Mobile Convergence Trends: A Canadian Perspective

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Mobile Monday Tokyo

2008/09/22

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Canada: Mobile Industry Snapshot

- Mobile penetration as of March 2008 was 62% (20.1M subs)
- Half of all voice connections in Canada are over mobile networks
- Over 25,000 Canadians work in the mobile industry which generated $C12.5B in 2007. Canadian Industry leaders include: Research in Motion (RIM) and Nortel Networks
- Canadians send 45.3M SMS messages daily
- The 3 largest mobile network operators are: Rogers/Fido (GSM); Bell (CDMA); and Telus (CDMA). Recent spectrum auctions earlier this year have created 3 new operators to increase domestic competition, but the Big 3 still account for 95% of the market today
- The 3 largest operators spend more than $1B annually on infrastructure

* From the **Decima Research Report: Useage of Wireless Communications in Canada**, May 16, 2008 (CWTA)

Canada: Mobile Industry Statistics/Overview

INTRINSYC®

Wireless profit margin, 23 developed nations

1. Canada 45.9%
2. Italy 41.0%
3. New Zealand 40.8%
4. Switzerland 38.3% 5
5. Greece 37.6%

Rate per voice minute in $US

1. Switzerland $0.32
2. Japan $0.26
3. Ireland $0.24
4. Netherlands $0.23

21. Canada $0.11

Monthly ARPU in $US

1. Ireland $62.97
2. Canada $60.83
3. Norway $59.42
4. Switzerland $55.24
5. United States $52.47

Data as a % of monthly revenue

1. Japan 34.4%
2. Ireland 27.1%
3. United Kingdom 26.4%
4. Australia 25.2%

22. Canada 12.5%

* Statistics from Merrill Lynch Global Wireless Matrix, April 2008

- Though overall penetration is not very high, the Canadians who use mobile services use a lot
- Given low data ARPU – most of the usage is voice
- Mobile operators in Canada are looking to increase revenue share from data – opportunities exist in VAS and network upgrades
- Canadian mobile technology companies have had to be export-focused as the domestic market is not large enough to support the domestic vendor community

Intrinsyc Software International: Corporate Overview

INTRINSYC®

- Over 12 years experience in wireless, handheld and embedded device development (Founded in 1996)
  - System Integration for Tier 1 OEMs with 200+ engineering services design wins
  - Strong expertise in: Windows Mobile, Windows CE Embedded, Mobile Linux, and Symbian
  - 300+ employees with 75% in development or engineering
  - Located in Vancouver, Canada (HQ); Bellevue, USA; Cupertino, USA; Herzliya, Israel; Beijing; and Taipei
  - World-class management – senior executives from Microsoft, Intel, Qualcomm, Nortel
  - Publicly traded on the Toronto Stock Exchange (ICS.TO)
- Deep Partnerships with companies that define the Wireless/Mobile device Industry

Windows Mobile · symbian · ARM · freescale semiconductor · intel · MARVELL · SAMSUNG · OMAP TEXAS INSTRUMENTS TECHNOLOGY Independent Technology Center

- Intrinsyc has 3 business units offering both Services and Software
  - The Services unit is called Global Engineering Operations (GEO) and provides engineering services
  - The Mobile Product Development (MPD) unit is responsible for our Soleus™ High-Level OS for consumer mobile devices
  - The Navigation Software Unit is responsible for our Destinator product line

Key Assumptions – Mega-Trends

- Voice as a percentage of operator ARPU will continue to decline – even more rapidly than now
- Mobile data plans will all be fixed-rate "all-you-can-eat"
- The internet will outstrip "walled garden" or "on-net" content provided by mobile operators today as the mobile internet user experience gets better
- Operators will better monetize new and existing VAS offerings such as LBS/LBA, apps, etc.
- Network operator business models will accelerate the Quadruple Play (voice, data, video, mobile) and drive Fixed-Mobile Convergence (FMC) to happen
- Mobile devices will no longer be single-purpose, but be multi-feature/purpose
- OS for mobile devices will largely become irrelevant – the true battleground will be above the OS

One Device – Many Functions

TODAY

- Voice
- Data (SMS/MMS)
- WAP
- Organizer
- Games
- Media Player
- Limited Personalization

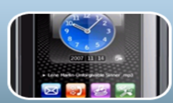
TOMORROW

- Good Web Browser
- MDTV
- GPS/PND
- Good media player
- Unlimited Personalization

Segmentation in the Mobile Device Market

Feature Phone

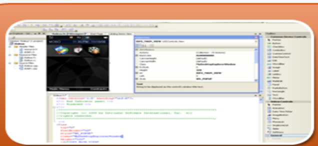
Multimedia Device



Navigation Phone

Connected PND

Integrated Applications
- Core Apps: Web Content, off-board/hybrid Navigation, Communication, and Multimedia
- 3rd Party applications: Web Browser, Messaging, Email, etc.

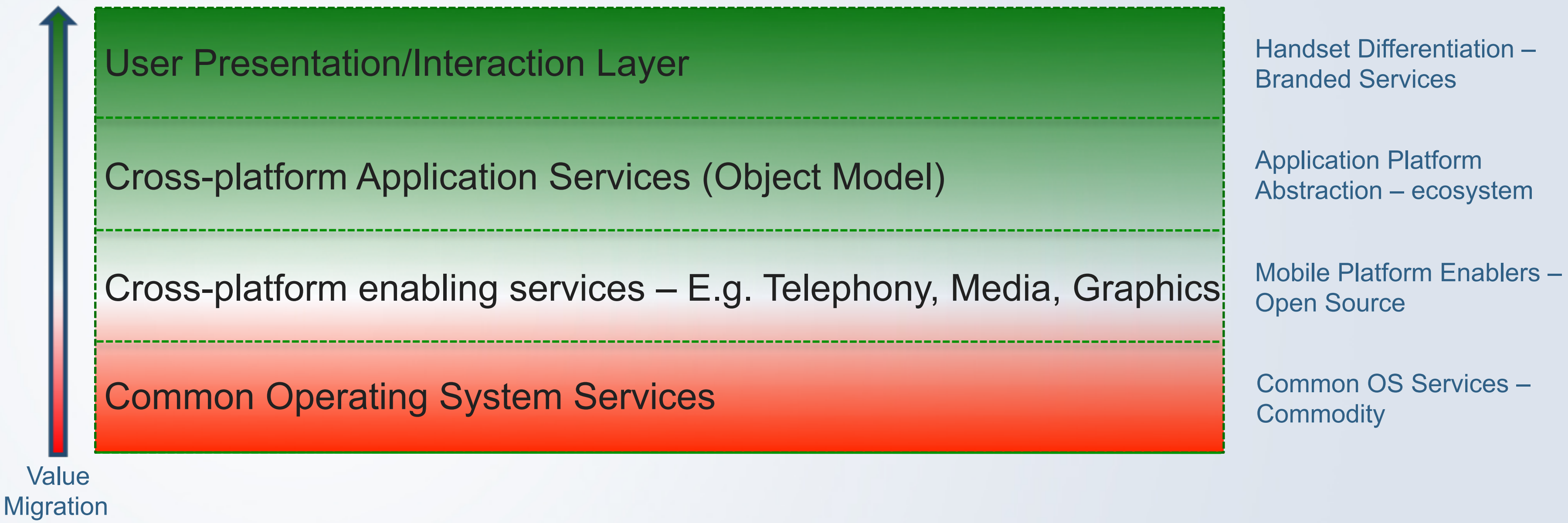


Application/UI Framework & Design Tools
- Deep customization of UI flow, themes, and apps with easy to use design tools
- Cross platform application development

Connectivity & OS Kernel
- Telephony / Communication Layer: **2G, 3G, & 4G**
- OS Abstraction Layer

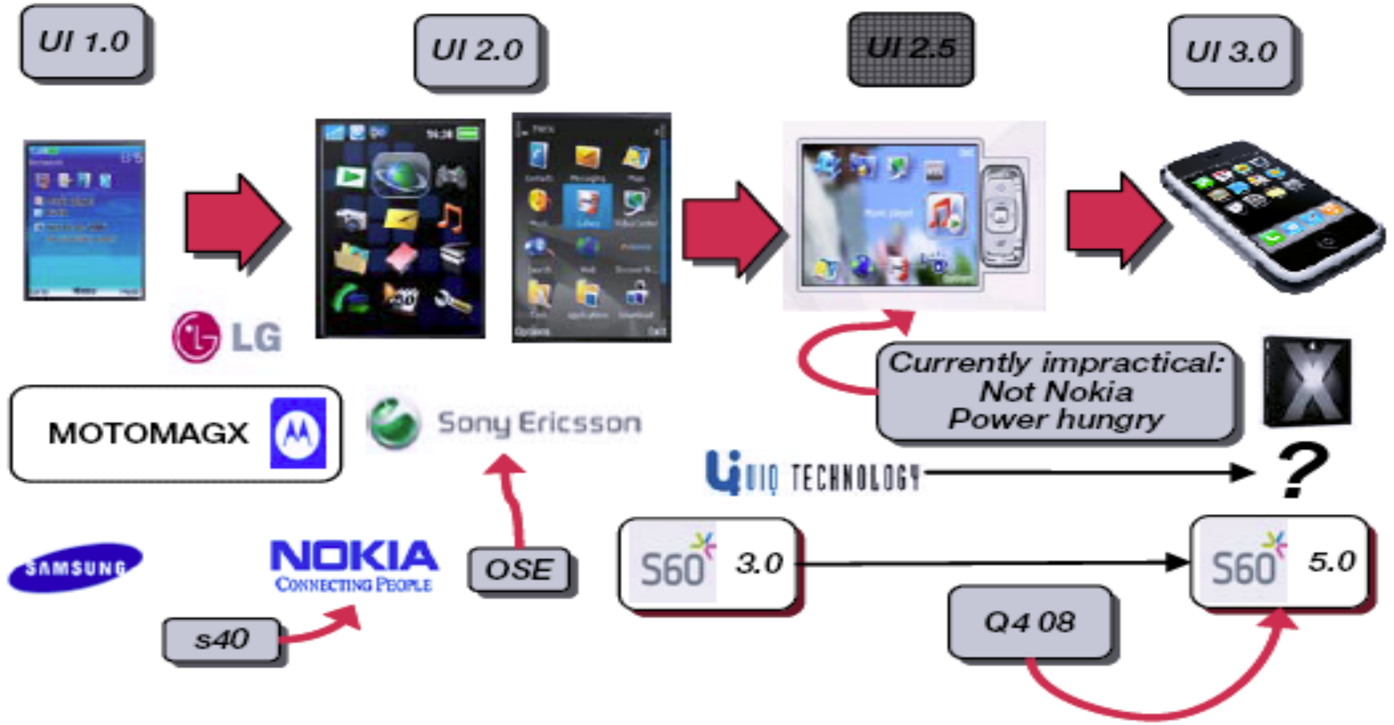
The OS Will Not Matter

- Value moving up the SW stack
- Cross-platform has taken on a new meaning – the cloud is the platform
- End-to-end solutions to include popular Internet brands
- Handset OEMs need a web-applications strategy on their handsets



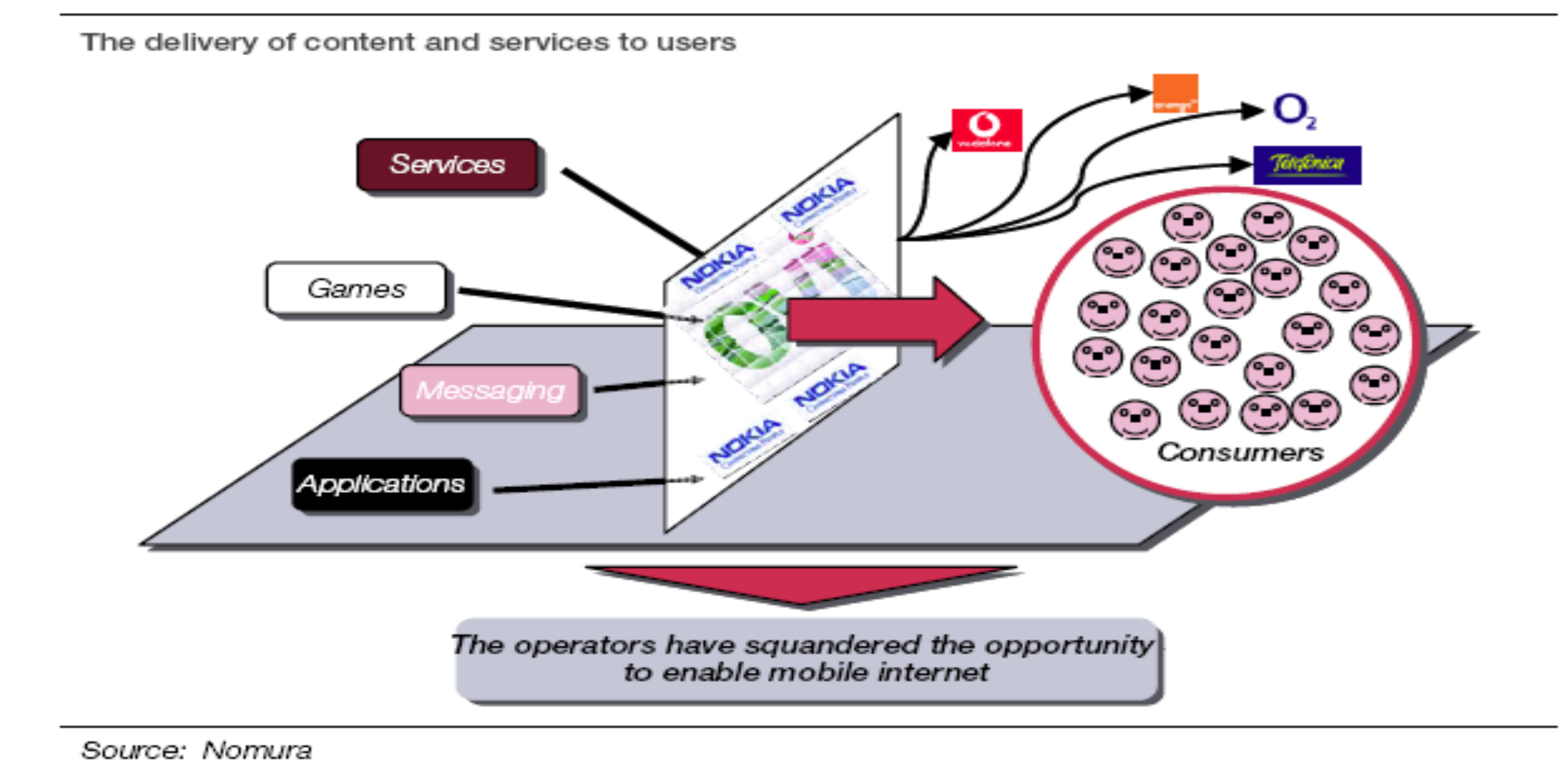
It's about the UI, stupid

User interface roadmap and current positions



Source: Nomura and company data

Redefining the Battlefield: OEMs vs Operators



Market Megatrends: Content Meets Terminal

iTunes

iPod
iPhone

NAVTEQ — Gate5 — Enpocket — NOKIA

Contents → *Platform* → *Application* → *Service* → *Network & Media* → *Terminal*

Tele Atlas — tomtom PLUS traffic info. — tomtom

Google

Google Earth

Google Phone?

- "Android" : open platform for handsets
- Open Handset Alliance