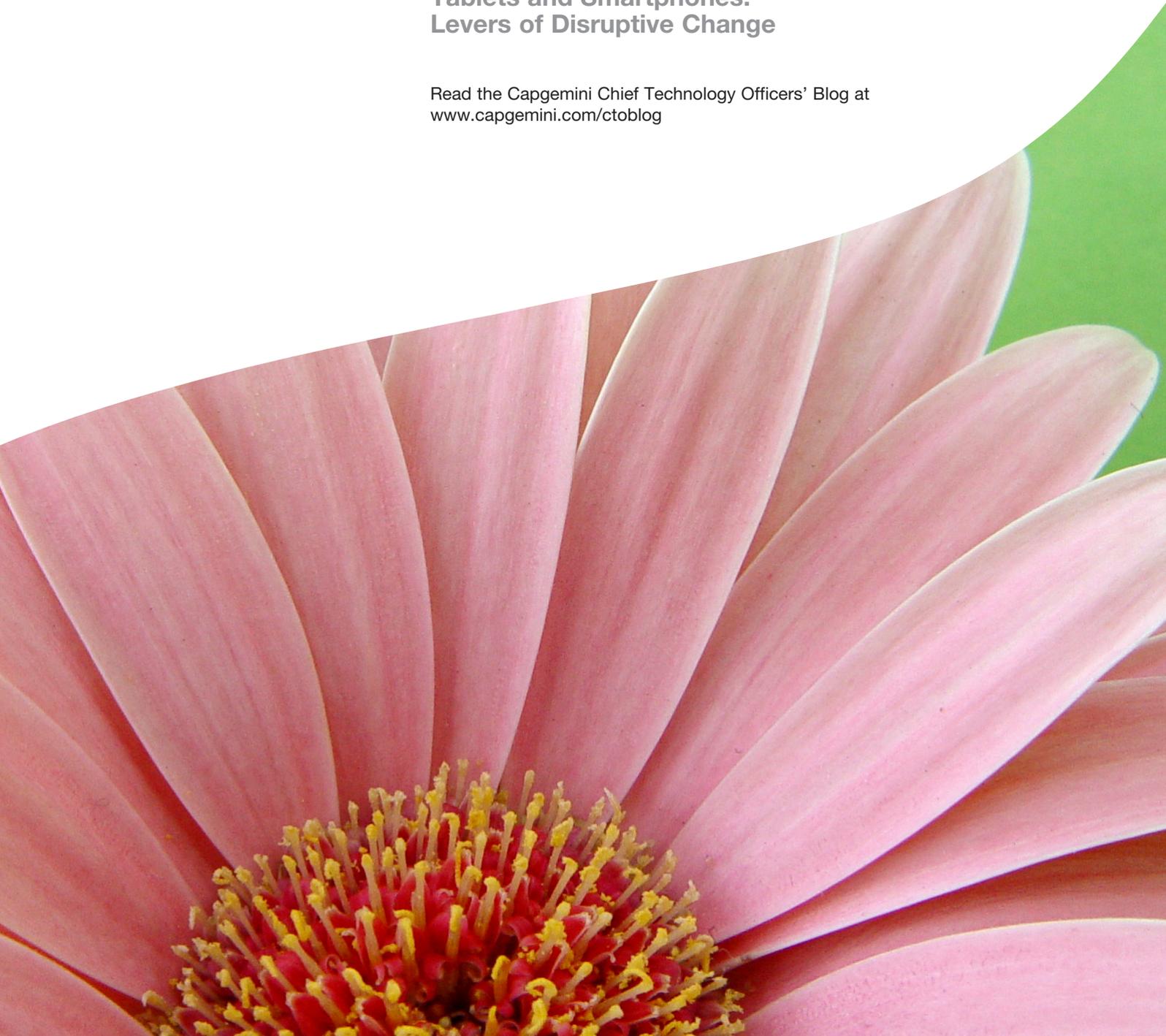


Changing the Game: Monthly Technology Briefs

April 2011

**Tablets and Smartphones:
Levers of Disruptive Change**

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www.capgemini.com/ctoblog



Tablets and Smartphones: Levers of Disruptive Change

All 2010 shipment reports tell the same story - of an incredible increase in the shipments of both Smartphones and Tablets, and of a corresponding slowdown in the conventional PC business. Smartphone sales exceeded even the most optimistic forecasts of experts, with a 74 percent increase from the previous year – around a battle between Apple and Google Android for supremacy at the expense of traditional leaders Nokia and RIM BlackBerry.

It was the same story for Tablets with 17.4 million units sold in 2010 led by Apple, but once again with Google Android in hot pursuit. Analyst predictions for shipments suggest that the tablet market will continue its exponential growth curve to the extent that even the usually cautious Gartner think that by 2013 there will be as many Tablets in use in an enterprise as PCs with a profound impact on the IT environment. On February 7, as part of the Gartner 'First Thing Monday' series under the title 'The Digital Natives are Restless, The impending Revolt against the IT Nanny State' Gartner analyst Jim Shepherd stated;

“I am regularly hearing middle managers and even senior executives complaining bitterly about IT departments that are so focussed on the global rollout of some monolithic solution that they have no time for new and innovative technologies that could have an immediate impact on the business. They’re fed up with IT’s refusal to acknowledge the technical sophistication of today’s average user.... They (the users) regularly purchase, deploy and manage a wide variety of computing and communications technology in their private lives, but at work....”

Harvard Business Review argues the problem also lies with the IT Industry, citing in their 2010 book titled 'Business Model Innovation' that the lessons of PC disruption are just as applicable to today's disruption as they were then. At the heart of their view is that market leading enterprises fail by continuing to follow wishes and comments of their current customers/clients and thus fail to understand and engage with buyers of the next market wave. In the late 80s, this led to the continued support of the Data Center manager who opposed the introduction of PCs and allowed unknown newcomers such as Compaq (now merged with HP), Dell, Microsoft and Cisco to take over the market at the expense of the then leaders DEC, Data General, Prime, Wang, etc.

Today, it is claimed that the continued focus on the CIO by current leaders, who all too often hold the view on user-driven adoption of Tablets and 'XaaS' as something to try to stop, is allowing new players to grab the new and rapidly emerging market wave by selling to the business managers and business users. In the case of the Tablet and the Smartphone, the new competitors leading the wave are clearly Apple and Google, and the traditional PC suppliers are all struggling to get to market Tablet PCs or compete with revolution in the mobile phone market. But its not just about hardware, the software market is changed by this shift as much and the rise of Google Android as the operating system of choice is strongly linked to this change.

The business user driven adoption of the PC was initially driven by the Spreadsheet, and then by networked information sharing leading to the dominance of Windows and Intel. This consistent easy-to-use client interface played a significant part in the rise of client-server based systems, a new wave of enterprise applications including ERP, business model innovation around Business Process Re-Engineering, and the need for a new approach to supporting services for system integration.

Connection to existing Enterprise Software applications, other than email, is a secondary consideration for most Tablet (and Smartphone) users, instead a whole new ecosystem has been created around apps, or more correctly 'services', being chosen and downloaded by users on a pay per use basis. Today the whole IT industry is faced with the challenge of disruptive change that the Tablet/Smartphone model is creating in parallel to the existing IT landscape. These changes include a new wave of innovation around business models, the shift to browser-clouds as the technology model, whole new edge of business apps around people and event interactions including social CRM, social networks, real-time decision support, business process orchestration, etc, and of course a new generation of supporting services.

The adoption of Tablets, and new generation Smartphones, are not an annoying inconsequential distraction for the CIO, they are well on-track as a key component in the creating of an entirely new Business Technology wave.

The impact of this and other technologies is discussed in the [Capgemini CTO Blog](#).

Leading Company Results (Revenues)

Leading Company Results (Revenues)		
Q4	RedHat ↑24% @ \$244.8mn	Accenture ↑17% @ \$6.05bn

Movements by Industry Leaders

Cisco hosted email service is to be discontinued eighteen months after its launch claiming that customers want more than simple email and there is a need for hosting sophisticated multimedia interaction services. **Cisco Telepresence Content Server 5.0** adds new recording and delivery features for collaborative sharing. **Cisco OfficeExtend** provides a complete home-working package that is an extension of an enterprise network and can be managed under the enterprise policies. www.cisco.com

Oracle Health Sciences Information Manager is an open source based solution for health care data aggregation and management that links to **Health Services Information Exchange** which provides interoperability tools to connect with various data formats. **Oracle GlassFish Server 1.3 update** provides a fully featured version of the open source GlassFish Server with increased tools and management capabilities. **Oracle PeopleSoft Mobile Inventory Management** part of the PeopleSoft Enterprise Supply Chain Management suite. **Oracle Mobile Client Application Development Framework** as part of the Fusion Middleware Platform is claimed to allow a single generic build to be deployed on multiple platforms and devices. **Oracle MySQL Enterprise Edition 5.5 update** has performance and management tools update and is claimed to be cheaper to buy/ implement and run by 90 percent than Microsoft SQL. www.oracle.com

HP CEO Leo Apotheker at HP Strategy Summit laid out a roadmap for HP around three topics; Converged Infrastructure, the development of the WebOS platform for HP devices, and a new attack on Software via an HP App Store. **HP Notebooks EliteBook 8460p and 8560p** add new higher performance and increased ruggedness to its enterprise range of notebooks. **HP BladeSystem Matrix and CloudSystem Storage** products gain integrated thin provisioning Utility Storage from the 3Par acquisition. **HP E series Multi Service Mobility Access Points 460 & 466** are claimed as the first to support the 450Mbit 802.11n WiFi standard. HP has made a commitment that it will ship its **WebOS operating system** alongside Microsoft Windows on all its PC ranges from 2012 onward. **HP Energy and Sustainability Management, ESM**, is a collection of products and services to improve various aspects of energy management. **HP Integrity NonStop BladeSystem N5400C** upgrades the critical systems range to include a quad core Itanium 9300 processor. www.hp.com

Intel ThunderBolt Connection Technology provides 10 Gbit bidirectional data connectivity and is a next generation capability for today's FireWire and USB I/O serviced devices. **Intel SSD510 Solid State Drives** double reading speeds to 500Mbits and tripling writing speeds to 315Mbits over the previous models. **Intel Cloud Builders program** aims to help developers in understanding how to use Clouds to their best advantage. **Intel Dual Core Atom N570 processor** ships increasing both processor power and numbers of threads to boost internet services performance. **Intel Core vPro next generation** aims to bring desktop PCs up to a new level to cope with Internet and multi-media services plus strong encryption requires for enterprise deployment. **Intel is acquiring SySDSoft**, an expert in LTE and 4G communication protocols to supplement its current WiMax positioning in next generation wireless. **Intel Micro Server Architecture** for appliance servers will add new Xeon E3 and smaller versions of ATOM chips. **Intel is acquiring Silicon Hive**, a designer of System on a Chip parallel processors. www.intel.com

IBM Tivoli Provisioning Manager 7.2 automates and manages extremely large numbers of Virtual Machines. **Tivoli Storage Manager for Virtual Environments** delivers data protection and security management. IBM is bundling a selection of its products together to provide a **Smarter Commerce Platform** to support and enable a cohesive approach to doing business online with analytical tools, as well as obvious online product offerings. www.ibm.com

Microsoft Windows Phone 7 has a 'small upgrade' being rolled out via a PC based download. **Developers** are being offered free time on Azure for compute and storage to encourage them to try the Azure Platform. **Microsoft Windows 7 Server SP1** is now released. **Microsoft Dynamics CRM** gains new connector to Microsoft AX and a data migration tool from Oracle Databases to Microsoft SQL Server. **Microsoft Intune Cloud Management** and update/service management suite is a one-size-fits-all approach to provide small to large enterprise with comprehensive PC management. Microsoft is promising **Windows for Tablets in 2012** with multi-touch and battery management improvements. **Microsoft Bing Search engine** gains instant search similar to Google and will be able to use HTML5 content. Microsoft has formally released its **Windows Internet Explorer, IE9, browser** for download with new security features, performance boosts and the adoption of many standards including HTML5. **Microsoft is suing some eBook manufacturers** claiming violation of its patents, neither Amazon or Sony is affected. Microsoft has **previewed System Center 2012 Management Suite** defining it as more than the need for IT to manage its assets better through virtualization, etc. but a need to understand how to manage users' operational expectations of performance, availability and access. **Microsoft Bing for Mobile** update adds more leisure feature supporting topics such as shopping searches. www.microsoft.com

SAP RoadMap for 2011 at Cebit Fair stated that Mobile Access, Social Networking, Business Analytics, and Processes on the Cloud would all merge together to meet new business demands focusing technology in new ways. **SAP Business Objects 4.0** update gives real time decision support to BlackBerry and Apple mobility devices and uses the new HANA, High performance Analytic Appliance, in memory technology. **SAP Sales on Demand** provides sales force support with social CRM tools and integrates to the Business By Design suite. SAP has preannounced **four new in-memory applications** built on the SAP HANA platform covering Invoice Analysis, Cash & Liquidity Management, Promotional Forecasting, and Smart Metering Monitoring. SAP and IBM worked together to **test the SAP HANA in-memory performance** and found it could handle more than 10,000 queries an hour against a 1.3 Terabytes database with typical ERP reporting queries. **SAP BusinessObjects Governance, Risk, and Compliance, GRC, 10.0** brings together all the parts of analytics and business intelligence elements to provide a comprehensive approach. www.sap.com

Google Android 3.0 Honeycomb SDK for creating apps to use on Tablets is now available. **Changes to Google Search** now cut out 'content farming' spam. **Google Cloud Connect for Microsoft Office Services** enables migrating to Google Office by supporting Office 2003, 2007 and 2010 documents. **Google Apps Certification Program** has been introduced to ensure that Apps developed for Google will be of a uniformly high quality by certifying professionals. **Google User Managed Storage Service** provides business users with incremental storage for Enterprise Applications and Google Apps. **Google API Explorer** offers six common APIs to offer developers a simpler route to building and using services on Google. **Google Maps** gains real time traffic feeds. **Google Chrome 10 Browser** delivers the expected boost in speed up to 66 percent faster but majors on security with a range of features from password management through to sandbox running of media. **Google Instant Search** can now be used on Android and Apple devices. **Google Android distributions** should only be from well trusted sources as several distributions have

been found to have Malware inclusions for remote command and control. **Google Gmail Smart Labels** automatically sorts incoming mail into different folders according to parameters set. **Google Apps Schedule Release** allows updates to be planned as to when they will happen rather than the current automatic deployment. **Google Docs** gains a new discussion capability to support multiple editing of documents. **Google Chrome Browser beta** now has HTML 5 speech input capability. www.google.com

Apple MacBook Pro gains three new NoteBooks based on the Intel Sandy Bridge processor for enhanced performance and battery life. A **developers' preview version of Mac OS X Lion** is now available featuring new LaunchPad and Mission Control graphical user interfaces. **Apple iPad 2**, thinner, faster and with front and rear cameras, is now available and 500,000 of the new units were sold on the launch day. **Apple iOS 4.3** is now released for **iPhone 4** as a firmware upgrade to allow faster browsing and shared 3G connections via 3G. **Apple is suing Amazon** over its use of the term App Store which it claims as trademarked in a case that could have industrywide implications. www.apple.com

Amazon CloudFormation simplifies the design and building of templates that can be used for creating the same hosted services. **Amazon Appstore is due to open** for user business following being open for developers to build Apps from January. **Amazon Elastic Compute Cloud, EC2** has improved secure access by browser to its services without needing to operate a Virtual Private Network, VPN. **Amazon Web Services Elastic Block Store, EBS**, suffered some short outages on two consecutive days causing their customers concern about the reliability of the service. **Amazon is opening an 'App Store' to trade in Android based Apps** thus providing a new independent market for developers which they claim has similar characteristics to authors and books reform in publishing that they drove. Note, Apple are suing over the use of the name App Store – see Apple news. www.amazon.com

Open Source Update

Mozilla Firefox 4 beta for Android and Nokia Maemo speeds up loading times, and adds new toolbar features. **The final FireFox 4 beta for PCs** is now available. www.firefox.com

Novell SUSE Linux Enterprise Server for SAP Applications allows SAP applications to run on the SUSE Open Source Operating System with the claimed reductions in cost of provisioning and managing servers. **Novell SUSE Manager** provides enterprise level Linux Server management for virtual or physical environments. www.novell.com

Xen Cloud Platform 1.0, XCP 1.0, is a composite of Xen components including Xen HyperVisor, Networked Storage, and Management stack to support Windows and Linux as well as integration to OpenStack Bexar Infrastructure to provide a comprehensive approach to providing private clouds. www.xen.org

Project Chrysalis, an open source version of the BitTorrent engine, is now available as an alpha release for development into a supporting medium to allow commercial enterprises to offer channels of content. www.bittorrent.com/chrysalis

OpenStack Cloud Initiative gains the support of RackSpace who are now to offer their support service on any OpenStack Cloud implementations. **CloudStack 2.2 release** claims to add more than 100 new features and now provides inter-cloud operability with Amazon EC2 as a well as the ability to run virtualized servers separately or as part of a cloud. www.rackspace.com

JBoss Enterprise SOA Platform 5.1 adds new extensions to cope with a wider variety of integrations of data types and bundles Apache CXF web services stack and Camel Gateway, JBoss Developer Studio 4.0, and a preview of WS-BPEL orchestration. www.jboss.org

OpenSUSE 11.4 release using the Linux Kernel 2.6.37 bundles KDE Plasma and Gnome Desktops, and FireFox 4.0 plus the newly formed LibreOffice as a replacement for the previously incorporated OpenOffice. (OpenOffice has seen a number of members quit to form LibreOffice in protest against Oracle 'controlling' the development of OpenOffice.) www.opensuse.org

Standards Watch

Internet Engineering Task Force, IETF, and International Telecommunications Union, ITU, will both develop competing standards for a common multi-protocol label switching, MPLS, standard despite an earlier agreement to work together. www.ietf.org www.itu.int

WebGL hardware accelerated 3D graphics standard final specification has been released and now has the support of Google, Apple and Mozilla for immediate adoption into their browsers. www.khronos.org

More Noteworthy News

Analysts are warning that the Tablet market could implode stating the manufacturers are planning to make around 81 million units in 2011 as all major and minor players enter the market. But sales are expected to be around 50 million units with the Apple iPad into its second generation beating newcomers both on price and specification to take 80 percent of this. IDC and JP Morgan have both published detailed reports in which they also state that other Tablet operating systems including Google Honeycomb are disappointing in their reliability.

StatCounter reported Search Engine usage positioning Microsoft Bing in second place with 4.37 percent of enquiries overtaking Yahoo at 3.97 percent leaving Google as the leader with 89.94 percent of all searches. www.statcounter.com

Nielsen say that Android is the top USA smartphone operating system with 29 percent with BlackBerry and Apple each at 27 percent, Microsoft at 10 percent and HP with 4 percent. www.nielsen.com

McAfee is combining WaveSecure and VirusScan into a single suite with new licensing terms that benefit Service Providers and will be better suited for supporting Smartphones and Tablets. **McAfee is acquiring Sentrigo, a specialist in database security** with a product set that currently is sold alongside the McAfee Imperia. www.mcafee.com

RSA SecureID is at risk of being compromised after a sophisticated attack mounted against its own confidential systems succeeded in partial access. www.rsa.com

VMware View 4.6 now has an iPad client version including full remote keyboard emulation. VMware vCenter Operations comes as three versions with increasing levels of functionality to manage various aspects of a virtualized environment as well as monitor performance and support tuning. www.vmware.com

Avaya Virtual Enterprise Network Architecture, VENA, capabilities can be extended to service campus based users as well as main services and includes automation features for managing user applications. www.avaya.com

Sony Vaio Notebook ranges S, C, L and F all gain new models with latest Intel Sandy Bridge chipset for improved performance and battery management. www.sony.com

Amazon EC2 has new capabilities accessed via the Amazon AWS Management Console to alter characteristics of selected instances. www.amazon.com

NetApp is acquiring the external storage business of LSI centered on the Engenio range whilst LSI will remain with the Megaraid and 3ware storage controllers. www.netapp.com

Juniper Networks QFabric is a network architecture for Next Generation Data Centers which provides connectivity in what is described as a 'flatten' single tier model through a single high performance router with claims of huge performance improvements. <http://www.juniper.net/us/en/>

Motorola Xoom Tablet is now shipping as the first Google Android 3.0 Honeycomb Tablet but a last minute change in specification drops Adobe Flash 10.1 from the shipped specification stating it will be a later free download. The Launch was hit by a legal dispute over the name Xoom. www.motorola.com

Fujitsu Stylistic Q550 Business Tablet runs on Windows7 and features a strong security emphasis as its differentiator with fingerprint sign-in and an encrypted solid state drive. <http://www.fujitsu.com/global/>

Origin Storage Enigma FIPS is a hard disc upgrade for existing devices to meet US Government FIPS 140-2 security standard that combines Seagate Momentus with a software pack of utilities. www.originsecurity.com.au

Spiceworks iPhone Network Administration App allows a range of standard Admin tasks to be managed via an iPhone. www.spiceworks.com

Lenovo ThinkPad Enterprise Notebooks upgrades add built-in video and audio improvements for conferencing and much improved power consumption. **Lenovo ThinkCenter M91 desktop series** is claimed to offer increased performance including Intel based hardware graphics at an 'affordable' cost. www.lenovo.com

Dell has now formally launched the **storage products** acquired via Compellent Technologies as part of its Unified Architecture. **Dell Venue Pro Smartphone** on Windows 7 is now world-wide released. **Dell Vostro 3000 Notebook** range upgrades performance and battery life but adds more support for online interaction with built-in camera and microphone plus preinstalled Skype. **Dell PowerEdge C 5000 Server** is a new 3U rack mount format for up to 12 separate server nodes. www.dell.com

Strato Web Hosters are first to introduce an iPhone app to support remote access of their online storage service including streaming video. www.strato.com

AMD G Series Embedded Processors has three new chips as extensions to the BobCat platform for devices that do not require an visual displays. www.amd.com

Sage CRM v7.1 adds social CRM via Twitter, etc. as well as integration for iPhone and Microsoft Exchange synchronization. www.sage.com

Opera Mobile App Store provides a non-specific platform app store for any mobile app developers and downloaders with a claimed 140,000 apps on opening. **Opera Barracuda Browser 11.10** for Windows, Mac and Linux is now available as a beta.

Opera Mobile and Opera Tablet versions are now available of the new Opera Mini 6 Browser. **Opera DragonFly 1.0 beta** for web developers looking for errors in pages and can be embedded directly into the Opera Browser for maximum ease of using and viewing the finished results. www.opera.com

Adobe ColdFusion Builder 2 public beta is available and brings the Eclipse Integrated Development Environment, IDE, to the development of Adobe Rich Internet Applications. **Adobe Flash Player 10.3** adds new developer tools, increased security and a new audio update for web based communications. **Adobe Wallaby converts Flash content to HTML5** and allows existing Flash built apps to be repurposed as HTML to be accessed by Apple devices. **Adobe Flash Player 10.2 for Mobile** is now available for Android 2.2 and 2.3 devices. www.adobe.com

RIM BlackBerry Messenger is to be extended to include Android Smartphones and Apple iPhones but with a reduced set of features. **RIM BlackBerry Protect beta** is available as a free download and allows backup and restore, plus location services for devices. **BlackBerry Playbook** is now on preorder prior to launch in the USA market. www.blackberry.com

Salesforce.com Service Cloud 3 is a comprehensive upgrade of Social Tools to include customer CRM on Twitter and Facebook integration. www.salesforce.com

Western Digital has acquired Hitachi Storage to merge the previously competitive product lines and create a new force in the storage market. www.westerndigital.com

Precise 9.0 creates new capabilities to manage and monitor transactions running on virtual machines, and allows performance to be recorded and tuned. www.precise.com

Samsung and Motorola challenge BlackBerry with Android based Smartphones with keyboards making the same form factor as BlackBerry. **Samsung Galaxy Tab 8.9** is claimed to be the thinnest Tablet on the market and has an 8.9inch screen size replacing the current 7inch screen plus front and rear cameras and a 1GHz dual core chip running Android 3.0 Honeycomb. www.samsung.com
www.motorola.com

Symantec VeriSign Secure Sockets Layer, SSL, certificates can now be renewed through a faster and simpler process called Express Renewal that allows a valid unexpired certificate to be renewed with a simple payment rather than requiring a resubmission of a Certificate Signing Request. www.symantec.com

Aruba Mobile Virtual Enterprise, MOVE, is an enterprise tool to automate the permissions and connections for devices connected by WiFi and is particularly aimed at managing the connection of employees own devices at work. www.aruba.com

Twitter has improved security by providing an easy user option to use HTTPS as the default for their sessions and therefore prevent session and account hijacking from public WiFi sessions. www.twitter.com

Picisel SmartOffice 1.5 provides office automation around Microsoft Word, Excel, Powerpoint plus PDF documents on most mobile platforms and Tablets including iPad. www.picisel.com

Facebook is acquiring Snaptu, the mobile company responsible for the Facebook Feature Phone software that allows 'ordinary' phones to interact with its site.

www.facebook.com

Brocade ServerIron ADX 12.3 software upgrade for the Brocade Application Switches supports concurrent IPv4 and IPv6 operation. www.brocade.com



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called Rightshore®, which aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients. Present in 40 countries, Capgemini reported 2010 global revenues of EUR 8.7 billion and employs around 110,000 people worldwide.

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