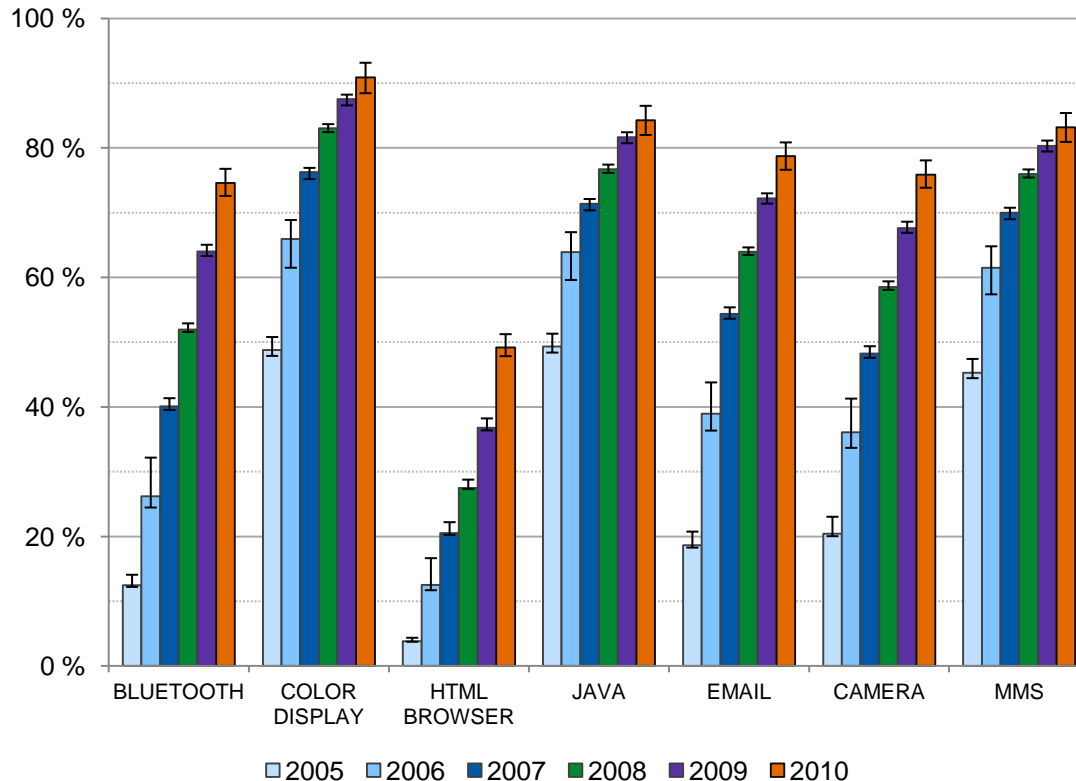
- Especially 3G technologies
 - WCDMA, WCDMA900, HSDPA
- WLAN slower
- GPS in almost 25% of handsets
 - Feature included increasingly in mid-range models

N = 4-6.6 Millions

Upper and lower error margins presented with I

Many features with high penetration

Penetration of handset features in Finland 2005-2010 (2)



- Many features close to saturation
 - Low-end population limits penetration
- HTML capable browser in almost 50% of devices

N = 4-6.6 Millions

Upper and lower error margins presented with $\bar{\pm}$

Mobile handsets by input method

Input method	2005	2006	2007	2008	2009	2010
3x4 KEY in**	98 %	99 %	99 %	98 %	96 %	86%
QWERTY in*	3 %	5 %	5 %	5 %	7 %	10%
TOUCH in*	0.1%	0.2%	0.1%	0.4%	2 %	11%

* TOUCH + QWERTY in 2,7%

** 3x4 KEY + QWERTY in 3,5%

- Emerging input methods substitute numeric keypad
 - Share of handsets with numeric keypad as the only input method decreasing (2009: 92% → 2010: 82%)
 - Especially touch screen penetrating fast

Conclusions

- Typical handset manufactured by Nokia (86.5%)
 - Series 40 (45%) the largest development platform, share of Symbian (26%) growing
- Advanced features spreading fast
 - With increasing share of handsets possible to consume advanced services & content
 - New input methods (touch screen, QWERTY) substituting numeric keypad

Further information

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