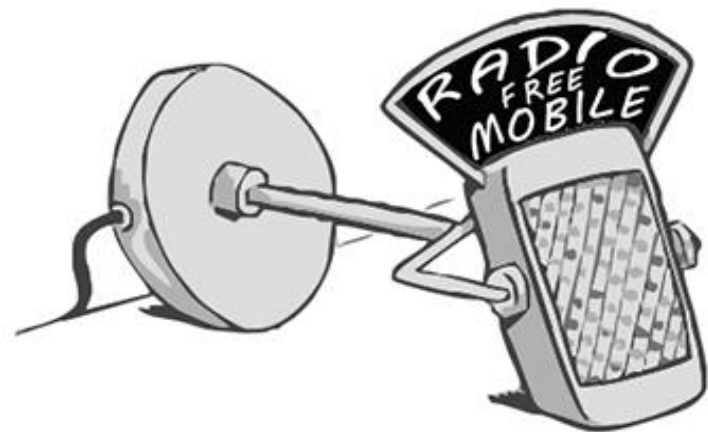


Mobile Software

iRobot



- Ecosystems are where differentiation will occur
- Digital Life and Three Laws of Robotics are central to analysis
- iOS and Android on top...
- ...but vulnerable
- Windows Phone has all the assets to succeed...
- ...but execution has been poor to date.
- Yahoo!, Microsoft and Nokia warrant attention...
- ...while Sony, LGE, HTC, Panasonic and Sharp look very precarious

Dr Richard Windsor CFA
Radio Free Mobile
+44 203 239 9904
richard@radiofreemobile.com
Skype: rhswindsor

4th June 2013



Mobile Software

iRobot

4th June 2013

The days of earning a return on hardware are numbered. To earn a decent return over the next 5-10 years, companies will need to make a difference to the way users live their Digital Lives on mobile devices. Fortunes change fast in mobile, and while iOS and Android are on top now, that could rapidly change as they are not without significant weaknesses. Of the challengers, Microsoft and Yahoo! are, by far, the most exciting.

- **Ecosystems will rule.** The smartphone market is still growing but only a few companies seem to be able to make money from it. This is because the emphasis is shifting from hardware towards the entire user experience from hardware performance all the way to the apps and services. The ecosystem is the glue that holds the entire proposition together and it will be responsible for triggering user delight or disgust. It is here fortunes will be won, lost or perhaps recovered.
- **Open spaces.** The notion that the market is saturated or that there is only space for 2 ecosystems is fundamentally flawed. In theory there could be 20, but RFM sees a more realistic scenario as: 2-4 big and 3-4 mid-sized ecosystems.
- **Tools of the trade.** Radio Free Mobile (RFM) combines two proprietary methods to assess those addressing the market for mobile devices and services. First, an assessment of services provided to satisfy user demand for online activities (Digital Life (page 11)). This analysis **excludes** transactions that would be considered e-commerce. Second, an assessment of an ecosystem against three simple rules (Three Laws of Robotics (page 15)) that RFM considers essential to be a successful mobile ecosystem provider.
- **iRobot.** Android and iOS are the runaway leaders but are not without their weaknesses. Of the two, Android looks the most vulnerable and there is scope for substantial market share loss as consumers become more sophisticated and are made aware of decent competing ecosystems at very reasonable prices.
- **Blue squares of death.** Microsoft's Windows Phone scores very well using RFM's methods but it is floundering due to poor execution and user ignorance. There is potential but Microsoft and its partners really need to step it up.
- **Door wide open.** Of the rest, Facebook, Amazon and Twitter have great user numbers but no real ecosystems to speak of. RFM expects heavy investments in this area. Yahoo! and BlackBerry are more advanced in delivering an ecosystem but only Yahoo! has a good chance of being really successful.

Contents

Executive Summary	1
Smartphone Snapshot	4
Market dynamic.....	4
Making Money	6
Competition	8
Digital Life.....	11
Ecosystems.....	13
Three laws of Robotics.....	15
1) An ecosystem must provide easy and fun access to the user's digital life.....	16
2) An ecosystem must be simple and quick to set up.....	16
3) An ecosystem must capture traffic on its own servers.....	16
The Contenders	18
iOS.....	18
Android.....	20
Microsoft	27
Yahoo!	32
China / Baidu.....	34
Facebook	36
Amazon.....	38
Blackberry.....	40
Jolla	43
Tizen	45
Twitter	46
Firefox OS.....	48
Ubuntu	49
The waiting list.....	50
Conclusion	51
Market forecasts	52
Disclaimer.....	56

List of Figures

Fig. 1: Mobile handset market 2012A-2013E

Fig. 2: Smartphone users by ecosystem, 2012A-2015E

Fig. 3: Where to make money in the mobile phone industry

Fig. 4: The five levels of competition in mobile phones.

Fig. 5: Internet use on fixed and mobile.

Fig. 6: Smartphone users by ecosystem

Fig. 7: Smartphone users by ecosystem, 2015E

Fig. 8a: Mobile ecosystems scored against The Three Laws of Robotics - 1

Fig. 8b: Mobile ecosystems scored against The Three Laws of Robotics - 2

Fig. 9: Apple's coverage of Digital Life

Fig. 10: RFM Apple smartphone shipment and ecosystem user forecasts

Fig. 11: Price and volume of Android and iOS shipments

Fig. 12: Android users by OS Fork

Fig. 13: Google's position in Digital Life

Fig. 14: Vertical fragmentation of Google compliant Android

Fig. 15: Analysis of the Android / Google Ecosystem

Fig. 16: Android vs. iOS traffic (US)

Fig. 17: RFM forecasts for Android (All forks and versions)

Fig. 18: Analysis of the Windows Phone Ecosystem

Fig. 19: Windows Phone Position in Digital Life

Fig. 20: The Blue Squares of Death

Fig. 21: The coloured squares of Digital Life

Fig. 22: RFM forecasts for Windows Phone

Fig. 23: Yahoo!'s position in Digital Life

Fig. 24: Baidu's position in Digital Life.

Fig. 25: Facebook's position in Digital Life

Fig. 26: Amazon's position in Digital Life.

Fig. 27: BlackBerry's position in Digital Life

Fig. 28: RFM Forecasts for BB10

Fig. 29: RFM Forecasts for total BlackBerry

Fig. 30: Jolla's position in Digital Life

Fig. 31: Twitter's position in Digital Life

Fig. 32: Global handset shipments by vendor

Fig. 33: Global smartphone shipments by vendor

Fig. 34 Global smartphone shipments by OS

Fig. 35: mobile ecosystem user numbers and share