Google Android: A New Star on the Horizon

THE INTRODUCTION

The telecommunication sector has grown at a breakneck pace in the past decade smashing all existing logical predictions and forecasts that took an educated guess at approximating the pace of the development. The wireless and mobile communication domain has evolved at such an astonishingly rapid rate that every day that dawns sees the birth of countless applications that promise to raise the levels of cellular experience. At the forefront of the revolution at this point in time is Google with its revolutionary open source mobile platform; Android. With even experts hesitant to hazard a guess at the probable market share captured by Android, the future seems bright and sunny for this novel cellular operating system.

THE INNOVATIVE BREAKTHROUGH

Google went ahead and bought Android Inc, a firm that was credited with the development of the Android operating system. Andy Rubin and his team of developers designed and conceived a mobile operating system running on the Linux Kernel. The unique feature of this system is that it allows developers to write managed code in Java which controls the device via Google-developed Java libraries.

The first public distribution of Android was announced in November 2007 with the founding of the Open Handset Alliance. A major chunk of the Android code was released under the Apache license which is an open source and free software.
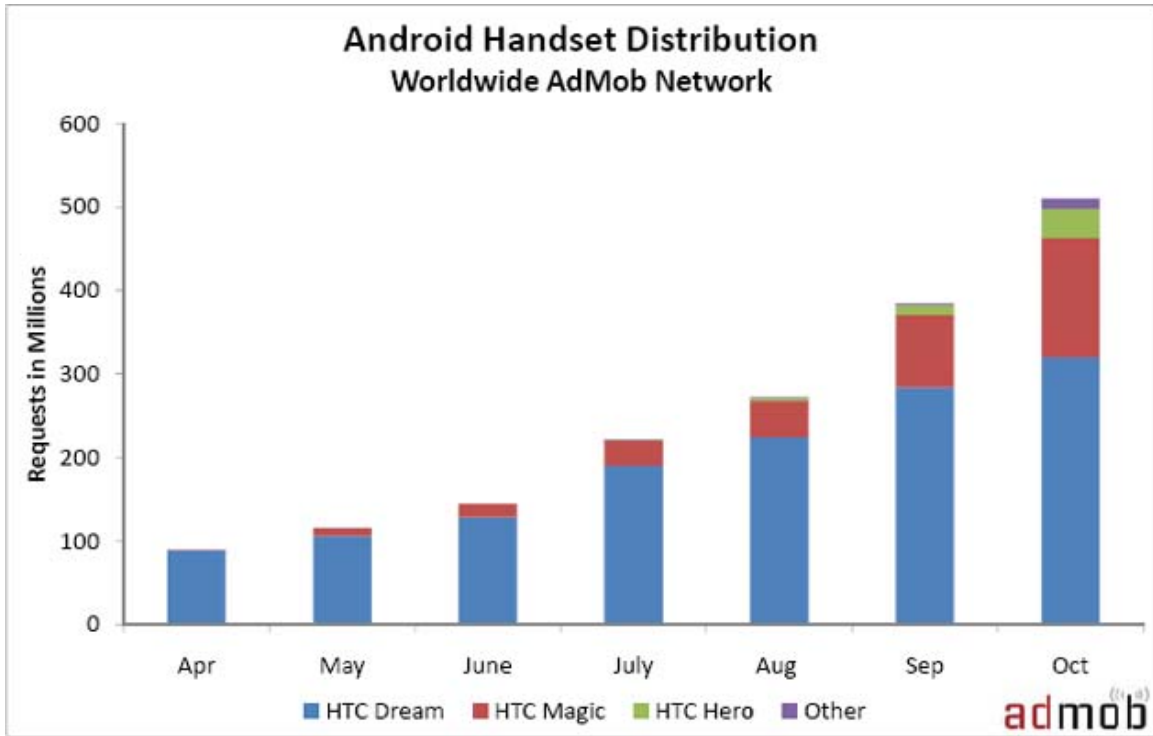
The first phone to feature an Android operating system was the HTC Dream in 2008 and the subsequent years have seen the number rise to 18 models which incorporate the novel OS. On the software facet of things, applications for Android started appearing a week after its release. Though there were concerns about the functionality and the veracity of the open source nature of the OS, that didn't stop app developers from conceiving applications right from day one. The Android SDK provided a comprehensive set of development tools that include a debugger, libraries, handset emulator documentation, sample code and tutorials. Subsequent releases saw the dawn of updates and fixes with releases occurring in July 2008, August 2008, March 2009 culminating in the release of Google Android OS and SDK version 1.5 (CupCake) in May 2009. This release offered users with the features of video recording, support for stereo Bluetooth profile, customizable onscreen keyboard system and voice recognition. September 2009 saw the release of the Donut v1.6 which featured better search, battery usage indicator and VPN control applet.

With many versions sure to come out in the near future, Android possesses the potential to garner a major share of the cellular market pie.

THE NUMBER GAME

Since its inception, Android has steadily grown and has eaten into the market share of seasoned campaigners like Symbian and iPhone etc... If numbers are to be believed, the existing market share of Android would increase by around 900% which is way higher in comparison to the 79% growth predicted for iPhone.

Android Handset Distribution
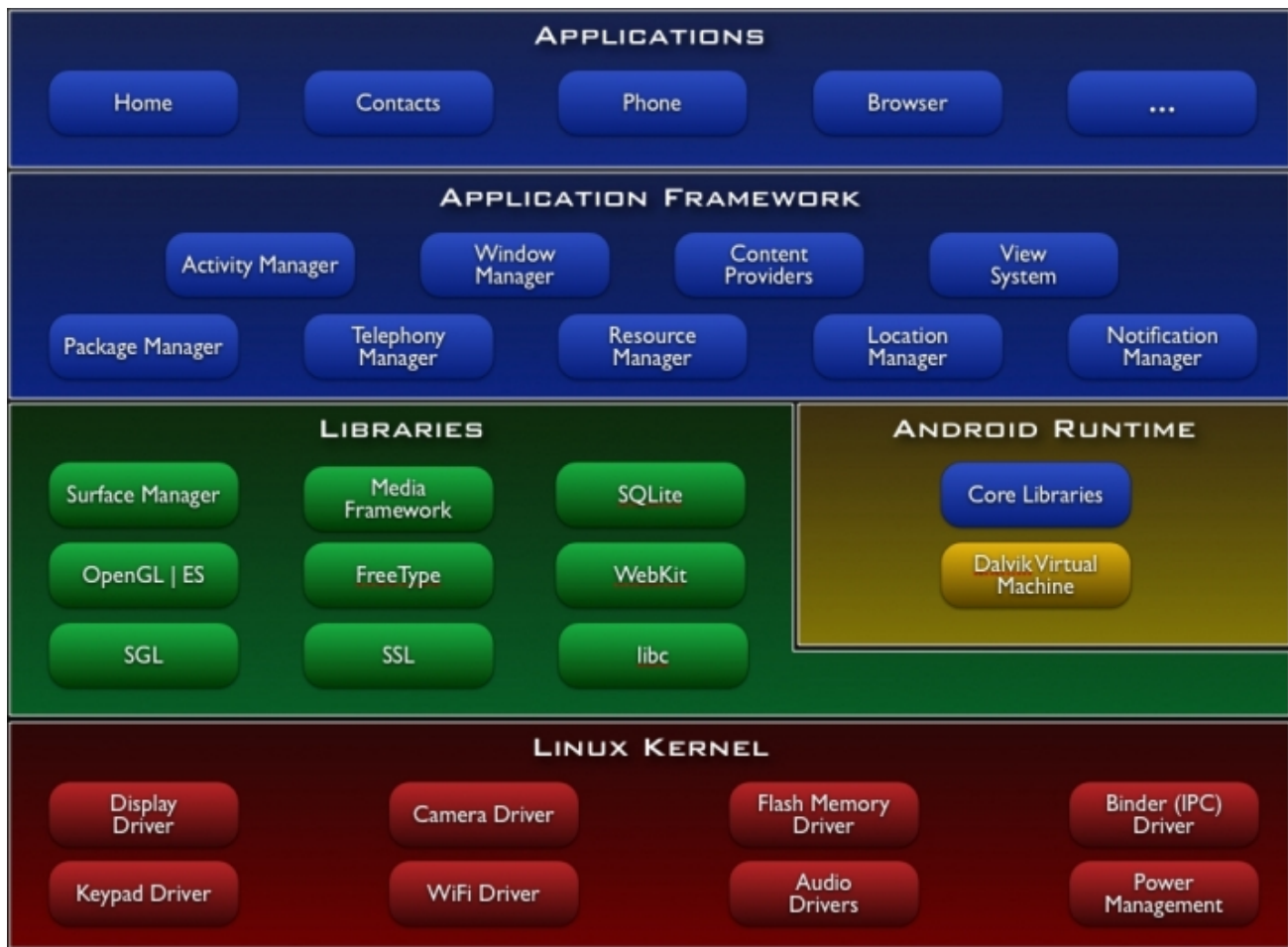**Worldwide AdMob Network**

The above graph shows a clear indication of the almost exponential increase in the popularity and acceptance of Android on a global scale. If the causes of this popularity were to be analyzed, the open source framework sure turns out to be the highlight. But the other features which set this OS apart are similarly exciting. A flexible application framework that enables reuse and replacement of components forms the Android backbone. Dalvik virtual machine suitably optimized for mobile devices, integrated browser based on the open source WebKit engine, optimized graphics powered by a custom 2D graphics library, 3D graphics based on the OpenGL ES 1.0 specification, SQLite for structured data storage, Media support for all common audio, video and still image formats, GSM Telephony, Bluetooth, EDGE, 3G and WiFi Support, camera, GPS, compass and accelerometer are some of the capabilities available in Android.

Android application development has seen an increased frenzy with a rising number of developers favoring to go the Android way. By the end of 2012, Android would be the 2nd most popular mobile platform only coming after Symbian which is the longest reigning and widest reaching OS.
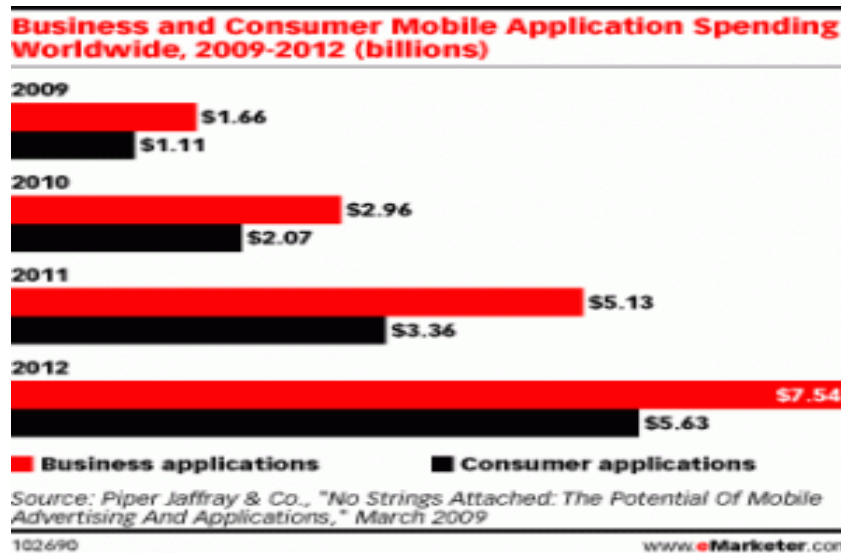
The architecture of the Android OS allows extensive application innovation which paves the way for the future application development.

The onset of 2010 has brought with it immense expectations about the Android future. The application development scenario has already witnessed the dawn of some trendsetting applications like audio/video converters, file transfer, navigation etc… Yet the coming years are sure to see novel and state-of-the-art applications being developed such as simultaneous synchronization of files running common software like Dropbox, FPS and TPS multiplayer games, Wireless connectivity with TV and media, MySpace incorporation, Hulu plugin for watching media online, a decent media player, twitter clients, Google wave incorporation and inclusion of options for browsers.
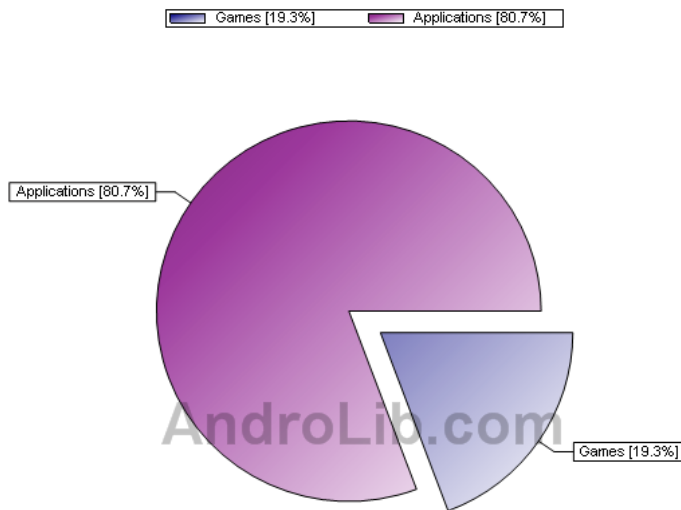
Android also promises an elevation of online business standards by acting as a business platform facilitating mobile versions of websites, making businesses, brands and products more relevant and easily accessible. Increasing the reach, advertising presence and profitability of businesses is a focus area for Android as it leverages application development, mobile marketing and its tremendous future business potential to pave the way for excellent return on investments. Mobile Marketing by Google Android allows businesses a profitable avenue for eCommerce and advertising through the development of web applications which are Android compatible for marketing on mobile technology. Android web development provides businesses with a lucrative, measurable and cost effective means to interact and

engage with customers. The credibility and the vast repertoire of experience that Google brings to the table, ensues that the Android development too would match and exceed pre-set benchmarks. Google Maps, Google Chrome, Google Wave etc... have already proved to be milestones and have set examples for other app developers to follow. Andy Rubin, the father of Android technology, says that though the Android does support enterprise applications on a major scale, the future would see a shift in the focus with major concentration on providing enterprise level application concepts.

Business and Consumer Mobile Application Spending Worldwide, 2009-2012 (billions)

2009
Business applications: $1.66
Consumer applications: $1.11

2010
Business applications: $2.96
Consumer applications: $2.07

2011
Business applications: $5.13
Consumer applications: $3.36

2012
Business applications: $7.54
Consumer applications: $5.63

■ Business applications   ■ Consumer applications

Source: Piper Jaffray & Co., "No Strings Attached: The Potential Of Mobile Advertising And Applications," March 2009
102690   www.eMarketer.com

The corporate and consumer sectors for the span of the next 4 years on a global basis forecast a steep rise in the mobile application spending. With such encouraging numbers to stand by and with Android also being tested for desktops, Google Android proves to be the right companion for all your future business needs.

Distribution of apps and games in Android Market

Games [19.3%]   Applications [80.7%]

Applications [80.7%]

AndroLib.com

Games [19.3%]

On a total of 9977 apps