

[illegible]

**NOKIA**

A word cloud on a green background. The words are: 'ideas' (large, dark green), 'invent' (medium, light green), 'possibilities' (medium, light green), 'experience' (very large, yellow), 'fun' (medium, light green), 'opinions' (medium, light green), and 'future' (very large, dark green).

# Agenda

- 1) Nokia's competitive advantages
- 2) Business review for 2008
- 3) Focus areas for 2009

# Nokia competitive advantages – more relevant in this environment

**Scale:** 39% market share YTD Q3 2008

**Ability to invest in innovation:** Services & Software

**Brand:** #5 worldwide, #1 in Asia and #1 Europe

**Manufacturing and logistics:** World leading position

**Distribution:** Substantial lead in China, India, and MEA

**Cost & IPR:** Significant competitive advantage

- 1 
- 2 
- 3 
- 4  General Electric
- 5 
- 6 
- 7 
- 8 
- 9 
- 10 

Source: Interbrand



# Nokia 2008 Business review

**NAME** NOKIA  
**DATE** 2008

## SUBJECT

## STATUS

Device Portfolio



Smartphones

Services & Software

Nokia Siemens Networks

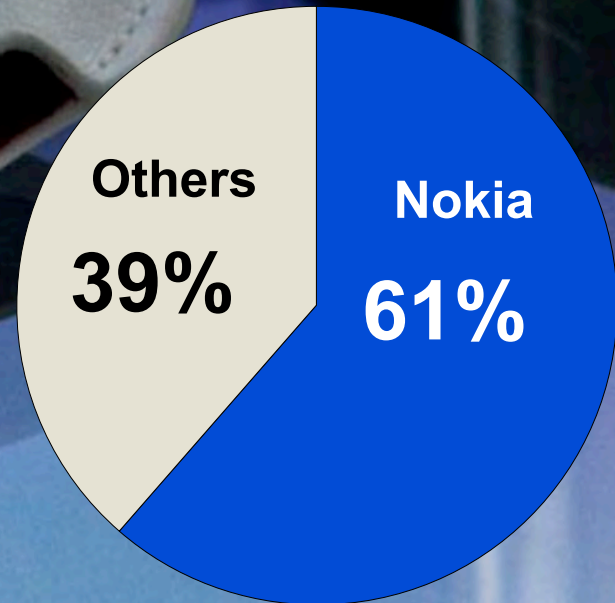
2008 Events

**NOKIA**



# The device business: profits

**Winner takes the most**  
Mobile device operating  
profit share (Q1-Q3 2008)



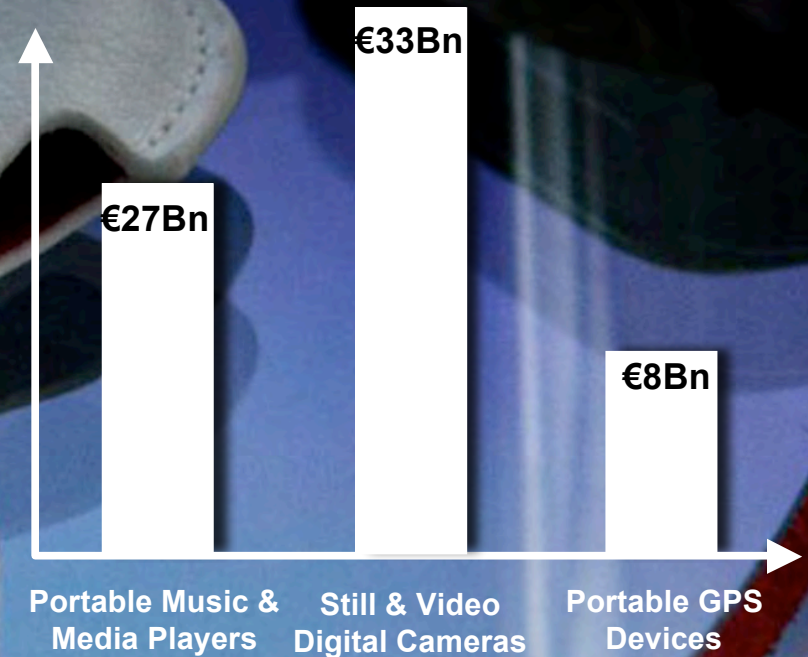
Source: Nokia estimates and company reports of Samsung, Motorola, Sony Ericsson, LG, RIM and Apple

**NOKIA**



# The device business: value capture

Opportunities to capture value from other industries



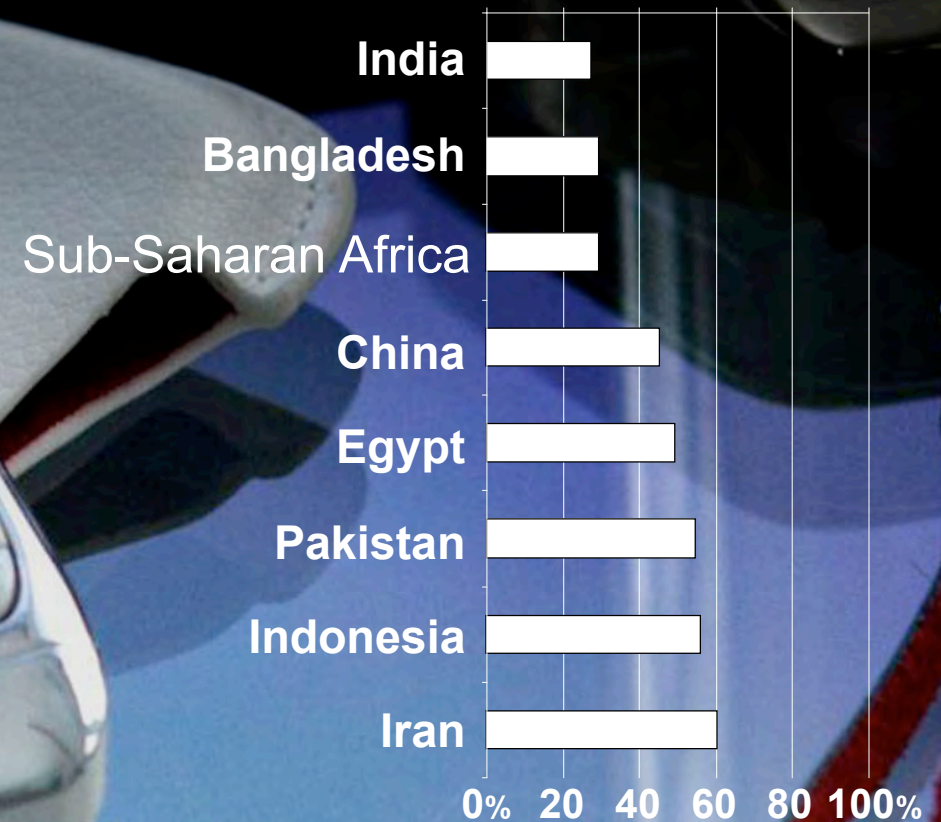
Source: IDC – Estimates for 2008  
Sept. 2008  
(USD-Euro exchange rate=0.773)

**NOKIA**



# The device business: growth opportunities

**Room for growth**  
penetration in large emerging markets

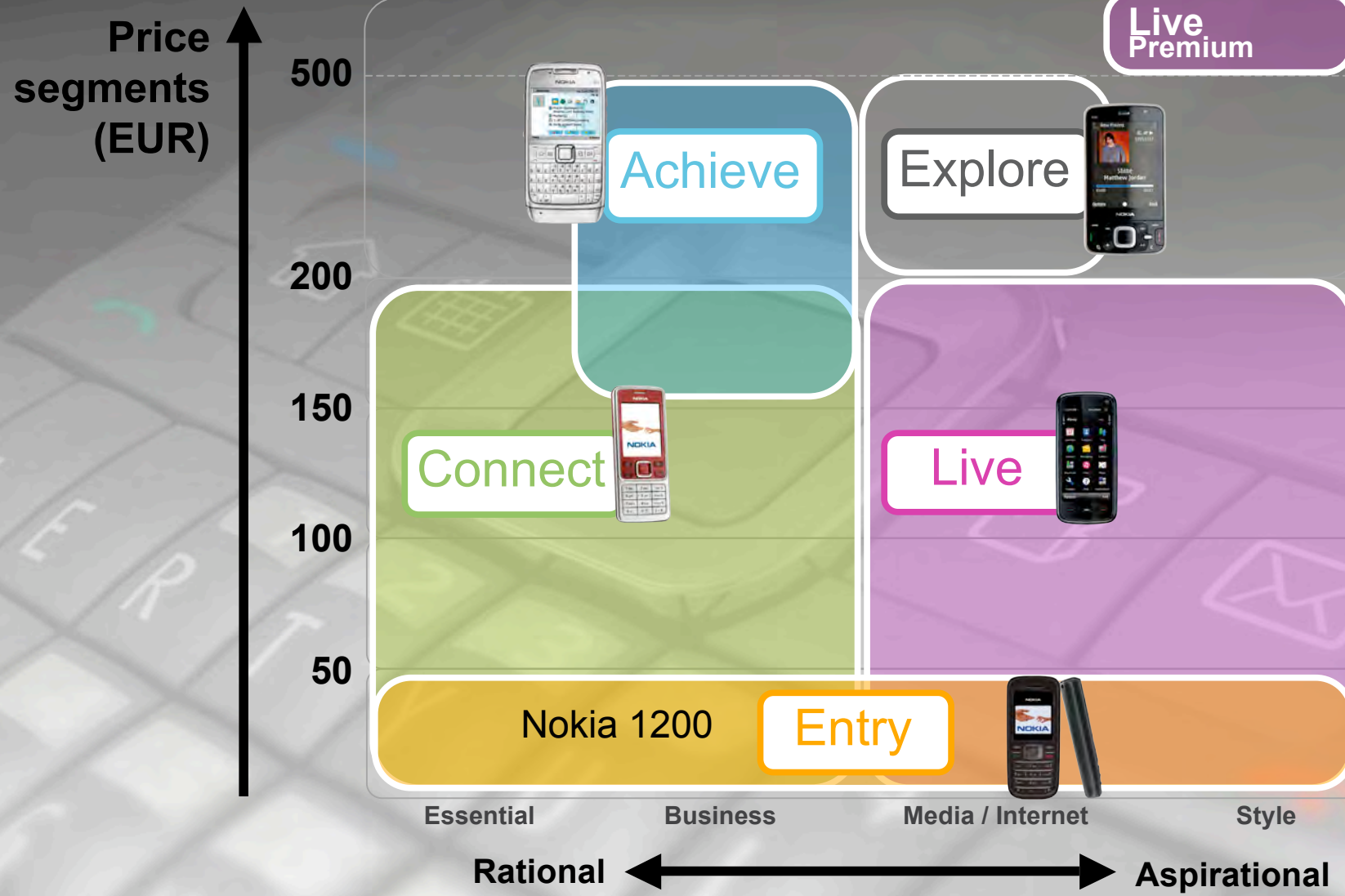


Source: Nokia estimates

**NOKIA**



# The only global portfolio



# Nokia 2008 Business review

NAME

NOKIA

DATE

2008

**SUBJECT**

**STATUS**

Device Portfolio



**Smartphones**

**WIP**

Services & Software

Nokia Siemens Networks

2008 Events

**NOKIA**

# Smartphones for the fourth quarter

WIP



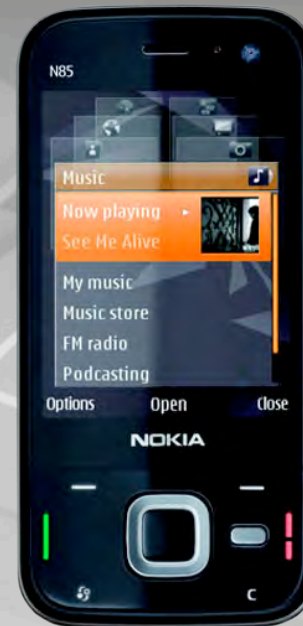
**Nokia E71**



**Nokia N96**



**Nokia  
5800 XpressMusic**



**Nokia N85**



**Nokia E63**

**NOKIA**



# Nokia 2008 Business review

NAME **NOKIA**  
DATE **2008**

SUBJECT	STATUS
Device Portfolio	✓
Smartphones	WIP
Services & Software	WIP
Nokia Siemens Networks	
2008 Events	

# Services & Software launches

WIP

Files on Ovi

Mail on Ovi

Nokia Maps  
2.0

11<sup>th</sup> Nokia  
Music Store

Nokia Comes  
with Music

Share on Ovi

Nokia Ovi  
Suite

Ovi.com sync

Maps 3.0,  
Maps on Ovi,  
Nokia  
Messaging

N-Gage

Jan/08 Feb/08 Mar/08 Apr/08 May/08 Jun/08 Jul/08 Aug/08 Sep/08 Oct/08 Nov/08 Dec/08



# Nokia 2008 Business review

NAME

NOKIA

DATE

2008

## SUBJECT

## STATUS

Device Portfolio



Smartphones

WIP

Services & Software

WIP

Nokia Siemens Networks

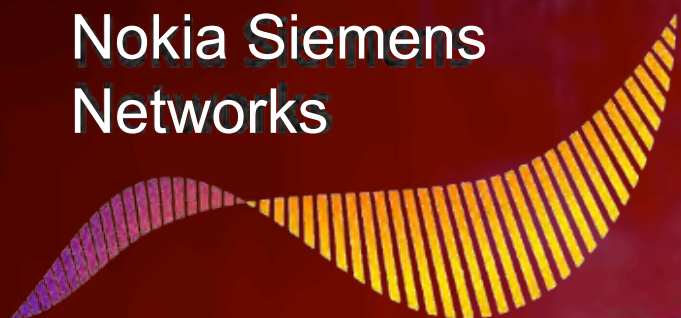


2008 Events





# Nokia Siemens Networks



**NOKIA**

# Nokia 2008 Business review

NAME **NOKIA**  
DATE **2008**

SUBJECT	STATUS
Device Portfolio	✓
Smartphones	WIP
Services & Software	WIP
Nokia Siemens Networks	✓
2008 Events	✓

**NOKIA**

# Important 2008 milestones

A man and a woman are running on a paved path. In the background, there is a large concrete bridge with several support pillars. Beyond the bridge, a body of water is visible, along with some industrial structures and distant hills under a clear blue sky.

**symbian**

**NOKIA**



# Important 2008 milestones



# NAVTEQ

# Nokia 2008 Business review

NAME **NOKIA**  
DATE **2008**

SUBJECT	STATUS
Device Portfolio	✓
Smartphones	WIP
Services & Software	WIP
Nokia Siemens Networks	✓
2008 Events	✓

**NOKIA**

# 2009 Focus Areas

**Cost base sized correctly**

**Growth opportunities**

**Services & Software**

**Email**

**UI and Software Platforms**



**NOKIA**



## Cost base sized correctly

2009  
Focus areas

- Prioritization leads to specific cost reductions in all areas
- We will execute our strategy, but at appropriate cost levels

# Growth opportunities

2009  
Focus areas


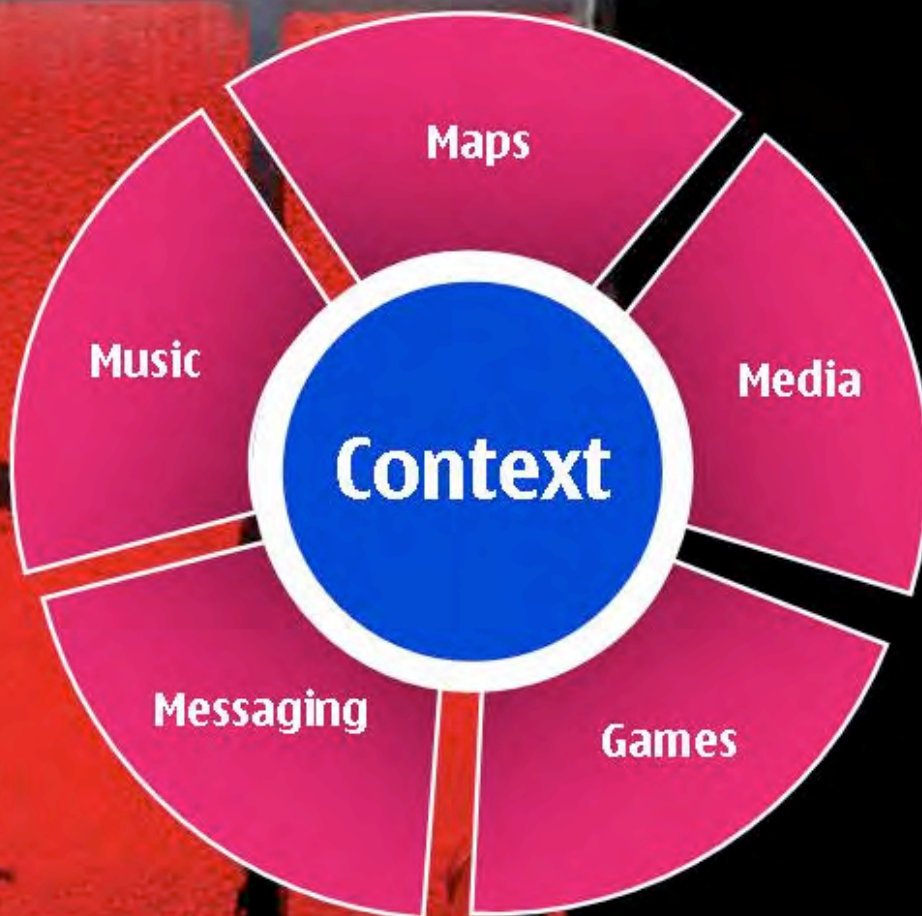
- Services & Software
- Take market share
- Capture value from adjacent industries
- Nokia device enhancements
- NAVTEQ

**NOKIA**



# Services & Software

**2009  
Focus areas**



Internet services that  
Nokia has chosen to  
focus on:

**EUR 40 billion in 2011**

**NOKIA**

## 2009 Focus areas



**Simple and intuitive  
Mail on Ovi for Nokia  
Series 40 Devices**



**Nokia Life Tools**



## 2009 Focus areas



**Simple and intuitive  
Mail on Ovi for Nokia  
Series 40 Devices**

A screenshot of the Nokia Life Tools app interface. It displays a table titled 'Cereal Prices' with information about Wheat (Sharbati) in Sangli for the date 10/6/08. The table lists prices per 100kg, a maximum price, a minimum price, and the arrival quantity. Navigation buttons like 'Back' and 'Back' are visible at the bottom.

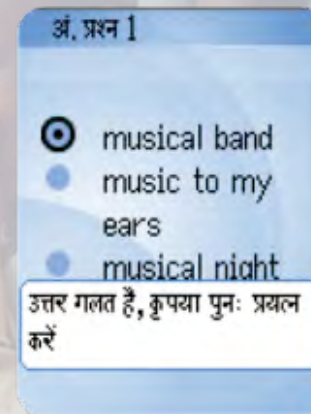
Cereal Prices	
Wheat (Sharbati)	
Sangli (10/6/08)	
Prices	Rs/100Kg
Maximum	1850
Minimum	1100
Arrival	424 Qtl

**Nokia Life Tools**

## 2009 Focus areas



**Simple and intuitive  
Mail on Ovi for Nokia  
Series 40 Devices**



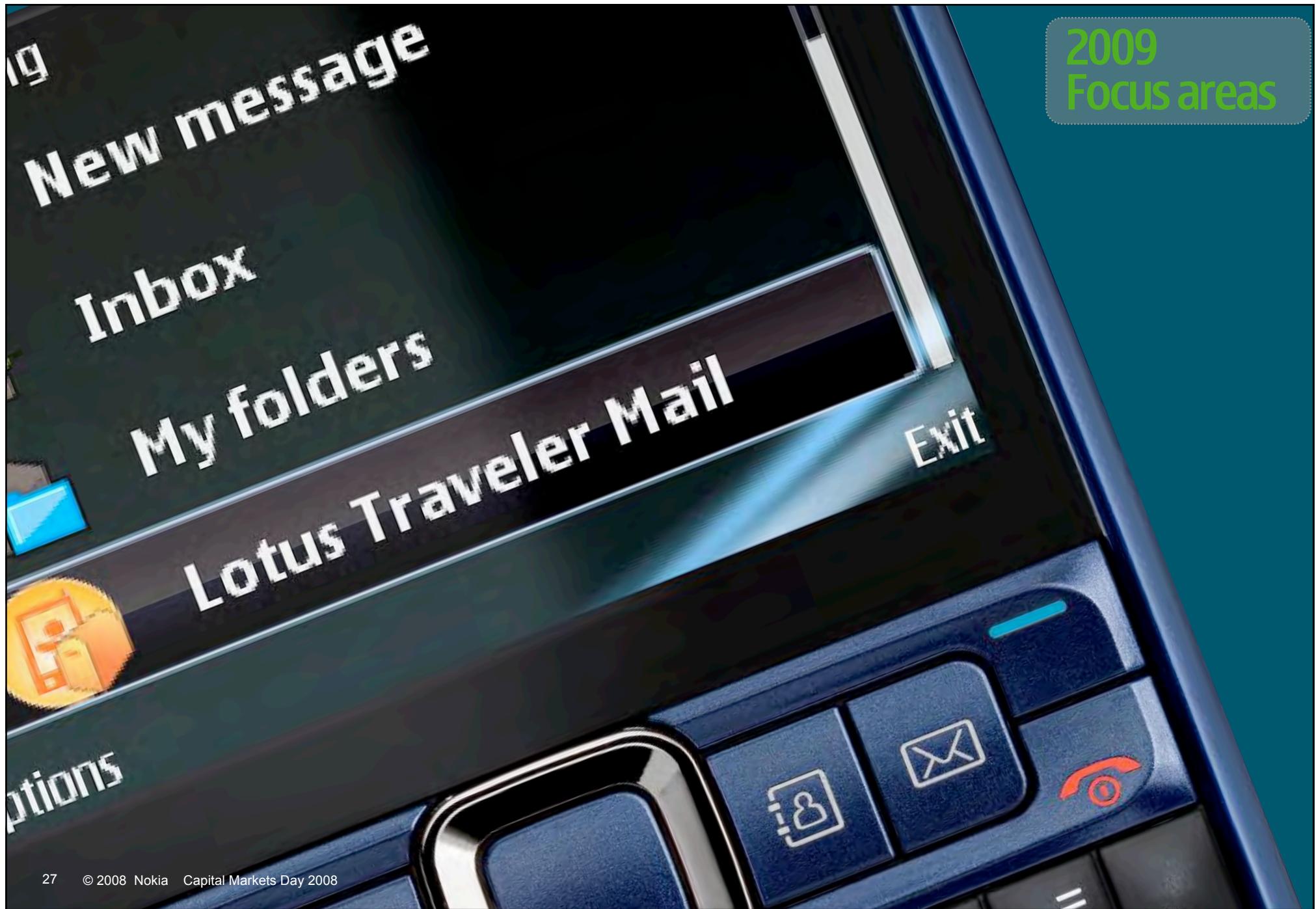
**Nokia Life Tools**



2009  
Focus areas



**NOKIA**



2009  
Focus areas



# Mobile Messaging for the Masses

2009  
Focus areas



## Device Breadth, Global Reach

# Software and UI

2009  
Focus areas







# Shaping the future

**NOKIA**

# Extending the lead in devices

Kai Öistämö  
Executive Vice President, Devices

**NOKIA**





- Mobile **Phone** becomes Mobile **Computer**
- Focus on **solution** not product
- New organization has **reduced overlaps**
- Focus back on **hero** products



# Grow market share

- 1 million people choose Nokia each day
- Target retention rate increase to 65% would add 5% to market share
- Grow value share by strengthening high end



# Hold home field advantage

- Defend in markets where we are strong
- Value for money
- Highest perceived value
- Nokia brand strength
- Portfolio is king

NOKIA

# Exploit growth opportunities

- Starts with the consumer
- Strategic collaboration with US carriers
- Shipments to Korea scheduled to begin in 2009

**NOKIA**





Grow in  
emerging markets  
through **value** add





# Key drivers for 2009

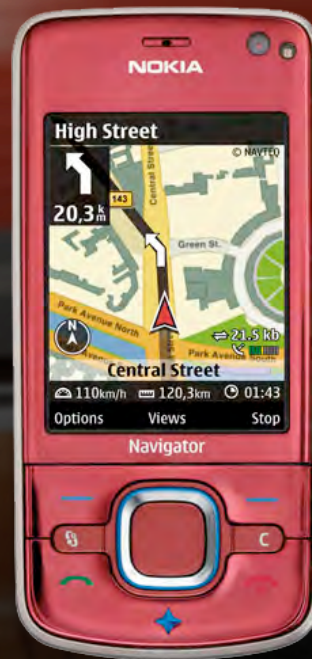
- User Experience
- Innovation
- Scale and Cost Efficiency

NOKIA

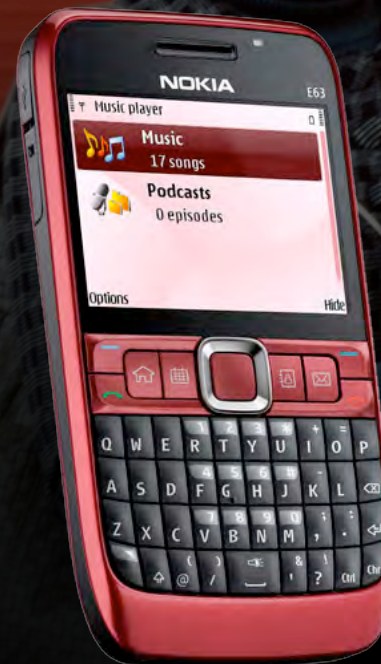


# Gain **user experience** leadership

- Across platforms, geographies, price points
- One size does NOT fit all
- User experience defines form factor
- Tailored solutions



Nokia 6210 Navigator



Nokia E63

**NOKIA**



**NOKIA**

# Nokia **Entry** and Life Tools



# Nokia Nseries

- Over 80% of N95 owners access the web
- Estimate over 100 million Nseries sold by Q1 2009



**NOKIA**

# Nokia N97



- Touch and physical QWERTY
- Customizable Homescreen – your favorite contacts & services at a glance
- 32 GB of on-board memory + 16 GB card slot = 48 GB of memory
- 3.5" widescreen with 640x360 resolution
- 5 Mpx camera with Carl Zeiss optics

**NOKIA**





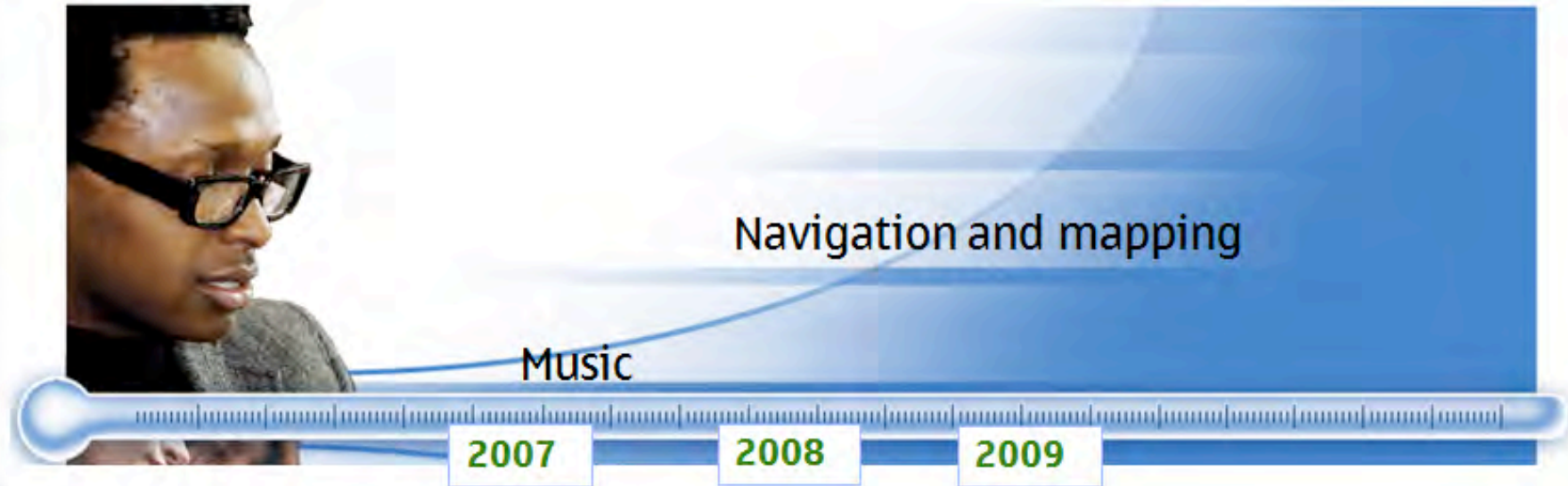






# Drive **innovation** through platforms

- Innovation in hardware and software
- Symbian Foundation, Trolltech in software
- UI puts people first



Navigation has **reached the mass market**

**50% of 2009 portfolio** with built in GPS

All S60 with Maps, first Series 40 with GPS

Navigation coming to **entry markets**

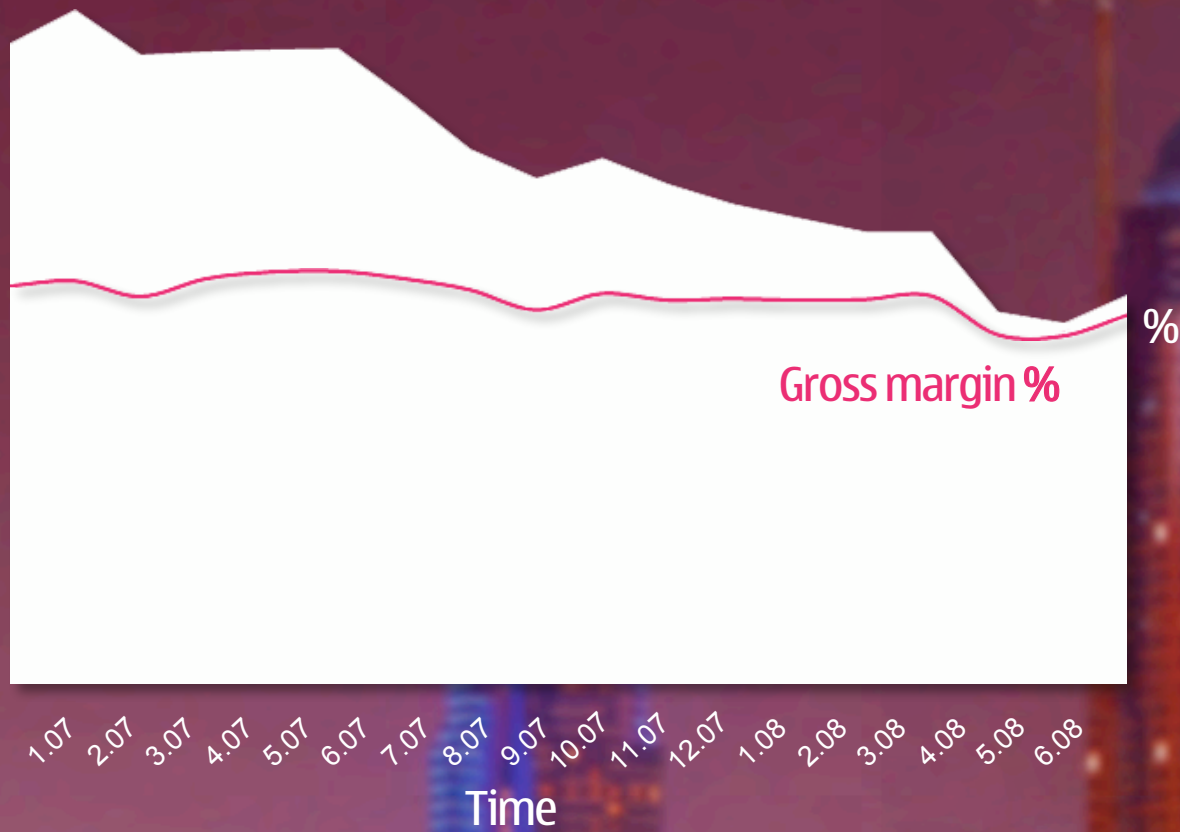
Open map APIs drive **new location services**

**NOKIA**



# Maximize scale and cost efficiency

Retail price in €



Nokia 6300





# The New Smartphones

We take four of the best for a ride. **By Jessi Hempel**

APPLE'S IPHONE MAY HAVE set the standard for a new generation of smartphones, but plenty of competitors, including RIM, Nokia, and Google, are vying to upstage Steve Jobs in the competition for

consumers' hearts. RIM's BlackBerry models are the favorite choice for U.S. corporate users, while Nokia's phones hold the lead in the rest of the world. Here are four top picks for the PDA-obsessed.



## RIM BlackBerry Bold

**UPSIDE** A brilliant screen, the best e-mail keyboard available, and a slick operating system.

**DOWNSIDE** It's a bit bulky, and web browsing is still more awkward than on its competitors.

**\$299; AT&T**



## Apple iPhone 3G

**UPSIDE** Can handle Microsoft Exchange e-mail and offers lots of fun, downloadable applications.

**DOWNSIDE** The battery runs down quickly, and the keyboard isn't for the typo-prone.

**\$199; AT&T**

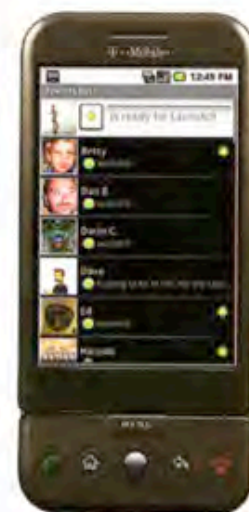


## Nokia E 71

**UPSIDE** Sleek frame, a 3.2-megapixel camera, and you can use it with any carrier. A toggle switch flips between screens for work and home.

**DOWNSIDE** Requires special headphone jack, and the screen is tiny.

**\$465; T-Mobile and AT&T**



## Google Android G1

**UPSIDE** Easy to navigate, with a force-quit feature that lets you close a frozen app without rebooting.

**DOWNSIDE** It's chunky and heavy, and the keyboard is, for some, challenging to use.

**\$179.99; T-Mobile**

**OUR PICK** Despite a small screen, the Nokia E71 offers a sleek and satisfying experience and stands out from the pack.

# FORTUNE

APPLE'S IPHONE MAY HAVE set the standard for a new generation of smartphones, but plenty of competitors, including RIM, Nokia, and Google, are vying to upstage Steve Jobs in the competition for

consumers' hearts. RIM's BlackBerry models are the favorite choice for U.S. corporate users, while Nokia's phones hold the lead in the rest of the world. Here are four top picks for the PDA-obsessed.



## RIM BlackBerry Bold

**UPSIDE** A brilliant screen, the best e-mail keyboard available, and a slick operating system.

**DOWNSIDE** It's a bit bulky, and web browsing is still more awkward than on its competitors.

**\$299; AT&T**



## Apple iPhone 3G

**UPSIDE** Can handle Microsoft Exchange e-mail and offers lots of fun, downloadable applications.

**DOWNSIDE** The battery runs down quickly, and the keyboard isn't for the typo-prone.

**\$199; AT&T**

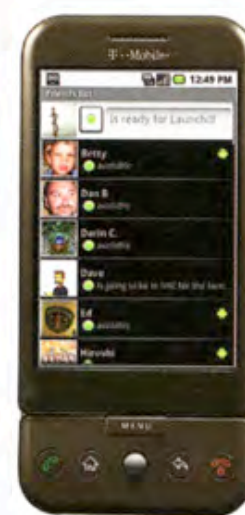


## Nokia E 71

**UPSIDE** Sleek frame, a 3.2-megapixel camera, and you can use it with any carrier. A toggle switch flips between screens for work and home.

**DOWNSIDE** Requires special headphone jack, and the screen is tiny.

**\$465; T-Mobile and AT&T**



## Google Android G1

**UPSIDE** Easy to navigate, with a force-quit feature that lets you close a frozen app without rebooting.

**DOWNSIDE** It's chunky and heavy, and the keyboard is, for some, challenging to use.

**\$179.99; T-Mobile**

**OUR PICK** Despite a small screen, the Nokia E71 offers a sleek and satisfying experience and stands out from the pack.





**TEST BEST**

Phones BY STEVEN LECKART

# Nokia E71

Finally, a smartphone that means business—without looking like a weary road warrior. This QWERTY kid could be the most beautiful piece of mobile hardware to step out of Finland, winning points for its remarkably trim stainless steel profile (0.39 inch), decent 3.2-megapixel camera, and speedy OS. Though the E71 comes stocked with enough office apps to handle a TPS report, it has a wild side, too: You can easily toggle between two separate, customizable home screens—one for your business contacts and email account, one for the personal life. And did we mention the E71's got battery life for days? Literally, three of them. **WIRED** 3G, Wi-Fi, Bluetooth, and GPS (found us in 18 seconds). Textured back plate prevents slippage. Mail for Exchange required no frantic calls to IT. Easy-to-access microSD slot holds up to 8 GB. Vivid 2.36-inch screen (viewable even in direct sunlight), with 15-fps video for solid YouTube sessions. Can create and edit Microsoft Office files on the fly. Adobe Acrobat Reader for PDFs; Flash for, you know, Flash stuff. **TIMED** Dinky 2.5-mm audio jack requires adapter for your good headphones.

9 Camera has low dynamic range and puny LED flash. Screen is wide but not big enough to do justice to a feature-length film. **\$483**

320 x 240-pixel screen

3.2-megapixel camera

QWERTY keyboard

# WIRED

**Best Smart Phone for Professionals**  
(PC World Latin America 2008 Awards)

**Phone of the year**  
(Mobile Choice UK)

**Smartphone of the Year**  
(Mobilgalan, Sweden)

**Editor's choice**  
(CNET Asia)

**Smartphone of the year**  
(PC World India)



# NOKIA



Lead in **user experience**  
the world over

Focused on **innovation**

**Scale** and structure  
brings **cost efficiency**

**NOKIA**



friendships

debate

network

**NOKIA**

ideas invent

possibilities

experience

opinions

fun

expertise

future

explore

vision

connect

inspire

exchange

discover

debate

real

relevant

progress

exchange

learn

experience

inspire

share

explore

# Services & Software

Niklas Savander

EVP, Services & Software

**NOKIA**

A word cloud background on a green gradient. The words are in various sizes and colors (white, yellow, pink, green). The most prominent words include 'experience' in large yellow letters, 'discover' in large pink letters, 'future' in large white letters, and 'share' in large green letters. Other visible words include 'ideas', 'invent', 'progress', 'learn', 'exchange', 'inspire', 'connect', 'vision', 'debate', 'fun', 'opinions', 'possibilities', 'explore', 'relevant', 'real', 'exchange', 'friendships', 'debate', 'expertise', and 'connect'.





2008



Nokia Music Comes With Music

Nokia Maps 2.0

Nokia Maps 3.0



Maps on Ovi

Share on Ovi

Nokia Messaging

N-Gage





€40 billion in 2011

NAVTEQ

intellisync

Sega.com  
m



AVVENU

gatel

PLAZES

loudeye.

OZ

twango





12 markets - 3 continents

35% of visitors from Mobile Devices



Comes With Music, now live in the UK  
Four major labels and indies on board



Coverage in >200 countries

70 turn-by-turn navigable countries



Navigation license in 70% of GPS enabled devices in 3Q08

Sales in over 130 countries

More than 1/3 come back for more

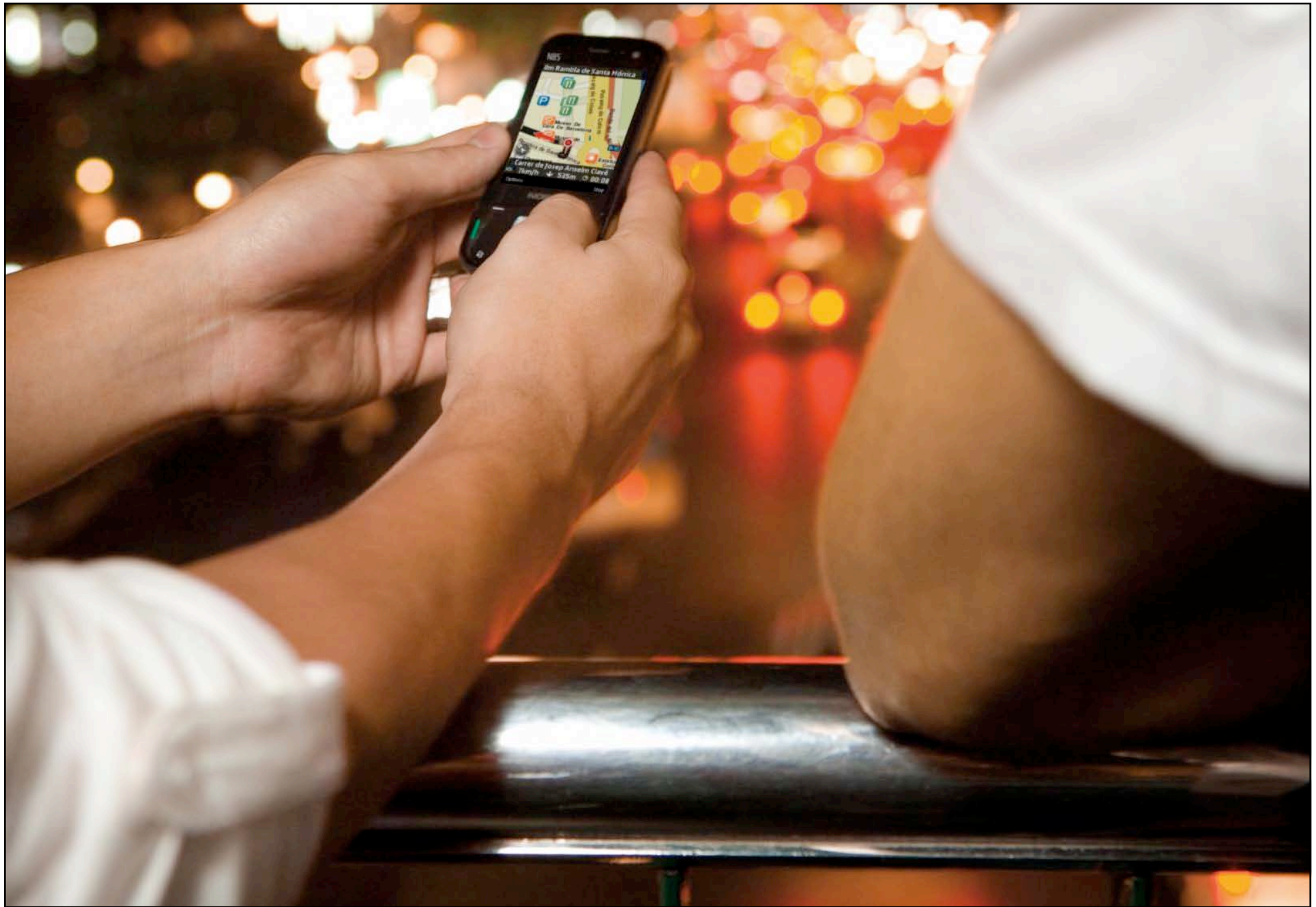


23 games published on N-Gage

Device N-Gage bundles ramping up starting 3Q08













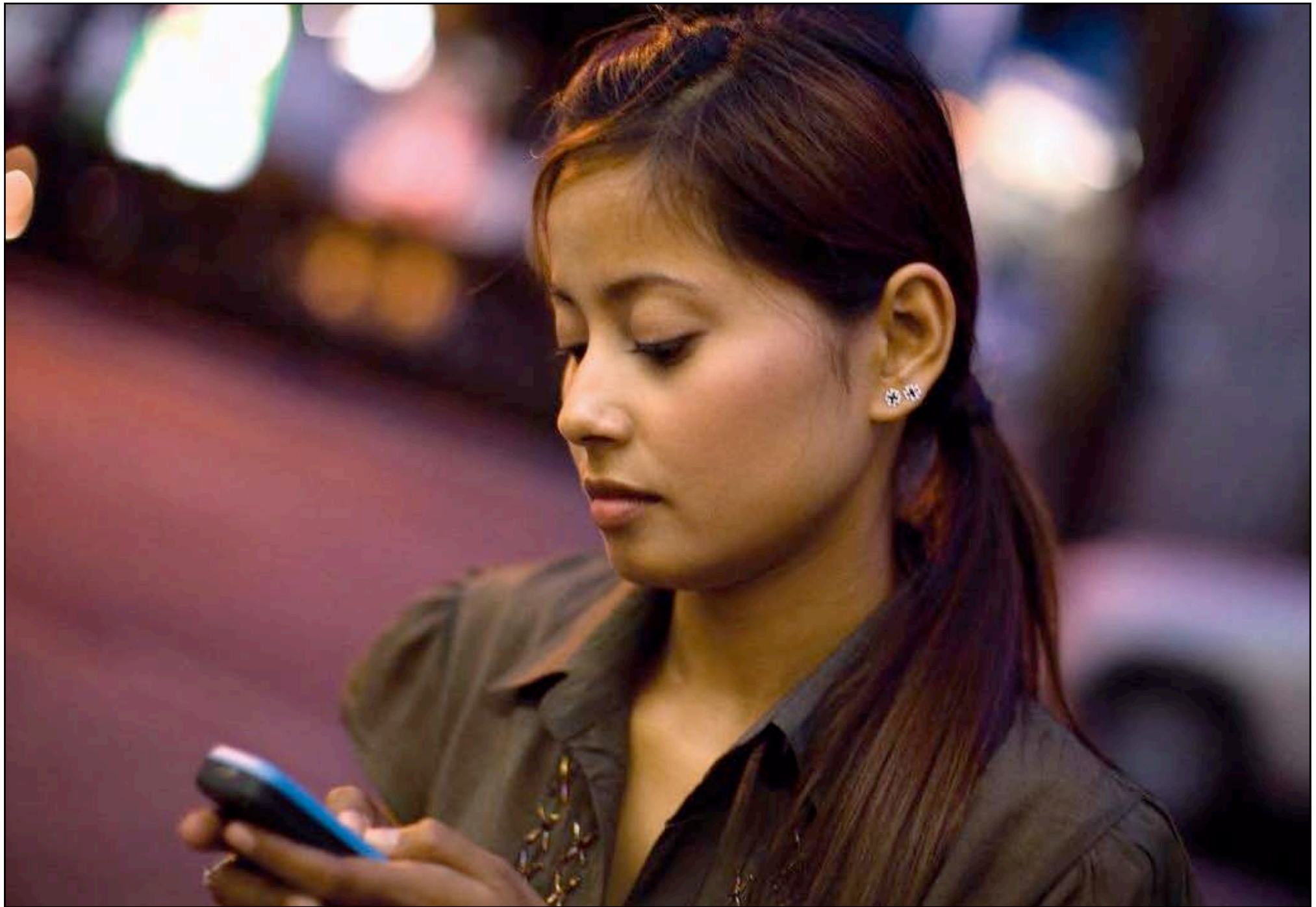




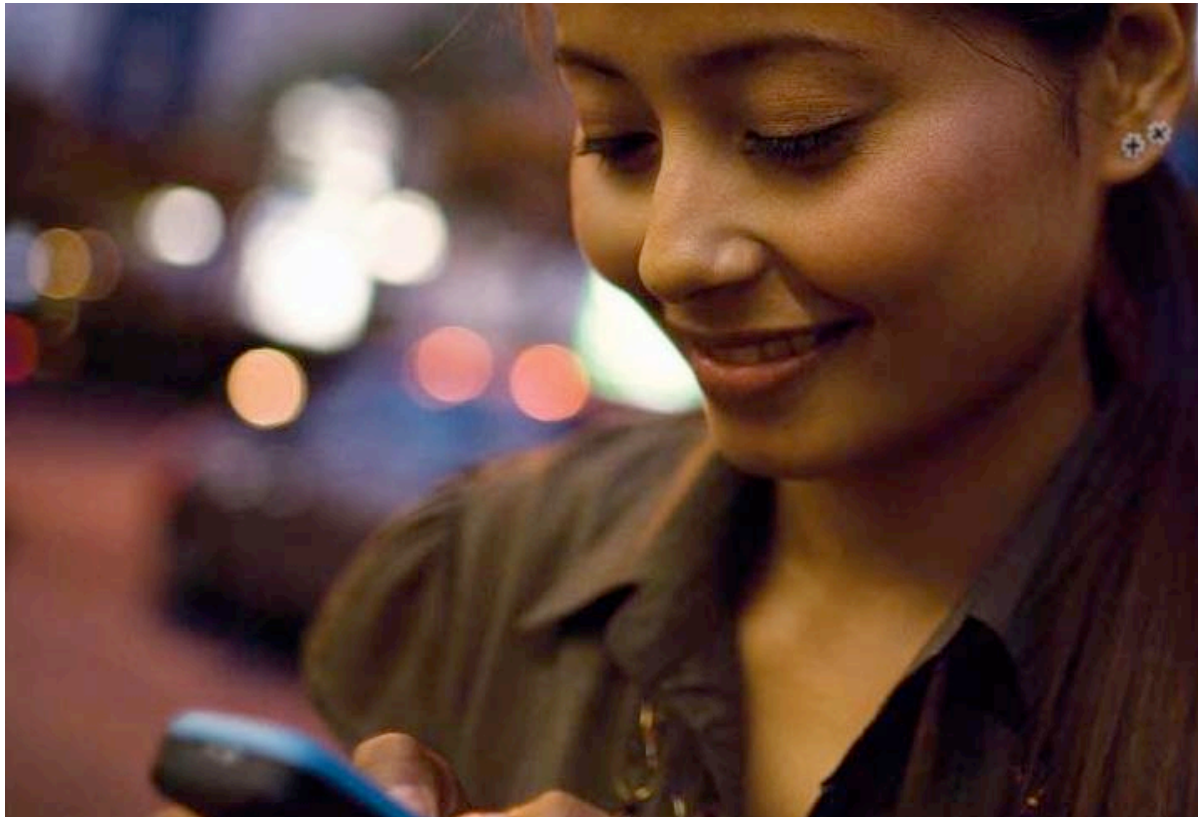






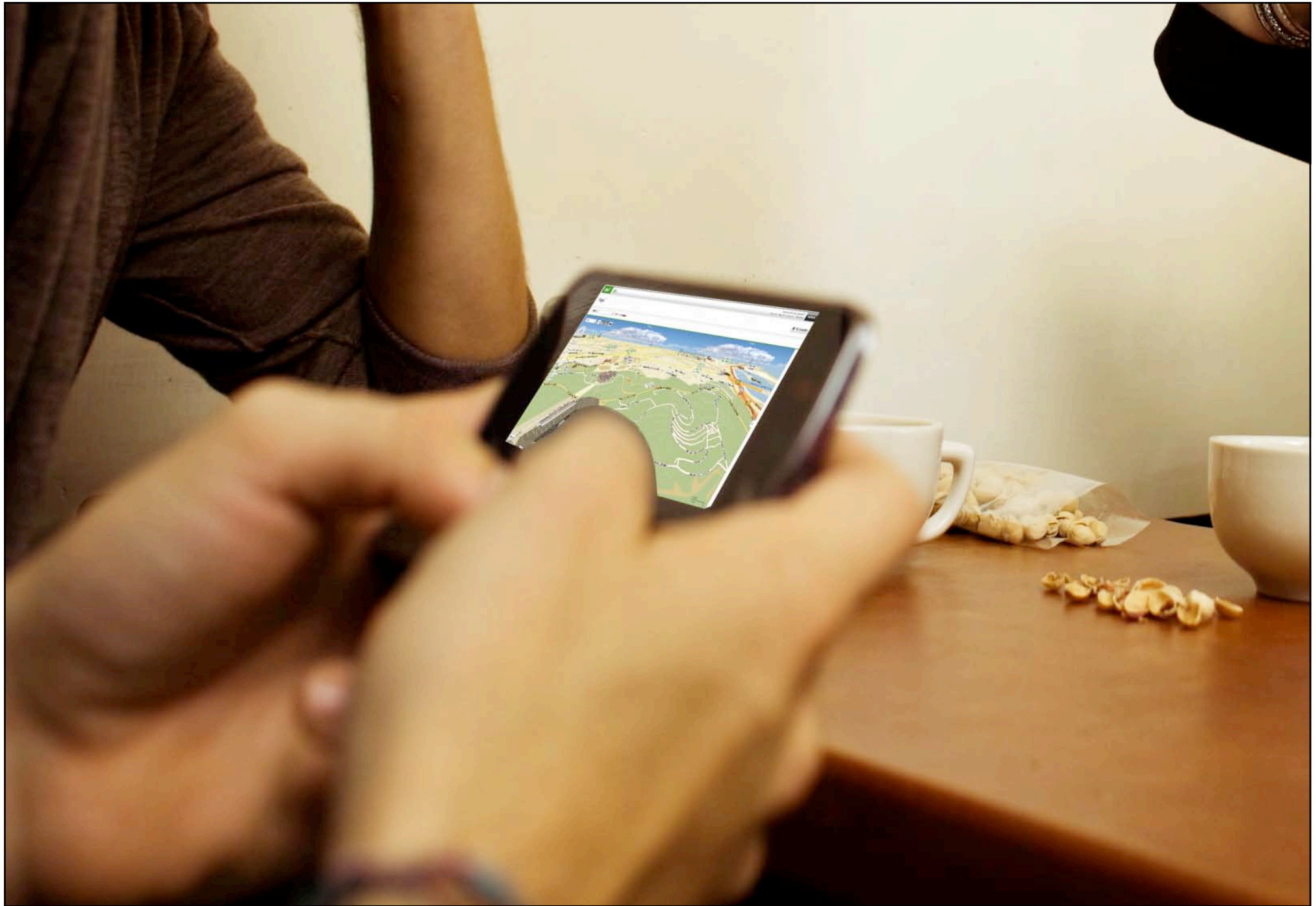


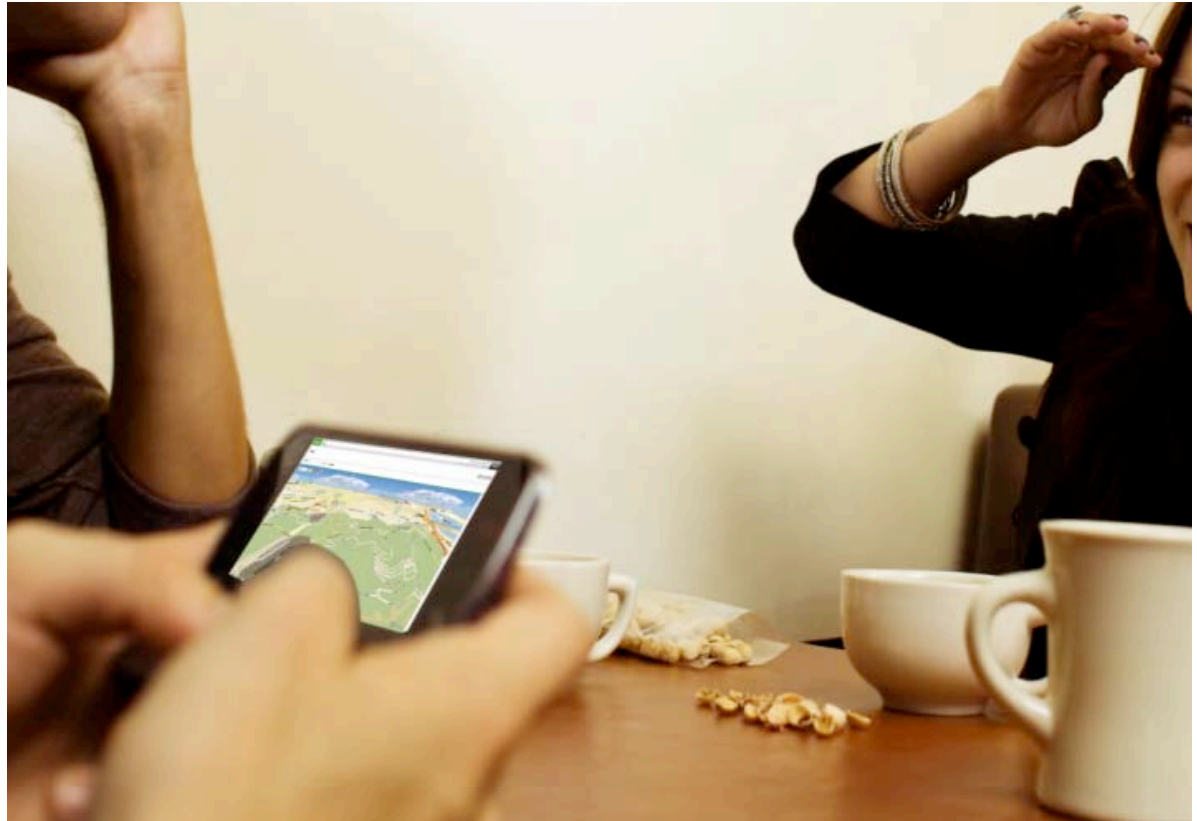
















## Nokia Music Store for US, South Africa and Brazil



Comes With Music

100% of chart coverage at sales start

13 additional markets on >7 devices across price bands in 2009



Several operator cooperation projects launched or in the pipeline

Expand usage of device bundles

Support for 18 devices, 23 new titles coming



N-Gage in Chinese language and with QQ Coin

1Q09 – 15K to 20K retail purchase points in India





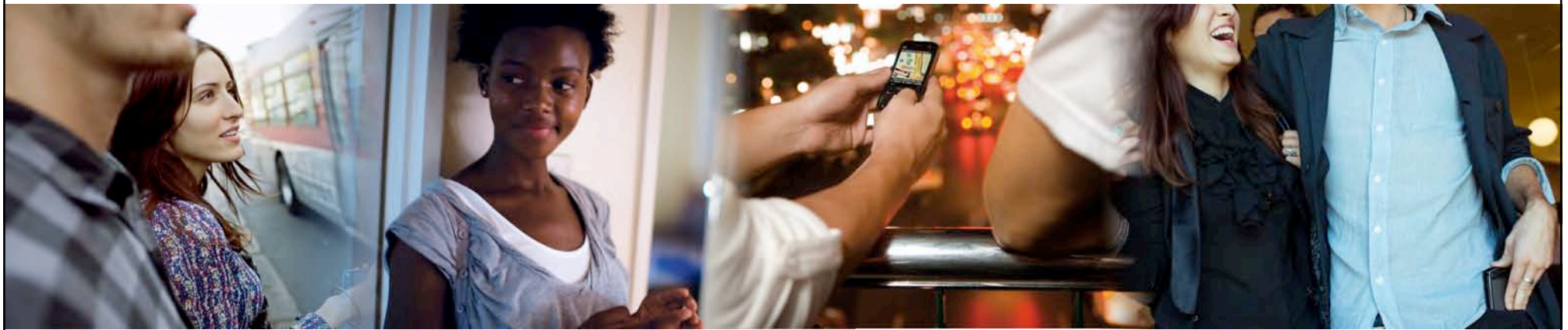
Nokia Music      Nokia Maps 2.0      Maps on Ovi      Nokia Messaging

Comes With Music      Nokia Maps 3.0      Share on Ovi      N-Gage



2008







# Building the brand and bringing Nokia solutions to market

**NOKIA**

# experience

# Outline

## Global view

Brand

Consumer

Operator cooperation

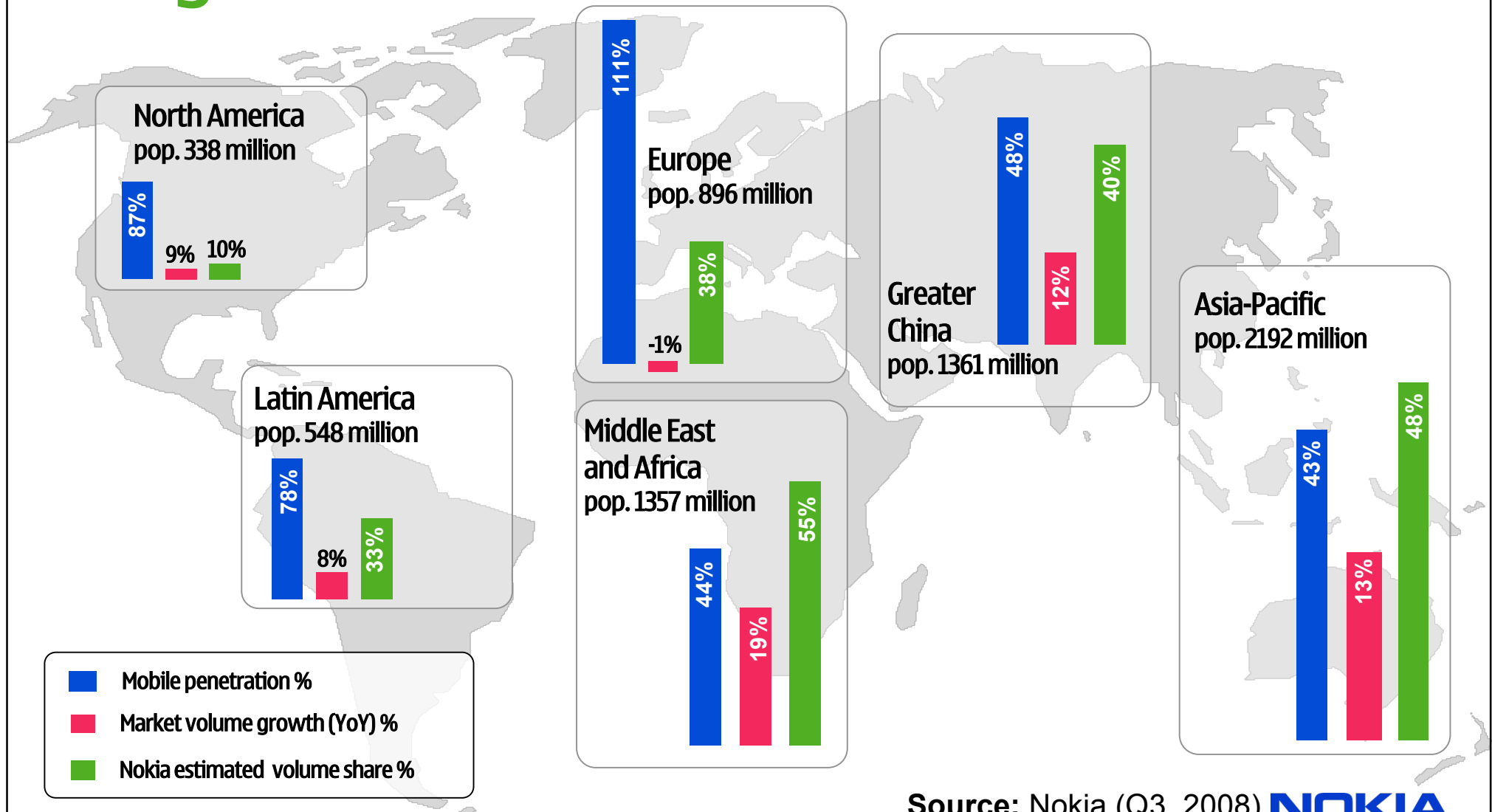
Marketing efficiency

Go-To-Market

Summary



# Nokia is best positioned to grow in a diverse and global market



Source: Nokia (Q3, 2008) **NOKIA**

# Outline

Global view

Brand

Consumer

Operator cooperation

Marketing efficiency

Go-To-Market

Summary



# Nokia - The 5th most valuable brand in the world (Interbrand, 2008)

More than 1 billion people use a Nokia device every day

Connecting People  
in new and better ways

Top 10 Brands



Microsoft



**NOKIA**



intel.



Disney

Google

**NOKIA**

Best Global  
Brands 2008

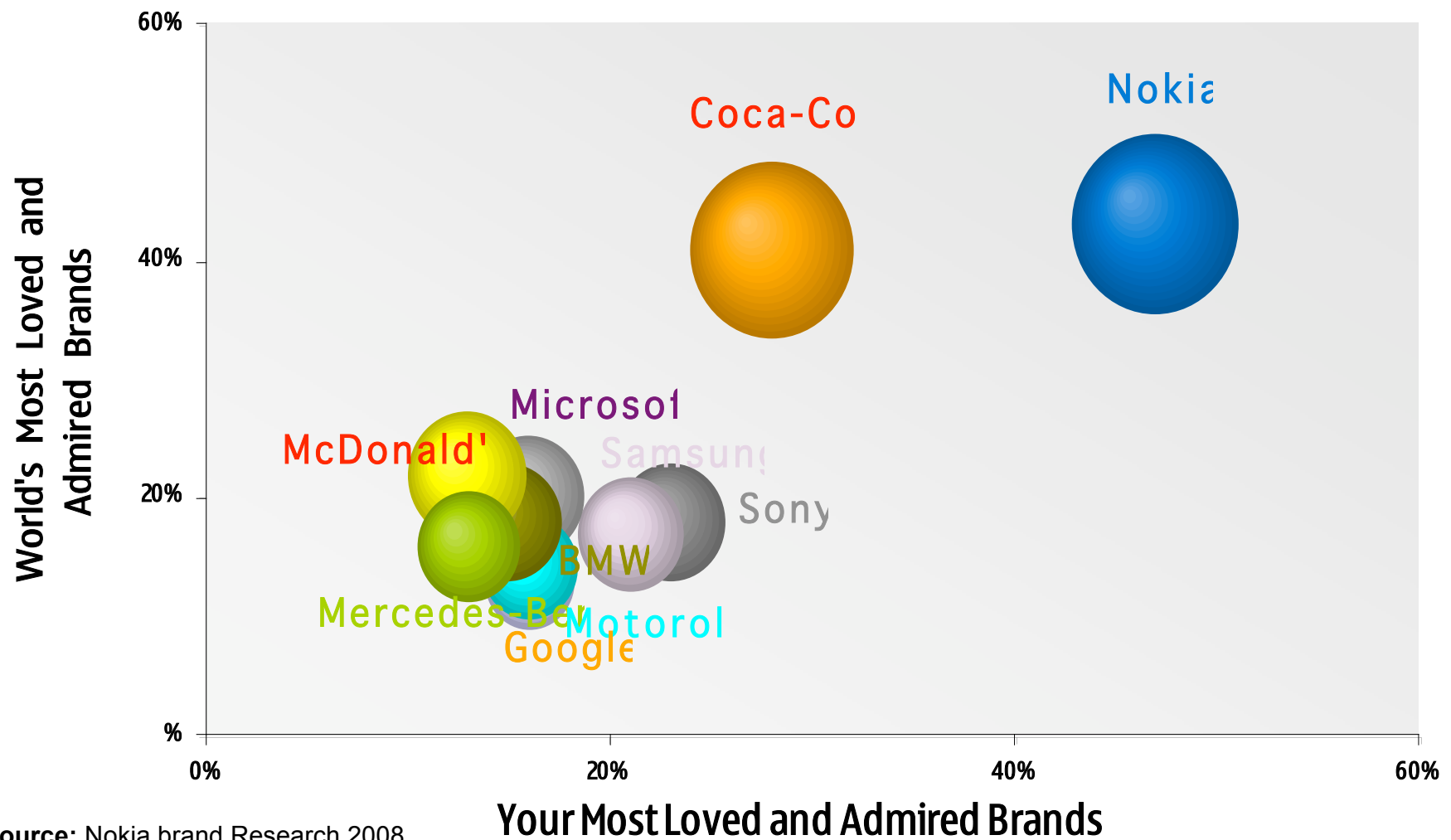
interbrand

Best Global Brands 2008

Rank	Brand	Value	Change	Category	Country	Revenue
1	Coca-Cola	218.1	+	Beverages	USA	218.1
2	IBM	160.0	+	IT	USA	160.0
3	Microsoft	150.0	+	IT	USA	150.0
4	GE	140.0	+	Electronics	USA	140.0
5	Nokia	130.0	+	Telecommunications	Finland	130.0
6	Toyota	120.0	+	Automotive	Japan	120.0
7	Intel	110.0	+	IT	USA	110.0
8	McDonald's	100.0	+	Food & Beverage	USA	100.0
9	Disney	90.0	+	Entertainment	USA	90.0
10	Google	80.0	+	IT	USA	80.0

summary

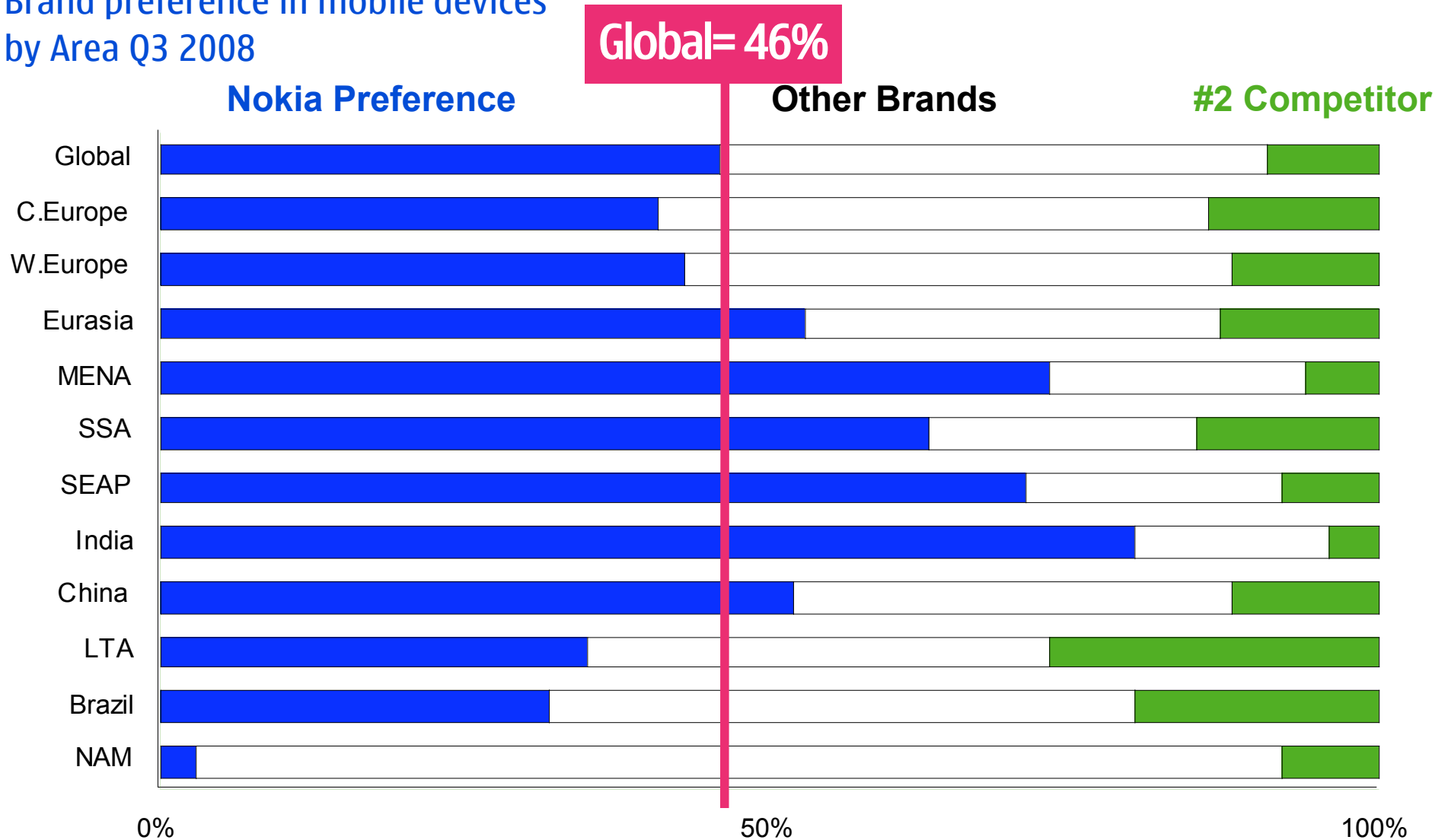
# Nokia is the most loved and admired brand in the world



Source: Nokia brand Research 2008

# Nokia has the highest brand preference

Brand preference in mobile devices  
by Area Q3 2008





# Evolve Nokia to an **Experience brand** and develop Ovi as a **Services brand**

**NOKIA**  
Connecting People

**ovi**



# Outline

Global view

Brand

Consumer

Operator cooperation

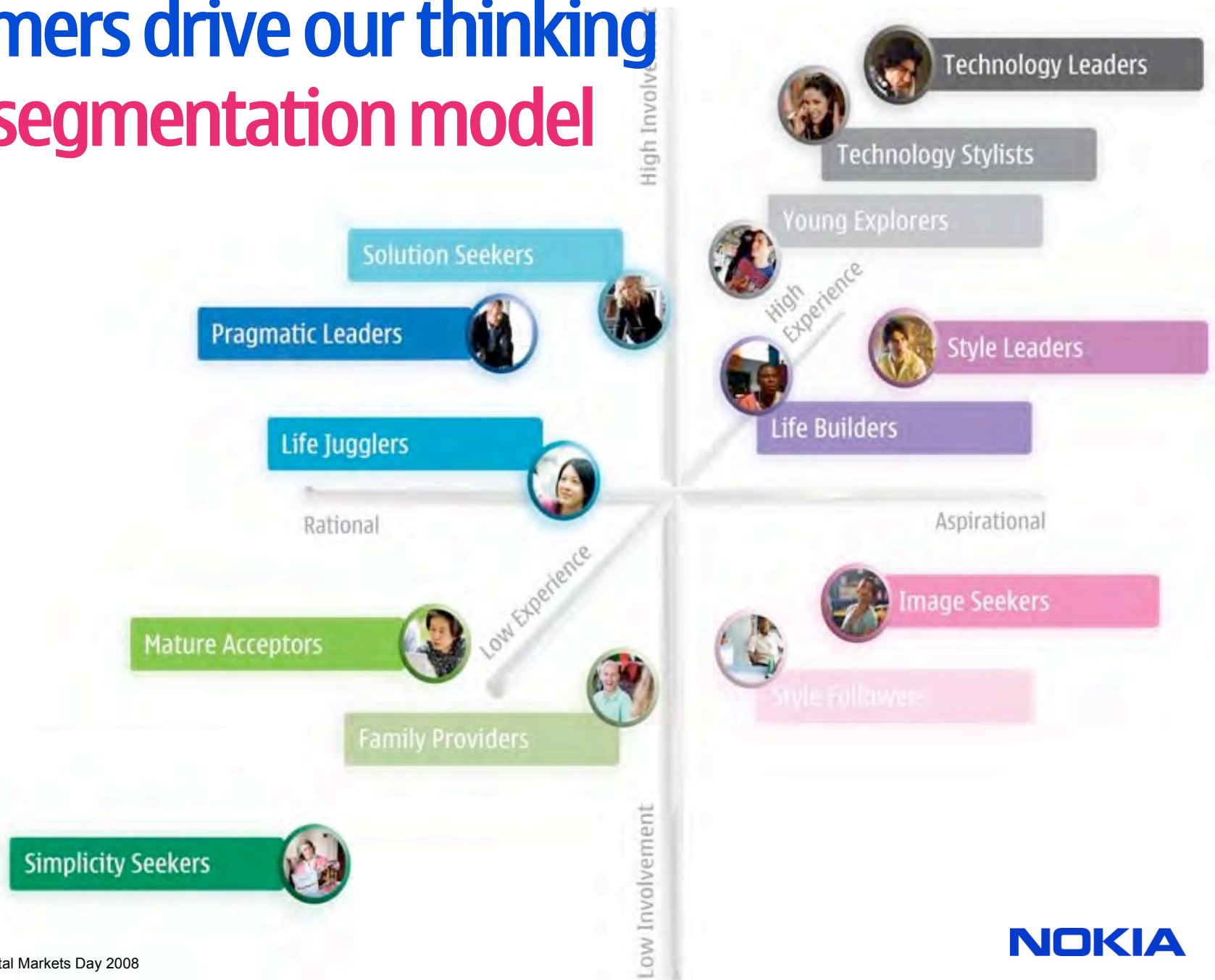
Marketing efficiency

Go-To-Market

Summary

# Consumers drive our thinking

## Nokia segmentation model





# Consumers drive our thinking

## Nokia segmentation model

### Key findings from Segmentation3

People are more engaged to the category

People are willing to spend more

Internet and entertainment are of high interest

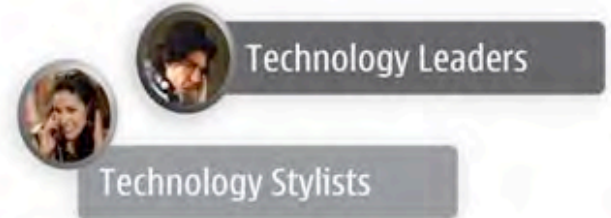
Simplicity Seekers



Family Providers

Low Involvement

High Involvement



Young Explorers



High Experience



Life Builders



Style Leaders

Aspirational



Style Followers



Image Seekers

**NOKIA**

# Consumers drive our thinking

## Technology Leaders

### Technology Leaders



Modern, leading edge consumers  
Technology is their life  
Very positive towards mobile entertainment  
Highly sociable with an active lifestyle

Solution Seekers

Family Providers

Simplicity Seekers

High Involvement

Low Involvement



# Consumers drive our thinking

## Segmented offering



Pragmatic  
Leaders



Young  
Explorers



Technology  
leaders





# Outline

Global view

Brand

Consumer

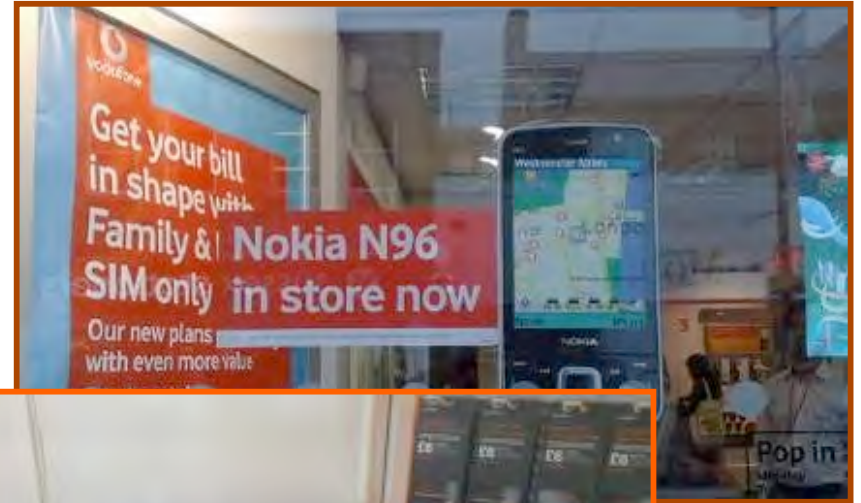
Operator cooperation

Marketing efficiency

Go-To-Market

Summary

# Strong operator support for Nokia's flagship devices

[illegible]

# Strong operator support for Nokia's flagship devices

**Germany: €150-200 subsidy for Nokia high-end devices**



**Vodafone:**

**Nokia E51, E71, E66, E90, N78, N95, N95 8GB, N85, N96**



**T-Mobile:**

**Nokia E66, E71, E51, N82, N95 8GB, N96**



**O2:**

**Nokia E66, E71, N78, N79, N95, N95 8GB, N96**



**E-Plus:**

**Nokia E71, E66, N85**





# Strong operator support for Nokia's flagship devices



**UK: Subsidies driving device price to zero**

Nokia N96



Most popular

Select & view plans

**Free**

On Pay monthly plans from £40

Nokia 6300

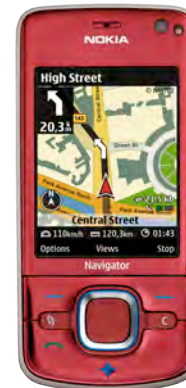


Select & view plans

**Free**

On Pay monthly plans from £15

Nokia 6210 Navigator



Select & view plans

**Free**

On Pay monthly plans from £25

# Strong operator support for Nokia's Internet services

SAY MY NAME	4:00	DESTINY'S CHILD
MANDY	3:21	BARRY MANLOW
SLAP	4:40	LUDACRIS
SAY MY NAME	3:49	SUPERCHUNK
ALICE	4:26	MOBY
SLAP	1:16	LINK 80
SAY MY NAME	4:44	LITTLE AXE
KAREN	3:59	THE NATIONAL
HIT THE ROAD, JACK	4:20	RAY CHARLES

**NOKIA**  
Connecting People

UNLUCKY IN LOVE

3

COMES WITH MUSIC  
ACCESS  
UNLIMITED  
TRADES  
MILLIONS

## Britain: now open

Millions of places waiting to be discovered



**NOKIA**



**O<sub>2</sub>**

Nokia N95 including 18 months voice-guided navigation

# Strong operator support for Nokia's Internet services

SAY MY  
MANDY  
SLAP  
SAY MY  
ALICE  
SLAP  
SAY MY  
KAREN  
HIT TH

Comes with  
**music.**  
Unlimited music  
download service.

£35  
a month

Nokia N95 8GB with music

3

Free device  
£35 per month

An advertisement for the Nokia N95 8GB with music. It features a vertical list of song titles on the left, a central image of the phone with a music download icon, and the 3 logo and a music note icon at the bottom. A black circle highlights the 3 logo.

**Britain: now open**  
Millions of places waiting to be discovered

Nokia  
Maps

Nokia N95 including 18 months  
voice-guided navigation

O<sub>2</sub>

An advertisement for Nokia Maps. It features a Nokia N95 phone displaying a map of London, a compass icon, and a map of Britain with location pins. The O2 logo is circled in red at the bottom right.



# Outline

Global view

Brand

Consumer

Operator cooperation

Marketing efficiency

Go-To-Market

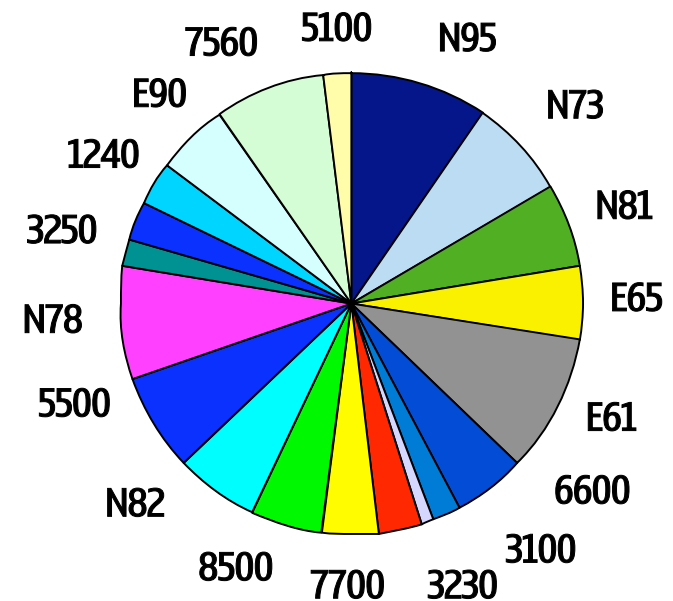
Summary

# Target: Increasing marketing effectiveness

**2007:**

Device based campaigns led to fragmentation of media spend

Share of marketing spend by product



**NOKIA**

# Solution: Theme based marketing

Convergence

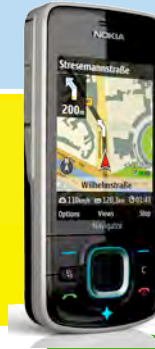


ovi NOKIA

Music



Navigation



Productivity



Time

Q1

Q2

Q3

Q4

NOKIA



# Solution: Theme based marketing

Converge



## Navigation theme Hero device

Nokia 6210 Navigator

## Supporting devices

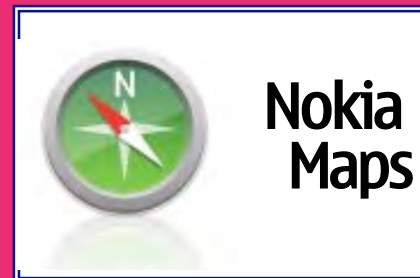
Nokia 6220 Classic

Nokia N95 8GB

Nokia N85

Nokia E71

Nokia E66



**NOKIA**

# Solution: Theme based marketing

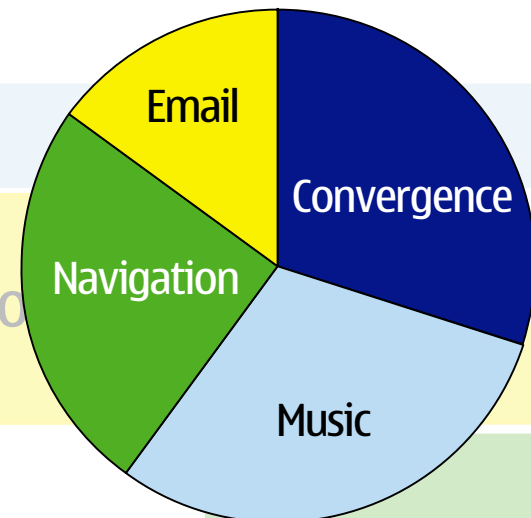
Convergence



Share of marketing spend per theme

**2009:**  
More wood behind fewer arrows

Navigation



Productivity



Time



# Increasing stakes in digital marketing

✉ From: Luca 10:55am  
If you listen to my  
voicemails...I kind of told  
her my name was Mark.  
**Lucasphone.com**

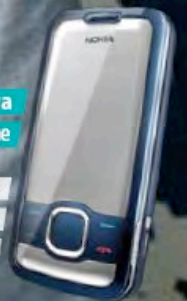
**NOKIA**  
Connecting People

My Nokia 7610 Supernova  
knows everything about me

Colourful exchangeable covers

3.2 megapixel camera with 8x zoom

mp3 music player





# Increasing stakes in digital marketing

11:44pm  
✉ From: Anna  
If you read my text  
messages, Rock Boy's  
just a friend, alright?  
**Annasphone.com**

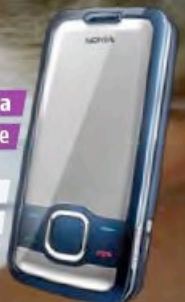
**NOKIA**  
Connecting People

My Nokia 7610 Supernova  
knows everything about me

Colourful exchangeable covers

3.2 megapixel camera with 8x zoom

mp3 music player



# Outline

Global view

Brand

Consumer

Operator cooperation

Marketing efficiency

Go-To-Market

Summary

# Go-To-Market brings Nokia solutions to market

## Device



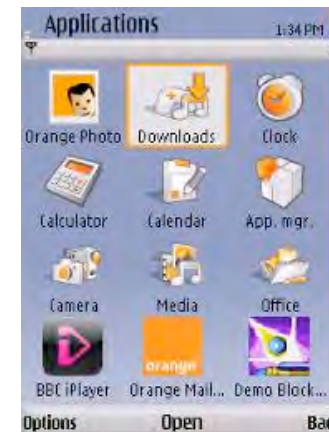
## Ovi services



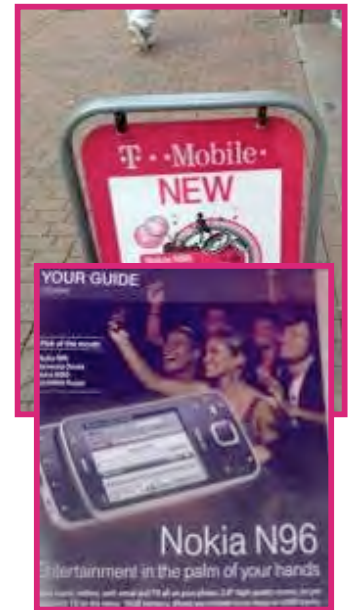
## Partner apps and services



## Operator customization and services

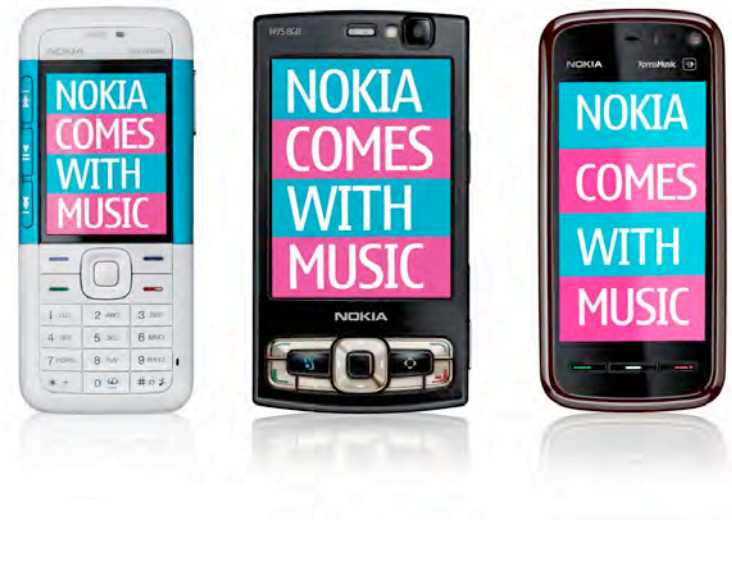


## Marketing and retail





# Go-To-Market: combining devices and services

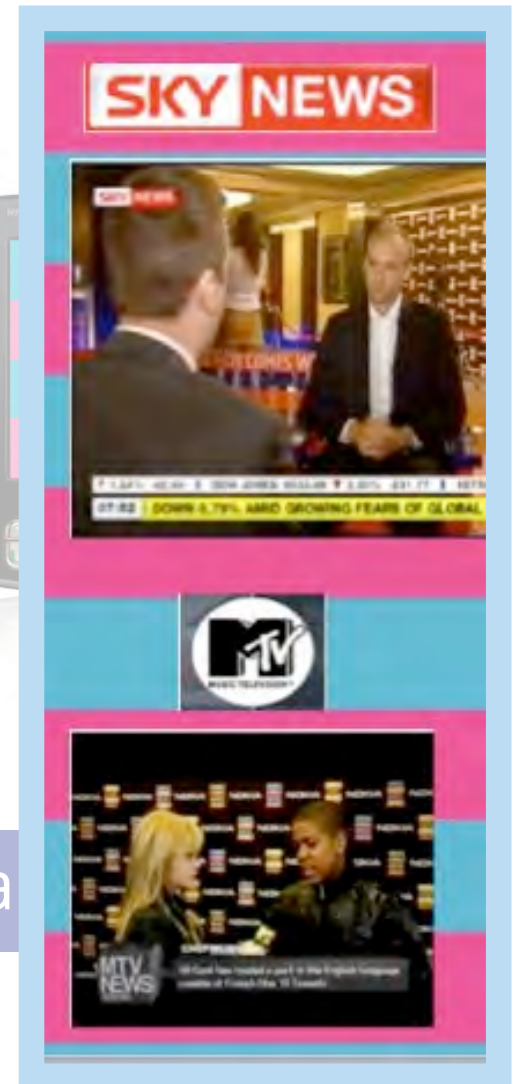
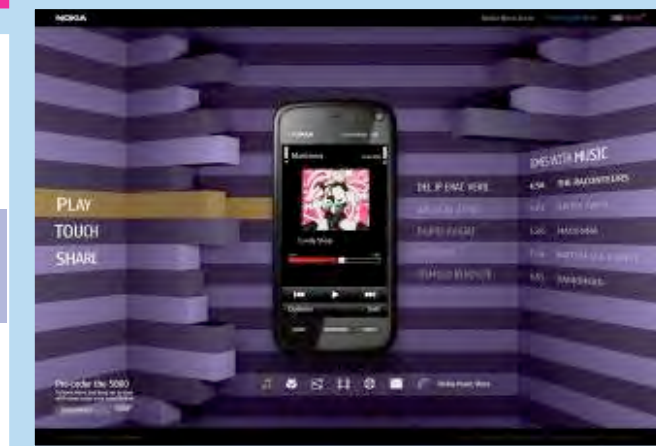


Nokia Music Store



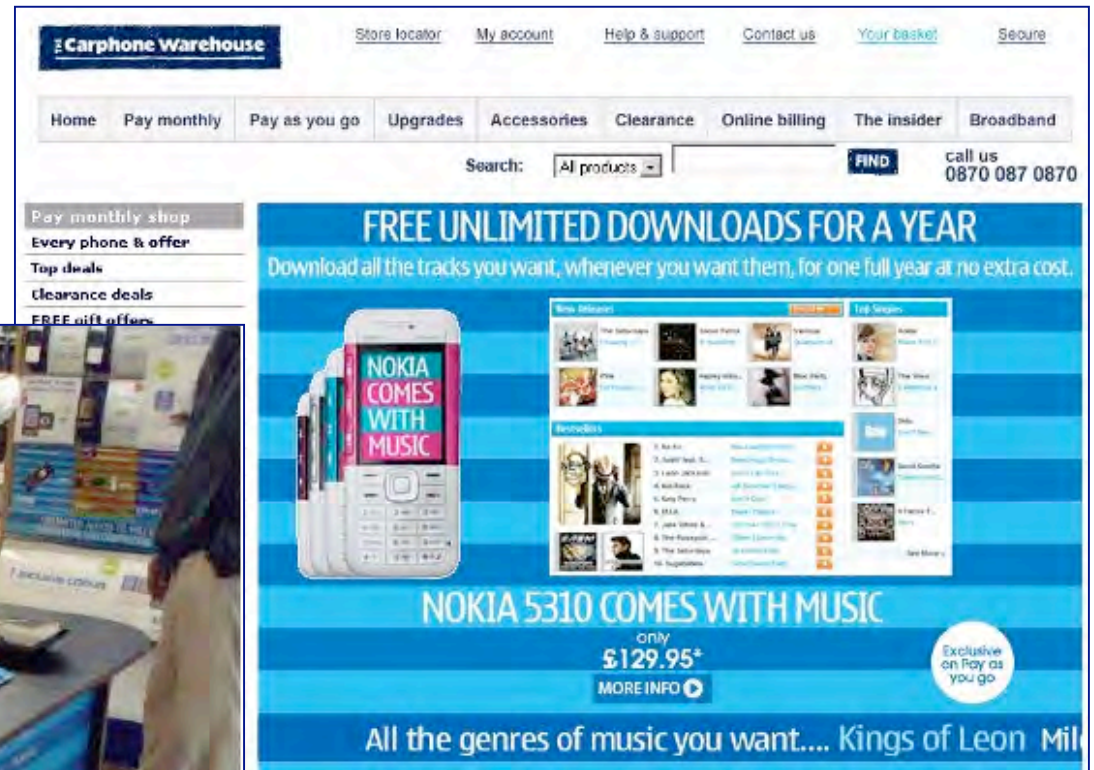
Nokia Music Devices

# Go-To-Market: exciting 360° marketing






# Go-To-Market: cooperation with retailers




**NOKIA**



# Go-To-Market: Nokia E71 & Email solutions with operator collaboration



**From meetings to myspace**



**Nokia E71. Free\* on Vodafone's \$69 Cap over 24 months**

**NOKIA**

The Nokia E71 has a unique switching mode that allows you to switch from work to play at the touch of a button. Plus, get it free\* on Vodafone's \$69 Cap over 24 months. Cap includes all the credit you need for calls, text, email, mobile internet and much more\* so you can get the most out of the Nokia E71. So head into Vodafone today.




**NOKIA Eseries**

**Introductory Offer**

**\$448**

With BroadBand on Mobile (BoM) Plan

**Nokia E71**

Smart Simplicity

- Excellent Messaging
- Two Home Screens

**Nokia E66**

COMING SOON

Designed for the way we work

- Personal Information Management
- GPS Navigation

The Sleek and Stylish E71 and E66 offer one-touch, easy access to personal and corporate email, including Microsoft Exchange with Nokia's Mail for Exchange.

More Nokia Eseries Special Buys with Broadband on Mobile Plans

	Nokia E51	Nokia E51 (non camera)	Nokia E90 Communicator
Retail Price:	\$558	\$528	\$1418
Special Price:	\$258	\$228	\$1018

All prices inclusive of 7% GST

**FREE**

Nokia Bluetooth Headset BH-201\* worth \$98 with every featured handset purchase

This fresh and young looking headset can be easily carried with you using the carrying strap

**Exclusive for Corporate Customers**

\*While stocks last.

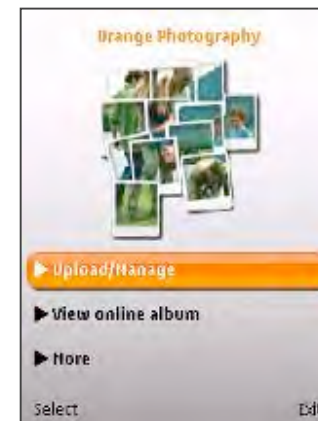
BroadBand on Mobile Plans	1000	2000	3600
Download Speed	Up to 1000Kbps	Up to 2000Kbps	Up to 3600Kbps
Promotion Price @ 50% off	<b>\$11.21</b>	<b>\$17.42</b>	<b>\$31.19</b>
Usual Price	\$22.42	\$34.85	\$62.37
Data Bundle	50 GB local data usage bundle can be used to retrieve about 1 million* emails or surf over 150,000* WAP pages per month		

# Go-To-Market: Operator cooperation



## Orange N96

- Customized user interface
- Services integration
  - Orange Downloads
  - Orange Traffic TV
  - Orange Email and more...



# Go-To-Market: Content customization



## BBC iPlayer

- BBC programs from the past week.
- BBC iPlayer supports on-demand TV & Radio - Streaming and DRM Download over Wi-Fi, plus Streaming on select 3G networks

## Nokia Video Center

- Program feeds for BBC, SKY and ITV

BBC

sky

itv



# Go-To-Market – a strategic asset for Nokia

## Very sustainable competitive advantage

- Superior **geographical** coverage and **relationships** with main actors
- Critical mass of **skillful** solutions selling **resources**
- Very strong Go-To-Market process
- Seamless synchronization of GTM process and **Demand-Supply** network process



**NOKIA**

# Outline

Global view

Brand

Consumer

Operator cooperation

Marketing efficiency

Go-To-Market

Summary

# Building a **strategic asset** for Nokia



**Consumer insight**

**Experience brand**

**Theme based  
marketing**

**Go-To-Market**



A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo and tagline "Connecting People" are in white on the right. Various words in different colors and sizes are scattered across the bottom half, including "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "relevant", "real", "learn", "explore", "exchange", "possibilities", "invent", "friendships", "network", "expertise", and "connect".

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, progress, exchange, inspire, connect, debate, vision, fun, opinions, relevant, real, learn, explore, exchange, possibilities, invent, friendships, network, expertise, connect

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo and tagline "Connecting People" are on the right. Various words are scattered throughout in different colors and sizes, including "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "relevant", "real", "learn", "explore", "exchange", "possibilities", "invent", "network", "friendships", "debate", "expertise", "connect".

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, progress, exchange, inspire, connect, debate, vision, fun, opinions, relevant, real, learn, explore, exchange, possibilities, invent, network, friendships, debate, expertise, connect

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo and tagline "Connecting People" are in white on the right. Various words in different colors and sizes are scattered across the background, including "network", "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "possibilities", "invent", "explore", "relevant", "real", "learn", "exchange", "friendships", and "debate".

Thank you.

**NOKIA**  
Connecting People

network  
experience  
discover  
future  
ideas  
share  
progress  
exchange  
inspire  
connect  
debate  
vision  
fun  
opinions  
possibilities  
invent  
explore  
relevant  
real  
learn  
exchange  
friendships  
debate

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo and tagline "Connecting People" are in white on the right. Various words in different colors and sizes are scattered across the background, including "network", "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "possibilities", "real", "relevant", "exchange", "explore", "friendships", and "debate".

Thank you.

**NOKIA**  
Connecting People

network  
experience  
discover  
future  
ideas  
share  
progress  
exchange  
inspire  
connect  
debate  
vision  
fun  
opinions  
possibilities  
real  
relevant  
exchange  
explore  
friendships  
debate

# Nokia Siemens Networks

**Simon Beresford-Wylie**  
**Chief Executive Officer**



**Progress  
update**

**Industry  
and  
market  
trends**

**Our  
direction  
and  
assets**

**Our  
targets**



# Progress update

## Overall

- Progressing well – a clear winner in consolidating industry
- Well placed against backdrop of economic uncertainty

## Financials

- Maintaining top line
- Improvement in operating and gross margins (non-IFRS)
- Cash collection improved, still some way to go with NWC

## Integration

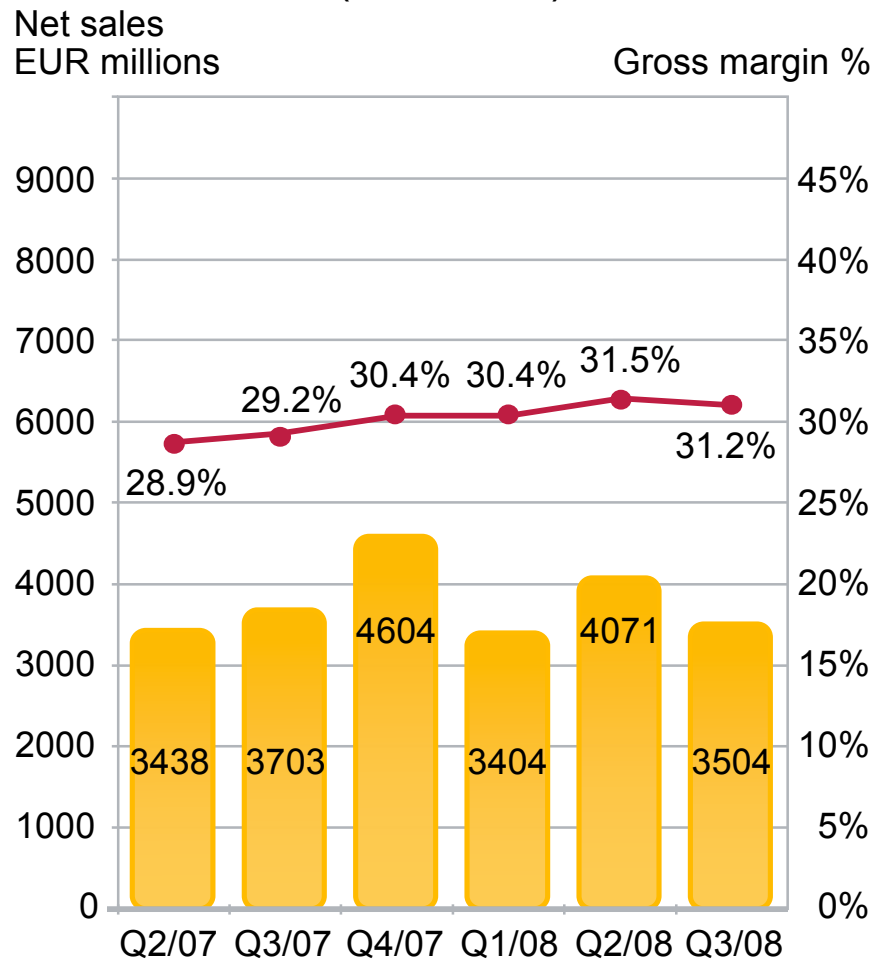
- Substantially all of EUR 2 billion annual synergies captured by 2008
- Restructuring on track
- Resource balancing on track

## Strategy

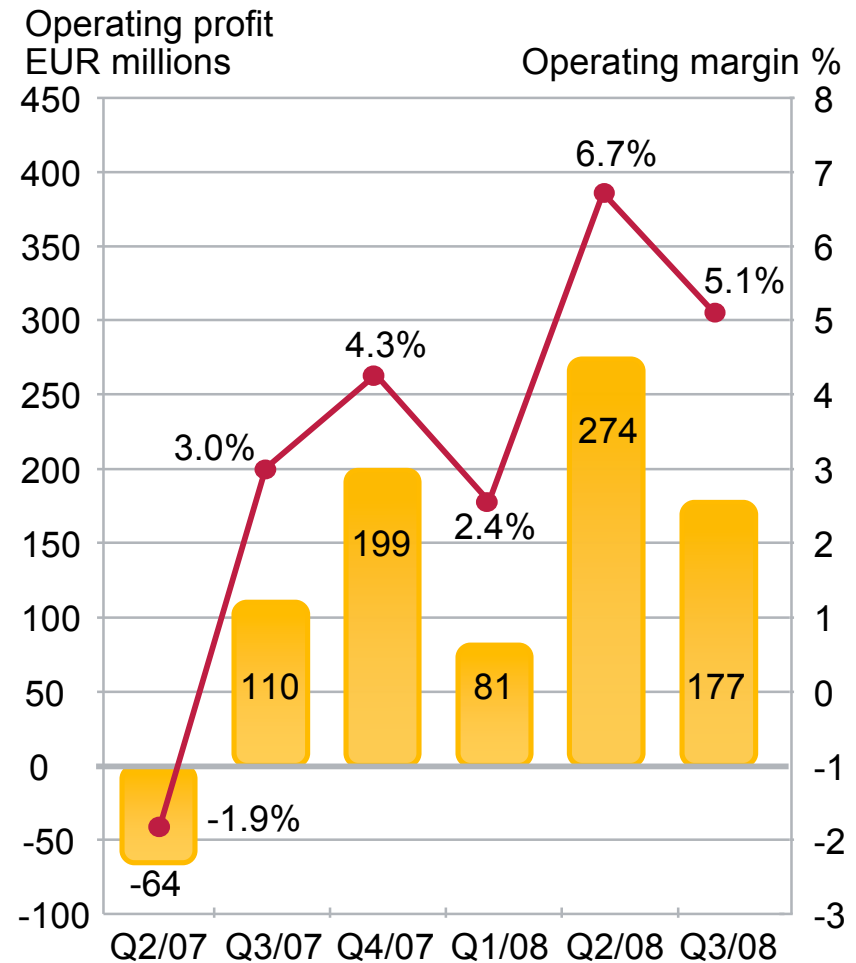
- Profit and cash first – strong deal discipline continues
- Focus on building 'most competitive' operations
- Lead in network efficiency & enriched customer experience

# Financial performance – the first six quarters

## Net sales and gross margin (non-IFRS)

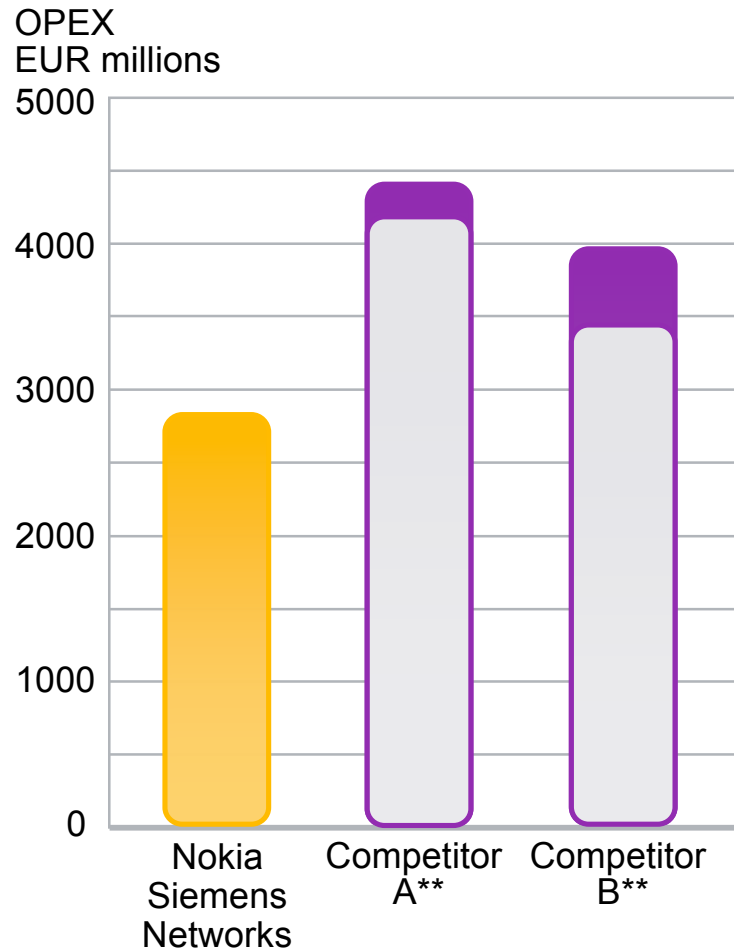


## Operating profit and operating margin (non-IFRS)

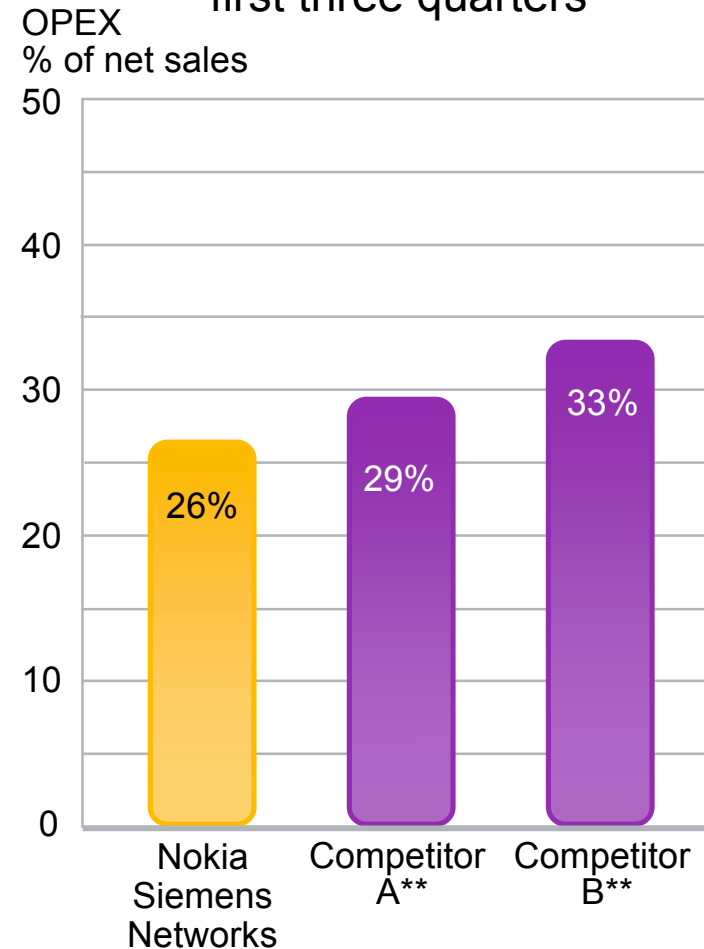


# Industry-leading OPEX efficiency

OPEX\* 2008 first three quarters



OPEX\* as % of net sales 2008,  
first three quarters



\* Non-IFRS figures for Nokia Siemens Networks, excluding special items for Competitor A and B

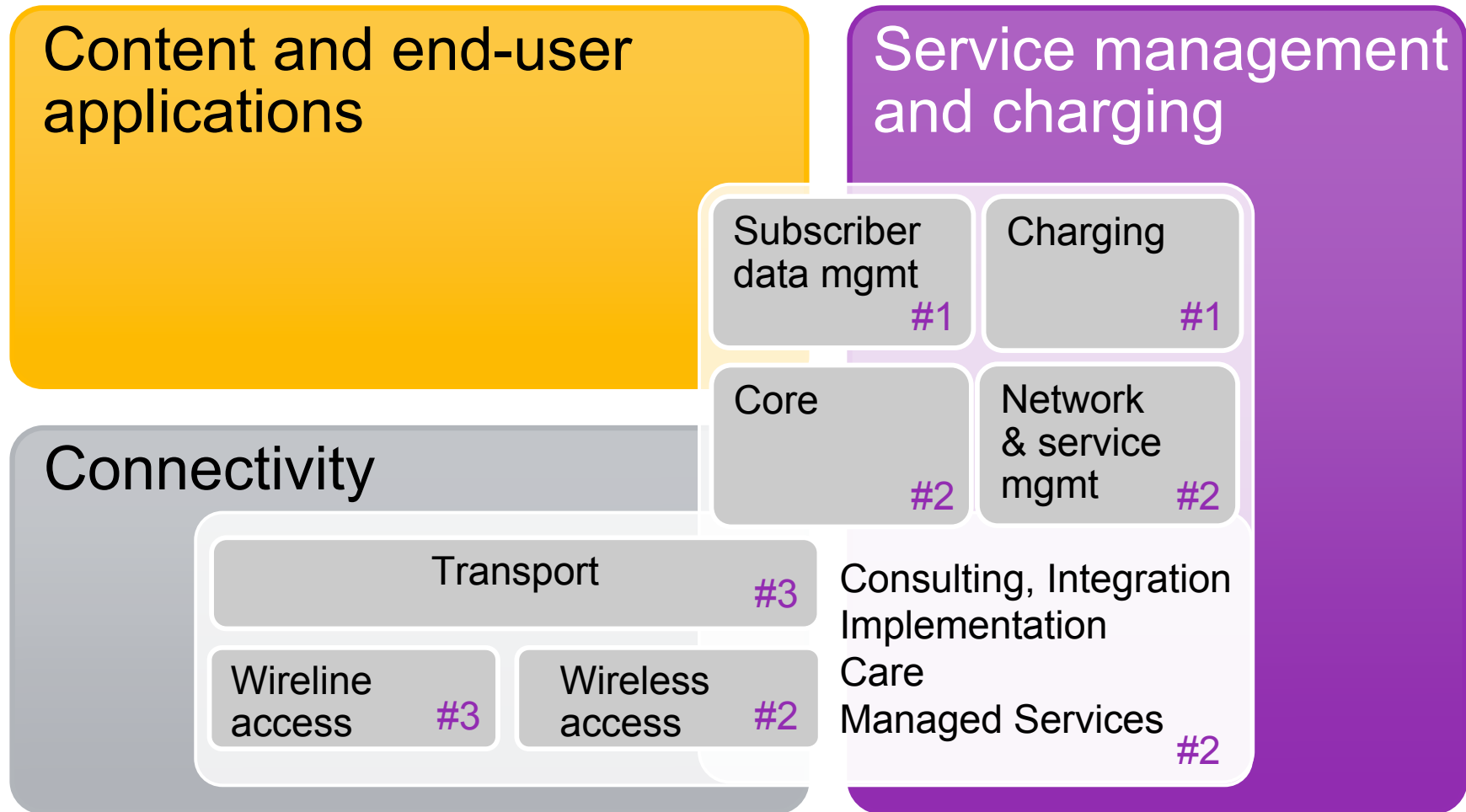
\*\*Competitor A and B figures are group level

Source: Company reports, Nokia Siemens Networks estimates





# Scale and installed base





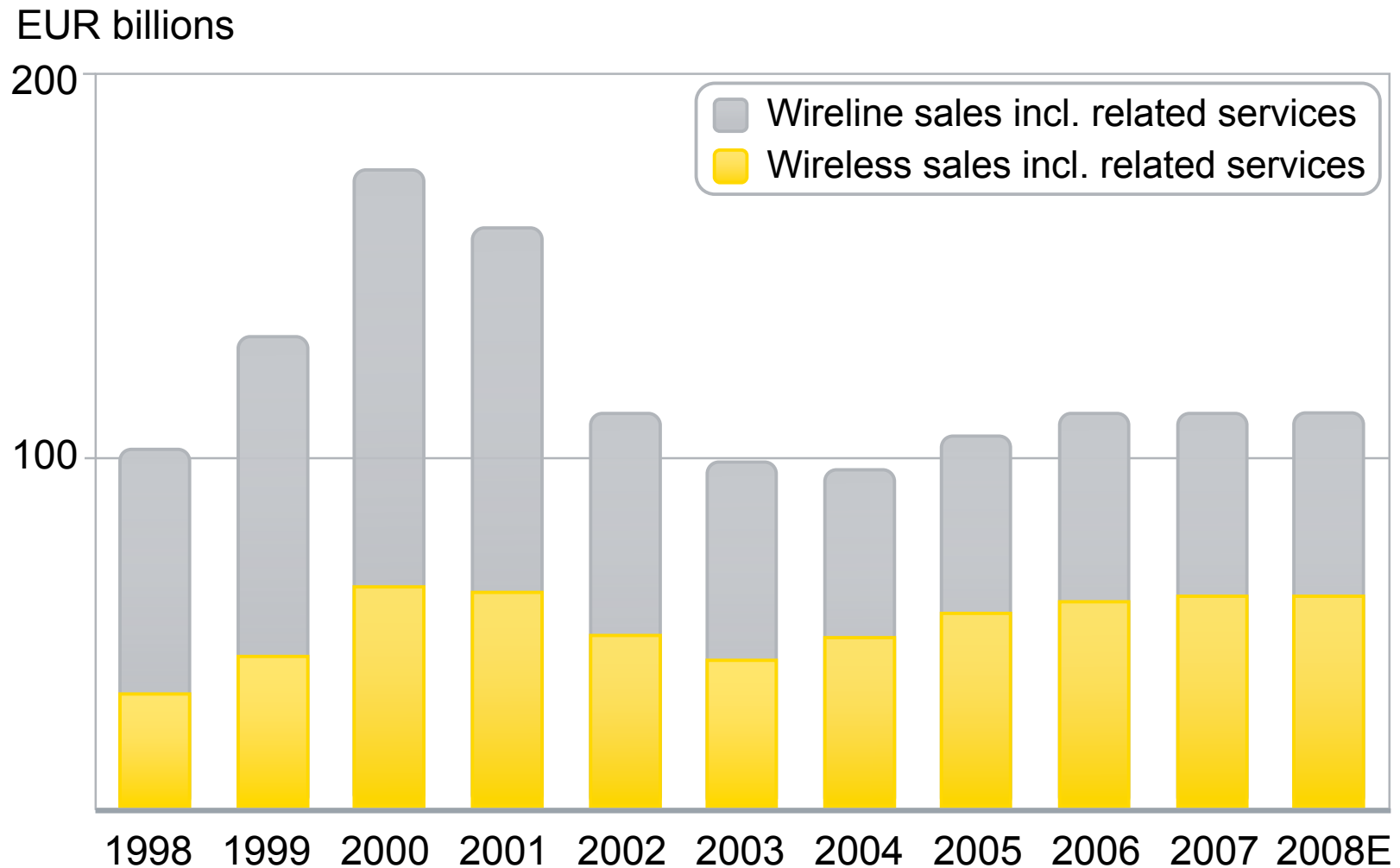
Progress  
update

**Industry  
and market  
trends**

Our  
direction  
and  
assets

Our  
targets

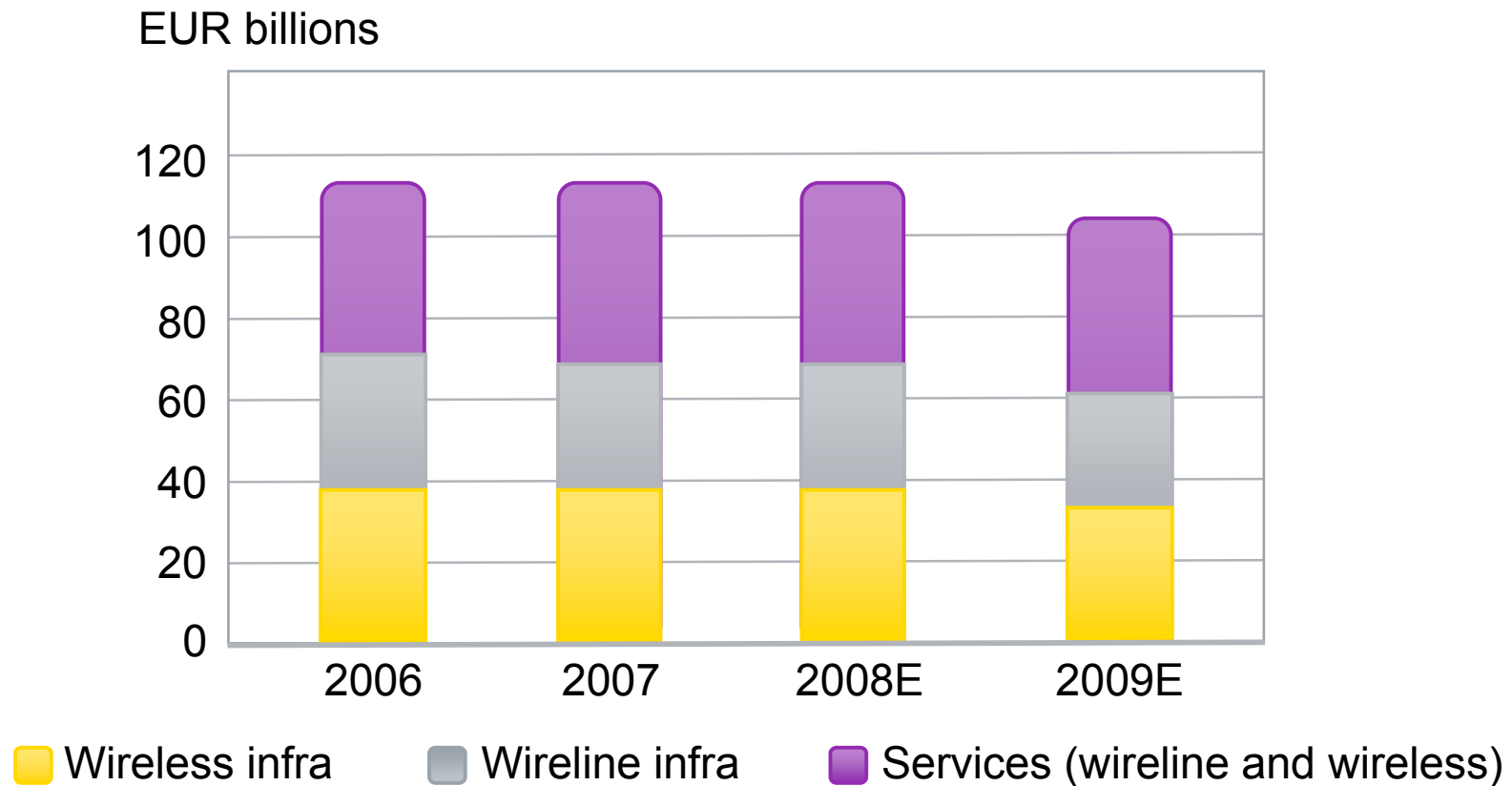
# Telecom infrastructure market - last 10 years





# Telecom infrastructure market outlook 2009: decline of 5% or more

**Total vendor sales of infrastructure products and related services**



# Downturn brings challenge and opportunity

## Content and end-user applications

- Increased partnering with Internet players and content providers
- Operators' development focus in communication

## Connectivity

- Largest spend
- Upgrades with clear payback to continue
- Interest in operational efficiency solutions
- Increased interest in outsourcing

## Service management and charging

- Split of major IT projects into multiple focused ones
- Interest in process simplification and automation solutions



Progress  
update

Industry  
and  
market  
trends

Our  
direction  
and assets

Our  
targets



# Continue to work on **basics**

Effective and efficient operations

Tight focus on profitability and cash flow

Leverage global resources

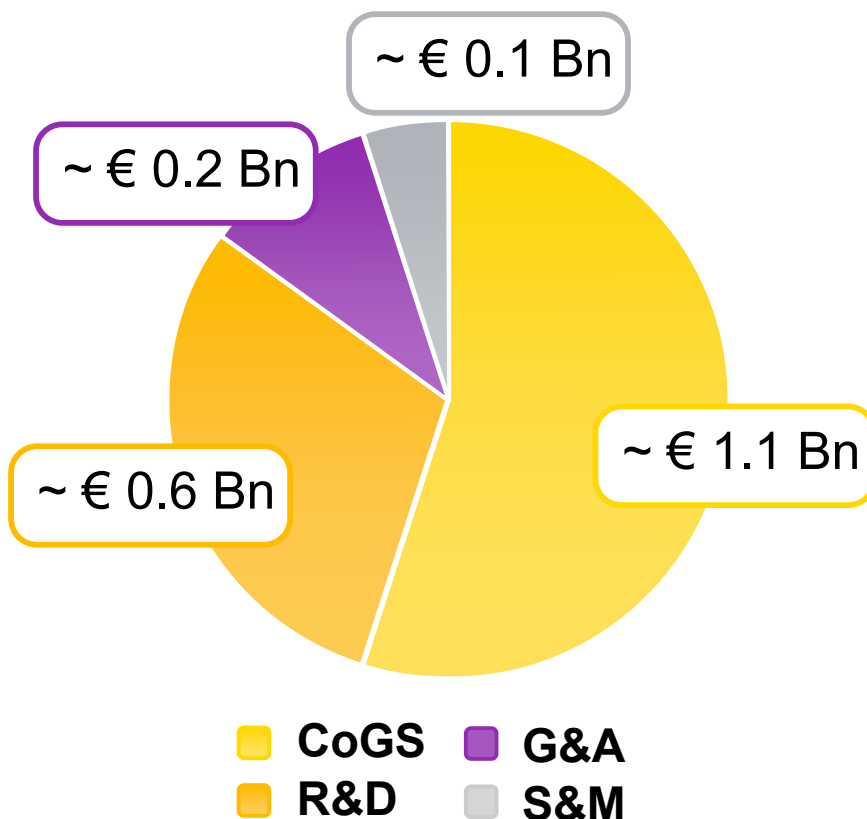
Culture and values

Business ethics and social responsibility

# Focus on cost reduction

## Track record of delivery

Annual cost synergy estimate  
by function



## Levers for ongoing cost reduction

- Scale
- Asset reuse
- Design to cost
- Global resource balancing
- Supply chain optimization
- Supplier and subcontractor consolidation
- IT and process development
- Real estate consolidation

# Build for **leadership** in enriched customer experience and network efficiency

Content and end-user applications

Service management and charging

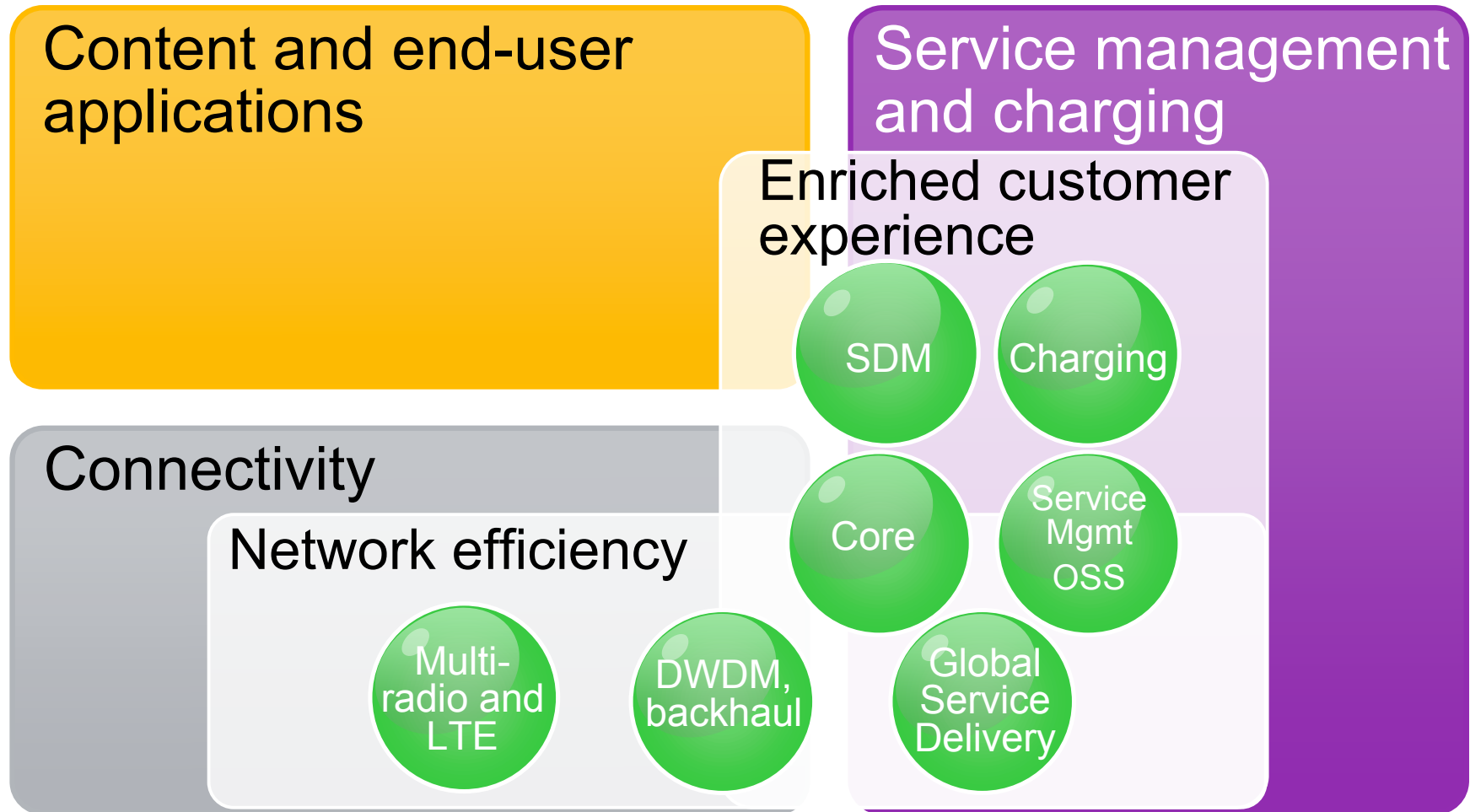
Enriched customer experience

Connectivity

Network efficiency



# Strong **assets** drive differentiation





Progress  
update

Industry  
and  
market  
trends

Our  
direction  
and  
assets

Our targets

# Nokia Siemens Networks targets

Maintain share in declining market

Complete integration

Continue to expand margins

Improve operating cash flow





Thank you

# Capital Markets Day 2008

Rick Simonson  
Chief Financial Officer

**NOKIA**

A word cloud graphic on a green background. The words are in various sizes and colors (white, yellow, pink, and green). The most prominent words include 'experience' in large yellow letters, 'discover' in large pink letters, 'future' in large white letters, and 'share' in large green letters. Other visible words include 'ideas', 'invent', 'exchange', 'inspire', 'connect', 'progress', 'learn', 'fun', 'opinions', 'debate', 'vision', 'explore', 'relevant', 'real', 'possibilities', 'friendships', 'network', 'expertise', 'connect', and 'debate'.

exchange  
explore  
inspire  
share  
relevant  
real  
experience  
learn  
progress  
debate  
vision  
fun  
opinions  
exchange  
future  
ideas  
invent  
possibilities  
debate  
friendships  
network  
expertise  
connect  
debate

# Agenda

- Myth vs. Reality
- Actions
- Balance sheet and cash flow
- Financial targets

**NOKIA**





# Myth vs. Reality

**NOKIA**

# Nokia = geographically balanced

**Units by Geography**



**Net Sales by Geography**



**Gross Profit by Geography**



■ Asia-Pacific

■ Middle East & Africa

■ Greater China

■ Latin America

■ Europe 5

■ Rest of Europe

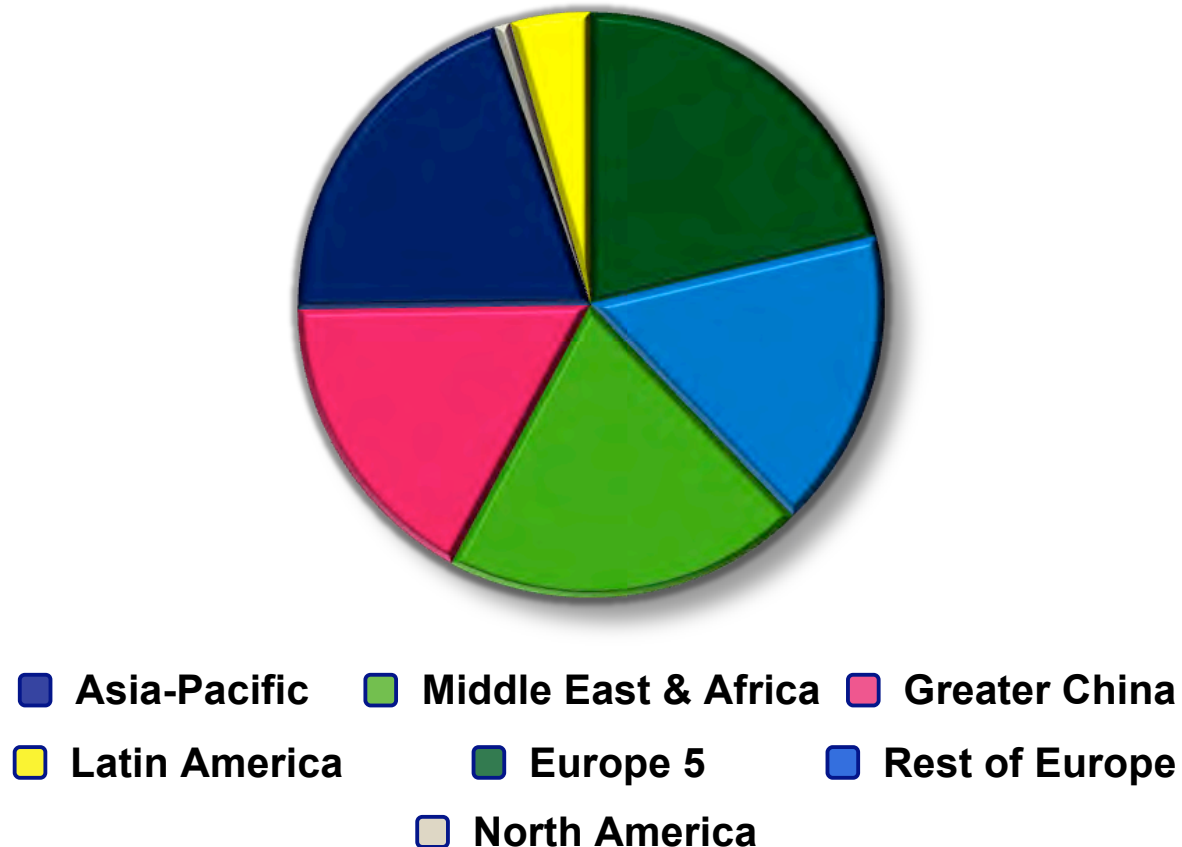
■ North America

Source: Nokia Q1-Q3 2008

Europe 5 = UK, Germany, France, Spain and Italy

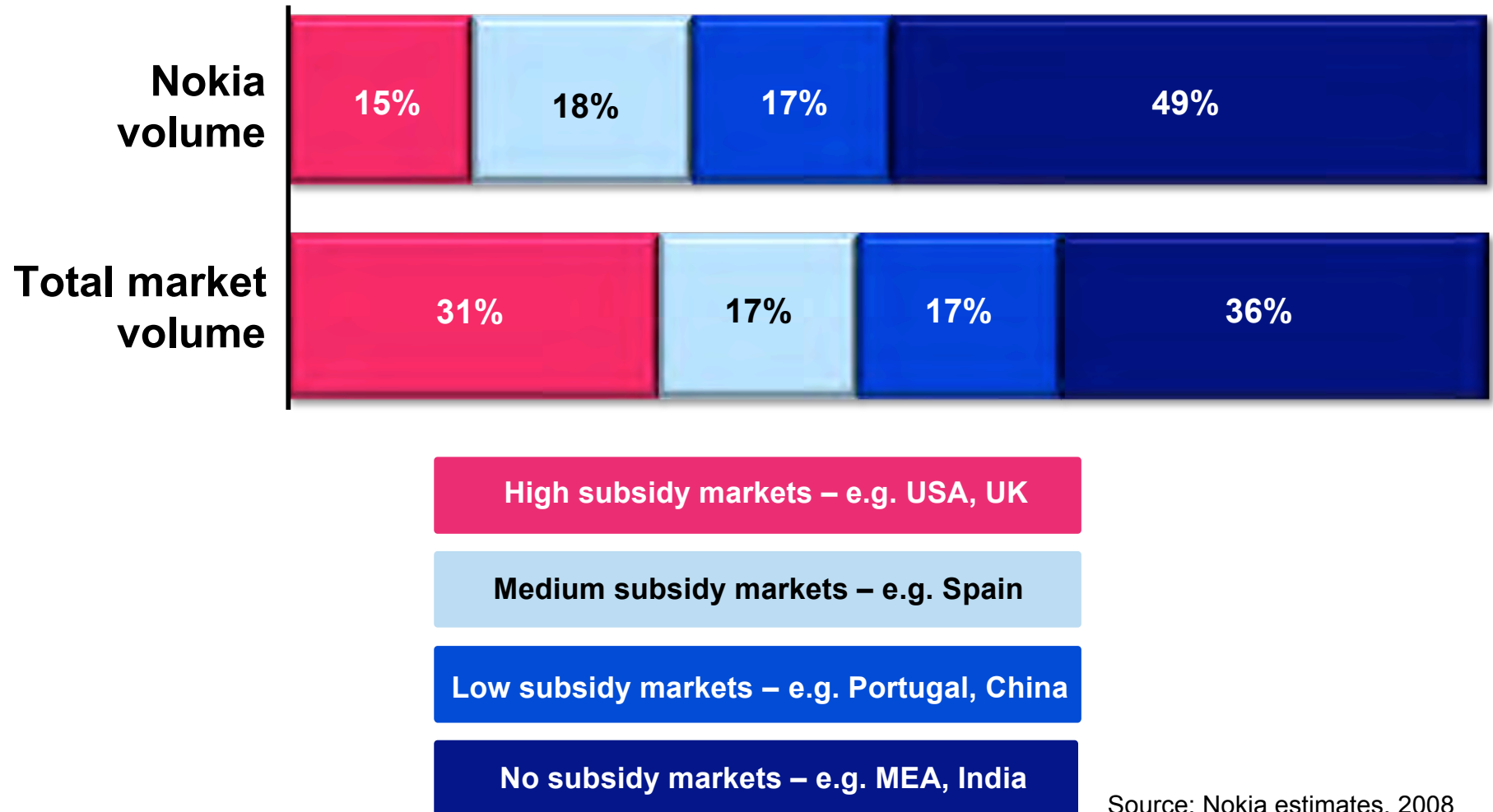
# Nokia Smartphones = geographically balanced

**Geographical split of Nokia smartphone units  
Q1-Q3 2008**





# Nokia = less vulnerable to decreasing subsidies



Source: Nokia estimates, 2008

Low subsidy markets: limited high-end subsidies or small low-end subsidies

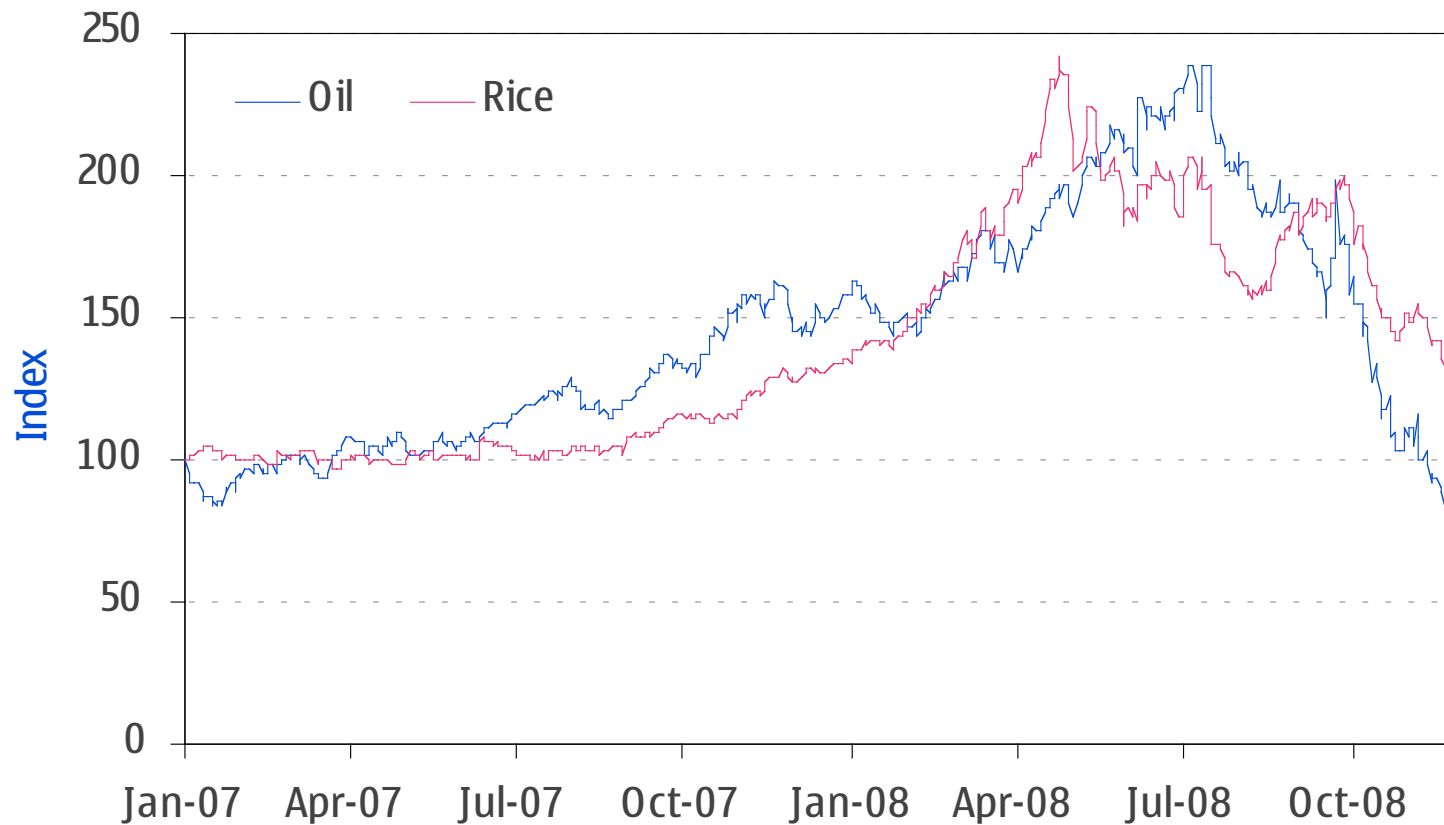
Medium subsidy markets: significant subsidy in high-end, but typically not free with contract; limited or no pre-paid subsidies

High subsidy markets: high-end device typically free with contract; subsidies also in prepaid devices

**NOKIA**

# Commodity price bubbles **have burst**

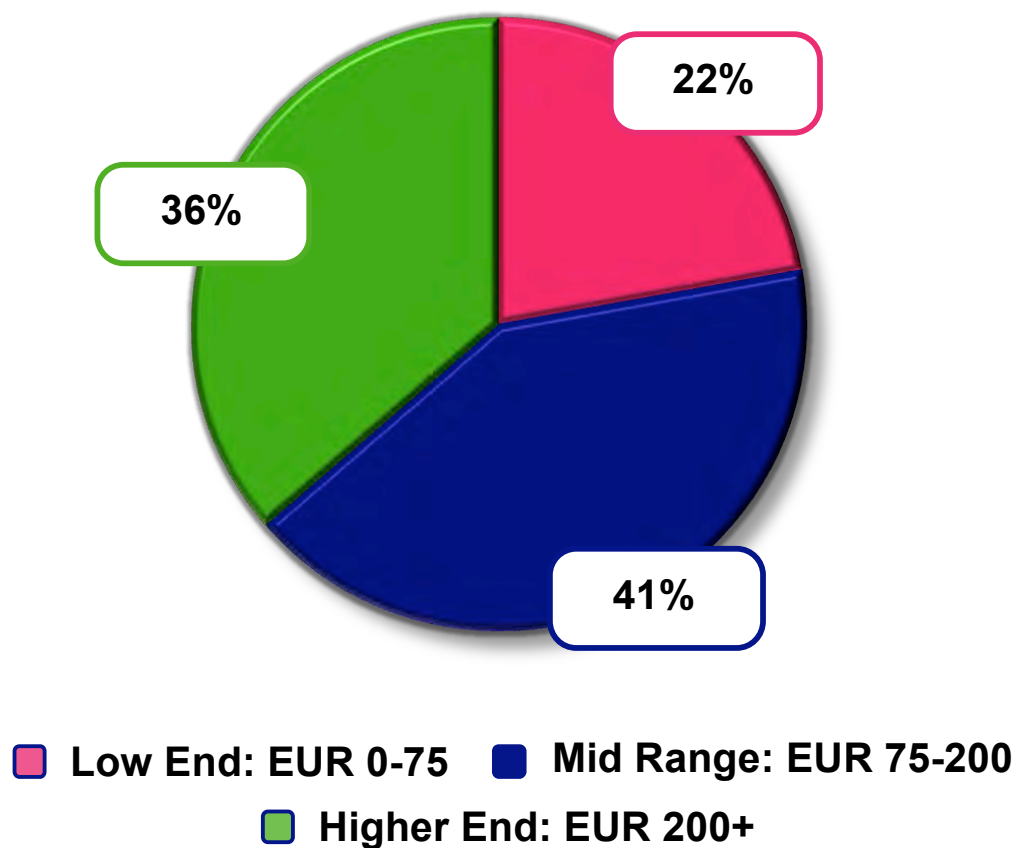
Food = over 50% of spending in rural areas of India



Source: Bloomberg

# Industry market value by price band = **balanced**

**2008E Device Market Value by Price Band**



Source: Nokia estimates



# Nokia competitive advantages – Not a myth!

- **Scale:** 39% market share YTD Q3 2008; same as next 4 players
- **Ability to invest in innovation:** Services & Software
- **Brand:** #5 worldwide, #1 in Asia and #1 Europe
- **Manufacturing and logistics:** World leading position
- **Distribution:** Substantial lead in China, India, and MEA
- **Cost & IPR:** Significant competitive advantage

Sources: Nokia estimates; Interbrand; BrandZ; AMR Research; Fairfield Resources International

A photograph of two people walking away from the camera on a dark, flat rooftop. The person on the left is wearing a blue and white plaid shirt and blue jeans. The person on the right is wearing a red t-shirt and light-colored trousers. A large, bright yellow arrow is painted on the ground, pointing directly towards the viewer. The scene is brightly lit, casting long shadows of the people and the arrow onto the rooftop surface. The word "Actions" is written in large white letters on the left side of the image, and the "NOKIA" logo is on the right side.

# Actions

**NOKIA**

# Set Costs to Reality

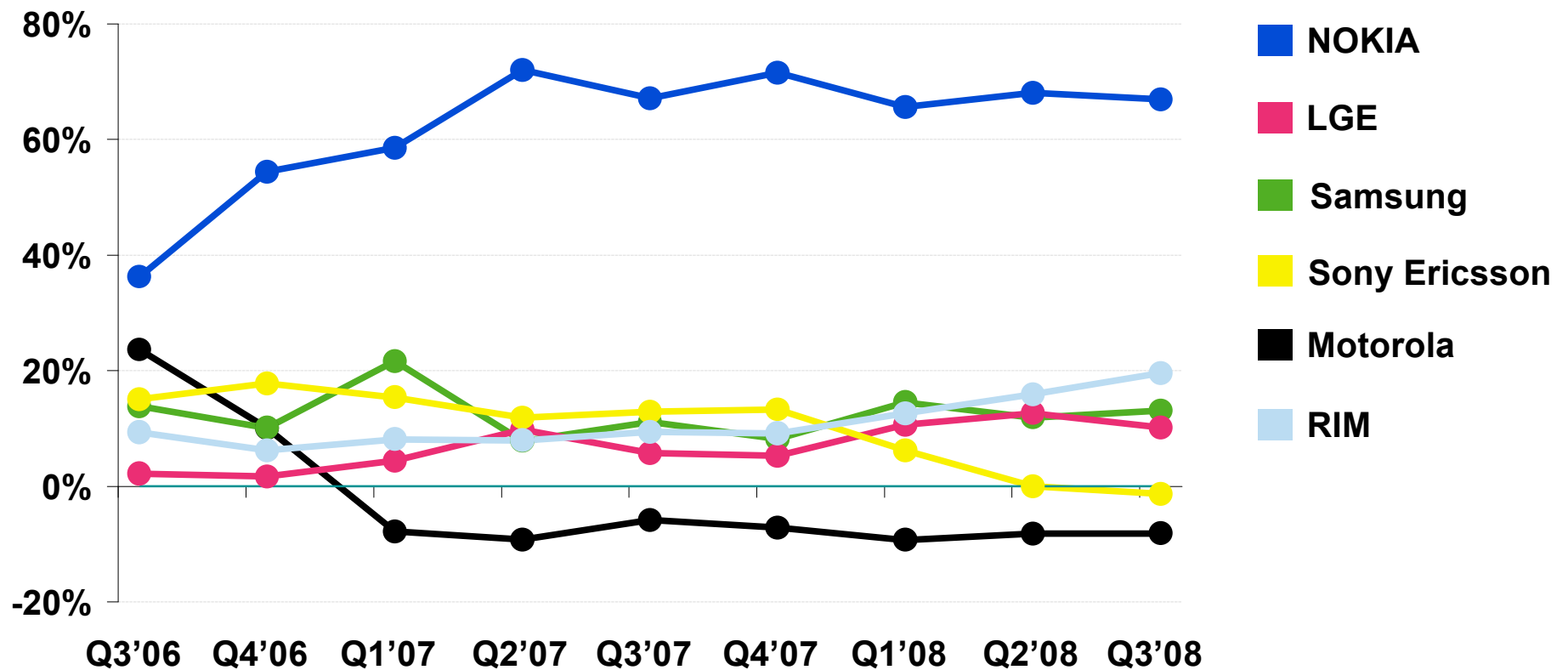
Ongoing through 2009 and 2010

- 1) Cost of Goods Sold
- 2) Operating Expenses
- 3) Capital Expenditures



# Nokia margin advantage

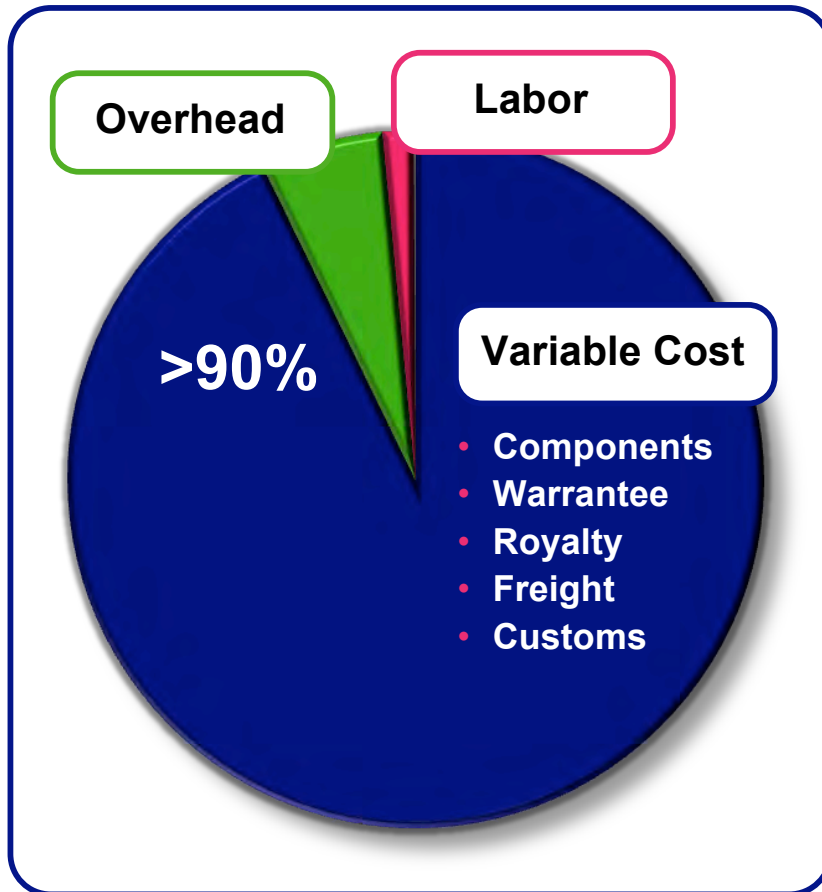
## Percent of operating profit



Source: Nokia, company reports

# Devices & Services COGS

## COGS Breakdown: >90% Variable



Source: Nokia

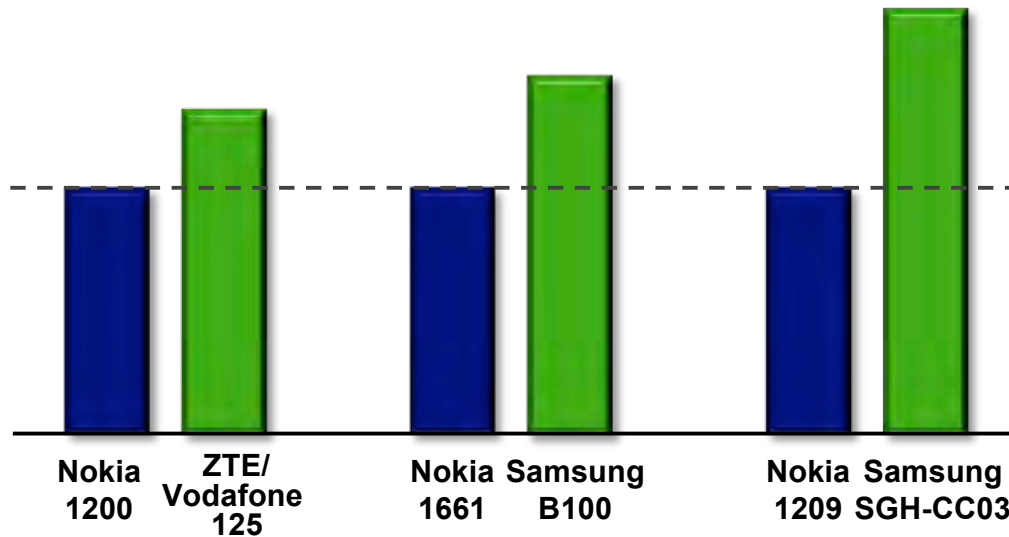
## Drivers of COGS Advantages

- Component purchasing
- IPR
- Warranty costs
- Inventory carry costs
- Design for manufacturing
- In-house manufacturing

# Product cost advantage: two examples

## Low end tear-down study

Nokia solution 30 – 70% lower cost

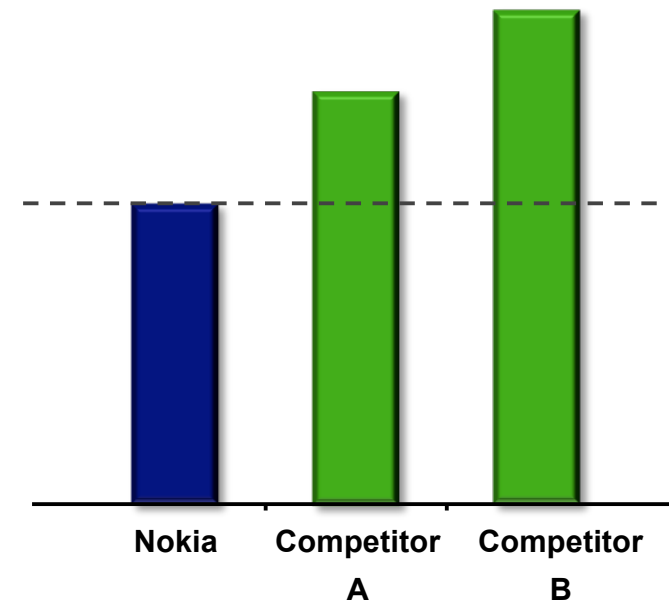


Cost comparison: Relative device+battery materials cost of product pairs

Sources: Portelligent, iSuppli and Nokia estimates

## Mid range chipset cost study

Nokia solution avg. 20% lower cost

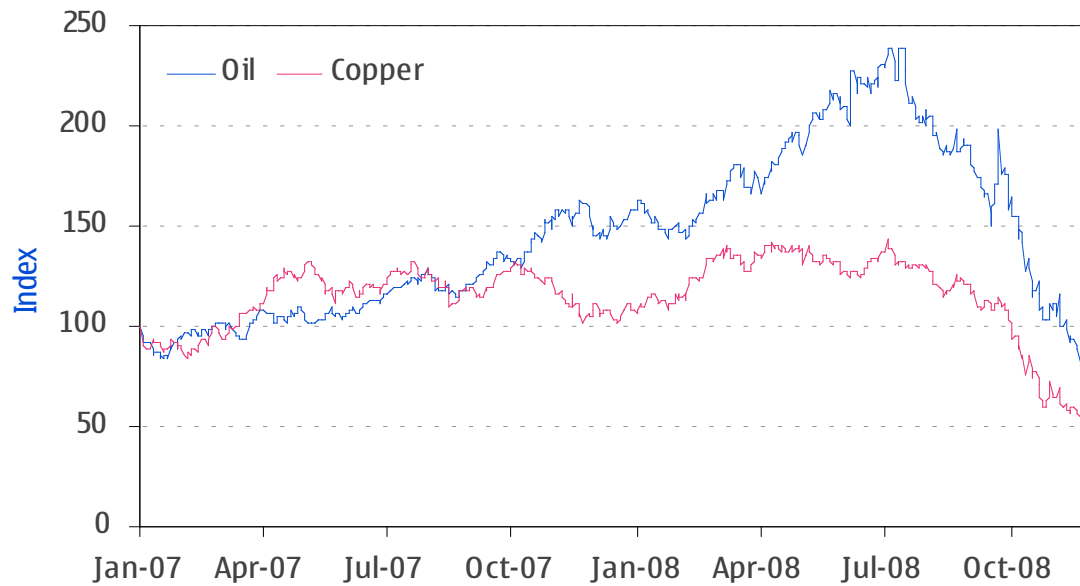


Source: Nokia estimates



# Devices & Services: COGS reduction

## External developments



- Commodity prices down 60% from highs
- Excess production capacity in supply chain

Source: Bloomberg

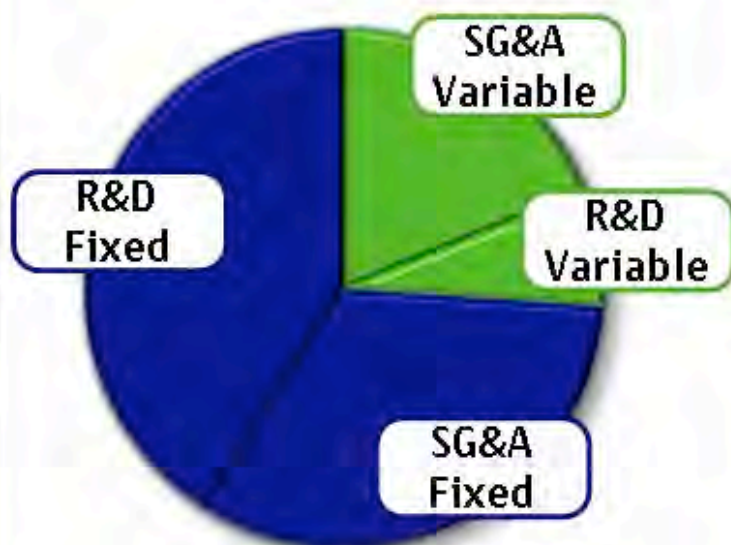
## Internal actions

- Use Nokia's buying power to negotiate with suppliers for the best prices
- Low cost design focus  
Example – super low end Bill of Materials down 10% with each new generation

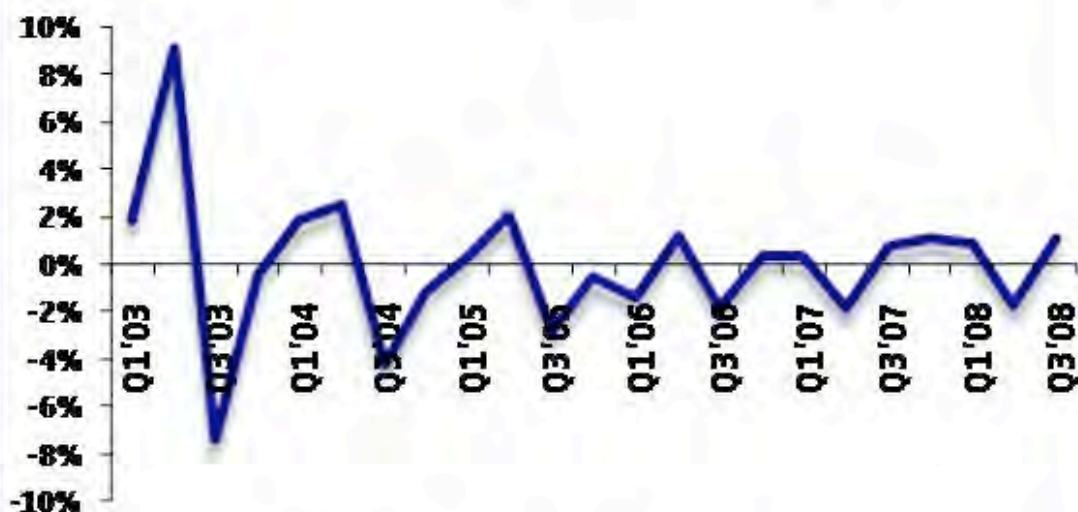
# Devices & Services OPEX

Our scale gives us more than 5 percentage points  
OPEX cost advantage on average

**Devices & Services OPEX  
Fixed vs. Variable**



**Nokia OPEX volatility -  
Sequential Percentage Point Change in OPEX\***



\* Excludes special items and purchase price accounting related items

Source: Nokia estimates

# Devices & Services: OPEX cost reduction

## Taking action to adjust to the new reality

- “Plans” not “Budgets”
- Announced 4<sup>th</sup> November: 700+ employees impacted
- Announced 27<sup>th</sup> November: Partial exit from Japanese market
- Targeted actions:
  - R&D
  - Sales & Marketing
  - General & Administrative
- Communicate urgency throughout the organization: immediate travel restrictions, hiring freeze, curtail consultants



# Devices & Services: CAPEX cost reduction plan

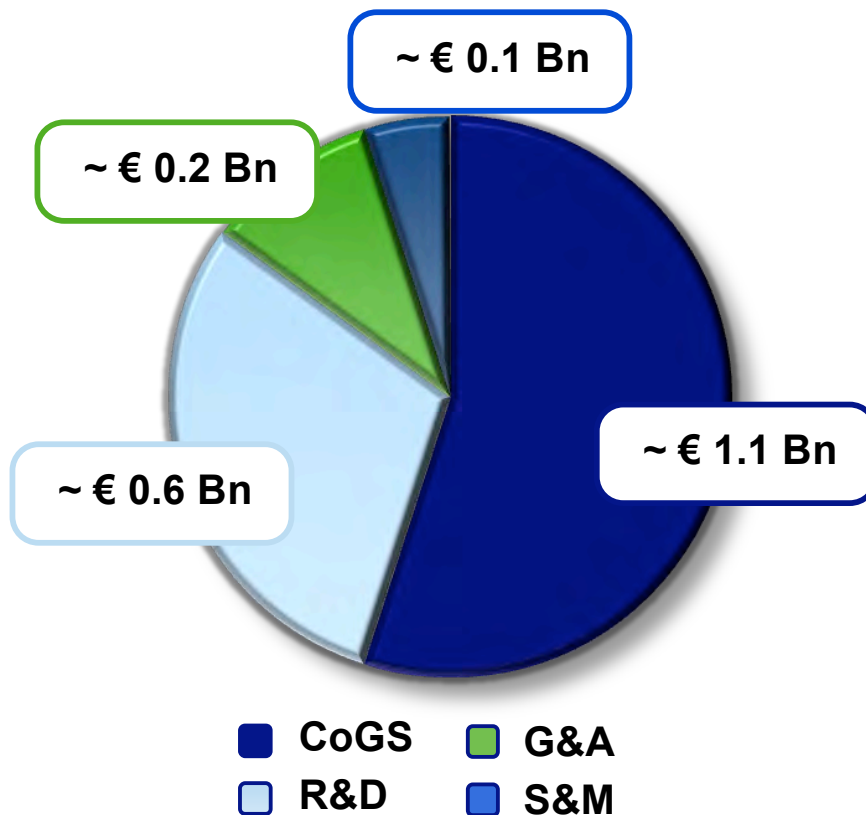
**Good starting point: not a CAPEX-intensive business**

- Targeted actions:
  - Estimated CAPEX investment in 2009:
    - ~700 million euros (estimated ~850 million euros in 2008)
  - Consolidate production lines
  - Reduce the pacing of incremental CAPEX
    - Test equipment
    - Building improvements
    - IT equipment

# NSN cost reduction plan

## Track record of delivery

### Annual cost synergy estimate by function



## Levers for ongoing cost reduction

- Scale
- Asset reuse
- Design to cost
- Global resource balancing
- Supply chain optimization
- Supplier and subcontractor consolidation
- IT and process development
- Real estate consolidation

# Balance sheet and Cash flow

**NOKIA**



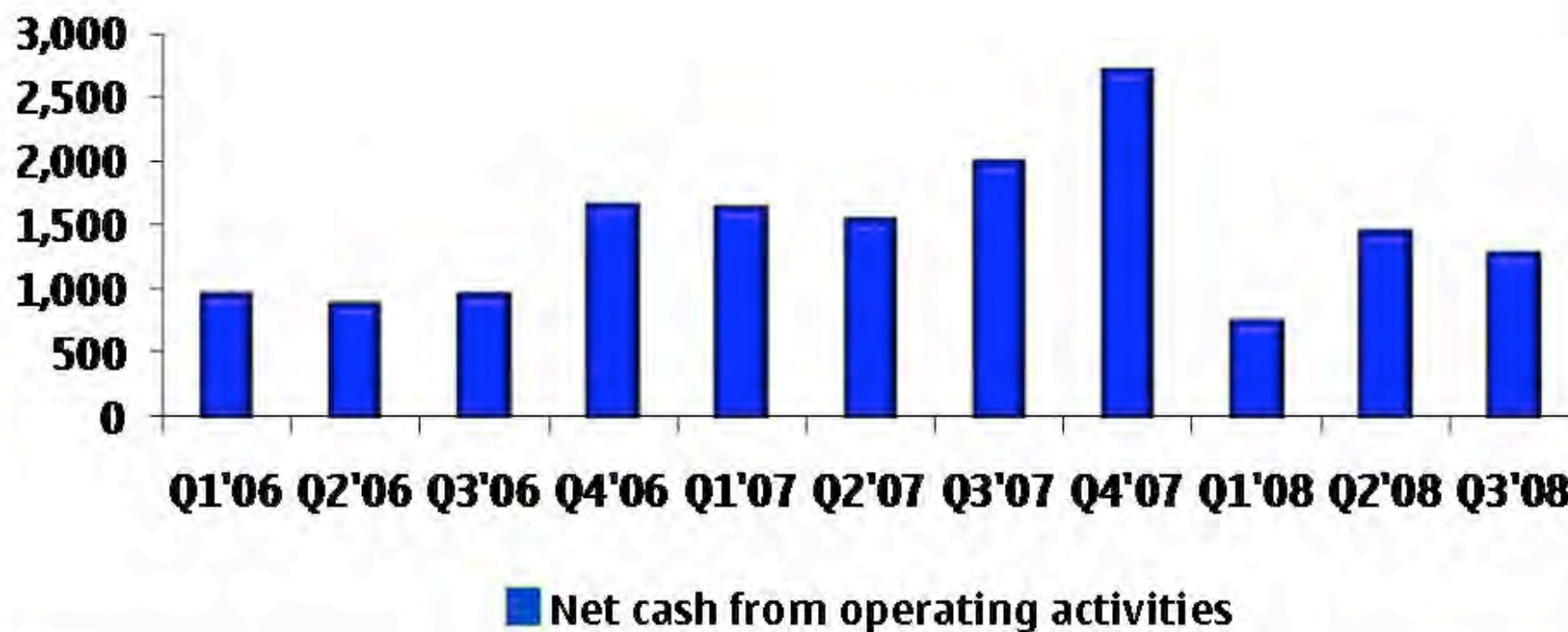
# Balance sheet

Clean, simple, strong

	<u><b>Q3'08 (EUR)</b></u>
Cash and other liquid assets	7.2B
Debt	4.3B
Net cash	2.9B

## Quarterly Cash Flow

EUR  
millions







# Financial targets

**NOKIA**



## 2009 Mobile device market

2009 Mobile device market: Down 5% or more

- Global slowdown in consumer spending
- Currency devaluation
- Credit tightness
- Channel destocking

## Nokia 2009 financial targets

Do better relative to competitors, and minimize volatility

- Nokia Devices & Services operating margin in the teens\*
- NAVTEQ operating margin somewhat above the Devices & Services operating margin\*
- Nokia Siemens Networks operating margin in the single digits\*

\* Non-IFRS

**NOKIA**

# Summary

- Reality – strong competitive position
- We are taking action
- Our capital structure is solid
- Our view of the market is realistic



A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo "NOKIA" is in white, with "Connecting People" below it. Various words are scattered in different colors and sizes, including "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "relevant", "real", "learn", "explore", "exchange", "possibilities", "invent", "network", "friendships", "debate", "expertise", "connect".

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, progress, exchange, inspire, connect, debate, vision, fun, opinions, relevant, real, learn, explore, exchange, possibilities, invent, network, friendships, debate, expertise, connect

[illegible]A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" below it, is on the right. Various words in different colors and sizes are scattered across the background, including "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "relevant", "real", "learn", "explore", "exchange", "possibilities", "opinions", "network", "friendships", "debate", "expertise", and "connect".

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, progress, exchange, inspire, connect, debate, vision, fun, relevant, real, learn, explore, exchange, possibilities, opinions, network, friendships, debate, expertise, connect

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" below it, is on the right. Various words in different colors and sizes are scattered across the background, including "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "relevant", "real", "learn", "explore", "exchange", "possibilities", "opinions", "friendships", "network", "expertise", and "connect".

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, progress, exchange, inspire, connect, debate, vision, fun, relevant, real, learn, explore, exchange, possibilities, opinions, friendships, network, expertise, connect

## Other financial targets

	2008E	2009E
Tax Rate*	26%	26%
Capex (m EUR)	~ 850	~ 700
Depr. and Amort. (m EUR)*	~ 900	~ 900
Financial Income and Expense (m EUR)	~ -40	~ -110
Common Group Functions* (m EUR expense)	~ 210	~ 175

\* Non-IFRS

# The **Device Portfolio** serving the Planet

Søren Petersen  
SVP, Nokia Devices

**NOKIA**

A word cloud background on a green gradient. The words are in various sizes and colors (white, yellow, pink, and green). The most prominent words include 'experience' in large yellow letters, 'discover' in large pink letters, 'future' in large white letters, and 'ideas' in large green letters. Other visible words include 'connect', 'exchange', 'inspire', 'share', 'progress', 'learn', 'fun', 'opinions', 'debate', 'vision', 'explore', 'relevant', 'real', 'possibilities', 'invent', 'friendships', 'network', 'expertise', and 'connect'.





High-End



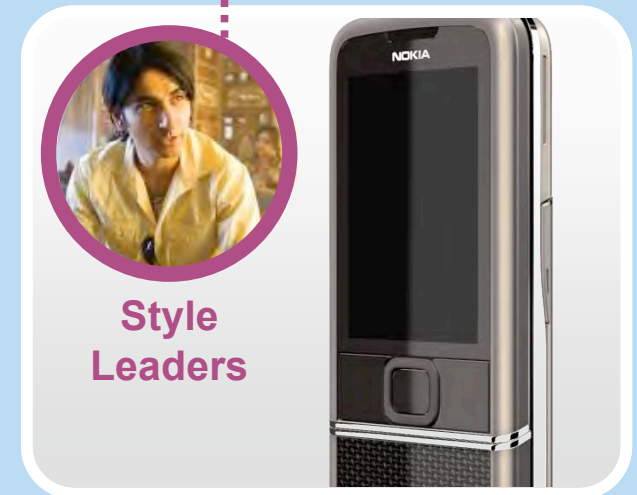
Mid-Range



Low-End

**NOKIA**

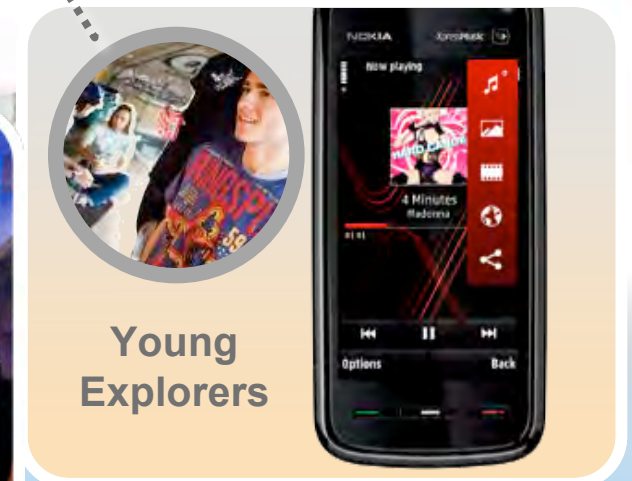
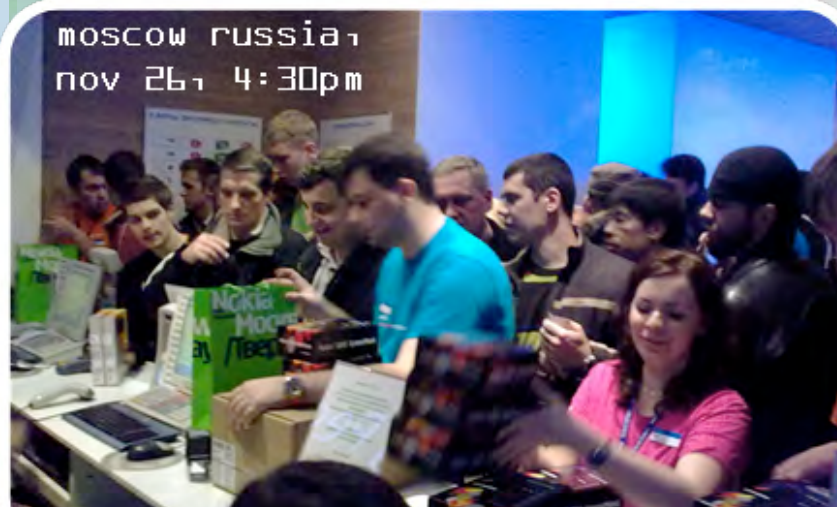
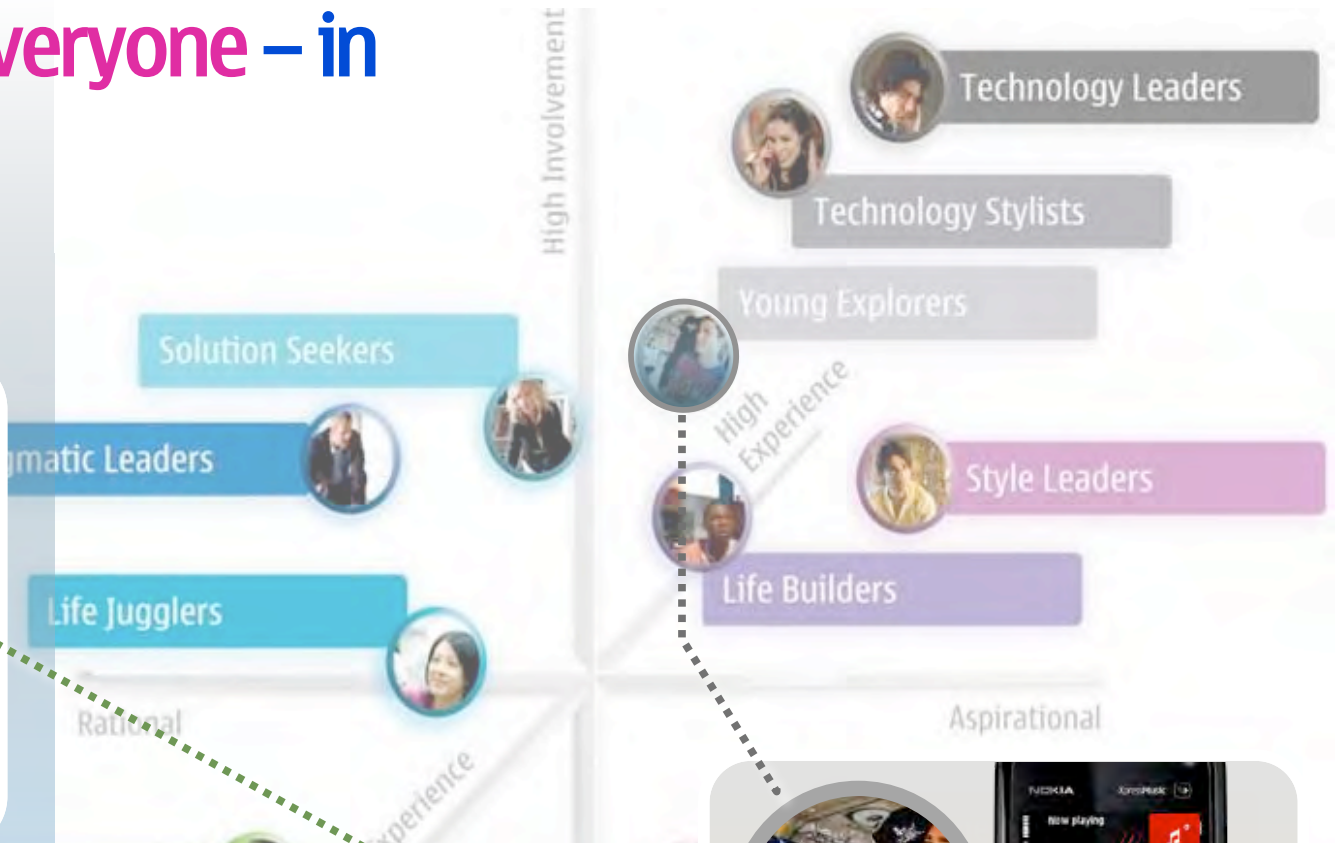
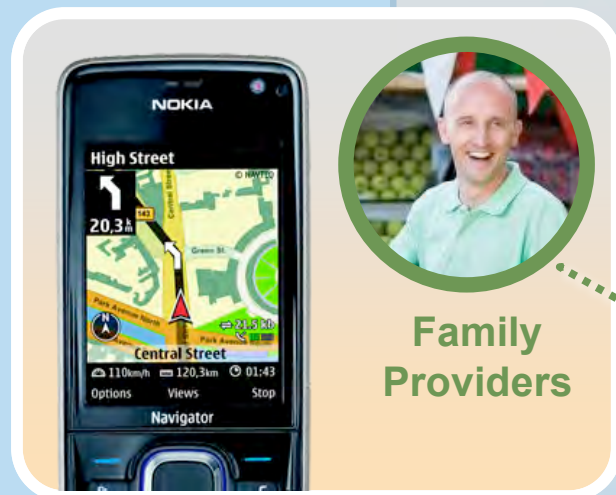
# The High-End comprises **several** consumer segments



**NOKIA**



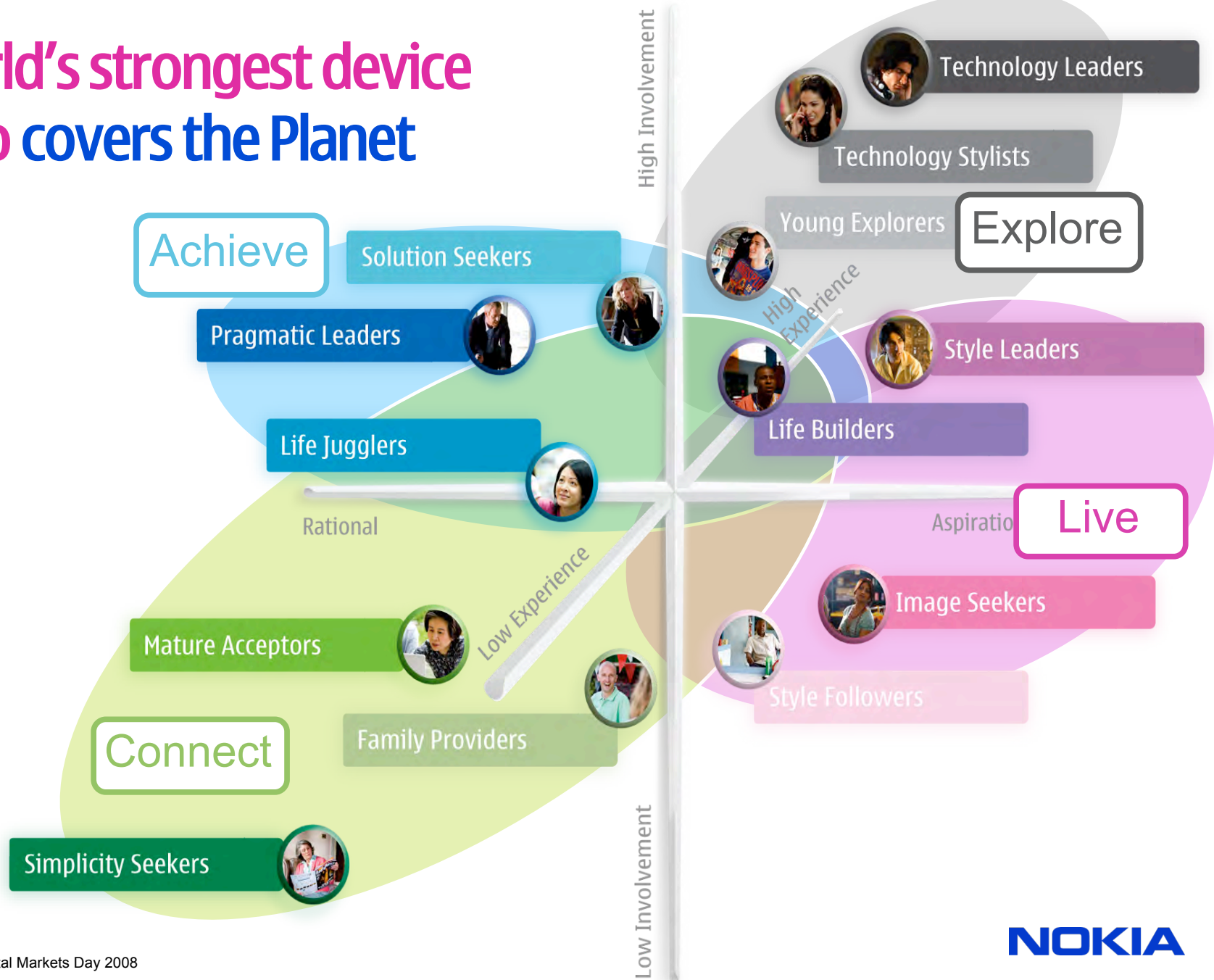
# Smartphones for **everyone** – in the Mid-Range



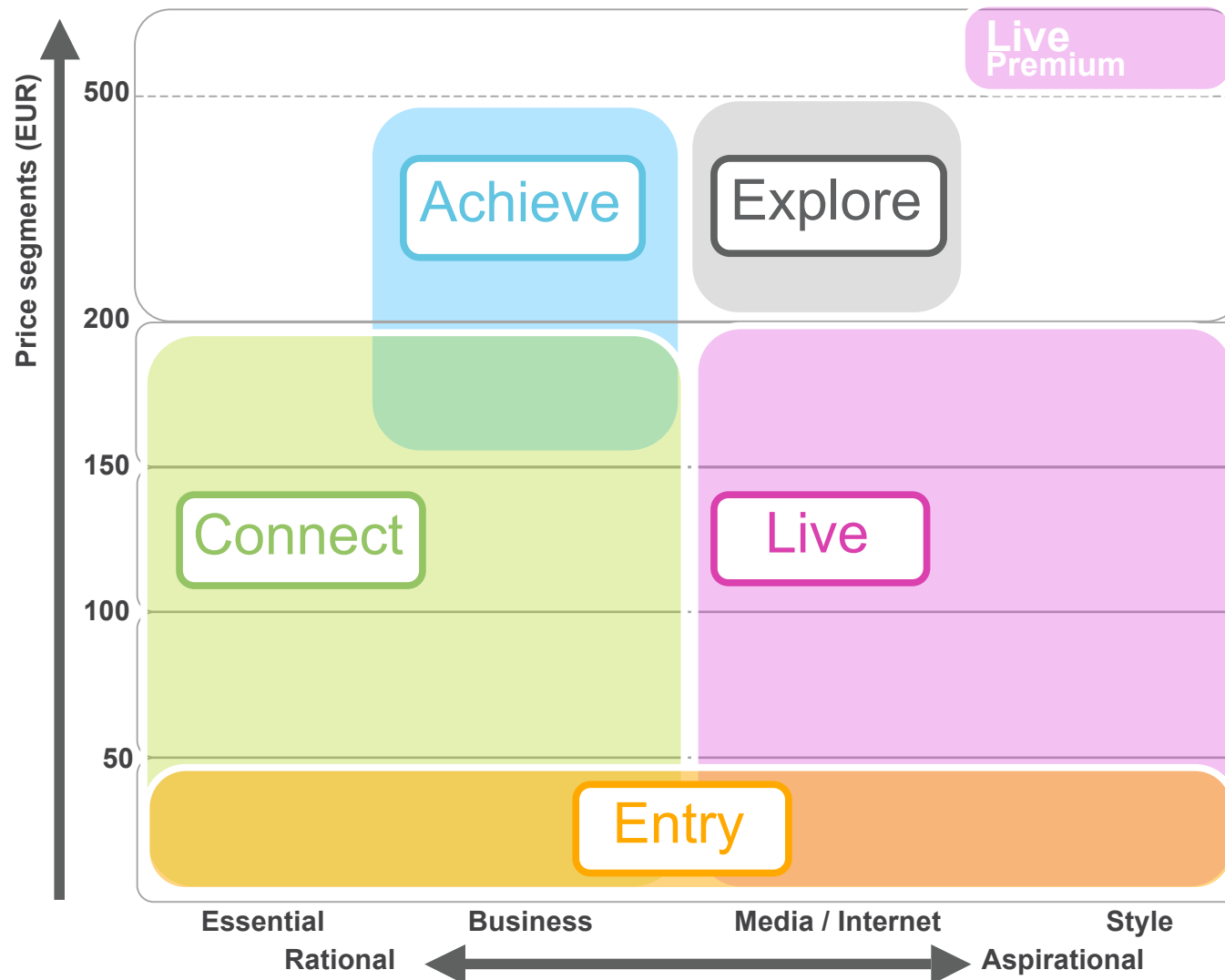
**NOKIA**



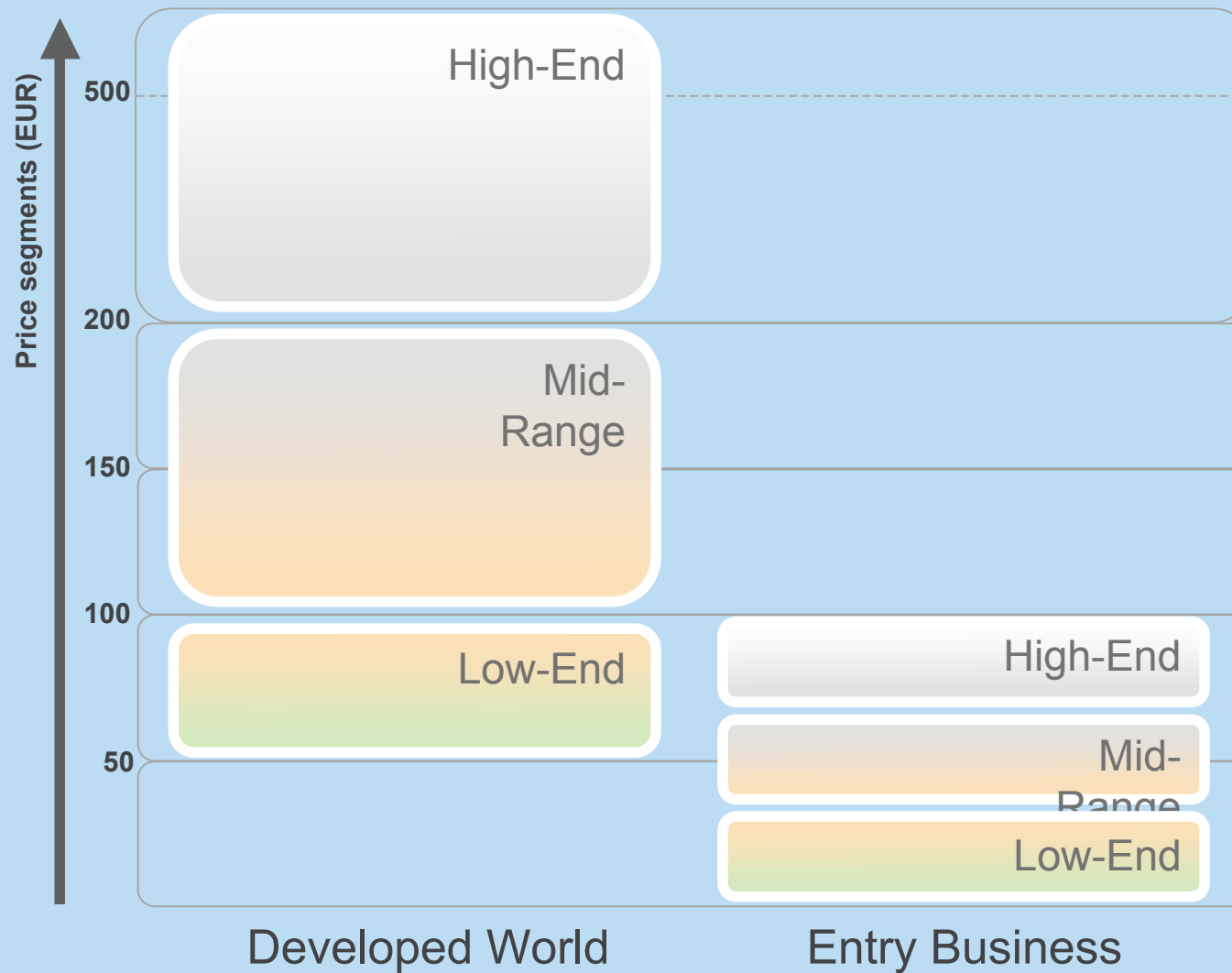
# The world's strongest device portfolio covers the Planet



# Nokia's systematic device portfolio approach



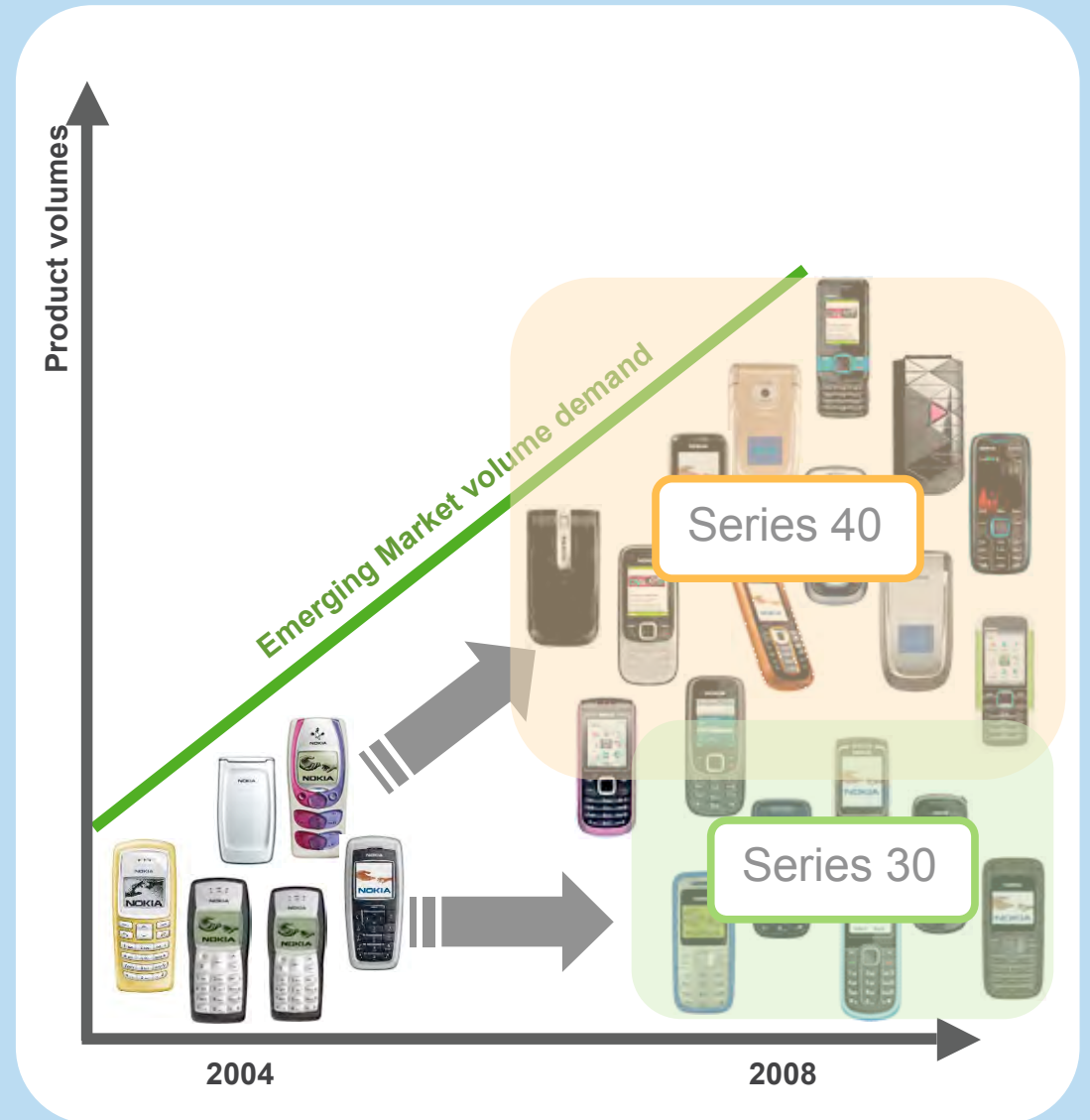
# There's a parallel universe





# Nokia remains the leader in the Entry Business

through  
great platforms

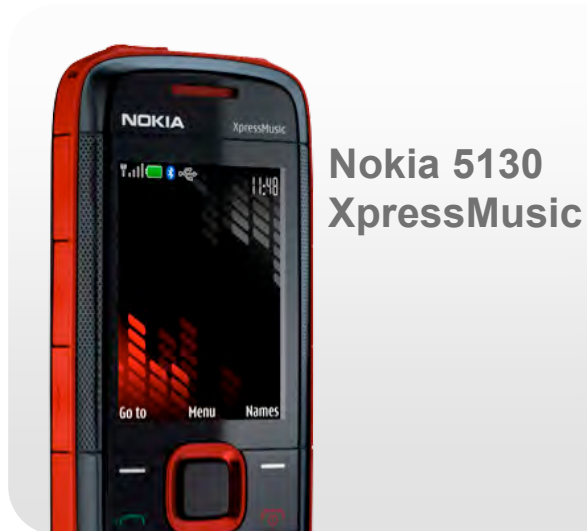


# Nokia remains the leader in the Entry Business

Nokia 1200/1208



through  
great devices



through  
great solutions





# E 71 is the leading messaging solution



**NOKIA**

# The New Smartphones

We take four of the best for a ride. **By Jessi Hempel**

APPLE'S IPHONE MAY HAVE set the standard for a new generation of smartphones, but plenty of competitors, including RIM, Nokia, and Google, are vying to upstage Steve Jobs in the competition for

consumers' hearts. RIM's BlackBerry models are the favorite choice for U.S. corporate users, while Nokia's phones hold the lead in the rest of the world. Here are four top picks for the PDA-obsessed.



## RIM BlackBerry Bold

**UPSIDE** A brilliant screen, the best e-mail keyboard available, and a slick operating system.

**DOWNSIDE** It's a bit bulky, and web browsing is still more awkward than on its competitors.

**\$299; AT&T**



## Apple iPhone 3G

**UPSIDE** Can handle Microsoft Exchange e-mail and offers lots of fun, downloadable applications.

**DOWNSIDE** The battery runs down quickly, and the keyboard isn't for the typo-prone.

**\$199; AT&T**

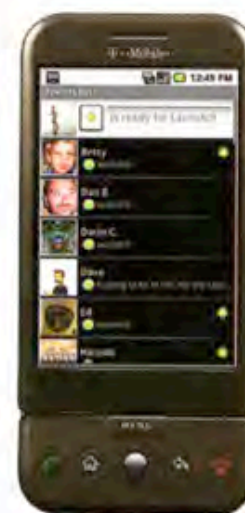


## Nokia E 71

**UPSIDE** Sleek frame, a 3.2-megapixel camera, and you can use it with any carrier. A toggle switch flips between screens for work and home.

**DOWNSIDE** Requires special headphone jack, and the screen is tiny.

**\$465; T-Mobile and AT&T**



## Google Android G1

**UPSIDE** Easy to navigate, with a force-quit feature that lets you close a frozen app without rebooting.

**DOWNSIDE** It's chunky and heavy, and the keyboard is, for some, challenging to use.

**\$179.99; T-Mobile**

**OUR PICK** Despite a small screen, the Nokia E71 offers a sleek and satisfying experience and stands out from the pack.



# FORTUNE

APPLE'S IPHONE MAY HAVE set the standard for a new generation of smartphones, but plenty of competitors, including RIM, Nokia, and Google, are vying to upstage Steve Jobs in the competition for

consumers' hearts. RIM's BlackBerry models are the favorite choice for U.S. corporate users, while Nokia's phones hold the lead in the rest of the world. Here are four top picks for the PDA-obsessed.



## RIM BlackBerry Bold

**UPSIDE** A brilliant screen, the best e-mail keyboard available, and a slick operating system.

**DOWNSIDE** It's a bit bulky, and web browsing is still more awkward than on its competitors.

**\$299; AT&T**



## Apple iPhone 3G

**UPSIDE** Can handle Microsoft Exchange e-mail and offers lots of fun, downloadable applications.

**DOWNSIDE** The battery runs down quickly, and the keyboard isn't for the typo-prone.

**\$199; AT&T**

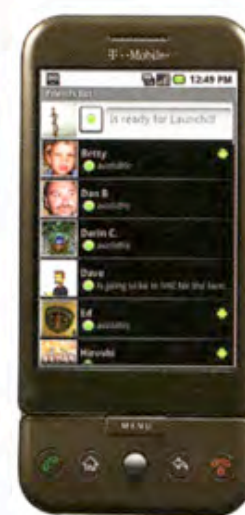


## Nokia E 71

**UPSIDE** Sleek frame, a 3.2-megapixel camera, and you can use it with any carrier. A toggle switch flips between screens for work and home.

**DOWNSIDE** Requires special headphone jack, and the screen is tiny.

**\$465; T-Mobile and AT&T**



## Google Android G1

**UPSIDE** Easy to navigate, with a force-quit feature that lets you close a frozen app without rebooting.

**DOWNSIDE** It's chunky and heavy, and the keyboard is, for some, challenging to use.

**\$179.99; T-Mobile**

**OUR PICK** Despite a small screen, the Nokia E71 offers a sleek and satisfying experience and stands out from the pack.





**TEST BEST**

Phones BY STEVEN LECKART

## Nokia E71

Finally, a smartphone that means business—without looking like a weary road warrior. This QWERTY kid could be the most beautiful piece of mobile hardware to step out of Finland, winning points for its remarkably trim stainless steel profile (0.39 inch), decent 3.2-megapixel camera, and speedy OS. Though the E71 comes stocked with enough office apps to handle a TPS report, it has a wild side, too: You can easily toggle between two separate, customizable home screens—one for your business contacts and email account, one for the personal life. And did we mention the E71's got battery life for days? Literally, three of them. **WIRED** 3G, Wi-Fi, Bluetooth, and GPS (found us in 18 seconds). Textured back plate prevents slippage. Mail for Exchange required no frantic calls to IT. Easy-to-access microSD slot holds up to 8 GB. Vivid 2.36-inch screen (viewable even in direct sunlight), with 15-fps video for solid YouTube sessions. Can create and edit Microsoft Office files on the fly. Adobe Acrobat Reader for PDFs; Flash for, you know, Flash stuff. **TIMED** Dinky 2.5-mm audio jack requires adapter for your good headphones.

9 Camera has low dynamic range and puny LED flash. Screen is wide but not big enough to do justice to a feature-length film. **\$483**

320 x 240-pixel screen

3.2-megapixel camera

QWERTY keyboard

# WIRED

**Best Smart Phone for Professionals**  
(PC World Latin America 2008 Awards)

**Phone of the year**  
(Mobile Choice UK)

**Smartphone of the Year**  
(Mobilgalan, Sweden)

**Editor's choice**  
(CNET Asia)

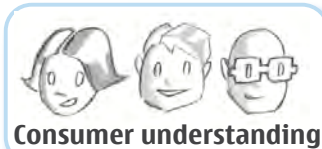
**Smartphone of the year**  
(PC World India)



# NOKIA

**NOKIA**  
Connecting People

**DESIGN**



§ IPR



LINUX

S30

S60

S40



**NOKIA**





A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" in smaller white below it, is on the right. The word cloud contains various terms in different colors and sizes, including "experience" (yellow), "discover" (pink), "future" (white), "ideas" (brown), "share" (light green), "inspire" (white), "exchange" (white), "connect" (white), "progress" (white), "learn" (white), "fun" (white), "debate" (white), "vision" (white), "explore" (white), "relevant" (white), "real" (white), "possibilities" (white), "opinions" (white), "network" (white), "friendships" (white), "debate" (white), "expertise" (white), and "connect" (white).

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, inspire, exchange, connect, progress, learn, fun, debate, vision, explore, relevant, real, possibilities, opinions, network, friendships, debate, expertise, connect

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" in smaller white below it, is on the right. Various words in different colors and sizes are scattered across the background, including "network", "experience", "future", "discover", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "relevant", "real", "learn", "explore", "exchange", "possibilities", "invent", "friendships", and "connect".

Thank you.

**NOKIA**  
Connecting People

network  
experience  
future  
discover  
ideas  
share  
progress  
exchange  
inspire  
connect  
debate  
vision  
fun  
opinions  
relevant  
real  
learn  
explore  
exchange  
possibilities  
invent  
friendships  
connect

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" in smaller white below it, is on the right. The word cloud contains various terms in different colors and sizes, including "experience" (yellow), "discover" (pink), "future" (white), "ideas" (brown), "share" (light green), "inspire" (white), "exchange" (white), "connect" (white), "progress" (white), "learn" (white), "fun" (white), "debate" (white), "vision" (white), "explore" (white), "relevant" (white), "real" (white), "possibilities" (white), "opinions" (white), "network" (white), "friendships" (white), and "debate" (white).

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, inspire, exchange, connect, progress, learn, fun, debate, vision, explore, relevant, real, possibilities, opinions, network, friendships, debate

[illegible]

# NOKIA

inspire  
share

# Scale advantage

Device Volumes

(M)

140

120

100

80

60

40

20

2001

2002

2003

2004

2005

2006

2007

2008 \*

- Nokia
- Samsung
- Motorola
- Sony Ericsson
- LGE

\*Sources: Company reports up to 3Q 2008

NOKIA

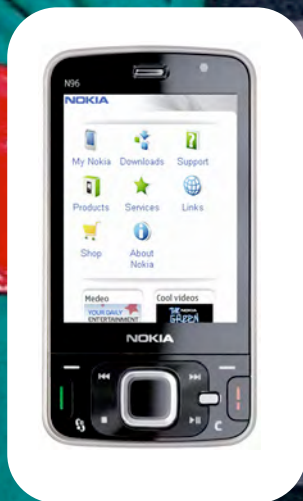


# Responding to customer needs

250 Sales Package Variants

170 Handset Variants

Nokia N96





# Combining **responsiveness** and **efficiency**: Excellent ability to adapt

Suppliers



Engine Operations



Supply Operations



Manufacture to order

150 suppliers for 120 billion components  
15 devices each second 24/7  
200 devices in average customer order

**NOKIA**



# Advantages in rapidly changing markets

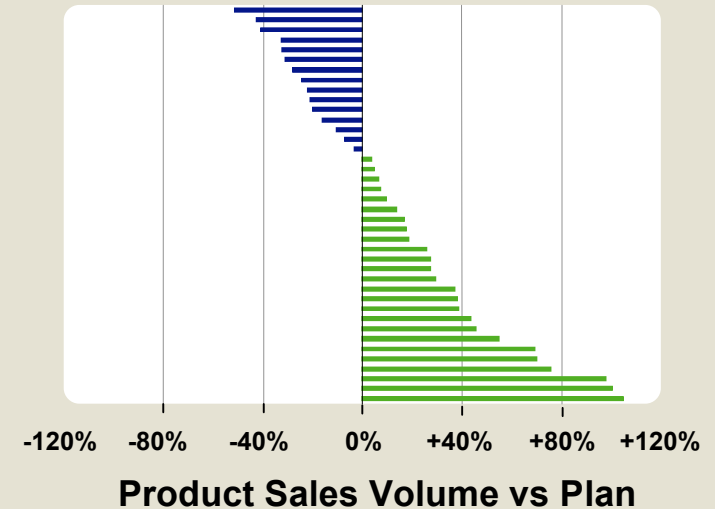
## Flexible inventory management:

- 75% of inventory held by suppliers immediately prior to assembly

## Manufacturing Flexibility:

- ~20% of manufacturing done by sub-suppliers – adds flexibility
- Booming Market = We managed for upside better than others
- Contracting Market
  - We are already biased for downside
  - Our organization has experience
  - Less important = capacity/supply constraints
  - More important = managing costs

## Flexible Manufacturing





# Nokia Demand Supply Network Architecture

Cost effective

Responsiveness

Pull driven

Global reach

Innovation

Ecosystem

NOKIA



# Eco-System: Fast response for markets needs



Komarom industrial village

**NOKIA**



# High responsiveness combined with low inventories





# Summary

Ensuring **efficiency** and **flexibility** while  
creating **customer value**

**Variation Management**

**Global Manufacturing**

**Scale and Efficiency**

**... and extending the  
lead further**

# Superior Powers of Collaboration

Jean-Francois Baril  
Senior Vice President  
Sourcing

**NOKIA**



# Connecting the Inside with the Outside

Customer Satisfaction

NOKIA

Operational  
Excellence

Supplier  
Network

Great  
Products



# Margin advantage vs. competition



Operational mode

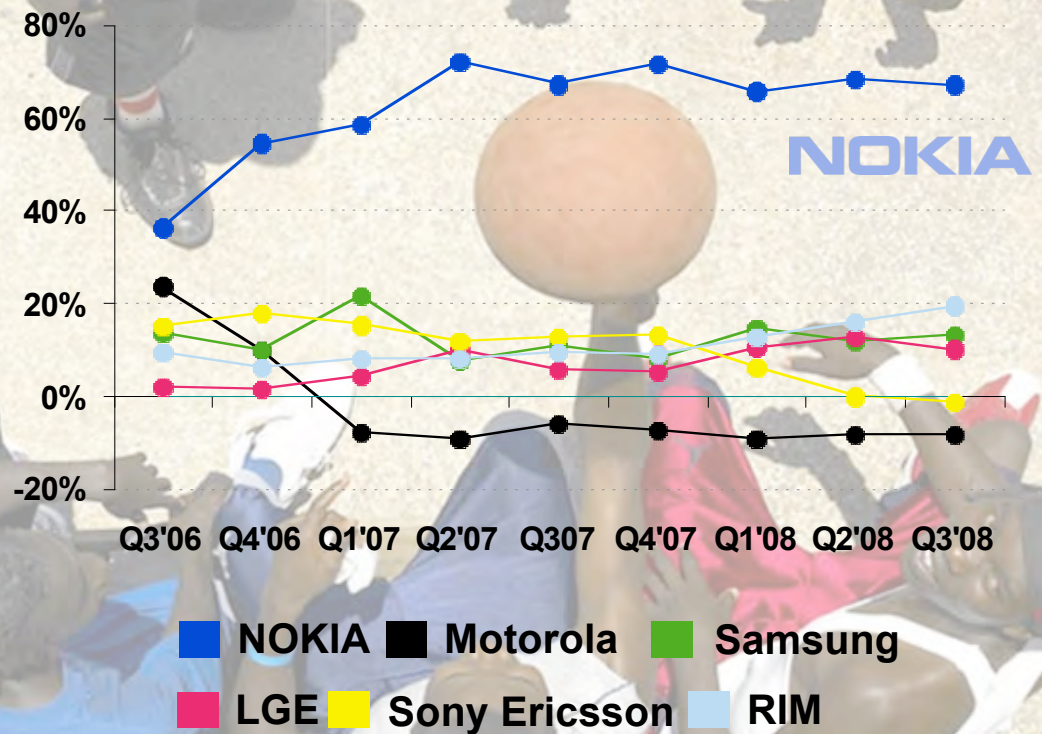


Supplier portfolio



Collaboration

## Percent of operating profit



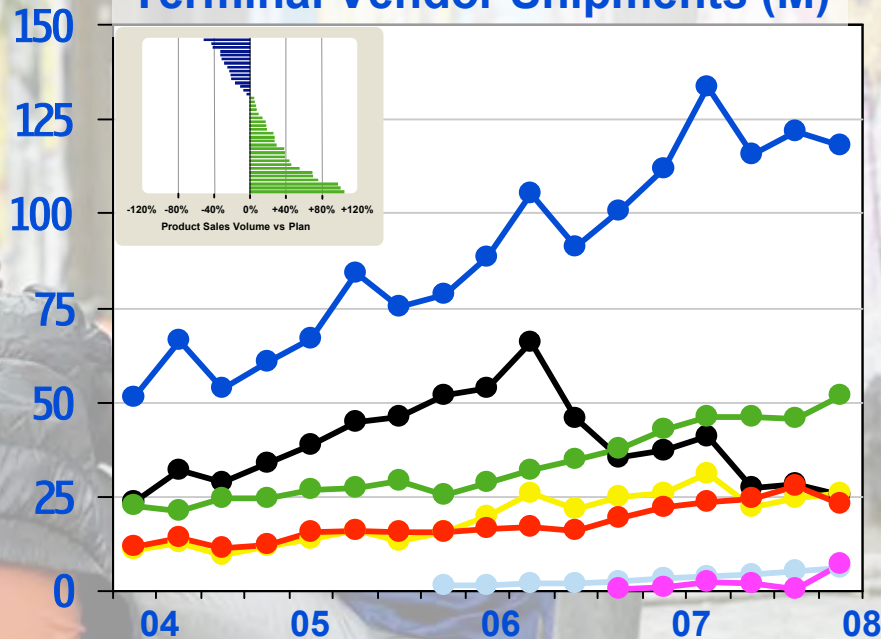
Source: Nokia, company reports

# Operational mode = Scale and cost advantage

Operational flexibility

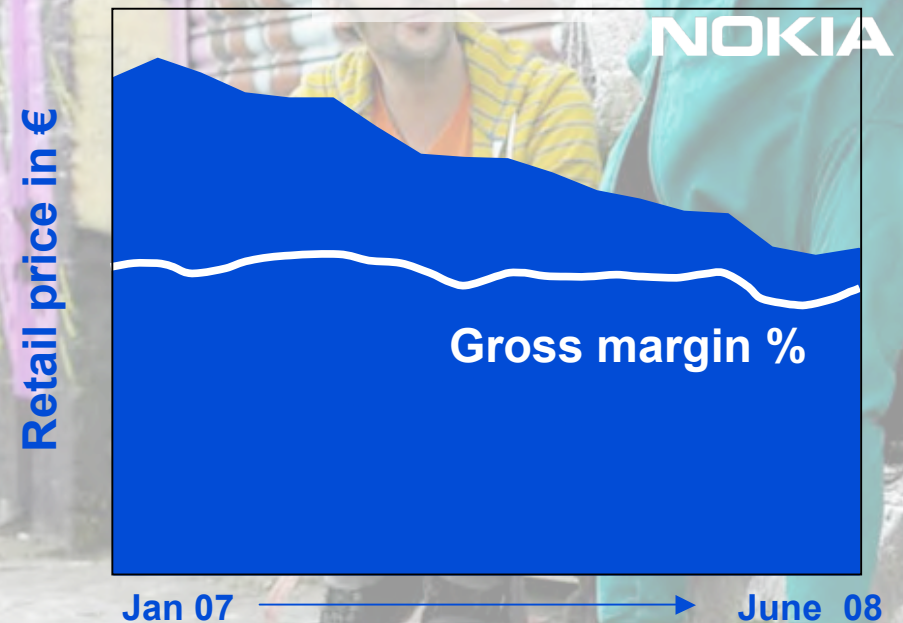
R&D and supplier collaboration

Terminal Vendor Shipments (M)



Source: Nokia, company reports

Nokia 6300





# Working only with the best suppliers

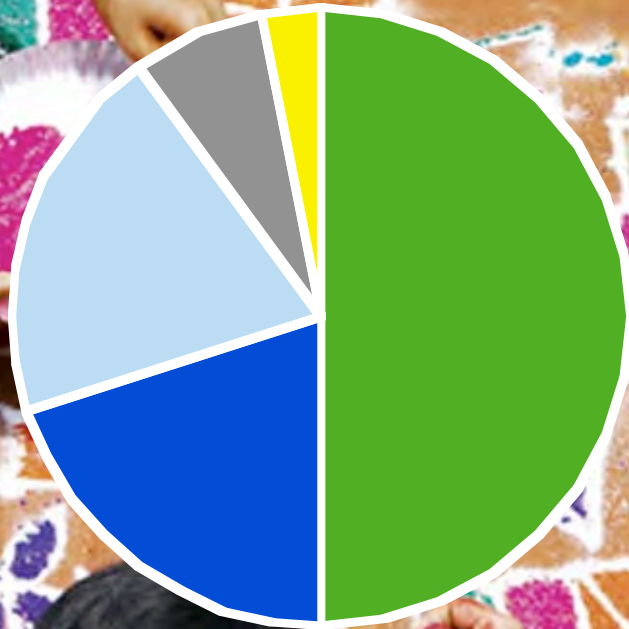


**NOKIA**

Nokia  
#1 customer



# Balanced supplier portfolio



Shares by commodity

Software  
& Content

Hardware

NOKIA

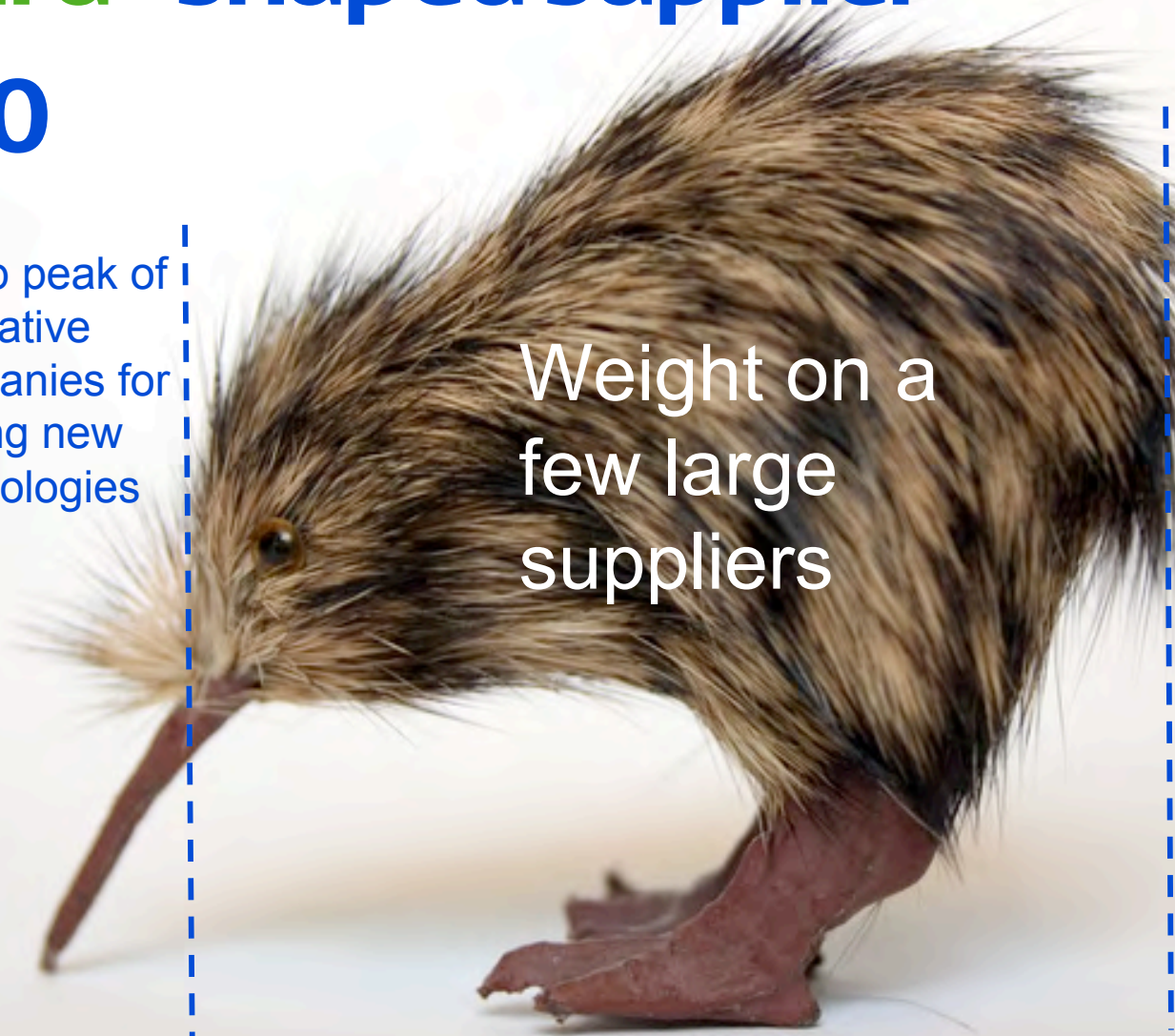
# of Suppliers

# “Kiwi-bird” shaped supplier portfolio

Sharp peak of innovative companies for picking new technologies

Weight on a few large suppliers

No long tail of legacy suppliers





# Unleashing the power of collaboration: 1+1=11

Human and business leadership

## Supplier

- Capabilities
- Scale
- Innovation



## Passion and Trust

Co-creation  
Transparency  
Rewards

## Nokia

- Technology planning
- Product
- Logistics



# **Risk** management resilience

**2/5**

**Collaboration**

**2/5**

**Supplier portfolio**

**1/5**

**Robust processes**

**..and “a pinch” of leadership**



# Responsible supplier management

- Supplier requirements for Ethics, Labour, Health & Safety and Environment since the 1990s
- > 50 on-site supplier assessments annually with active development programs
- Environmental improvement targets for key suppliers
- #1 Dow Jones Sustainability Index - Communication Technology category (2008)
- #1 in Greenpeace Electronics Ranking (Nov 2008)
- Active participation at industry level (e.g GeSI)

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" below it, is on the right. Various words are scattered throughout in different colors and sizes, including "network", "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "relevant", "real", "learn", "explore", "exchange", "possibilities", "invent", "friendships", and "connect".

Thank you.

**NOKIA**  
Connecting People

network  
experience  
discover  
future  
ideas  
share  
progress  
exchange  
inspire  
connect  
debate  
vision  
fun  
opinions  
relevant  
real  
learn  
explore  
exchange  
possibilities  
invent  
friendships  
connect

A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo "NOKIA" is in white, with "Connecting People" below it. Various words are scattered in different colors and sizes, including "experience", "discover", "future", "ideas", "share", "inspire", "connect", "exchange", "progress", "learn", "fun", "debate", "vision", "relevant", "real", "experience", "opinions", "possibilities", "invent", "explore", "friendships", "network", "expertise", and "connect".

Thank you.

**NOKIA**  
Connecting People

experience, discover, future, ideas, share, inspire, connect, exchange, progress, learn, fun, debate, vision, relevant, real, experience, opinions, possibilities, invent, explore, friendships, network, expertise, connect

[illegible]A word cloud on a green background. The text "Thank you." is in large white font on the left. The Nokia logo, consisting of the word "NOKIA" in bold white and "Connecting People" below it, is on the right. Various words are scattered throughout in different colors and sizes, including "network", "experience", "discover", "future", "ideas", "share", "progress", "exchange", "inspire", "connect", "debate", "vision", "fun", "opinions", "possibilities", "invent", "explore", "relevant", "real", "learn", "exchange", "friendships", and "debate".

Thank you.

**NOKIA**  
Connecting People

network  
experience  
discover  
future  
ideas  
share  
progress  
exchange  
inspire  
connect  
debate  
vision  
fun  
opinions  
possibilities  
invent  
explore  
relevant  
real  
learn  
exchange  
friendships  
debate



# Nokia Smartphone Software

**NOKIA**

David Rivas  
Vice President, S60 SW Technology Management



# Four Pillars of Nokia Smartphone Execution

NOKIA

**Internal and External  
Software Innovation**

**Global  
Presence**

**Consumer  
Insight**

**Integrated  
Experiences**

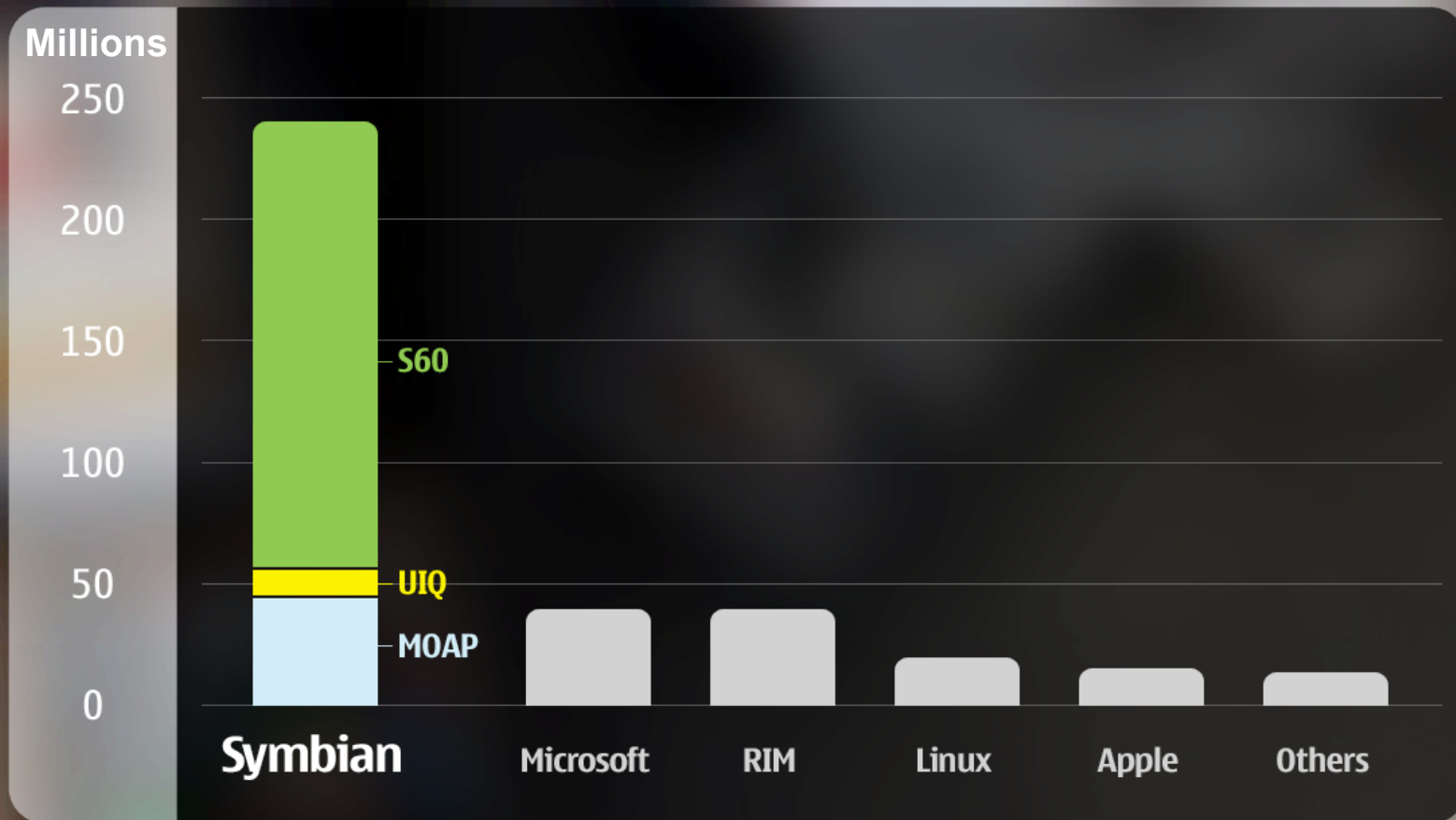


A high-angle photograph showing a person's hands sorting through a box of old, physical photographs. The box is open on a dark, textured surface. Several black and white photos are visible, some showing architectural structures and others showing groups of people. To the left of the photo box, there is another box containing various colorful toys, including a green toy car and a small figurine. The overall scene suggests a process of archiving or organizing old memories.

Symbian OS  
**In 200+ Million** Smartphones  
Worldwide

NOKIA

# Shipments Since January 2004



Source: Canals estimates, Worldwide smart mobile devices, November 2008

**NOKIA**



A photograph of a woman with short brown hair, smiling and looking upwards. She is wearing a bright yellow jacket over a light blue shirt and a thick, textured yellow scarf. She is standing on a metal escalator. The background is blurred, showing the motion of the escalator. The text "Content and Services Anywhere, Anytime – Today" is overlaid on the left side of the image. The word "NOKIA" is visible in the upper right corner.

Content and Services  
Anywhere, Anytime –  
Today

NOKIA









A photograph of two people walking away from the camera on a dark, flat rooftop. The person on the left is wearing a blue and white plaid shirt and jeans, while the person on the right is wearing a red shirt and light-colored pants. A large, bright yellow arrow is painted on the ground, pointing directly towards them. Long shadows are cast on the ground and a white wall to the right. The overall scene suggests a path forward or a journey.

Software Enables **Innovation**

**NOKIA**



## Intention

Reduce costs and shift focus to value add in software

Focus on differentiating consumer experiences

Bring external innovation to play

## Execution

- Defragment investment base
- Reduce costs associated with development current assets

- Improve software offerings
- Extend Software business reach
- Cross platform programs

- Make mobile software open
- Inspire open source community
- Create a new category of services

## Action

Acquisition of Symbian

Web runtime

Trolltech acquisition & Qt

Symbian Foundation

A photograph of two basketball players in a jump ball position. The player on the left is wearing a black jersey and black sneakers, holding an orange basketball. The player on the right is wearing a red jersey, white socks, and red and white sneakers. They are standing in front of a green, rusted metal wall. The text "Nokia SW Strategy Impacting the Whole Industry" is overlaid on the left side, and "Open Source with Symbian Foundation" is overlaid at the bottom left. The "NOKIA" logo is on the right side.

# Nokia SW Strategy Impacting the Whole Industry

Open Source with Symbian Foundation

NOKIA

## Short term objectives

Improve operational set-up  
Further increase foundation  
platform attractiveness for handset  
vendors  
Create one common platform with  
a unified UI

## Long term objectives

Desirable industry standard  
platform used by everyone  
Positive impact on speed, quality  
and innovation  
Wide, engaged and successful  
ecosystem of industry players



We have 50+ announced supporters, including the 10 Founding members.

- 8 Device manufacturers
- 7 Semiconductor vendors
- 9 Network operators
- 27 Services & SW companies

Hundreds of organizations have registered their interest via the website:

[www.symbianfoundation.org](http://www.symbianfoundation.org)



NOKIA

**User Experience is the Star  
of the Future: **Simplicity,  
Quality, Beauty****

NOKIA

# Multiple UI Styles and Capabilities

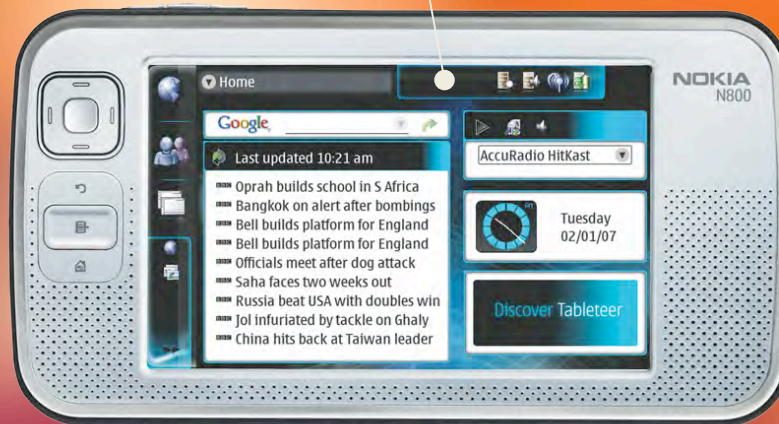
UI Portfolio spans broadest range of consumers and needs



S60  
Touch

Maemo  
Touch

S60  
Non-Touch



NOKIA



Best in class touch solution enables large volumes and growth

Direct UI simplifies interaction with standard strokes and gestures



NOKIA

Context and  
Presence

Integrated  
Services

Smart  
Widgets

Multiple  
Homescreens



NOKIA





Thank You

NOKIA



# Context is here, there, now, then and in the future...

Ilkka Raiskinen

SVP, Context and Advertising Solutions

**NOKIA**

A word cloud on a green background. The words are in various colors (white, pink, yellow, light green) and sizes. The most prominent words are 'experience' in large yellow letters, 'discover' in large pink letters, and 'share' in large light green letters. Other visible words include 'ideas' in pink, 'future' in white, 'fun' in white, 'exchange' in light green, 'inspire' in white, 'connect' in white, 'network' in light green, 'expertise' in light green, 'invent' in light green, 'possibilities' in light green, 'opinions' in light green, 'debate' in light green, 'vision' in white, 'explore' in white, 'relevant' in yellow, 'real' in white, 'learn' in white, 'exchange' in white, 'inspire' in white, 'share' in light green, 'future' in white, 'fun' in white, 'exchange' in light green, 'inspire' in white, 'connect' in white, 'network' in light green, 'expertise' in light green, 'invent' in light green, 'possibilities' in light green, 'opinions' in light green, 'debate' in light green, 'vision' in white, 'explore' in white, 'relevant' in yellow, 'real' in white, 'learn' in white, 'exchange' in white, 'inspire' in white, 'share' in light green.

People **want** relevance

**NOKIA**

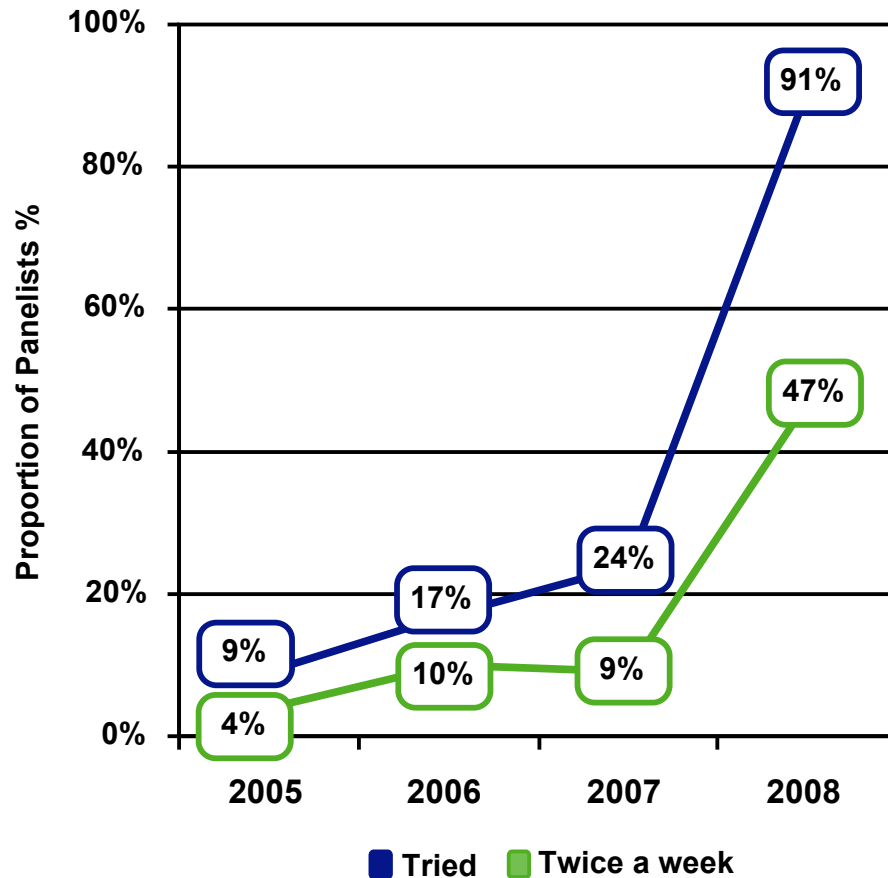
People **need** location  
based services

**NOKIA**



# Number Of Active Map Users Has Increased Five Fold From 2005 to 2008

## Map Application Users



Source: Live UK panels 2005-2008 (all together 1 189 device owners)

## Highlights

- The introduction of Nokia Maps in 2007 has pushed maps usage to 91%
- 47% of panelists used map applications actively in 2008
- In 2008, Maps is the key service of S60 devices
- Music and browser usage grew similarly 2 years ago

**NOKIA**

Nokia is the **market leader**  
in GPS devices

**NOKIA**

# #1 Global Manufacturer of navigation-enabled devices

- Nokia offers over 20 GPS-enabled devices
- Nokia sold close to 7 million navigation-enabled devices in Q3'08
  - Compare that to what the next two manufacturers delivered in the quarter
    - TomTom 2.5 million units in Q3'08
    - Garmin 4.3 million units in Q3'08

Source: Nokia, Garmin, TomTom





A photograph of two people walking away from the camera on a dark asphalt sidewalk. The person on the left is wearing a plaid shirt and jeans, and the person on the right is wearing light-colored trousers and white sneakers. A large, bright yellow arrow is painted on the ground, pointing directly at the person in jeans. The scene is brightly lit, casting long shadows on the pavement.

Navigation...it's not all about  
cars

NOKIA

Location based services  
are **more** than A to B

**NOKIA**



# Bringing us all together: People, Places, Time

# People

## People who matter to me

# Places

## A world full of interesting places

# Time

## People organize around time and place

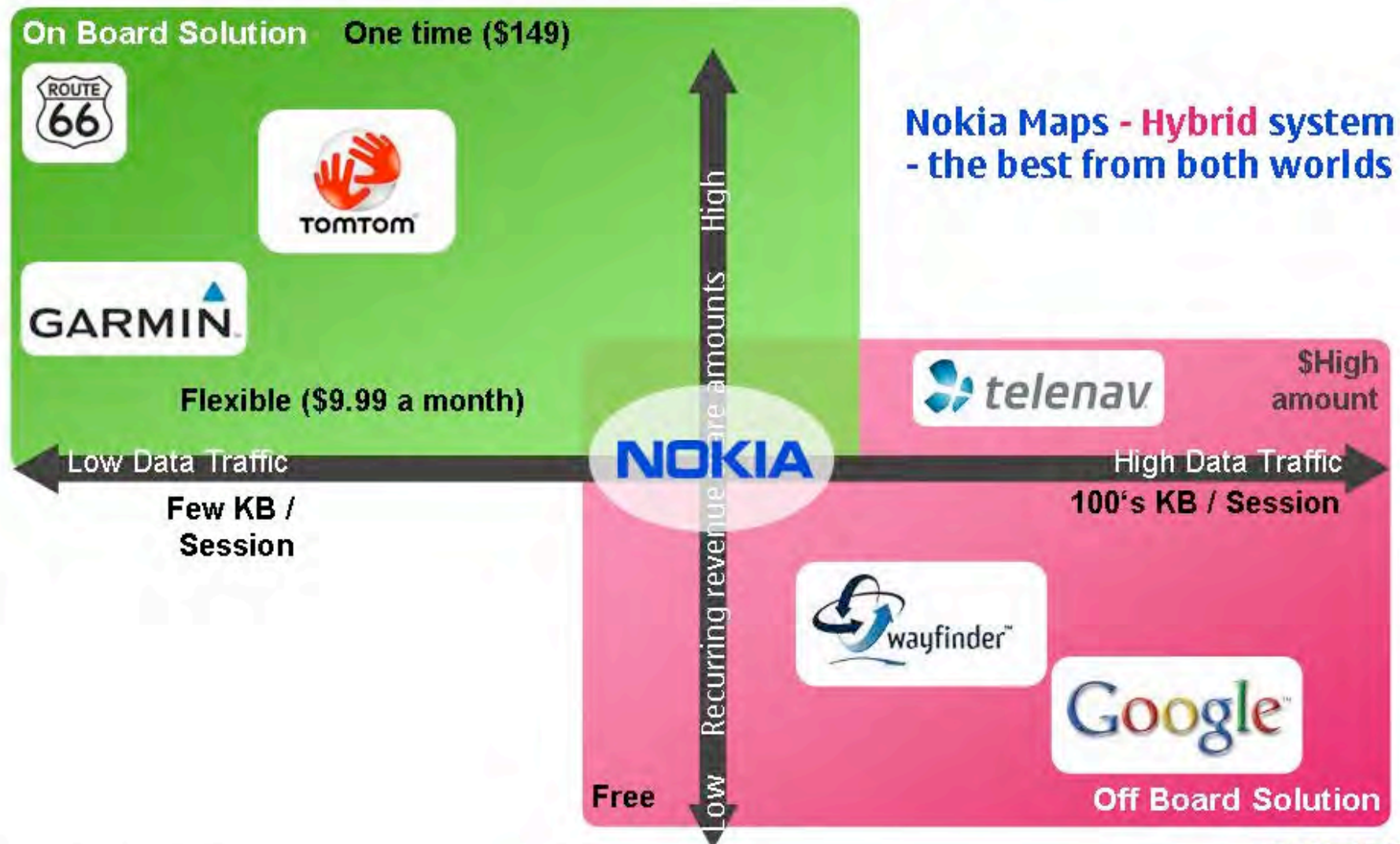






# How do we compare?

**NOKIA**

# Nokia Maps 3.0 competitive landscape



# Nokia Maps 3.0 competitive landscape

	Nokia Maps 3.0 	Google Maps for mobile* 
<b>Map data coverage</b>	200+ countries	100+ countries
<b>Pre-loading of maps via PC / Mac</b>	yes, via Nokia Map Loader	no, download only via online connection on mobile
<b>Map views</b>	2D, 3D, Satellite, Hybrid, Terrain	only 2D and Hybrid
<b>Multi point route planner</b>	yes	no
<b>Walking directions</b>	yes	no
<b>Real time turn-by-turn pedestrian navigation</b>	yes, Walk, in 70 countries (premium service, not free)	no
<b>Real time turn-by-turn voice guided car navigation</b>	yes, Drive, in 70 countries (premium service, not free)	no
<b>Share POI's, or any place from map</b>	Yes, Send via SMS, MMS, Bluetooth, Infra red	no

\*compared with version 2.2.0.13 for Nokia S60 3<sup>rd</sup> ed.

**NOKIA**



**Where** do we go from  
here?

**NOKIA**

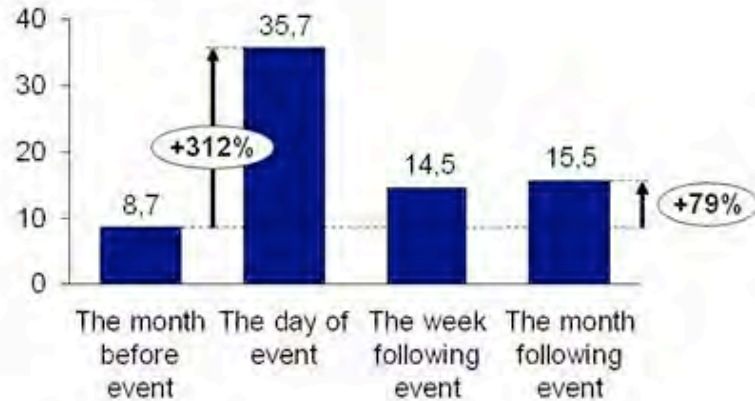
# Costs Related to a Contextual Web

- The initial cost associated with building our location based services were heavy on the front end with acquisitions – gate5, NAVTEQ, Plazes
- Now that the system is in place, we need to build awareness and increase the user base.
  - Content
    - Add in Third-Party Content (Lonely Planet, Via Michelin, and Wcities) and more...
  - Marketing
    - Work closely with Device and Theme based Marketing to raise awareness.
  - Adding platforms.
    - Series 40 devices loaded with Nokia Maps started shipping this year
    - LG-KT610 is shipping with Ovi Maps...

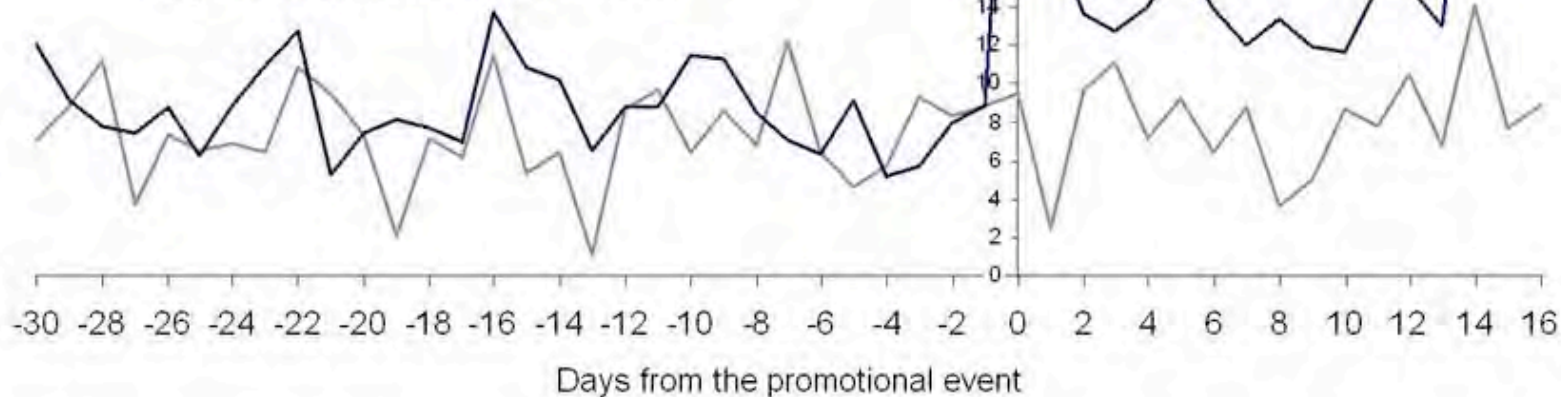
**NOKIA**

# Nokia Maps promotional SMS had a 79% long-term impact

Avg. user rate among target population



— Reference group (no promotion)  
 — Targeted population (SMS promotion)  
 — Targeted population (SMS promotion)



- The target group got a free Nokia Navigation Licence (30 days)
- The short-term contribution was high: 312% increase in the number of users

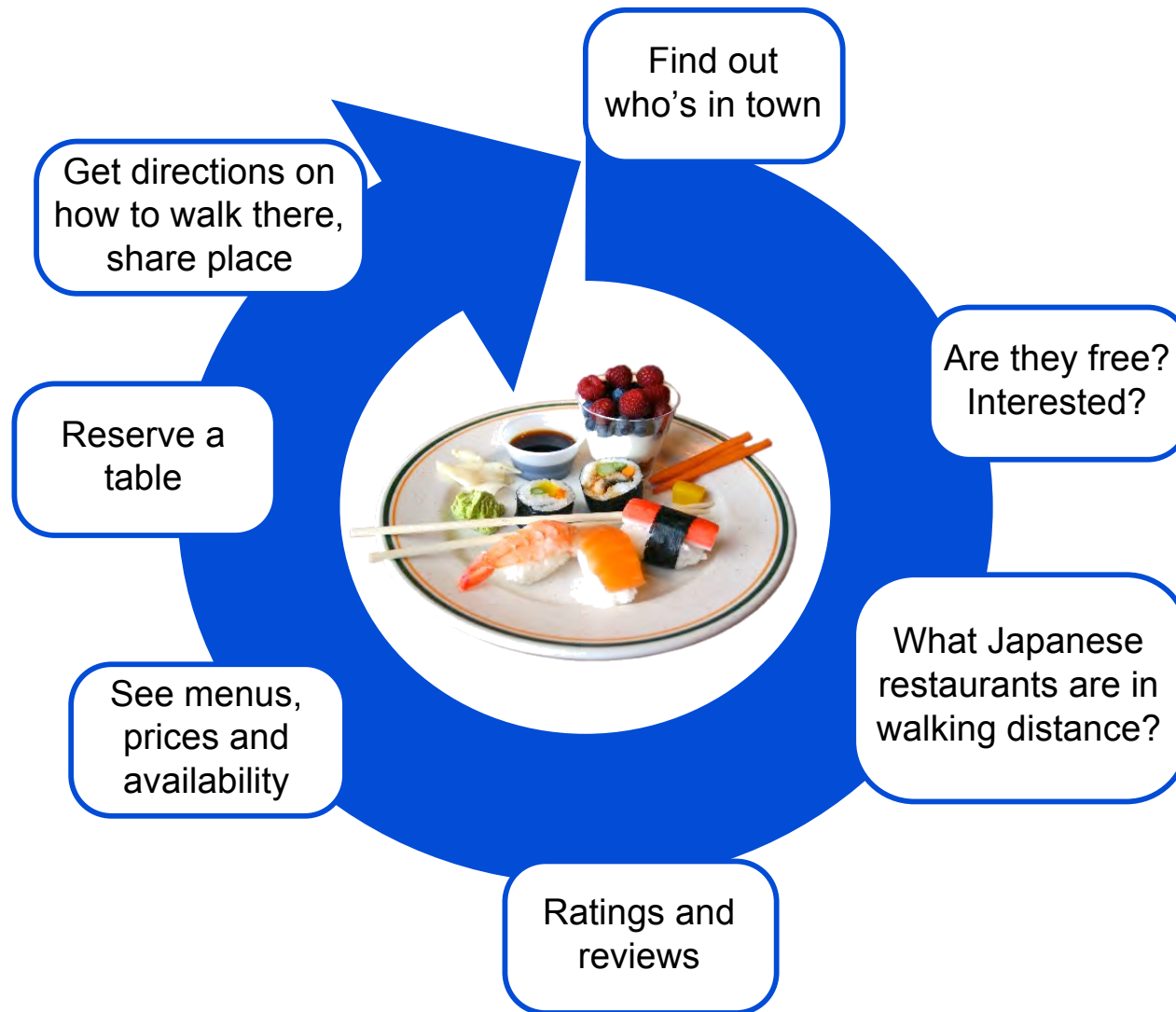
Source: Live 5 UK panel (2008) with 489 device owners

**NOKIA**



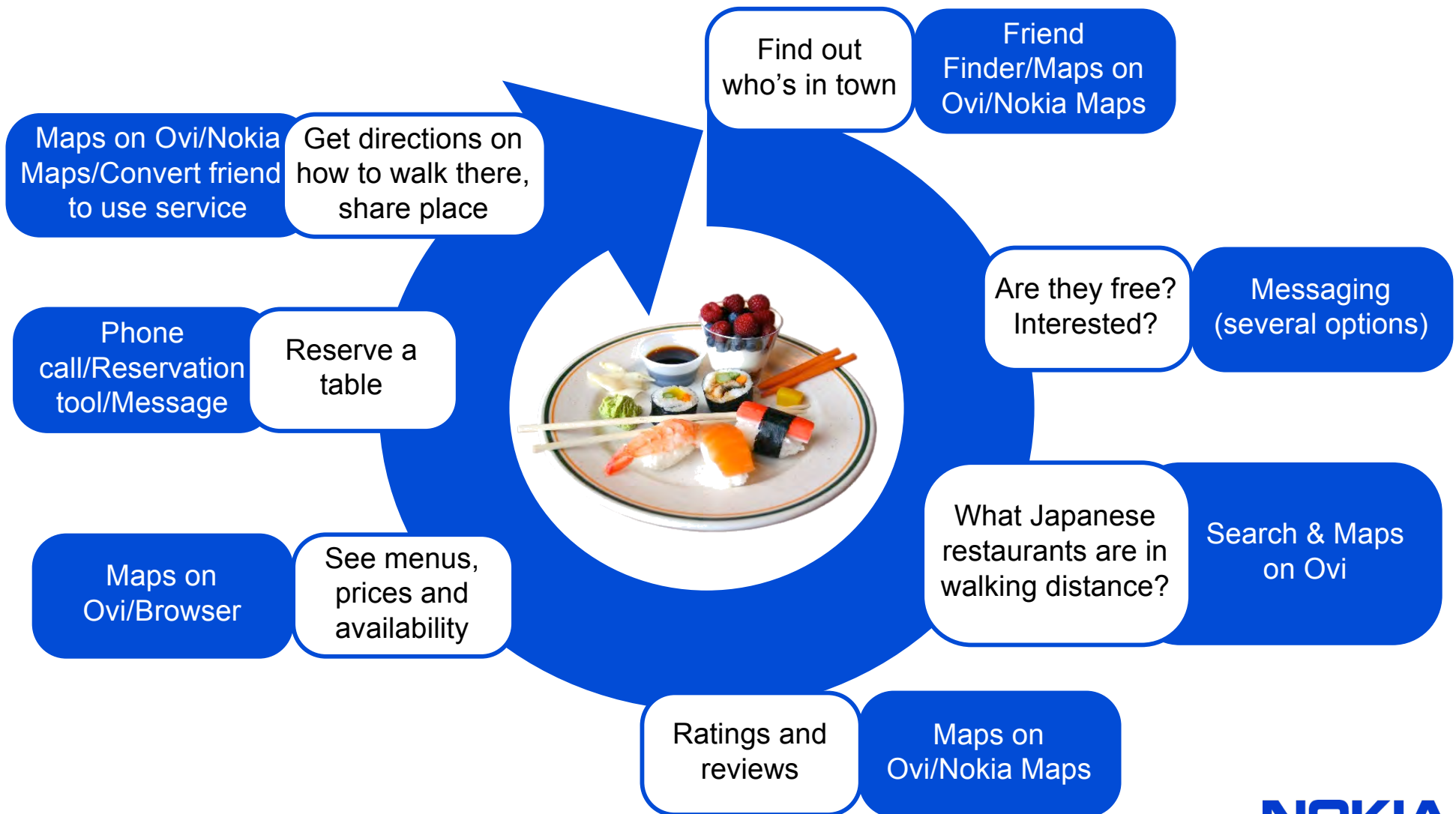
## Better context – richer service experience:

### Having sushi with friends



**NOKIA**

# Which Nokia services enable this?



**NOKIA**

Thank you.

**NOKIA**  
Connecting People

ideas  
experience  
discover  
share  
future  
network  
connect  
exchange  
inspire  
learn  
relevant  
real  
debate  
fun  
opinions  
possibilities  
invent  
vision  
explore  
exchange  
experience  
share  
inspire  
learn  
relevant  
real  
debate  
fun  
opinions  
possibilities  
invent  
vision  
explore



opinions  
 futu  
 ange

# Messaging Markets and Initiatives

## Enterprise

Direct access enterprise clients

- Mail for Exchange
- Lotus Traveler

## Consumer

Consumer IM and push email service

- Nokia Messaging

## Emerging

Nokia provided email accounts

- Mail on Ovi ( *name@ovi.com* )

A photograph of two people walking away from the camera on a dark, flat rooftop. The person on the left is wearing a blue and white plaid shirt and jeans, while the person on the right is wearing a red shirt and light-colored pants. A large, bright yellow arrow is painted on the ground, pointing directly at them. Long shadows are cast on the ground and a white wall to the right. The overall scene suggests a path or direction.

# Enterprise Messaging

**NOKIA**



# Winning device portfolio and device-led solutions

- Strong Nokia device portfolio, led by Nokia Eseries range
- Both Nokia and partner developed applications connecting directly to partners' enterprise infrastructure



**NOKIA**

# Enterprise email available for 80 million Nokia devices



**Exchange**

- Mail for Exchange client offers freedom to mobilize email, calendar and contacts
- Mail for Exchange now runs on 80 million Nokia devices (43 models)
- Lotus Notes PIM access client available this year for Domino access
- Customers can choose the Nokia phone they love (e.g. Nseries, music phone) and still set it up for mobile email
- Largest enterprise access range of devices from any manufacturer



**Domino**

**NOKIA**

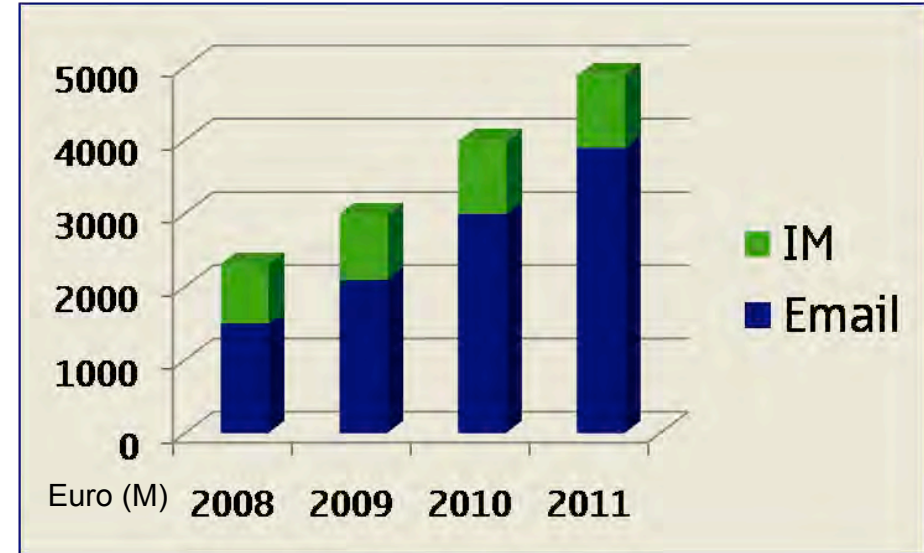
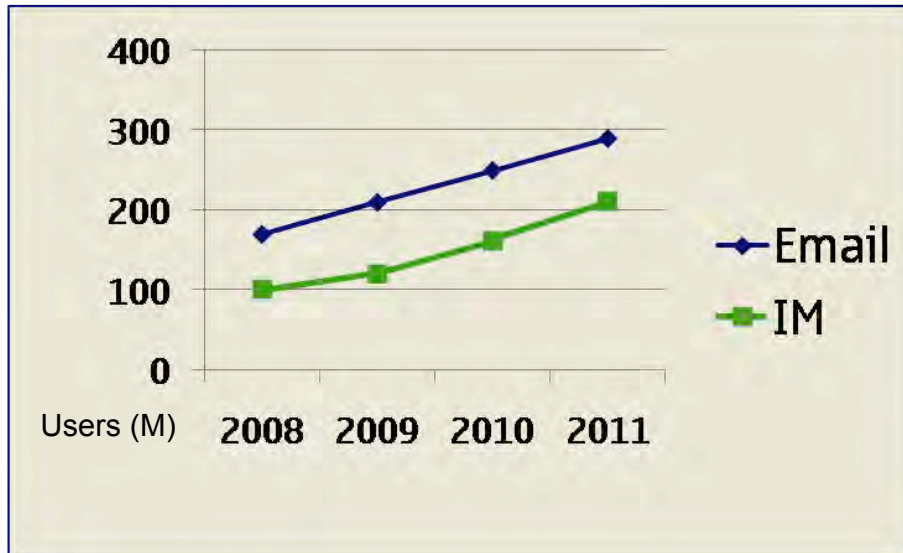


# Consumer Messaging

**NOKIA**



# Mobile Messaging Market Opportunity: 500 million accounts by 2011\*



- Addressable market of circa **500 Million** combined users accounts for Mobile Email and IM by 2011\*

\*Sources: Nokia and external analyst estimates  
Email & IM excludes Japan & Korea

- Combined Operator Revenues of almost **€5 Billion** by 2011 for Mobile Email and IM\*\*
- Ad funded models planned to deliver lowest cost consumer messaging

\*\* Sources: Nokia and external analyst estimates  
Revenues are inclusive of net consumer spend including data fees incurred

# Investing to win



November 4, 2008

Nokia acquires OZ Communications

- Leading provider of white label mobile email and IM services.
- Supplier to AT&T, T-mobile, Sprint, Verizon and nearly all NA operators
- S40 email and consumer IM service
- 5.5M active users



February 10, 2006

Nokia acquires Intellisync

- Advanced email solutions for prosumers
- Nokia hosted solution
- Push email for S60

# Introducing Nokia Messaging

A new Nokia service for mobile email and IM  
pre-loaded on Nokia Series 40 & S60 devices

*Your favorite devices now come with your  
favorite messaging services!*





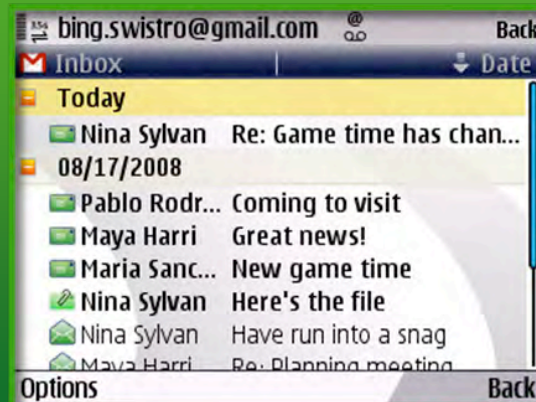
# Nokia Messaging: Designed to be Easy

## Easy to set up



Email address and password are all that is needed

## Easy to use



Next generation email client

## Easy to afford



Designed to be bundled with data plans

# Service is Now Live



# Mobile Messaging for the Masses

## Device Breadth, Global Reach



Global reach to establish messaging for the masses

- From smartphones to feature phones for the broadest appeal
- Preinstalled connection to the Nokia hosted service for a consistent Nokia experience

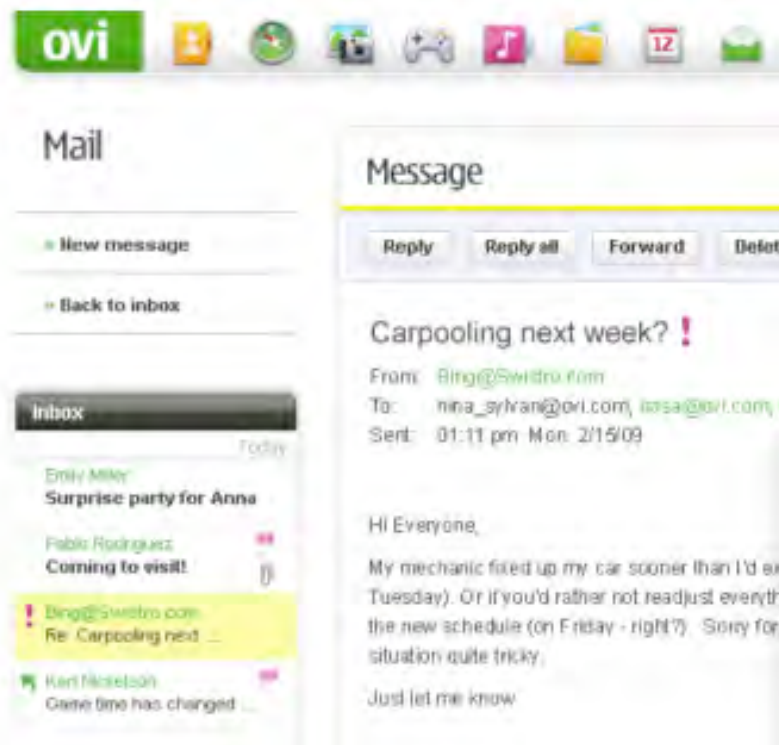
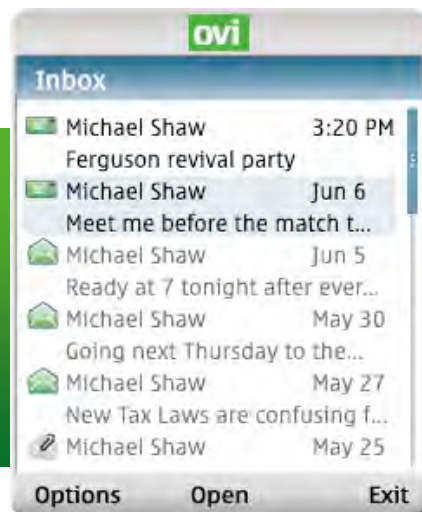
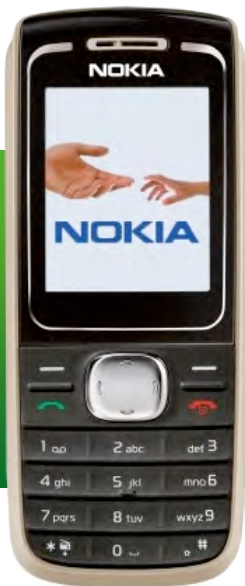


# Ovi Messaging Services

**NOKIA**

# Mail on Ovi: **yourname@ovi.com**

- A free service for consumers of all Nokia phones
- An integrated Ovi.com experience
- Live on select S40 devices now; Web access in Q1'09





# Designed for Emerging Markets

- 25% of the world has email accounts. Mail on Ovi is for the 75% without
- First time internet users will be able to create and access a persistent internet identity, without a PC
- OZ technology mobilizes email yet requires just 1% of a typical push email data service – providing the platform for truly affordable mail services





# Mobile Messaging for the Masses

## Leading Enterprise Solutions

- Enterprise connectivity on mainstream devices

## Compelling Mobile Messaging

- All your favorite internet messaging services in your pocket

## Easy Ovi Identity

- Bringing email to the emerging market



# Thank You.

**NOKIA**

**Tero Ojanperä, EVP, Entertainment & Communities**  
**Liz Schimel, VP, Global Head of Music**  
**Jaakko Kaidesoja, VP, Games**

## Overall Highlights

- Entertainment is a key focus area for Services & Software
- 2008: a very productive year
  - Roll out of Nokia Music Stores across 3 continents
    - Locally relevant content, not just international hits
  - Launch of Comes With Music in the UK
    - Innovative business model to labels and compelling value proposition to consumers
  - Launch of new N-Gage service, new device support and dozens of games
    - Innovation – Reset Generation (cross-platform) and Dance Fabulous (cross-service)
  - Pre-installed content – revenue opportunity
    - N96 and Transformers/Batman
    - N85 and games
- Coming soon
  - Announced in August that we are streamlining various services such as MOSH, WidSets and Download! into a single service
  - This will provide an easy way for consumers to get mobile media for their device
  - Core part of our People and Places strategy

## Music

- Offering a total music experience – on PC, on devices and services
- Nokia Music for PC
  - Easiest way to get music onto your Nokia and manage your music collection
  - Rip CDs DIRECTLY to your mobile – no other software enables that
  - Easy transfer by dragging and dropping albums or songs onto the picture of your device
  - Transfer playlists from your device to your computer – also unique
  - In markets that have a Nokia Music Store, access the store directly from the Store tab



- Aggressive Nokia Music Store roll out
  - 12 markets in 13 months across 3 continents
  - Continue roll out during 2009 including the US and our first stores in Africa (South Africa) and South America (Brazil)
  - Focus on locally relevant content, not just international hits
- Interesting trends from Nokia Music Store highlighting value of mobility
  - About 35% of visitors to our music stores are via mobile
  - About a third of downloads are happening over the air, either via 3G or wifi
- Comes With Music
  - Very simple proposition – buy a Nokia Comes With Music device and get a year's worth of unlimited access to the Nokia Music Store. Keep all of the music you download
  - Strong support from the industry – all major labels on board as well as indies and music publishers
    - Offer 100 percent chart coverage in the UK at sales start
  - Nokia 5310 XpressMusic and Nokia N95 8GB now on sale – compelling price points (GBP 129.99 and free on a GBP35/month contract)
    - 18-month contract option to support operators (e.g. 3UK)
  - Expanding device support with additional devices in 2009 – major focus on Nokia 5800 XpressMusic
  - Roll out in 2009 across markets with existing Nokia Music Store
  - Nokia makes money both from traditional device margins, as well as margins on the Comes With Music service
    - Positive business for all players – Nokia, labels, rightsholders

## Games

- N-Gage highlights
  - Live in April and regularly introducing more and more N-Gage-compatible devices to the market (already Nokia N79, N81, N82, N85, N95, N96, Nokia 5320 XpressMusic)
  - Pre-loaded games. For example, Nokia N85 comes with at least 10 games in box
  - Co-operation with Vodafone with Nokia N85 bundled with a customized version of the N-Gage application with the Star Wars: The Force Unleashed game embedded as well as exclusive mobile content
  - Co-operation with Rogers (Canada) around N-Gage
- Trends from the first six months:
  - Sales transactions in over 130 countries
  - Repeat purchase rate is over 35% globally
  - Operator billing is dominant with over 80% of people using it in countries where available

- Other milestones
  - Chinese language N-Gage application and the ability to pay with QQCoin (the leading virtual currency in China) later this year
  - 1Q 2009 – 15 to 20k retail purchase points in India and well as operator billing in Latin America and a localized service and operator billing in Russia
- New titles on a regular basis with a mix of genres
  - Play and compete with others: ONE and Dirk Dagger
  - Interact and communicate with others: Reset Generation and Yamake
  - Casual gamers: Bounce and Hooked On: Creatures of the Deep
  - Big brands: EA Sports, Gameloft, etc.
- Game innovation
  - Cross-platform games - web-to-web, web-to-PC/console and web-to-mobile
    - Reset Generation available to play for free on PC (Windows/Mac/Linux) as an embedded web widget and as downloadable content with all N-Gage compatible devices.
  - Games across Nokia service offerings
    - Dance Fabulous dance and music game. Create unique choreographies to the music stored on your device, including a link to the Nokia Music Store
    - Expect to see more integration of services in N-Gage games – for example using Nokia Maps and GPS
- N-Gage Arena
  - the place where the N-Gage community goes to meet friends and find others to play with
  - Online multiplayer gaming is at the core of the N-Gage experience
  - All titles support a common minimum community feature set, but more multiplayer games and more community features coming
  - Nokia has the leading, tried and tested solution for creating the best online multiplayer mobile games

## Summary

- Music and Gaming focus for 2009
  - Rolling out NMS/CWM in key markets
  - Expanding N-Gage portfolio in terms of games and devices
- Nokia strengths
  - Tight integration between experience and device
  - Innovative business models that bring value to all
  - Device volumes

# Nokia Research

Sharpening Innovation to Build the Future

Dr. Henry Tirri, PhD  
SVP & Head of Nokia Research

**NOKIA**



# Four Research Focus Areas for NRC

In Order to Bridge the Now to the Next



Rich Context Modeling

New User Interface

## Rich Context Modeling

Meet the needs of individuals on their terms.

## New User Interface

Interact joyfully and intuitively through technology.

## Cognitive Radio

Liberate spectrum to expand markets and enable large-scale sensing.

## High Performance Mobile Platforms

Superior mobile platform improving performance and power ratio.



Cognitive Radio

High Performance  
Mobile Platforms

# Open Innovation at Nokia

## Engaging the World's Premiere Institutions

- Three years of actively exploring open innovation
- Selective deep collaborations with world-leading institutions
  - China – Beijing
  - Finland – Helsinki & Tampere
  - Switzerland – Lausanne
  - UK – Cambridge
  - USA – Cambridge, MA & Palo Alto, CA
- The industry compels a “Demo or Die” philosophy
- Building global test beds to learn from larger and wider audiences



**NOKIA**

# Mobile Devices Sense Your Environment

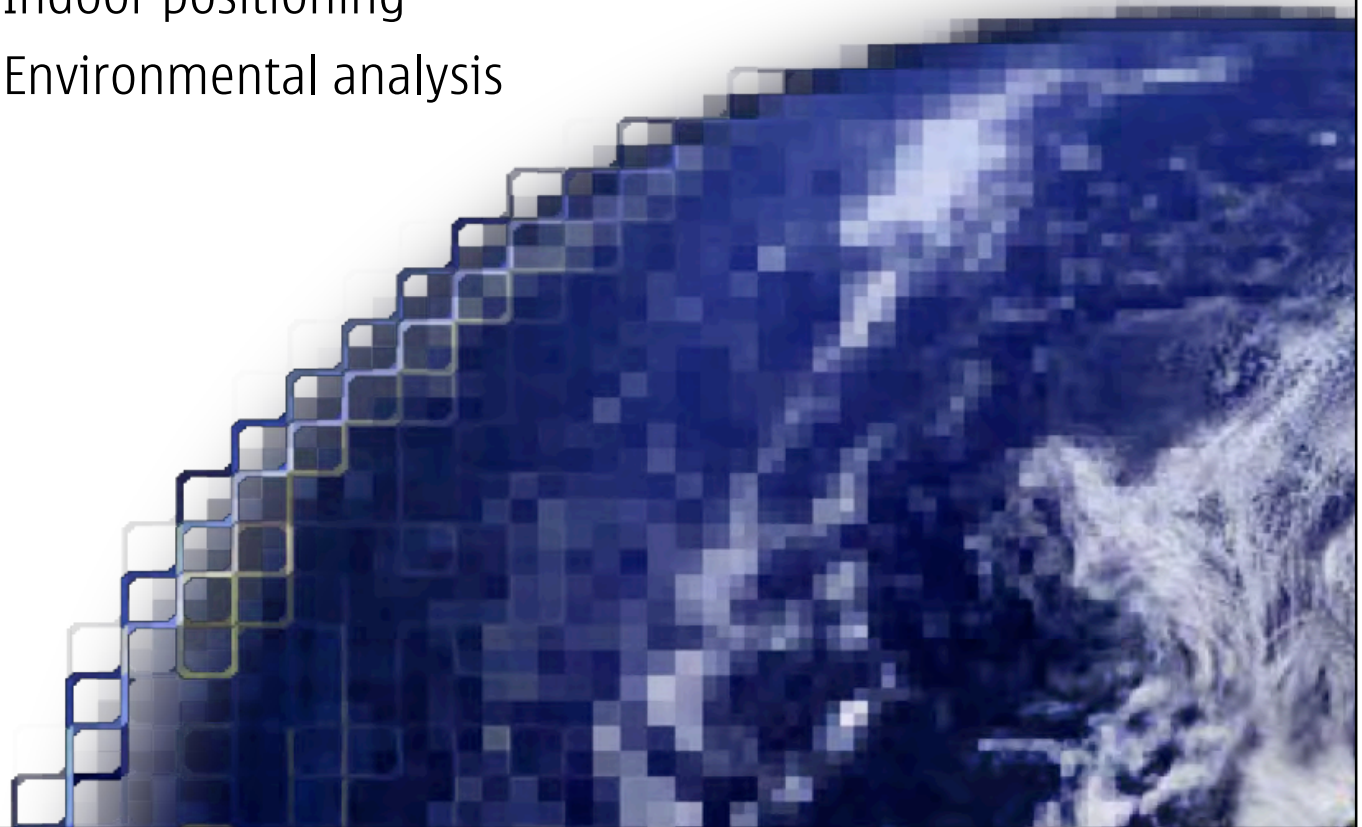
## Fusing the Physical & Digital Worlds

### Today...

- GPS
- Cameras
- Accelerometers
- Light sensors
- Bluetooth
- Microphones
- Wi-Fi
- Cell triangulation

### Incoming...

- Near Field Communication
- Indoor positioning
- Environmental analysis





# New User Experiences

Liberate data from application silos based on user behavior



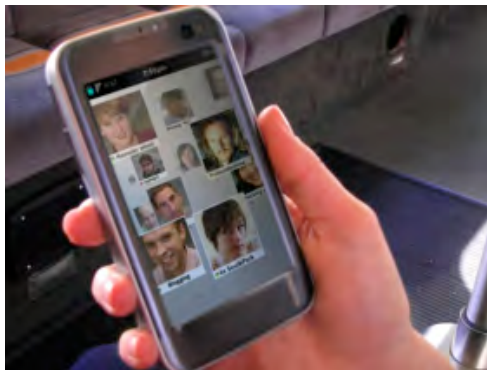
Dynamic tiles



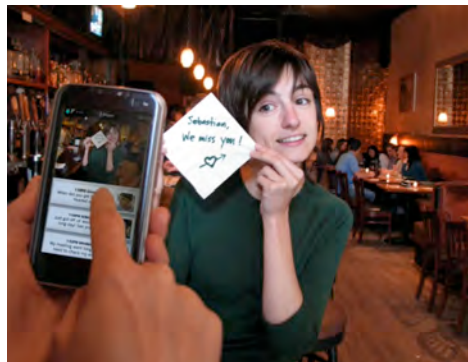
Filmstrip views of data



Content streams



People as the set point  
(shake & wake address book)



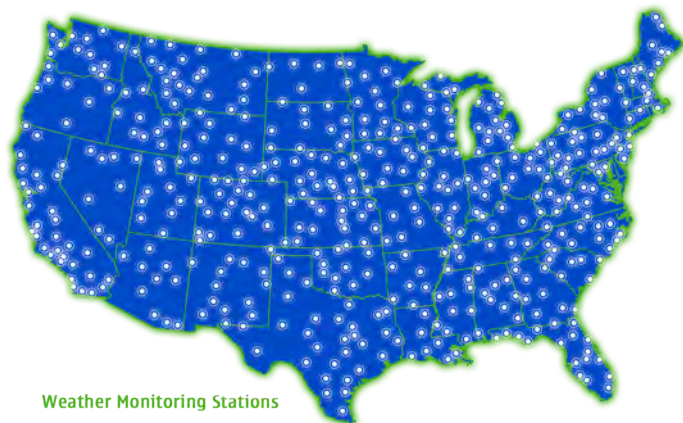
Lenses



Top-down is a valuable  
interaction model

# Wild Possibilities in a Sensor-Filled World

- Tracking of influenza outbreaks through personal health monitoring in populations
- Real-time weather monitoring across 100's of millions of users
- Citizen journalism during major events, such as when earthquakes strike
- Up to the second crowd flows in busy locations like stadiums



# Morph

## A Vision of the Deep Future

- Result of an invitation from MoMA
- Product of nanoscience work between NRC and Univ. of Cambridge, UK
- A highly personal device based upon sensors, services, customizability
  - All real work going on in our labs
- Captured the imagination of millions
  - Millions of views on YouTube
- Demonstrated the public hunger for daring visions



**NOKIA**



**NOKIA**  
Connecting People

# Nokia in North America

Mark Louison  
President  
Nokia Inc.

**NOKIA**



# Discussion Points

- North American Market Context
- Update on Nokia's NAM Focus Areas
  - Expand Portfolio
  - Invest in Key Technologies
  - Deliver Compelling Solutions
  - Create a Winning Workforce
  - Building a Leading Brand in NAM
- Summary
- Q&A



# North America Market Context

T-Mobile

fido

ROGERS

cricket  
wireless

Sprint

verizon

metroPCS  
Unlimit Yourself.

at&t

TRACFONE  
THE CELL PHONE THAT PUTS YOU IN CONTROL

# Growth Opportunities

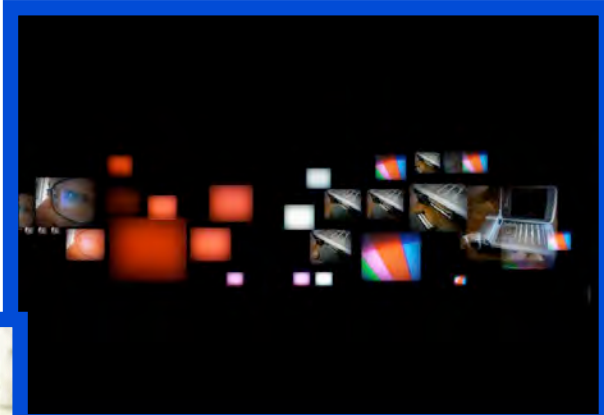
- Q3 08 Population (338 million) is 85% penetrated
- Q1-Q3 2008 YOY industry unit growth: approx 9% through Q3
  - Take market share by offering customized portfolio by operator
  - Continue to expand CDMA portfolio
  - Targeted growth tactics:
    - Realize mobile Internet vision
    - Growth in converged/qwerty messaging devices
    - Capture large share of prepaid/entry
    - Position Nokia firmly in replacement sales



# North America Focus Areas



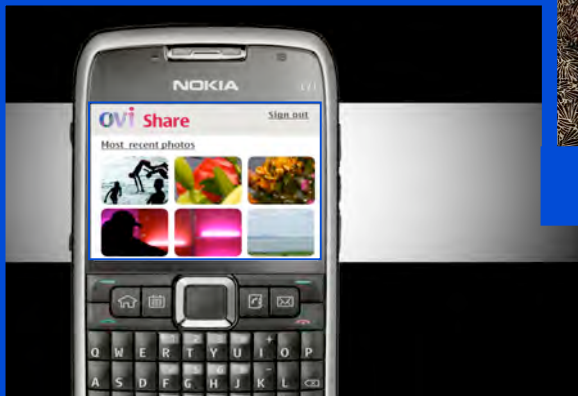
**Expand Our Portfolio**



**Invest in Key Technologies**



**Winning Workforce**



**Deliver Compelling Solutions**



**Leverage Brand Leadership**



# Expand Portfolio



# Growing US Carrier Portfolio



Nokia 2600  
(AT&T)



Nokia 6555  
(AT&T)



Nokia 6650  
(AT&T)



Nokia 6205  
(Verizon)



Nokia 6205  
Dark Knight (Verizon)



Nokia 5310  
(T-Mobile)



Nokia 6301  
(T-Mobile)



Nokia 5610  
(T-Mobile)



Nokia 6263  
(T-Mobile)



Nokia 2605  
(Verizon)



Nokia 3555  
(T-Mobile)



Nokia 2228



Nokia 1508



Nokia 1606  
(AWS)



Nokia N810  
WiMax Edition

# Growing US Retail & Online Portfolio



N96



N95 8GB



N95



N82



N81



N78



N73



N810



Nokia E51



Nokia E71



5310



6300



2760



2630



# Canada Portfolio

## Rogers



E71



N95 8GB



5310



5310



3555



6086



2680

## Fido



2760



6555



3500



3500



6301

## MVNOs



1208 Petro-Canada  
7-Eleven Cityfone



5310  
Primus

## MVNOs



1608  
7-Eleven



2760 Petro-Canada  
Cityfone Primus Videotron



3555 Petro-Canda  
Cityfone

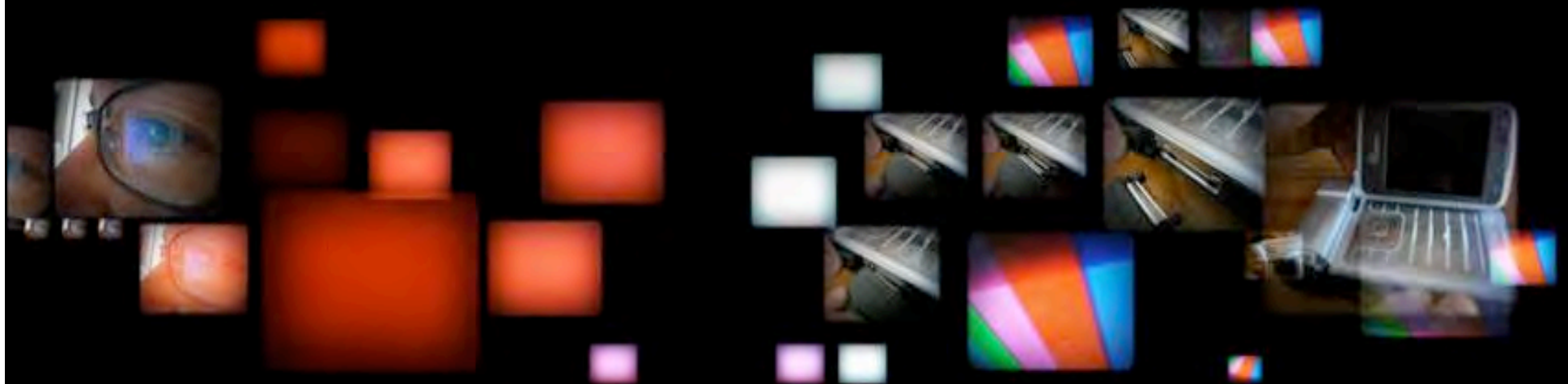


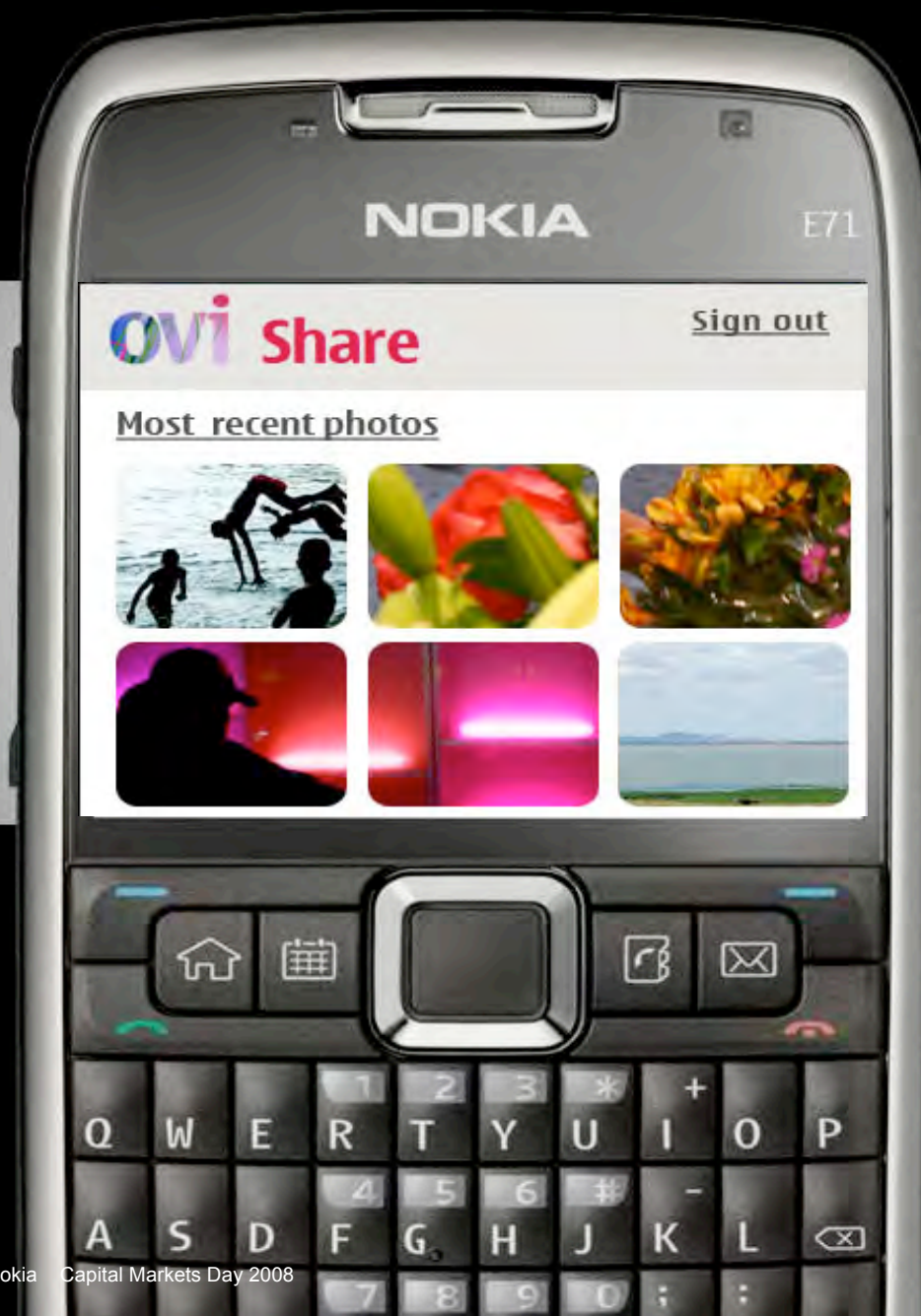
5200  
7-Eleven



2630 Videotron  
Petro-Canada

# Invest in Key Technologies





Deliver  
Compelling  
Solutions





Create a  
Winning Workforce



# Building a Leading Brand





# Early Stage Work Has Begun



**NOKIA**  
Connecting People

**From corporate litigator to party navigator.**

Shift bears between work and play with the push of a button. Set up email with ease. All in a slim, sleek, stainless steel design that looks good in any situation.

The Nokia E71. Designed for the way we live.

[nokiausa.com](http://nokiausa.com)

Available at: **Walmart**, **RadioShack**, **Best Buy**, **Micro Center**

**NOKIA**  
Connecting People

Home Find products Get support and software Explore services Find a store

You are here - Nokia Europe - Home

Site search

Designed for the way we work



Nokia Music Mixer

**Music Mixer Vinyl Competition**

Remix Booka Shade's exclusive track and win it on vinyl!

Share on Ovi

**Share on OVI**

Let others into your digital world

Nokia 5220

**Music Almighty**

Nokia 6600 fold

**Sensuous design**

Get more out of your phone

- Software Update
- Discussions
- Accessories
- Software market
- Nokia PC Suite
- Mac software

Find a model

Enter or select model name

[See complete collection](#)



**One touch GPS. 3G Smart.**

**NOKIA 6650**

Personalize. Browse. Use shortcuts. Multitask.

**Say It**

The Nokia 6650 is an all-in-one device that offers four hours of 3G talk time and combines smartphone features at an affordable price.

- Get super fast connection speeds and find directions with AT&T Navigator
- Use Video Share to stream live video while you're on a voice call, and catch up on the news and your favorite shows with Cellular Video or MobiTV
- Take pictures with the 2 megapixel camera and listen to music on the go

**Show It**

Let me show you the coolest features of the Nokia 6650:

- Use the dedicated GPS key to quickly access AT&T Navigator and take advantage of 500 capabilities such as Active Idle and multitasking
- Make a voice call and share your surroundings with Video Share
- Play music and take pictures using the cover display and volume keys

**Sell It**

Get the total package with:

- Media Max with AT&T Navigator, Cellular Video, and Video Share
- Headset with stereo Bluetooth connectivity
- 8 GB memory card

**at&t**

1. Designed to meet Bluetooth Specification 2.0 Generic Access Profile, Serial Port Profile, One-to-one networking Profile, Headset, Handsfree, Stereo, Object Exchange, Object Push, File Transfer, SPP Access, and Basic Imaging Profiles.

AT&T marks contained herein are trademarks of AT&T Intellectual Property and/or AT&T affiliated companies. © 2008 AT&T Intellectual Property. All rights reserved. W0007

**TALK OF THE TOWN**

CELLULAR BUYERS GUIDE

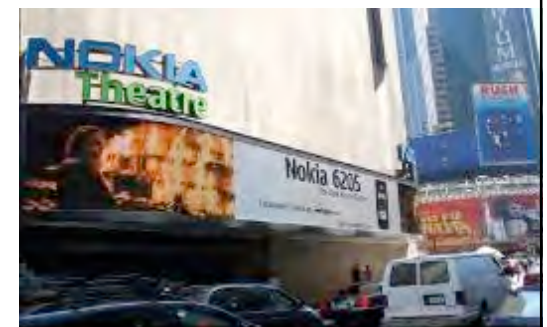
PREPAID VS CONTRACT KEY FEATURES

COOL CONTENT TO DOWNLOAD

PHONE ACCESSORIES

**BEST BUY**

[BestBuy.ca](http://BestBuy.ca)



**NOKIA**



# Summary

**NOKIA**  
Connecting People

A word cloud on a green gradient background. The words are in various sizes, colors (white, yellow, pink, and green), and orientations. The most prominent words include 'experience' in large yellow letters, 'discover' in large pink letters, 'NOKIA' in large white letters, and 'Connecting People' in white. Other visible words include 'network', 'ideas', 'future', 'progress', 'exchange', 'inspire', 'share', 'fun', 'debate', 'vision', 'explore', 'exchange', 'relevant', 'real', 'experience', 'learn', 'possibilities', 'opinions', 'connect', 'friendships', 'expertise', and 'debate'.

friendships  
debate  
network  
expertise  
connect  
NOKIA  
Connecting People  
ideas  
invent  
possibilities  
future  
vision  
explore  
exchange  
inspire  
share  
fun  
debate  
vision  
explore  
exchange  
relevant  
real  
experience  
learn  
progress  
exchange  
future  
opinions

# Regional Mobile Device Update

## India Africa China

Colin Giles  
Senior Vice President  
Distribution East

**NOKIA**

ideas invent possibilities  
experience  
future vision  
discover  
progress  
learn  
exchange  
inspire  
share  
relevant  
real  
debate  
fun  
opinions  
futu

A close-up photograph of a man with dark hair and a light beard, looking out of a car window. The window has some condensation or rain droplets on it. The background is blurred, showing what appears to be a city street.

# India

**NOKIA**



# Nokia is the **largest Multinational in India**



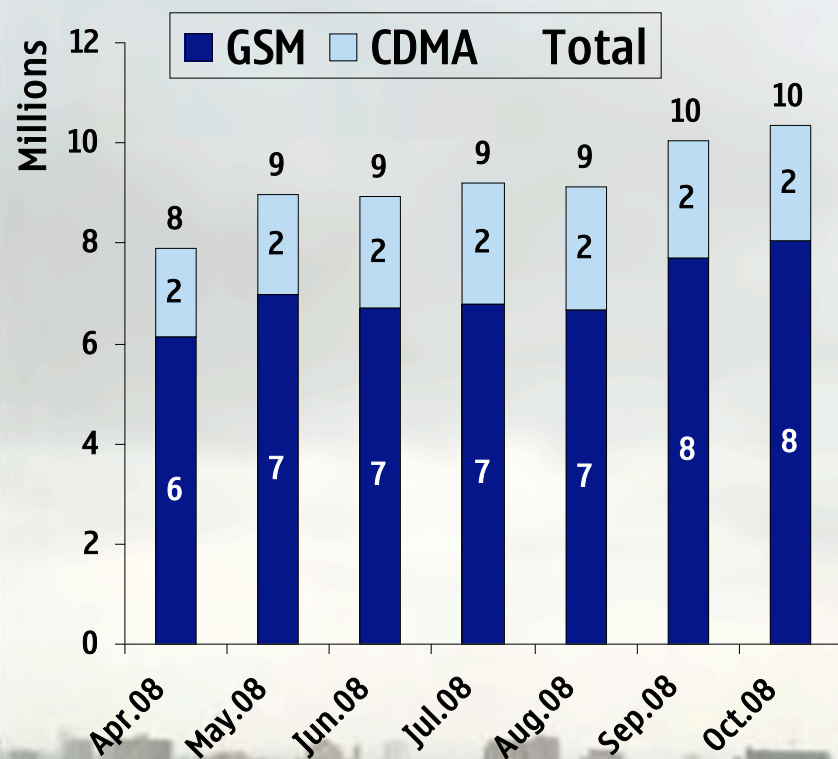
- Investing in and growing the market
- Taking mobility to the masses
- Providing Universal Access
- Generating employment
- Manufacturing – Nokia SEZ (Special Economic Zone)
- Infrastructure – Nokia Siemens Networks
- R&D
- Branded retail – Nokia priority dealers
- Mobile devices, enhancements & services

**NOKIA**

# Indian Telecom Market

6 national operators (4 in GSM and 2 in CDMA)

## Monthly Subscriber Additions



\* Based on National Council of Applied Economic Research (NCAER), Govt of India definition of middle class etc. Numbers refer to household incomes per month

Income Level	Income per month*	Subscriber base
Lower income	Up to USD 350	138 mn
Middle income	USD 350 – 1735	141 mn
Upper income	Above USD 1735	21 mn
Total		300 mn

NOKIA



# Trends in Telecom Industry

- Rural is likely to account for over 50% of new subscribers
- Services still nascent but picking up
- 3G Roll-out
- Increasing competition in the operator space
- Declining Device ASPs



***Estimated 500  
million mobile  
subscribers in India  
by 2010***

Source: Nokia

**NOKIA**



# Nokia India: Strong position

- Nokia is India's most trusted brand
- Nokia's brand preference continues to be strong at 77%
- Largest distribution network amongst device vendors – 162 000 retailers nation wide
- Pioneering India specific services business models

Sources: Economic Times, Nokia

**NOKIA**

# Africa

**NOKIA**



# Region with many faces



Developed markets



Nokia has  
Unrivalled  
distribution



## Linguistic diversity

- More than 1 000 languages

New African consumers

Emerging markets



## Ethnic diversity

- More than 1 000 ethnic groups



## Economic Diversity

- GDP per capita (purchasing power parity) varies between USD 470 and USD 12 000

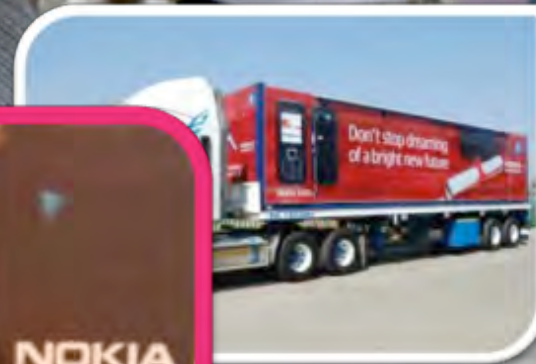
Source: IMF, World Bank, CIA Fact Book, Nokia

284 © 2008 Nokia Capital Markets Day 2008

NOKIA



# **“My First Nokia”** roadshow reaching the masses



The consumer is hungry for information as demonstrated by the amazing response that took all of us by surprise yesterday.

Just how magical can it get?

**NOKIA**

# Significant **growth expected**

- Mobile often the only choice of telephony
- Mobile likely to be first internet experience
- Penetration relatively low (~18%)
- Replacement market emerging
- Socio-economic benefits of mobile technology
- Mobile to become the banking platform for the 'unbanked'

Source: Nokia

**NOKIA**



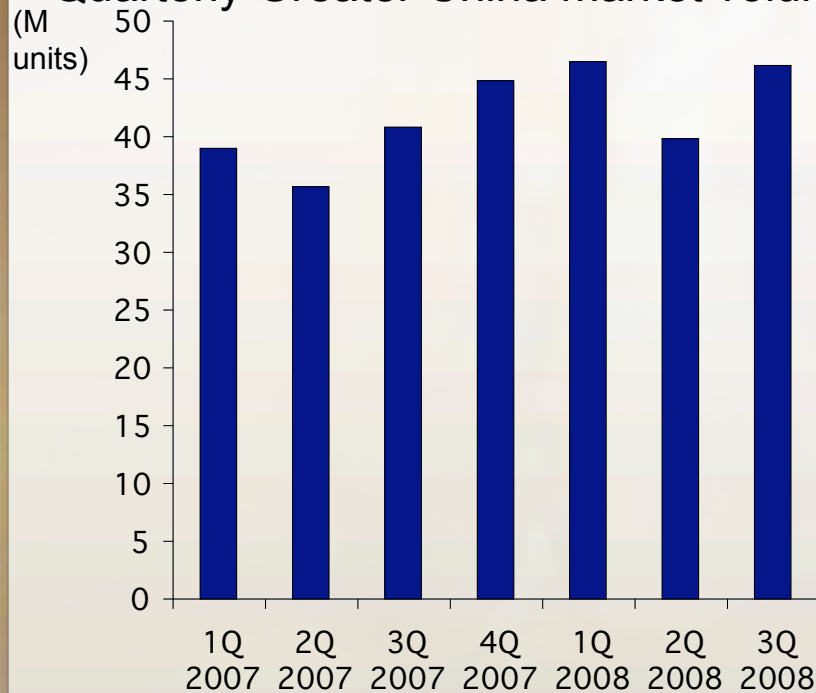




# Mobile device market growth in 1Q-3Q 2008

## strong in China

Quarterly Greater China market volume



1H07 – 1H08

+16%

3Q07 – 3Q08

+13%

- Most populous nation in the world 1.36 billion inhabitants (2008)
- Mobile penetration 48% (Q3 2008)
- World's largest mobile phone market 172 million devices (2007)
- Most internet users in the world 253 million users in June 2008
- Largest multimedia market in the world – largest market for Nokia N-Series devices

Source: Nokia

**NOKIA**

# A Strong Footprint in China

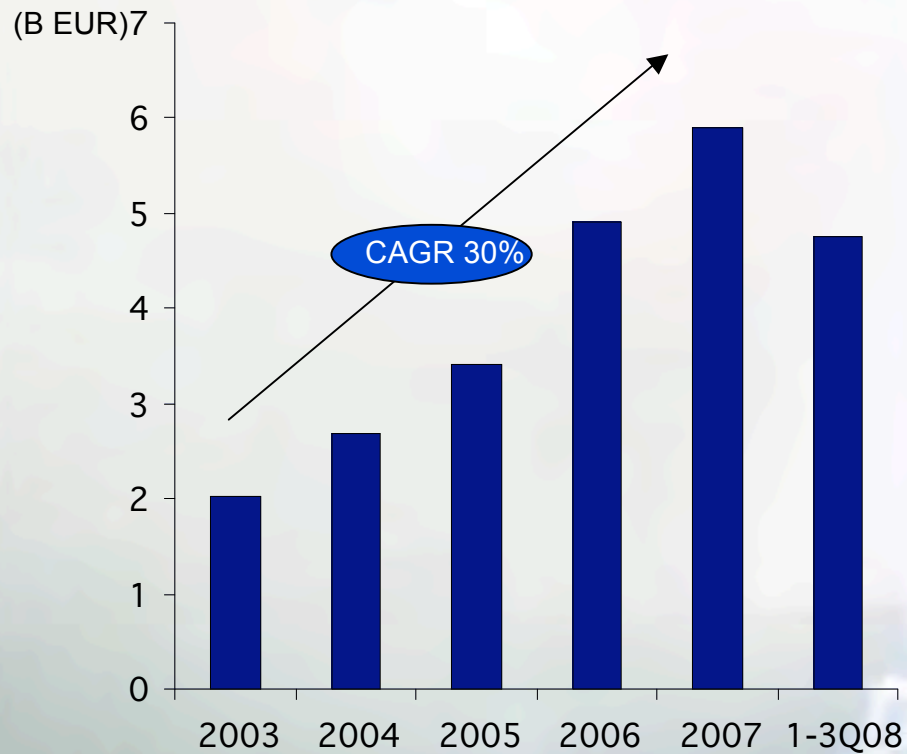
- 2 Manufacturing Sites
  - 10 R&D Sites
  - 12 000 Employees
  - Nokia's largest market with 13% of Global Sales Volume
- One of the biggest Foreign Invested Companies in China
  - Leader in Corporate Responsibility and Environmental initiatives



**NOKIA**

# Nokia with strong sales growth in China

Nokia sales in China 2003 – 3Q08



Source: Nokia

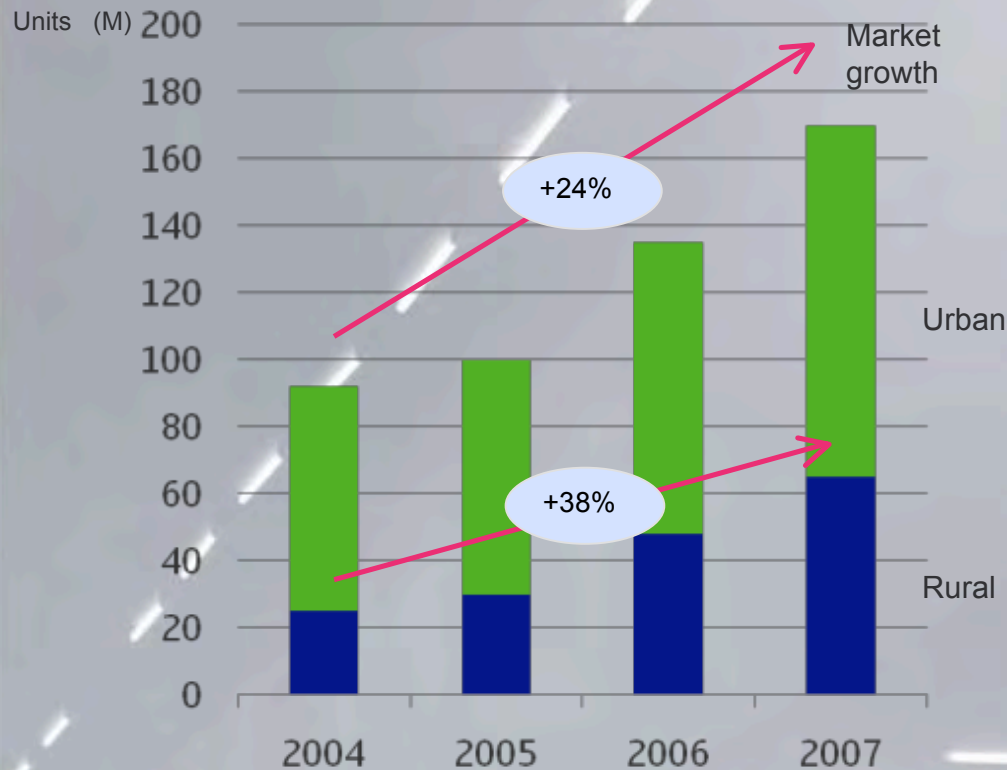
- Nokia had 16% volume growth YoY 1Q-3Q08
- Growth driven by strong market growth and maintained leading market share
- Nokia has built undisputed lead in Chinese market with strong coverage across all price bands

**NOKIA**



# Nokia remains committed to capturing rural growth in China

Rural vs. Urban market volume (CAGR)



- Rural market growing significantly faster than total market
- Rural market penetration in 2007 22% vs. 62% in urban – still significant potential remains
- Nokia committed to driving sustainable sales in rural areas

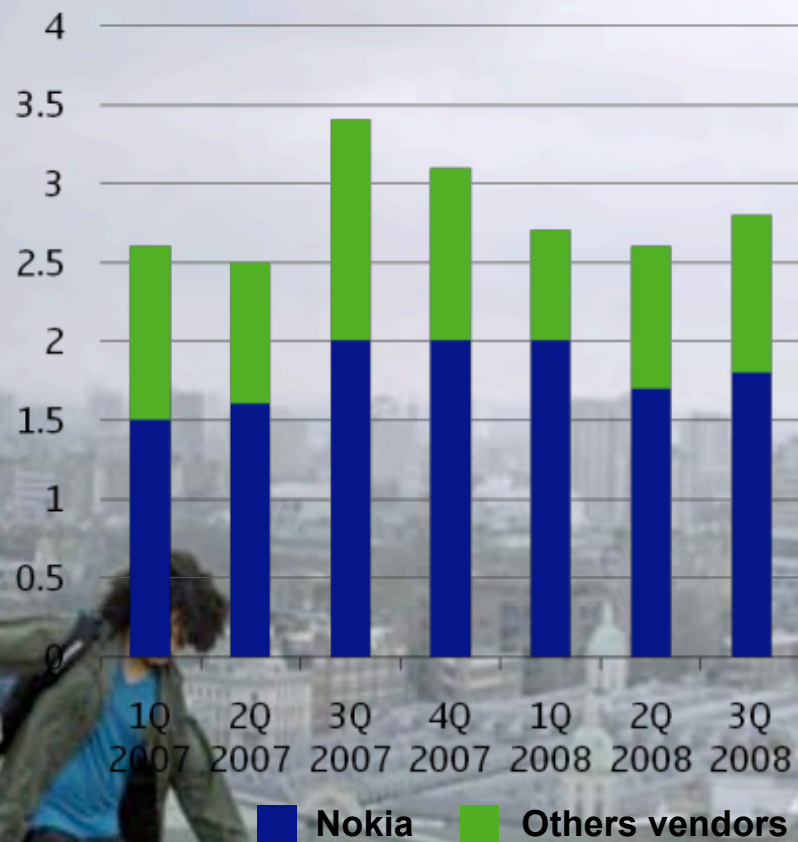
Source: Sino-MR, CCID, BDA survey and interviews

**NOKIA**

# Nokia the leader in smartphone sales in China

Estimated Quarterly Smartphone sales and Nokia share

(M units)

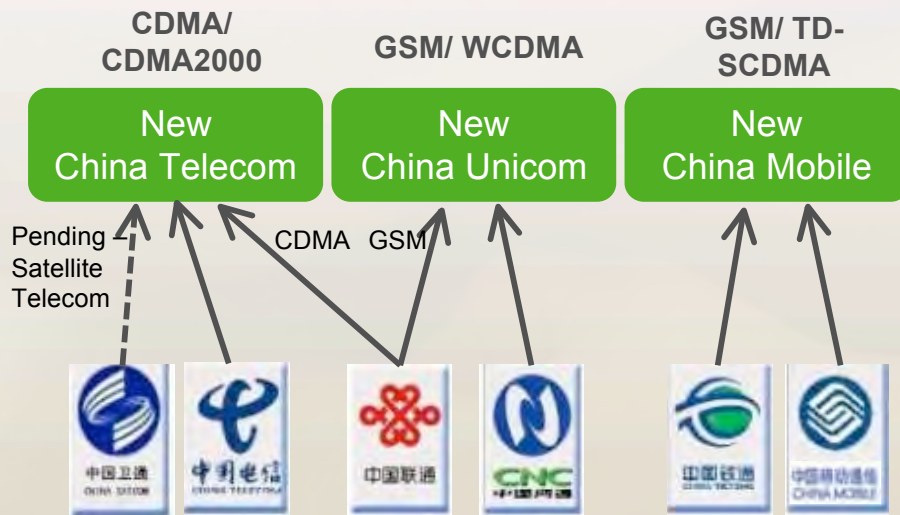


Source: Canalys

- Nokia the leader in smartphone segment in China
  - Nokia's average market share over last 7 quarters was 65%
  - Currently China is the largest market for Nokia N-Series devices in the world
- Nokia is poised to take advantage of service opportunity through large base of advanced devices

# Operator restructuring will have **positive effects** for **Chinese consumers** and the mobile industry

Three strong mobile operators emerging in China



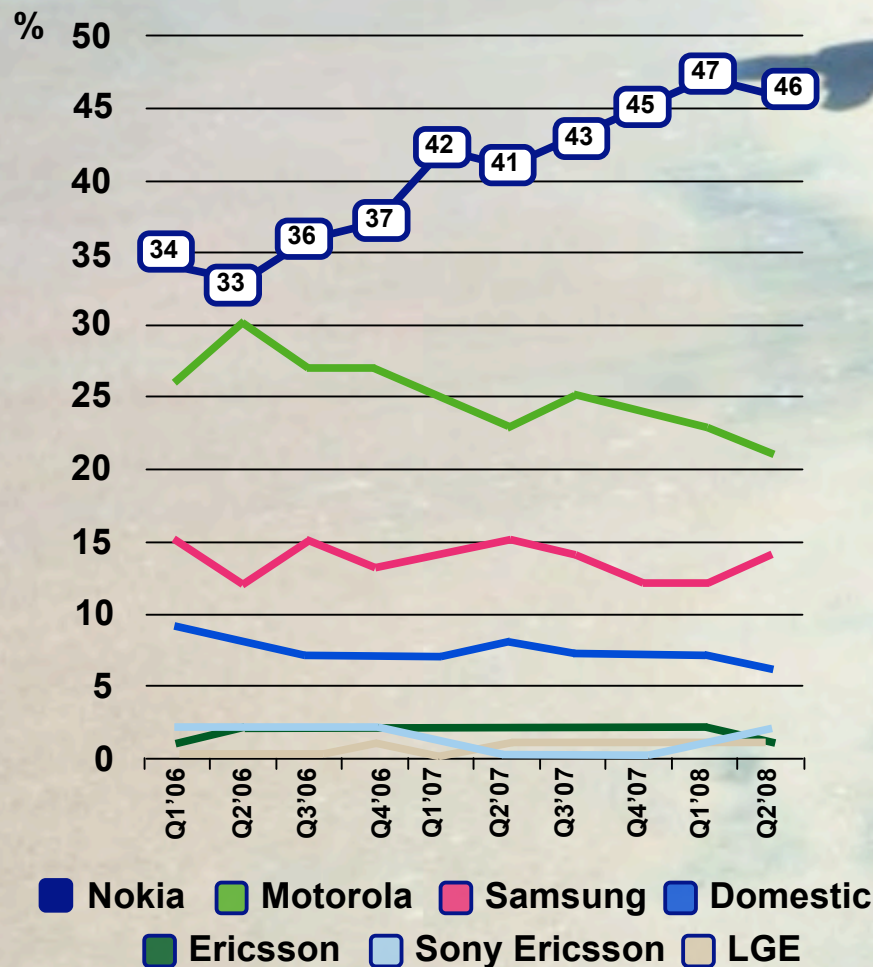
- Increased competition and value to Chinese consumers
- Effective roll out of 3G
- Drive opportunities to jointly develop service opportunities in the marketplace with operators
- Nokia will continue to develop our strategic relationships with all Chinese operators in the future

**NOKIA**



# Nokia's leadership in Distribution and Brand

Nokia brand preference among Chinese consumers



- Nokia leading in brand and distribution
  - Nokia brand preference (46%) over double that of competitors
  - Leading vendor retail network of 130 Nokia branded retail stores and 2 flagship stores
  - Leading resources of sales reps and promoters
    - Over 1 300 permanent sales reps
    - Over 4 000 permanent promoters ramping up to 20 000 in peak seasons

**NOKIA**



# Conclusions

**NOKIA**



# Opportunity for Growth Still Continues

	Population, millions	Urbanization	Mobile Penetration
Africa	758	35%	31%
India	1110	28%	22%
China	1361	45%	48%

- Connecting the next Billion...
- Distribution Development builds barriers
- Nokia Life-Tools adds extra value
- Constantly rejuvenating the portfolio with more features and lower prices points

**NOKIA**



Thank You.

NOKIA

A word cloud on a green gradient background. The words are in various sizes, colors (white, yellow, pink, and green), and orientations. The most prominent words include 'experience' in large yellow letters, 'discover' in large pink letters, 'future' in large white letters, and 'share' in large green letters. Other visible words include 'ideas', 'network', 'connect', 'exchange', 'inspire', 'progress', 'learn', 'fun', 'debate', 'vision', 'explore', 'relevant', 'real', 'experience', 'opinions', 'possibilities', 'invent', 'friendships', 'debate', 'expertise', and 'connect'.

# NAVTEQ Overview

Judson Green  
President & CEO, NAVTEQ

**NOKIA**



# Global Leadership in Digital Mapping

## In-Dash Vehicle



- Virtually every car manufacturer and system vendor in Europe and North America uses NAVTEQ in one or more of its products
- Nearly 20 million in-dash systems in EU and NA have been enabled with NAVTEQ maps since 1999
- First advanced driver assistance systems use NAVTEQ maps

## Internet & LBS



- Tens of billions of mapping transactions annually using NAVTEQ maps
- Internet focus rapidly evolving to local search services
- NAVTEQ maps enable all Verizon Wireless LBS in the U.S.

## Mobile Devices



- Significant share of European portable navigation business and leading map data supplier in North America
- Nearly 50 million Portable Navigation Devices (PND) and smartphones in EU and NA have been enabled with NAVTEQ maps since 2001

## Enterprise

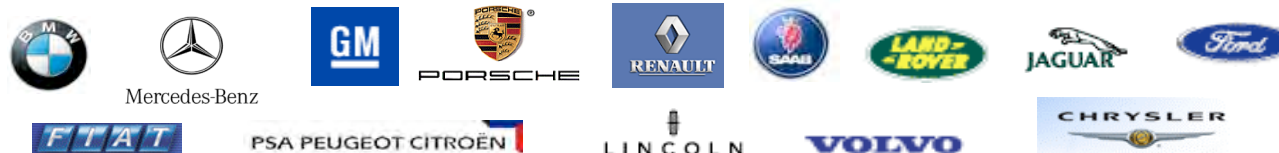


- Leading parcel and overnight delivery companies
- Federal agencies, including GIA and FEMA
- Enterprise software solutions using geospatial data, including Oracle and ESRI



# Strong Customer Relationships

## Automotive OEMs



## System Vendors



## Telematics



## Internet & LBS



## Mobile Devices



## Enterprise


**NOKIA**

# Three Principal Products



- Road network data with rich attribution required for navigation applications



- Real-time, historical and predictive data products and services that bring traffic information to navigation experiences

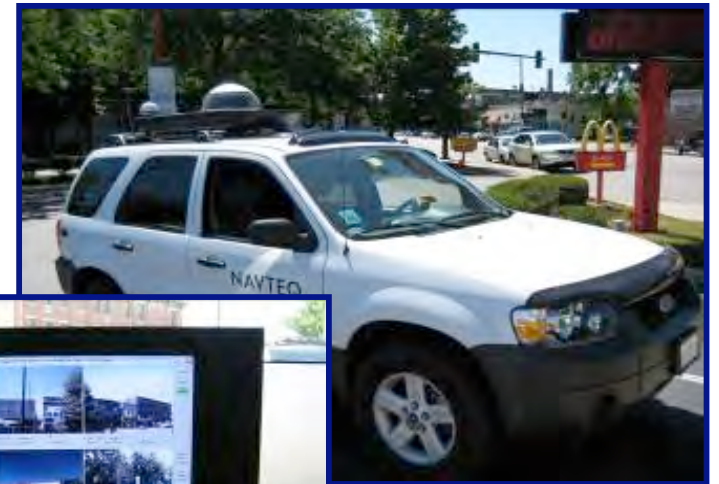


- Rich information about places on the map, including:
  - Points of Interest
  - Pedestrian content
  - Venue-specific maps & content
  - Dynamic content e.g., fuel prices, event info, and parking availability

Product Superiority = Accuracy + Richness + Breadth

# Field Driven Data Capture & Verification

- More than 1 000 geographic analysts in more than 180 offices around the world
  - Drive millions of miles annually
  - Collect more than 260 attributes per road segment
  - Use patented tools, technology and proprietary processes, as well as multi-view camera systems
  - Capture and verify road network and location-based content – exactly as a driver or consumer would experience it





# Superior Detail and Richness

## Turn Restrictions



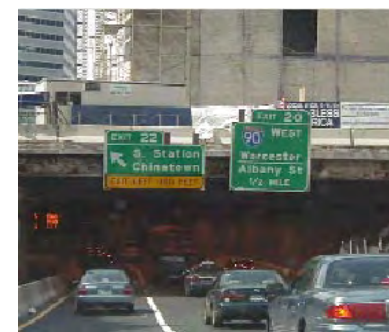
## One-Ways



## Access Restrictions



## Underground Exits



## Physical Barriers



## Complex Maneuvers



## Speed Limits



## Points of Interest (POIs)



# Extensive Geographic Coverage

- NAVTEQ Map coverage:  
74 countries & territories
- Intermediate & Entry  
Map coverage:  
147 countries & territories



Note: Navigable China maps available through NAVTEQ's joint venture, NAV2.



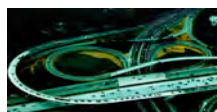
# Innovative New Content and Features

## Navigable Content

HOV Lanes



Extended Lane



Speed Limits



Toll Guidance



Scenic Routes



Speed Zones



## Display Content

Satellite Imagery



Junction Views



3-D Landmarks



Digital Terrain



2D Building Foot Prints



3D City Models



## Enabling Content

Precise Road Geometry



Lane Curvature



Road Slope



## Pedestrian Content

Neighborhood Boundaries



Pedestrian Paths



Mass Transit Lines



Travel Guides



## Informational Content

Points of Interest



Attribute Flags



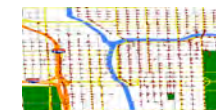
Real Time Traffic



Trucking



Telecommunications



Voice Phonemes

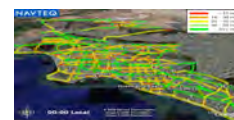


## Traffic & Dynamic Content

NAVTEQ Traffic™ Real Time



NAVTEQ Traffic Flow Patterns



Fuel Prices



- Event listings
- Movie times
- Parking



# Industry Trends

## Automotive

- Car sales declining
- Mix shifting to lower priced models
- Penetration continuing to increase
- Low-cost in-dash navigation becoming available
- Advanced Driver Assistance Systems representing a longer-term opportunity

## Wireless

- Smartphone business becoming more significant
- Wireless operators increasing focus on mobile applications
- Internet portals focusing on mobile LBS opportunity

## Portable Navigation Device

- Volume growth moderating
- Lower ASPs dampening revenue growth

## General

- Customers demanding new content to differentiate
- Focus increasing on advertising-driven models

## Acquisition Update

- Transaction closed July 10, 2008
- NAVTEQ operated as an independent unit
- New governance procedures and Board of Directors established
- Operating synergies realized

# NAVTEQ's Role In Support of Nokia

## Content

- Principal source of:
  - digital maps and POIs
  - pedestrian maps, local content & transit information
  - traffic information & other dynamic content
  - visual content

## Technology

- Location services server platform components
- Location content referencing system
- Location-based advertising fulfillment engine
- Map sensor data processing



# Examples of Nokia/NAVTEQ Collaboration

**Map sensor data**



**Community input**



**Content & coverage  
roadmaps**



## NAVTEQ's Future Direction

- Development of innovative new content & capabilities
- Rapid expansion to new geographies
- Focus on high quality products and services
- Essential services & support for all customers

Thank you.

**NOKIA**  
Connecting People

A word cloud on a green gradient background. The words are in various sizes, colors (white, yellow, pink, and green), and orientations. The most prominent words include 'experience' in large yellow letters, 'discover' in large pink letters, 'future' in large white letters, and 'share' in large green letters. Other visible words include 'network', 'ideas', 'progress', 'exchange', 'inspire', 'connect', 'fun', 'learn', 'debate', 'vision', 'explore', 'exchange', 'relevant', 'real', 'experience', 'opinions', 'possibilities', 'invent', 'friendships', 'connect', 'expertise', 'debate', and 'share'.



# Nokia Siemens Networks Competing in a challenging business environment

**Mika Vehviläinen**  
**Chief Operating Officer**

# In a nutshell

- Walking the talk
- Service providers' challenges – our approach
- Transforming development
- Customer experience & network efficiency
- Good green business sense
- Strong portfolio and market-leading innovations

# Walking the talk

- Software sales have been developing well
- Good progress in solutions
- Portfolio strengthening
- Increasing R&D efficiency continued



“We are extremely pleased with Nokia Siemens Networks...as our preferred partner in creating the largest and most advanced networks in the world.”

Dr. Marwan Al-Ahmadi,  
CEO, Zain Saudi Arabia

Source: Nokia Siemens Networks



# Service providers' challenges – our **opportunities**

Enriching customer  
experience



Improve efficiency  
and quality



**Changing  
business  
environment**

Extreme traffic  
growth



Making a net  
positive impact



# Our approach in realizing opportunities

- Transforming development
- Differentiating in focus areas
- Ensuring good green business sense
- Offering a strong portfolio and market-leading innovations



# Transforming development

From the traditional way...



- Waterfall model
- “One size fits all”
- Specific design
- High cost development
- Local infrastructure

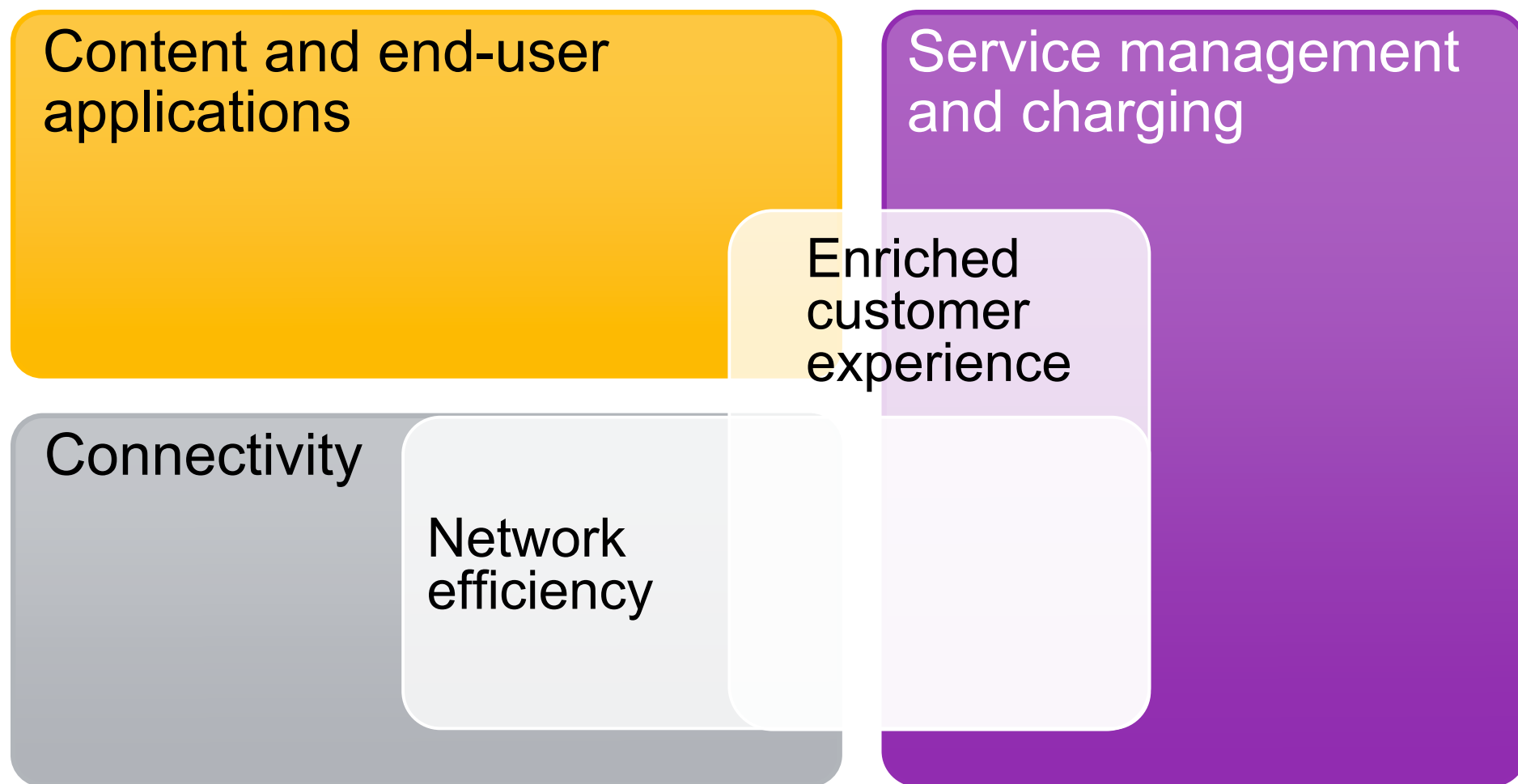
...to the new way



- Agile model
- Customer value focused
- Asset reuse
- Global resource balancing
- Shared infrastructure



# Build for **leadership** in network efficiency and enriched customer experience



# Network efficiency solutions to provide connectivity at lowest cost

## Our offering to service providers

- Network simplification & automation
- Modernization
- Energy efficiency

## We differentiate through

- Clear leadership in energy efficiency
- Driving role in network simplification
- Track record in bringing costs down



“...Nokia Siemens Networks offered exactly what we need to overcome the bottleneck in our data network.”

Rico Chemnitz, Head of  
Core Network, 3 Austria

Source: Nokia Siemens Networks

# Enriching customer experience for increased (life-time) value

Through customer insights and experience management

- Subscriber Data Management
- Next Gen Service Assurance & OSS
- Unified charging

We differentiate through

- Unique knowledge of experience drivers
- Compelling portfolio and know-how
- Excelling in solution delivery



“With Traffica, we solve  
98% of the problems during  
the 1st call.”

Vesa Suomalainen, Head  
of the Customer Care  
department, Elisa

Source: Nokia Siemens Networks



# Making a net positive impact to the business and environment

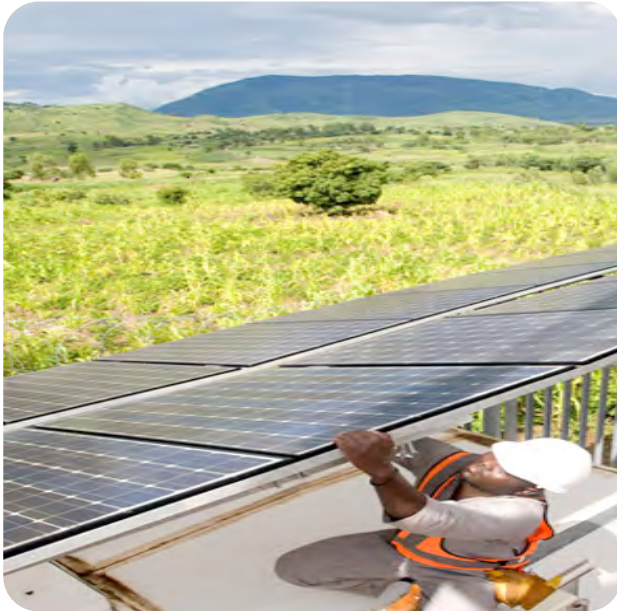
ICT can help to save  
nearly €600 billion  
in 2020, i.e.  
7.8 billion tons CO2

Source: GeSI

Reducing power  
consumption by up  
to 70%

Over 90% of Flexi  
BTS recyclable

Use of renewable  
energy sources



**GeSI**  
GLOBAL e-SUSTAINABILITY  
INITIATIVE



**climate  
savers**  
smart computing



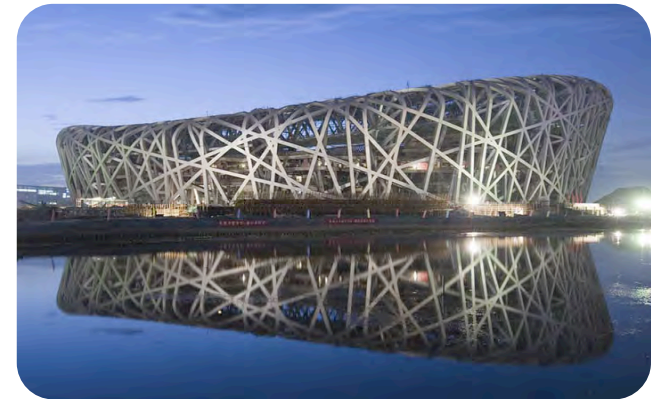
and  
more

Nokia Siemens  
Networks



# Strong portfolio and **market-leading** innovations

- Largest WCDMA/HSPA footprint worldwide
- Converged Core has shown strong growth
- Next Gen Service Assurance broke the 100 customers mark
- Driving optical innovation



“... 250,000 people around the Bird's Nest at the opening ceremony, there was not a single problem with the NSN network.”

General Manager, Beijing Mobile Communication Corporation

Source: Nokia Siemens Networks

# Way forward

Show thought leadership

Become a solutioneer

Excel in R&D productivity

Living up to our green ambitions



Thank you

# Nokia Siemens Networks

## Leading transformation partner for Communications Service Providers

**Rajeev Suri**  
**Head of Services**



Achievement  
&  
opportunities

Our approach

Way forward



# Services growth momentum in place

## 2008: A strong year\*

- Revenue growth
- Improving profitability
- Sustained market share

\*cumulative up to Q3.08

### North America

- Outsourcing for Embarq
- Remote BSC software upgrade for US service provider from GNSC, Chennai, India

### Latin America

- 3G at TIM Brasil
- 24h network planning for LAT operator through remote delivery

### West-South Europe

- Leading-edge wireless railway communications in Spain
- Consultancy and hosting at Blyk
- Service improvement at O2 Czech
- Hosted MVNO, Conad Italy

### MEA

- \$150m turnkey and network operations for Zain, Saudi-Arabia
- Remote radio frequency optimization for a service provider in Iran
- World's first commercial mobile-TV based on DVB-H for Qatar

### North East

- Customer Care support, Elisa Finland
- 3G arrives in Uzbekistan with NSN Services

### Greater China

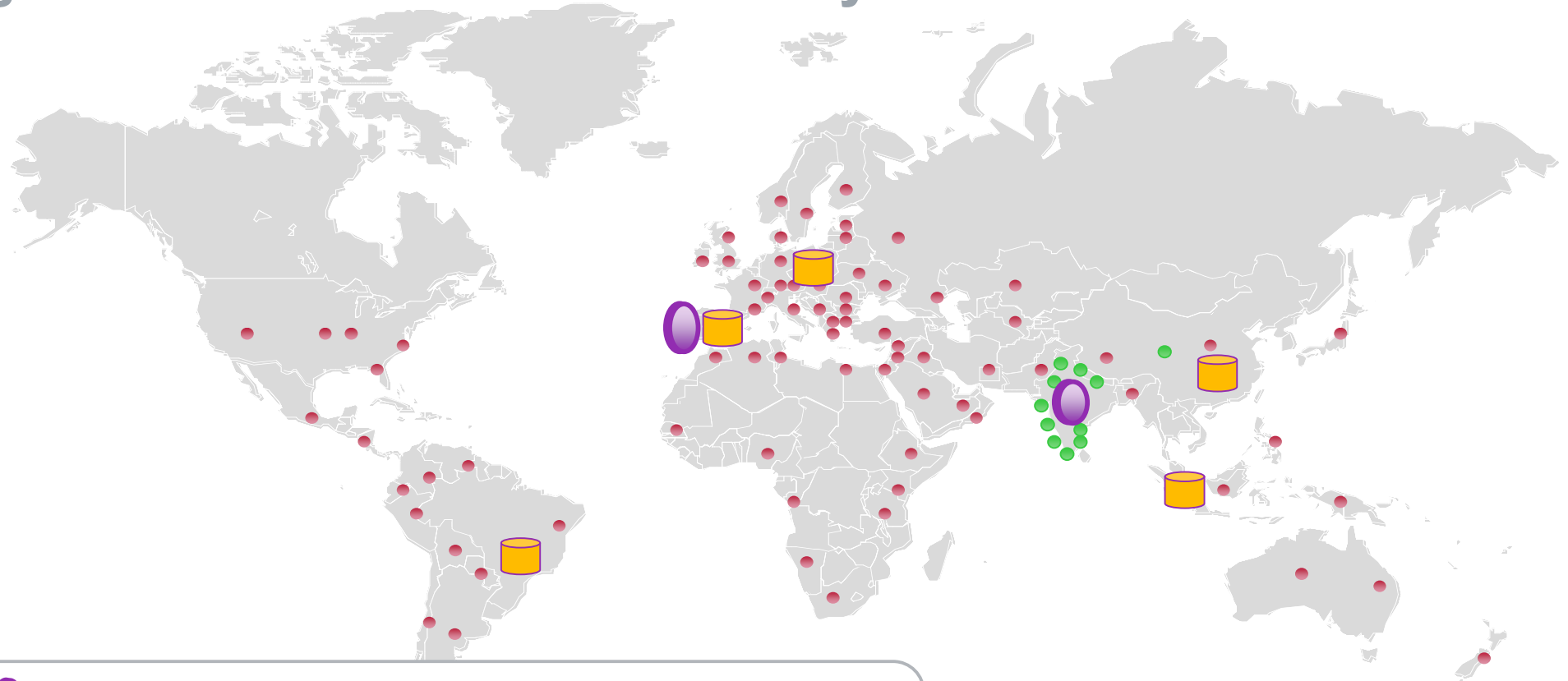
- Improving China Mobile's end-user experience
- Optimization at China Guangdong Mobile
- Network security entry in China





### APAC

- Turnkey contract with Hutchison Indonesia
- Managed Services activity in India
- DVB-H for Global Mediacom, Indonesia
- Location based services deployed at Telkomsel

Nokia Siemens  
Networks

# Service performance - right balance of local proximity, global scale and cost efficiency



-  **Global Network Solution Center (GNSC) – Integrated Managed Service**
-  **Global Care Center (GCC)**
-  **CSI Service Delivery Centers (SDC)**
-  **Local project organization**  
- Project specific activities and customer interface

# Success in operational improvement

- Transformation through global delivery strategy
- Efficiency gain programs
  - Supplier management
  - Utilization improvement
  - Standardization and automation

Deal discipline,  
focus on margin and  
eye on cash  
generation





# Our assets to address the opportunities



Our  
installed  
base

Portfolio in  
the growth  
segments


Global  
delivery  
model

Solution  
capabilities

Innovation

> 20,000 service professionals across 150 countries\*

\* as of Q3.08



Achievement  
&  
opportunities

Our approach

Way forward

# Service provider challenges – our opportunities

Enriching customer experience



Improve efficiency and quality



Extreme traffic growth



New business environment –  
cash, cost,  
simplicity

Access to  
competence and  
expertise

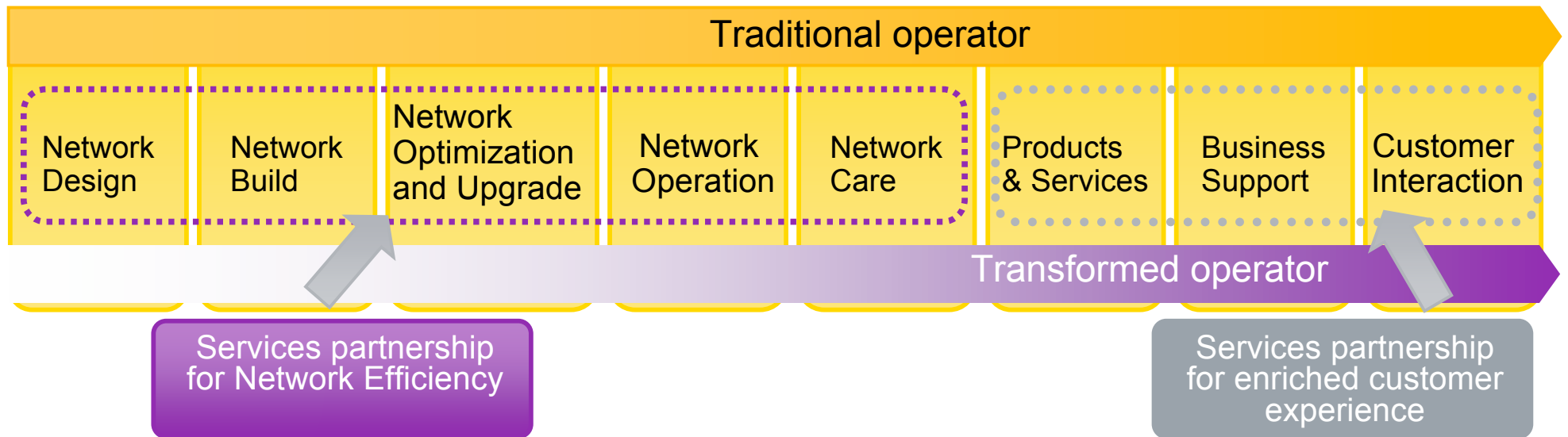


Nokia Siemens  
Networks





# Driving network efficiency & enriched customer experience



## Nokia Siemens Networks Proposition

Global Service Delivery Model

Processes and Automation

Service Offerings

Nokia Siemens Networks

# Transformation requires Solutions

## Customer focus

Industrialized procurement  
RFQs and E-auctions  
Offers easily compared  
Prices easily compared  
Global / Corporate  
decisions

Consultative  
co-development  
Market specific solutions  
Prices hard to compare  
Local / OpCo decisions

“The solution and services from Nokia Siemens Networks mean that we are able to focus fully on promoting new, value-added services to our customers.”

Jan Blom, Director of  
Business Market and  
Sales, 3 Sweden

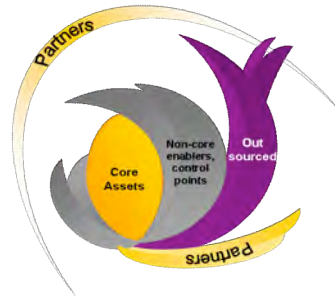
Source: Nokia Siemens Networks

## Network infrastructure focus

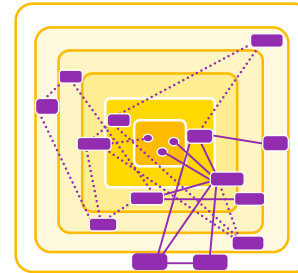
# The NSN way of providing solutions



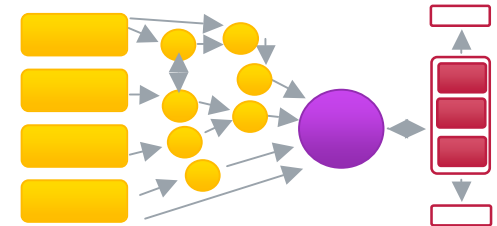
Defining a core strategy



Identifying/optimizing the use of strategic resources



Implementing an optimal value network



Achieving intimacy in the customer interface

Consulting Service – Business, Processes

End-user applications

Service Management

Customised solutions for service delivery

Integrated Provisioning Solution

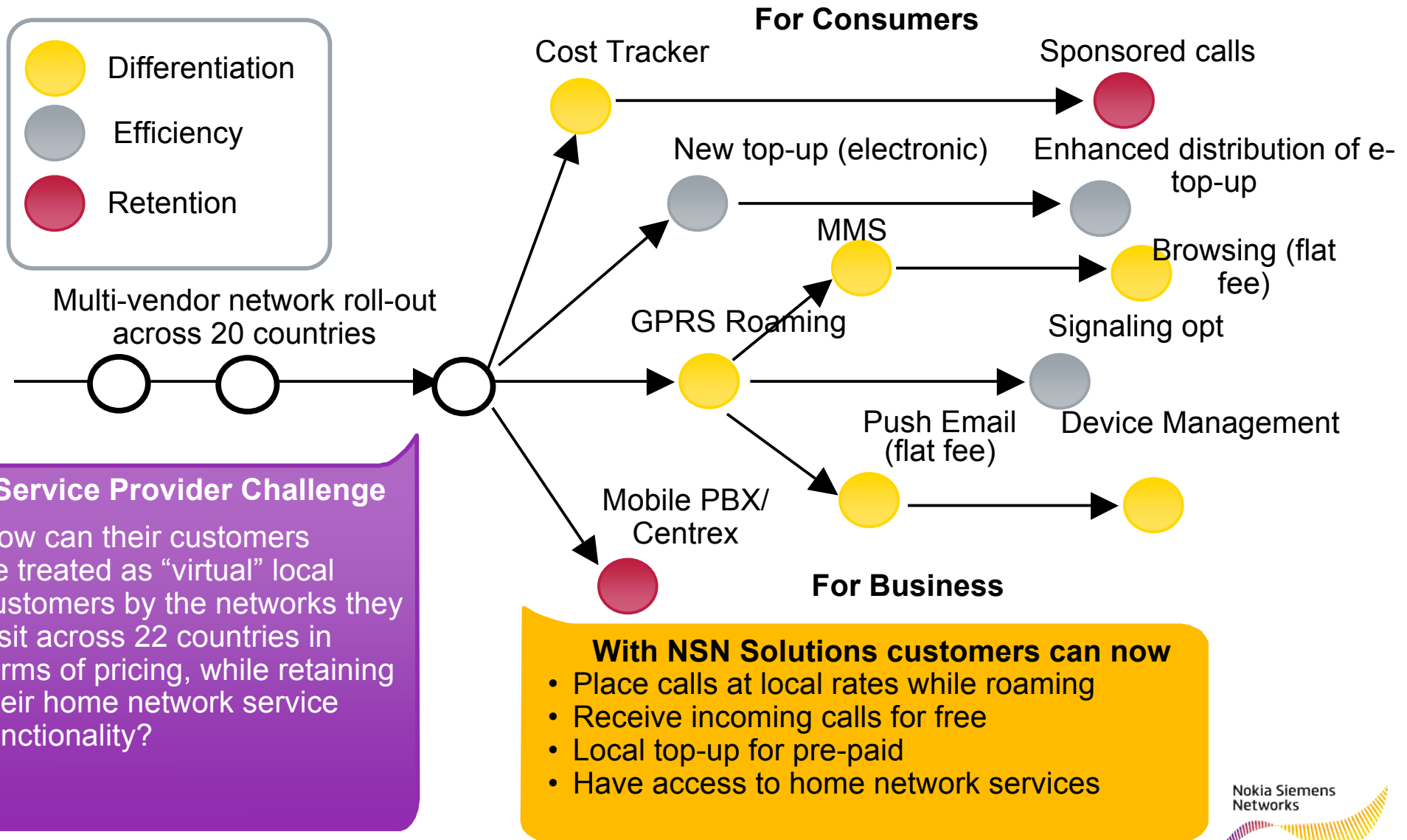
Convergent Charging and Care


Outsourcing and Hosted Services

Differentiate by monitoring, analyzing, managing, charging and bundling services in real time



# Solution example from a service provider from network efficiency to enriched customer experience





Achievement  
&  
opportunities

Our approach

Way forward

# Excellence in operational efficiency

Creating value for the company

## Global Service Delivery Model

### Shared delivery concept



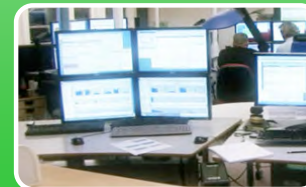
## Processes and automation

### Processes

- Functional Org. Model
- Process FW



### Standardization & automation





# Future-proof innovations

Creating value for customers

## Innovation in

Business model

Solution

Process



## Aim

Innovation leadership

Business transformation

Profitability

ACME  
partnership for  
improving  
networks'  
environmental  
performance

Innovative site  
designs  
(Aluminum feeder  
cables, Lattice  
Tubular Towers)

Prosper Platform  
– innovation in care  
delivery processes;  
  
enhancing network  
quality  
& efficiency

Nokia Siemens  
Networks



# Our priorities going forward

Continue focus on improving profitability & market share

Enhance solution capabilities

Efficiency in global delivery

Continue embracing innovation

Thank you