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VisionMobile Research

Mobile Megatrends 2009



### Mobile Megatrends 2009

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## Mobile Megatrends

Eight Centres of Gravity: the New Rules of Mobile.

Market Gravity: The Rise and Fall of Market Value. The Software Industry is Consolidating. Mapping Business

Model Innovation: Value Quadrants. Open is the New Closed. The Mobile Application Store Phenomenon.

NaaS: Network as a Service. Mobile Service Analytics: the Most Underhyped Opportunity.





### Research Reports

#### selected analyst reports



On-Device Portals: Beyond WAP (ARCchart)



The New Age of Handset Customisation: 2006-2011 (ARCchart)



MDM Case Study: Motorola (Ovum)



Five Defining Traits of Open Source (Informa)



High-Capacity SIMs (Informa)



Mobile Operating Systems: The New Generation



Firmware OTA: From Hype to Market Reality (ARCchart)



GPLv2 vs GPLv3 White Paper



Mobile Software Management Report



Activating the Idle Screen: Uncharted Territory (Informa)



Open Source in Mobile: 2007-2012 (Informa)



Mobile Megatrends 2008



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## Market-How Maps

#### Mobile Industry Atlas

:a visual map of who's who in the mobile handset industry, showcasing 800+ leading companies across 47 market sectors.



#### The 100 million club

: the watchlist of software companies whose products have been embedded on more than 100 million cellular handsets



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# Advisory services

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Teleca	abaxıa	redbend	Nokia Siemens Networks
ovum	informa	ARC CHART	. Sidem
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## Mobile Megatrends 2009

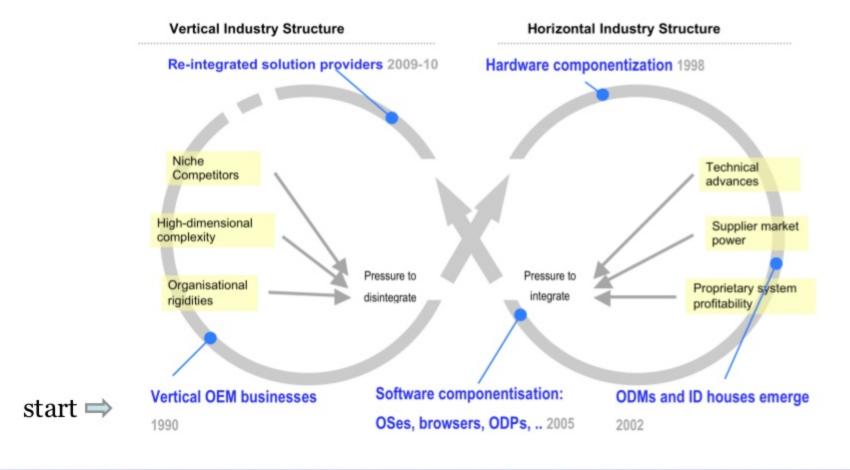
### Eight Centres of Gravity: consolidation of power



### Eight Centres of Gravity: consolidation of power

### The industry is moving again into a vertically integrated structure

From the vertically integrated devices 20 years ago, to the horizontal enabler era of ODMs and OSes, and again into a vertical integration of hardware + software + services with Nokia, Google et al



### 1 Eight Centres of Gravity: consolidation of power

Google, LiMo, Nokia, Qualcomm, Apple, Microsoft, Adobe, Intel

are building vertically integrated solutions and related ecosystems

in effect: Centres of Gravity

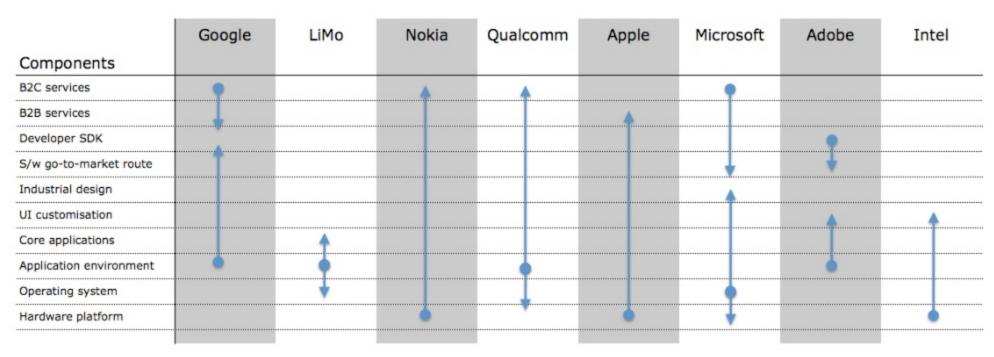
Services —— ecosystem players

Developer SDK
Go-to-market route
Industrial design
UI customisation
Core applications
Application environment
Operating system
Hardware platform

vertical solution

### 1 Eight Centres of Gravity: consolidation of power

Starting from software or hardware, and building upwards



denotes position where vendor started

..the value wars are moving up the stack!

### Eight Centres of Gravity: consolidation of power

	Google	LiMo	Nokia	Qualcomm	Apple	Microsoft	Adobe	Intel
Fundamentals								300000000000000000000000000000000000000
Core product	Android	LiMo stack	SOS + S60	BREW	iPhone	Windows Mobile	Flash Lite	Atom
Туре	appl. environm.	kernel, middlwr	complete OS	appl. environm.	mobile device	complete OS	appl. environm.	processor
Consortium	ОНА	LiMo	Symbian Foundation	none	none	none	Open Screen Project	none
Devices to ship with software in 2008 (est.)	1M	0 *	100M	140M	15M	22M	500M+	0 **
Components								
B2C services	Gmail, calendar,		Ovi		iTunes	My Phone	1	
B2B services	Adsense,		Ad platform	BrandXtend, Xiam,		×	×	
Developer SDK	×		×	x	×	×	×	×
S/w go-to-market route	Google Market		Nokia Download!	BREW Mobile Shop	App Store	partial	Appzone	
Industrial design			×		×	via Danger		
UI customisation	system-wide		wide & shallow	deep, per appl.		skins, idle screen	deep & narrow	via OpenedHand
Core applications	partial		×	uiOne HDK only	×	×		×
Application environment	×	partial	×	x	×	×	×	×
Operating system		partial	×	via REX/AMSS	×	×		Moblin
Hardware platform			×	x	×	partial		×
Commercials								
License	APL2	Proprietary	Propr., then EPL	Proprietary	not licensed	Propr., Shared Source	Proprietary	open source
Cost	free	not known	free	\$3 (est)	not applicable	\$5 (est)	free	hardware license
Consortium membership	closed	\$40-\$400K/year	\$1,500/year	not available	not available	not available	semi-open	not available

shipping the same LiMo stack components \*\* no voice-capable devices shipping in 2008

source: VisionMobile research

### Eight Centres of Gravity: consolidation of power

#### Outlook:

- RIM aggressively moving into forming a centre of gravity
- LiMo's future is uncertain: LiMo-compliance only applies to circa 1% of the software stack
- How successful will be Adobe's transition of Flash Lite into Flash 10 through the Open Screen Project?
- Can Sony Ericsson elevate Capuchin from a toolkit to a platform?
- Will Nokia divorce its Internet and manufacturing personae?
- -Plus: networks are now moving into horizontal structure; via outsourced IT operations, outsourced customer operations (see MVNO) and outsourced sub-brands (see Blyk, Out There Media)



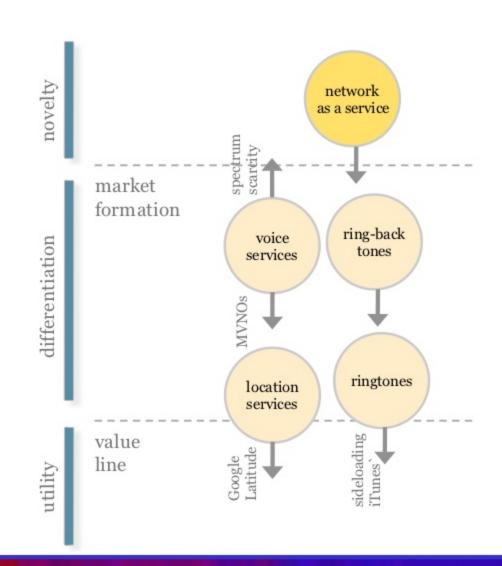
## Market gravity: the rise and fall of market value

Every market sector follows a downwards path;
As if pulled by a gravity, it goes through **3 stages:** 

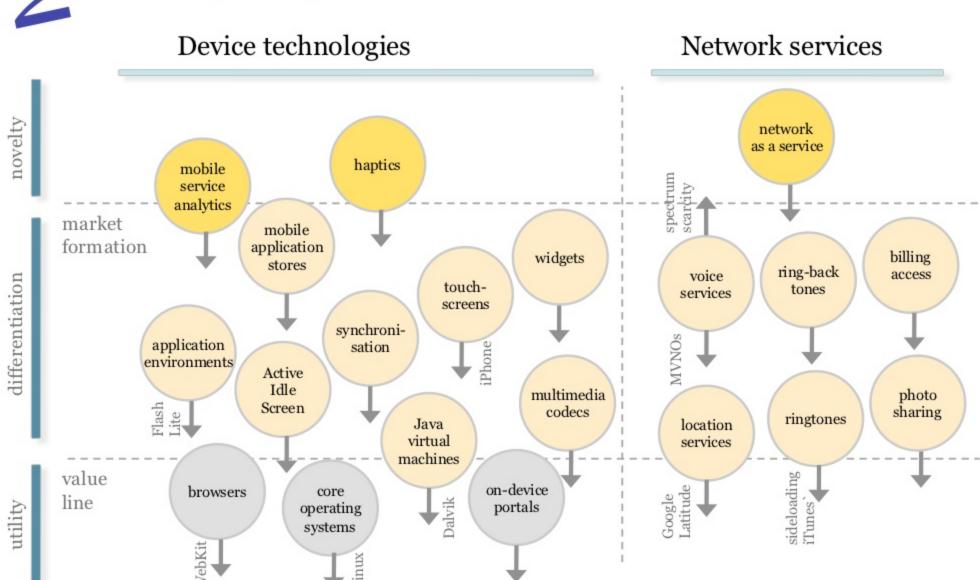
- Novelty: the point when a novel product is introduced, but demand is scarce.
- -Differentiation: market is formed and products become a point of differentiation
- Utility: when the products in the market have limited sale value, but have become essential commodities.

### Gravity accelerators/decelerators

For every market there are factors or events causing its gravity to accelerate or decelerate (e.g. see what Google Latitude has done for MNO location services)



### Market gravity: the rise and fall of market value





### The software industry is consolidating

#### Operating systems for smartphones are now reduced to two choices:

(smartphone OSes are strategically important to OEMs due to high margins of smartphones)

#### 1. S60: now with low cost of ownership and UIQ, MOAP out of the way

Pros: Backed by Nokia, SEMC, Samsung, LG, but not Motorola. Mature and operator compliant

Cons: Nokia's dominance of package ownership and lack of UI differentiation may alienate OEMs

#### 2. Android: advanced architecture, but not catering to OEM needs

Pros: Backed by HTC, SEMC, Samsung, LG, Huawei. Dell, Garmin, Fujitsu, China Mobile, Vodafone, O2.

**Pros:** designed from the ground up for 3<sup>rd</sup> party developers; fastest in developing and debugging apps

Cons: not designed for 2<sup>nd</sup> parties (OEM partners); variant creation is very resource intensive

Cons: software is not pre-integrated with telephony stack and needs Google engineering resource;

Our prediction: 5 Android devices will launch within 2009.

### The software industry is consolidating

..while other smartphone OSes have been sidelined:

#### Linux is no longer the panacea it was considered to be in 2006

- Android's flexibility and short time-to-market has pre-empted Linux's openness
- ALP, Azingo are still in development, with phones expected in early 2010.
- LiMo has been a diversion for ALP, Azingo and Myriad (Purple Labs), diverting focus away from product development, into operator customisations and business development.
- The discontinuation of Motorola's L-J and the decline in the Japan smartphone market has meant lower volumes from key Linux champions
- Linux is now meaningful only as an OS-supporting base

#### Windows Mobile has niched itself into a corner

- OEMs use Windows Mobile for enterprise phones or tactical wins (e.g. HTC X1)
- ODMs do not have the money or expertise to invest in consumer-oriented industrial designs
- The first consumer-oriented version of the OS, Windows Mobile 7, has been delayed to 2010

### RIM's Java platform and OSX growing strong but not licensable

### The software industry is consolidating

Mobile Linux landscape: from 10 vendors in 2007 to 5 in 2009

-Linux for mid-end: Myriad (ex Purple Labs)

now including Openwave client business and the Sagem software business

- Linux for smartphones: Azingo and Access Linux Platform
two acquisitions later, ALP is suffering from permanent beta status - since PalmOS 6 in 2004

- Linux for MIDs: Moblin (now with OpenedHand) and Ubuntu Mobile Missing in action: MontaVista, A la Mobile, OpenMoko (no consumer devices).

- Plus system integrators: WindRiver (now with Mizi know-how), Teleca, Movial

#### But Linux market share is in decline

Linux only 5.1% of the smartphone market in 3Q08, compared to 6% in 2006 (data: Canalys)