Symbian and University Engagement
An Overview

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"…the **mobile phone***…is most likely to carry the dream of the 'personal computer' to its conclusion"*
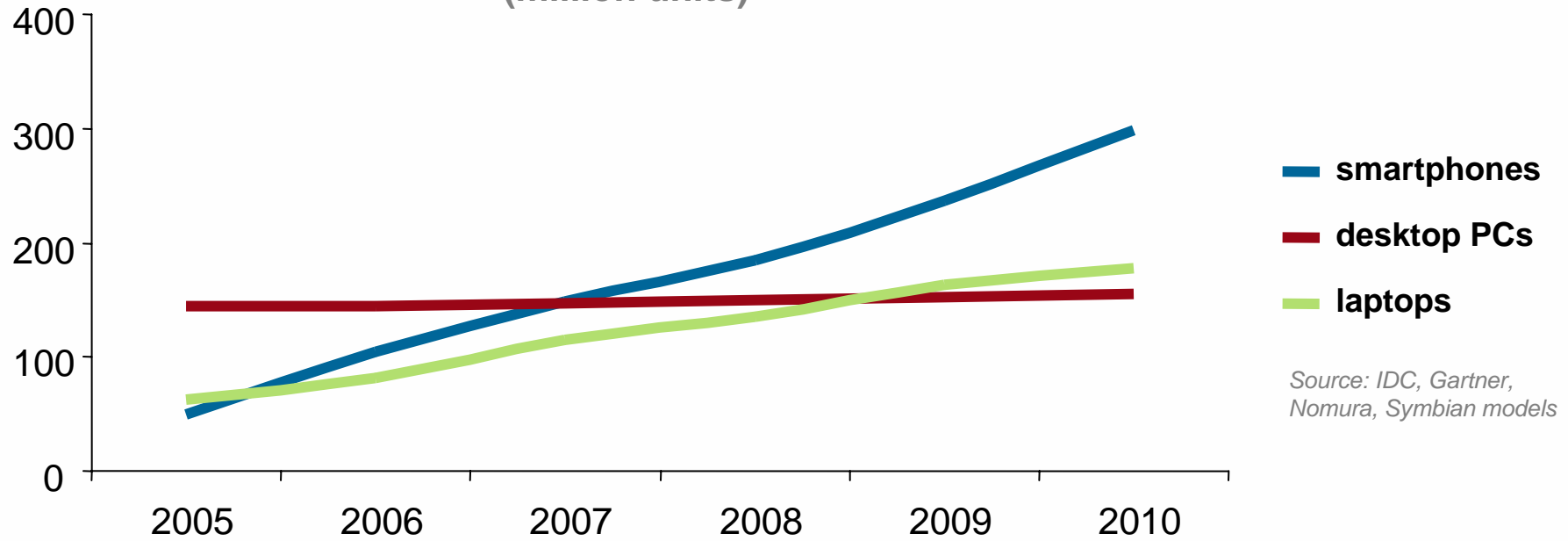
The "mobile phone" has evolved into the *converged mobile device* ...

... a platform for mobile computing
ubiquitous networking
multimedia
location-based services
context-sensitive applications

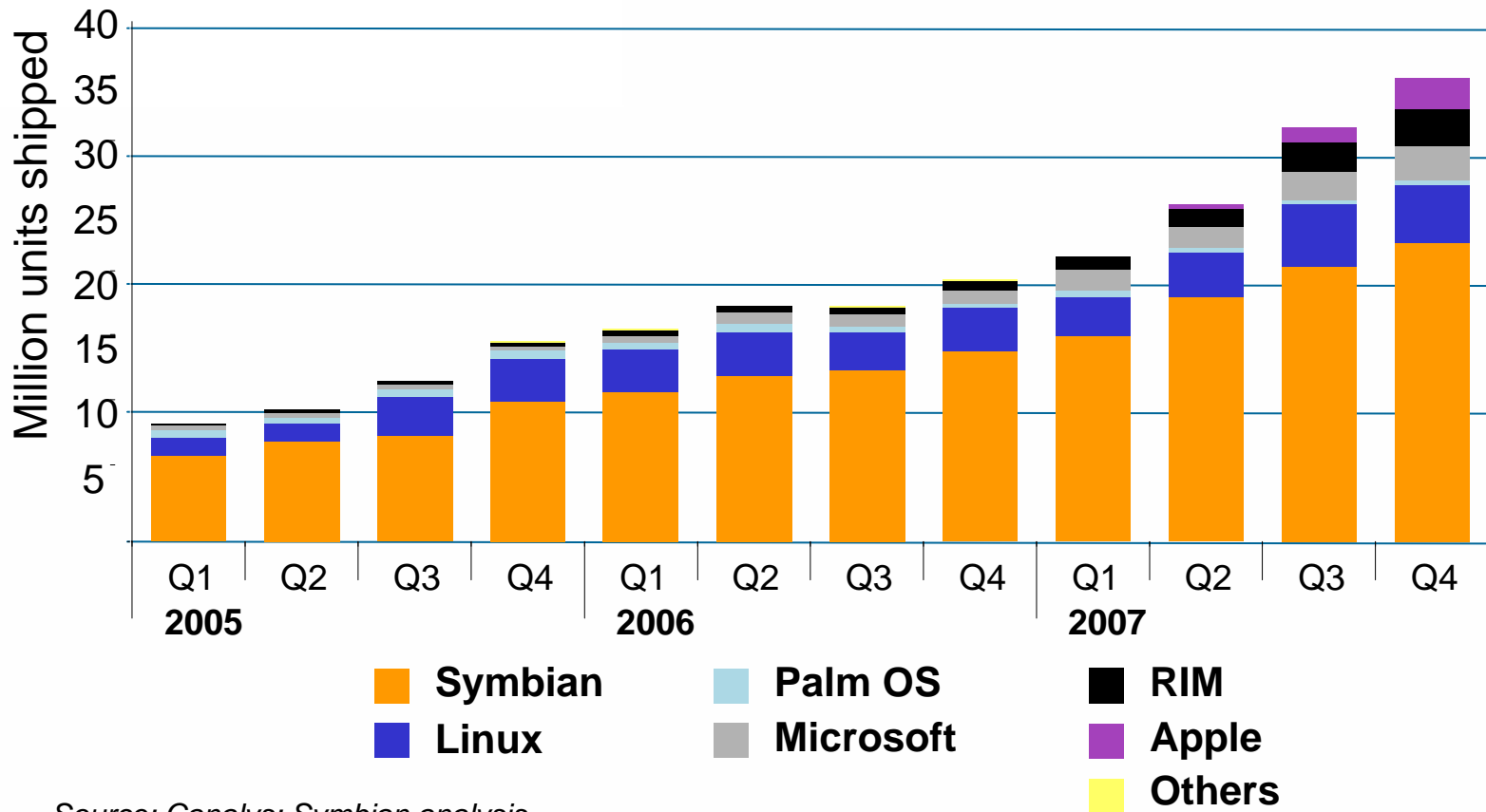# Smartphones are becoming more numerous than PCs

Market Growth Forecasts (pa)
Smartphones, Desktop PCs & Laptops
(million units)

— smartphones

— desktop PCs

— laptops

Source: IDC, Gartner, Nomura, Symbian models

Symbian is the prevalent Smartphone OS

Source: Canalys; Symbian analysis

The "smartphone" is no longer a niche market:
Over 200 million Symbian phones have been sold.
Symbian's share of the **overall** phone market increased from **5%** in 2006 to **7%** in 2007.

Symbian - some background

- Symbian OS is the market-leading smartphone operating system.

- Symbian was formed in 1998, by PDA-maker Psion and partners in the mobile phone industry.

- Current owners are Nokia, Ericsson, Sony-Ericsson, Panasonic, Siemens, Samsung.

- Symbian now has offices in Bangalore, Tokyo, Beijing, Seoul, the USA and has its headquarters in the UK.

- User interfaces designed for Symbian OS include Nokia's Series 60, NTT DoCoMo's MOAP, and UIQ.

After 10 years as a private company, Symbian goes open-source:

"LONDON, UK; June 24, 2008 -- Nokia, Sony Ericsson, Motorola and NTT DOCOMO announced today their intent to unite Symbian OS™, S60, UIQ and MOAP(S) to create one open mobile software platform."

Background Slide:
Likely steps/phases in the move to Symbian Foundation

- This is a history-making large-scale move to open source. See symbianfoundation.org and many other sources.

- This is still in planning, but it seems likely that the sequence will be something like this...

Stage 0 (now):

… Government approval to proceed with the plan (multiple governments)

… Analysis, detailed planning, preparation.

Stage 1 (late 2008 or early 2009):

… Nokia buys all Symbian shares from other owners.

… All Symbian employees & premises become Nokia employees & premises.

… Symbian Foundation is created.

Stage 2 (2009 and onwards):

… Nokia donates Symbian OS & DP and Series 60 software to Symbian Foundation. UIQ and MOAP(S) will also be donated to the Foundation.

… Some Nokia staff transfer (back) to the Foundation – especially platform-related functions.

… Most Symbian developers remain working for Nokia – working on software that will be donated to the Foundation.

… Symbian software will be "decontaminated" of 3rd party IP component-by-component before it is made available as open source (Eclipse Public License). **It seems likely that this process will continue over a year or more.**

… Other technological evolution and developments needed to support the new combined platform.

Symbian University Engagement – three facets

www.symbian.com/universities

Symbian Academy
www.developer.symbian.com/academy

Primary goals: Increasing the innovation and popularity of mobile software development.
Grow the number of Symbian skilled graduates available to the Symbian ecosystem.

… Provides teaching support; course material and other teaching resources, and support through SDN.

… Symbian Academy jobs board ties students with employers in the Symbian ecosystem

… Growth in specific regions based on Symbian ecosystem needs

University Research Relations (URR)
research@symbian.com

Primary goals: Promote awareness and use of Symbian as a platform among academic researchers.
Increase Symbian presence in research on ubiquitous computing & converged devices.

… Engages with universities' research programmes.

… Supports research on Symbian-related topics or other research that uses Symbian as a platform.

… Also promotes Symbian presence and presentations at academic conferences & journals.

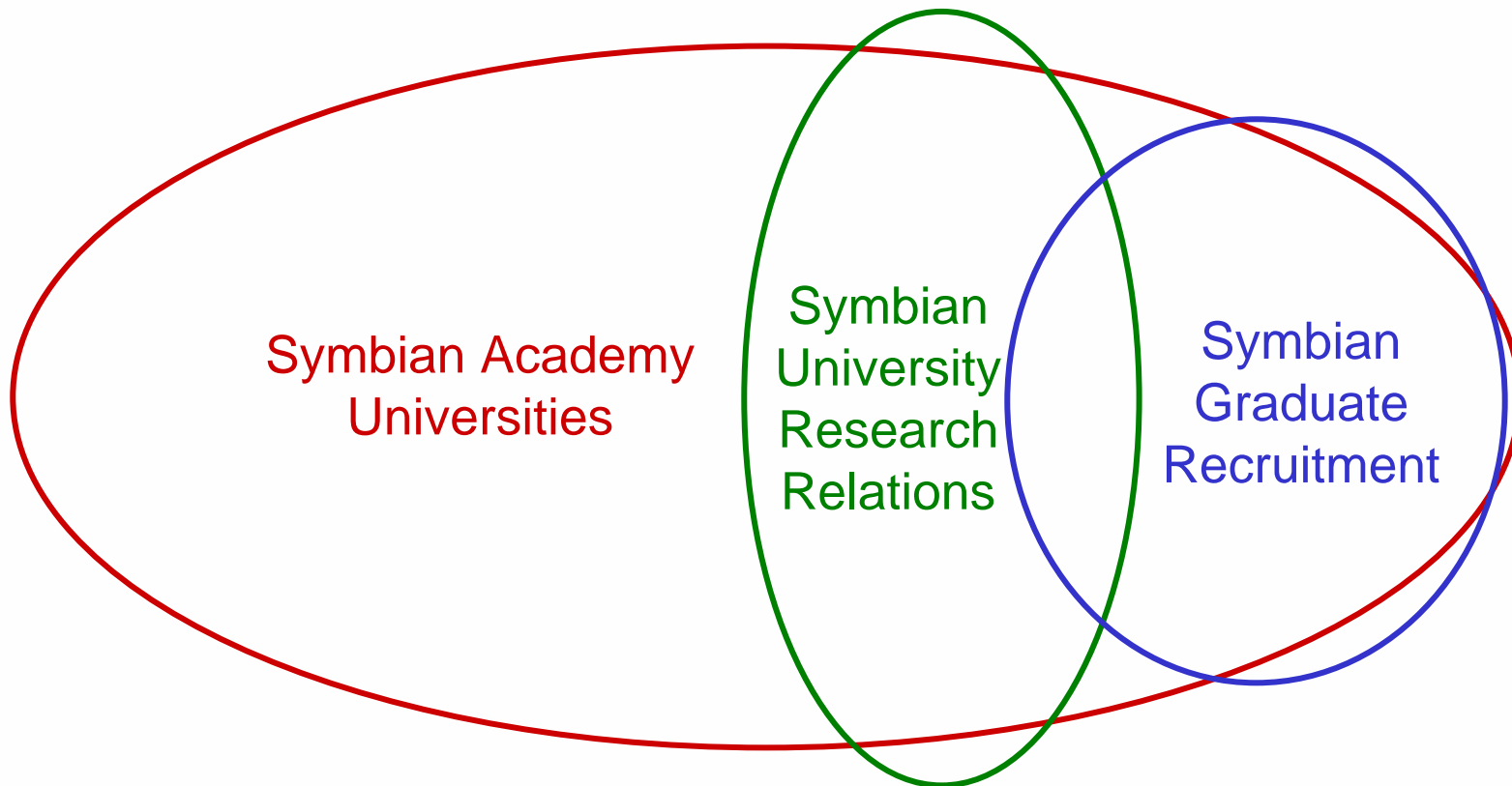… A new role in the Symbian Research dept, created June 2008.

Graduate Recruitment
www.symbian.com/graduates/

Primary goals: Recruit excellent graduates from universities for positions in Symbian.
Provide structures for training, networking, and career development of the new grads.

… Engages UK universities in a series of recruitment events.

… Manages the graduate recruitment process and Bootcamp training programme.

… Works with universities to provide student placement & internship in Symbian.

- These programmes are designed for *complementary overlap.*
- Symbian Academy provides a base for most other University Engagement.

Background Slide:
Software in a Symbian Phone – "Habitats of the Symbian Eco-System"

User-Installed Applications

"In-the-box" Applications
(commissioned/written by the phone-maker, built into the phone ROM)

User Interface
(S60 or UIQ or MOAP)

Symbian OS

Hardware Adaptation Software
(usually from chip-vendors or 3rd parties)

Symbian Academy support & services

- Software (SDKs and example software)
- SDN Technical support
- Course materials (complete courses or case studies & examples)
- Instructor training
- Teaching notes
- Books & documentation
- Exercise material
- Promotional material and services
- Students can gain Accredited Symbian Developer qualification

- Updates & news
- Community support & involvement with other Symbian Academy institutions
- Guest lectures & workshops with Symbian subject-matter experts
- Internship opportunities for students
- Networking opportunities for academic staff
- Research opportunities & contacts

University Research Relations

- **Provides Access**
  - … Academic Licenses for needed binaries, source, documentation

- **Provides Technical Support**
  - … First level of support is Symbian Academy / SDN
  - … Direct access to subject-matter experts and additional documentation for Symbian technologies
  - … Advice & assistance with system-level build & test techniques
  - … "Find a solution" service to ease researchers' problems

- **Encourages Cross-Fertilisation of Ideas**
  - … Participation in seminars & presentations

- **Some Research Funding Available**
  - … New program to provide funding for research of specific interest to Symbian
  - … Continuation arrangements to reduce uncertainty during transition to Symbian Foundation

Note: At this early stage, URR support is still labour-intensive, so the focus is mainly (but not entirely) on universities "easily accessed" from Symbian Offices ...

How much of this will change with the move to Symbian Foundation?

- The goal is to provide effective continuity – details currently being planned.

- Some University Engagement functions will move to Symbian Foundation, some to phone-makers UE functions.

- Names may change.

- Structures and contact points will be migrated/merged.

- Academic licenses will "fill the gap" in the interim period while source is not yet openly available.

University Engagement with Symbian – step by step

1	For background documentation & support, sign up with SDN – the Symbian Developer Network.	developer.symbian.com
2	For overall university engagement & support, and/or course materials contact Symbian Academy.	developer.symbian.com/academy
3a	Interested in Symbian-related research projects? Send enquiries or proposals by email.	research@symbian.com
3b	Enquiries about Graduate Recruitment – internship and permanent positions.	www.symbian.com/graduates/

- If your interest is commercial / non-academic, see symbian.com/partner

- For non-graduate career opportunities, see careers.symbian.com

Symbian Essay Contest 2009

- Following the success of the 2008 Symbian Essay Contest, the 2009 contest is now open

- Open to all university students around the world

- Planned as two rounds of entries and prizes – first round closes 31 January 2009

- Up to ten £1000 prizes in 2009

- See symbian.com/universities for link to details