

# Demand Supply Network Management

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Demand Supply Network Management

**NOKIA**

A word cloud on a green background featuring various terms related to innovation and business. 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 light green, 'progress' in light green, 'exchange' in light green, 'fun' in light green, 'debate' in light green, 'vision' in light green, 'explore' in light green, 'inspire' in light green, 'connect' in light green, 'expertise' in light green, 'relevant' in light green, 'real' in light green, 'learn' in light green, 'opinions' in light green, 'possibilities' in light green, 'invent' in light green, 'network' in light green, 'friendships' in light green, and 'debate' in light green. The words are arranged in a dynamic, overlapping manner.

# 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

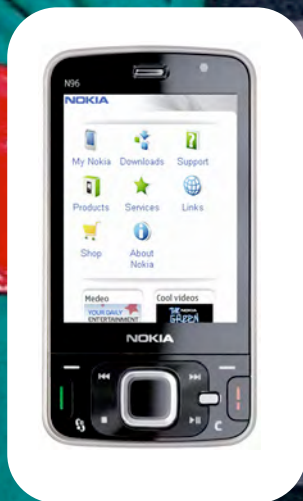


# Responding to customer needs

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

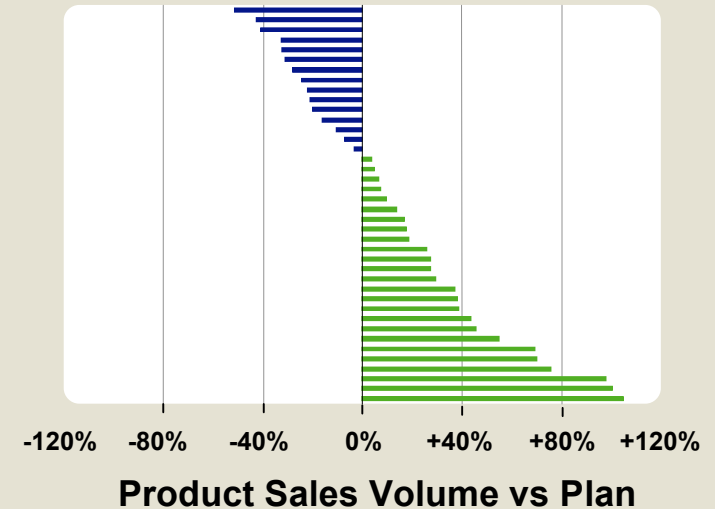
## Flexible inventory management:

- 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

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Operational  
Excellence

Supplier  
Network

Great  
Products



# Margin advantage vs. competition



Operational mode

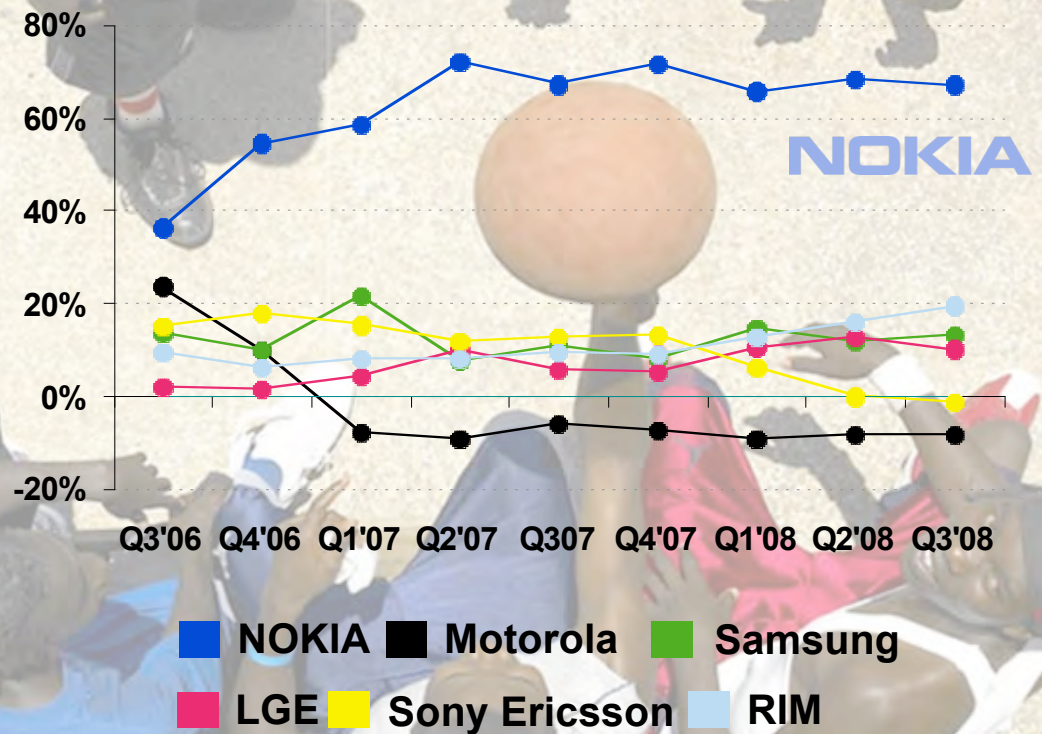


Supplier portfolio



Collaboration

## Percent of operating profit

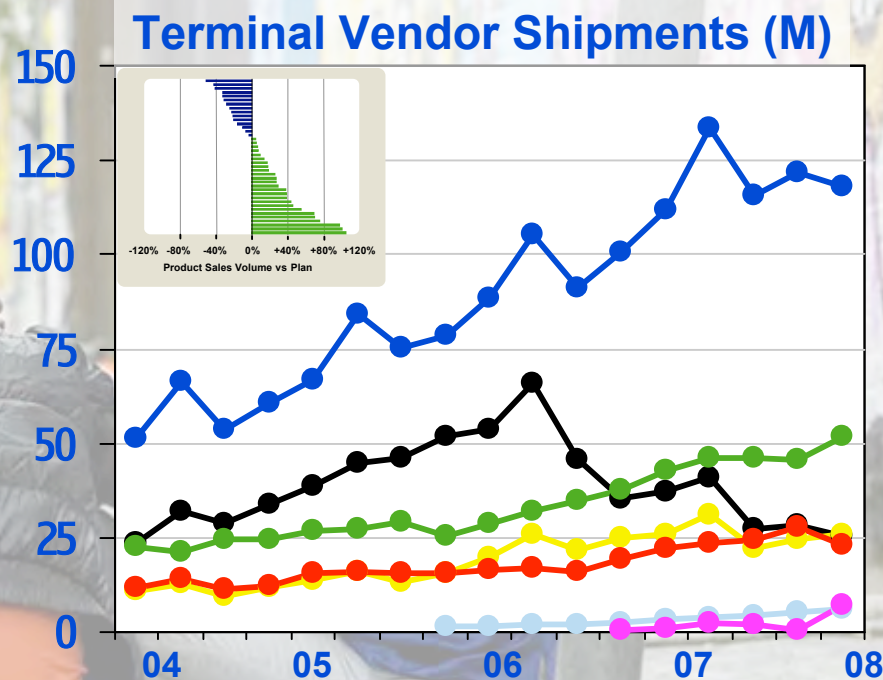


Source: Nokia, company reports

# Operational mode = Scale and cost advantage

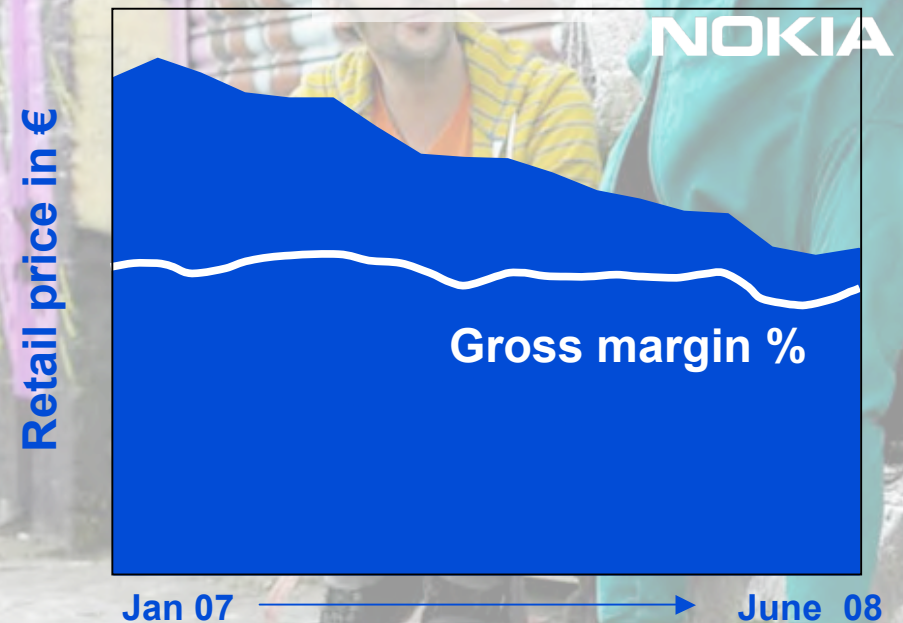
Operational flexibility

R&D and supplier collaboration



Source: Nokia, company reports

Nokia 6300





# Working only with the best suppliers

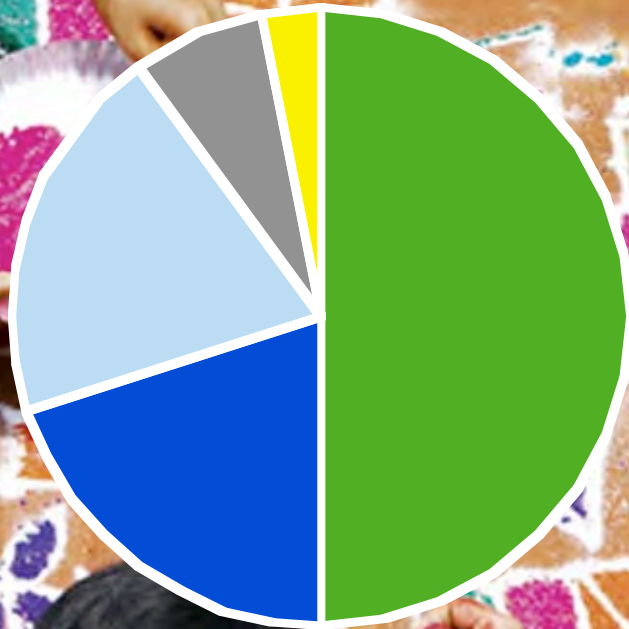


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Nokia  
#1 customer



# Balanced supplier portfolio



Shares by commodity

Software  
& Content

Hardware

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# of Suppliers

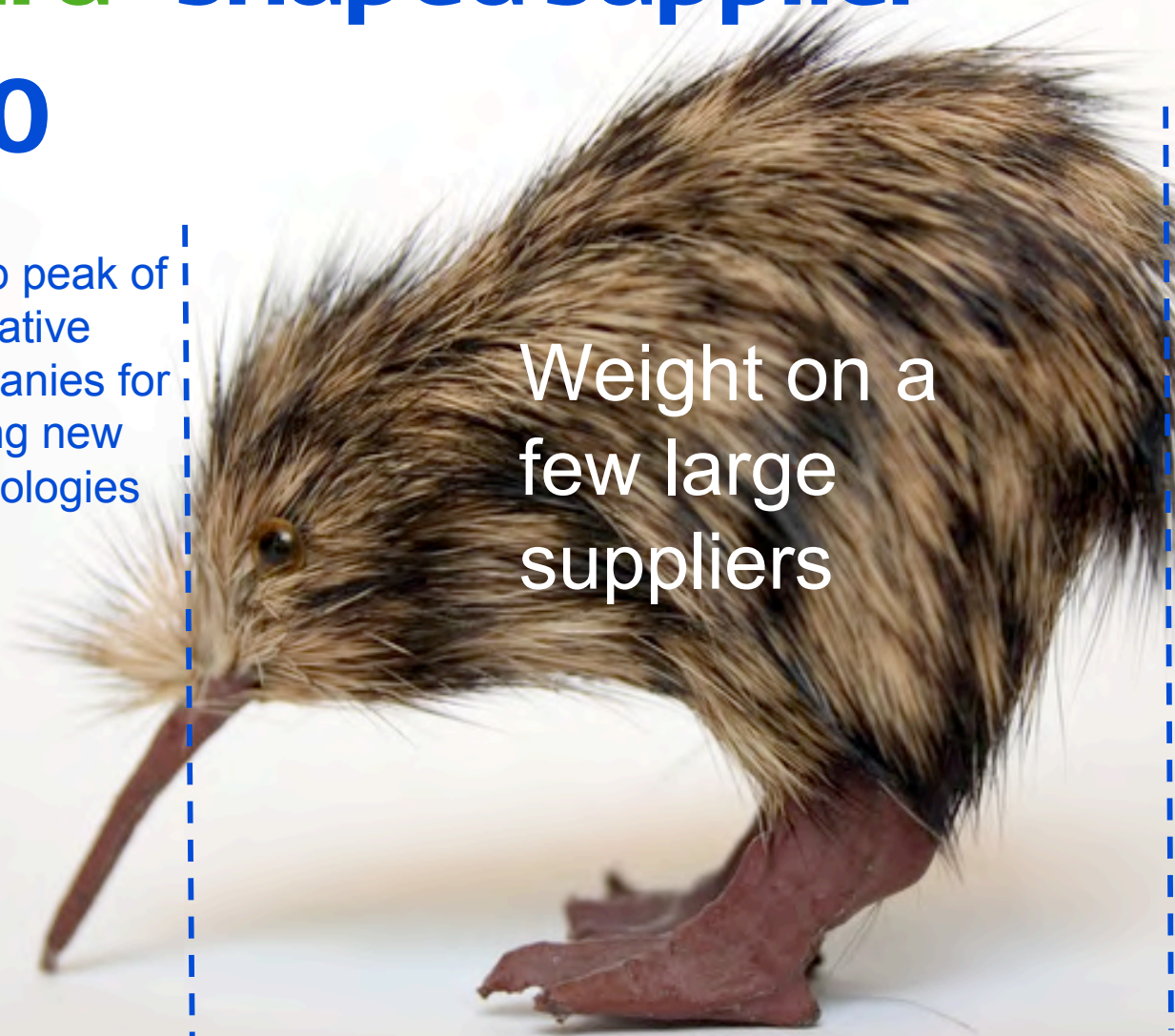


# “Kiwi-bird” shaped supplier portfolio

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" 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" (light green), "exchange" (light green), "progress" (dark green), "learn" (white), "fun" (dark green), "debate" (light green), "vision" (light green), "possibilities" (light green), "opinions" (light green), "relevant" (light green), "real" (light green), "explore" (light green), "connect" (light green), "network" (light green), "friendships" (light green), and "debate" (light green).

Thank you.

**NOKIA**  
Connecting People

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

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