7 November 2012

SEB ENSKILDA

IKT og marked

Lecture

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“Business” and academic principles

Close to each other: Engineering & Natural sciences

Further away from each other: Business & Academic economics/business literature

“Business” and academic principles

Laws of nature are consistent

People, that are central in the world of business, are less consistent

Some concepts from the world of business that you should know about

Valuation/Investment analysis

Accounting basics

Profitability/Differentiation

Scalability

Valuation – What is the economic value of something (e.g. share/bond etc)

Someone offered you a series of payments, what is it worth to you?

Year	2012	2013	2014	2015	2016
Annual payment	100	100	100	100	100

Sum up the future payments gives you NOK 500

Is it worth NOK 500 though? Not quite, you need to adjust for two factors:

1) Time value of money

   - Would you prefer NOK 100 today or in year 2020?

2) Risk

   - If you are concerned about the payments you would demand a higher interest rate

Valuation – Cost of capital

Time value of money + Risk = Cost of capital

An academic model to figure out Cost of Capital is CAPM

Cost of capital = Risk free rate + Beta x market risk premium

When assessing value of companies an OK ”rule of thumb” would be to use 10%

Let us have some fun and visit accounting before we go back to valuation

Telio Holding's Q3 2011 accounts

P&L

	Note	Q3 2011
Sales	5	88 527
Other revenues		5 521
Total revenues		**94 048**
Cost of connection and traffic charges		-34 566
Salaries and personnel costs		-14 843
Selling and marketing costs		-4 538
Other costs		-10 477
Depreciation and amortization	6, 7	-9 118
Operating profit		**20 506**
Finance		-104
Profit before income tax		**20 402**
Income tax		-5 219
Profit *)		**15 183**

Balance sheet

ASSETS	Note	30.09.2011
Non-current assets		
Property, plant and equipment	6	12 341
Intangible assets	7	25 937
Deferred tax assets		5 138
		43 416
Current assets		
Inventory	8	12 915
Trade and other receivables		44 091
Cash and cash equivalents		72 254
		129 260
Total assets		**172 676**
EQUITY		
Share capital		1 900
Other reserves		20 417
Retained earnings		40 861
Total equity		**63 178**
LIABILITIES		
Non-current liabilities		
Borrowings		11 193
Deferred tax liabilities		-
		11 193
Current liabilities		
Trade and other payables		58 474
Current income tax liabilities		15 581
Borrowings		4 617
Deferred income		18 536
Accrued liabilities		1 097
		98 305
Total liabilities		**109 498**
Total equity and liabilities		**172 676**

Cash flow

Cash flows from operations	Q3 2011
Profit/loss for the year before tax	20 402
Adjustment for:	
- Net financial items	104
- Interest paid	-364
- Interest received	237
- Realized foreign exchange gain/(loss)	-25
- Taxes paid	-11 945
- Depreciation	3 181
- Amortisation	5 938
- Non-cash transactions related to option costs	220
Changes in inventory	2 904
Changes in trade accounts payable and other liabilities	2 760
Changes in trade accounts and other receivables	4 367
Change in deferred revenue	-675
Net cash flow from operations	**27 104**
Cash flows from investment activities	
Purchase of property, plant and equipment (tangible fixed assets)	-438
Purchase of PPE through financial lease	-1 463
Purchase of other investments (intangible assets) *)	-6 800
Investments in subsidiaries	-
Acquired cash	-
Net cash flows used in investment activities	**-8 701**
Cash flows from financing activities	
(Purchase)/sale of treasury shares	-2 127
Proceeds for shares issued to employees	245
New borrowings (financial lease)	1 463
Payment of liabilities related to financial leasing	-3 384
Dividends paid	-
Net cash flows used in financing activities	**-3 803**
Change in cash and cash equivalents	**14 600**
Cash and cash equivalents and credit facilities utilised as at beginning of period	57 217
Effect of exchange rate fluctuations on cash and cash equivalents	437
Cash and cash equivalents as at end of period	**72 254**

What is the value of a company?

IKT & Marked consulting	**2012**	**2013**	**2014**	**2015**	**2016**
No of consultants	30	30	30	30	30
Number of hours per week per consultant	5	5	5	5	5
Number of weeks at work per year per consultant	35	35	35	35	35
Price per hour	1000	1025	1051	1077	1104
Revenues	**5.3**	**5.4**	**5.5**	**5.7**	**5.8**
Variable costs	**0**	**0**	**0**	**0**	**0**
Salary and employment fees per hour (NOK)	700	700	700	700	700
Salary costs	3.7	3.7	3.7	3.7	3.7
Office rent cost of NOK 25 000 per month (NOKm)	0.3	0.3	0.3	0.3	0.3
Christmas party and other costs (NOKm)	0.2	0.2	0.2	0.2	0.2
Total "operational expenditures"	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**
Depreciation	0	0	0	0	0
Earnings Before Interest and Taxes (EBIT)	***1.1***	***1.2***	***1.3***	***1.5***	***1.6***
Net finance	0	0	0	0	0
Taxes @ 28%	0.3	0.3	0.4	0.4	0.5
Net profit / Earnings / Net income	**0.8**	**0.9**	**1.0**	**1.1**	**1.2**
Cost of capital assumption = 10%					
"Discount factor"	1.100	1.210	1.331	1.464	1.611
Earnings in "today value"	**0.70**	**0.72**	**0.73**	**0.73**	**0.72**
Sum of the above = NOK 3.6m					

Economic value is driven by expected profits so let's talk about profitability

Firstly, why is it important?

Profitability means that you are ”serving a purpose” or meeting a demand in the society in a better way than competitors

Without profitability, no-one are likely to fund the company -> No company -> No employment

No profitability, no tax -> Low government budget, little welfare

High profitability attracts entrants -> Potential entrants need to come up with something new to enter successfully -> Innovation stimuli

Profitability, how is it created and how can one measure it?

Creation: There must be demand (someone must want to buy the product/ service) + You must be able to ”differentiate” vs competition

Demand but many equal competitors (”perfect competition”) -> zero profits

A word you should know about: ”Margin” -> Revenues NOK 100, EBIT NOK 20 -> EBIT margin of 20%

Margins are not the best way to assess profitability though. Why? Imagine you invested NOK 1m in an web page with IQ tests. It would cost NOK 100 to do the test. The first year, 10 persons did the test. Revenues would then be NOK 1000. Costs zero so you have 100% margin. Is it a good investment? No, ”return on invested capital” = NOK 1000 / NOK 1 000 000 = 0.1% (you would be much better off by placing your money in the bank)

Another important word in the world of ICT business: SCALABILITY

TELECOM:

Huge investment to build a network

Some fixed costs but relatively moderate

It takes fairly high number of customers to reach break even but every new customer contributes nicely to profits -> It scales! Margins increase on revenue increase

CONSULTANTS:

Payment per hour, does not scale (but can still be highly profitable)

INTERNET SOFTWARE COMPANIES:

A significant developer team -> Fixed cost base, very low variable costs

High scalability

Now that we have discussed basic business concepts, let us discuss actual ICT companies

ICT used to be a very diverse sector

The ”CT” in ICT:

- Telecom operators
- Network equipment
    - In Norway: Eltek (power electronics) Sweden: Ericsson Finland: Nokia

”I and T” comprises a very long list of very different companies:

- Internet software
- Semiconductor
- Business software
- Media/broadcasting technology
- Database
- PC etc etc etc

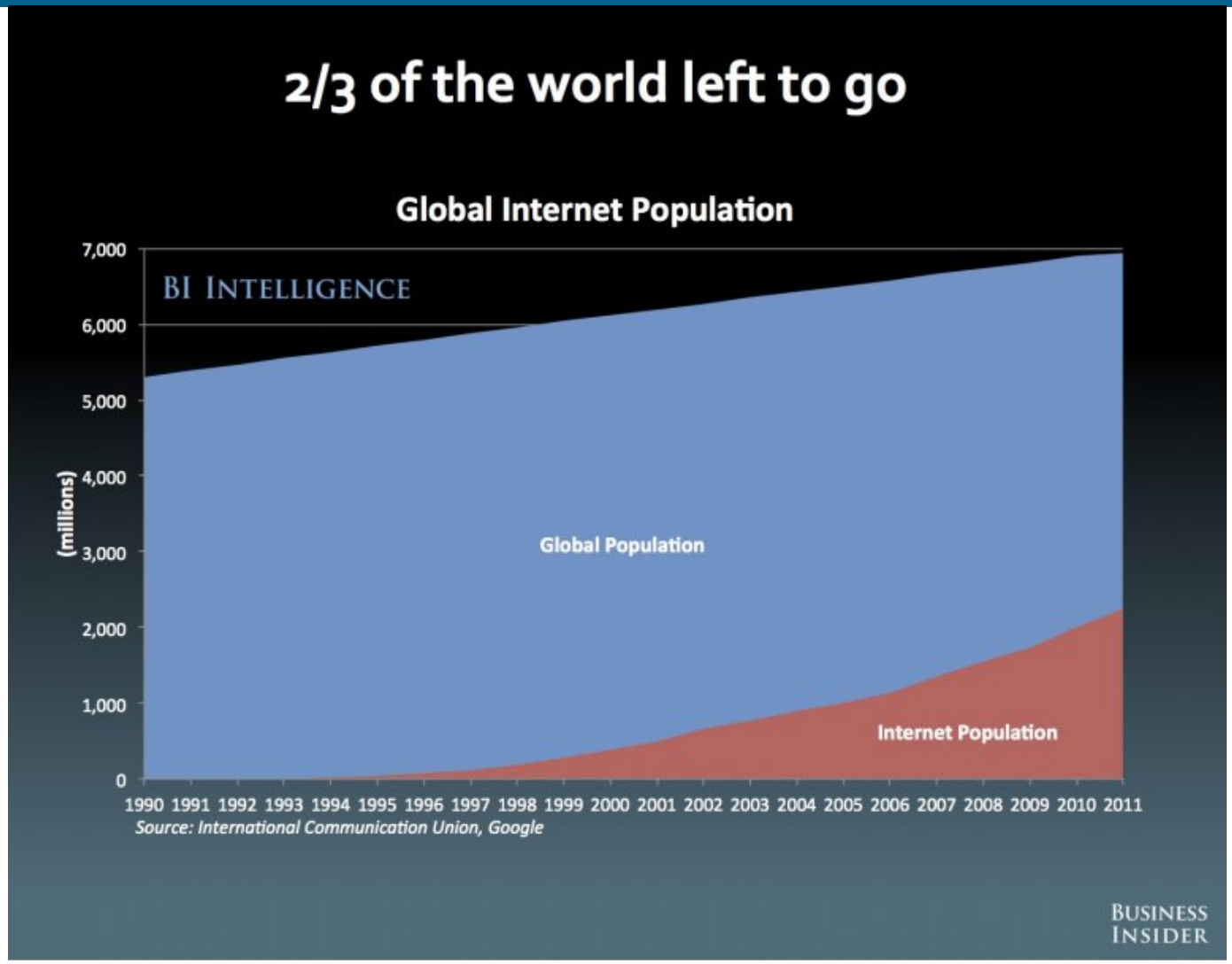
Let's start with some statistics

Most people that can read in the world have mobile phone

Key Global Telecom Indicators for the World Telecommunication Service Sector in 2011 (all figures are estimates)									
	Global	Developed nations	Developing nations	Africa	Arab States	Asia & Pacific	CIS	Europe	The Americas
Mobile cellular subscriptions (millions)	5,981	1,461	4,520	433	349	2,897	399	741	969
Per 100 people	86.7%	117.8%	78.8%	53.0%	96.7%	73.9%	143.0%	119.5%	103.3%
Fixed telephone lines (millions)	1,159	494	665	12	35	511	74	242	268
Per 100 people	16.6%	39.8%	11.6%	1.4%	9.7%	13.0%	26.3%	39.1%	28.5%
Active mobile broadband subscriptions (millions)	1,186	701	484	31	48	421	42	336	286
Per 100 people	17.0%	56.5%	8.5%	3.8%	13.3%	10.7%	14.9%	54.1%	30.5%
Fixed broadband subscriptions (millions)	591	319	272	1	8	243	27	160	145
per 100 people	8.5%	25.7%	4.8%	0.2%	2.2%	6.2%	9.6%	25.8%	15.5%
Source: International Telecommunication Union (November 2011)								via: mobiThinking	

Statistics continued

Out of the world's 7bn population ….

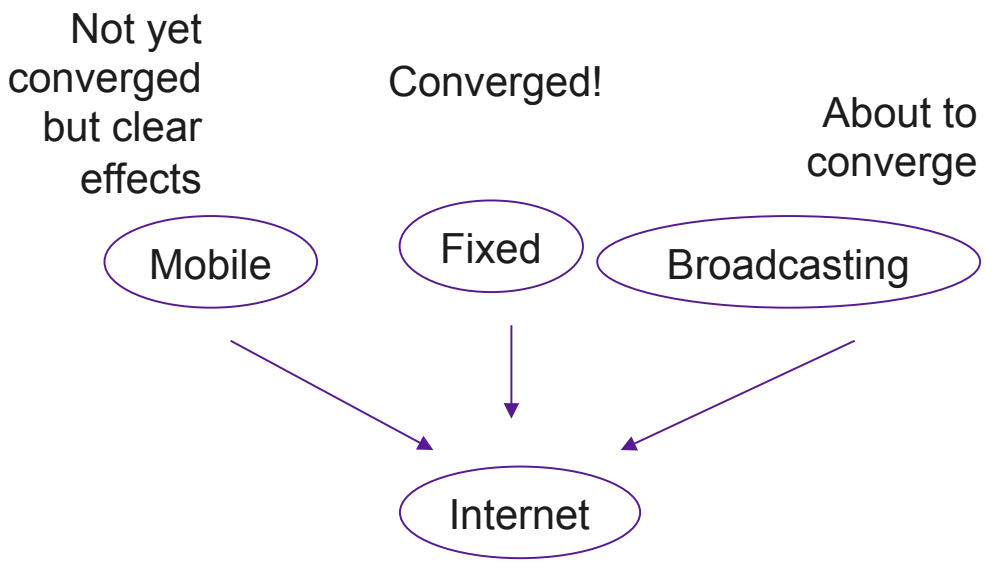


Source: Business Insider Intellingence

Internet has changed ”everything”

In the old days: ”I have an idea for a service [e.g. fixed telephony, mobile telephony, broadcasting etc], how can we build a technology/network that can deliver that service?”

Internet is fundamentally different since it takes the opposite approach: ”Here is a network that can deliver any kind of service”



Internet and telecom

Telecom operators have been highly profitable on traffic variable price plans

Smartphones + ubiquitious IP networks = scary mix for telcos

Status: phones are more than smart enough, IP networks are not ”ubiquitious” but with LTE+WiFi we are pretty close

How are Nordic telcos dealing with this?

- Moved from traffic variable to fixed price plans
- How does this change consumer incentives to ”play with” mobile VoIP solutions?

Telecom and price competition

Are we really ”homo economicus”?

How do you think the historical complex price plans affected that?

How will fixed price plans impact the opportunity to ”confuse”?

Will that result in tougher competition and lower profitability?

Why IT is so much fun compared to capital intensive industries IMO

Quiz: What is the common denominator

Value: USD 226bn

Value: USD 46bn

Value: USD 248bn

Value: USD 543bn

Combined value: USD +1000bn

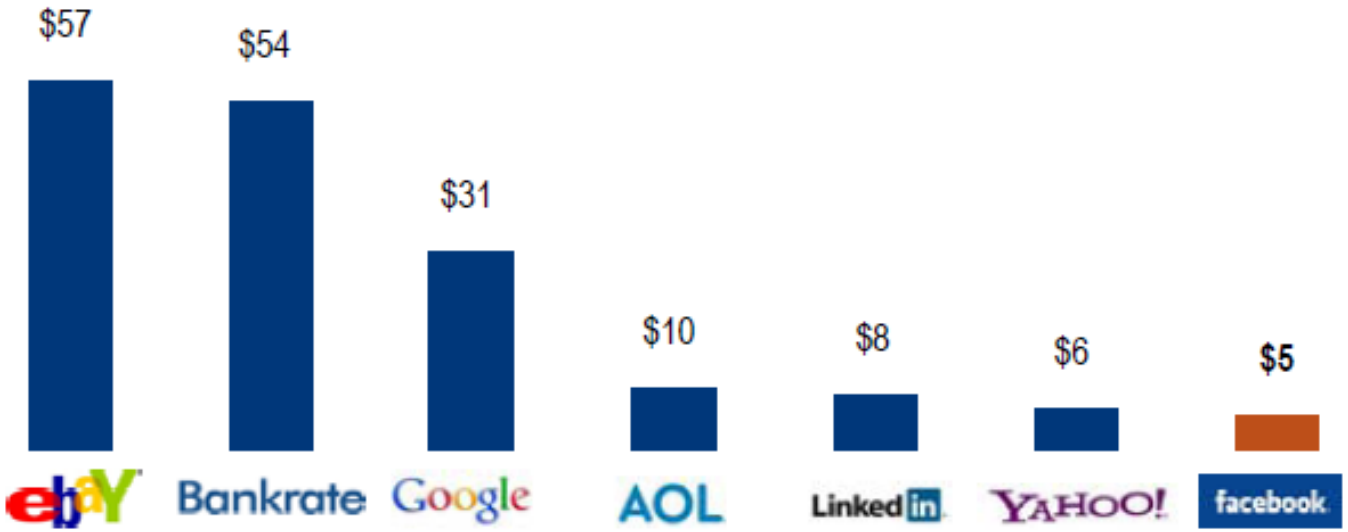
Norwegian ”oil fund”: USD 640bn

All companies on the Oslo Stock Exchange: USD ~300bn

For the ”Internet services” companies with big user bases we often look at ARPU

Average Revenue Per User

Chart 1: Estimated annual ARPU ($ and users in millions)

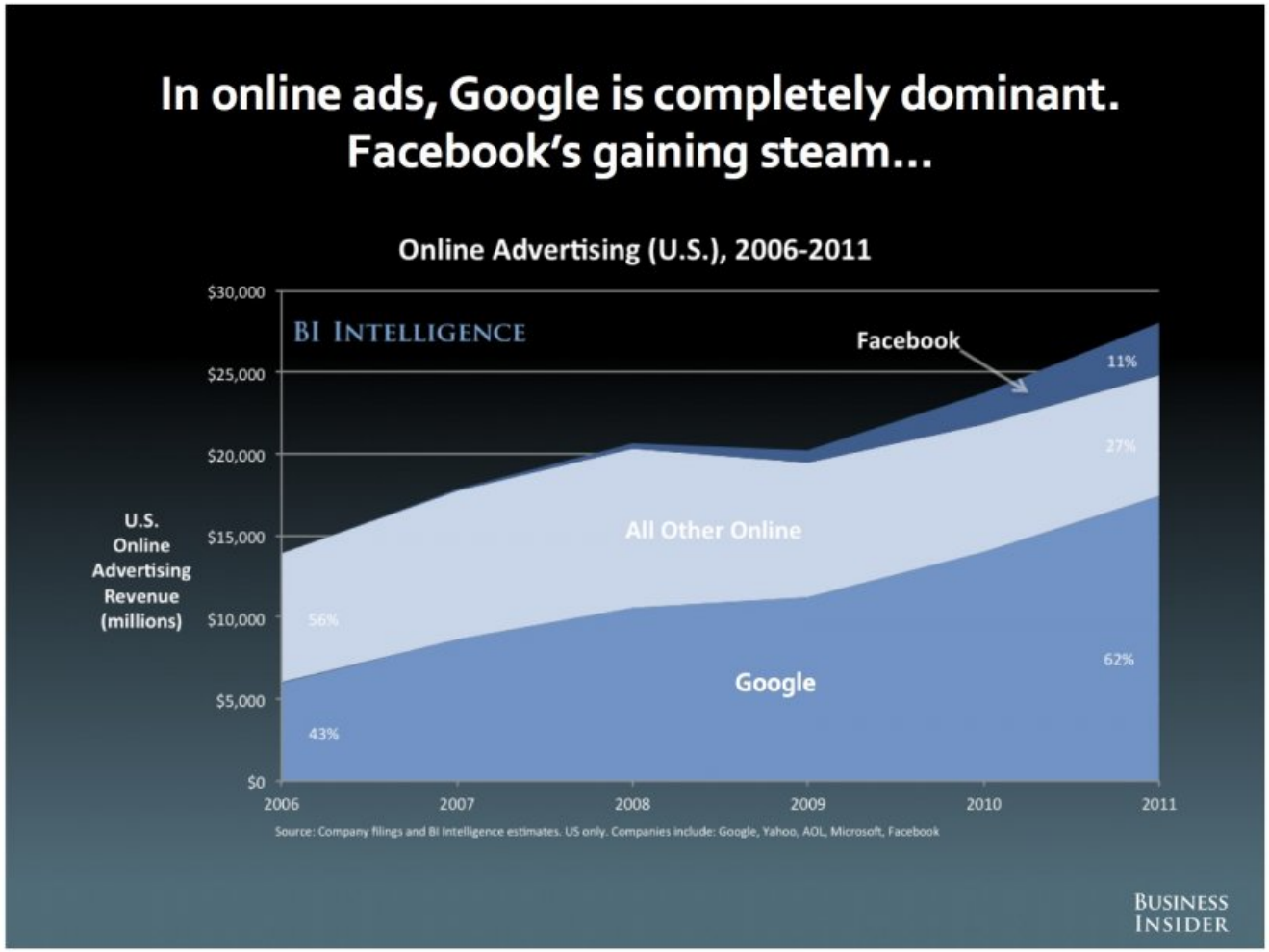


2012 Revenue	$14,010	$529	$35,146	$2,117	$901	$4,463	$4,815
Unique Visitors / MAUs	247	10	1,150	216	107	699	901

Source: comScore worldwide unique visitors as if May 2012, Facebook, BofA Merrill Lynch Global Research

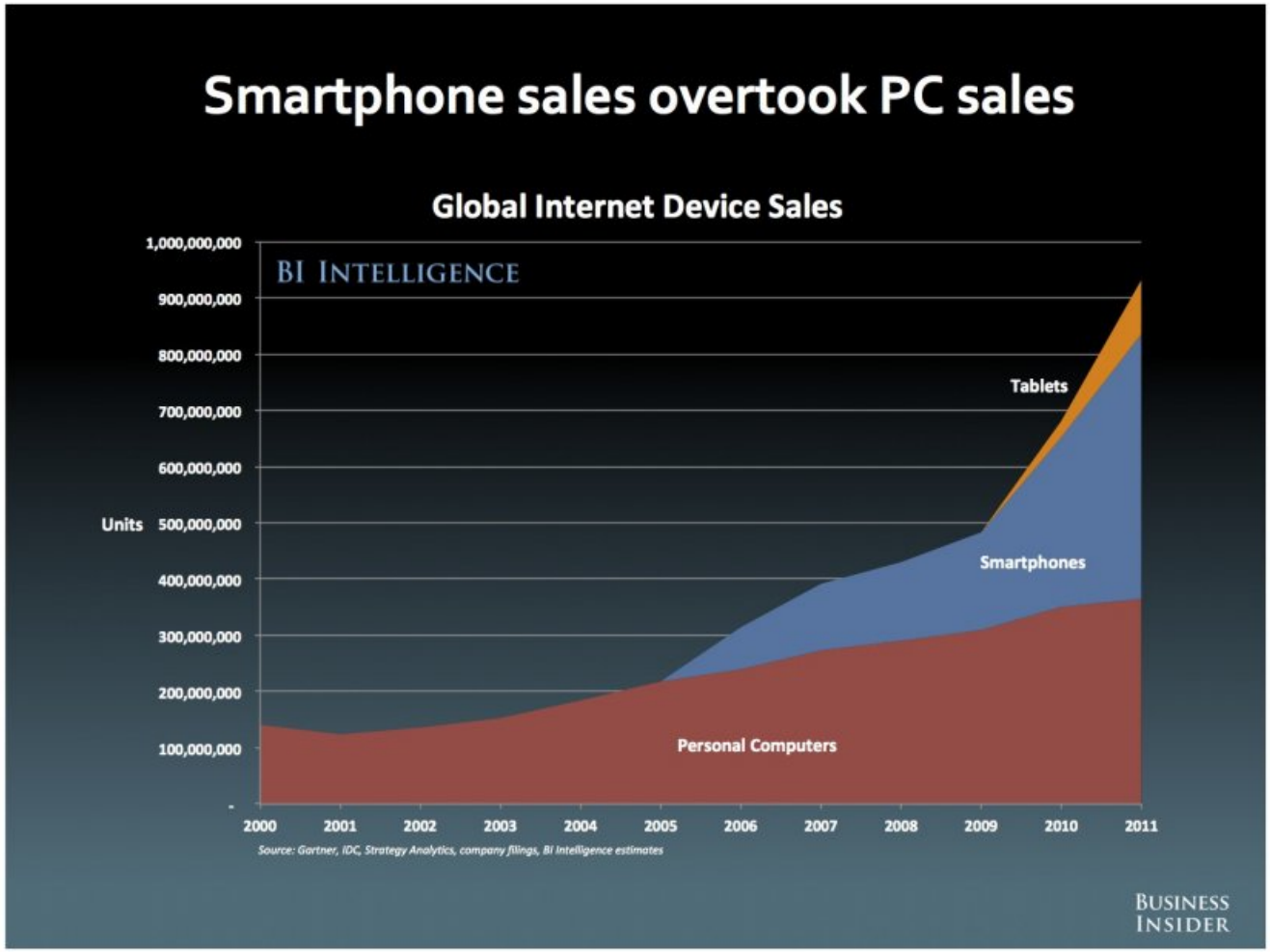
Note: Google revenue excludes Motorola

How do Facebook and Google make money?

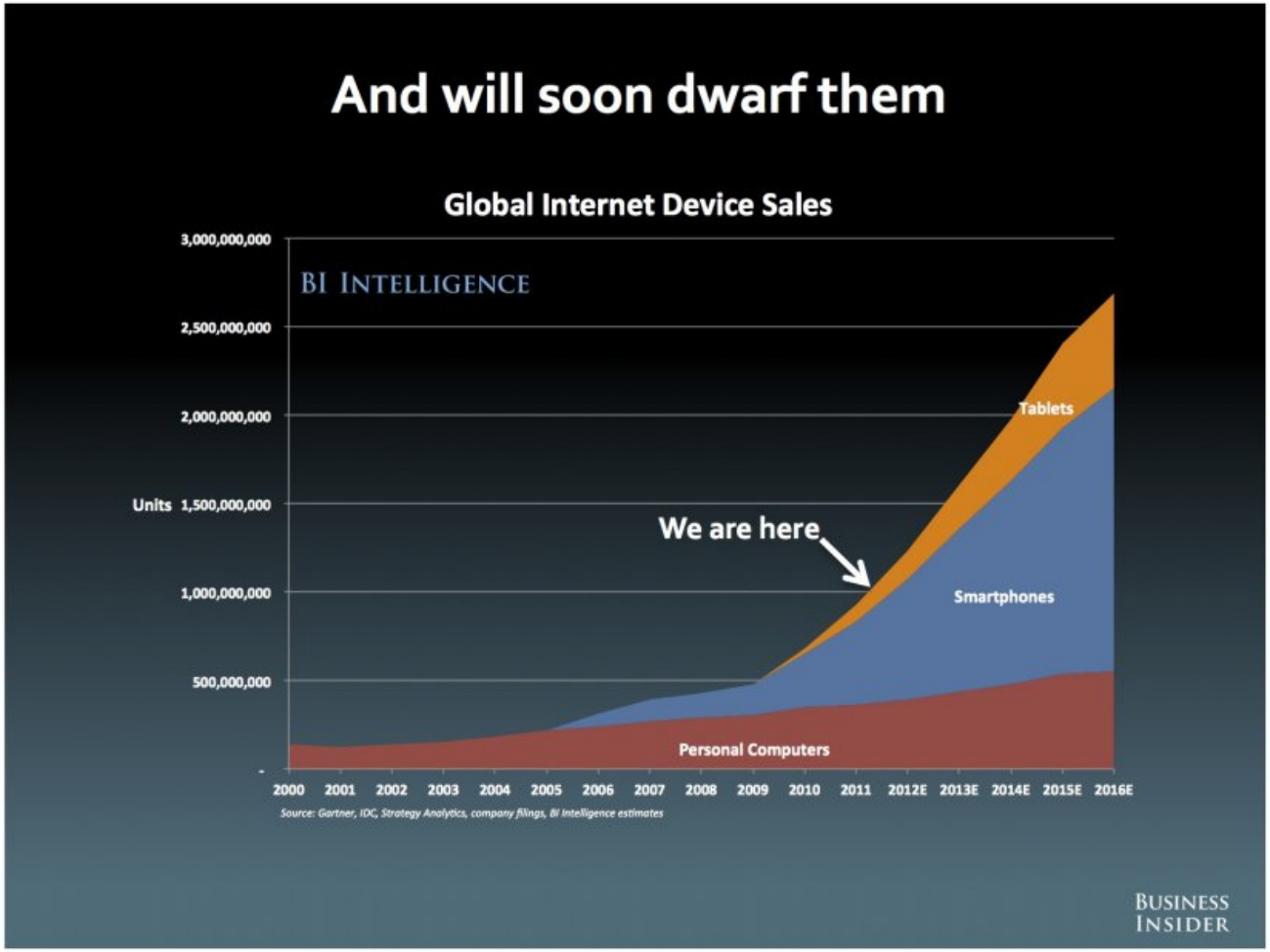


Will Facebook be bigger than Google in terms of ad revenues?

An important change has gradually happened over the last five years



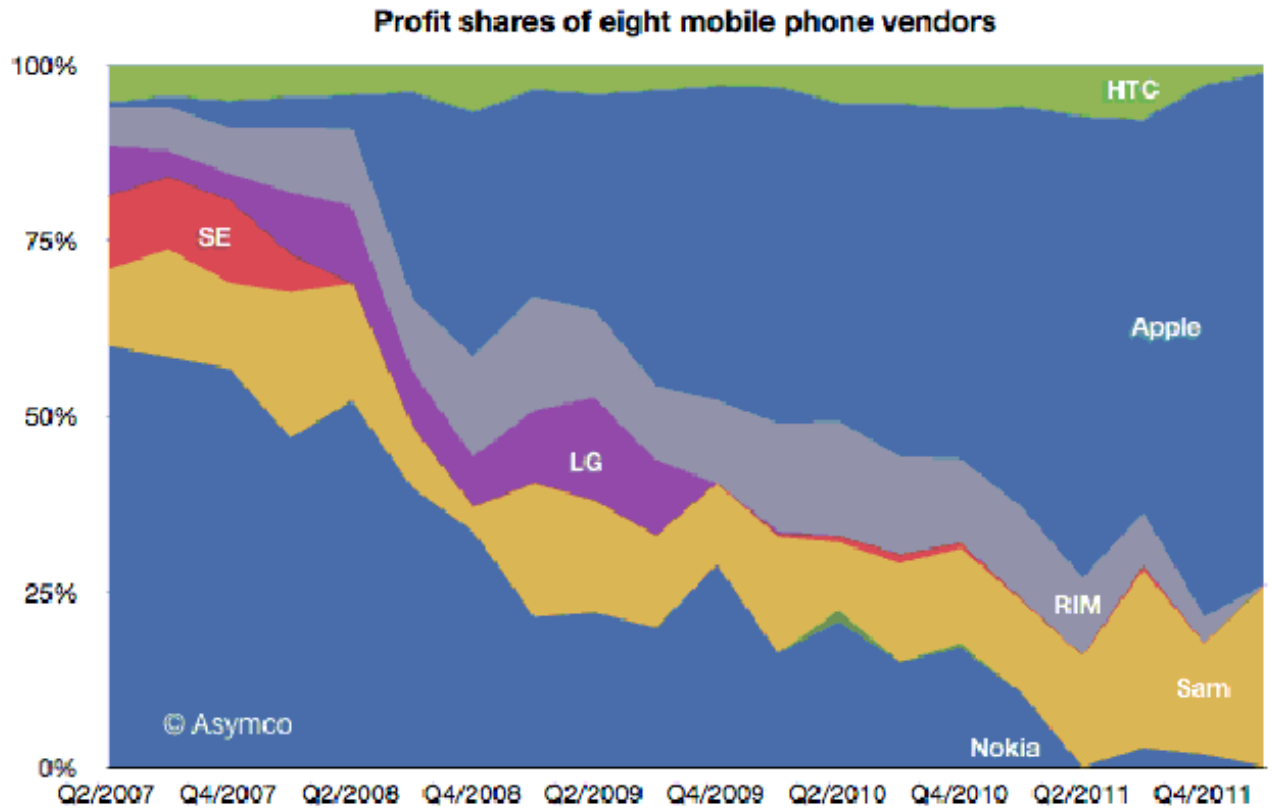
Future expectations



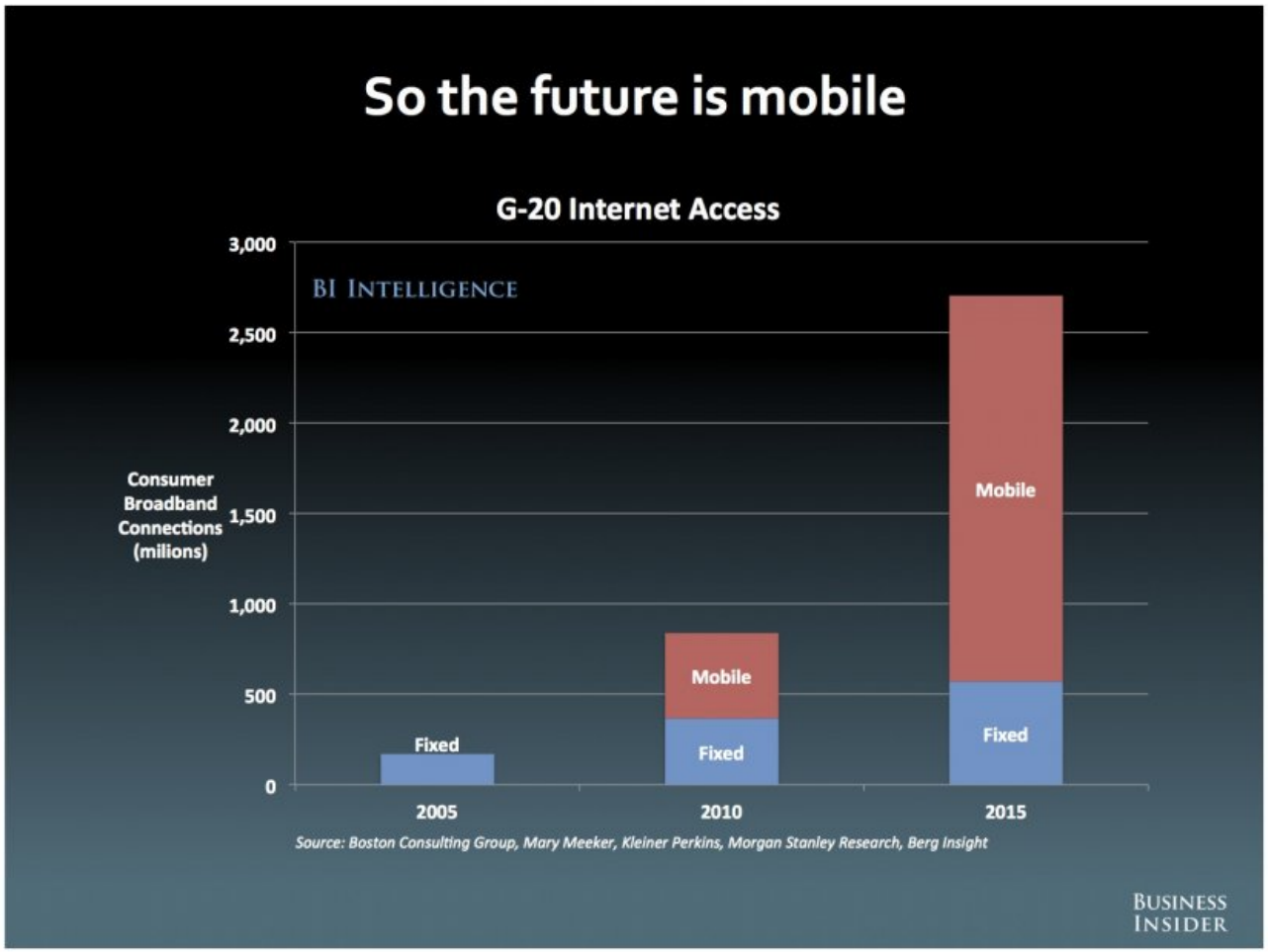
Which companies drive this and which benefit the most from it?

Table 1
Worldwide Mobile Device Sales to End Users by Vendor in 2Q12 (Thousands of Units)

Company	2Q12 Units	2Q12 Market Share (%)
Samsung	90,432.1	21.6
Nokia	83,420.1	19.9
Apple	28,935.0	6.9
ZTE	17,936.4	4.3
LG Electronics	14,345.4	3.4
Huawei Device	10,894.2	2.6
TCL Communications	9,355.7	2.2
HTC	9,301.2	2.2
Motorola	9,163.2	2.2
Research In Motion	7,991.2	1.9
Others	137,233.4	32.8
Total	**419,007.90**	**100.0**



Future is mobile, but how will that affect advertising ARPU?

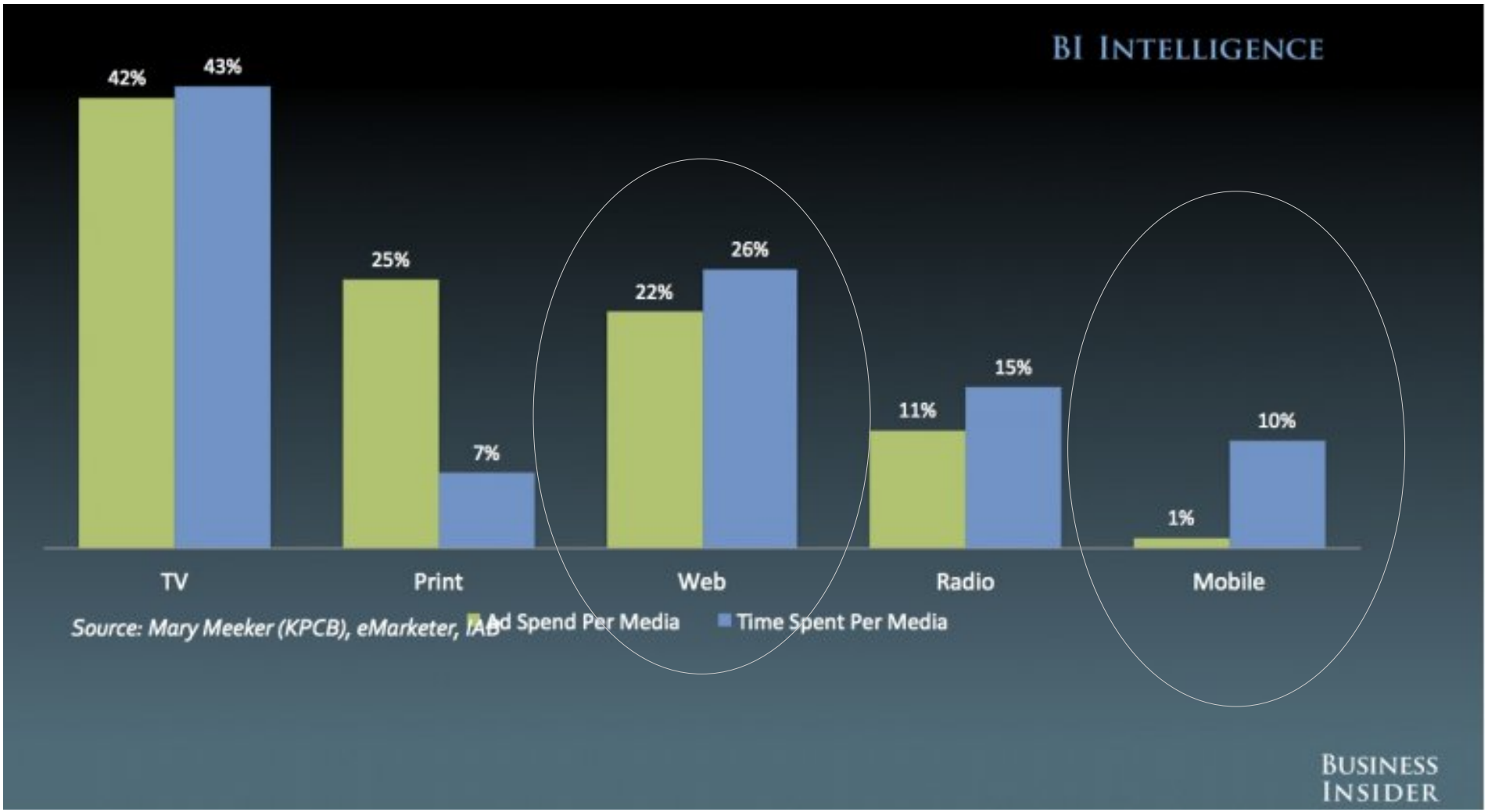


Why is this the case?

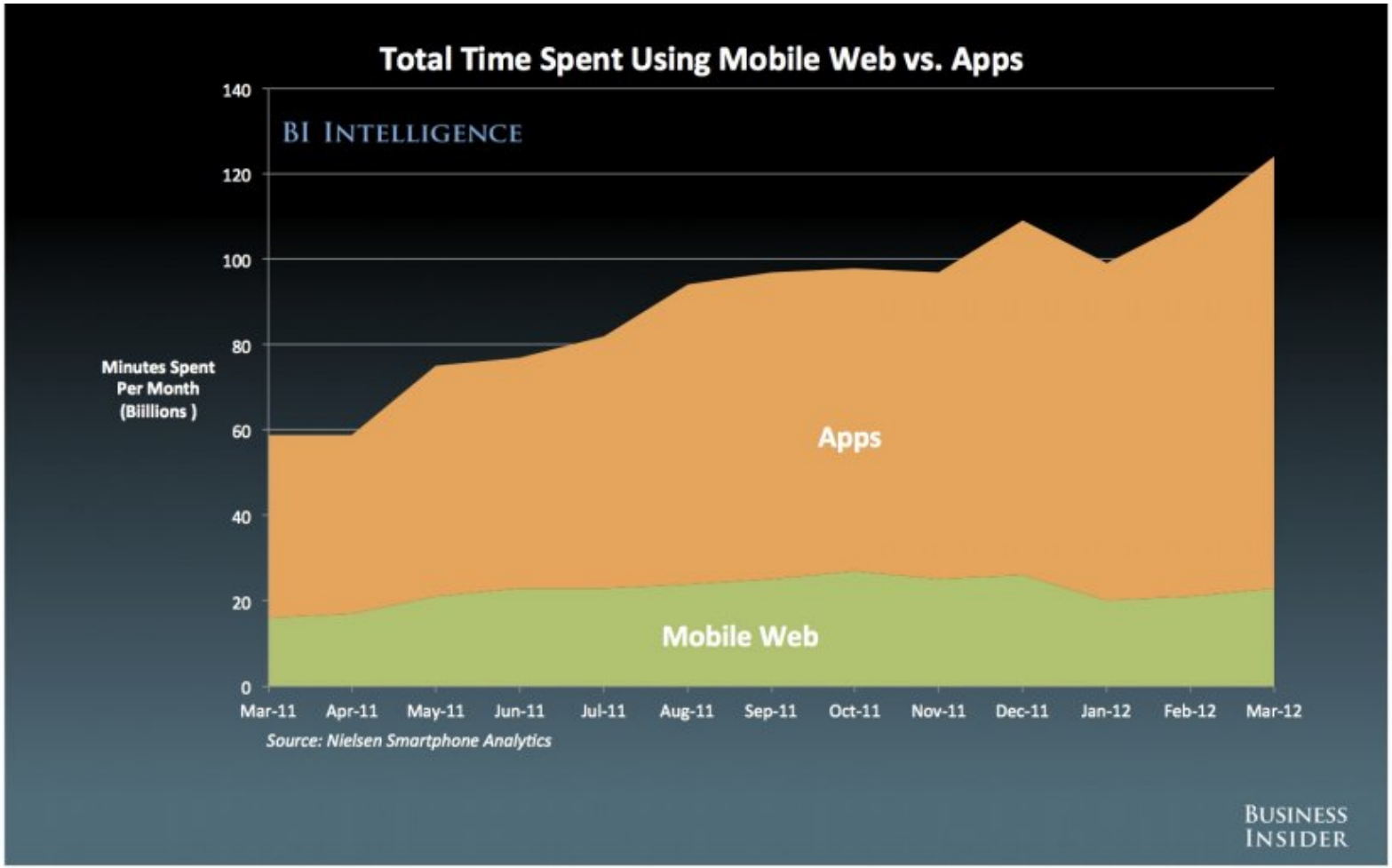
Chart 11: eCPMs 5x lower on mobile than desktop – industry data

Source: Bank of America Merrill Lynch

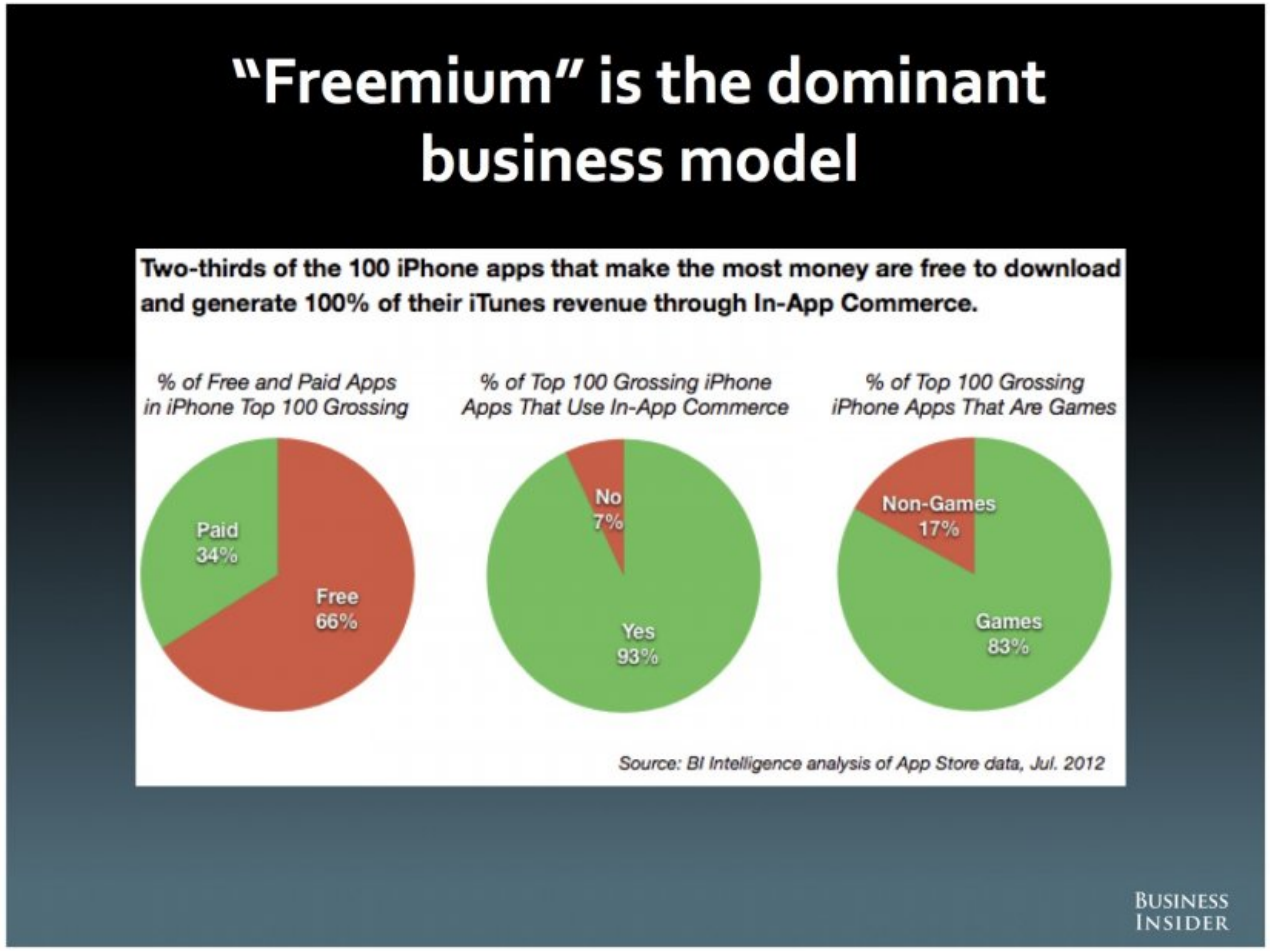
Commercial impact from desktop to mobile remains unclear



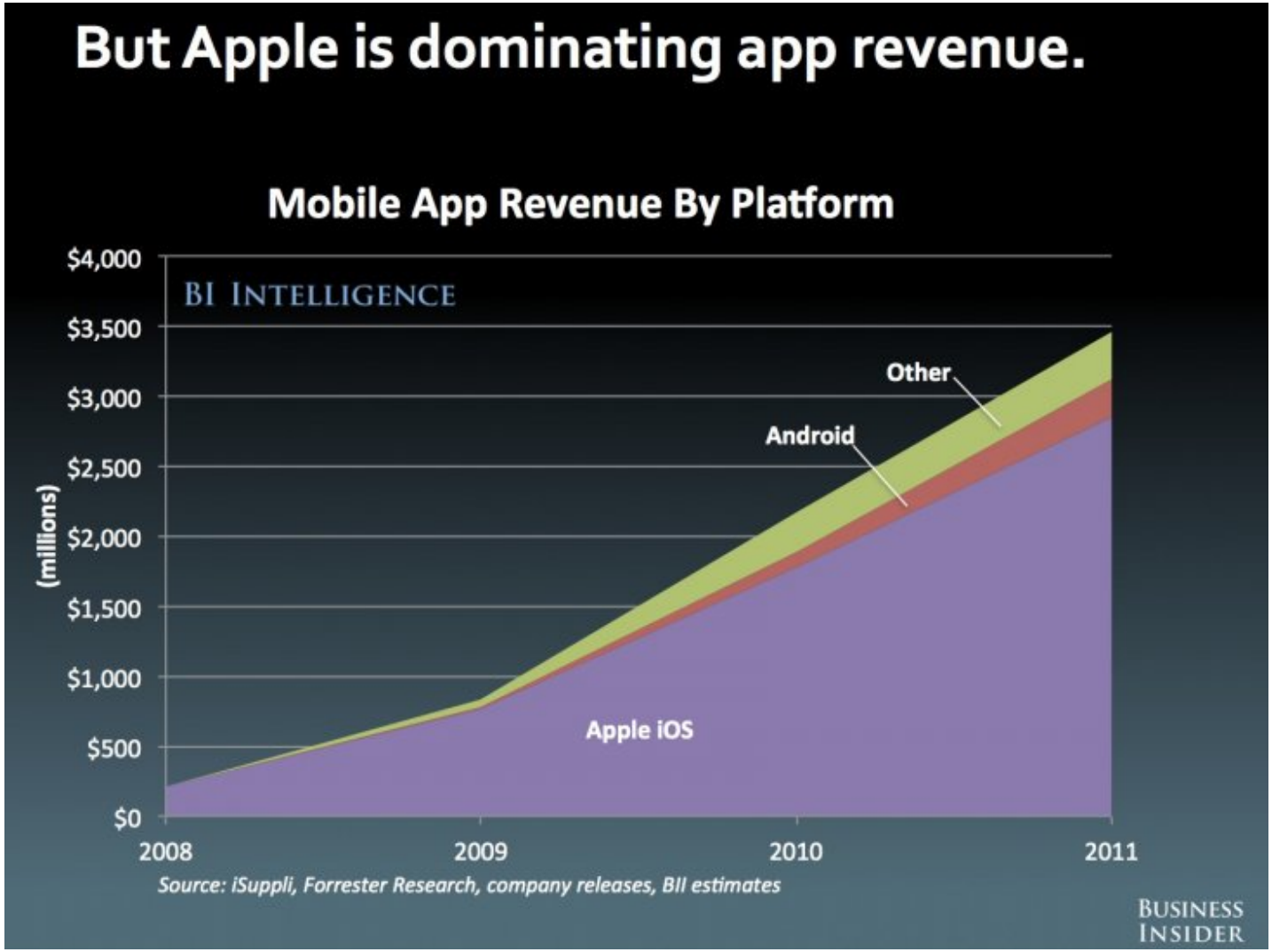
Perhaps advertisement business models will be replaced



Apps have a functioning payment platform



So far, Apple is also taking ”all” the profits here



IMPORTANT INFORMATIION

Your attention is drawn to the fact that:

The current market price of the securities shown in this summary is the price prevailing at the close of the business day preceding the date of publication, save where such price was more than 5% different from the price prevailing as at the time of publication, in which case it is the latter.

Unless explicitly stated otherwise in the full report of which this document is a summary, SEB Enskilda expects (but does not undertake) to issue updates to the report following the publication of new figures or forecasts by the company covered, or upon the occurrence of other events which could potentially have a material effect on it.

Changes in recommendation in the last 12 months:

The current Buy recommendation was first adopted on 9 May 2011. During the 12 months proceeding the date of this document SEB Enskilda has made the following changes in the recommendation and/or target price in Telio: 9 Nov 2011 (Buy / TP: NOK 34).

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