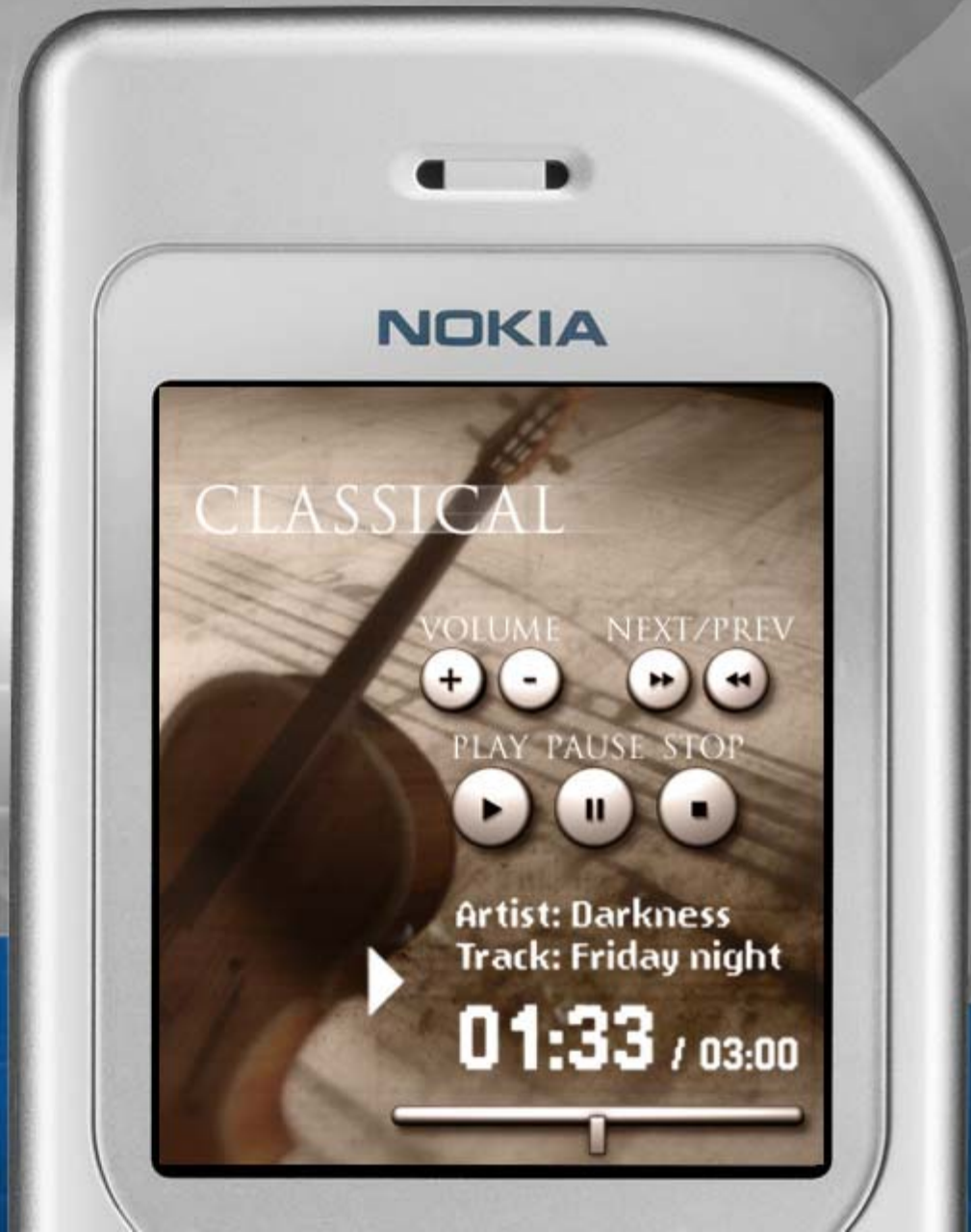


# Nokia's Horizontal Software Opportunity

Antti Vasara  
Vice President  
Technology Marketing and  
Sales

# Rich UI

- 3D icons
- Scalable vector graphics
- High resolution displays



# Customization

- Operator themes and menus
- APIs for operator applications



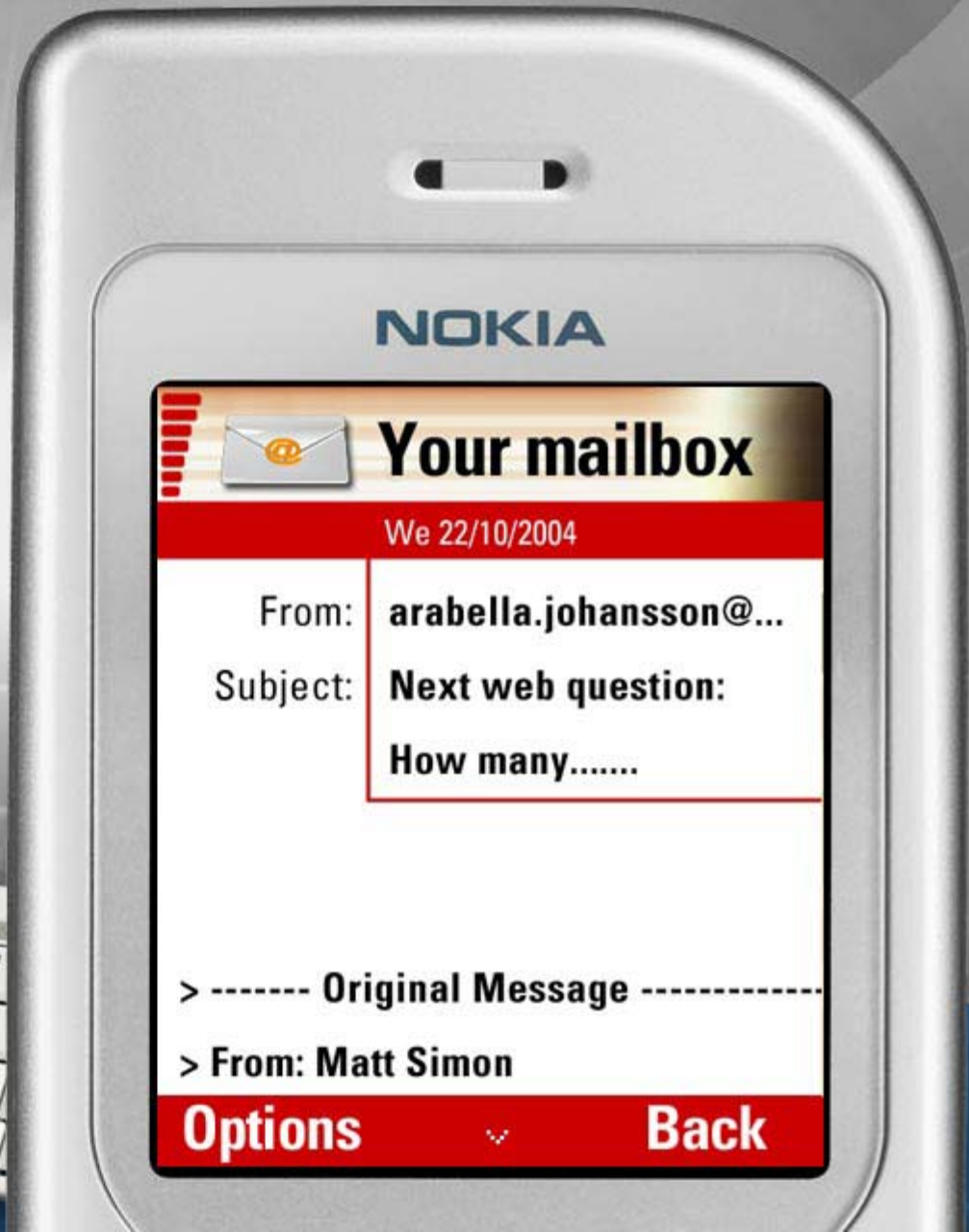
# Browsing

- XHTML and HTML
- Variable display resolutions
  - 176 x 208
  - 240 x 320,
  - 352 x 416
- WCDMA
- Landscape-portrait hot switch



# Professional use

- Application interplay
- Rich email, instant messaging and PIM
- Full QWERTY support
- PC connectivity

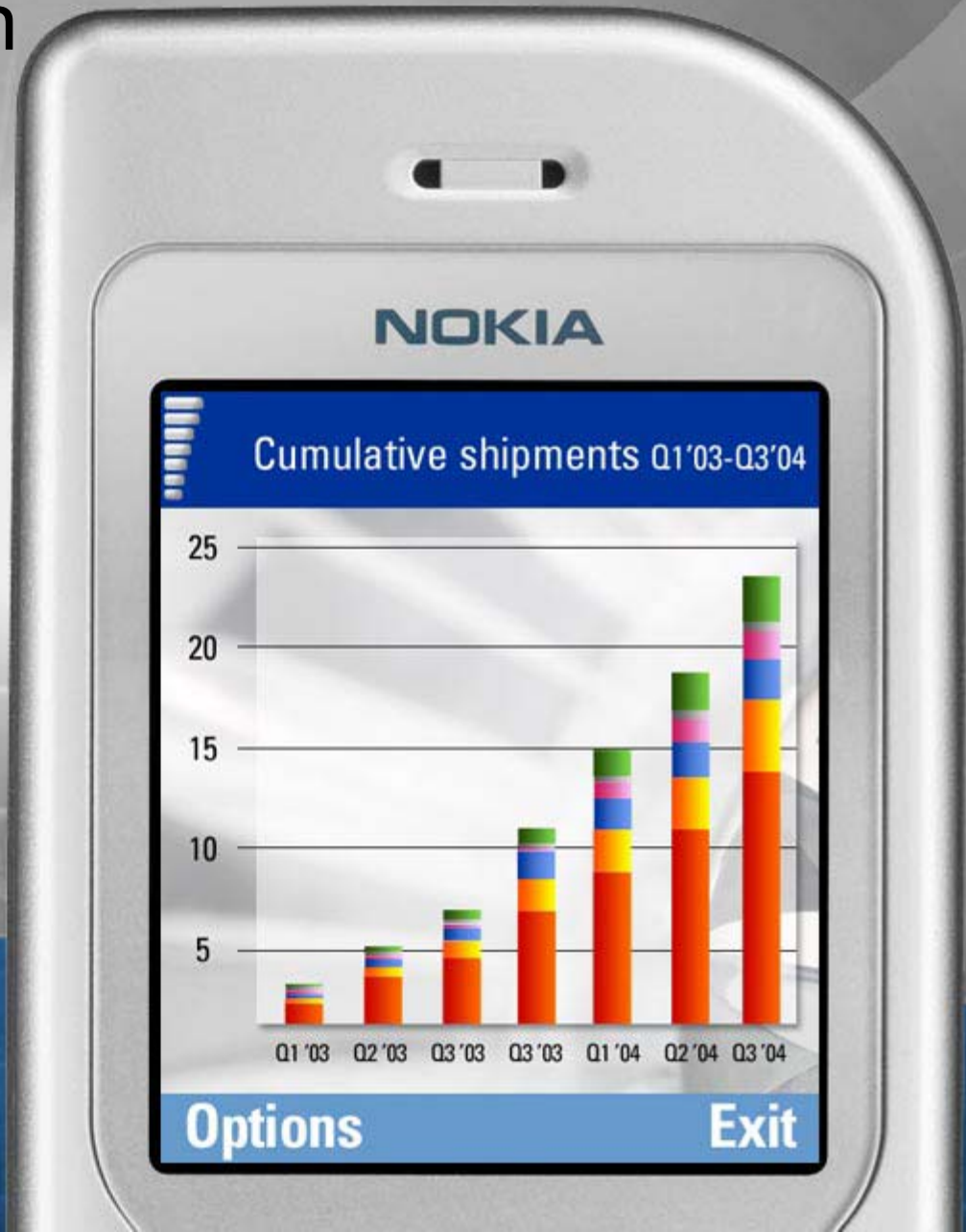


# Market Uptake

# Series 60 on Symbian has built sustainable leadership

Series 60 had more than 50% share of worldwide cumulative smartphone shipments by Q3'04

Source: Canalys, October 2004



# Series 60 Towards High Volume Segments

- Nokia alone sold 15 million Series 60 phones (October 04)
- 7 licensees
- 18 devices launched with over 100 operators selling them



Smartphone market expected to more than double in 2004 vs 2003, exceeding 20 million units

# Nokia Announces the Intent to Integrate Series 90 into the Series 60 Platform

## Series 60 Today

- Enables further device innovation through flexible, scalable UI architecture
- Support for 176x208, 240x320 (QVGA) and 352x416 display resolutions
- QWERTY accessories
- JavaVerified and SymbianSigned application certification
- Email, instant messaging, web browsing, video telephony

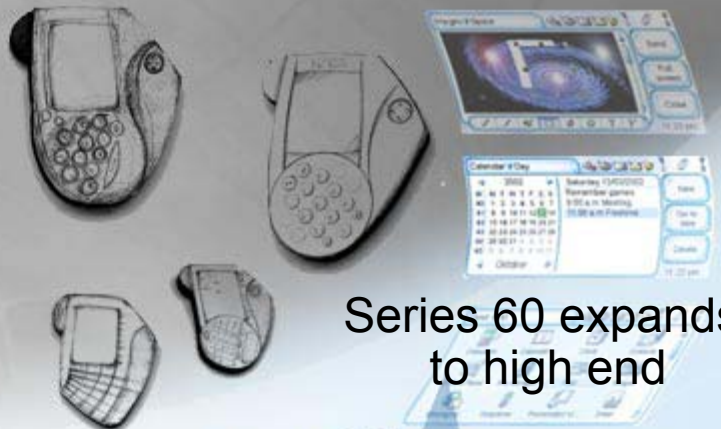
## Future Series 60

- Encompasses a wide portfolio of mobile devices, including high-end and volume mid-range categories
- Support for single and dual processing architectures
- 640x320 display resolution
- Pen input
- Platform security

From one-hand operated smartphone platform to mid-range and high-end categories



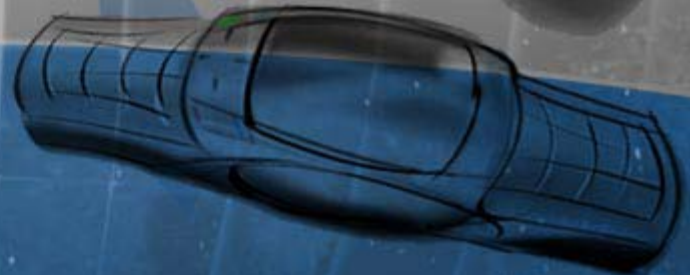
# Series 60 Expands To Both Directions



Series 60 expands to high end

Common Developer Platform, Interoperability and Scalability

Series 60 expands to mid range



# Symbian has built sustainable leadership

## Symbian – the leading Open Mobile OS

- > Over 60% market share in smart phone OS
- > Over 30 phones under development

Source: IDC August 2004, Converged devices



# Series 60 Action Plan

# Future Requirements For Smartphones

- Nokia estimates that smartphones will be up to 25 per cent of the mobile device volume in 2008.
- Critical success factors
  - Device Bill of Materials
  - Device size
  - Application performance and response times
  - Cost efficient variants and customization
  - Sustainable ARPU and cost saving for operators
  - Extendable through a rich portfolio of applications



# Comprehensive Software Platform Offering

Multiradio platform

High resolutions  
with SVG

Productized  
customisation

Largest mobile  
developer community



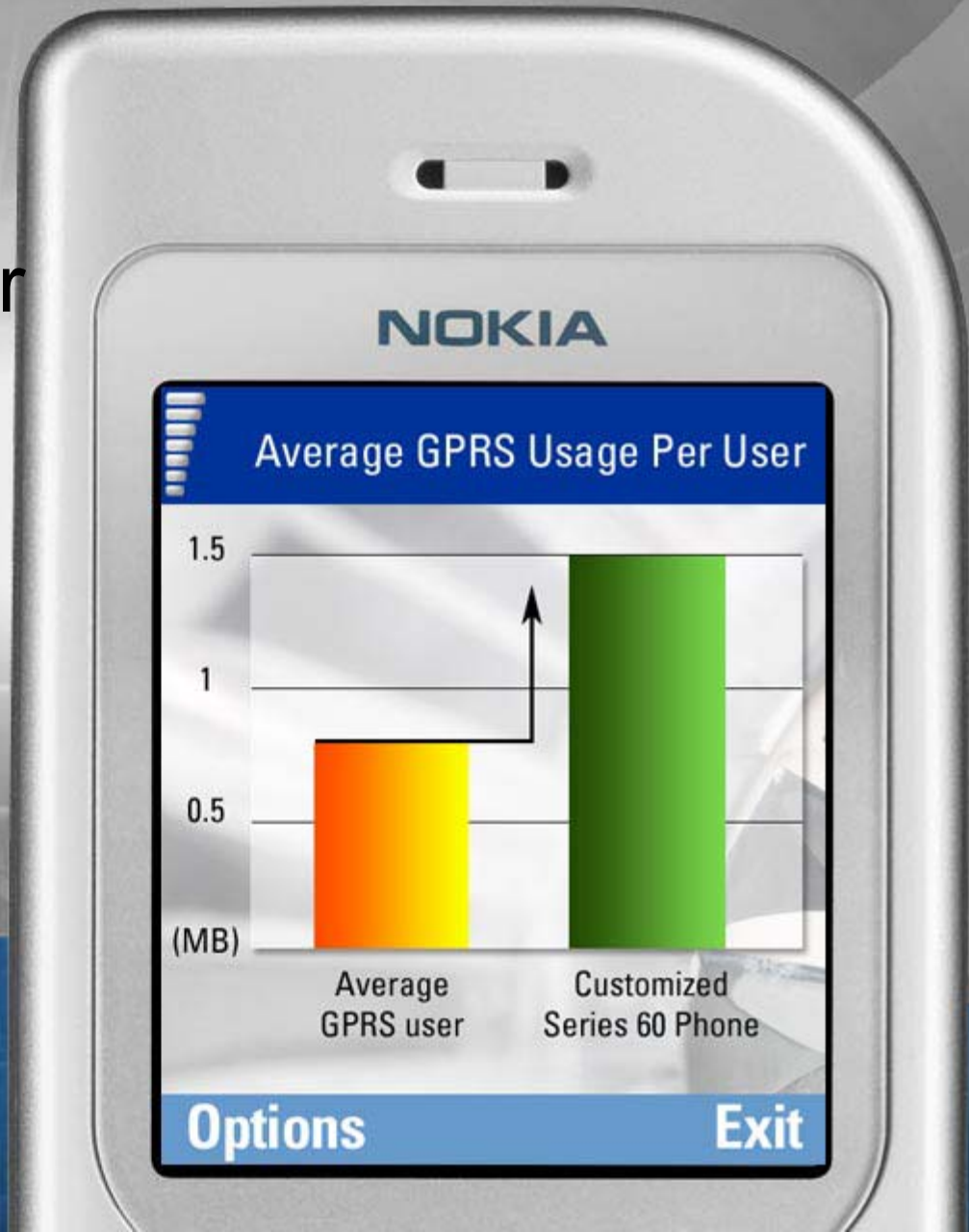
QVGA

Double 352x416



A customized Series 60 phone can generate twice the usage for the operator

- Significant increase in GPRS usage after customisation
- At least doubling the usage



# More service usage and sustainable ARPU



## KEY FINDINGS FROM A SERIES 60 USER STUDY

Source: Nokia originated study on the Nokia 6600 usage in UK and Germany, Feb-June 04

# To simplify Java, Nokia and Vodafone launched the Mobile Service Architecture (MSA) Initiative

Improves application compatibility  
across multi-vendor devices

Defines a common, open  
standards-based, next-generation  
Mobile Java platform

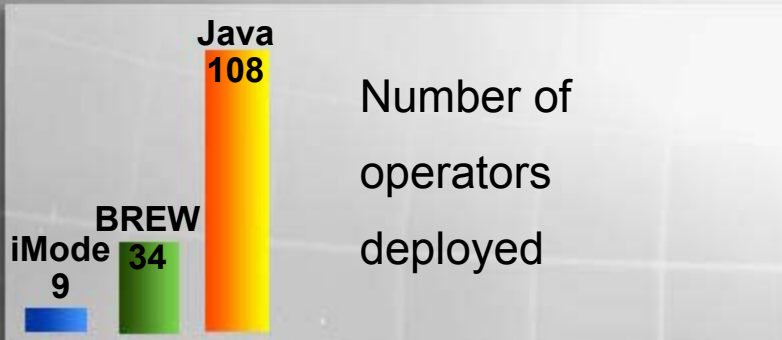
**Continuity** →  
A roadmap for further evolution of mobile Java

**Compliance** →  
A common set of Java programming interfaces  
(APIs) for developers, and a mechanism to  
dynamically expand this core API set

**Consistency** →  
A uniform and predictable licensing framework



# Java™ Has Highest Apps Availability Followed by Symbian



# Connections that count (September 2004)

Forum Nokia helps you turn ideas into revenue, faster and more easily

## Connecting to volume

- 60+ Developer Platform devices launched
- 7 vendors/18 devices using Series 60
- In 2003 Nokia delivered 70M Developer Platform devices
- Nokia targets shipping appr. 100M Developer Platform Devices in 2004

## Connecting to answer

- 1.6 M+ registered developers
- 440 000+ tools & documents downloads /month
- 13 000+ unique visitors daily

## Connecting to customers

- 3 200+ Symbian OS apps in the market
- 3 000+ applications in Nokia channels
- Nokia is shipping Series 60 based devices to more than 100 operators globally
- Example: 1.2 M+ downloads/ year, one game, over 90% on Nokia platforms

# Preminet Solution

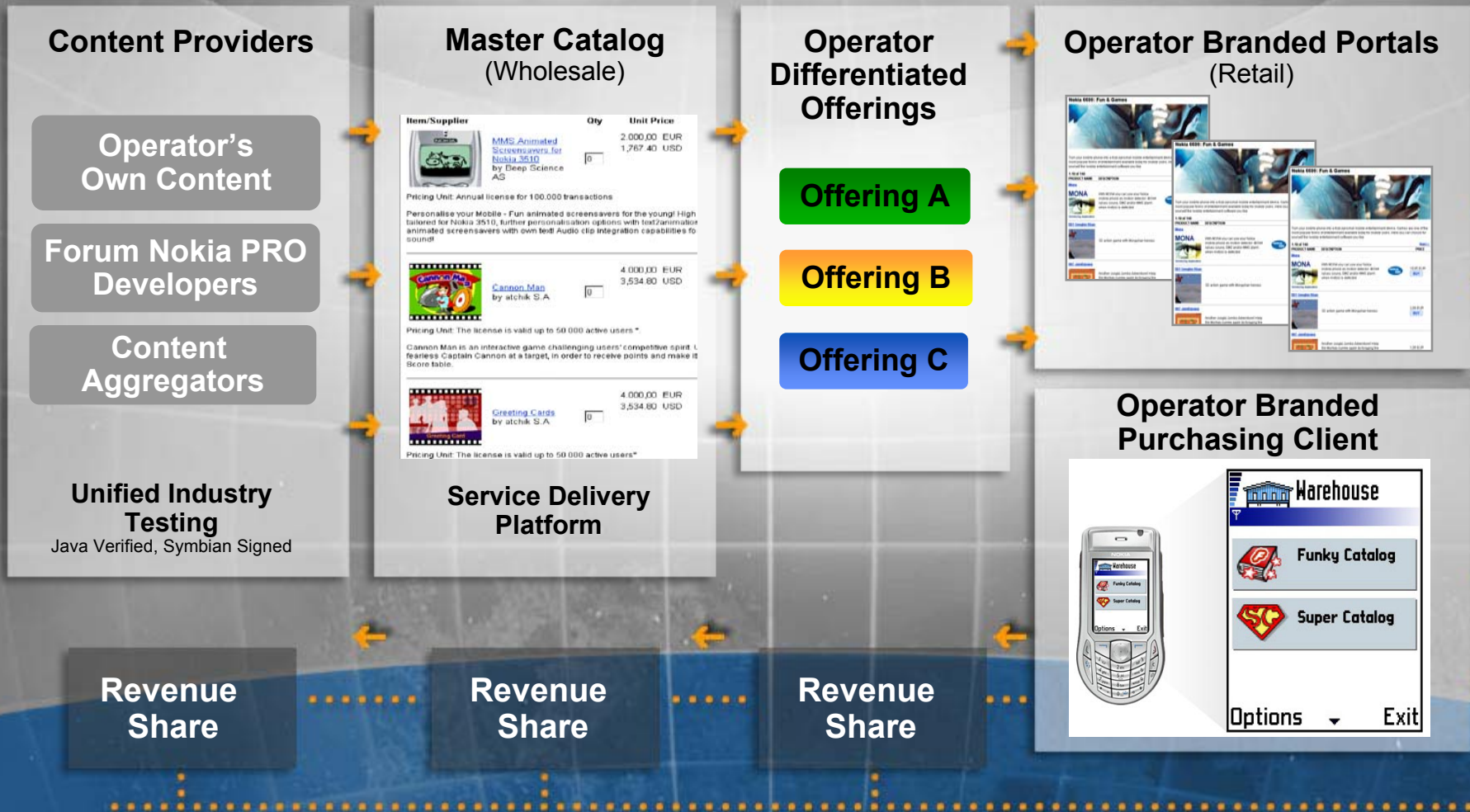
- Nokia launches operator-brandable mobile content and application distribution platform
- Preminet simplifies the process of making world-class, fully-certified applications and content available to consumers.



Single point  
entry to  
operators



# Preminet Solution - the premium network of content creation, delivery and consumption



# Macrospace – Developer Success Case



- UK based mobile gaming specialist
- Games on 10M+ phones
- **Alpha Wing™ game:**
  - **1,200,000 licenses sold in less than a year**
  - 91 % of java downloads on Nokia devices
  - Average selling price 3-4 Euros/game



Macrospace games  
available on **50+ operators:**





**NOKIA**

CONNECTING PEOPLE