Nokia Capital Markets Day 2009

Olli-Pekka Kallasvuo
CEO

Nokia Capital Markets Day 09
Nokia Connecting People
Espoo December 2nd

Strategic Assets

- Brand
- IPR
- Local go-to-market
- Supply-chain and manufacturing
- Scale and global reach
- Software assets

NOKIA

Mobile device market: Up ~10% in 2010

Focus areas

User experience
Product line-up
Software
Building the ecosystem
Nokia Siemens Networks

NOKIA

Nokia Siemens Networks

Devices & Services OPEX run-rate* reduced by ~1 billion euros in 2009

* Non-IFRS

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Improving execution and performance

Adding value through software and services

Devices & Services

Mobile Phones
Smartphones
Mobile Computers

NOKIA

Smartphones: New markets and lower price points

Nokia N97

Nokia X6

Nokia E72

Nokia 5230

Nokia N97 mini

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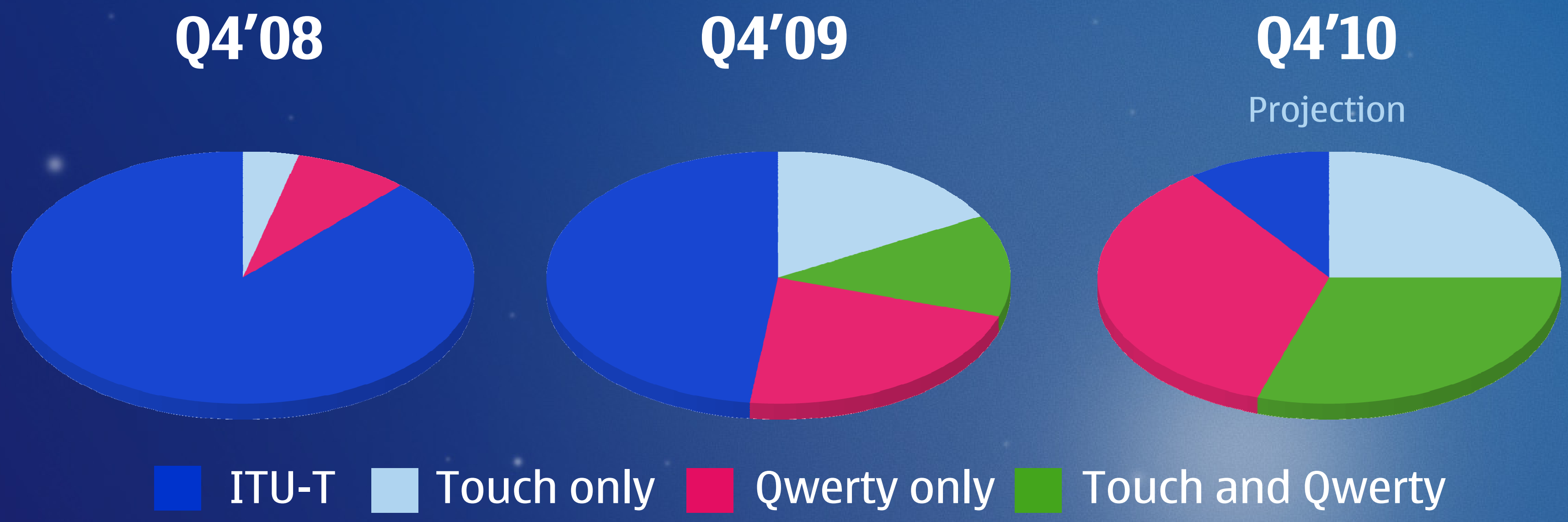
Nokia smartphone portfolio mix

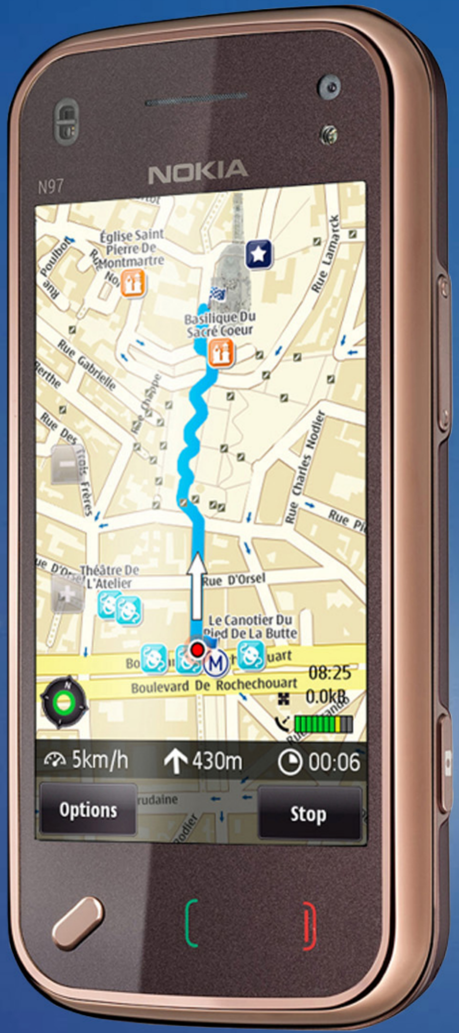


Source: Nokia, number of devices

Lifecasting with Ovi


facebook
Home
Profile
Friends
Inbox
17°C | 8 m/s
Nokia Head Office
Keilalahdentie 2, Espoo, FIN
See what is nearby in Ovi maps
Otsolahti
Itäranta
Nokia Office
101
Keilalahdentie
Keilalahdentie
Länsiväylä
Länsiväylä
51
51
See helpful details on this location
Navigate to this location
See what is nearby
Define this location a favourite
2008 Navteq, 2008 Nav2
Open Ovi Maps
Copy Link to this location

100 cities
50 languages



~4 million customers

60 operators globally

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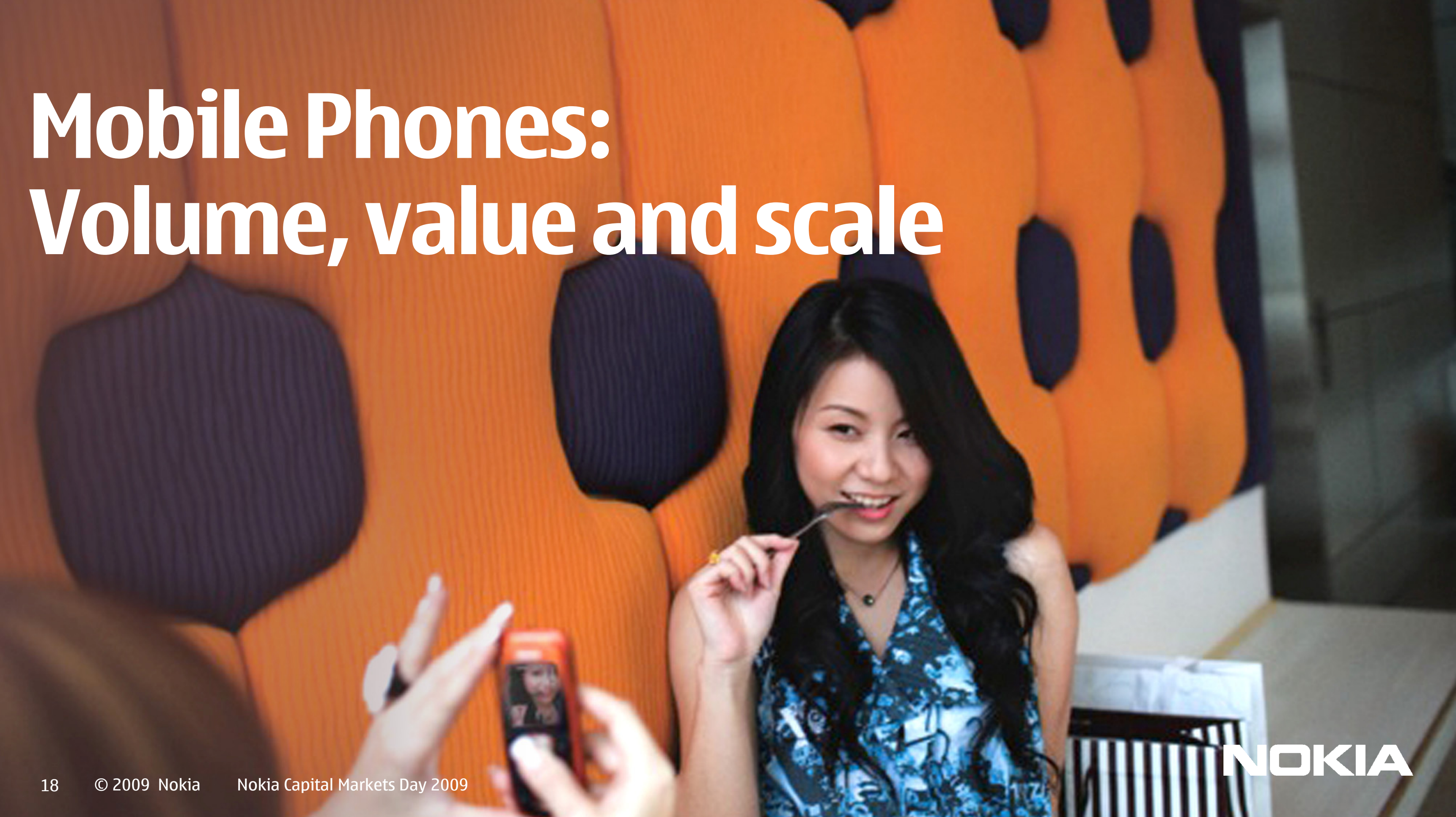
Mobile Phones: Volume, value and scale



16 million sold

Nokia Life Tools

Mobile Computers: No compromises

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"The N900 may very well offer the best browsing experience of any smartphone on the market today (yes, including the iPhone)"

- Engadget

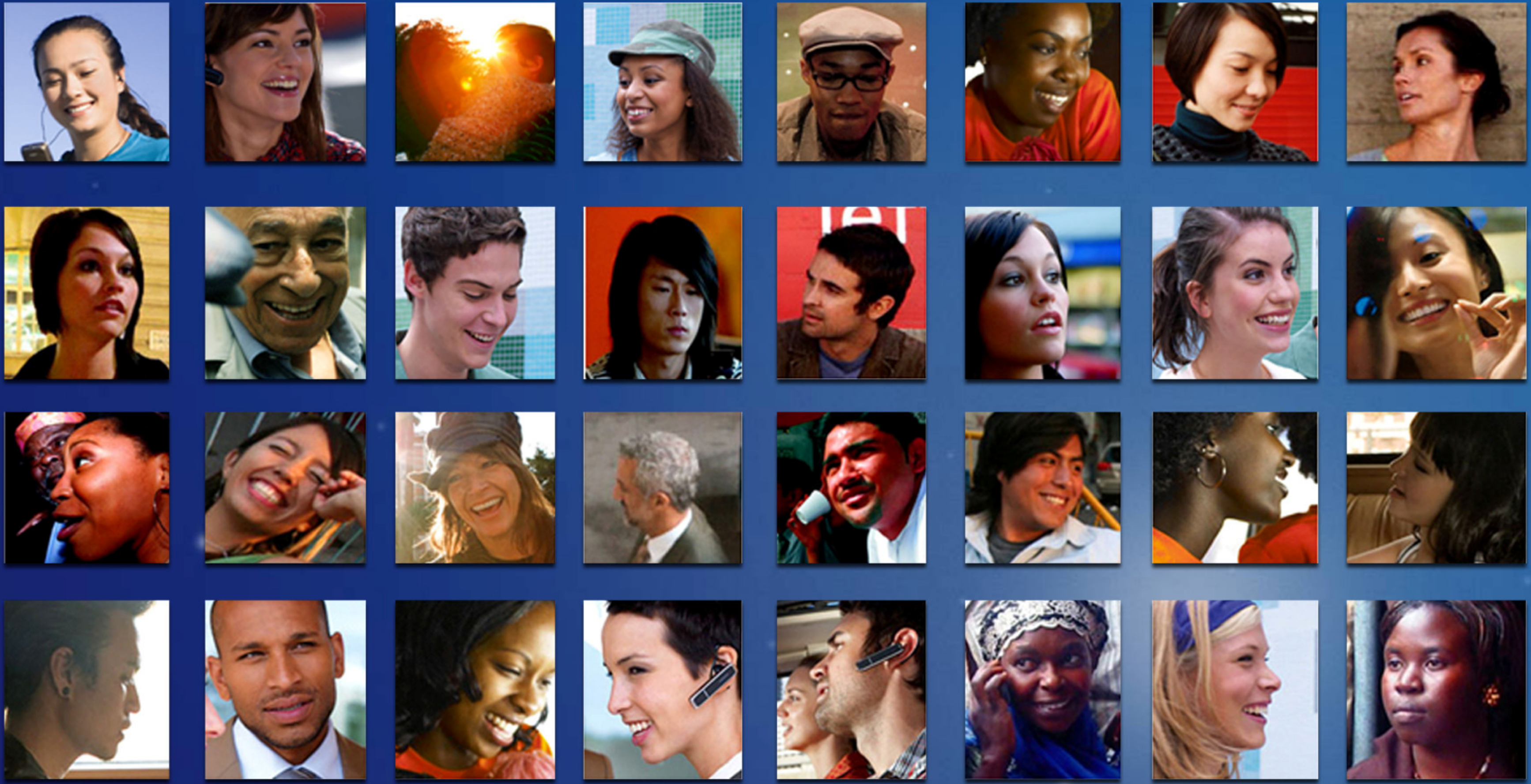
Nokia's approach: All price points, all markets

Software innovation

Symbian: Reach and flexibility


Microsoft
NOKIA

Growing the developer and partner ecosystem



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Connecting People

Nokia's future growth potential

Mary McDowell
EVP, Corporate Development

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Transforming from telecom to Internet model

The Web isn't just for people with deep pockets

It's not all in the cloud

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Connecting People

One size doesn't fit all

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Solutions for mobile-first markets

Making technology accessible to the next billion

Attractive, functional and affordable devices

Tailored with hyper-local services

Support for 80 languages

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Nokia Life Tools

Nokia Life Tools

Nokia Money bridges the gap

Pay bills

Person-to-person money transfers

Pay merchants, physical and online

Top-up prepaid services

Send money

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Making technology more intuitive, personal and relevant

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Bridging the physical and digital worlds

Nokia Mixed Reality

Nokia Research Center

Rich Context Modeling

New User Interface

High Performance Mobile Platforms

Cognitive Radio

NOKIA

Rich Context Modeling

SMS value-added services:

- Proximity SMS services
- M-Bazaar
- We Meet

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Open ecosystem

Turning strategy into execution

Building toward the new world

Driving our business

Kai Öistämö
EVP, Devices

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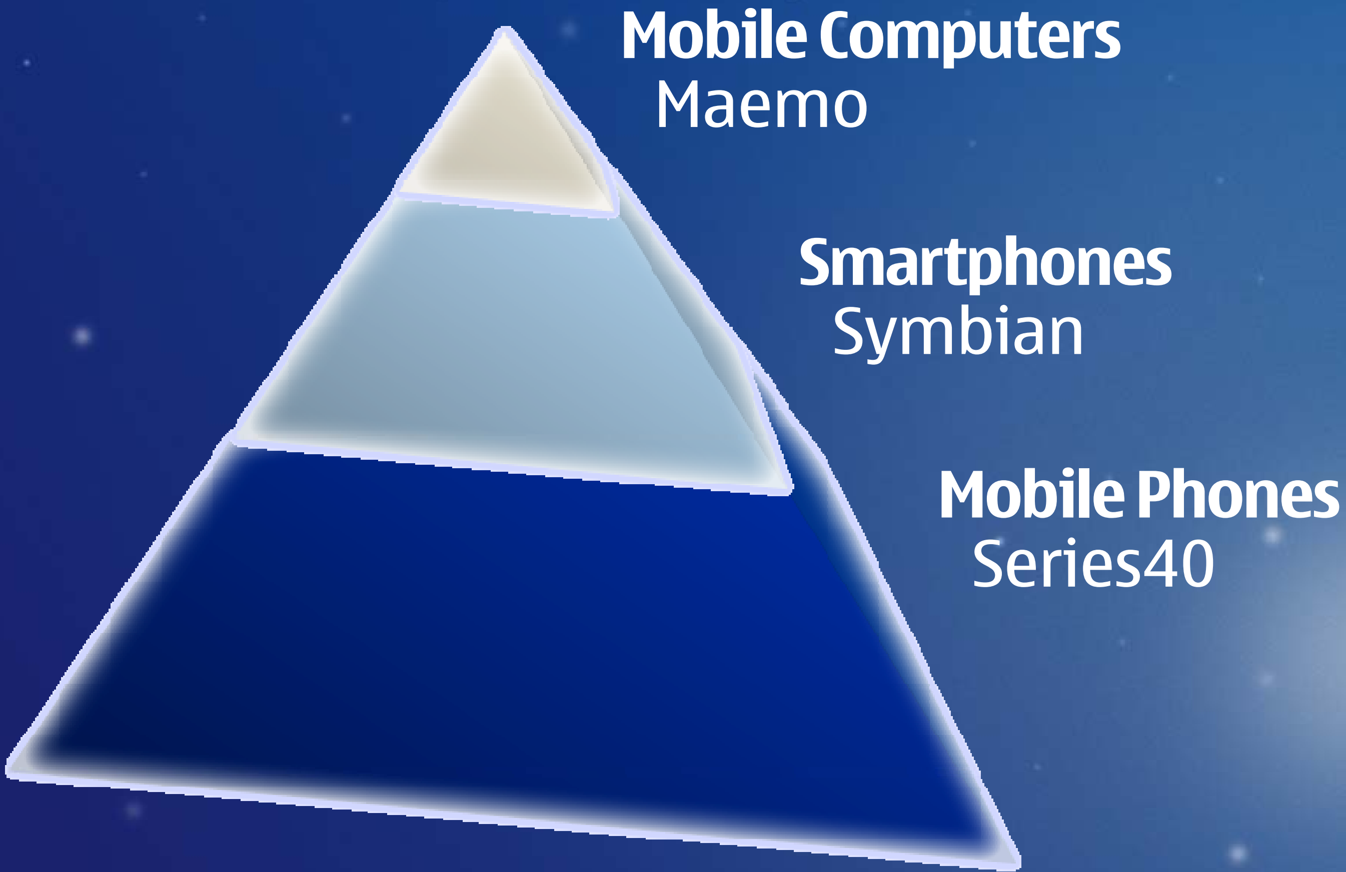

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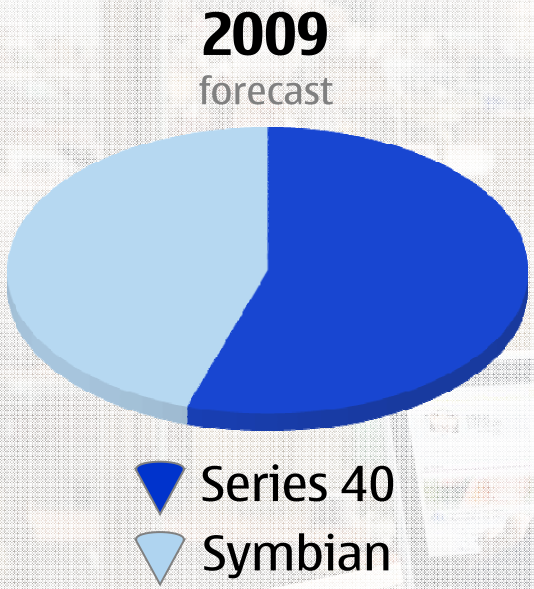
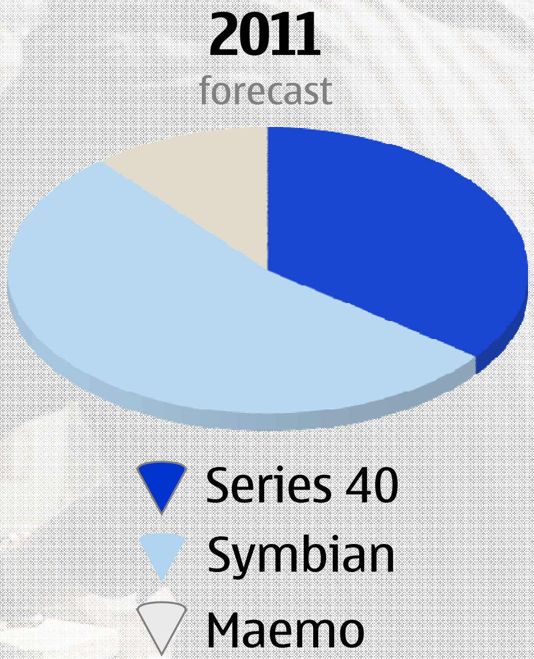
Connecting People

Multiple platforms

Devices Net Sales



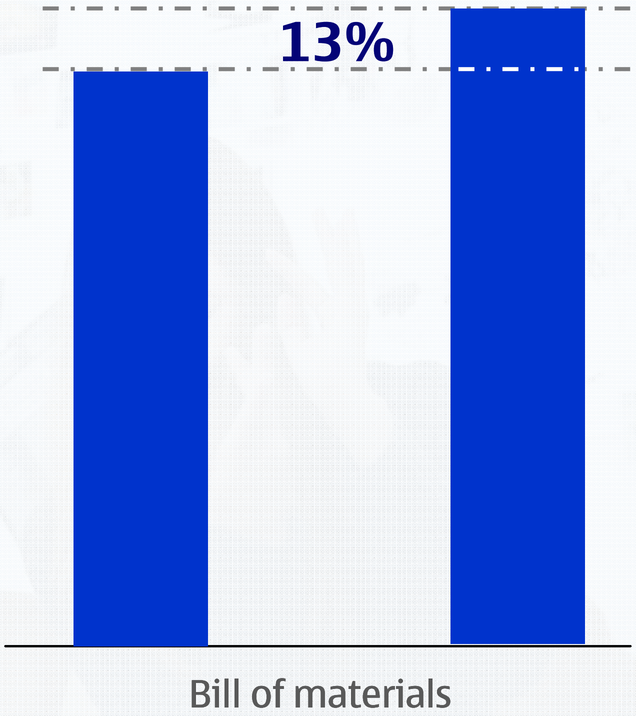


Source: Nokia

Mobile Phones

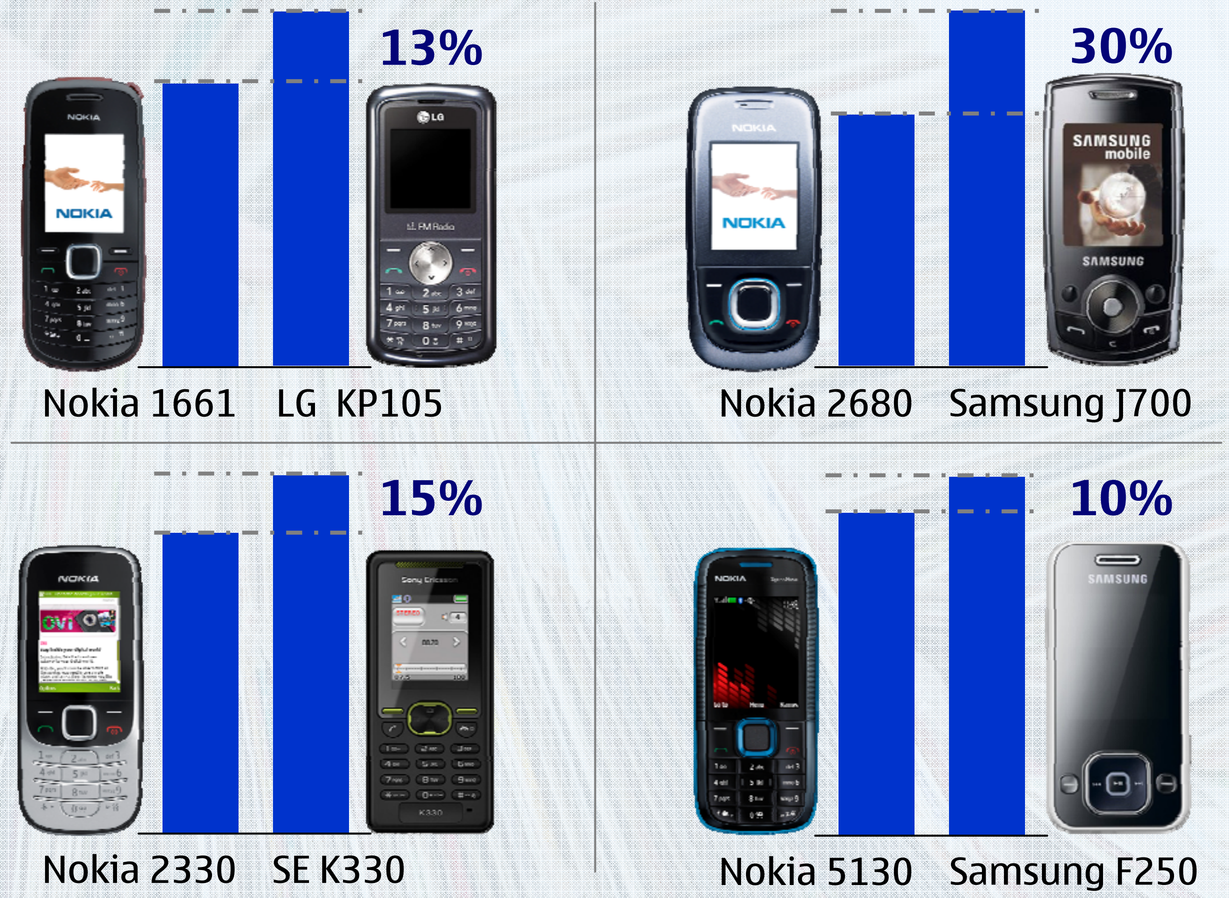
Efficiency

Nokia 1616



ZTE A211

Source: Portelligent & Nokia analysis



Source: Portelligent & Nokia analysis

Adding value

Brand, quality, reliability

300 Euro plus

High gross margin

Nokia 6700

Music

Nokia 5130 XpressMusic
Leading volume seller

Nokia 5030 ExpressRadio
Internal antenna

Nokia 1616
Radio at sub 25 Euro

Nokia 5130 XpressMusic

Nokia 5030 XpressRadio

Nokia 1616

Ovi Mail

Close to 4 million accounts

First year success greater than Hotmail, Yahoo and Gmail

More than 20 supported languages in less than a year

Nokia 2220 slide

Nokia 2690

Smartphones

Smartphones & Services

Niklas Savander
EVP, Services

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Experience booster
Relevant content
Localized billing
Fewer prompts

Partnering

Orange Global

LTA

Microsoft®

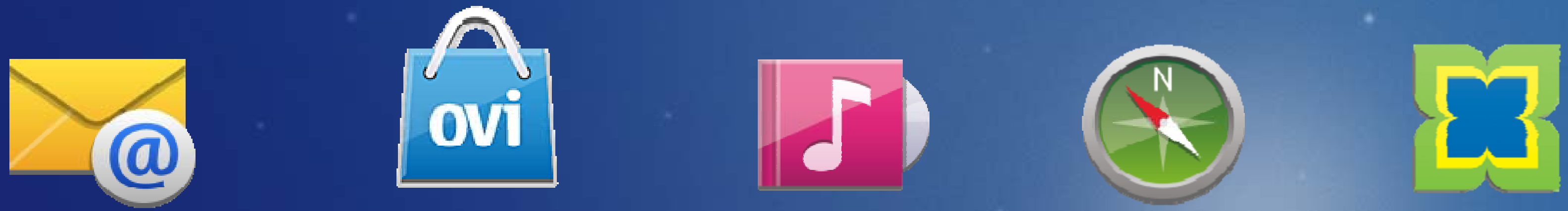
facebook®

Qt

Ovi SDK

Ovi API

ovi



Messaging

QWERTY market leader in Europe, MEA, APAC*

60 operator deals

Market penetration in 2010

Social Networking

IM

Email

*Nokia volume market share estimate

Media

Increased store activity

Daily downloads approaching one million

Increased localization

- 16 local languages, operator billing in 13 countries
- Q1 2010 plan: local in 20+ countries including billing

Stable back-end operations

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Music

22 Music Stores, 15 Comes With Music markets

~ 9 million tracks, emphasis on local content

#1 music store in India

Ovi Music – DRM-free catalogue, common sign-on

Encouraging the growth of legal music downloads

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Location

Market leader in Mobile Navigation

- Maps coverage in 180+ countries
- Drive & Walk in 70+ countries, ~50 languages
- Increasing coverage for Traffic & Safety

More than 70 million GPS-enabled devices shipped

Premium content lifetime bundle

Ecosystem and user growth in 2010

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Consumer insights
Heightened value
Incremental revenue

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User Experience and Mobile Computers

Alberto Torres
EVP, Solutions

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Global Portfolio breakdown

- Integrated roadmaps for devices and services
- Prioritizing features
- More relevant consumer metrics
- Consistency in each platform
- Cross-unit teams

User experience is everything


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Telephone
Contacts
Menu
XpressMusic
Operator
Sun 11/01/2009
General
Gmail (4)
Options
Contacts
E72
Select services
OK
Exit
Music player
Radio
Recorder
Select
Back
N900
Jon Reece
Phone
SMS
E-mail
Ovi chat
Google Talk call
Google Talk chat
Web page

Symbian: variety and reach

E72

N97

5230

Mobile Computers

- **Internet first**
- **High-performance hardware**
- **Streamlined product line**
- **No compromises**


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N900
SMS - Ari Jaaks
Reuters.com
Bloomberg.com
BusinessWeek
Mail for Exchan
Now playing
Hermes
Podcasts


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N900
PROSESSORI
UUSINTA TEKNOLOGIAA JA INNOVAATIOITA
PROSESSORI 30 VUOTTA
27.8.2009 15:46:14
Nokian virallisti Linux-kännykän
Mielenkiintoinen Maemo-laite
Nokia julkisti tänään virallisesti viikkoja netissä esillä olleen N900-linux-kännykän. Nokian aiempiin paneelimikroihin pohjaava N900 tarjoaa uuden Maemo 5 –käyttöjärjestelmän lisäksi


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Nseries
Carl Zeiss
Tessar 2.8/5.2
AF 5MP


NOKIA
N900
A
999

Maemo 6

- The ultimate UI
- Power of the social internet
- Developers will love it
- H2 2010

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Markets

Anssi Vanjoki
EVP, Markets

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Markets
2009 and beyond

Markets overview

Nokia in 2009

- Top 5 global brand
- ~60 million smartphones sold to date
- Over 75 million active service users
- Over 4 million developers

2010 industry estimate

- Improving industry conditions
- Volume growth
- More normal seasonality

1. Coca-Cola
2. IBM
3. Microsoft
4.
5. NOKIA

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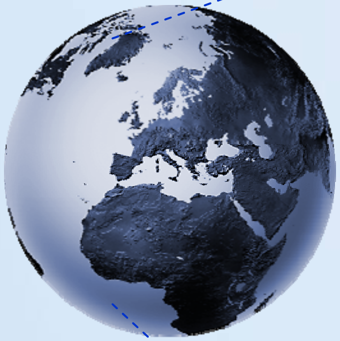
7. Google
19. SAMSUNG
20.
63. BlackBerry

Source: Best Global Brands 2009, Interbrand

Manufacturing

Creating value through consumer relationships & partnerships

From insight to solutions...



Consumer perspective

Consumer behaviors

- Brand strategy
- Solutions
- CX/UX
- Design

Solutions portfolio/ Unit portfolio

- Market optimization
- Proposition definition

Concepting

- Ranges/ categories/ R&D
- Service lines
- Campaign creation/ brand identity

Launch

Loyalty & retention

Consumer Lifetime Value

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Engage with consumers through our own media

1.1 billion consumers with Nokia devices

65 million visitors to nokia.com per month

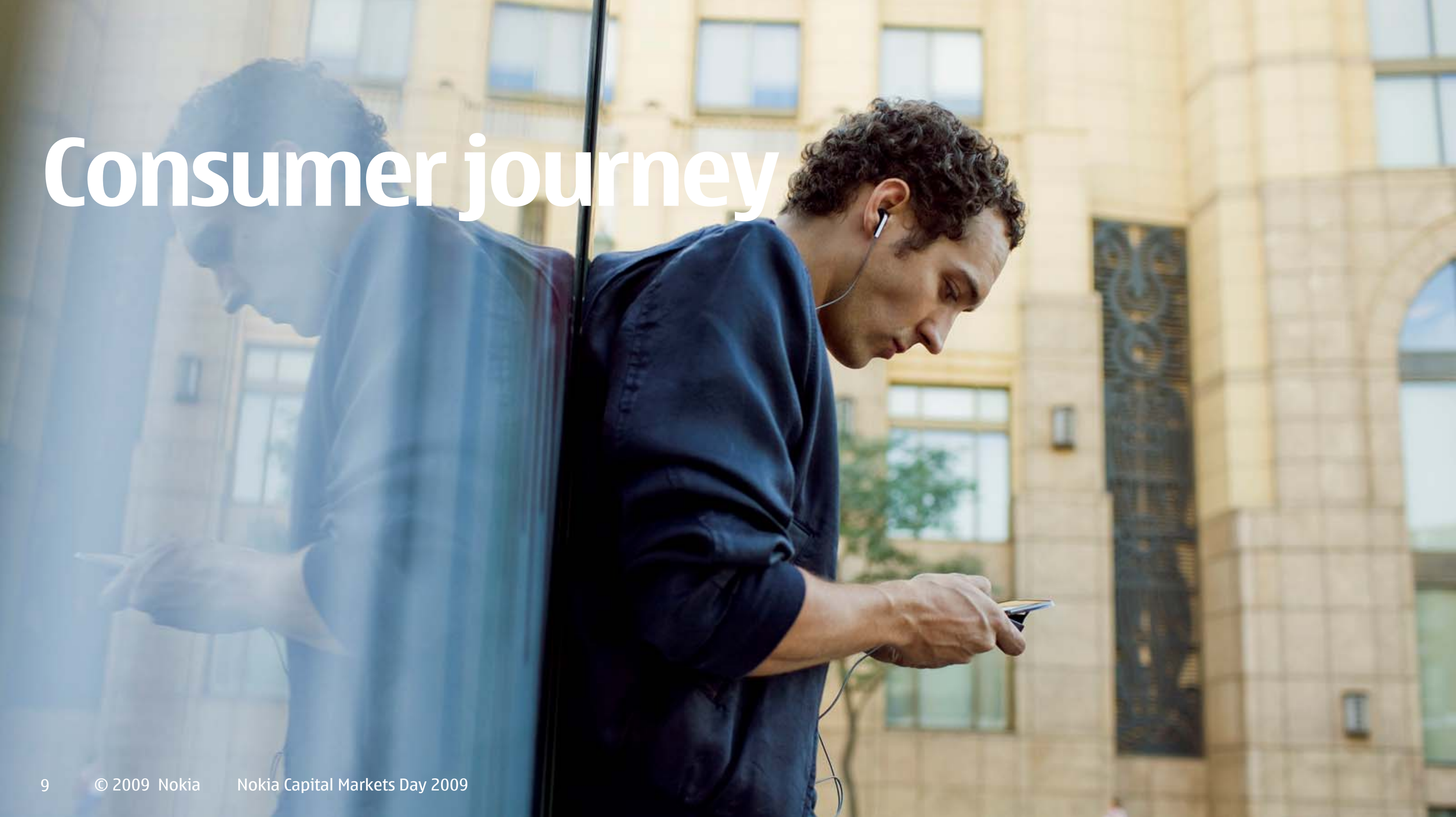
230 million visitors to nokia.mobi per month

Sales boxes:
468 million in 2008

Retail: 650K outlets speak volumes

10 consumer interactions per second in Care

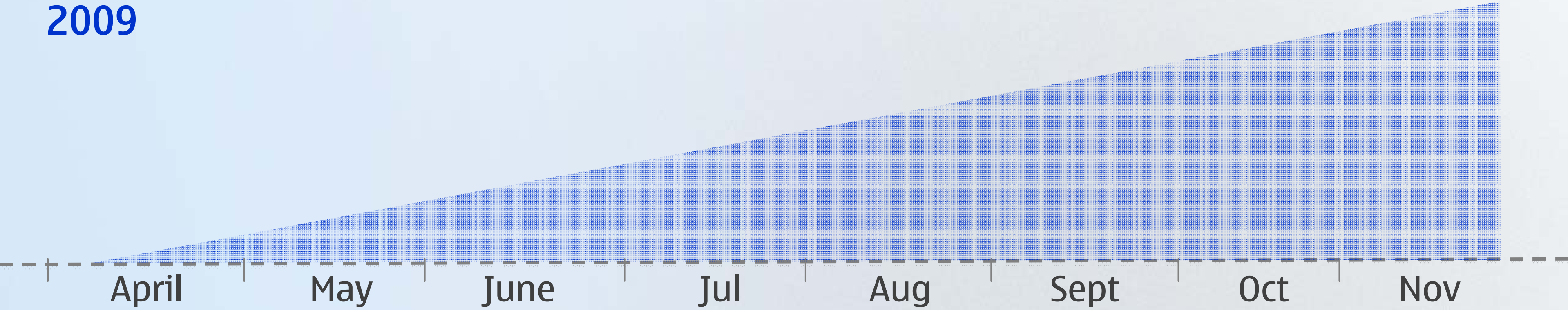
Consumer journey



A continuous relationship

Nokia Messaging – Success in partnering

2009

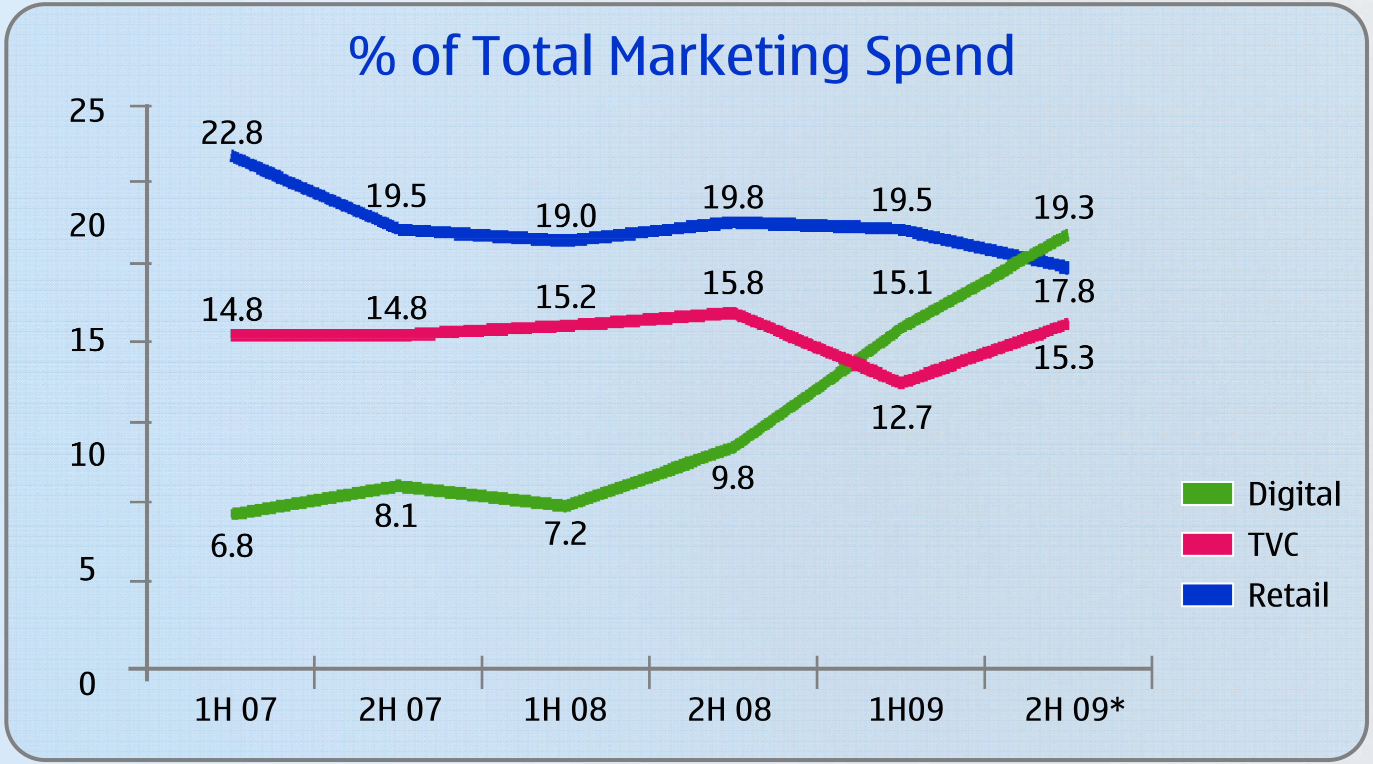


Orange Global

Marketing transition & Efficiency

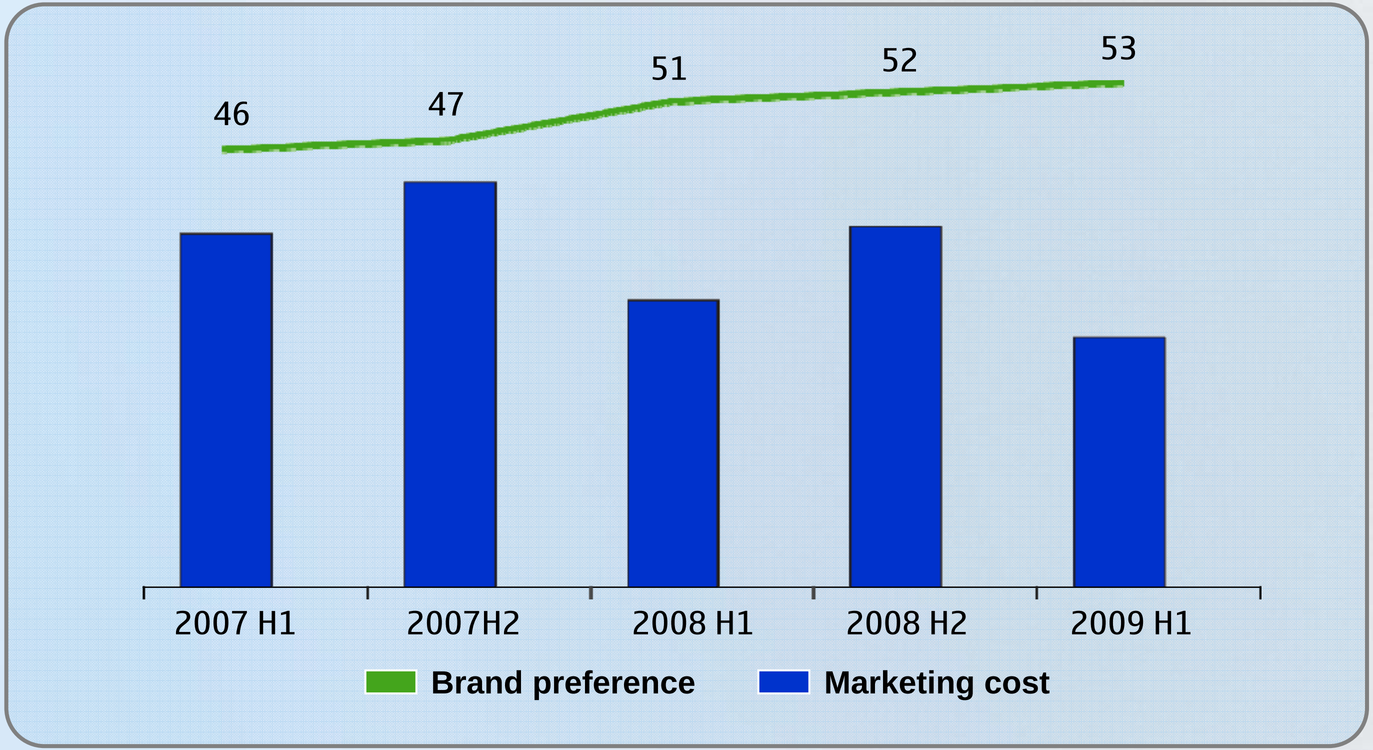
Focus on fewer, bigger marketing campaigns

Nokia's digital marketing spend will surpass TVC spend in 2009



* Nokia estimates

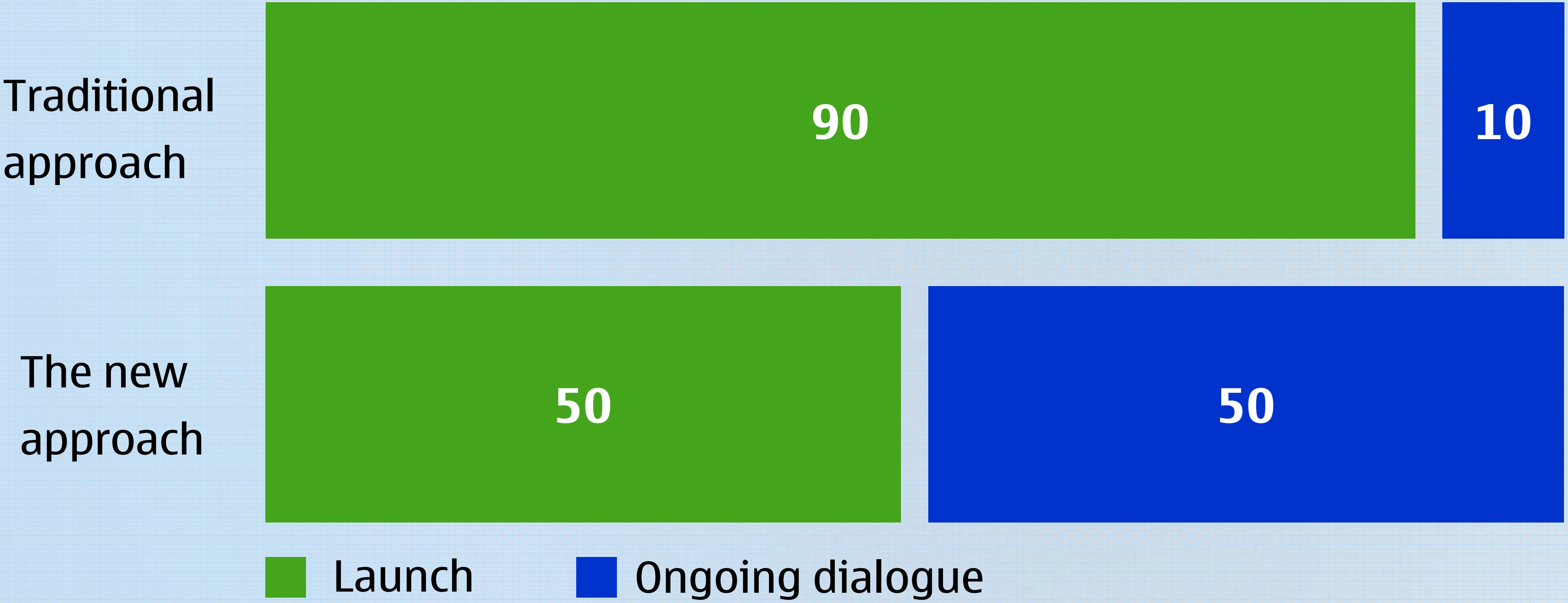
Positive brand preference trend despite decreased marketing spend



Source: Nokia

Changing the way we invest

Marketing spend – product launch to continuous dialogue



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Print

Digital

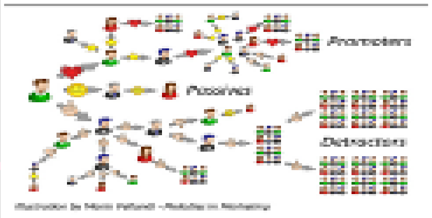
PR

Retail

Developer

Forum Nokia
Driving mobile innovation

Word of mouth



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World's best infrastructure

Building blocks in place

Thriving ecosystem

Unparalleled reach

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Nokia Siemens Networks

Rajeev Suri

Chief Executive Officer

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2009

The Opportunity

Delivering in 2010

Conclusion

2009 Summary

Overall

- Challenging economic and competitive environment
- Top-line decline also reflects effect of deal discipline
- Mature technologies in decline; momentum in focus areas

Financials

- 18% top line drop Q3 YTD, impacting profitability
- Plans in place to return to growth
- Cost discipline, continuing to lower the break even point
- Generating cash from operating activities

Strategy

- Driving efficiency and subscriber experience
- Focus on operator network and service layers

Nokia Siemens Networks

Challenging business environment in 2009

2009 has been a tough and disappointing year

- Reviving top line Nokia Siemens Networks' major priority
- Gross margin stabilized
- Opex reductions moderated operating loss

EUR million	Q1/08	Q2/08	Q3/08	Q4/08	Q1/09	Q2/09	Q3/09
Net sales*	3404	4071	3504	4340	2990	3199	2760
Operating profit*	81	274	177	225	-122	2	-53
Operating margin*	2.4%	6.7%	5.1%	5.2%	-4.1%	0.1%	-1.9%

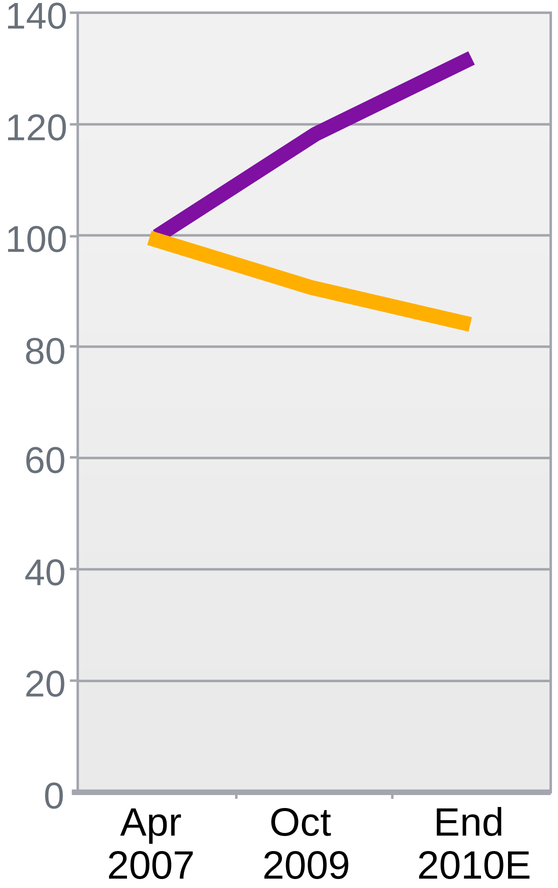
*Non-IFRS

Nokia Siemens Networks

R&D transformation – roadmap and cost advantage

R&D hours and cost in NSN Radio Access

Scale: Day 1 = 100



32% targeted capacity increase

18% targeted cost reduction

- Significant internal R&D ramp-up
- Focus on best skill / cost balance
- Reduction in collaborator input
- Resources shifted to focus products
- Proximity to key customers
- Highly competitive roadmap

Nokia Siemens Networks

2009 – Momentum where it matters

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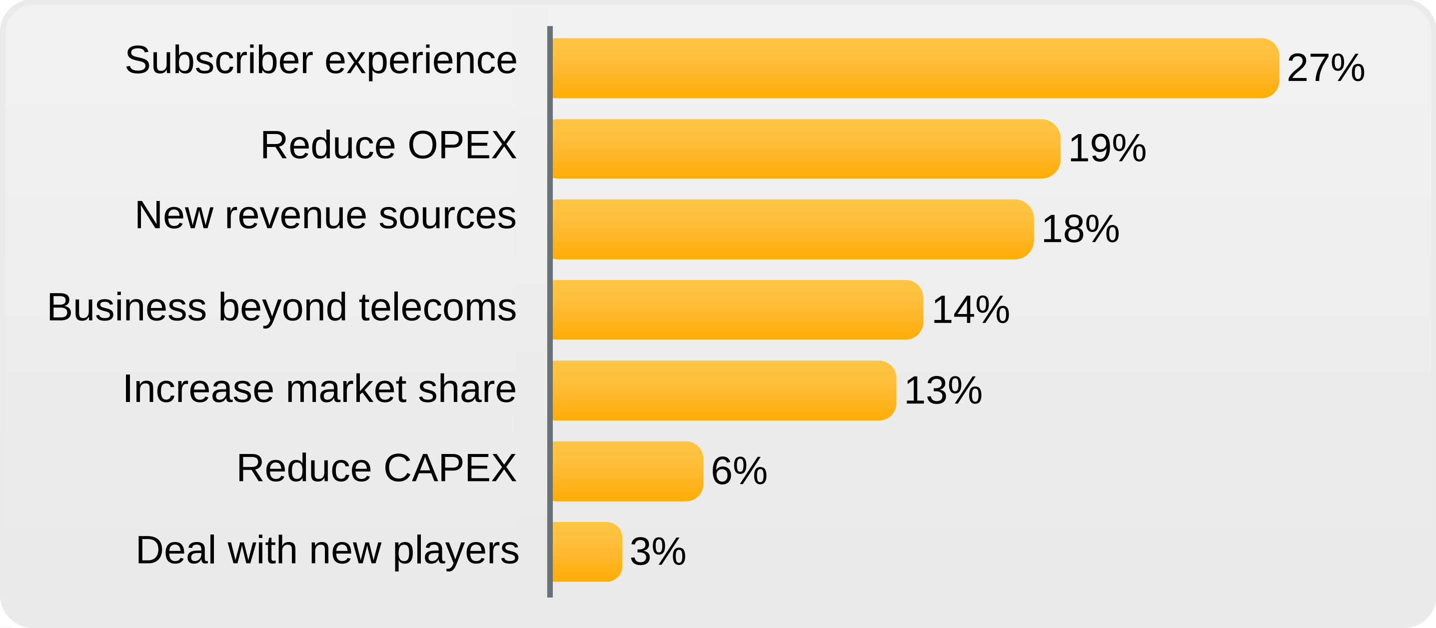
Our customers' top business goals in 2012

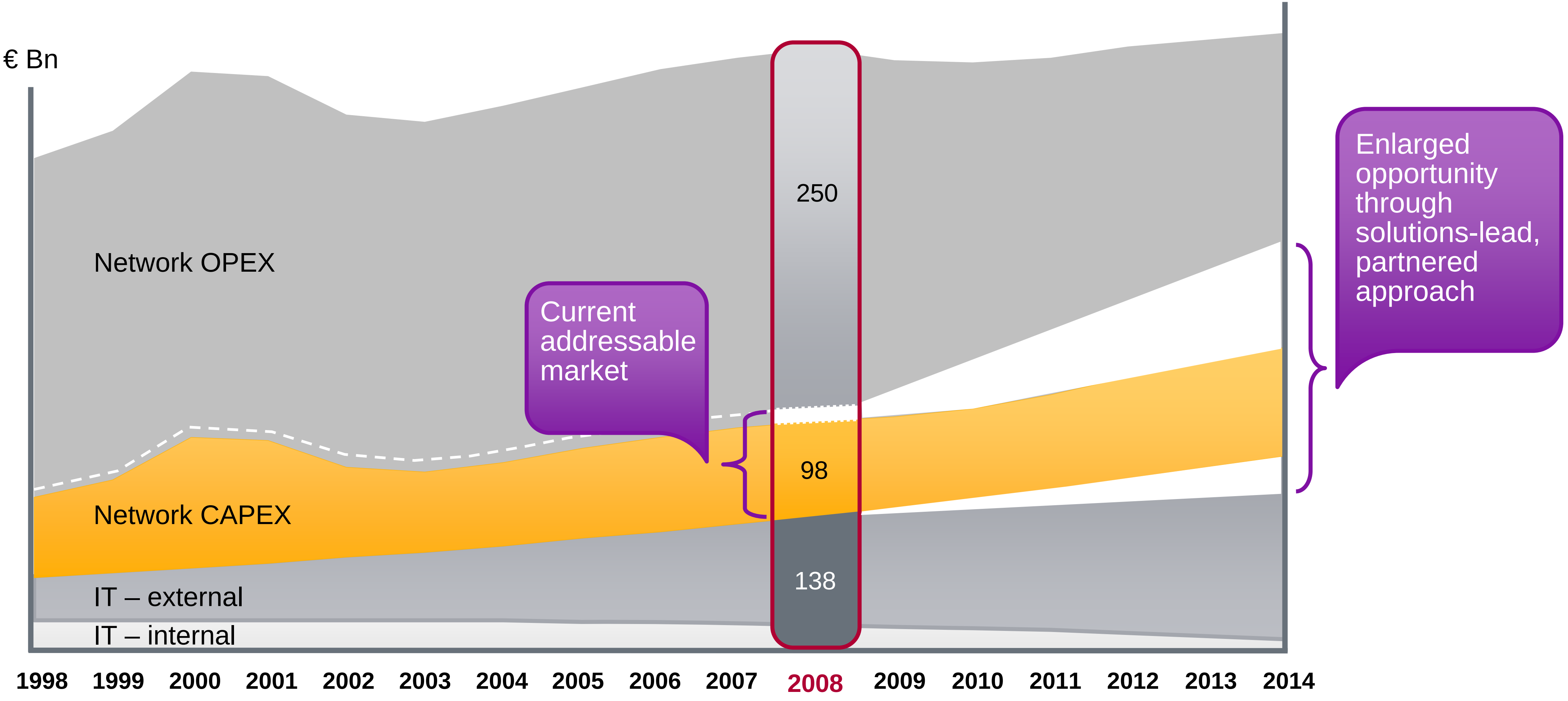


Priorities changing:

With challenges in top-line growth, optimised subscriber experience and OPEX reductions become key value drivers

Source: Business Needs Study 2009 (n153), Nokia Siemens Networks, Respondents were allowed to select two options

The Opportunity for Nokia Siemens Networks
Fulfillment requires transformation



Source: Gartner, KPMG, Nokia Siemens Networks estimate

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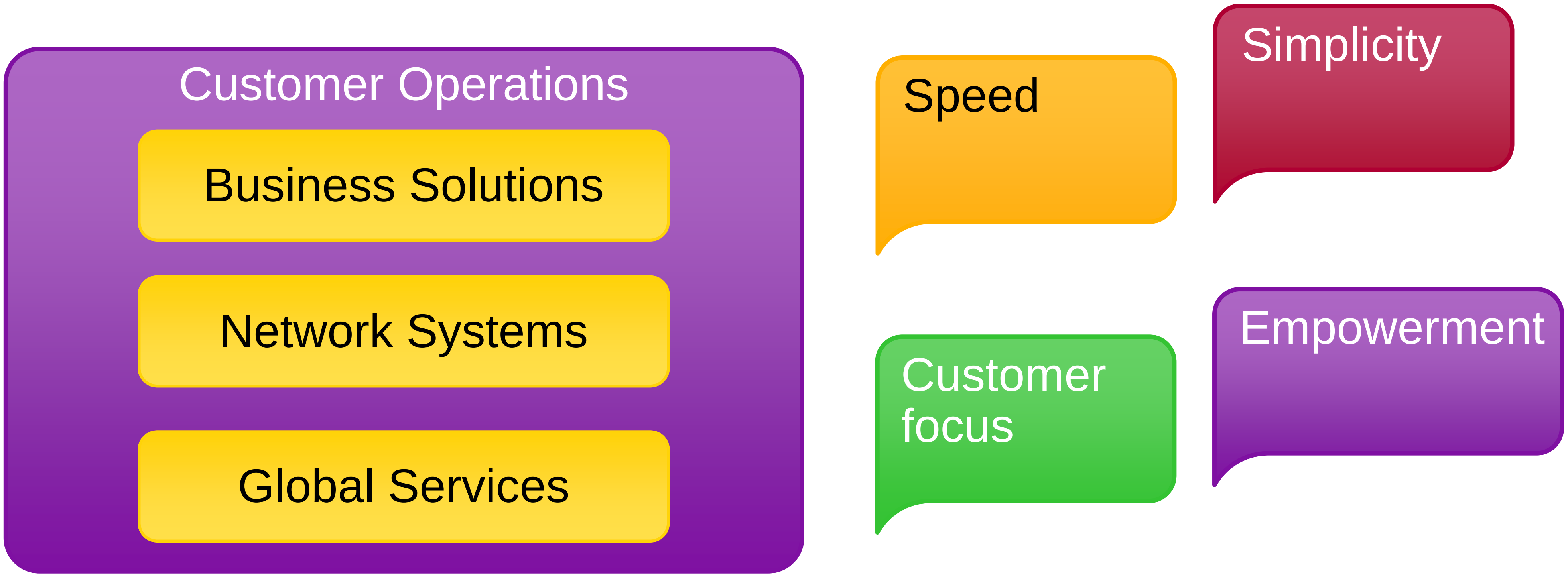
Execution priorities for 2010

Reinvigorating the organization

Driving for growth

Cost leadership

Reinvigorating the organization: Customer-centric



Cost leadership

- Plan to reduce annualised OPEX and production overheads by €500m by the end of 2011, compared to the end of 2009
- Plan to cut annual procurement costs by more than €500m
- Balance to low-cost, high-efficiency and new markets

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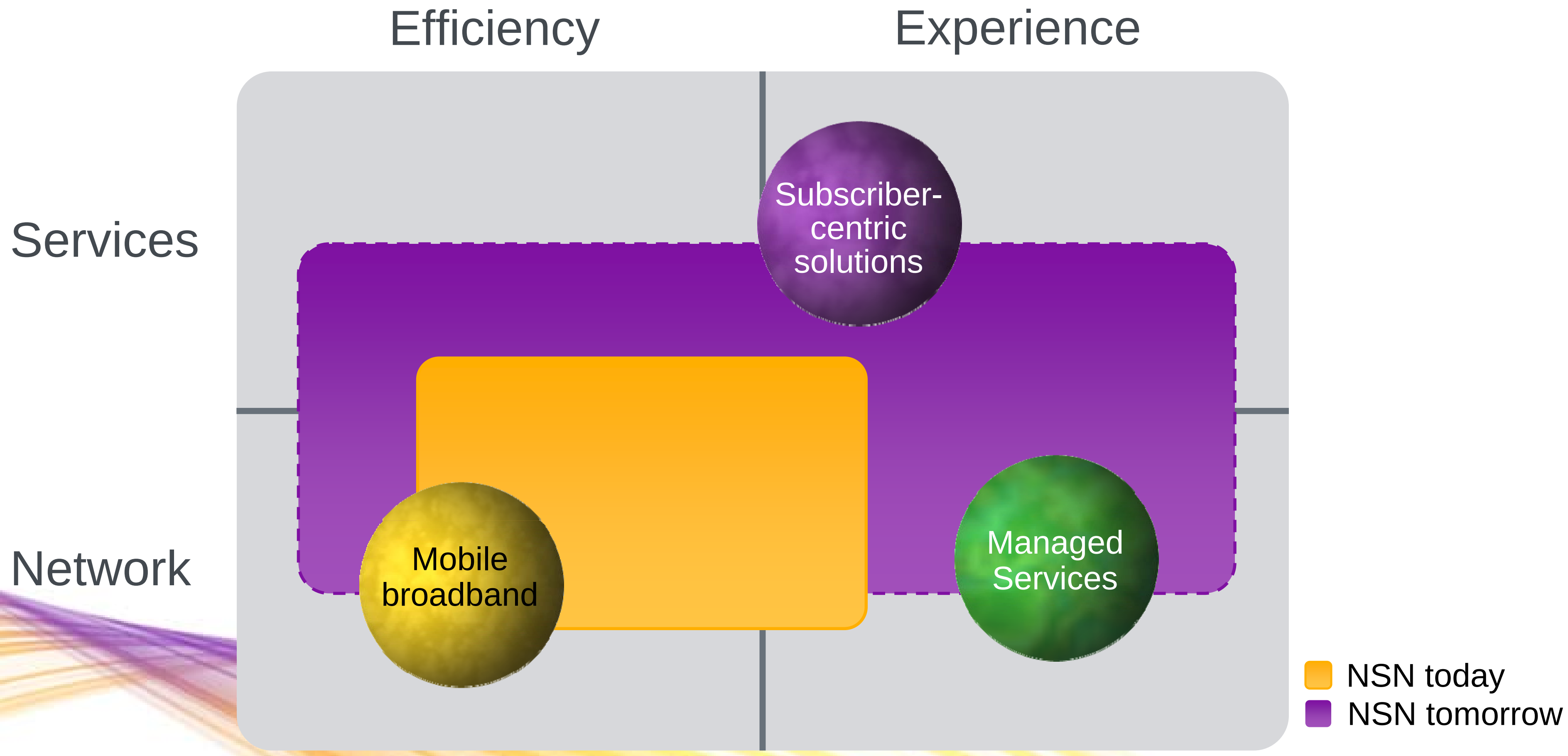
Driving for growth: Building on our strengths



Forecasts and targets for 2010

- Nokia and Nokia Siemens Networks expect a flat market in euro terms for mobile and fixed infrastructure and related services market in 2010, compared to 2009
- Nokia and Nokia Siemens Networks targets for Nokia Siemens Networks to grow faster than the market in 2010
- Nokia and Nokia Siemens Networks target Nokia Siemens Networks non- IFRS operating margin of breakeven to 2% in 2010

Nokia Siemens Networks

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Key takeaways

- Pursuing transformational opportunities – Professional Services leading the way
- Critical assets to enable best subscriber experience
- #1 mobile broadband customer base and offering
- Driving for growth – portfolio view of key markets

Nokia Siemens Networks

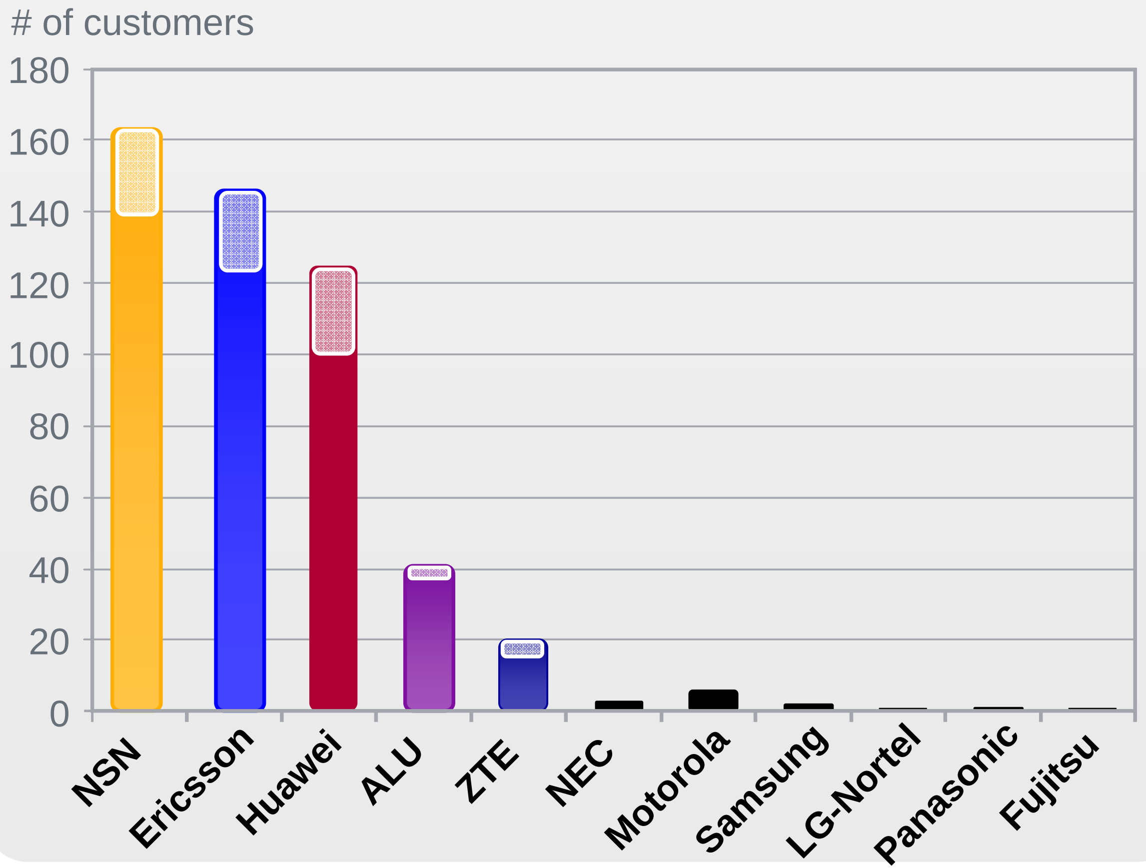
Appendix

Driving for growth: Mobile broadband momentum

Network Systems

163 active WCDMA/HSPA radio access customers

23 new customers added YTD in 2009 – 16 in 2H09



Undisputed LTE leadership

- First with LTE commercial HW: 100k LTE-ready BTS for 100+ operators
- World’s first LTE call and handovers on commercial software
- Selected by 4 operators for LTE radio deployment, including NTT DoCoMo
- LTE Centers of Competence in all lead markets globally
- LTE core network pioneer: packet core for DoCoMo, Zain and IMS for Verizon

Nokia Siemens Networks

Driving for growth: Managed services momentum

Spain and UK

Complete operations of fixed and mobile multi vendor networks

orange

3GIS — Shared network management

Latin America

Largest MS provider in Latin America with a 5 year € 1,1 billion multi vendor managed services contract

28,000 Services Professionals

- Including 16,000 in Managed Services
- Successful onboarding of >13,000 new MS employees

Largest MS provider in India

TATA indicom

delivering complete operations for Unitech, Tata and 4 other CSPs

Middle East & Africa

Five-year multi-vendor managed services contract for 3,000 sites in three countries

zain

- Only vendor to gain market share in 2008*
- Underpinned by unique Global Delivery model
- More than 230 MS contracts managing more than 300m subscribers

*Source: Equipment Vendor Services to Service Providers report, Infonetics Research, May 2009

** Deals are public and non-public

Nokia Siemens Networks

Driving for growth: Solutions momentum

Business Solutions

- Number 1 in NGN voice solutions
  - 260+ references for mobile soft-switching
  - 100+ references for fixed NGN
- Number 1 in customer data management; >1bn subscribers
  - 80 customers in 46 countries
- Prepaid leader with over 500m subscribers
- Installed 2,400 network management systems for 670 customers
- Over 760 systems integration projects
- 5 out of top 10 customers have paid for our business consulting services

Breakthrough win for our Service Delivery Framework at Globe

"We saw an end-to-end skill not only in hardware but also in Services… we thought if we are going to make leap in this leading edge application we need a trusted partner."

- Ernest L. Cu, Chief Executive Officer, Globe, Philippines

All-IP HSPA network at Bell Canada enhanced by unified subscriber database

By evolving to a subscriber-centric network with a unified subscriber database, Bell can reap the benefits of network efficiency and is also able to provide an enhanced personal experience to customers

Driving aggressive growth for leo™ with real time charging, mediation and subscriber data management

We opted for a trusted partner and their solution enables us to quickly launch attractive promotions and marketing campaigns

- Soban Paha, Chief Executive Officer, Leo, Namibia

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Timo Ihamuotila
CFO

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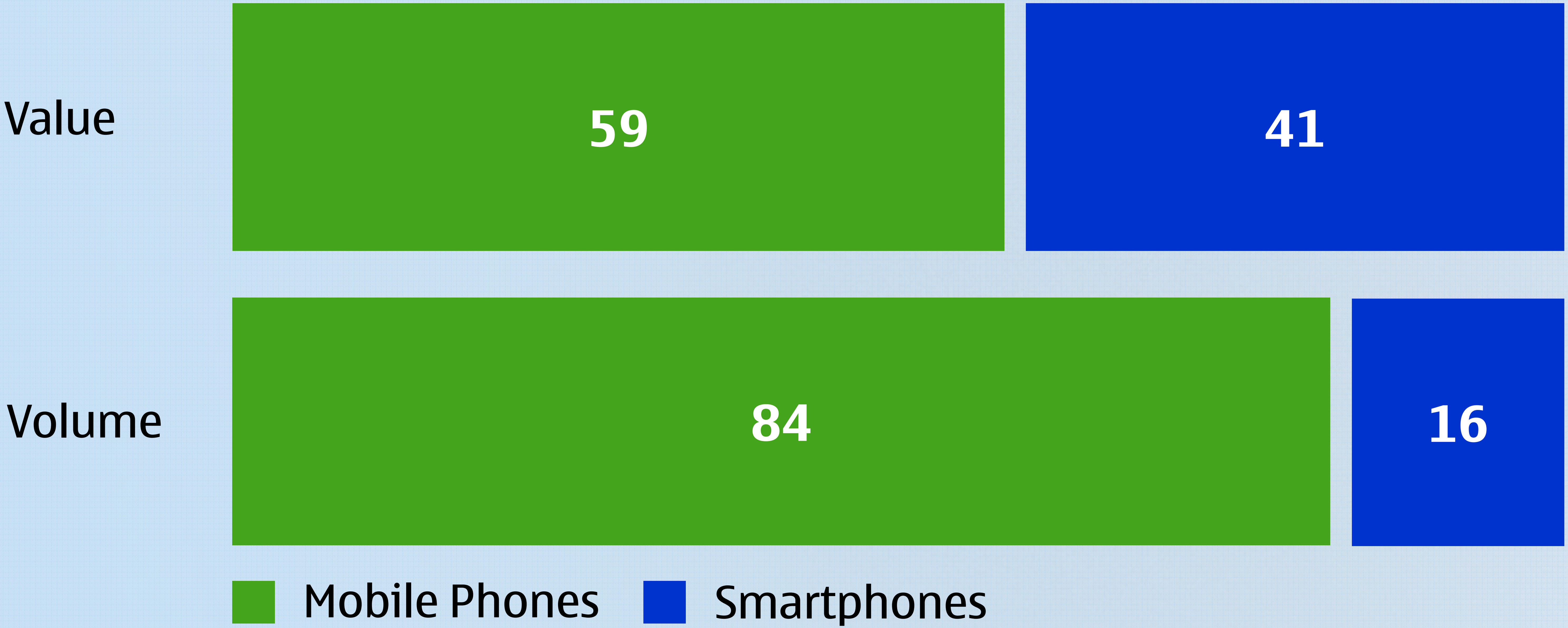
- Market dynamics
- One P&L in D&S – Two operating modes
- Balance sheet and cash flow
- Financial targets

Market dynamics

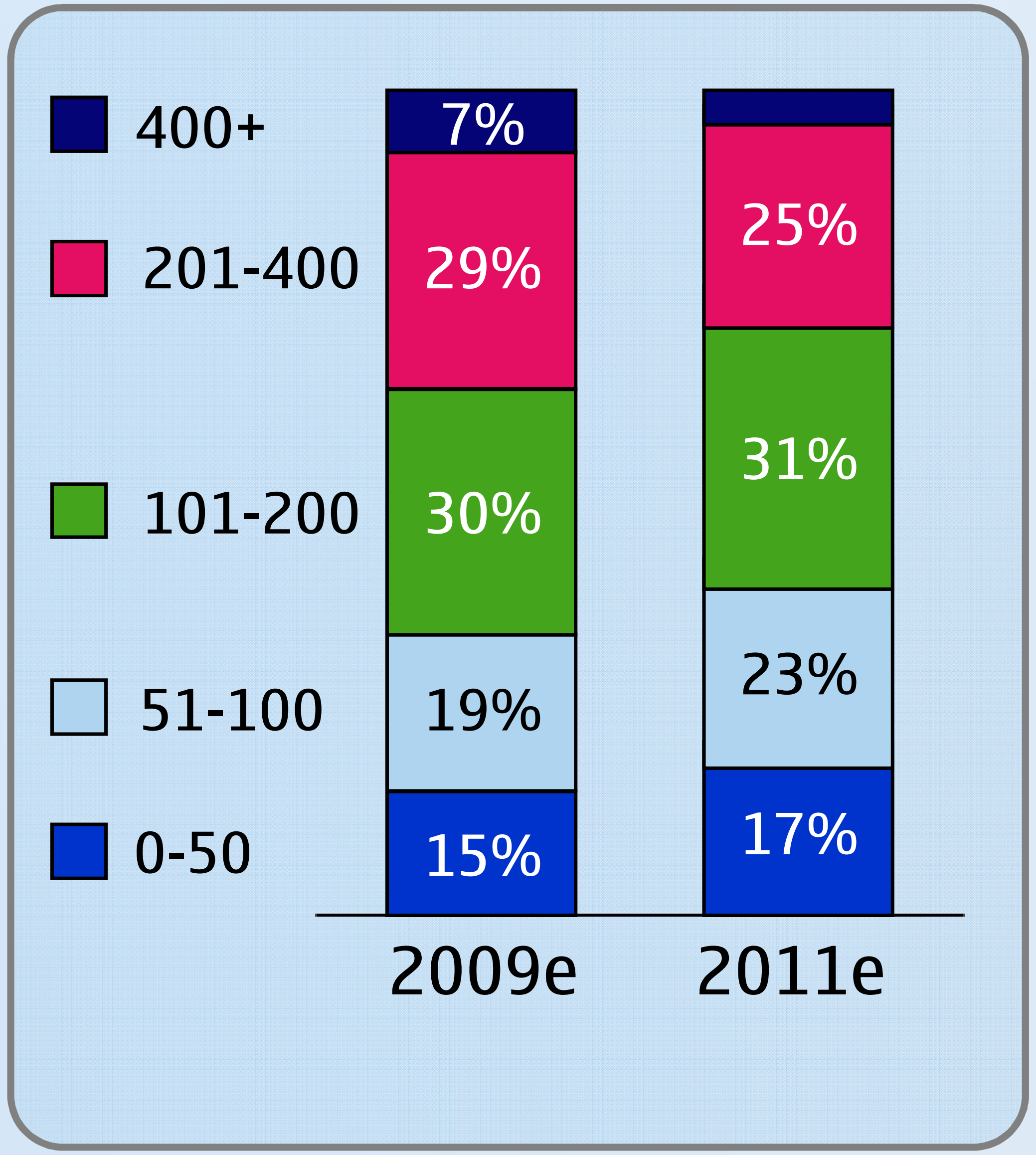
Industry value and volume

2009 mobile device market, Nokia estimate

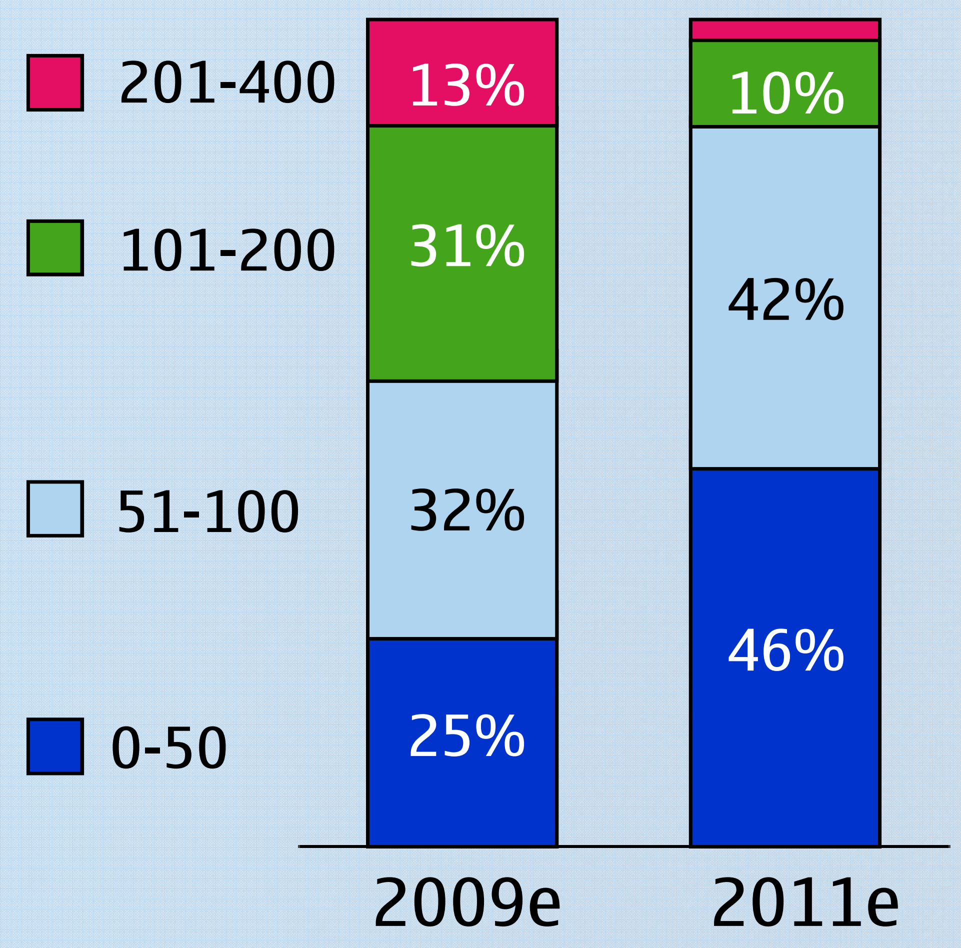


Industry market value – Two segments by price band

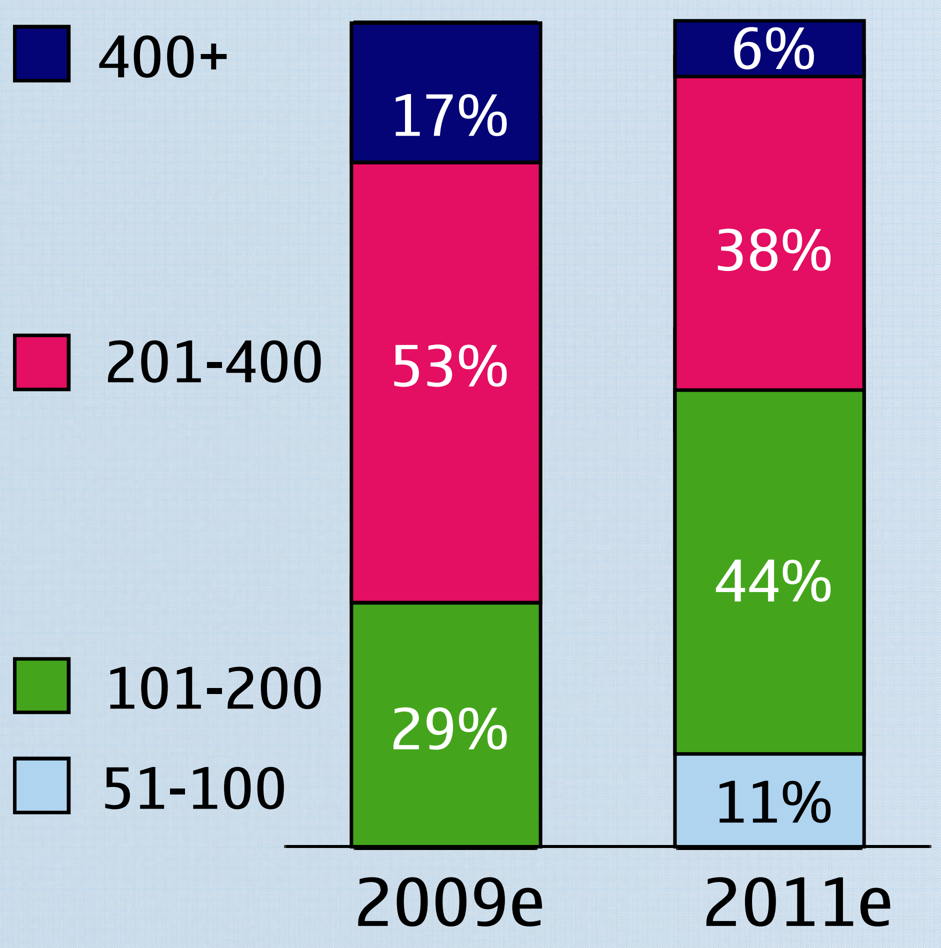
Mobile devices total



Mobile Phones



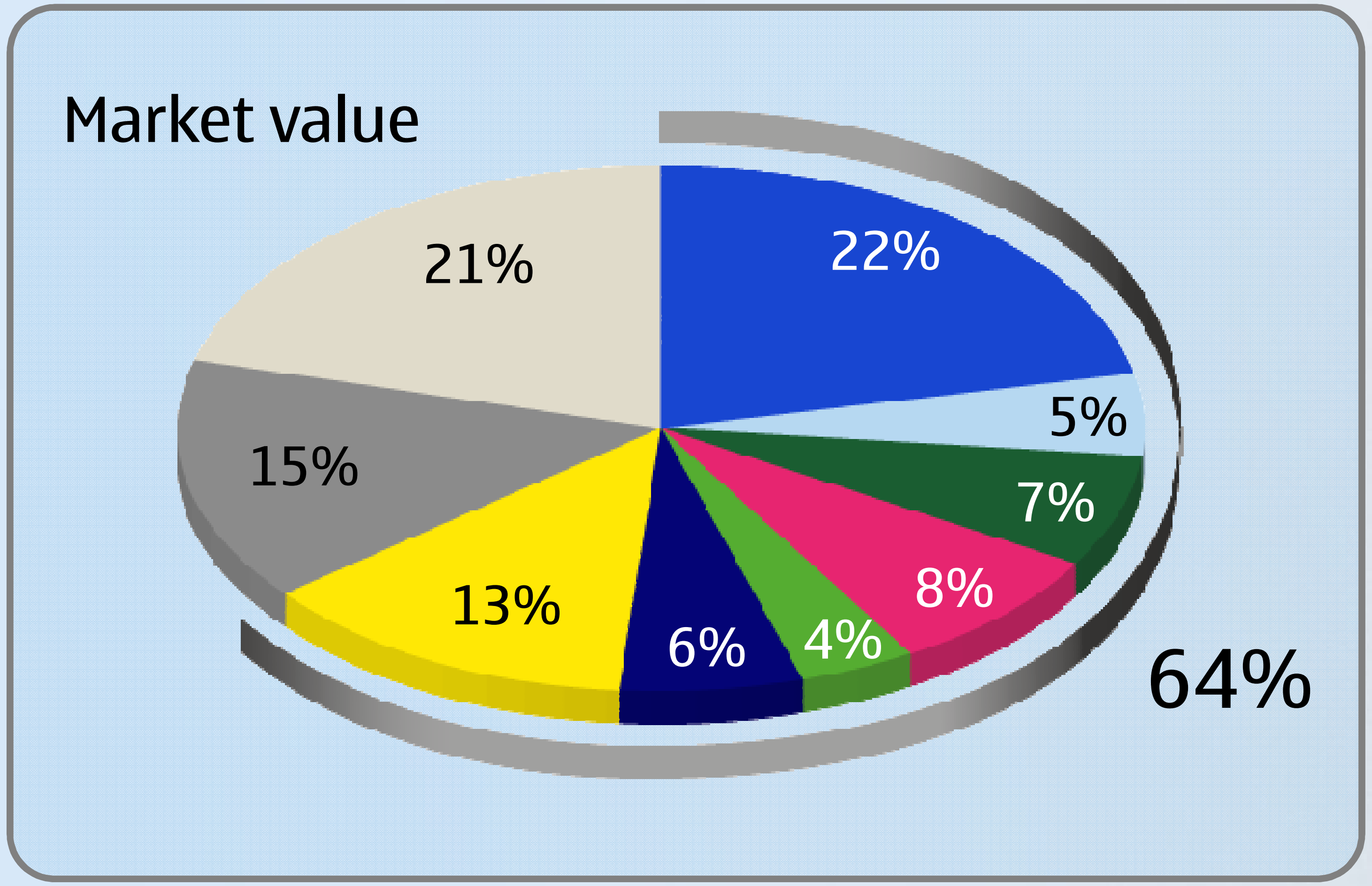
Smartphones



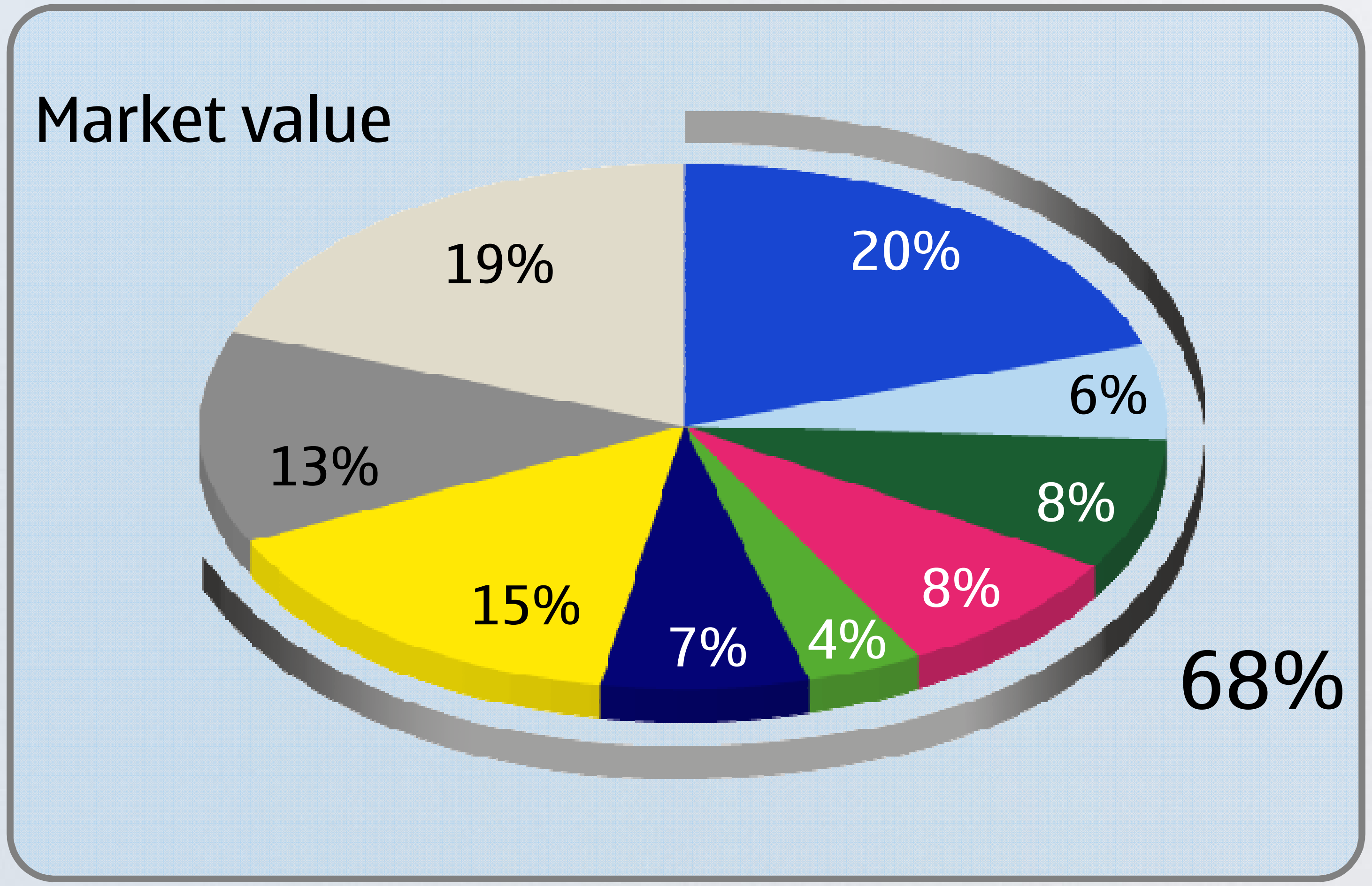
Source: Nokia estimates

Industry market value – Geographic balance

2009e mobile device market



2011e mobile device market



Europe
Eurasia
Latin America
Middle East & Africa
India
South East Asia & Pacific
Greater China
Japan & Korea
North America

Source: Nokia estimates

NOKIA

One P&L in D&S – Two operating modes

Efficient use of Nokia assets

Product mode

Mobile Phones

S40

Solutions mode

Smartphones & Mobile Computers

Symbian & Maemo

Common assets

Efficient use of Nokia assets: Common assets

Brand	• World's 5th most valued brand in 2009 • Ahead of competitors in all brand metrics
Relationships	• 1.1 billion consumers with Nokia device • 5 000 trade customers
Distribution	• World's widest distribution with over 650 000 points-of-sale
Sourcing	• 150 billion components from 150 suppliers • Long term relationships with best suppliers
IPR	• Protection for over 11 000 inventions (patent families) • Over 10% have been declared essential

NOKIA

NSN plan

Reorganization

Realigning the company around three key areas to better serve customers

NSN 1.1.2010

- Business solutions
- Network systems
- Global services

Cost focus

Targeting 500 MEUR annualized OPEX & production overheads savings by end of 2011, compared to the end of 2009

Drive for growth

Mobile broadband

Managed services

Subscriber-centric solutions

NAVTEQ

- Navigation becoming integral part of smartphones
- NAVTEQ gives Nokia ability to create new innovative services
- Cost of sales benefit to Nokia
- Nokia will continue investing in NAVTEQ

Balance sheet and cash flow

Balance sheet

Strong, simple and clean

	Q3-08	Q3-09
Cash and other liquid assets	7.2 BEUR	7.4 BEUR
Debt	4.3 BEUR	5.3 BEUR
Net cash	2.9 BEUR	2.1 BEUR

End of Q3 2009: Nokia Siemens Networks' contribution to Cash and other liquid assets was 0.7 BEUR, Debt 1.3 BEUR and thus reduced Net cash by 0.6 BEUR

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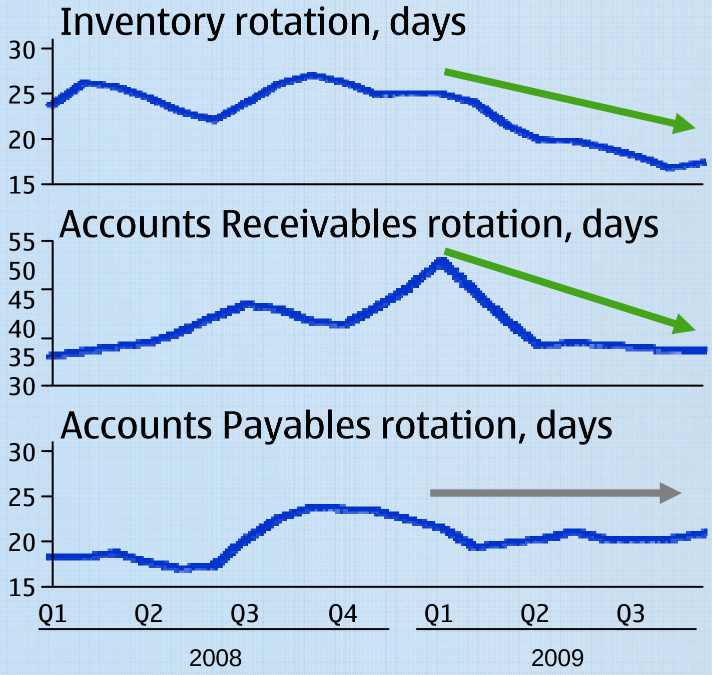
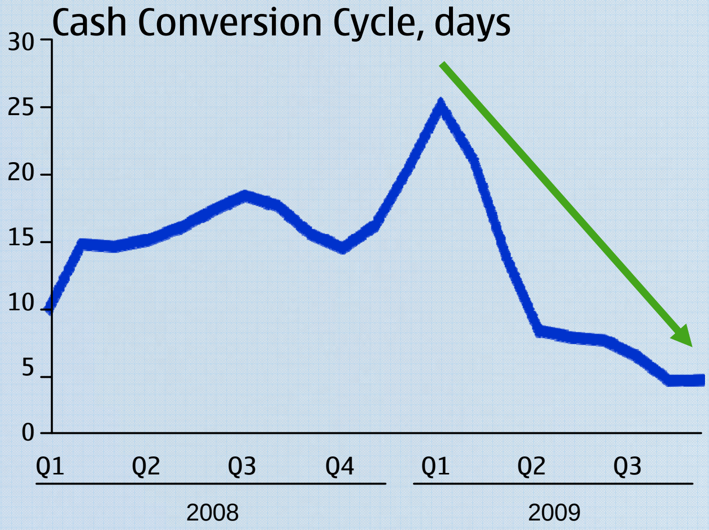
Devices & Services Cash Conversion

Inventory and Receivables efficiency improved throughout Q1-Q3 2009 and thus cash has been released from net working capital – focus to continue





NOKIA

Financial targets

D&S assets driving revenue & gross margin

Mobile Phones

- BOM & manufacturing cost benefit - scale
- Embedded services

Smartphones & Mobile Computers

- Symbian scaling down to lower price points
- Maemo user experience driving sales at higher price points
- Device + Service = solutions supporting ASP

Common assets

- Brand, relationships, distribution scale, reach and IPR

NOKIA

D&S assets driving operating margin

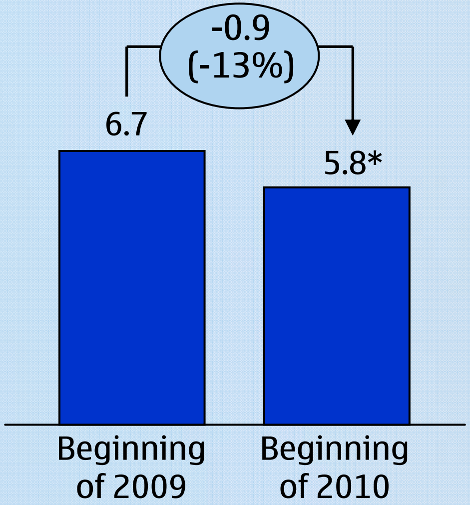
Mobile Phones	• Targeting cost leadership in all aspects of business execution
Smartphones & Mobile Computers	• Reducing complexity of Symbian • Investing in Maemo • Focusing on key services & solutions
Common assets	• Leverage combined scale across business segments

NOKIA

Devices & Services cost plan

Progress 2008-2009

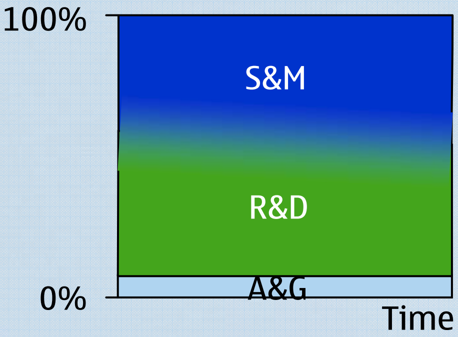
Annualized OPEX run rate,
Non-IFRS, BEUR



Plan going forward

- 2010 OPEX target: ~5.7 BEUR with mix shift towards S&M from R&D
- Target R&D to Net sales ratio < 10% in 2010

Longer-term focus on shifting OPEX mix from R&D to S&M



* Nokia estimate

NOKIA

Nokia 2010 financial targets

Devices & Services

- Industry mobile device volume up approximately 10%
- Nokia mobile device volume market share flat
- Nokia mobile device value market share slightly up
- Non-IFRS operating margin 12-14%

Nokia Siemens Networks

- Mobile and fixed infrastructure and related services market flat in Euro terms
- Grow faster than the market
- Non-IFRS operating margin of breakeven to 2%

NAVTEQ

- Non-IFRS operating margin higher than D&S

NOKIA

Summary

- Mobile devices market is stabilizing
- Nokia's competitive position is solid
- 2010 user experience milestones are key
- Building and sustaining competitive advantages in two operational modes:
  - Product mode (Mobile Phones)
  - Solutions mode (Smartphones and Mobile Computers)

NOKIA

Other financial targets

	2009E	2010E
Tax rate*	~26%	~26%
Capital expenditure (MEUR)	~540	~560
Depreciation and Amortization (MEUR)**	~830	~800
Financial income & expense (MEUR expense)	~260	~250
Common group functions (MEUR expense)**	~135	~140

* Average tax rate for ordinary activities

** Non-IFRS

NOKIA

Nokia software platforms
The shape of things to come.

Sebastian Nyström, Vice President
David Rivas, Vice President

Nokia Capital Markets Day 09
Nokia Connecting People
Espoo December 2nd

Nokia software platforms to connect 4 billion people.

Series 40

Symbian

Maemo

Portfolio

Three simple options to capture value across all segments & markets
Each providing unique capabilities to differentiate
Tremendous opportunity for developers

Nokia software platforms to drive value and differentiation.

Series 40

The world's most widely used mobile platform
Mature, flexible and cost efficient
Great ecosystem

Device shown is Nokia 2330 classic

Symbian^1

Reach: Channels, countries, price
Extensive telecom support & configurations
Smartphones for all price points

Devices shown are Nokia 6700 slide, Nokia X6, Nokia E72

> Smartphones | 1H/2010

Symbian^3

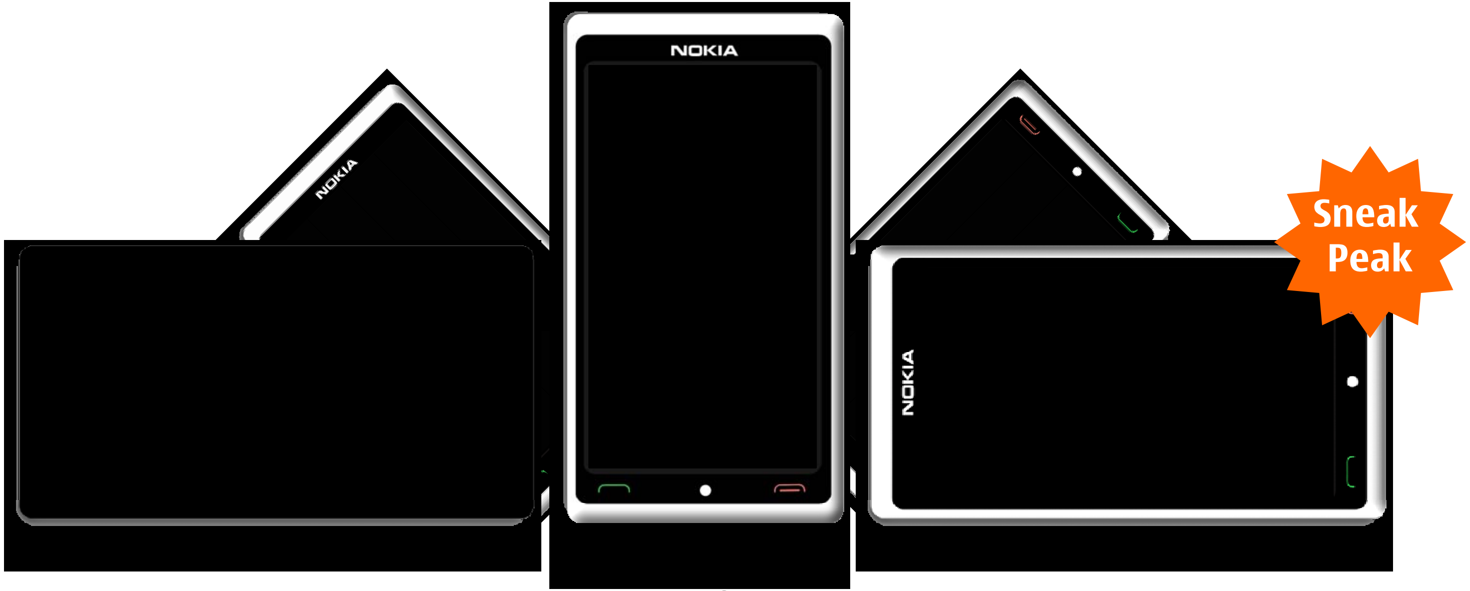
Fast and responsive single-tap UI with beautiful graphics
Multi-touch with gestures like pinch and zoom
Music experience re-energized

Devices shown are concept devices.

1H/10	1H/10	1H/10
UI	3X	Multi Touch
Simpler	Performance	with Gestures

Symbian^3

Simple, fast and beautiful
Higher performance, better configurations
Multi-touch and capacitive displays



Symbian^4

Completely re-designed
Simple, fast and beautiful
Powered by Qt

Devices shown are concept devices.

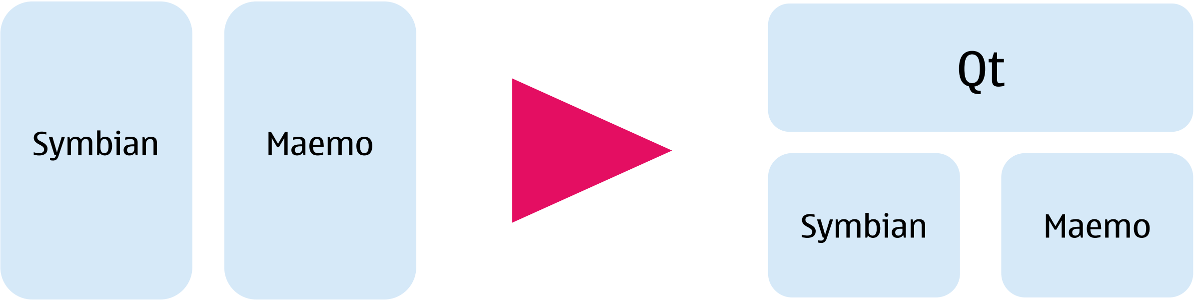
Maemo

No compromises. Linux based
Built for the highest-end mobile computers
Maemo 6 powered by Qt

Device shown is Nokia N900

Nokia software platforms shaping the things to come.

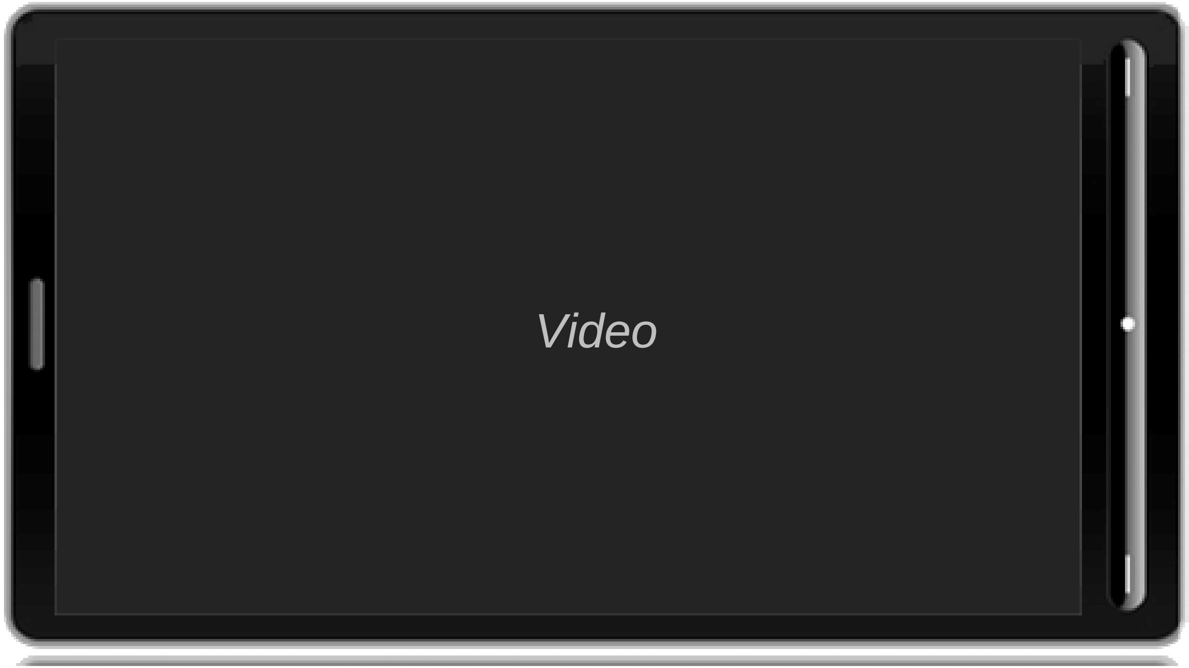
> Technology



Simplification

From two choices to one
Built on open, industry-proven technology developers love
For all Symbian and Maemo devices

> Development



Devices shown are concept devices.

today

Qt

Symbian
& Maemo

1H/10

Tool

All new
Developer

Developer

Easy, powerful, cross-platform development framework
Qt 4.6 for Symbian and Maemo available today
All new developer tools 1H/2010

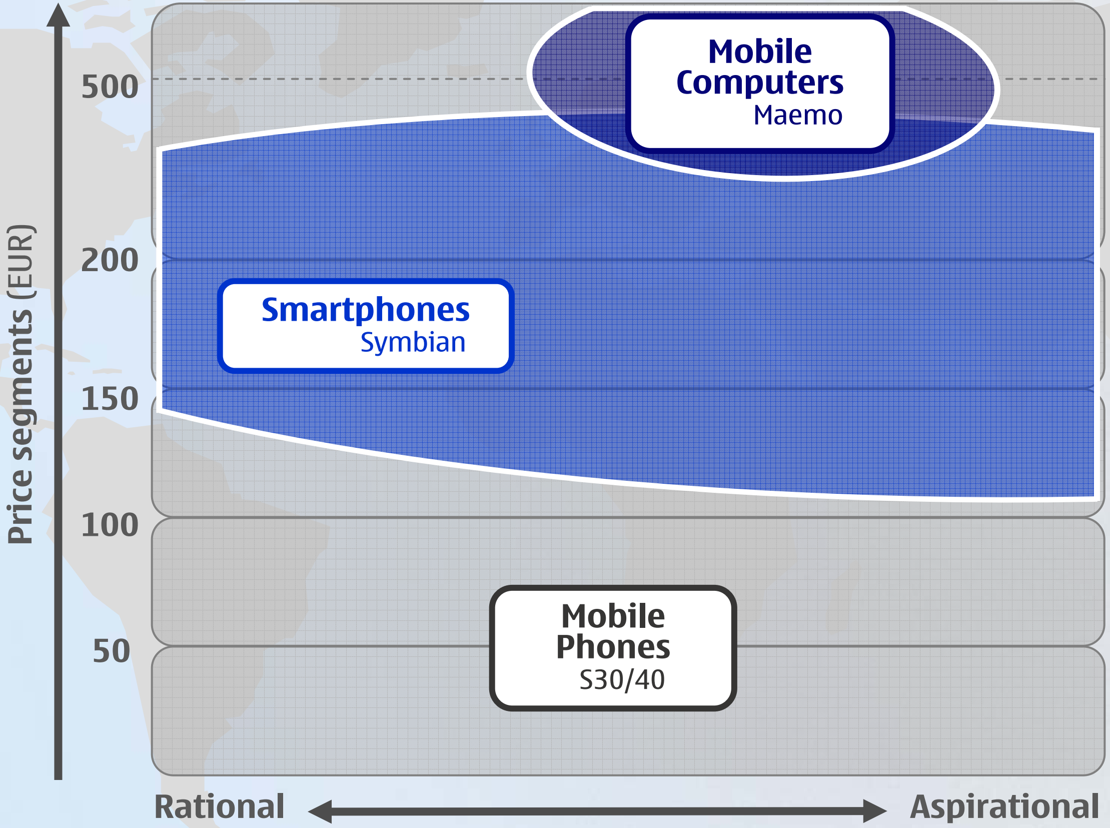
NOKIA

Nokia Smartphones
Each one a success story

Jo Harlow, SVP, Smartphones
Antti Vasara, SVP, Symbian Devices R&D

Nokia Capital Markets Day 09
Nokia Connecting People
Espoo December 2nd

Nokia Smartphones deliver outstanding consumer experiences that drive Services in the mass market



Nokia Smartphones deliver outstanding consumer experiences that drive Services in the mass market

Nokia E72

Smartphones
Symbian

Nokia N97 series

Nokia 5230

Rational

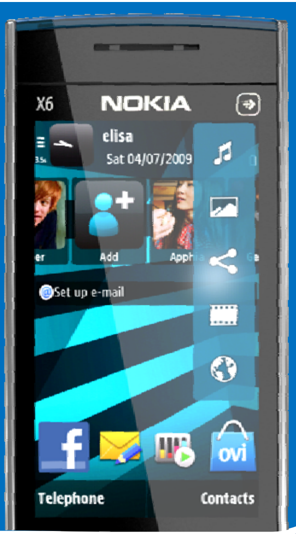
2010 takes Symbian to a new level in usability

NOKIA
Connecting People

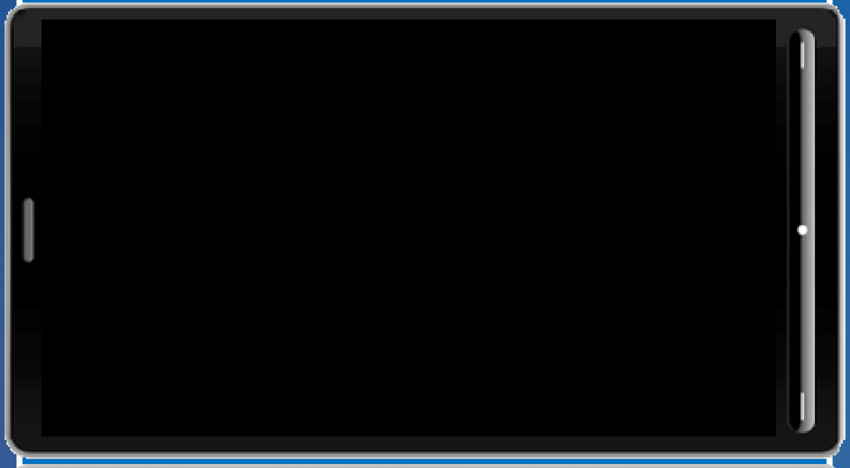
SIMPLICITY.
GLOBAL. QUALITY.
LOCAL. BEAUTY.
AT ALL PRICE POINTS.

Familiar UI
Rich features
Sleek design

Enhanced with touch



Fast & responsive UI
hardware accelerated

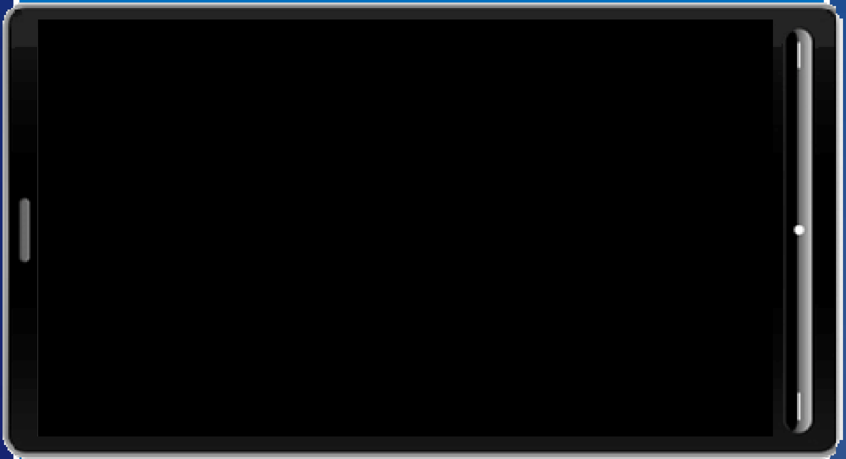


single-click interaction
flick scrolling
pinch-zooming
multiple Home screens

NOW — IN 2010

NOKIA

Fast & *responsive* ***UI***
hardware accelerated



single-click interaction
flick scrolling
pinch-zooming
multiple Home screens

Next step UI by the end of 2010

- Fully powered by Qt

- Content first
- Ultimate personalization
- Totally optimized performance

IN 2010

NOKIA

Consumer value drives our actions...

...and it's Software that creates the true value

- Differentiation via software
- Services to the mass-market through the Symbian platform
- Value add with software upgrades

Our operations are streamlined and tailored to deliver innovation, speed and cost efficiency

Consumer experience

↓

Time to market

↓

Cost

Partnerships leveraged beyond product innovation

Partnerships leveraged beyond product innovation

Mobile Phones

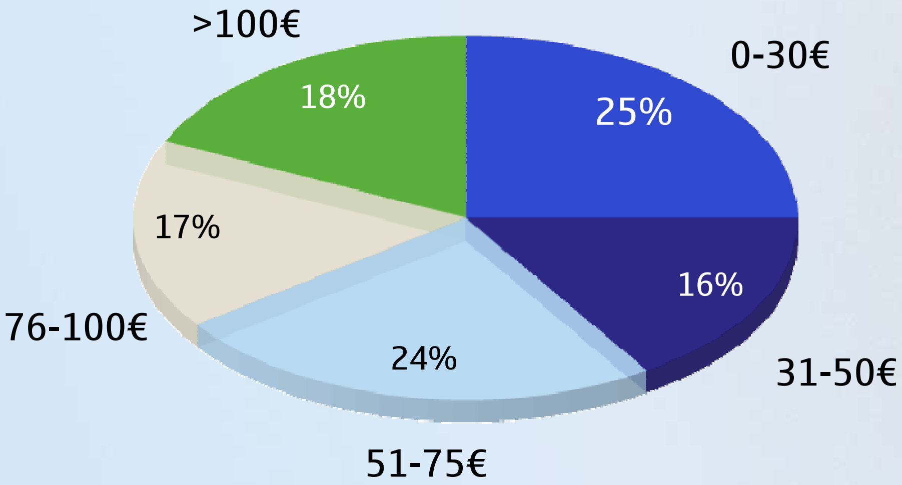
Rick Simonson
EVP, Mobile Phones

Nokia Capital Markets Day 09
Nokia Connecting People
Espoo December 2nd

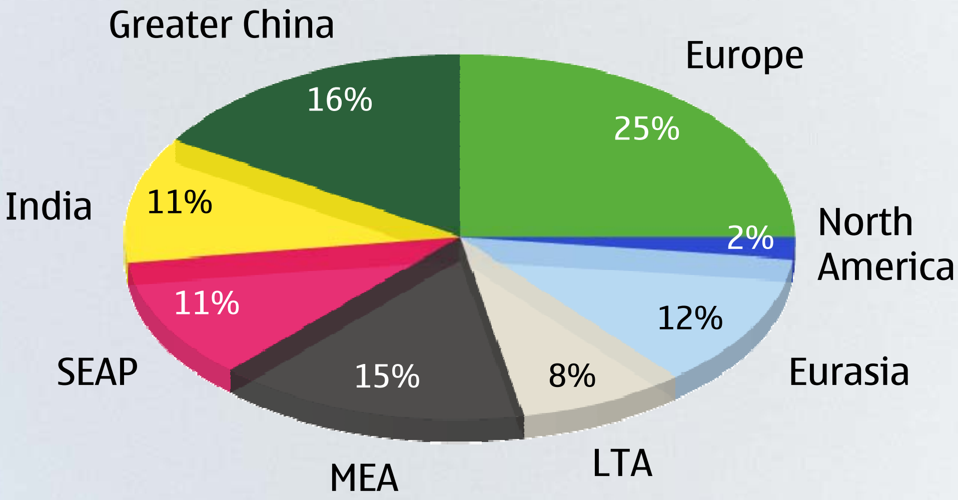
Mobile Phones drive the product mode of operation

Mobile Phones covers a wide range of price points and markets

3Q 2009 Revenue by ASP Band



3Q 2009 Revenue by Geography (%)



Mobile Phones key focus areas

- Excellent products that command a brand premium
- Leveraging Nokia scale in manufacturing, sales and distribution
- Practical understanding of what consumers value, aspire to and can afford
- Lowest cost end to end business model

Leveraging a strong brand

Typically, **entry consumers** put even greater importance on **brand**

Over 50% believe brand is one of the the most important purchase criteria

Nokia holds a distinct **brand advantage** against key competitors globally and locally

1 Coca-Cola
2 Microsoft
3 IBM
4 GE
5 NOKIA

Source: Interbrand 2009

NOKIA

World's most extensive reach through widest distribution network

China:

Nokia ~ **90 000** outlets and **1 000** care centers

Samsung ~70 000 outlets and 250 care centers

Middle East and Africa:

Nokia ~ **70 000** outlets

Samsung ~ 30 000 outlets

India:

Nokia ~ **160 000** retailers and **800** care centers

Samsung ~ 50 000 retailers and 400 care centers

Source: Nokia

Practical understanding of what consumers value, aspire to and can afford

First time buyers
Affordability and features
(e.g. FM radio)

Replacement buyers
Differentiation and services
(e.g. Nokia Life Tools,
Messaging, Comes with Music)

Expectations transformed from basic communication to modern design, music, radio, internet and more

Also the emerging market is increasingly driven by **replacement buyers**

NOKIA

Key drivers for the lowest cost end to end business model

- Competition coming from two different perspectives
  - Traditional competitors
  - MediaTek-based competitors
- We need to have continuous focus on gross margin – through ASP, brand premium and COGS – by leveraging Nokia's component sourcing scale
- Increased focus on R&D Opex efficiency while making selected new investments
- Driving for efficiency and scalability in manufacturing
- Focus on efficient distribution channel, leveraging Nokia scale

It is not only about cost efficiency, but also innovation

Cost innovation

Less-packaging, smaller user guide

Logistics optimization

Feature innovation

Flash-light, radio (with internal FM antenna), camera

Quality with strong signal reception

Material innovation

Coatings, metal-look plastic etc. creating premium products at low cost

Service innovation

Services built from the ground up, based on local context, local content and local language

Nokia Life Tools, Ovi Mail, Nokia Money

NOKIA

Focused service innovation

Messaging	Browsing	Nokia Life Tools	Nokia Money
All methods to stay in touch with family and friends on one device (Mail on Ovi, 3rd party e-mail/ Nokia messaging/ Social networking)	Optimized mobile browsing experience and widgets platform.	Out-of-the-box livelihood/life improvement enhancer for low income users (education, agriculture, entertainment)	Easy and low cost access to banking services and payment alternatives for the unbanked

It's the beginning of a long lasting **relationship! – Value adding** to consumers and **sustainably profitable** for Nokia!

10 © 2009 Nokia

NAVTEQ

Larry Kaplan

President & CEO

Global Leadership in Location Content

In-Dash Vehicle

- Used by virtually every car manufacturer and system vendor in Europe and North America
- ~ 20 million in-dash systems in EU and NA with NAVTEQ maps

Internet & LBS

- Tens of billions of mapping transactions annually using NAVTEQ maps
- Internet focus rapidly evolving to local search services

Mobile Devices

- Significant share of EU PNDs and leading map supplier in NA
- ~50 million PND and smartphones in EU and NA have been enabled with NAVTEQ maps

Advertising

- First integration of advertising into a navigation unit
- 100 million monthly ad impressions on mobile network

NAVTEQ

Strong Customer Relationships

Automotive OEs	BMW, Mercedes-Benz, GM, Porsche, Renault
Internet &LBS	Microsoft, verizon, Yahoo!, t info
System Vendors	Harman/Becker Automotive Systems, Alpine, Zenrin, Magneti Marelli
Mobile Devices	Garmin, Nokia, Navigon, Samsung, LG
Telematics	OnStar, ATX
Advertisers	Starbucks Coffee, Best Buy, bp, IKEA, McDonald's

NAVTEQ

Content Examples Enabling Compelling Experiences

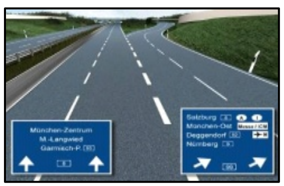
Navigable Content

- HOV Lanes
- Extended Lanes
- Speed Limits
- Toll Guidance
- Scenic Routes
- Speed Zones

Pedestrian Content

- Neighborhood Boundaries
- Mass Transit Lines
- Pedestrian Paths
- Crosswalks
- Stairwells
- Travel Guides

Display Content

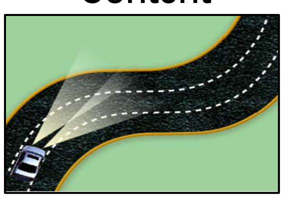


- Junction Views
- 3D Landmarks
- Digital Terrain
- 2D Building Footprints
- 3D City Models
- Satellite Imagery

Information Content

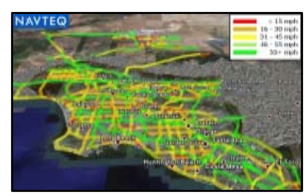
- Points of Interest
- Attribute Flags
- Truck / Transport
- Voice Phonemes
- Telecommunications

Safety & Security Content



- Precise Lane Geometry
- Road Curvature
- Road Slope
- Road Height

Traffic & Dynamic Content



- Traffic Patterns
- Real-time Traffic
- Gas Prices
- Event Listings
- Movie Listings

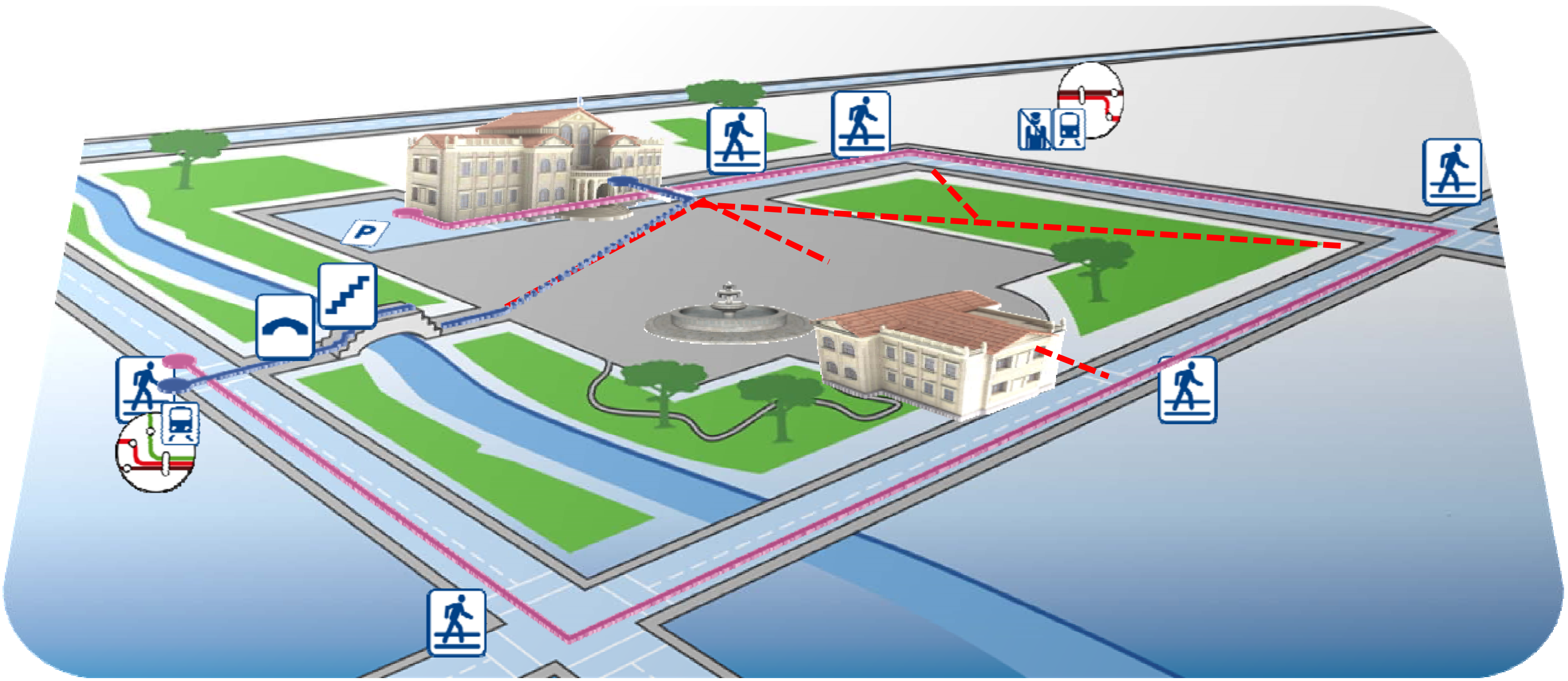
NAVTEQ

Easier Orientation: Motorway Junction Objects

Familiar 2-D Mode	Motorway Junction Objects in Complex Areas
	

Pedestrian Exploration & Routing: Discover Cities

- Pedestrian Geo & Sidewalks
- Virtual Connections
- Pedestrian Stairs, Bridges & Tunnels
- Cross-walks
- Transit Entrance /Exits
- Transit Lines & Schedules

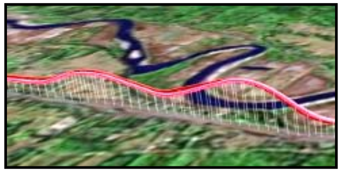


NAVTEQ

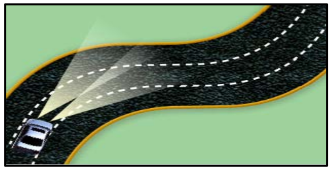
Potential Growth Driver: ADAS

Next Generation Applications

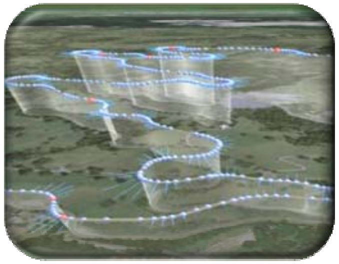
Road height enhances transmission performance



Road curvature enables headlight aiming, curve warnings



Unique Content



- Hard-to-capture ADAS attributes including curve, slope and height
- Advanced features including speed limits and traffic patterns
- Base map subset to support business model requirements

Driving Industry Development

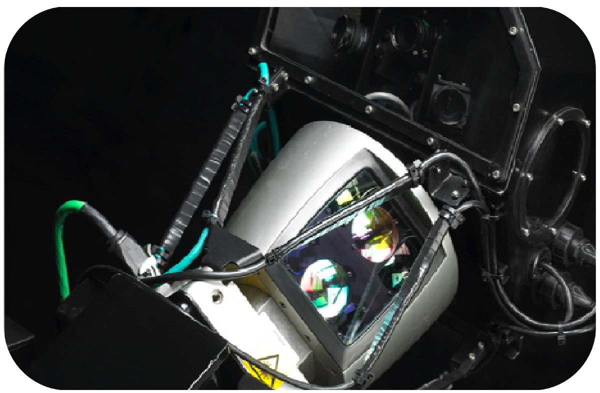
- Software research platform
- Pan industry specification design and adoption
- Map Positioning Engine (MPE) development

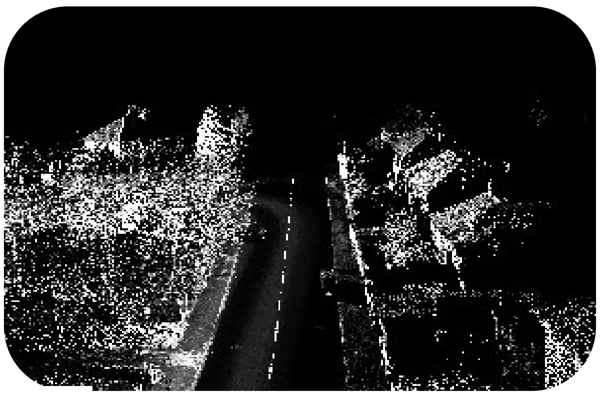
NAVTEQ

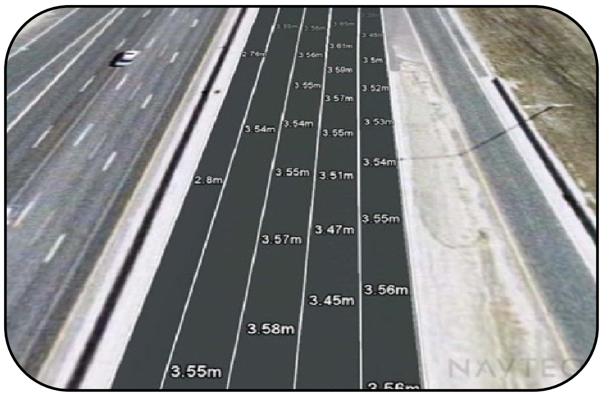
Using Field Collection Technology to Create Unique Content

Announcing NAVTEQ True

- Advanced field collection system
- Launching in Q1 2010
- Integrates Lidar, 360-degree video, IMUs, etc.

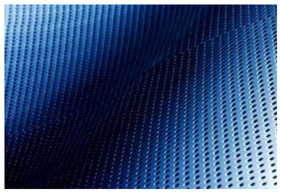






Using Communities to Decrease Cost Without Compromising Quality

Probe Feedback



- 3 billion monthly probe points in U.S. by Q3 2010
- Includes data from major handsets, PNDs and carriers
- Used in map maintenance and traffic products

Professional Feedback

- +4 million professional inputs incorporated annually

Professional Drivers

Governments

Merchants

Convention Bureaus

Consumer Feedback

- Leveraging community feedback for +10 years
- Automated validation of base data (e.g., geometry)
- Not a good source for advanced content

NAVTEQ

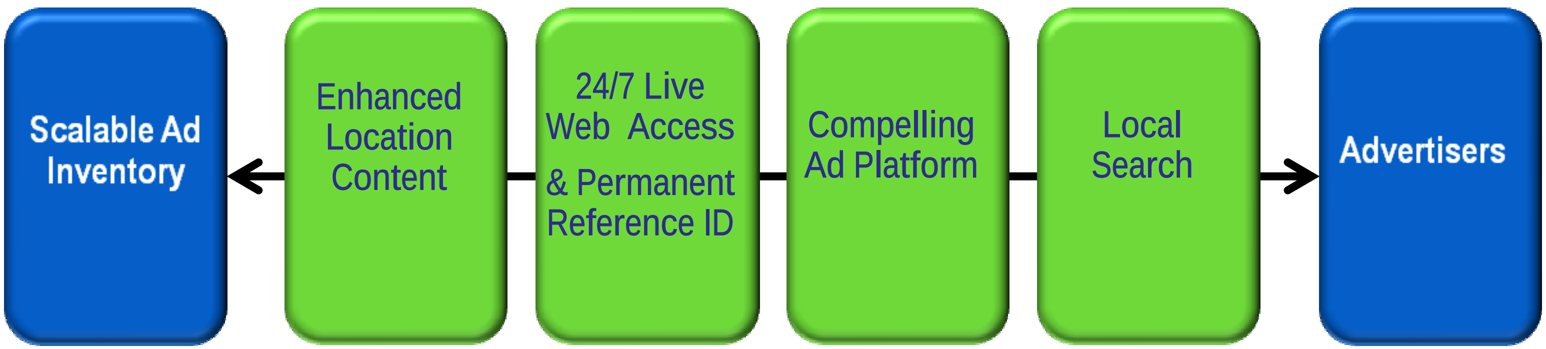
Enabling Alternative Monetization

Location Based Advertising

Scalable Ad Inventory ← Enhanced Location Content — 24/7 Live Web Access & Permanent Reference ID — Compelling Ad Platform — Local Search → Advertisers

Enabling Alternative Monetization

Location Based Advertising



Developer Communities

NAVTEQ NETWORK FOR DEVELOPERS™

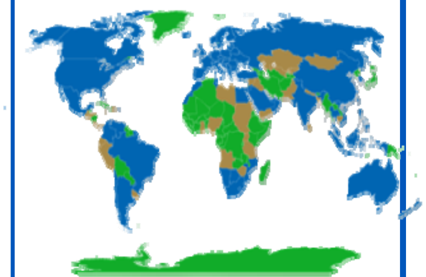
- Founded in 2003
- Launched multiple applications into mainstream success (e.g., NIM)
- Selected as top performing developer site in Evans Data comparison of 23 developer sites
- Selected by leading companies and platforms (e.g., Intel, Bing) to attract location-based developers

Leveraging Nokia Capabilities for Growth

NOKIA Innovation	▪ Mobile Millennium traffic / trip line project ▪ NRC server API technology
NOKIA Distribution	▪ Consumer access through device proliferation ▪ Advertising inventory
NOKIA Community	▪ Widespread implementation of Map Reporter for community feedback
NOKIA Resources	▪ Access to preferred content providers seeking Nokia scale ▪ High growth client enabling additional reinvestment

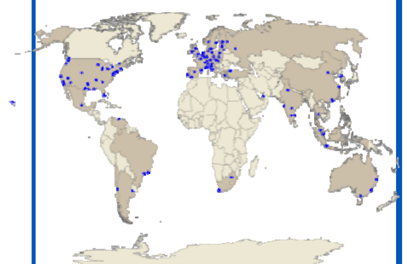
Supporting Nokia Growth

Coverage Expansion



- NAVTEQ Intermediate Maps developed for 33 new countries for launch in 2010

Pedestrian Content Expansion



- NAVTEQ Discover Cities pedestrian product in 175 cities by year-end 2010

Automotive Cooperation

MAGNETI MARELLI

NOKIA

NAVTEQ

Location Technology & Infrastructure

- Location referencing and content management systems

NAVTEQ

Developer Offerings
-
Higher Volume & Open Platforms

Purnima Kochikar
VP, Forum Nokia and Developer Communities

Nokia's Developer Offering:

Cross-Platform evolution expands opportunities

Increase Total Addressable Market and ROI

Commit to Open Source
SF / Maemo / Webkit

Lower Entry Barriers for Developers

Combine the Best of Mobile and Desktop

Nokia Platforms & Services

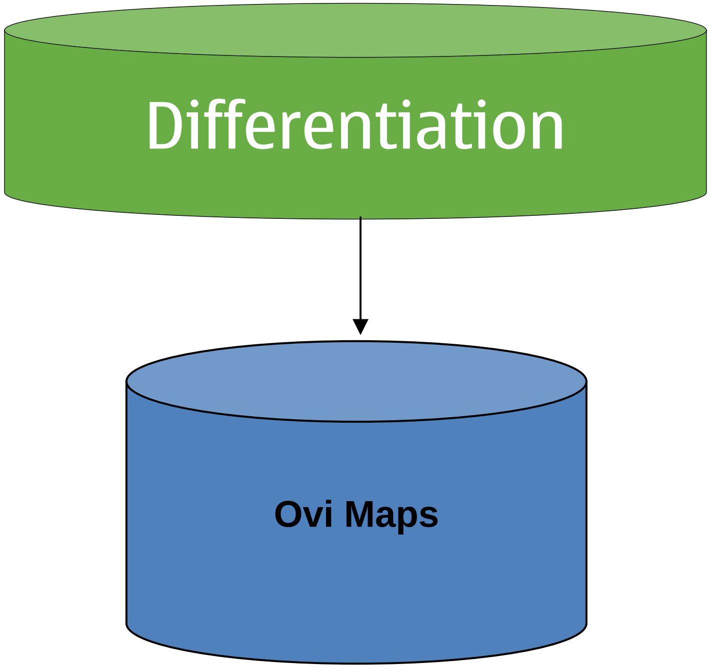
Momentum - Volume

Symbian

Recent Symbian launches X6, 5230, and N97 Mini demonstrate the viability of Symbian in different device ranges

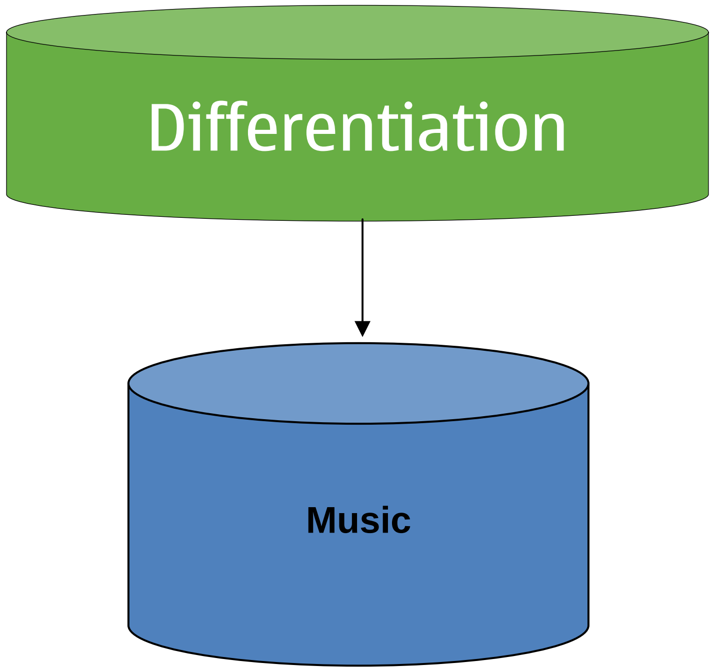
Momentum - Differentiated

Creation of Unique Solutions = Opportunities for Differentiated Apps



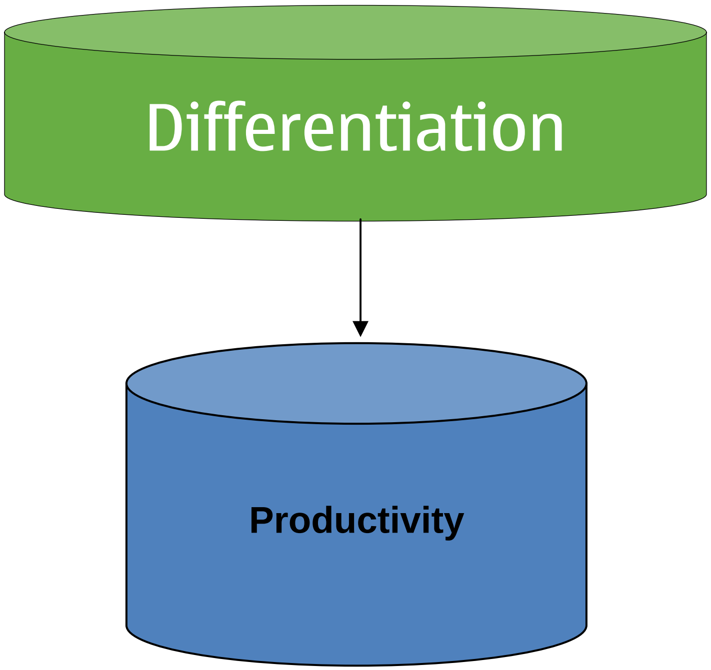
Momentum - Differentiated

Creation of Unique Solutions = Opportunities for Differentiated Apps



Momentum - Differentiated

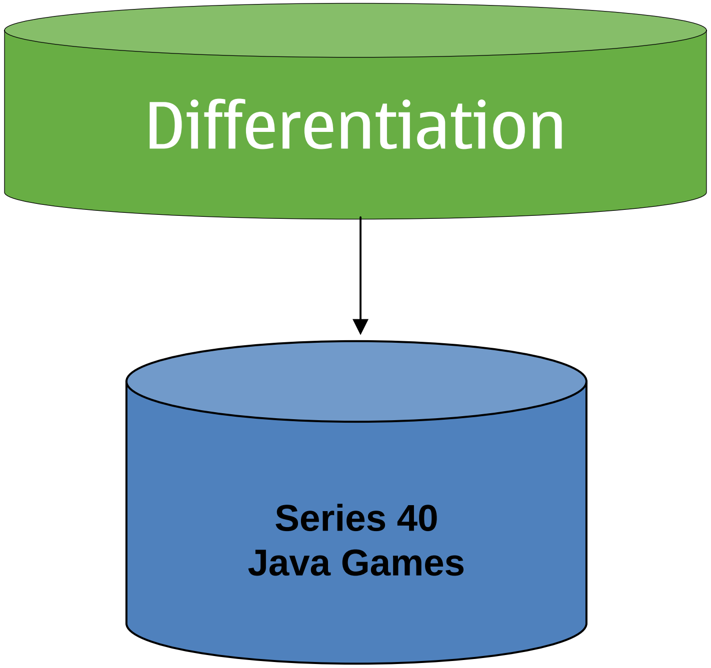
Creation of Unique Solutions = Opportunities for Differentiated Apps



Forum Nokia

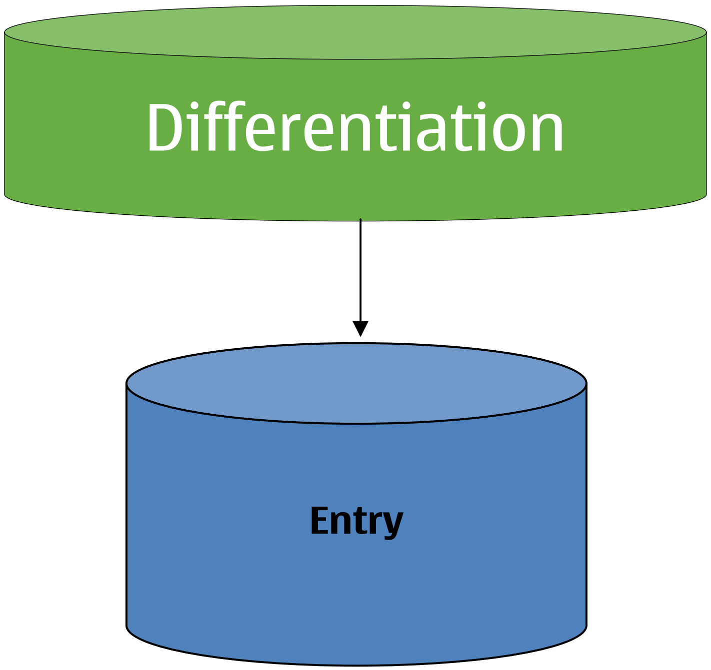
Momentum - Differentiated

Creation of Unique Solutions = Opportunities for Differentiated Apps



Momentum - Differentiated

Creation of Unique Solutions = Opportunities for Differentiated Apps



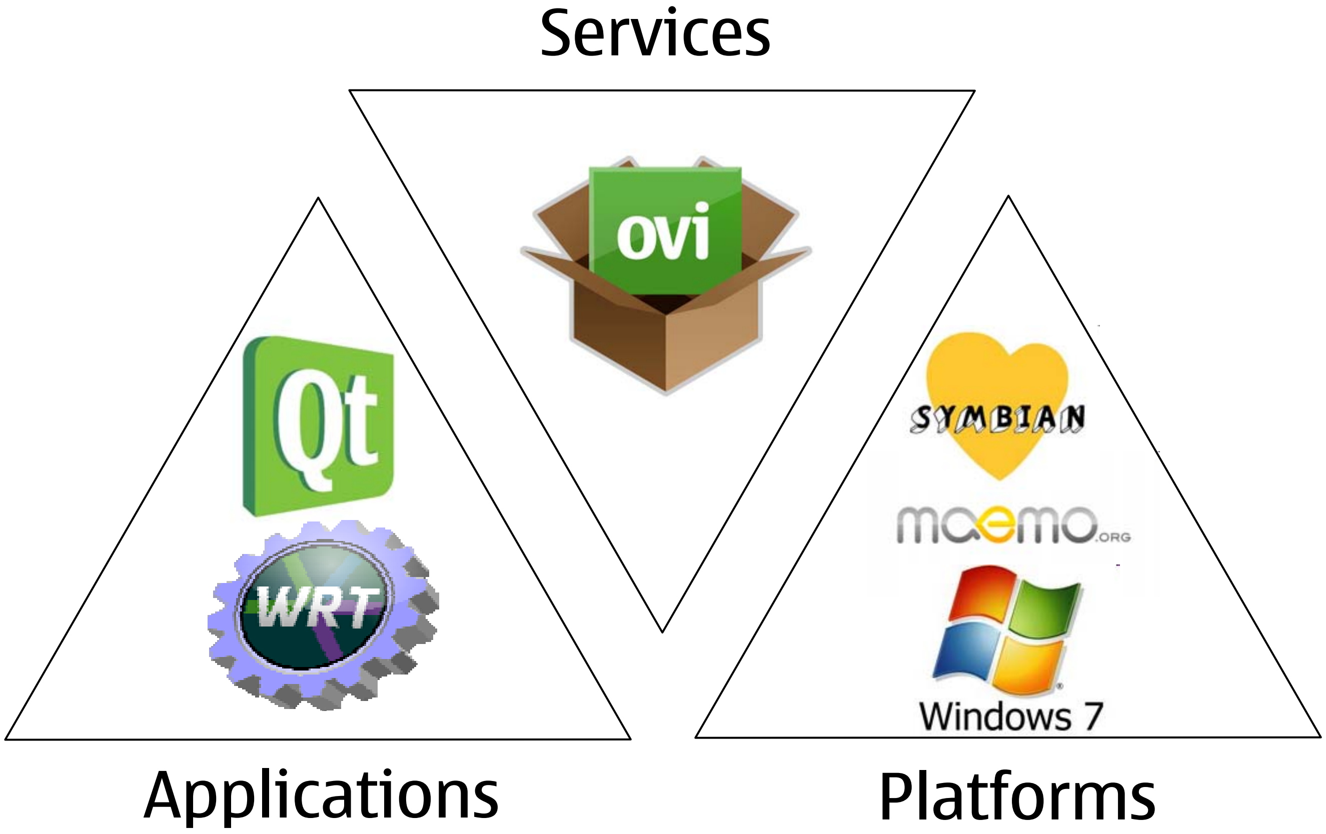
Forum Nokia

Momentum - Differentiated

Opportunities for Premium Applications

Frameworks of Choice

Elegant


Services
ovi
Qt
WRT
SYMBIAN
maemo.org
Windows 7
Applications
Platforms

Pervasive

Globally diverse, widely available, and constantly evolving

Forum Nokia

Locally Relevant

Plusmo ESPN Soccernet Widget

Locally Relevant

Gift of Light - Diwali Applications

Locally Relevant

Netflix – North America Themed

Forum Nokia

Locally Relevant

Xdancery – Preload on Nokia N97 in China

Forum Nokia

Innovative

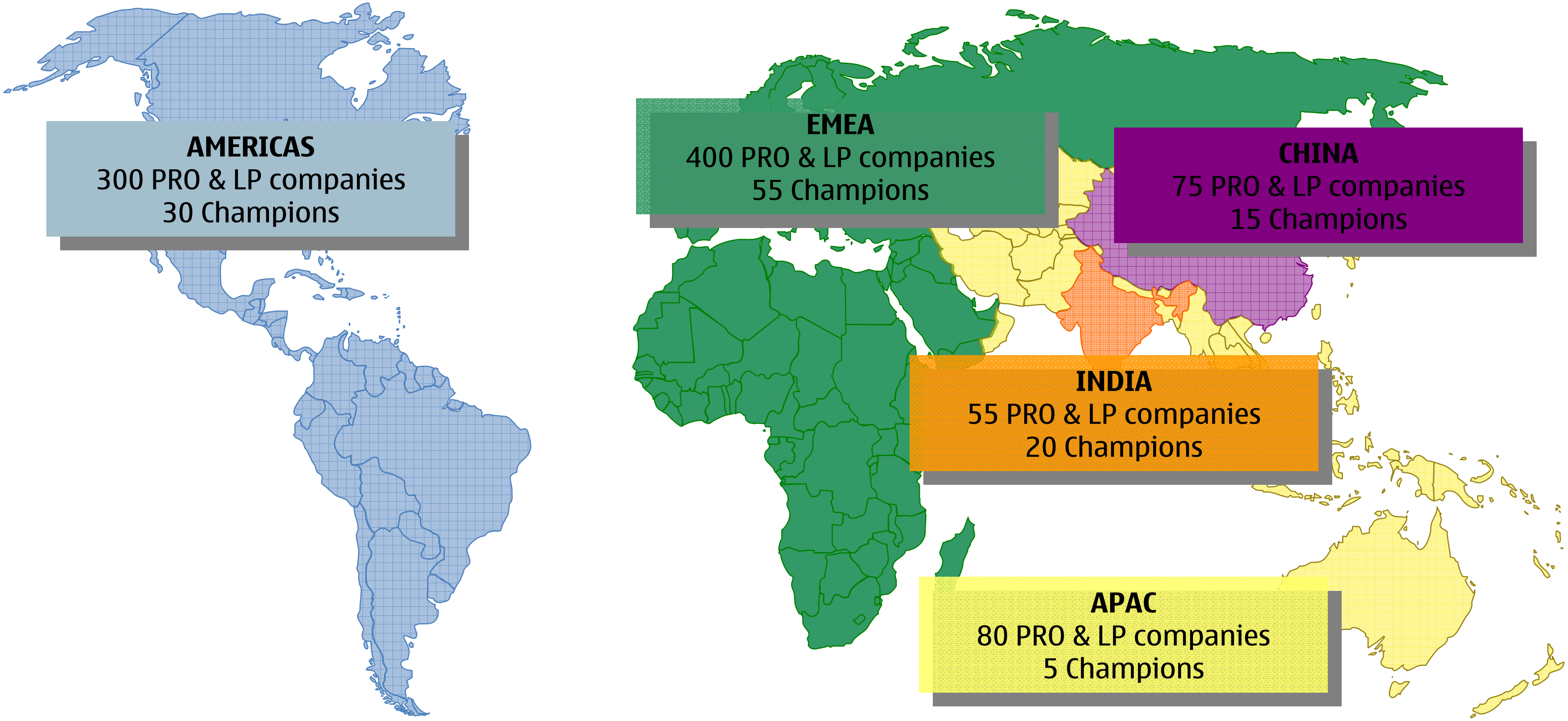
Innovation creates business opportunities and changes lives

A Highly Active Developer Base

Enthused


Calling All Innovators
Developer Enthusiasm
Nokia Developer Summit
Open Screen Project Fund

Engaged



AMERICAS
300 PRO & LP companies
30 Champions
EMEA
400 PRO & LP companies
55 Champions
CHINA
75 PRO & LP companies
15 Champions
INDIA
55 PRO & LP companies
20 Champions
APAC
80 PRO & LP companies
5 Champions

Driving for growth

Bosco Novak

Chief Market Operations Officer

Enabling the Customer Experience

Dating

Relationships

Blogs

Personal Interests

Banking

Taxes

Health Benefits

Shopping

Resume

Credit Cards

School

TV Shows

Games

Movies

Music

End-user behavior is changing
From internet to “evernet”

"Free or fantastic" services

Simplicity & user experience

Digital life goes mainstream

Invasion of smart devices in the home

Privacy and security

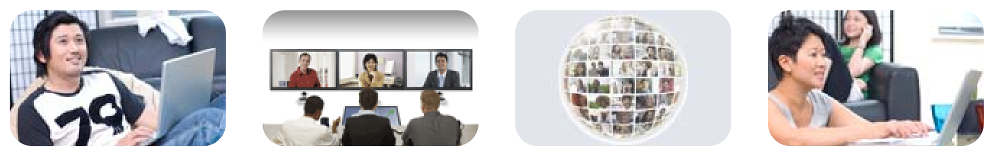
High emotional attachment to Internet super brands

Home

Digital camera | PVR set top box | VOIP clients | Laptop PC

Digital VCR | Music & gaming | Mobile Computer | IPTV | TV PC

Enterprise



eLearning | HD Video conferencing | Unified communications | Home working

eMedicine | Remote security | Storage area networking | Community VPN

In order to provide necessary investments in building customer experience …

… NSN also enables extreme efficiency solutions for operators

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Communications Service Provider (CSP) in 2015:
From network centric to customer centric

CSP Today	CSP in 2015
Network is complex • Each network with own service platform landscape • Many different billing / charging systems • Several ways to deliver voice (TDM, ATM, VoIP)	**Network is simple** • Centralized service hubs • SDP and converged charging systems • Flat network architecture • Single RAN → evolution to multi-radio
Biggest business comes from voice • Voice 80-90% of revenues • Data dominated by SMS • Low, but increasing mobile data usage	**Business comes from broadband** • Move to IP - digital live is mainstream • >25Mbit/s across the network • 300x mobile data increase from 2008
Telecom & Media are separate businesses • Own IT outsourced to 3rd party • Some enterprise data-warehousing	**Telecom, IT and media converge** • IT services and applications cloud • Infrastructure provider and enabler • Internet content and applications drivers of usage
Global CSP with independent operations • Mainly local operator operations • Limited synergies realized on cross-borders M&As	**Centralized service operations architecture** • Network is key asset, but operated by 3rd party • Service hub across technologies & access

Source: Nokia Siemens Networks estimates

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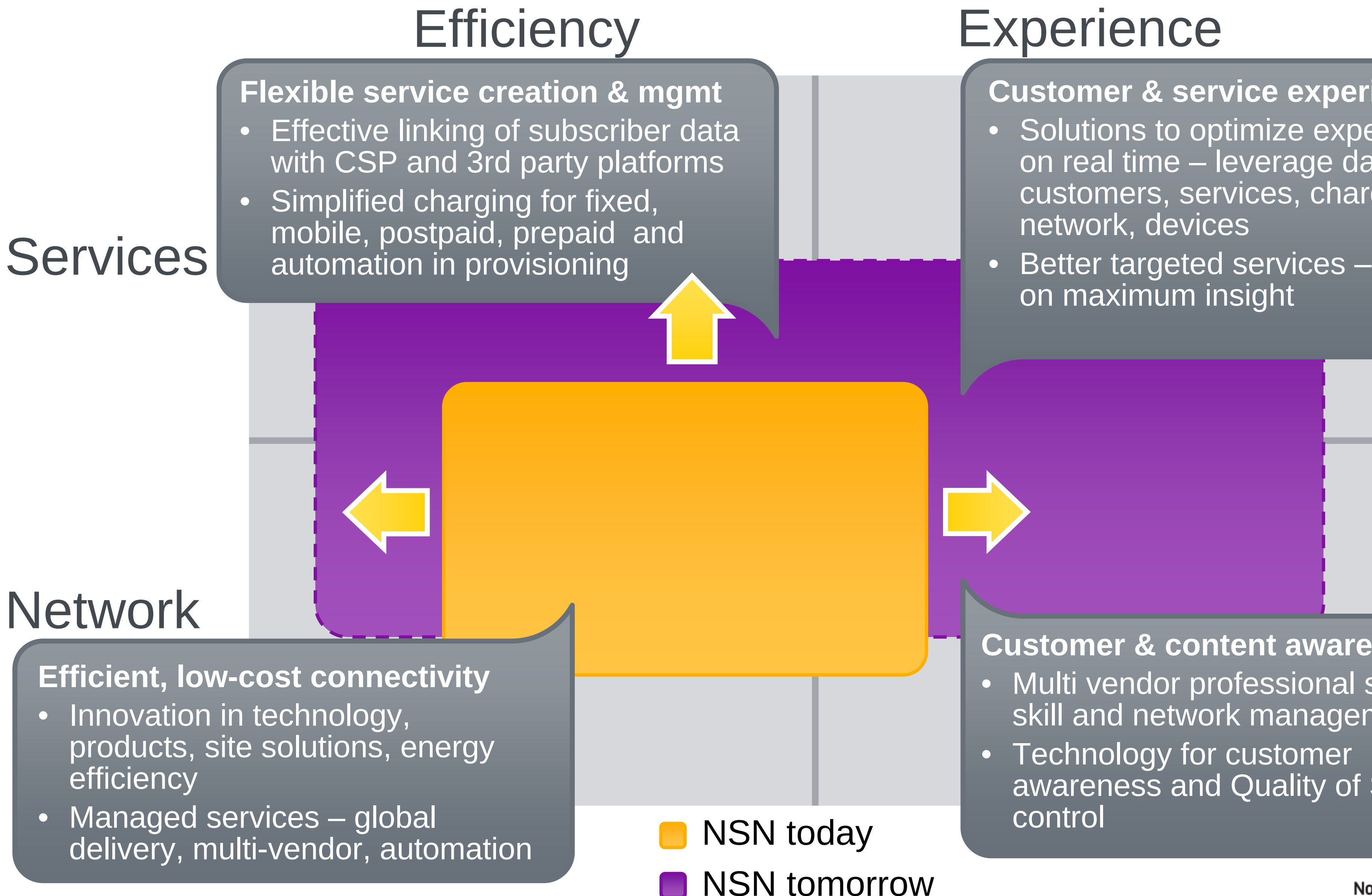
We help CSPs build customer value through **efficiency** and **experience**



Flexible service creation & mgmt

- Effective linking of subscriber data with CSP and 3rd party platforms
- Simplified charging for fixed, mobile, postpaid, prepaid and automation in provisioning

Customer & service experience

- Solutions to optimize experience on real time – leverage data on customers, services, charging, network, devices
- Better targeted services – based on maximum insight

Efficient, low-cost connectivity

- Innovation in technology, products, site solutions, energy efficiency
- Managed services – global delivery, multi-vendor, automation

Customer & content aware delivery

- Multi vendor professional service skill and network management
- Technology for customer awareness and Quality of Service control

Let’s look at some success stories within our industry …

Customer profitability

Effective Customer Care (elisa)

Asian CSP cuts revenue loss

Radically reduced time-to-market (Globe)

Effective partnerships

Effective business transformation (oi)

Rapid launch of new services (zain)

Business processes

Unified customer intelligence (AIS)

Effective service monitoring (orange)

Optimized network

Boosting quality and capacity (XL)

Extending 3G to rural areas (elisa)

Improved transmission capacity (zain)

Automation

Automated device management (!dea)

Reduced energy bill

Lowering site costs (SoftBank)

Green energy solution

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We are getting deal momentum back

- Telenor Denmark awards the 1st Nordic LTE contract to NSN
- Chosen by NTT DoCoMo as their only non-Japanese supplier for LTE
- 22 new 3G deals secured in 2009 up to now
- Unitech Wireless India greenfield roll out with an important new customer
- Hutchison Hong Kong network modernization and expansion project
- Selected by Telefonica for (LTE) trial in the Czech Republic
- IDEA Cellular India: Device Management solution
- Oi Brazil multivendor / multi-technology Managed Service and Care contract
- Telenor Pakistan off-grid energy solution

"Nokia Siemens Networks secured 55.2% of total contract awards (2G, 3G, LTE) during the September 30th, 2009 ended quarter, beating Huawei (19.4%), and ZTE(14.9%)"

EJL Wireless Research, Nov/2009

Significant 1H2010 opportunities in key markets such as India, Brazil, US and China

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Leading business transformation through services

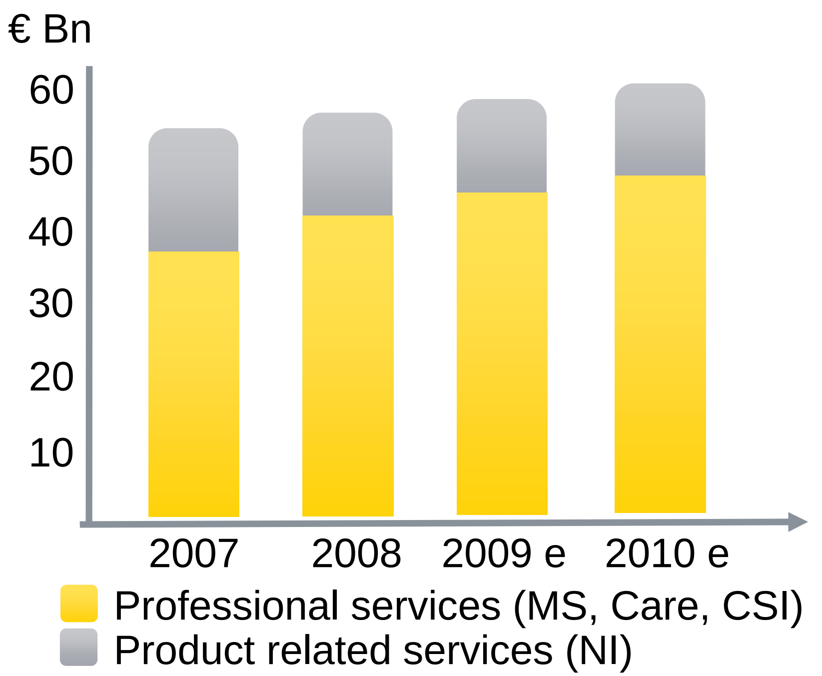
Ashish Chowdhary

Head of Global Services

Services is a growth market…

Key market trends

- Economic climate & driving Capex and Opex pressure
- Price erosion widespread
- Communication Service Providers (CSPs) and vendors identifying optimal role in value chain
- Investments into customer experience, complexity reduction

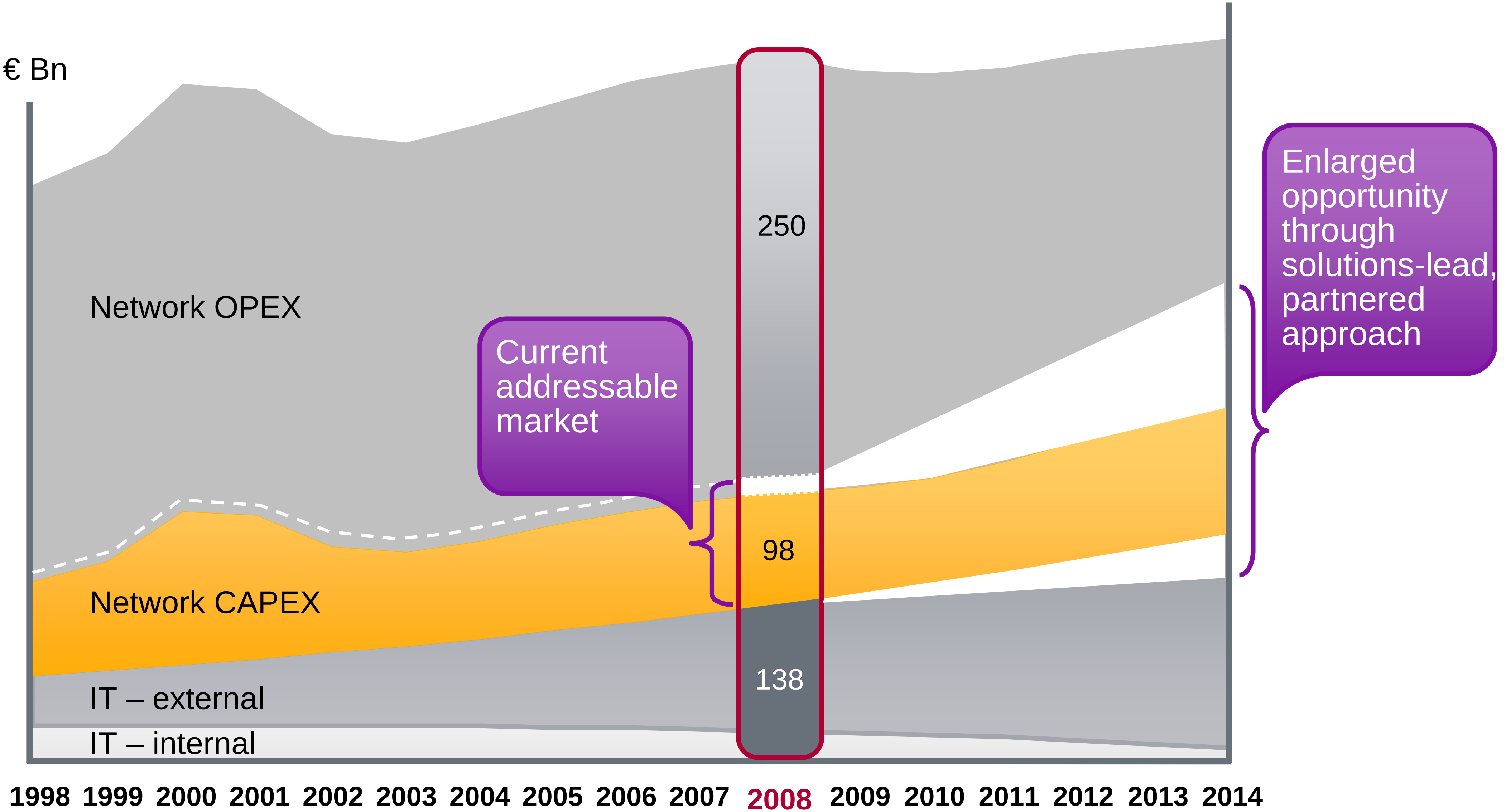


Our assets

- 600+ customers
- 28k service professionals across 150 countries
- #2 in Services
- #1 in Network Implementation
- #2 and fastest growth in Professional Services

Source: Nokia Siemens Networks

…and there is a significant upside potential



Addressing these new opportunities needs Transformation

Source: Gartner, KPMG, NSN analysis

Services transformation to realize the potential

Services support products

Services differentiate products

Services lead products

Services are the products

Product focused — **Services focused**

Deliver
Focus on execution and efficiency

Services is ~45% of company revenue

Transform
Focus on innovation and growth

Network Implementation #1

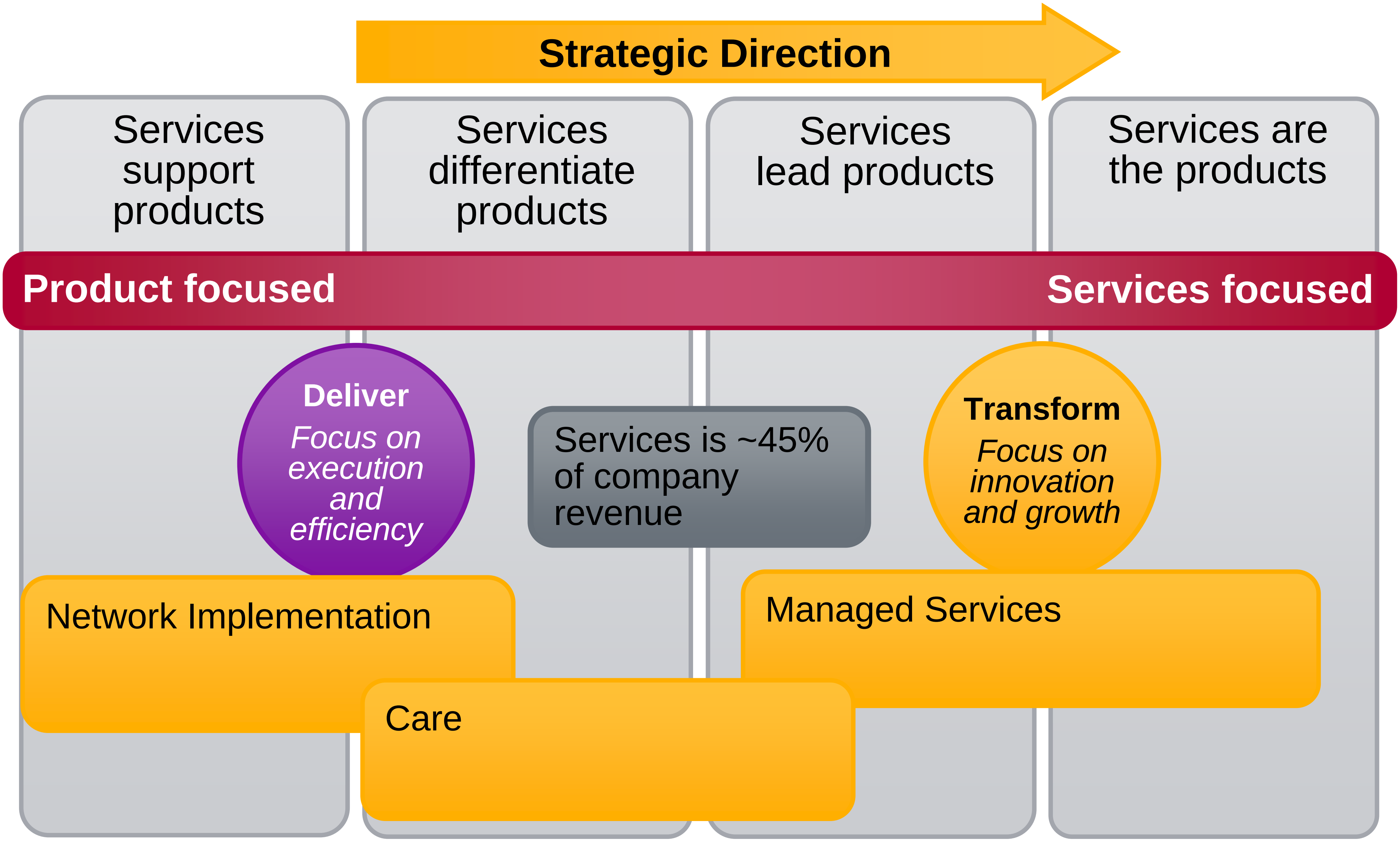
Care #2

Managed Services #2

Source: Nokia Siemens Networks analysis

Nokia Siemens Networks

Services transformation to realize the potential



Source: Nokia Siemens Networks analysis

Driving for the future

1 Managed Services – a growth engine

2 Care – profitable and growing

3 Network implementation – efficiency driven; opportunity for innovation

4 Global service delivery – key differentiator

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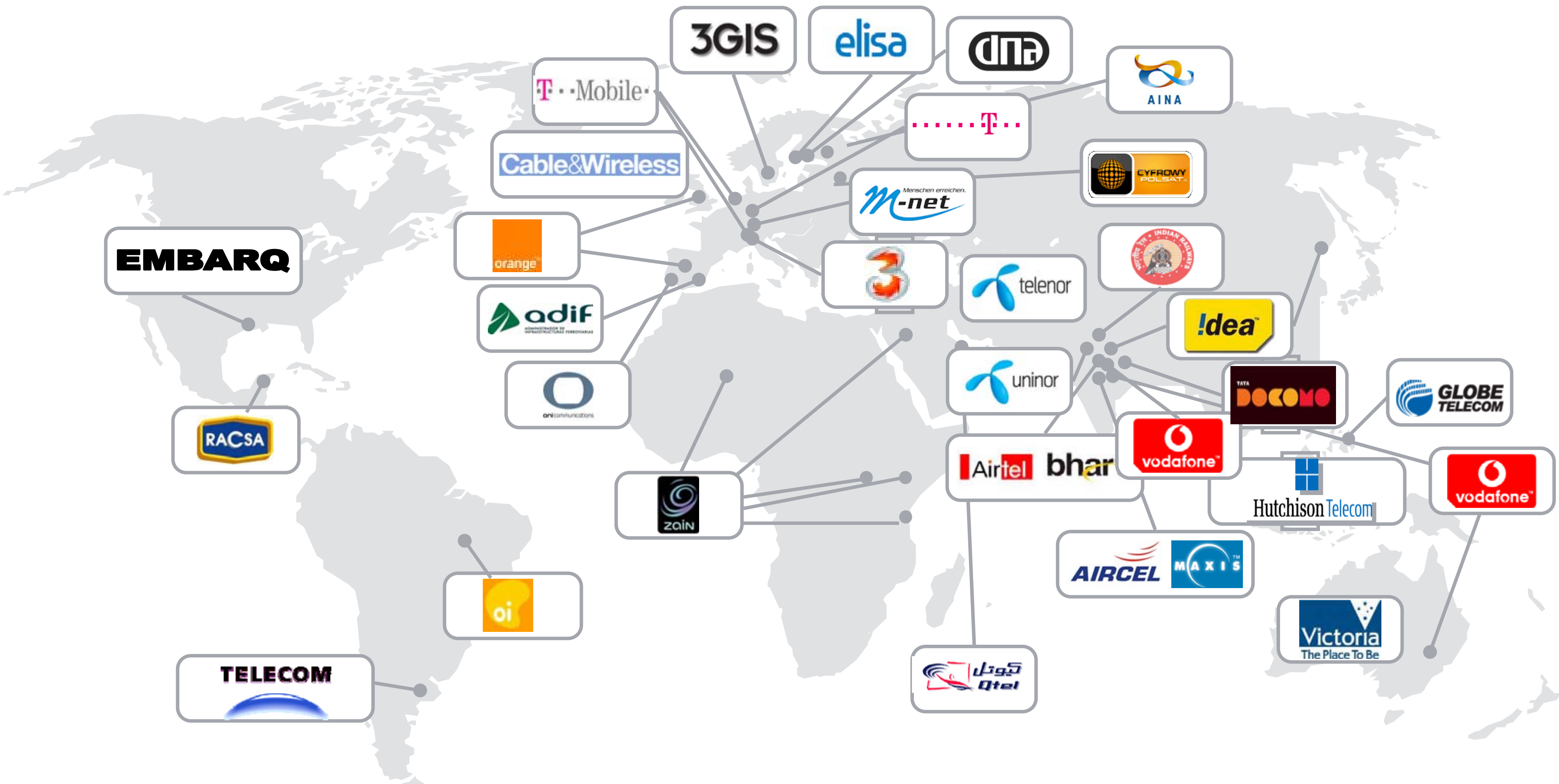
1 Strong global presence in Managed Services



Managing networks ca 300 million subscribers

Over 230 Managed Services contracts

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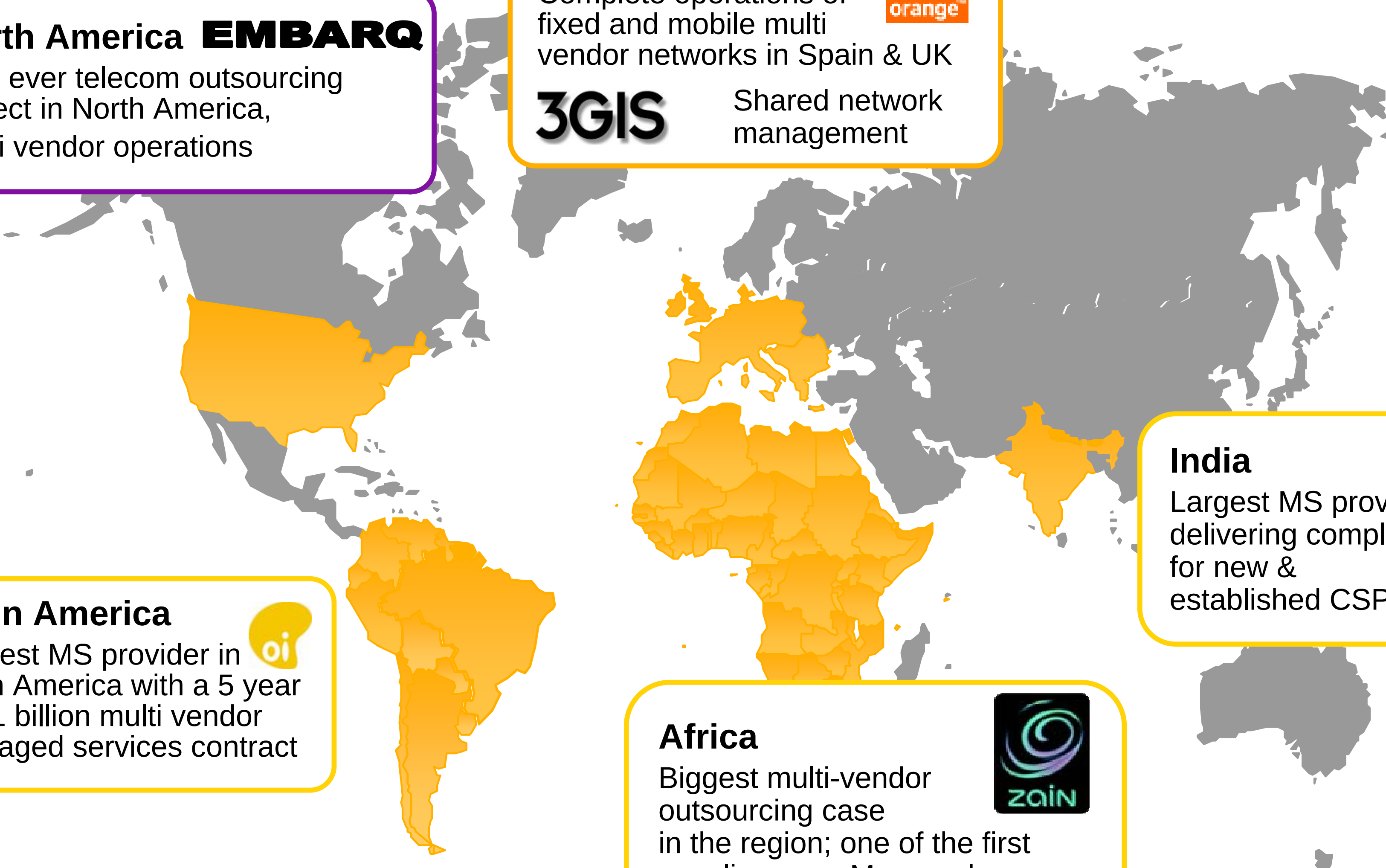
1 With strong win momentum in key markets…

North America EMBARQ
First ever telecom outsourcing project in North America,
Multi vendor operations

Europe orange
Complete operations of fixed and mobile multi vendor networks in Spain & UK
3GIS Shared network management



India vodafone TATA indicom
Largest MS provider delivering complete operations for new & established CSPs
bharti Airtel

Latin America oi
Largest MS provider in Latin America with a 5 year € 1.1 billion multi vendor managed services contract

Africa zain
Biggest multi-vendor outsourcing case in the region; one of the first supplier swap Managed Services deals of its kind

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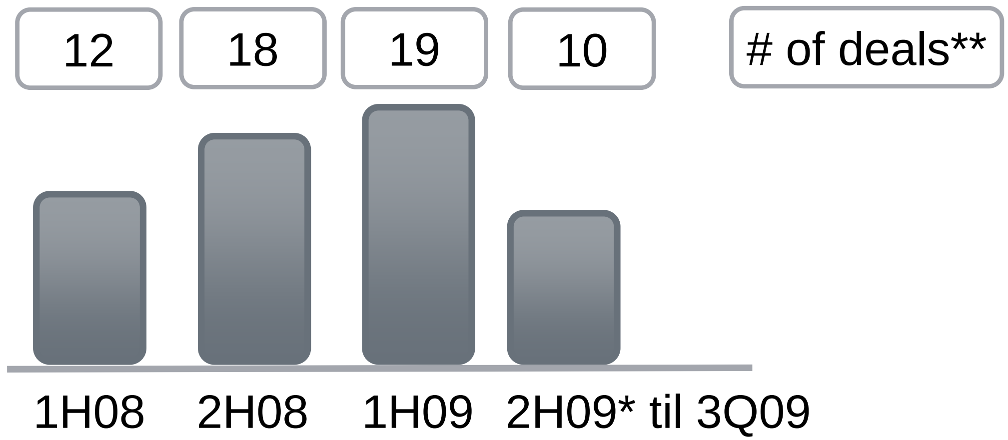
1 …and delivering efficiencies on large scale



#2 Managed Services vendor*

Only vendor to gain market share in 2008*
Most deals in 2009

70 multi vendor networks managed

Over 800 planning and optimization projects are delivered per year

13 000 employees transitioned

Managing over 500k network elements, 50% from other vendors

*Source: Informa report, March 2009 & Equipment Vendor Services to Service Providers report, Infonetics Research, May 2009
** Deals are public and non-public

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2 Care services – stable and growing portfolio of attractive services

- Healthy top line and margin growth
- Preventive Software Support services driving enriched customer experience
- Multi-vendor Care, Life extender portfolio winning more customers
- Opportunity in CSP internal Opex on network repair and maintenance
- Increased usage of global delivery driving costs down

- 6.5 Million visitors, 110 000 calls/ hour
- 0 outage and 0 end-customer complaints during Olympic Games, 100% reliability

Care services for industry's 2nd largest installed base

1 300 technical experts providing remote care services to over 360 customers

Increased usage of automation & global delivery - 74% of customer trouble tickets now resolved earlier (tier 1 and 2) up from 66% in 2007

3 Network Implementation – new growth opportunities in a traditional business

- Execution capabilities of 5 000+ base stations rollout per month
- Proven turnkey leadership
- Target growth areas around Multi vendor and OSP rollout
- GM improvement despite sales decline
- Centralized, remote delivery & project management excellence
- Energy solutions driving Opex efficiency

- In a CSP in Germany we are installing non-NSN equipment
- In Indonesian CSP we are doing project management for a multi vendor rollout

#1 in Network Implementation

11 projects & 100+ trials on green energy control already; 360 solar panels sites installed

1 site on air every 3 minutes

200k+ site integrations in 2008, 1/3rd remotely

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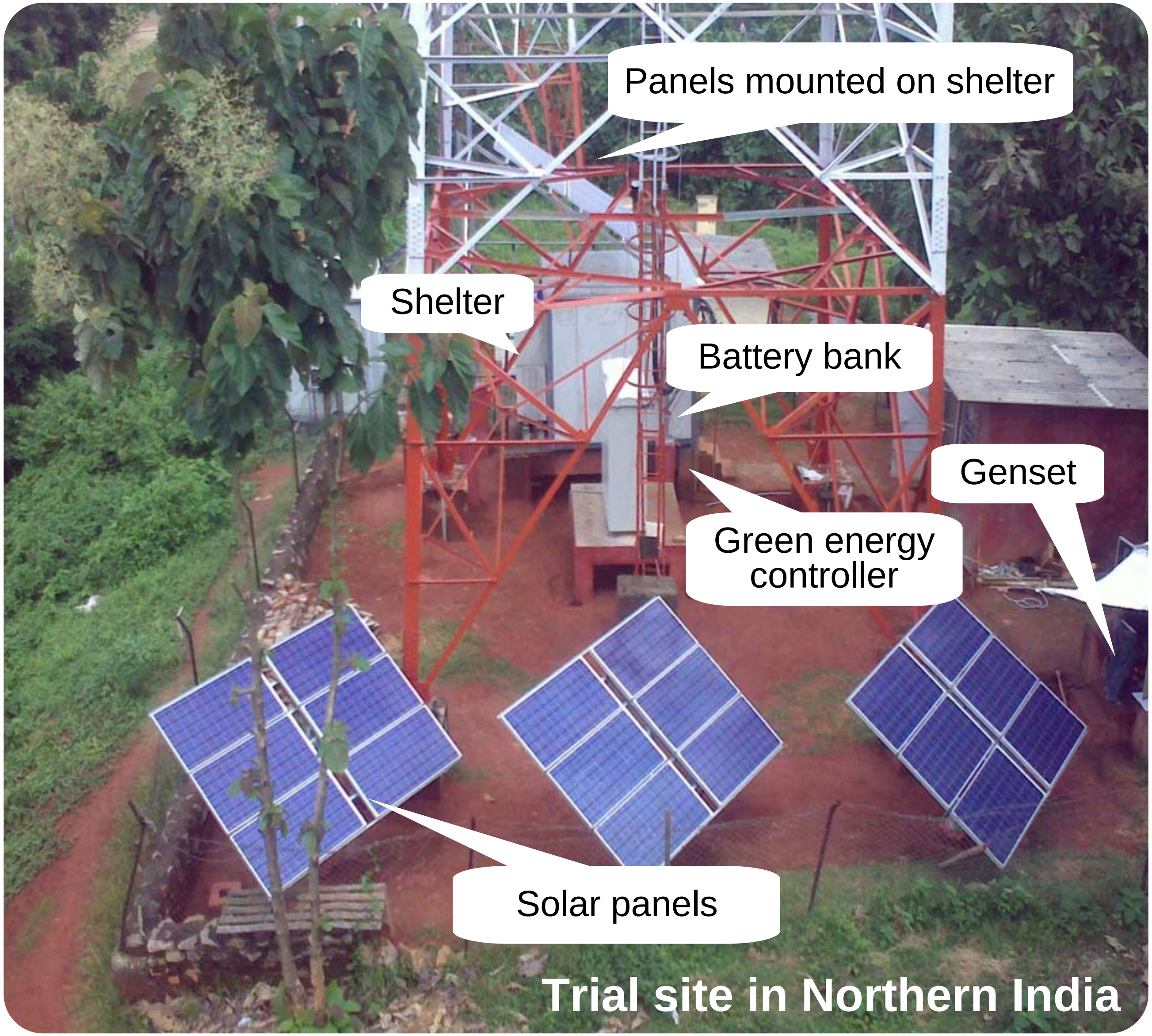
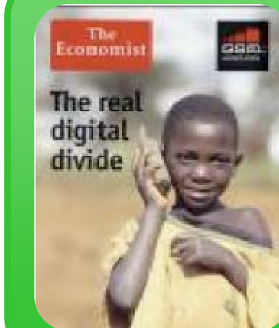
3 Energy Solutions – Innovative portfolio addressing customers pain point around Opex





Demands of rural **connectivity**

2.6 billion people have limited access to electricity

Opex efficiency

~86% of energy used in the network

Climate change resource scarcity & regulations

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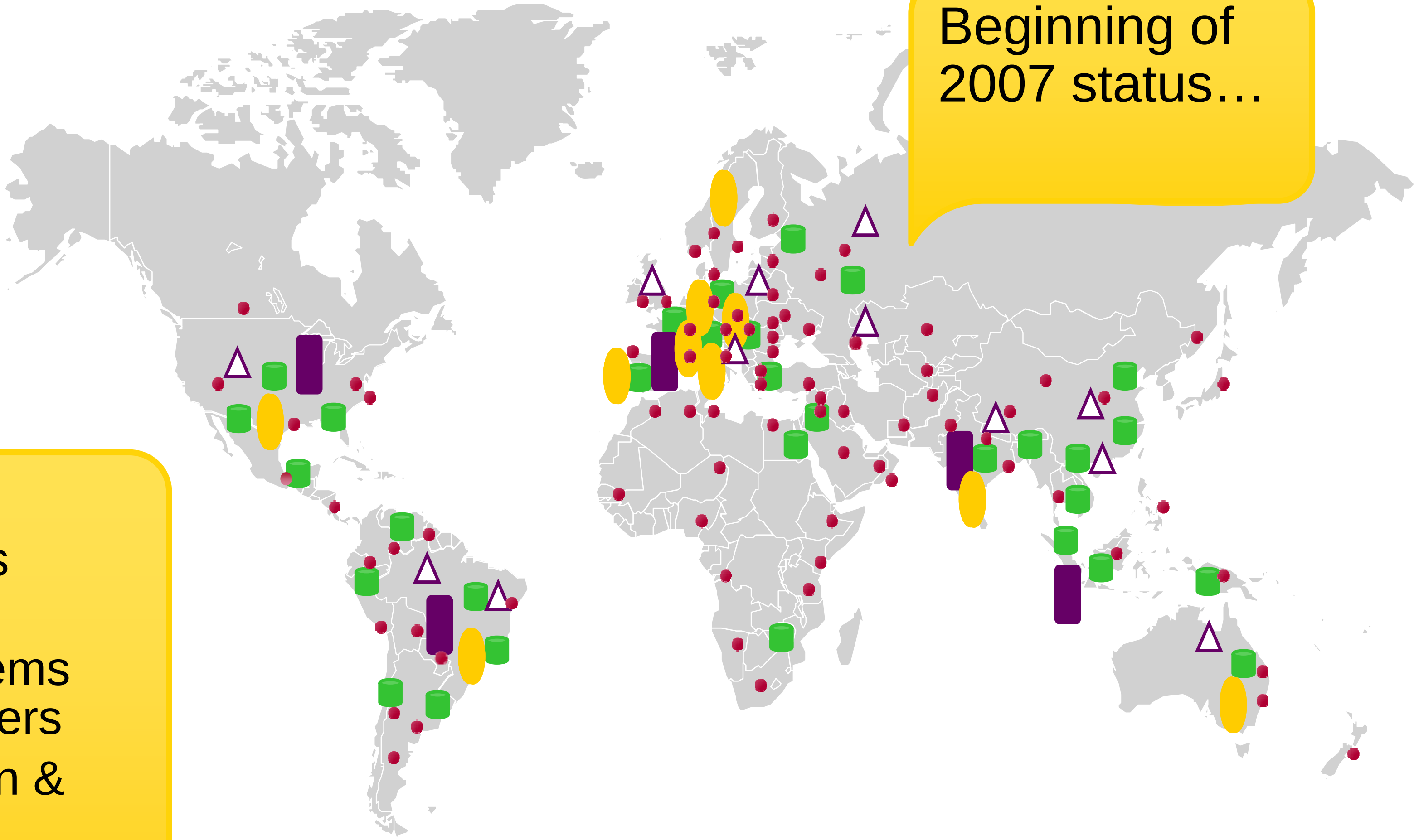
4 Global service delivery transformation: cornerstone of our strategy



Beginning of 2007 status…

- 10 local NOCs
- 61 Care centers
- Project based network & systems integration centers
- Little automation & standardization

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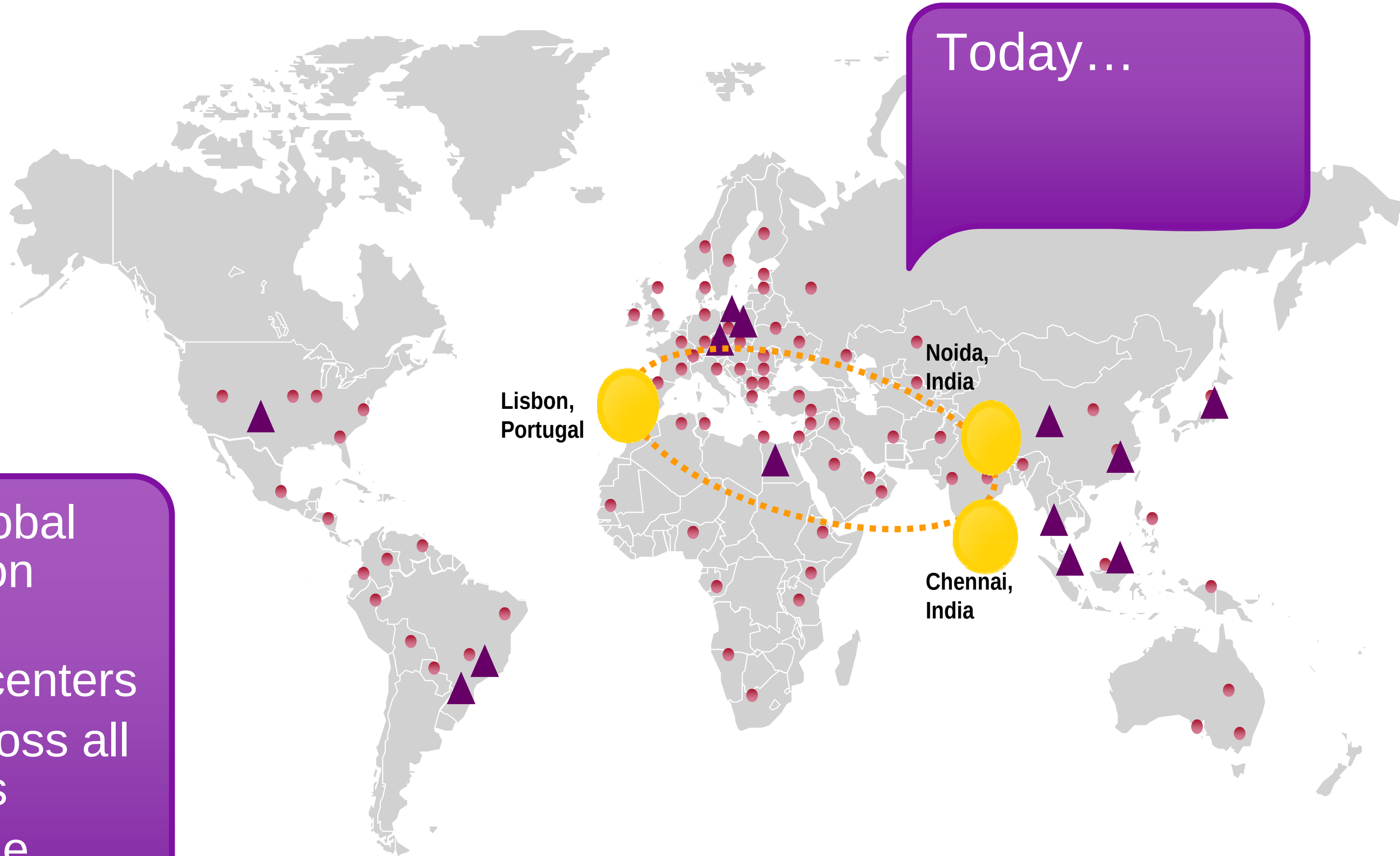
4 Global service delivery transformation: cornerstone of our strategy



- 3 integrated Global Network Solution Centers
- 5 Global Care centers
- Automation across all delivery centers
- Leading revenue efficiency among IT & Telco services vendors

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Business Transformation through efficiency

- Strong momentum in Services
- Growth opportunities in current market - strong execution and operational efficiency
- New adjacent markets - Innovative portfolio and solutions
- Sustainable competitive advantages - People, Global Delivery and Customer centricity

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