
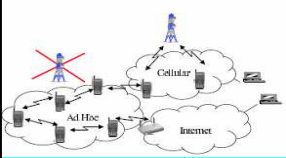


**HTC's  
Desire**


# Sydney PC User Group Smartphones SIG




**Google's  
Nexus One**

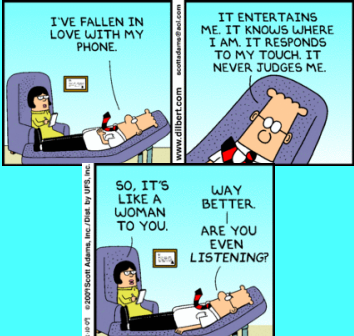



**Aug Mtg**  
**John Shiel**





**Apple's  
iPhone4**





**Nokia  
6710 Nvgr**

## Agenda

- *Last Mtg*
- *History & Current status*
- *External Keyboards*
- **6:50pm Coffee break**
- *Colour-coded real-time traffic*
  - Green > 80kph
  - Red < 40kph
  - Red/Black – very slow, stop/start
- *Latest smartphones*

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## ***In Jul***

- **Operating Systems**
  - *Timeline*
- **How Mobile Phones Work**
- **Usability – importance**
- **Adv mobile applications**
  - *Mapping*
  - *Music*
- **6:50pm Coffee break**
- **Downloadable applications**
  - *Monitoring resource usage (to extend battery life)*
- **Phone review**
  - *HTC Desire*
  - *Others*

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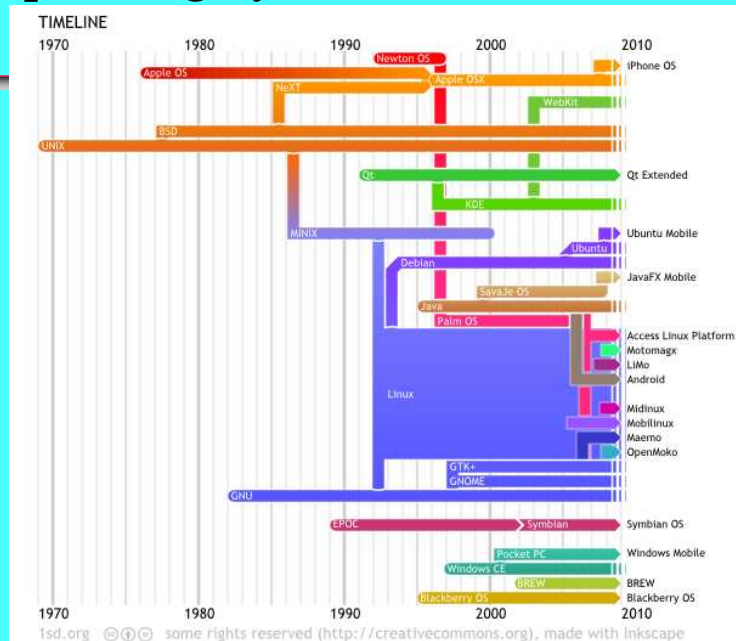
## ***1973 - Motorola's Martin Cooper invents the mobile phone***

[http://www.maximumpc.com/mobile\\_phone\\_breakthroughs?page=0,1](http://www.maximumpc.com/mobile_phone_breakthroughs?page=0,1)



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## Operating System Timeline



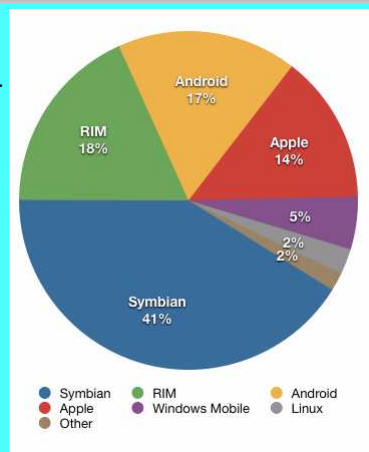
5

## Global Smartphone Market Share

<http://en.wikipedia.org/wiki/Smartphone>

<http://www.gartner.com/it/page.jsp?id=1421013>

- **Smartphone**
  - Has advanced capabilities beyond a typical mobile phone.
  - Runs complete operating system software that provides a standardized interface and platform for application developers.
  - Distinct from PDA-based devices running operating systems such as Palm OS or Windows Mobile for Pocket PCs.
  - Smartphones usually have a standard phone keypad for input, not just a touch-screen for pen input like a PDA.
- Smartphones usually have larger displays and more powerful processors.



Gartner - Android overtaking Apple in 2010 Q2 smartphone sales

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## *Phones can almost replace a PC*

### *Ext. Keyboard is missing piece of puzzle*

- Processor is fast enough
- Presentation device that plugs into a data projector
- Great storage (often 32GB, or storage card)
- Fast internet connectivity
- iPhone 4 + others have great capability
  - HD video recorder,
  - 5 MPx digital camera with GPS tags - locate your photos on map,
  - Street directory for the world,
  - Traffic reports - road speed by colour (google maps),
  - Location-based services (nearest restaurant, service station etc.),
  - A tom-tom,
  - Music player, tape recorder, radio,
  - Calendar, reminders and alarms,
  - Occasionally-connected computer (OCC) applications
    - User can input with or without a connection (eg. sms, internet, email, editor for Office docs)
  - Share a folder of files with a PC eg. "drop-box",
  - Voice recognition for dialling

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## *Foldable Keyboards*

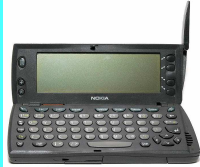
[http://en.wikipedia.org/wiki/Flexible\\_keyboard#Foldable](http://en.wikipedia.org/wiki/Flexible_keyboard#Foldable)

- Made of soft plastic or silicone which can be rolled or folded on itself for travel.
- When in use, these keyboards can conform to uneven surfaces, and are more resistant to liquids than standard keyboards.
- These can also be connected to portable devices and smartphones



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## Alternatives to Extra Keyboards



- **Nokia 9000 – approx 1998**
  - AMD Elan SC450 486 processor at 33 MHz
  - GEOS - on top of ROM-DOS
  - 6" x 2"x.5"



- **Nokia N900 Internet Tablet - 2009**
  - OMAP 3430 ARM Cortex A8 – 3 processor
  - 5MPx camera
  - \$500
  - 3.5" diag,
  - O/S Maemo 5 (brilliant interface), based on Debian Linux distribution
    - no longer supported

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## Alternatives to Extra Keyboards (II)



- **HTC Shift – Windows Vista - 2008**
  - Intel A110 800MHz for Vista, & 400MHz Qualcomm for SnapVue
  - Weight 0.8kg
  - 128 MB ROM, 1GB RAM, 40GB HDD
  - 7" diag TFT-LCD touch screen
  - 207 mm (L) x 129 mm (W) x 25 mm (T)
    - Approx A4 page 1" thick
  - SnapVue (UMPC)
    - Always on – email, SMS, local weather, calendar
    - Make voice calls via a bluetooth headset
  - New in 2008 - \$2,500, now \$800-\$900 on [http://www.mysnapvue.com.au/PR-519712-HTC\\_Shift](http://www.mysnapvue.com.au/PR-519712-HTC_Shift)



- **LG KF900 Prada II - 2010**
  - \$500
  - 3" diag, TV out

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## *Phones with Ext. Keyboards*

Infra Red + Palm OS, Pocket PC 2000-2003 and Symbian Series 60, UIQ

- Palm
  - 500/VX/M505/M515/Zire/Zire71
- Tungsten T/T3/T5/C/E/W, etc
- iPAQ Series
- XDA (XDA 1 and XDA 2)
- Handspring Series
- Dell Axim X3/X5
- Sony Clie Series
- Viewsonic V35
- HP Series
- Toshiba Series
- Nokia
  - 6600, N-Gage, 7650, 3650, 3600, 3660, 3620
- SonyEricsson
  - P800, P900
- Motorola A920



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## *Palm Universal Wireless keyboard 3169WW*

[http://reviews.cnet.com/keyboards/palm-universal-wireless-keyboard/4505-3134\\_7-31125482.html](http://reviews.cnet.com/keyboards/palm-universal-wireless-keyboard/4505-3134_7-31125482.html)

- **Infrared**
- Palm TX, E2, handhelds,
- Treo 700p, 650 and 600,
- LifeDrive devices
- Tungsten T3, T5, E, C
- Zire 21, 31, 71, 72
- Windows mobile
  - HP, Dell, Toshiba
- US\$70



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## *HP Bluetooth Foldable Keyboard*

[http://reviews.cnet.com/keyboards/hp-bluetooth-foldable-keyboard/4505-3134\\_7-31144234.html?tag=also](http://reviews.cnet.com/keyboards/hp-bluetooth-foldable-keyboard/4505-3134_7-31144234.html?tag=also)

- Only works with HP iPAQ
- **Bluetooth**
- US\$130



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## *Nokia SU-8W Wireless Keyboard for some Symbians*

- **Infrared**
  - 6600, N-Gage, 7650, 3650, 3600, 3660, 3620
- **Bluetooth**
  - AU\$240.00
  - 262 x 87 x 13 mm
    - Al casing
  - Two AAA batteries
- Does not lock in open position, making its use on trains and planes impossible.



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## *Celluon Laserkey CL800BT*

[http://reviews.cnet.com/keyboards/celluon-laserkey-cl800bt/4505-3134\\_7-31645178.html?tag=also](http://reviews.cnet.com/keyboards/celluon-laserkey-cl800bt/4505-3134_7-31645178.html?tag=also)

- 3.6 x 1.5 x 1.4"
- **Bluetooth**
- Laser projects a virtual keyboard onto a flat surface
- Frustrating setup and poor support.
- In the end, it just wasn't worth the trouble. So we were a bit wary when we heard about the similar Celluon Laserkey CL800BT (\$199.99)



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## *Blackberries*

<http://www.medicalkeyboardsandmice.com/products/coolmir.htm>

- BlackBerry Mini-USB keyboard
- **Docking cradle**
- Tactile feedback
- BlackBerry icons application keys for easy use
- Carrying pouch
- Rechargeable battery for 15 hours continuous use



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## *ThinkOutside Stowaway Universal Bluetooth Keyboard*

- 2004
- Full sized keys and excellent tactile feedback
- **Bluetooth**
- Compatible with any Bluetooth-enabled
  - PDA running Windows Mobile 2003
  - Smart phone with
    - Windows Mobile 2003
    - Symbian OS
    - Palm handhelds
    - US\$150



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## *Other keyboards*

- X&F Mini Keyboard
  - 2010, **bluetooth**
  - US\$40
  - Windows system, Windows, Mobile system, Symbian S60



- Guangzhou Silicone **Bluetooth** Keyboard
  - Mobile phone system SymbianS60/V3, Windows MobileV6.0
  - Windows/XP/vista/win7/MAC

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# Cuppa

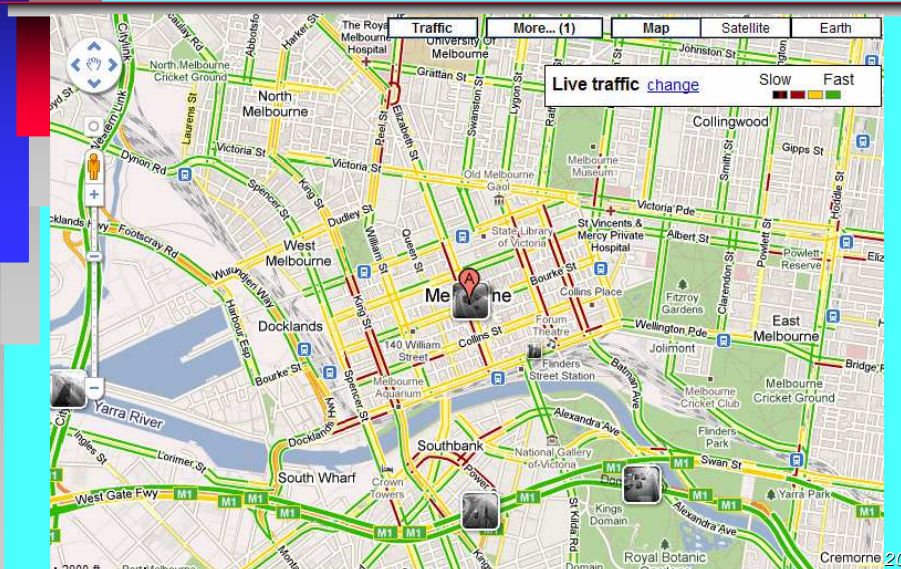
■ *Back at...*

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## *Live Traffic – colour-coded*

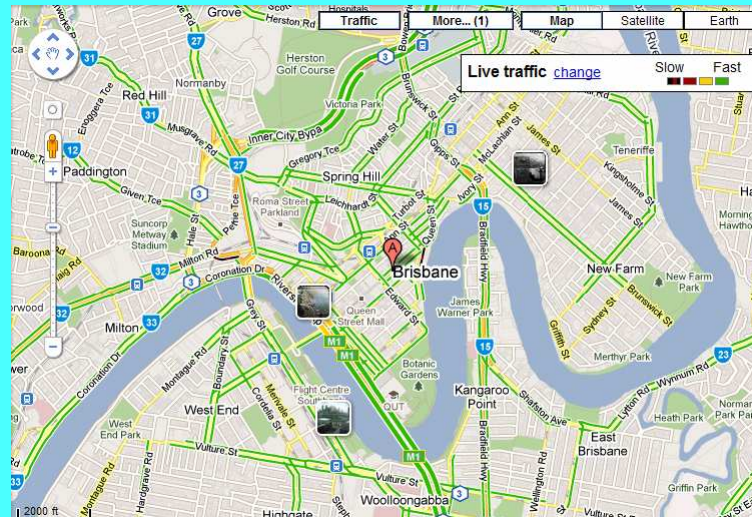
<https://maps.google.com/> Melbourne, 19/8/10, 8:20pm

*Need to watch the zoom level*



## Live Traffic – colour-coded

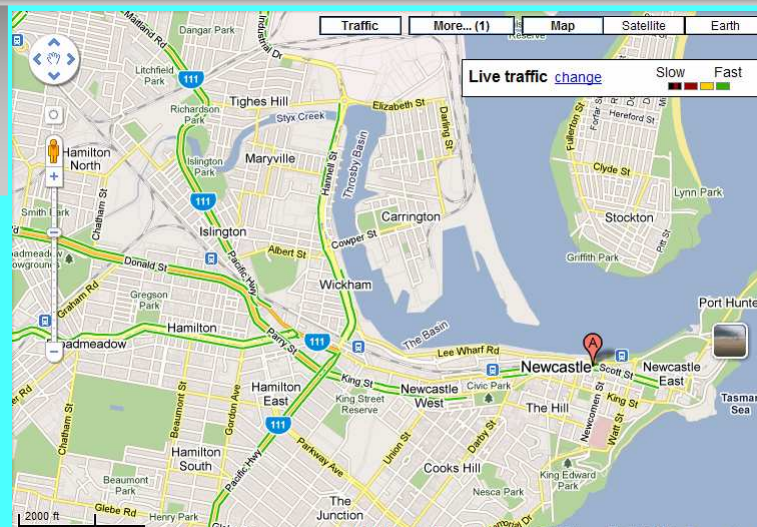
<http://maps.google.com/> Brisbane, 19/8/10, 8:20pm



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## Live Traffic – colour-coded

<http://maps.google.com/> Newcastle, 19/8/10, 8:20pm

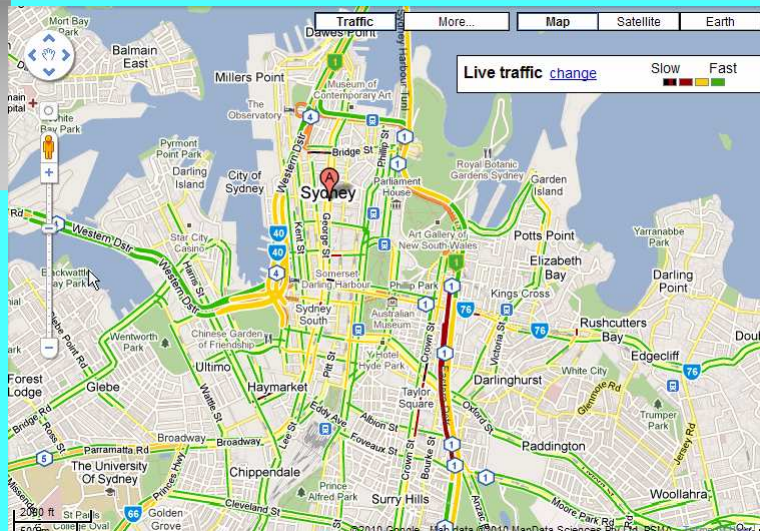


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## Live Traffic – colour-coded

<http://maps.google.com/> Sydney, 19/8/10, 8:20pm



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## Top Smartphones

<http://cell-phones.toptenreviews.com/smartphones/google/nexus-one-review.html>



### ■ Google's Nexus One - \$879

- **5MPx Android 2.1**
- *Pros: A fast phone with noise cancellation software.*
- *Cons: The media player is only basic.*
- *The Verdict: One of the leading smartphones with quick performance, colorful design and noise cancelling software.*

<http://www.theaustralian.com.au/australian-it/googles-nexus-one-phone-fast-but-heavy-on-the-gas/story-e6frgaxx-1225888187099>

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## Top Smartphones

Based on <http://cell-phones.toptransnews.com/smartphones/google/nexus-one-review.html>  
<http://www.engadget.com/2010/04/01/htc-desire-review/>

- **HTC Desire – AU\$779**
- **5MPx Android v2.1**
- Similar to Nexus One, but with Sense User Interface like Legend, but with “Leap”
- Large 3.7” AMOLED pinch
- 1GHz Snapdragon
- GPS receiver, Wi-Fi and Bluetooth
- Edit M/S Office documents
- Pros: Huge range of preinstalled software; First class web browser with Flash
- Cons: Poor 5-megapixel camera; Battery needs to be managed by the user; Needs at least 8GB of internal storage



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## Top Smartphones

Based on <http://cell-phones.toptransnews.com/smartphones/htc-hd2-review.html>  
<http://www.htc.com/au/product/hd2/specification.html>

### ■ **HTC HD2 - \$829.00**



- **5MPx Windows Mobile 6.5**
- 1GHz Snapdragon™ twin-processor
- ROM: 512 MB, RAM: 448 MB, 32GB microSD card
- Opera browser
- Pros: Brilliant 4.3-inch screen with 480 x 800 pixel resolution.
- Cons: With large size its difficult to hold and carry in back pocket; poor battery life.
- The Verdict: Large size detracts from look and feel, but great 480 x 800 pixel display.

<http://www.htc.com/uk/product/hd2/overview.html>

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## Top Smartphones

<http://www.apple.com/iphone/design/>

### ■ Apple's iPhone4



- Apple has confirmed that free "bumper" cases would be offered to Australian iPhone 4 buyers for all orders up until September 30. <http://www.smh.com.au/digital-life/iphone/iphone-4-australian-launch-guide-20100727-10t65.html>
- **5MPx Apple OSX for Mobiles**
- 16GB & 32GB options
- Large Multi-Touch display,
- Brilliant screen 960x640 backlit LCD display
- 2 mics
  - phone calls, voice commands, and memos
  - FaceTime (video) calls and for noise cancelling
- 5-megapixel photos, HD video, built-in LED flash
- Three-axis gyroscope plus accelerometer for better motion gestures & gaming
- Power-efficient A4 chip for multitasking, editing video

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## iPhone 4 Costs

Carrier	16GB			32GB			Locked?	Comment
	Up-front Cost		24 mth cost	Up-front Cost		24 mth cost		
Apple		\$859	\$859		\$999	\$999	No	Total price
Telstra	\$0	\$79	\$1,896	\$0	\$99	\$2,376	Yes	Bonus data till 1/11
Telstra	\$149	\$49		\$299	\$49	\$1,475	Yes	\$400 calls, 200MB data
Optus	\$0	\$59	\$1,416		\$79	\$1,896	Yes	2 months free access fee if bought online - Out of stock
Optus	\$0	\$57	\$1,368		\$64	\$1,536	Yes	\$450 calls, 1GB data
Vodafone	\$0	\$47	\$1,128	\$0	\$53	\$1,272	Yes	Unlimited calls to VF/3 + \$180 calls to any network, 50MB of data + bonus 500MB

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## Top Smartphones

<http://blog.7touchscreen.com/tag/fastest-mobile-phone-2010/>

[http://www.maximumpc.com/mobile\\_phone\\_breakthroughs](http://www.maximumpc.com/mobile_phone_breakthroughs)

### ■ **Palm Pre – WebOS**

- 2009 - \$550
- 3.1 inch multitouch screen
- 320 X 480 display,
- Integrated IM, SMS, MMS,
- Wi-Fi, built-in GPS,
- 3MPx camera with LED flash, USB, 8GB of memory
- Customizable inbox and calendar/contact integration
- The first mobile to use a TI OMAP 3430 processor, and the first to have a wireless charging base, the Touchstone.
- Custom operating system called WebOS, which is undoubtedly the slickest, most user-friendly interface that's appeared on any mobile phone
- Book a movie ticket using one app, and the Palm Pre automatically updates the calendar with the show time
- Multitask loads of powerful apps
- Not expandable – no SD card



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Thank You

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