



## **Disruptive Technologies and the Decline of Nokia**

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The Ratio Institute**

***UFM Seminar, 13<sup>th</sup> of June 2013***



... A KODAK MOMENT...

250



WE BURN  
YOU ALL!

Yes

Handwritten graffiti in yellow and white on a dark brick wall, including a large stylized 'B' and other illegible scribbles.

Handwritten graffiti in white on a dark brick wall, including a large stylized 'G' and other illegible scribbles.



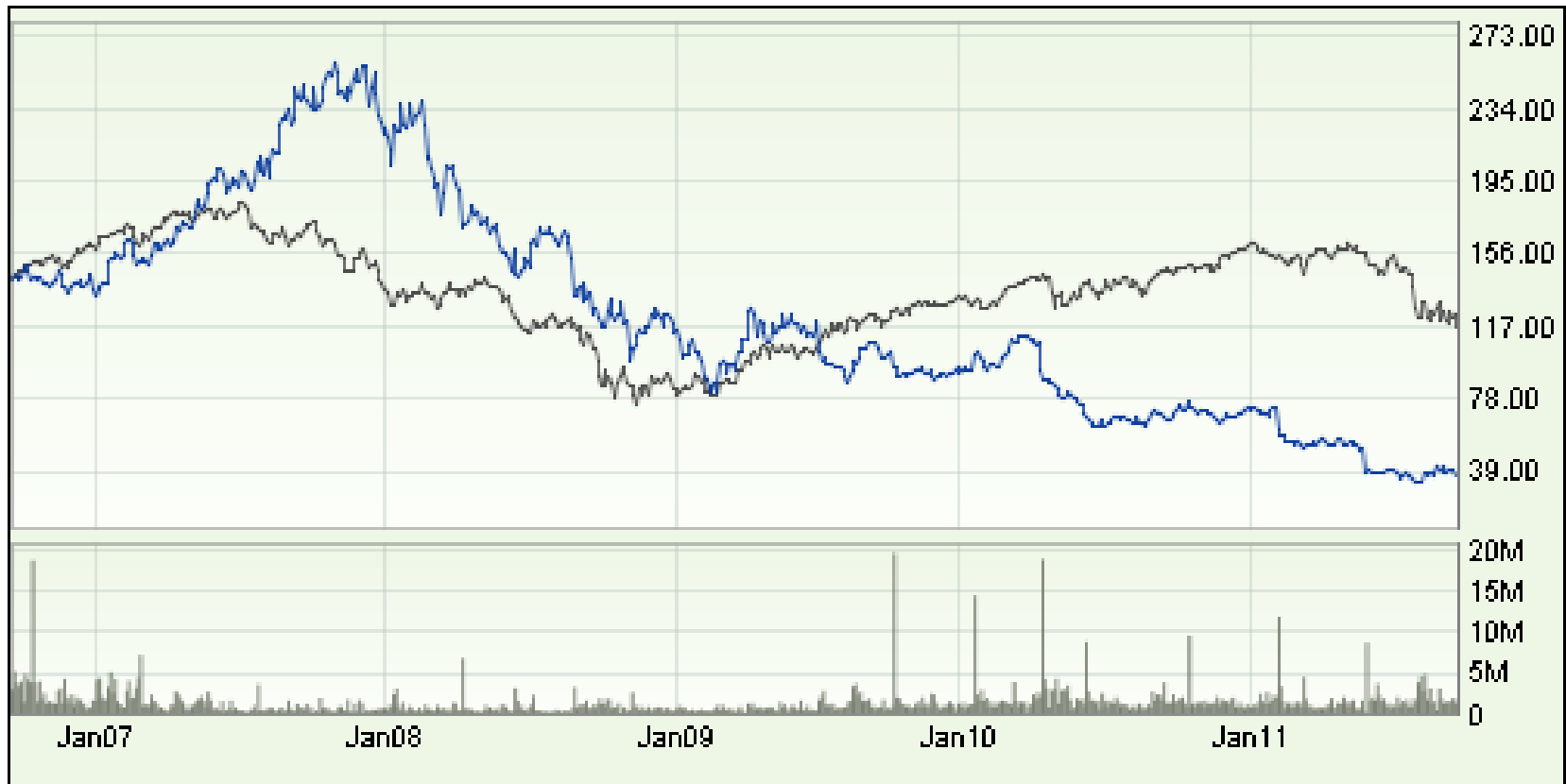




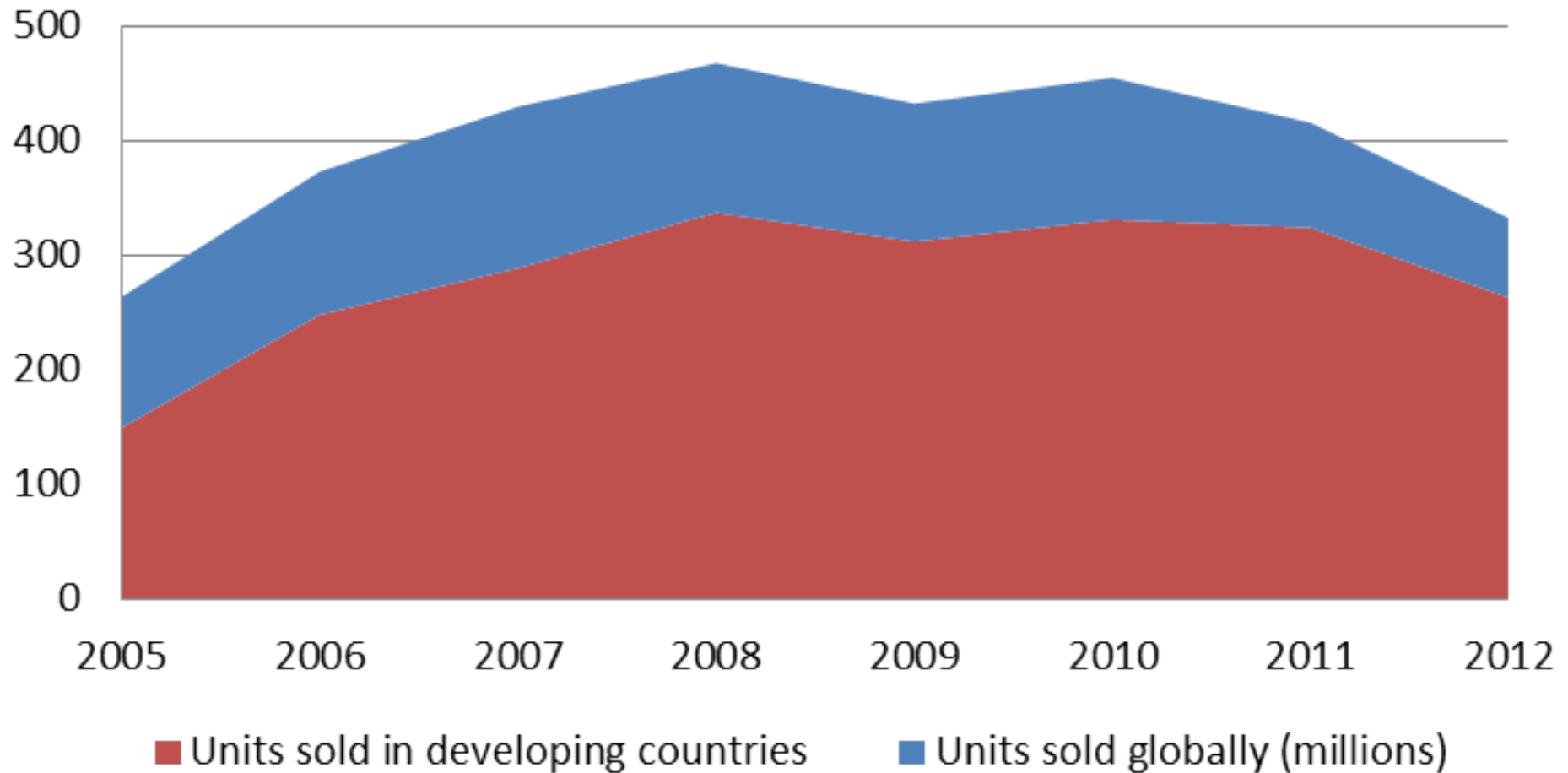




# BusinessWeek 2007: "Nokia's dominance in the global cell-phone market seems unassailable."

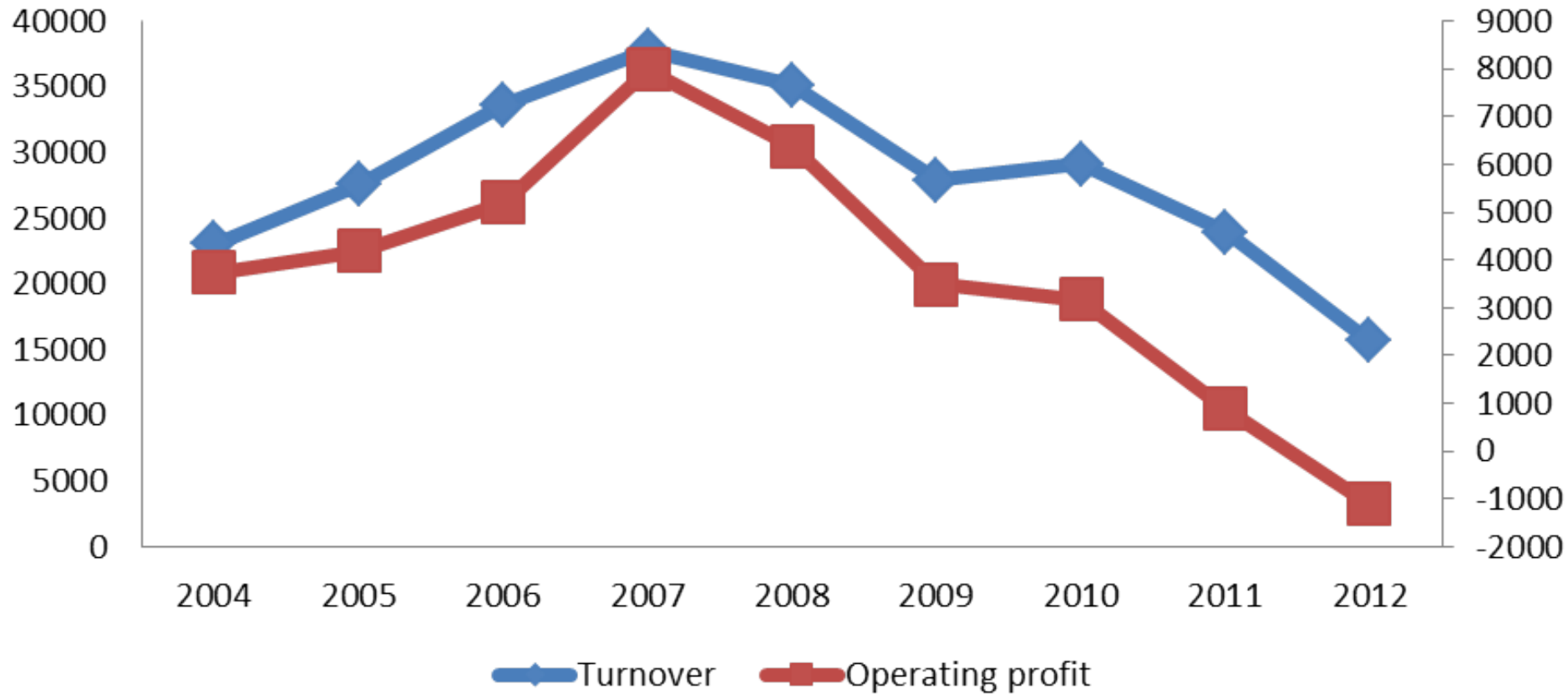


# Nokia sold mobile phones (million units)

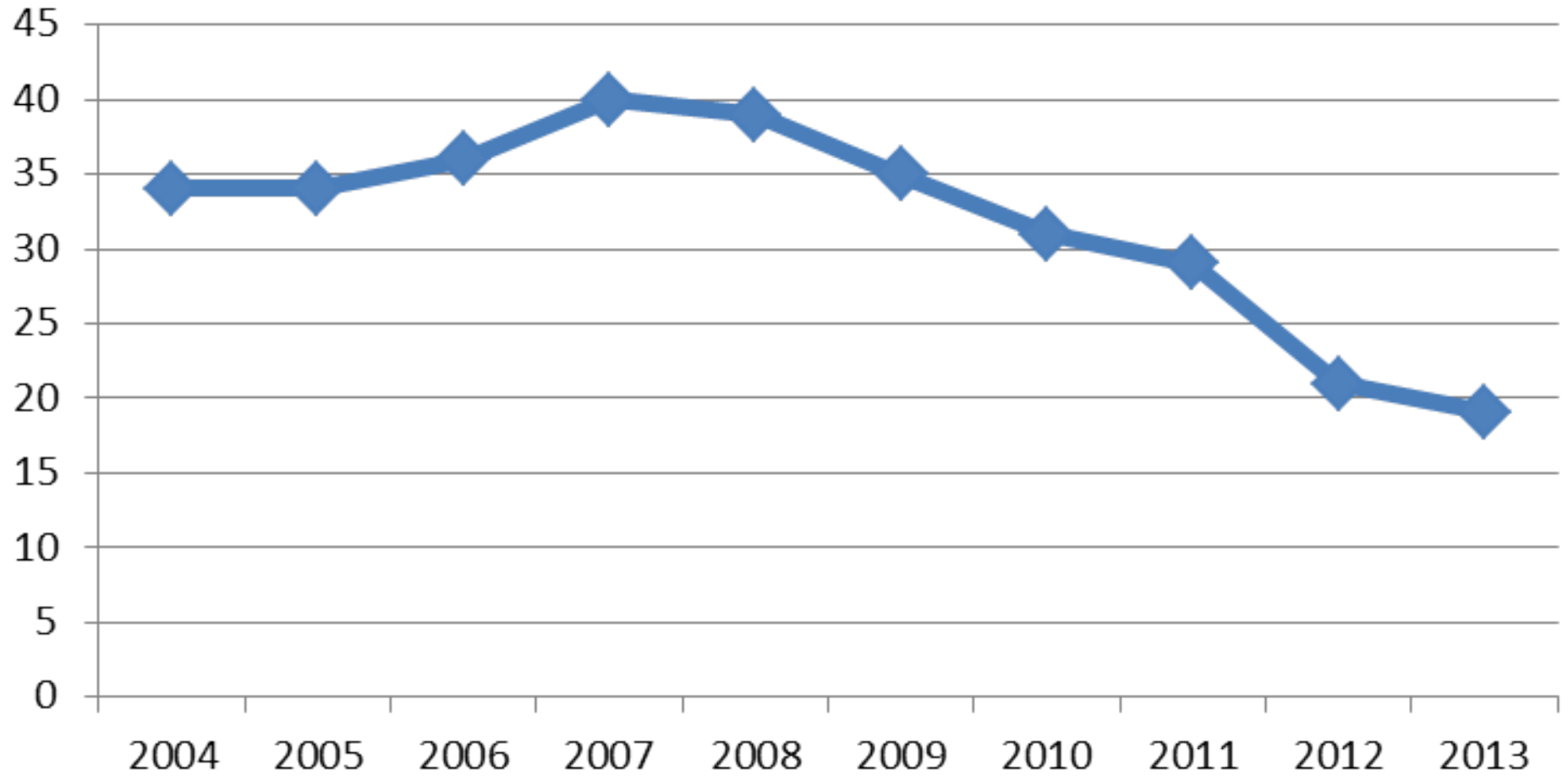




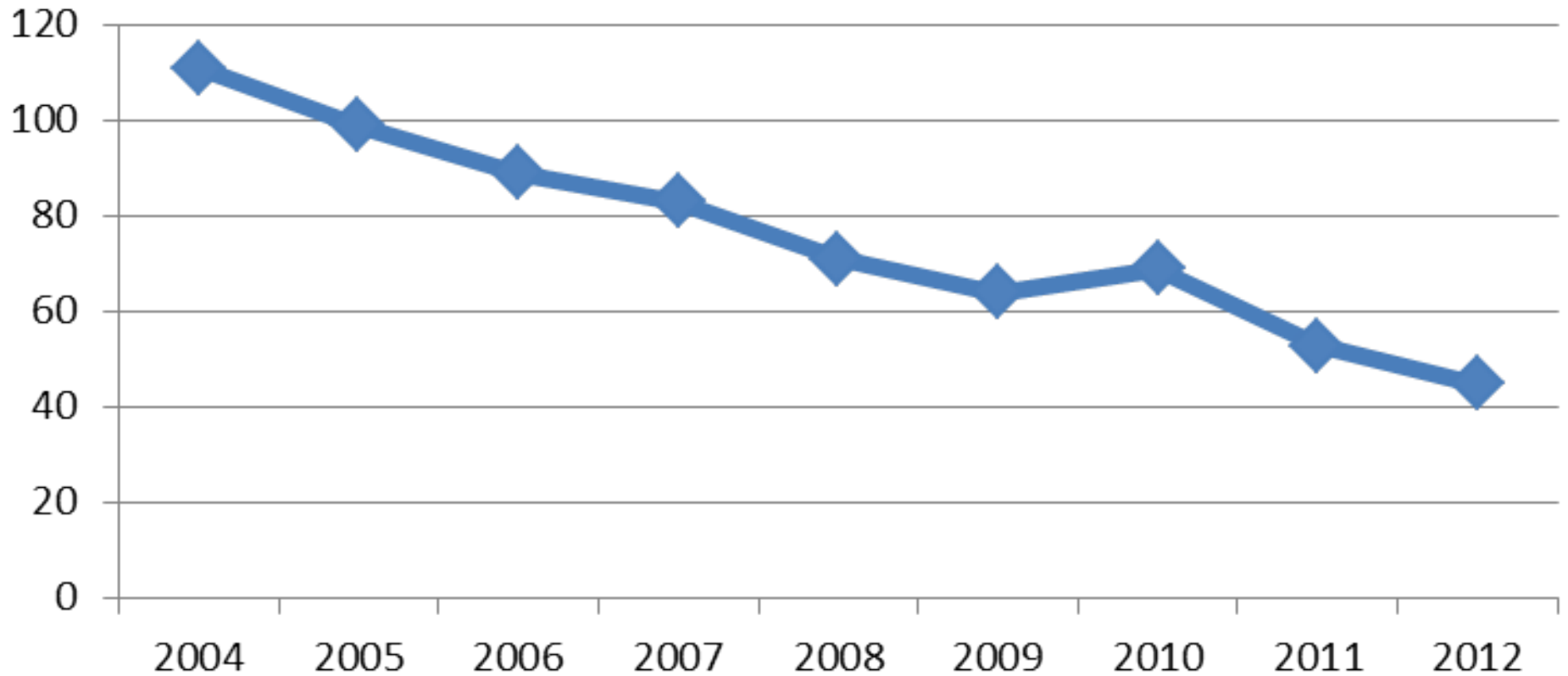
# Nokia mobile phone business 2004-2012 (million euros)



# Nokia market share (sold units %)

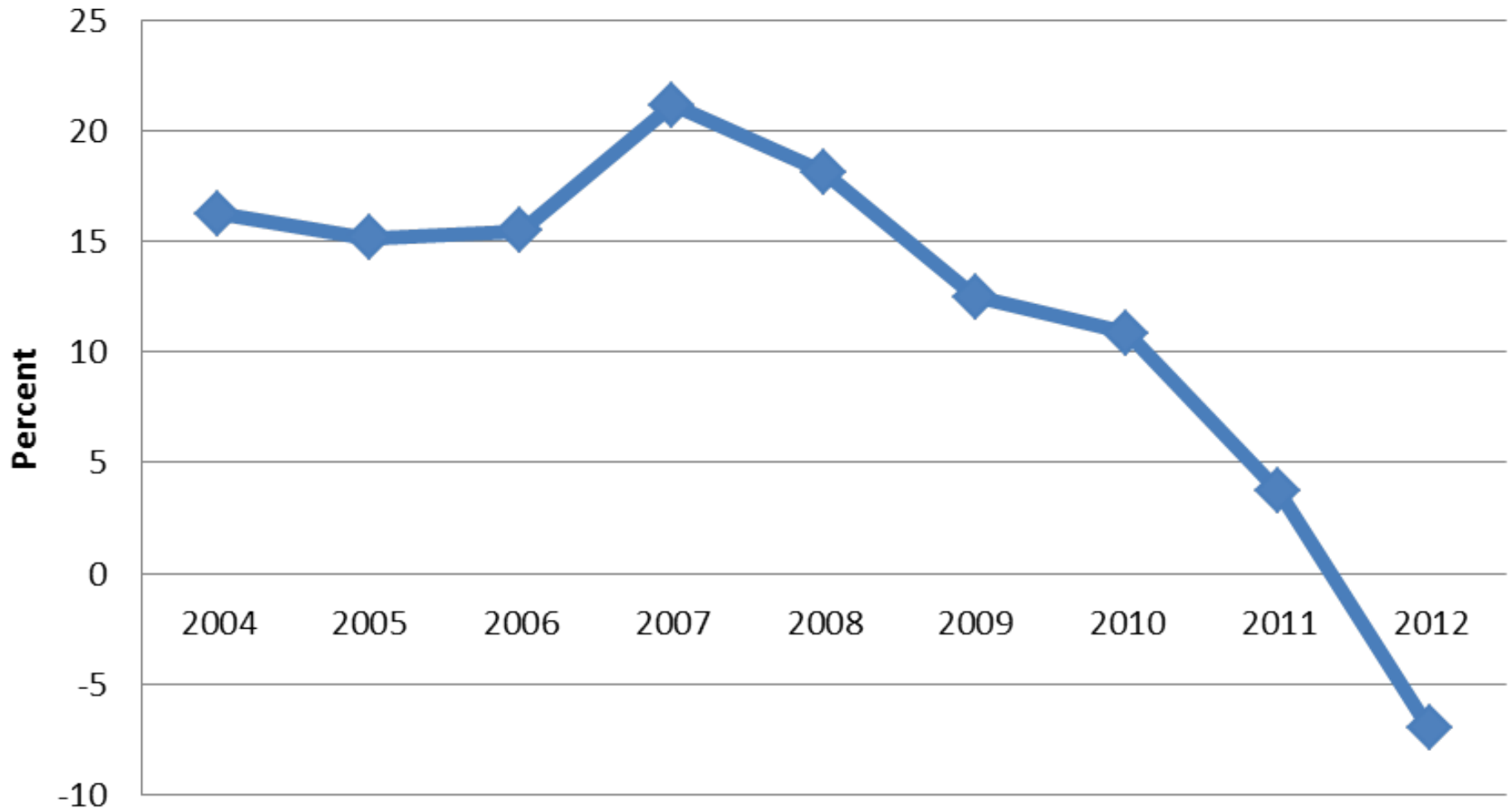


# Average selling price Nokia phones (euros)





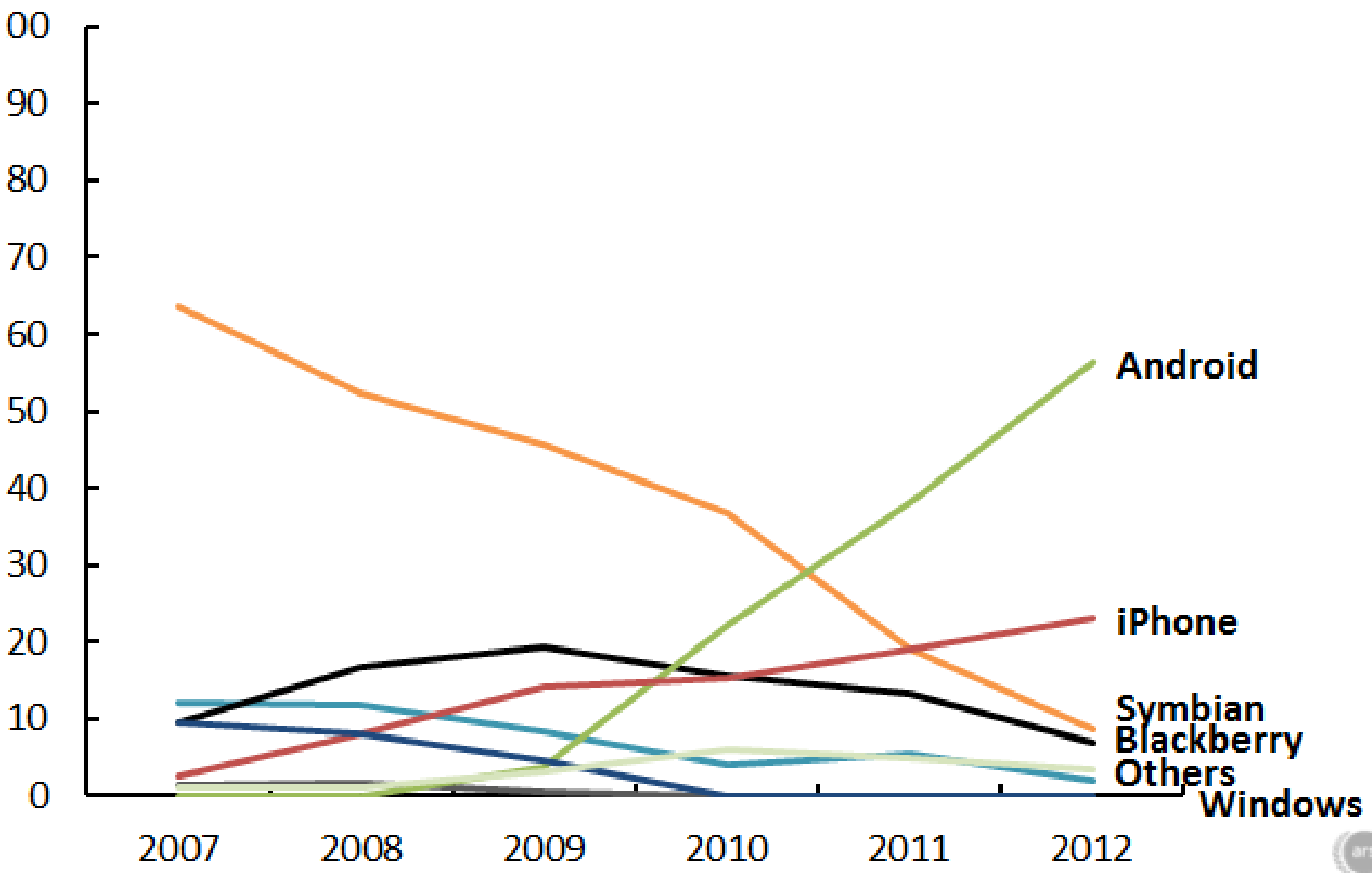
# Nokia mobile phone operating margin



# Smartphone market share: 2007-2012\*

\* 2012 data estimated based on Q1 sales

Percent



**Q4 slides 2008:**

**“Nokia’s longer term strategy  
remains valid and intact”**



# Q2, 2009

## Nokia must develop new skill sets

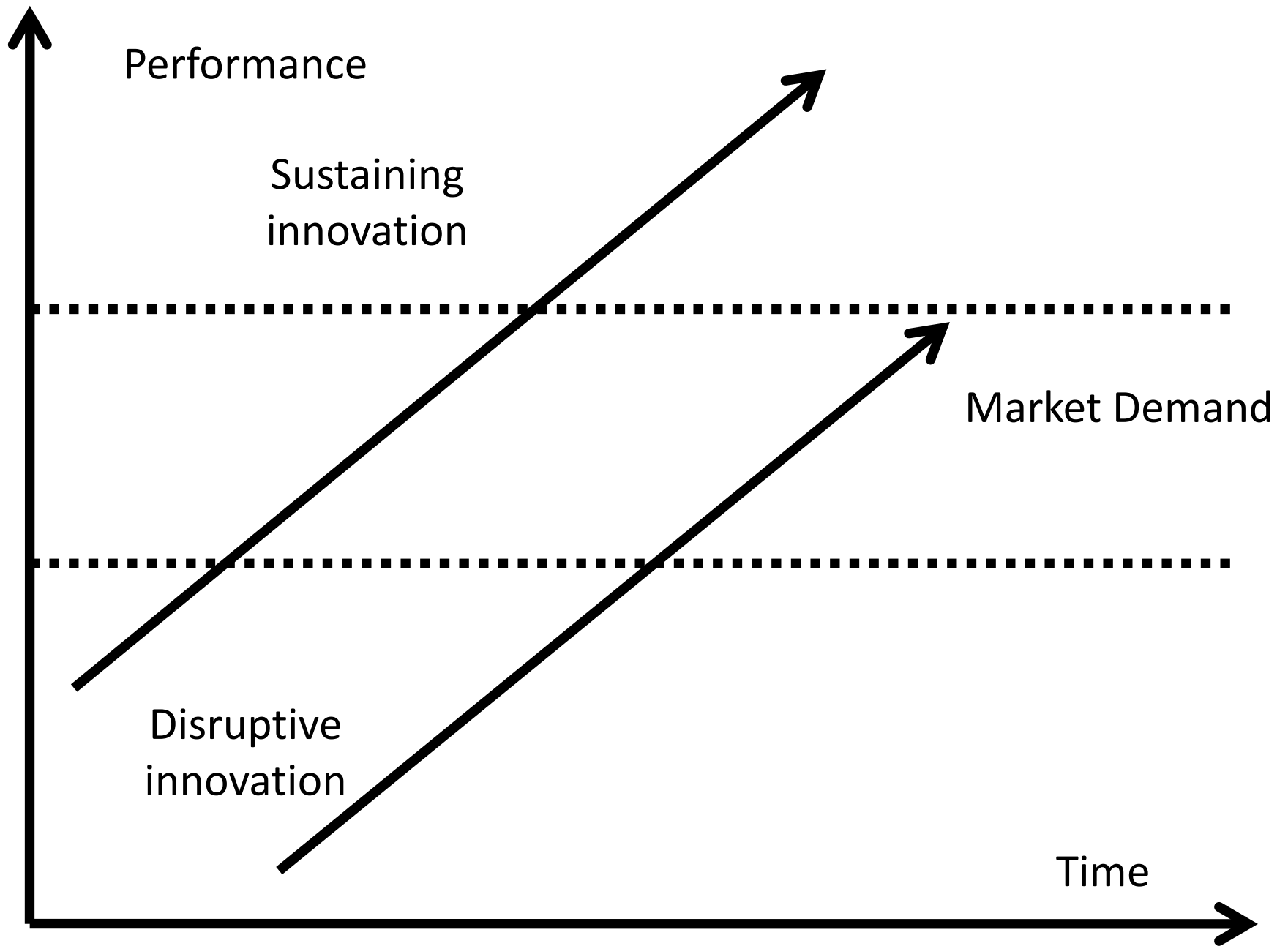
- The mobile industry is undergoing the biggest change in its twenty year history
- Nokia is accelerating the pace of change towards a solutions mode of operation
- A vibrant partner ecosystem is important to Nokia's solutions mode
- Inherent in Nokia's solutions mode is its commitment to build direct and continuous consumer relationships
- Nokia will track its progress and link employee incentives to a clear target: Active Users



# Definition of a Disruptive Technology

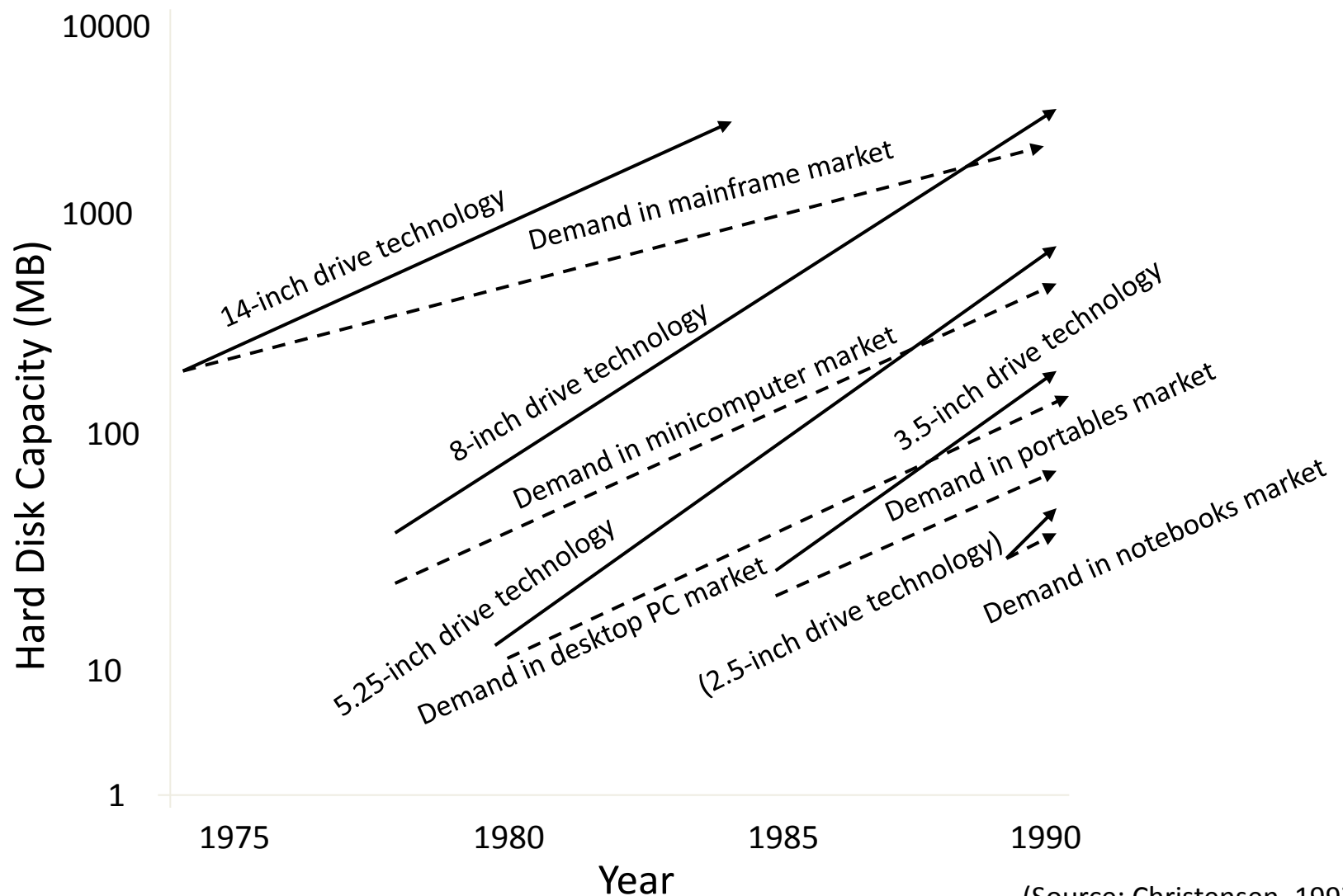
*“A disruptive innovation introduces a different set of features, performance, and price attributes relative to the existing product, an unattractive combination for mainstream customers at the time of product introduction because of inferior performance on the attributes these customers value”*

*(Govindarajan & Kopalle, 2005, p. 15)*





# Technology supply and demand in the HDD industry



(Source: Christensen, 1997)



**Firms are enslaved by their  
current, profitable market.**

# Christensen on Nokia VS Apple:

*“The iPhone is a sustaining technology relative to Nokia. In other words, Apple is leaping ahead on the sustaining curve [by building a better phone]. But the prediction of the theory would be that Apple won’t succeed with the iPhone. They’ve launched an innovation that the existing players in the industry are heavily motivated to beat: It’s not [truly] disruptive. History speaks pretty loudly on that, that the probability of success is going to be limited.”*

*Business Week, 2007*



**Operators did not want smartphones,  
but customers did.**

**As a consequence, Nokia  
could only innovate in  
ways that **were**  
**appreciated** by operators.**

# Significant Products for 1Q 2008





# Key Products Going Forward



Nokia 1200



Nokia 1208



Nokia 1680



Nokia 2630



Nokia 2680



Nokia 3110 classic



Nokia N73



Nokia N78



Nokia N95 8GB



Nokia N96



Nokia E51



Nokia E65



Nokia 5000



Nokia 5610 XpressMusic



Nokia 6220 classic



Nokia 6500 slide



Nokia E90 Communicator



Nokia 5310 XpressMusic



Nokia 6210 Navigator



Nokia 6300



Nokia 6500 classic

# The Nokia E71

## E71 gets a "10 out of 10"

'It's a beautifully engineered phone, with great looks, slim build and fantastic ergonomics. It has wonderful battery life, a superb screen, effective GPS and fast mobile data. Better than all that, it's reasonably priced.'

(Source: [trustedreviews.com](http://trustedreviews.com))



	Nokia E71	Blackberry Bold
Talk Time (GSM)	10.5 hrs	5 hrs
Standby Time (WCDMA)	20 days	13 days
Thickness	10mm	14mm
Weight	127g	133g
Camera	3.2 MP	2 MP
Ovi Services Support	Yes	No

Source: [Nokia.com](http://Nokia.com) and [Research.in.Motion.com](http://Research.in.Motion.com) websites



# Moving Forward



# Nokia had software and plans to become a software company in the long term

## Nokia Services



### Games

N-Gage service now live on S60 3rd edition devices. Offers games from leading mobile games publishers.

### Music

Offering over 2 million tracks from major and independent labels. Planned expansion to 11 markets in 1H08.

### Maps

Nokia Maps 2.0 offers pedestrian navigation, car navigation, satellite images and city guides.

### Photos

Share on Ovi allows users to easily share their photos and other media via their mobile device or desktop computer.



# Devices & Services in 4Q09: Highlights

- Shipped 126.9 million devices, up 17% QoQ and up 12% YoY
- Shipped 20.8 million converged mobile devices, including:
  - 6.1 million Eseries devices
  - 4.6 million Nseries devices
- **Ovi Store** now seeing over 1 million downloads per day
- **Comes With Music** available in 15 markets and supported by 25 operators
- More than doubled the number of **Ovi Mail** accounts to 5 million
- **Nokia Messaging** deals signed with 69 operators



**NOKIA**

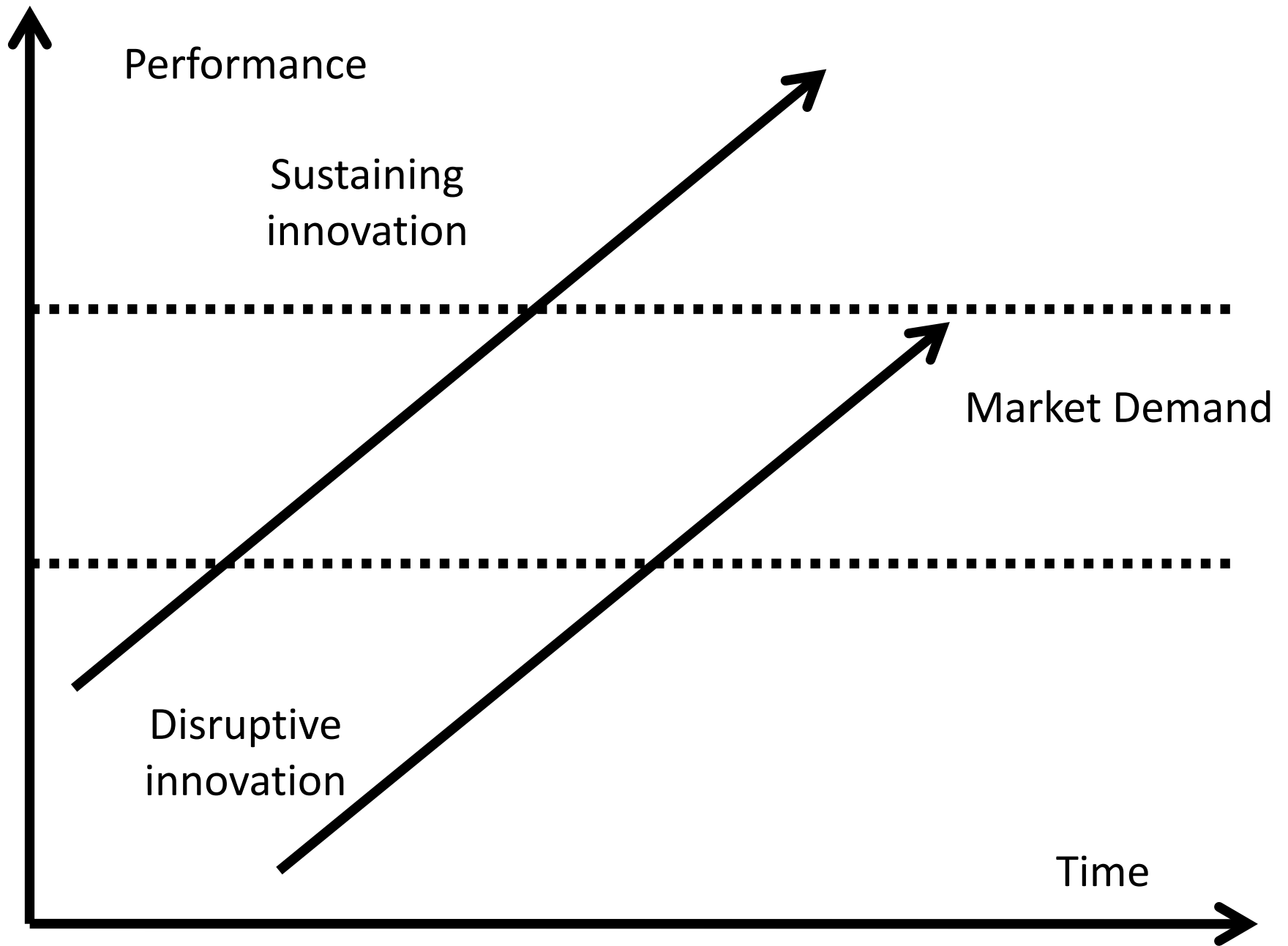
# Only an entrant could circumvent operators and create a new distribution of value







**With the shift to smartphones, operators do not add much value any longer.  
=> Price competition has followed**



**The framework does not  
assume heterogeneity in  
terms of how different  
actors **perceive an  
innovation.****

**Smartphones were  
sustaining for consumers,  
but highly disruptive to  
operators.**

**Nokia was thus "held  
captive" by the operators.**

# Conclusion

**The subjectivity of value needs to be taken into account.**

**A more Austrian, evolutionary perspective on markets is needed.**





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