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Holiday Best Buys » December 2011



Taking on the Top 5

he annual awarding of our The annual awarding 5. 5. Top 5 products usually goes along with a fair amount of excitement in the office. Apart from signalling the end of the year, it gives us some time to take stock of all the good, bad and ugly tech that made its way through our hands.

The products featured in the Top 5s are ones we spent a good deal of quality time with, enough to write a fair review, which you'll find in full on www.techsmart.co.za. Compiling the awards does pose some difficulties though;

for example the late release of the iPhone 4S in South Africa meant we did not receive it in time for possible inclusion in our list of the Top 5 high-end smartphones.

This year we split smartphones into entry-level (sub-R3000) and high-end models, while the rise in popularity of tablets meant that, for the first time, theres also a Top 5 tablets. Unfortunately, we could not work our way through all the excellent gaming titles appearing in 2011, which made a fair Top 5 games simply not possible.

Congratulations to all those included, and specifically our winners, whom you can read about from pages 9-13. Here's to an even better 2012.

Enjoy the issue, Mike (michael@techsmart.co.za)



TechSmart and Smart Publishing would like to wish all our readers and advertisers a peaceful and happy festive period.

Your support and feedback throughout 2011 was greatly appreciated. May 2012 bring the love, thought and understanding to make not only South Africa, but the world, a better place to live in.



Feature

Top 5 products of 2011

So which products can be named 2011's best of the best? Our Top 5 notebooks, tablets and smartphones are not to be missed.

9-13

» Hardware

Vodafone Webbook

Vodacom's Vodafone Webbook brings computing to the masses with a sub-R1500 netbook. Here's our review.

17

Games

Battlefield 3

So how much fun is gunning it with online multiplayer in Battlefield 3? Read here to find out.

40

Competitions

Win! Win! Win!

3x Battlefield 3 and 8 x Jabra Active headsets up for grabs! Find out how to enter here.

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83 333 average copies per month Consumer: Male [Jul - Sept 2011]



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Top Tech Titbits »

Nokia goes Windows Mobile



Following its announcement earlier this year that it would be partnering with Microsoft, the Finnish phone giant finally revealed some tangible Windows Phone devices in its arsenal. More specifically, these include the Nokia Lumia 800 and Lumia 710 smartphones, which both run off the Windows Phone 7.5 Mango operating system and are powered by a 1.4 GHz Scorpion processor. Even so, Nokia demonstrated that it would not abandon the lower-end of the market, evident by its announcement of the Asha family of Series 40 mobile phones, which are powered by a very competent 1 GHz processor.

Nvidia Tegra 3 unveiled



s a sign that progress marches As a sign that progress marener

Ainexorably on, Nvidia's latest Tegra 3 processor (codenamed Kal-El) was officially unveiled. This quad-core processor promises PC-class performance levels, better battery life, as well as improved mobile experiences on both tablets and smartphones. More specifically, Tegra 3 will apparently offer up to three times the graphics performance of Tegra 2 and up to 61% lower power consumption. According to Nvidia, this will translate into an industry-leading 12 hours of battery life for HD video playback. Already Asus has showcased its impending tablet equipped with the new processor, the Asus Eee Pad Transformer Prime (see below).

HP to keep PSG



fter an eventful few months for HP, which saw their Personal Systems Group (PSG) division (responsible for PCs) fated to be spun off into a separate entity or sold off, PSG instead received a reprieve. New HP CEO, Meg Whitman, who replaced the fired Leo Apotheker, marked a 180 degree reversal from her predecessor's plans when she pledged that the division would be staying within the company. She described the move as being "right for customers and partners, right for shareholders, and right for employees." As the world's no. 1 PC vendor, we would hope so. 4

Hot New Products »



Asus Eee Pad Transformer Prime

As big fans of Asus' Eee Pad Slider SL101, we had grand expectations for the company's latest tablet. Asus didn't disappoint as the 8.3 mm thin Transformer Prime is the world's first tablet powered by Nvidia's new Tegra 3 quad-core processor (see news above). It operates on the latest Android 4.0 OS (Ice Cream Sandwich), while sporting a battery life of 12 hours. No

local release date is available

HTC EVO 3D

HTC has thrown its hat into the local 3D smartphone ring with its EVO 3D that boasts twin 5 MP cameras. With these it can capture 3D photos or record video at 720p resolution, both of which can be viewed in 3D onscreen (a lovely 4.3"

with 540 x 960 resolution) without the need for those horrible 3D glasses. The HTC EVO 3D is already available

at select retailers locally at an RRP of R6888.





LG Plasma Pentouch TV

If you have ever had the urge to have a really big touchscreen display that you could scribble freely on, somewhere in the region of 50" (R10 999) to 60" (R25 999, 3D enabled)

for example, then LG's Plasma Pentouch TVs may be up your alley. Both offer viewers the ability to interact with the screen as they would with a virtual whiteboard. So now you can draw pictures, make notes and edit photos using nothing more than a special pen and the

screen.

Samsung Galaxy Note

Is it a smartphone? Is it a tablet? Neither, it's an Android 2.3 hybrid of the two, with a middle of the road 5.3" screen. The note boasts a HD Super AMOLED display (1280 x 800, 285 ppi), a powerful 1.4 GHz dual-core ARM Cortex-A9 processor and 16 GB of internal memory. Most distinctively, its pen-input technology enables users to write and draw on-screen with the provided stylus, while an 8 megapixel camera offers above average photo capture. Expect to pay R8000.



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Sci News »







A royal roar

To be the king of the animals, you need the voice to match. And a lion does. According to a study published in a November issue of PLoS ONE, it's the shape and structure of a lion's vocal cords that give it its fearsome roar. When scientists analysed the vocal chords of three lions and three tigers, they found that a deep layer of fat gives the chords a flat, square shape rather than the triangular shape seen in most other species. Because of the square shape, air moving past the vocal folds let them vibrate at 200 Hz or less. Although human voices also typically vibrate between 100 and 200 Hz, big cats' roars sound much scarier because they use lung pressure more efficiently to produce sounds than humans do. Roar!

Mind map

 $\mathbf{I}^{ ext{f}}$ you've lost your way, it's all in your head. Really. According to a study published in a recent issue of Science, the cerebellum at the back of your brain is your personal navigator. Based on input from the outside world, like sights, smells and sounds, a brain region called the hippocampus creates a map of your surroundings. But to put the info to good use, it seems to need input from the cerebellum about where your body is in space. Scientists found that without external input, mice with a faulty chemical messaging system between the cerebellum and the hippocampus could not reach a specific destination successfully. This suggests that without guidance from the cerebellum, the body can't do much with the internal map of its surroundings. No more blaming the GPS lady.

Scare tactics

tress kills, at least when you're an Sinsect. Researchers wrote in a recent issue of the journal Ecology, that the mere sense of predators could lead to young dragonflies' death. In the study, dragonfly larvae were raised in tanks that also held insect-eating fish. But the tanks were divided into two compartments so that the fish could never actually get to the bugs. Yet, the possibility of becoming a fish meal caused enough stress among the larvae to significantly lower their survival rate: at least 2.5 times fewer larvae survived than those with a carefree upbringing. And even if stressed-out insects did make it safely through childhood, another 11% died while morphing into adults, compared to only 2% of insects that were raised in a fish-free environment. [LP] 🕹

New computer chip that mimics the brain's neurons. bit.ly/chipneuron

» More amazing science

Proof found for Unifying Quantum Principle: bit.ly/quantumproof

Future wars may be fought by synapses: bit.lv/svnapsewar

Eco News »





Toyota expands Prius hybrid family

oyota has announced a new addition to the eco-friendly Prius range, the Prius c, which will make its US debut in January at the 2012 North American International Auto Show in Detroit. The company stated that the Prius c is targeted at youthful car buyers who require fuel efficient vehicles. The Japanese car manufacturer expects classleading fuel economy of 50 mpg (miles per gallon, around 21 km/l) for inner-city driving, the highest city fuel range of any non-plug-in vehicle. Its green credentials will not, however, translate to limpwristed performance on the N1, since the c is powered by a 1.5-liter DOHC fourcylinder, 16-valve engine with VVT-i technology.

» Other interesting eco news

Australian government to tax the country's 500 biggest polluters: yhoo.it/Ozcarbontax

Advanced bio-fuel powered jet takes flight

ontinental Airlines undertook the first US commercial flight powered by advanced biofuels. Flight 1403, a Boeing 737-800, departed from the Bush Intercontinental Airport in Houston, Texas, last month to Chicago's O'Hare International Airport. A blend of sustainable biofuel and petroleum-derived jet fuel was used, with this algae-based biofuel blend developed by renewable oil and bioproducts company Solazyme. Solazyme produced the world's first 100% algaederived jet fuel for both commercial and military applications, with United signing a letter of intent with the company to purchase 20 million gallons of jet fuel per year for delivery as soon as 2014.

LED light system becomes smarter

Tntelligent LED lighting system maker ■ Digital Lumens has announced daylight harvesting capabilities will be employed within its newest LED lighting fixtures. Just like your smartphone's display boasts an ambient light sensor to determine the levels of available light and set the backlight accordingly, these new fixtures include integrated light sensors, which automatically adjust the light output to suitable levels. Managed by new LightRules software, the daylight harvesting system has the potential to deliver an additional 50% energy savings. LightRules software also reports on the amount of energy saved via the use of daylight harvesting, in order to provide useful feedback for facility management.

Siemens claims most efficient gas turbine in the world: bit.ly/siemensgas

Carbon-capture and storage (CCS) at UK plant: bbc.in/CCSPeterhead

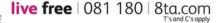
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TOP 5 TECHNEWS OF 2011

This year has been many things, but uneventful on the technology front was never one of them. IT companies were suing, merging, consolidating, re-inventing and, well, blacking-out. So what exactly was the big news? Well here are our Top 5 tech news stories of 2011.









No. 5 I now pronounce you merged: Google buys Motorola

 $I^{\text{n a highly unexpected}}$ move (not even Motorola's local country manager knew about it), Google stunned the industry when it announced that it will be acquiring Motorola Mobility for \$12.5 billion. This in order to "Supercharge Android, enhance competition, and offer wonderful user experiences".

The acquisition is believed by many to be Google's response to the ongoing patent wars (see see no.3), and a desire to strengthen its patent portfolio in order to shield it against patent lawsuits from the likes of Apple and Microsoft. Google CEO and co-founder Larry Page explained that Motorola will be run as a separate business and that Google would continue to work with other hardware partners, such as Samsung and Sony Ericsson, which have based their phones on the Android platform.

No. 4 Nokia's burning platform - the jump to Windows Mobile

he year began with a brutally honest admission by Nokia that it was in trouble, with no product close to offering an experience that rivalled Google's Android or Apple's iOS. By February the company was prompted to announce that they will abandon the "burning platform" that is the Symbian OS, and jump into bed with Microsoft and their Windows Mobile operating system.

Fast forward a few months to November, and the company had launched its Windows Phone-based Lumia 800 and Lumia 710 smartphones into a competitive market (see page 3), with another highend model and a Windows 8 tablet planned for the future. Time will tell if it was the right move, but we have a feeling that the release of Windows 8 next year will do Windows Mobile devices a lot of aood.

No. 3 Patent wars: the bullets of technology titans

 $I^{\text{n 2011}}$ the battle for market share was not fought in shop windows, but rather in courtrooms, as legal wrangling about illegal patent usage came to a head. At one stage it felt like everyone was suing everyone else, but one ongoing battle stood out: Apple vs. Samsung. It started back in April, with Apple suing Samsung for alleged patentand copyright violations in the Galaxy line-up of smartphones and tablet PCs. Samsung then counter-sued the Cupertino company in South Korea, Japan and Germany, alleging ten patent infringements. Skip eight months and Apple had managed to stop the sales of Samsung's Galaxy Tab 10.1 in Australia and Germany.

To give an idea of the power of patents, it is said that Microsoft is now earning more money out of Google's Android than their own Windows Phone, thanks to cross-licensing agreements with the likes of HTC (\$5 from every HTC device sold) and now also Samsung.

No. 2 BlackBerry Blackout: Service unavailable

Who will forget the few eventful days in October when darkness spread across the country. Meetings were cancelled, email went unopened, Facebook was not updated, and people had to resort to, shock-horror, texting instead of BBMing. Thanks to a core switch failure in some critical infrastructure, RIM's popular BlackBerry Internet Service went all belly up. The service outages, which lasted for three days from the 10th October, before being fully restored, affected Europe, Latin America, the Middle East and Africa, before spreading to Canada and North America. For many, it was RIM's lack of communication about the crisis that frustrated, with not a word forthcoming until the second day. But, life goes on, and many BlackBerry users who promised to switch brands are still lovingly doing the "BlackBerry Prayer".

No. 1 Death of an icon: Steve Jobs dies

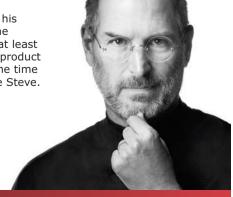
 ${f I}$ t was the singular news that shook the technology world, industry leaders, presidents and fans alike, as this year saw the world bidding farewell to Steve Jobs. Jobs passed away after a long battle with pancreatic cancer at the age of 56. Universally hailed as being a visionary, Jobs was responsible for revolutionising technology

with a number of innovations, including the Apple Mac, MacBook, iPod, iPhone and iPad. In a big way, he changed the way we relate to technology.

Many justifiably questioned Apple's future after the death of its leader. However, Jobs had taken this into account; after resigning as CEO prior to his death, he asked the Apple Board to

appoint Tim Cook in his place. Additionally, he apparently planned at least four years' worth of product ideas for Apple for the time ahead. Rest in peace Steve. [RN] &

Steve Jobs 1955-2011



ISSUE 99 | December 2011

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TOP 5 NOTE300KS OF 2011

Intel's second generation Core processors made their way into a number of new notebooks this year. Codenamed Sandy Bridge, it brought with it enhanced processor speed, while decreasing power usage and heat output. We loved it, and a number of machines loved the extra power too. Here are our Top 5 notebooks of 2011.



No.5 Asus N53SV

eaturing an Intel Core i7 2630QM CPU rated at 2.0 GHz, this 15" machine impressed from the start. It featured Asus' trademark good looks, a blazingly fast processor and also a keypad to keep number crunchers happy. Those weren't the only people left with a smile, since thanks to a Nvidia GT 540M GPU, it was also capable of doing a spot of gaming. The cherry on top? Sound courtesy of Bang &

We also enjoyed the N53SV's ice cool palm rests, which made typing a less heatintensive affair, but would have liked a more ergonomically designed keyboard.

We said:

"The N53SV's speedy i7 processor and excellent sound combines to make this stylish Asus as comfortable in the office as it is at home."

Full review:

bit.ly/n53asus



No. 4 Lenovo ThinkPad X1

 $I\!\!I^{ ext{f}}$ business is tough on the road, but you still need to make an impression in the boardroom, then the ThinkPad X1 is the machine for you. It might not be the lightest thinand-light out there, weighing in at 1.72 kg, but it is Chinese computer giant Lenovo's thinnest ThinkPad yet, measuring a mere 17 mm. Featuring a very capable Intel Core i5 2520M processor, the X1 further impressed with a superb keyboard. But it was its ability to take the knocks that sealed the deal, thanks to the ThinkPad's roll-cage protection and a 13.3" Corning Gorilla Glass protective screen.

We said:

"Lenovo has managed to trim enough of the excess fat that can turn a notebook bag on the shoulder into a medieval torture device."

Full review:

bit.ly/x1lenovo

No. 3 Toshiba

Satellite L755-17u

When we tested this Satellite L755, we had to do a double take on the price. For a recommended retail price of R7000, do you really get all this? Included was the very capable Core i5 2410M processor enhanced by the excellent Nyidia GeForce GT 525M GPU (with 2 GB of dedicated memory), the striking 15.6" LED backlit screen and a numberpad. Granted we weren't fans of the keyboard or trackpad, but the inclusion of a Blu-ray player on what is essentially a mid-range machine ensured that the Toshiba L755 makes an appearance on this list.

We said:

"Toshibas Satellite L755 could be the poster child for what affordable computing could look like."

Full review:

bit.ly/toshiba755

No. 2 HP Pavilion dv7

Pavilion dv7

As a desktop replacement machine, one can expect a powerful processor (Core i7 2670QM, running at 2.20 GHz) and a big screen (17.3" HD LED BrightView). The HP Pavilion dv7 delivered all this in a very stylish, brushed aluminium package which proved that big can indeed be beautiful. It will be as comfortable at home as it is in the office, since also onboard are 8 GB of RAM, an AMD Radeon HD 6770 GPU and Beats Audio speakers. Add to this an almost excessive 2 TB worth of storage space for music, pictures and movies, and you have yourself an extremely solid notebook.

We said:

"The HP Pavilion dv7 is a massive multimedia powerhouse wrapped up in a very stylish package."

Full review:

bit.ly/hpdv7review

Samsung Series 9 900X



When we first spotted the Series 9 at the Consumer **Electronics Show** earlier this year, we knew Samsung

had a winner. This thin-andlight notebook needs to be seen to be believed, since at 1.31 kg and 15.7 mm it was by far the sleekest unit that arrived at the TechSmart office this year. Featuring a

head-turning Duralumin design, the Series 9 has curves in all the right places, plus the specs to back it up.

Processing was provided by the solid Intel Core i5 2537M CPU, while the Series 9 also featured a 128 GB Solid State Drive that allowed it to boot up under 20 seconds from a cold start. Although the mousepad could have been better, and a dedicated graphics card would have

helped with gaming, the Samsung Series 9 still comes out on top. Expect a lot more notebooks looking like this next year, as the ultrabook craze heads to SA. [MJ] 🔓

We said:

"Samsung's 900X notebook is slim, sleek and as much a pleasure to hold and to use as it is to look at."



Full review:

bit.ly/series9samsung

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TOP 5 TABLETS OF 2011

Nevermind if you had any specific use for one, somewhere along 2011 you most probably wished you had a tablet. Most of the new entries were Android-based, some considerably better than others. The rise of tablets gave the TechSmart crew something to get excited about (at least initially), so here, for the very first time ever, we bring together our Top 5 tablets of the year.



No. 5 BlackBerry PlayBook

We know you have to use Bridge to connect to BlackBerry services, and of course there are not many apps available, and it's also true that email integration could have been better, but boy did we enjoy the PlayBook's interface. Based on RIM's QNX platform, the BlackBerry Tablet operating system showed the shortcomings of Android's clunky Honeycomb OS, making us wish for a quick sweep-up or sweep-down on other tablets. Unfortunately the amount of cons weighed too heavily to rank this tablet any higher.

We said:

"Despite all its shortcomings we really enjoyed our time with the PlayBook. Much more so than on a number of Android tablets."

Full review:

bit.ly/blackplaybook



No. 4 Toshiba AT100-100

It quickly became apparent that tablets will simply not provide a vast variety of ports (the iPad does not even include a microSD slot). The Toshiba AT100-100 proved otherwise, offering a full USB port, a full SD card reader and a full-sized HDMI port.

This allows one to add a lot of extra memory, or to quickly copy data off a flash-drive. It did come at a cost to size though, with the AT100 being one of "bigger boned" tablets out there. Of the five tablets featured here, it was also the least appealing on the design front.

We said:

"The Toshiba AT100 impressed with its ability to read directly from a flash disk, while it also has a full SD card slot and HDMI port."

Full review:

bit.ly/at100tos



No. 3 Asus Eee Pad Slider SL101

The general consensus is that tablets are good for content consumption, not content creation. The Asus Slider SL101 begs to differ, and tried to shake things up with a built-in slide-out QWERTY keyboard. And we liked it, a lot. Not only did it help with typing, but the keyboard also doubled as a convenient stand for when you're watching a movie or surfing the net.

The Slider isn't quite the one to get if you're looking for a lightweight tablet – it drew the scales at a hefty 960 g, the most of all the tablets we've tested.

We said:

"If you're going to be taking lots of notes, write emails or create the odd document, you should seriously consider the Asus Slider."

Full review:

bit.ly/asslider



No. 2 Samsung Galaxy Tab 10.1 P7500

Weighing a mere 595 g, the least of all the tablets we've tested, the Samsung Galaxy Tab 10.1's 8.6 mm thickness matches that of the iPad 2. Add to this a bright, scrumptious screen, plus Samsung's TouchWiz user-interface that livens up Honeycomb a bit, and you have yourself certainly the best Android tablets currently available. It could have done with more ports, and we weren't too pleased with the 'watermark' issue found on some of the first units, but for its slick look and weight-watching measurements, Android tablets did not get better than the Galaxy Tab 10.1 this year.

We said:

"The race for the definitive Android tablet is far from over, but with the Galaxy Tab 10.1, there is a clear contender of what an Android tablet can be."

Full review:

bit.ly/galtab10

No. 1 Apple iPad 2



As the year progressed and we started to get to know what to expect from the Android gang (10" screen,

Honeycomb, Tegra 2 SoC – see repetition above), it became glaringly obvious that nothing is going to come close to Apple's second incarnation of the iPad. Released in March, the

iPad 2 is the torch bearer to what tablets should be. Thin and light, fast and responsive, with loads of tablet-specific apps and an intuitive interface, plus the general feeling that everything just works, the iPad 2 is more than worthy of its number one spot. At this rate, it does not look like any other tablet manufacturer will surpass Apple soon. [MJ] .



"It will be

incredibly difficult to catch up to the headstart Apple has had with the iPad, and now of course the subsequent improvements on the iPad 2."

Full review: bit.ly/ipad2iwant

We saw an incredible rise in smartphones during 2011, with a number of entry-level offerings becoming more powerful, bringing faster processors and up-to-date operating systems to the mobile-loving masses. Google's Android OS dominated the scene, powering the majority (52.5%) of smartphones sold within the most recent quarter (Q3), not to mention all our top five budget smartphones.











No. 5 Huawei IDEOS X5

Huawei's IDEOS X5 smartphone isn't the most exciting Androidrunning mobile around, but you do get some very nice mid-range specs for its budget pricetag. This includes a large 3.8" (480 x 800) capacitive touch-screen, as well as a 5 MP camera that can record HD-ready videos (720p @ 30fps). It is powered by an 800 MHz Scorpion CPU, ensuring that things run smoothly with the Android 2.2.1 OS. With the X5 it's easy to see why Chinese manufacturer Huawei is fast becoming a smartphone powerhouse.

We said:

"It might not be the cheapest budget-conscious Androidpowered smartphone available, but its good spec level also reflects that."

Full review:

bit.ly/IdeosX5

No. 4 HTC Wildfire S

he sturdily constructed HTC Wildfire S impressed thanks to stylish looks. With an ivory coloured cover nicely contrasted by a silver softtouch plastic finish around the smartphone's edges and camera, it is reminiscent of HTC's Flyer tablet. It also boasts a 3.2" Gorilla Glass touchscreen for extra protection and durability - a really impressive feature on a budgetfriendly device. Unfortunately HTC's Sense interface requires some processing oomph, and the 600 MHz Snapdragon MSM7227 CPU were not always able to cut it, resulting in noticeable lag.

We said:

"A capable budget performer sporting a great looking design, an excellent interface and specs, but let down by the sluggish processor."

Full review:

bit.ly/WildfireS

No. 3 HTC ChaCha

nlike the Wildfire S, the ChaCha is powered by a 800 MHz processor, which manages to run Android 2.3 (Gingerbread) and HTC's updated Sense interface smoothly. Like the Nokia C6, this is a touch-and-type device that sports both a QWERTY keyboard and a 2.6" (480 x 320) touch-screen.

A more exclusive feature of this phone is its Facebook integration, boasting a dedicated Facebook button which, rather counterintuitively, doesn't take you to your news feed, but rather defaults to a status update field.

We said:

"Beyond its obvious Facebookcentric approach, the ChaCha stands alone as an exceptionally attractive, wellbuilt and feature rich device."

Full review:

bit.ly/HTCcha

No. 2 Samsung Galaxy Gio

ike its Springbok namesake. Samsung's Gio blast its way past the opposition straight to our number two spot. This little pocket-rocket measures 110.5 x 57.5 x 12.2 mm and weighs in at just 102 g, but it punches above its weight due to the presence of zippy 800 MHz Qualcomm processor. Count in an excellent 3.2" touchscreen with nicely saturated colours, plus the fact that out of all the models here it's also the cheapest (R1999), and the Gio becomes even more appealing. Its unassuming looks might not distinguish it from the budget crowd, but underneath it packed a real punch.

We said:

"A well rounded budget offering from Samsung, boasting some great budget features such as a comparatively quick 800 MHz processor and 3 MP snapper."

Full review:

bit.ly/SamGio

No. 1 Samsung Galaxy Ace



Besides the Gio, Samsung held another card up its budget smartphone sleeve - the excellent Galaxy Ace. Like

the Gio, it is powered by an 800 MHz processor, but features the ARM 11 as opposed to the Gio's Qualcomm processor. It also operates on a more up-to-date version of Android,

namely 2.3.3 (Gingerbread) and boasts a 5 MP auto-focus snapper with LED flash, as compared to the Gio's average 3.15 MP camera. What really sealed the deal was the Ace's slightly bigger frame (112.4 x 59.9 x 11.5 mm) and, more importantly, a larger 3.5" display made from Gorilla Glass. The Ace makes the entry-level smartphone experience a thoroughly enjoyable one. [HD].

We said:

"The R2999 pricetag of the Samsung Galaxy Ace comes in slightly higher than that of HTC's Wildfire S (R2888), but the Ace does offer more spec bang for your buck with its faster CPU and added screen real estate."

Full review:

bit.ly/samgalace



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This year a number of high-end smartphones moved to more powerful dual-core processors, at the same time stretching screen size to 4.2" and beyond. We loved every minute of this specs arms-race, and now we are happy to present our Top 5 high-end models.









No. 5 LG Optimus 3D

 ${f I}$ t's not often that 3D really does bowl us over, but the Optimus 3D did just that. Boasting a beautiful 4.3" screen with a resolution of 480 x 800, a sturdy build and a speedy dual-core 1 GHz ARM Cortex-A9 processor, and you already have the makings of a respectable Android 2.2 phone. Add in a 3D screen which doesn't require glasses, and two five megapixel cameras (with resolutions of 2560 x 1920 pixels) that are able to capture both 3D still images and 1080p video, and you have a winner.

We said:

"The Optimus 3D's most compelling distinction is the uniqueness of being able to produce and share one's own 3D images and video."

Full review:

bit.ly/lgop3d

No. 4 Nokia N9

With the N9, Nokia showed that they still knows how to produce phones that are both cool and exciting. Equipped with a 1 GHz processor and 1 GB of RAM, it provided a speedy and faultless performance, while the curved 3.9" AMOLED ClearBlack display is excellent. Even the MeeGo OS is exciting, and a lot better than the company's previous Symbian OS. The trouble is that it lacks apps, with Nokia already turning its attention to Windows Phone. Having said that, we are really looking forward to the new Lumia 800 that is very similar to the N9.

We said:

"Nokia's N9 is the most exciting and coolest smartphone that the company has produced for a while."

Full review:

bit.ly/reviewnokian9

No. 3 HTC Sensation

Not so much a sensation as a quiet statement, HTC's flagship won our hearts with its subdued style. Equipped with a dualcore processor and a very smart 4.3" screen, the Sensation's secret weapon resides in its software. Sense 3.0 is HTC's user interface skin and is certainly the best in the business, making an exciting addition to a sometimes boring Android OS. Add to this full HD video recording and the Sensation is exactly how a smartphone should look like in 2011. (See review on p19).

We said:

"It is a flagship phone that is not flashy, instead providing one of the best interfaces in the business."

Full review:

bit.ly/sensathtc

Sony Ericsson Xperia arc

e were very happy to see V Sony Ericsson getting back in the game with last year's exciting X10. It does seem like they are building a bit of a legacy, since this year's Xperia arc was a sight to behold. It's a minute 8.7 mm round its waist and barely pulls the scales at 117 g, all wrapped up in a beautiful black body, which in our humble opinion makes this 2011's sexiest smartphone. An excellent screen plus the inclusion of a mini HDMI port to connect the phone to an HDTV did a lot to impress, but unfortunately no dual-core processor and a lack of full HD video recording prevented us from ranking it any higher.

We said:

"Compared to other phones with similar specs we couldn't believe that Sony Ericsson crammed everything in such a thin body."

Full review:

bit.ly/sonyearc

Samsung Galaxy S II



amsung's Galaxy S II looks like the type of device someone in the 60s would predict we here in 2011

would be working with. It immediately catches the eye, in no small part due to the beautiful 4.3" screen placed on a body that is only 8.5 mm thick. But don't let that fool you into believing

the S II is all about style trouncing substance.

A dual-core 1.2 GHz processor with a full 1 GB of RAM helped the S II shoot to the top of our benchmarking scores, while it doesn't let up with 16 GB of storage, a sharp 8 MP camera, full HD video recording and a Gorilla Glass display. It's not difficult to see why the S II has sold more than 10 million units worldwide while

ranking as our top smartphone of 2011. [MJ +RN] &

We said:

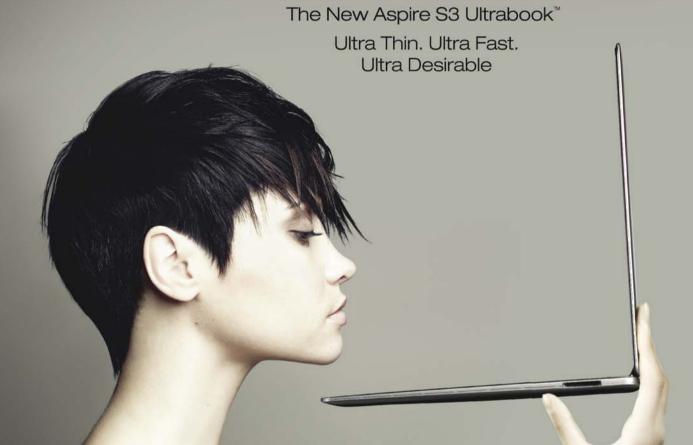
"This phone will be a topseller and already booked a place under 2011's top 10 smartphones."

Full review:

bit.ly/samgal







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Tel: (031) 582 0200 Fax: (031) 582 0280 Port Elizabeth: Tel: (041) 398 7082 Fax: (041) 398 7140 Bloemfontein: Tel: (051) 430 0000 Fax: (051) 430 1144 Aspire S3 Ultrabook R9999.00 incl VAT

HTC Sensation

Sense and sensibility

The Sensation is the current flagship of HTC's range here in SA. Does it have what it takes to take on the other big guns?

Unlike Samsung's Galaxy S II, which can be described as the boisterous Kanve West of smartphones, the Sensation is not a showboat. This despite the fact that, just like the S II, it also boasts a 4.3" screen and a dual-core processor. In our opinion the Sensation is a more stylish device, thanks to its toughened plastic and aluminium design, that features a grey, dark brown and black motif at the back. It does not appear as large as the S II (more like the original Galaxy S) while it's also very comfortable in hand, mainly due to a thickness of 11.3 mm that does not compete with other cardboard-thin smartphones. The screen's resolution of 540 x 960 pixels (still not close to that of the iPhone 4 though) went far to make the most of HTC's visually rich Sense 3.0 user interface.

A touch of (common) Sense

It is with Sense 3.0 that we feel HTC has a jump on the Android competition. It manages to enhance Android Gingerbread (2.3.4) to such an extent that it almost makes for a fresh Android experience (we honestly cannot wait for Android 4.0 Ice Cream Sandwich). The "Unlock Ring" for example allows for a quick-drag manoeuvre to swiftly go to your mail, phone, camera or messages, while the way Sense arranges your apps (All, Frequently used and Downloaded), is a big improvement on the regular long list of apps to scroll through. Add to this a number of visually appealing widgets (weather, photos, favourites) that can be loaded onto different screens, and you have yourself a best-in-business interface.

"It is with Sense 3.0 that we feel HTC has a jump on the Android competition."

The 3D and animated elements of Sense are helped along by a very capable dual-core 1.2 GHz chipset (featuring a Qualcomm MSM 8260 Snapdragon). The Sensation also carries a commendable 8 MP camera which includes some interesting effect filters, while it's also capable of 1080p movies. Interestingly, during benchmarking (Smartbench 2011), its Productivity Index score of 1905 could not match the dual-core performance of the Motorola Atrix (2792) and fell way behind the excellent 3990 of the Samsung S II.

Verdict

The HTC Sensation is an impressive phone on all accounts. It is a flagship device that is not flashy, instead providing one of the best interfaces in the business and solid performance. R5888. [MJ] &



Asus O!Play Mini Plus Smart TV set-up box

Streaming made simple

Want to watch digital movies on your TV? The O!Play Mini Plus makes it a breeze.

Media players, including the likes of the PlayStation 3 and Xbox 360 systems, are nothing new, nor is the ability to play one's music, movies, photos and internet files directly on TV. However, the biggest problem with transmitting content to one's HDTV is

had movies playing in full 1080p high definition.

Support

Equally as important as ease of use though, was the bevy of supported formats. For video, this included mpeg 1, 2 and 4, H264, .mp4, .mov, .avi, .asf, .wmv, .flv, .vob, .mts, .mkv, .ts, .dat and our personal backup format of choice, .iso. For music, .mp3, .wav, .aac, .ogg, .flac, .aiff were supported as was Dolby

"The O!Play delivers what it promises, and ended up being a gadget we could easily envision becoming an integral part of a home entertainment setup"

often the formats of files themselves, which can make playing content more difficult than it ought to be. This is where Asus's O!Play Mini Plus Smart TV set-up box comes in.

For starters, the neat and compact O!Play was a breeze to set up, and within five minutes of plugging in the device and attaching an HDMI cable, we Digital Plus and DTS surround sound. The video and the sound quality when we played back a compressed movie backup in .iso for the former, and .mp3 and .aac files for the latter, was exemplary. The sound and video quality were disarmingly good and played through our 5.1 sound system without a hitch.

Full stream ahead

The device further features built-in wireless and an Ethernet port, which can be used to stream content from the internet, such as YouTube videos, internet radio, movies from subscription services and podcasts. This can either be done by connecting an Ethernet cable to the device, or by using the built-in Wi-Fi to connect wirelessly to one's network. Content can then be sent from the network to the device. Another equally viable way to load content onto the device is by connecting an external hard drive or flashdrive via USB or plugging an SD card into the integrated 4-in-1 reader.



The O!Play delivers what it promises, and ended up being a gadget we could easily envision becoming an integral part of a home entertainment setup. For more information phone AsusTEK on 011-783-5450. [RN] &



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Just want to send emails and browse the web?





Want to back up and print files from anywhere











Want to download, game, and stream HD movies?



What you need to know: Wise Touch tablets

Affordable tablet catering specifically to South Africans' needs

South African tablet users will soon be able to take advantage of a new tablet entry geared particularly for the local market. the Wise Touch tablet range. These will be available with either a 7", 8", 9" or 10" capacitive multi-touch screen and will run on Android 2.3 Gingerbread.



While the Wise Touch tablets will offer Google's regular Android market, and all the functionality offered by the Android platform, the tablet's distinguishing feature is its preloaded South African applications.

Essential support

The company explained that the main problem with other tablets, including large brand name devices, was that people don't know where to take them for repairs, advice, training or education. To this end, the company is focusing 30% of its efforts on support, which includes more than thirty walk-in repairs centers countrywide, along with telephonic support for Android tablets. The company cautioned users against purchasing "just any tablet", rather to focus beforehand what functionality the tablet can deliver.

"We believe tablets should be a consumable type product and any family would end up with many tablets in the house. Especially with our focus on educational content, the parent and kids would possibly each have their own," commented Wise management.

Education too

Educational content will also be bundled with the Wise Touch tablet, which will

include the public school syllabus. Additionally, the company is currently working with universities, private schools and colleges to develop their own educational content and they will use the Wise Touch as the tablet of choice.

Touch shopping

Wise management explained that the majority of the content has been developed on behalf of South African brands and pre-loaded on the tablet. This localised content is presented in the form of a Wise Shopping Mall, Wise Business Park and a Wise Education Centre.

The Wise Shopping Mall & Business Park features a variety of local shops in more than 10+ departments with over 80+ applications through which the user may browse and purchase from. These include local retailers, travel shops, banking, ticket offices, toy stores and more. Also arriving soon is the ability to enjoy the morning's magazines or newspapers featured in the Mall's Newsstand as well as the ability to order takeaway from SA's favourite restaurants and franchises from the Food court. The 10" Wise Touch tablet will have a retail price below R3500, the 7" 3G tablet will cost less than R2500 and the entry level 7" Wi-Fi version will be available for R1700. All of these are expected to be available from the beginning of next year. Tablets will be available from mid-January, but purchase online now from www.wisetablets.co.za to receive a 5% early bird discount. Resellers welcome. &

Vodafone Webbook netbook

Computing for the masses

Vodacom has made the low-cost Vodafone Webbook available locally, bringing a simplified netbook to users that can be easily used to connect to the web.

his Ubuntu Linux 10.04-operating This Ubuntu Linux 10.0.1, netbook weighs less than 1 kg, boasting a 10" (1024 x 600 resolution) LCD display, which offered a better viewing experience than expected. Our unit had a sleek matt white cover, while the body is constructed out of hardened plastic, which did not look like it was particularly fond of taking a knock

Underneath the hood and performance

At a low-cost of R1499 (including VAT), you wouldn't expect the Webbook's specs to set the netbook world alight, and this is indeed the case. Powering the device is an 800 MHz Mx515 ARM Cortex A8 CPU, which for general performance was not always up to scratch. Whether you're starting the Firefox web browser or viewing your photo collection, there is a very noticeable lag. Storage capacity does

not fare much better than the processing performance (or lack thereof), since the Webbook only has 4 GB of internal flash-based space, most of which is taken up by the Ubuntu Linux operating system and pre-loaded apps. These include the excellent OpenOffice 3.2 for document viewing and creation, and Mozilla Thunderbird for email.

Pros and extras It's lack of

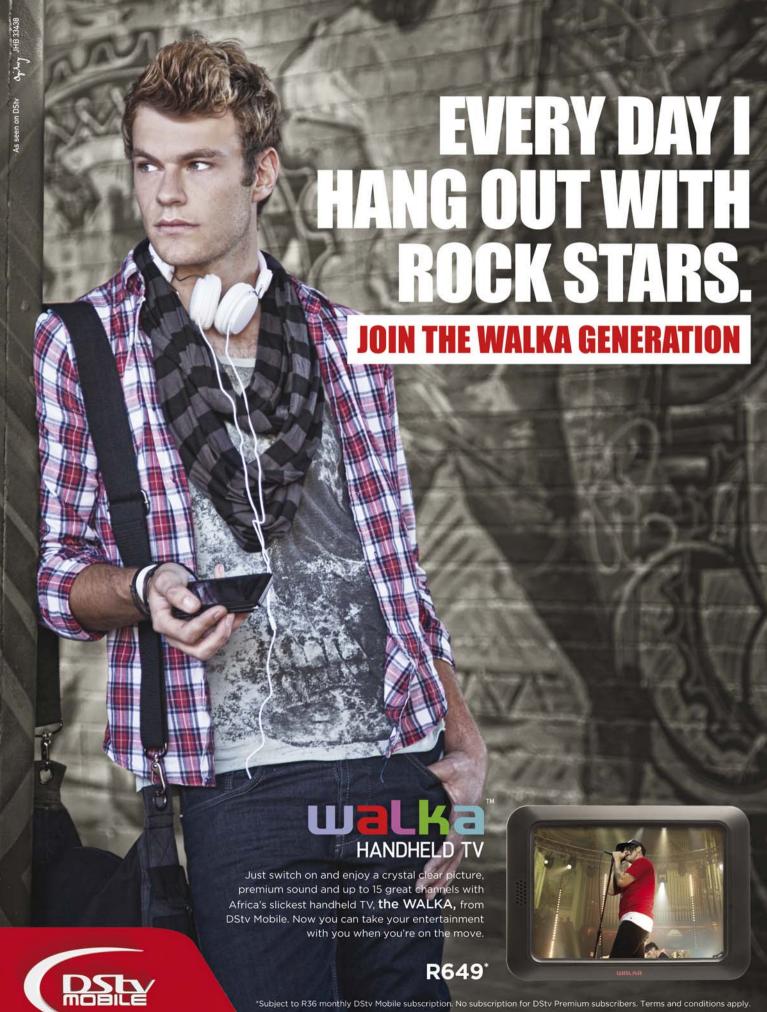
storage

space sees you relying on USB flash disk drives to access your multimedia, and there are two USB 2.0 ports (one on each side), as well as on cloud-based storage solutions, the likes of Microsoft's SkyDrive and Dropbox. To access these cloud-based storage services, the Webbook comes equipped with Wi-Fi connectivity to connect to a company or home network, while you can also purchase the device with a Starter Pack that includes a Vodacom USB modem for connectivity on the go.



The Vodafone Webbook can provide many local users with a cheap netbook, and a low-cost way to access the web. It may not provide mind-boggling netbook performance, but its R1499 asking price (or with a prepaid Starter Pack at R1899) should be enough to sus your complaints. Our advice would be to go to a Vodashop and actually play around with the Webbook to see how you feel about its performance. [HD] &





www.dstvmobile.com

DStv Mobile unveils Walka Handheld TV



After recently releasing the Drifta USB and making the Drifta DStv Mobile decoder compatible with certain Android devices, DStv Mobile has announced the Walka Handheld TV.

This portable television has a 3.5" viewing screen and does not need to pair with the Drifta or Drifta USB, seeing that it connects automatically to the DStv Mobile DVB-H broadcast signal. After activating the Walka through the MultiChoice call centre, users will be able to access up to 16 DStv Channels in the genres of sport, music, news, cartoons and general entertainment. The content line-up includes the two brand new channels that were recently added; M-Net Mobile and the Discovery channel. The same channels are available across all DStv Mobile capable devices for the same subscription of R36 per month. DStv Premium subscribers pay no subscription to access the DStv Mobile for Premium subscribers package which includes the M-Net Mobile channel.

"We are proud to introduce South Africans to the Walka device which is designed to further enrich the mobile TV viewing experience," explains Mark Rayner, general manager, DStv Mobile. "It's a must have, mobile TV viewing can begin the moment you switch it on. Our research has shown that there is interest in a dedicated mobile TV viewing device to ease accessibility and improve usability of the mobile TV service. We anticipate that the Walka will be well received by the market and hope our subscribers find it as another useful way to stay in touch with DStv channels," said Rayner.

The Walka is available at MultiChoice centres and selected retail outlets from 1 December 2011 at the recommended retail price of R649. Proof of a valid existing TV licence will be required when purchasing the Walka. DStv Mobile coverage is available in the nine major cities of South Africa, so make sure the DVB-H network covers your area by visiting www.dstvmobile.com. *



- Dimensions: 110 x 79 x 14 mm
- ARM 9 200 MHz processor
- 3.5" LCD screen (320 x 240 resolution)
- Mini USB port for charging and firmware upgrade
- 3.5 mm headphone jack
- Built in speaker 0.7 W
- · Battery life: 3.5 hours
- · Built-in extendible Rod antenna

What's in the box?

- Walka TV device
- USB Cable: Mini-A Male to standard type A Male
- USB power adapter
- Earphones
- Quick Guide/Manual
- Hand lanyard
- Sucker stand





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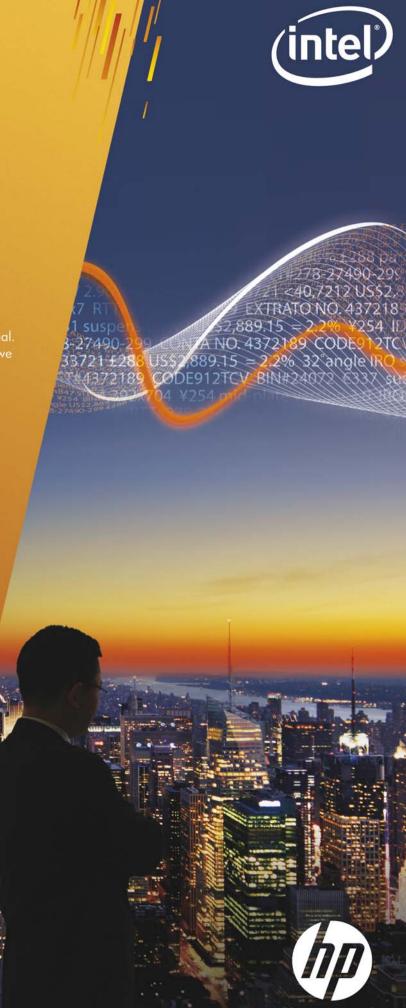
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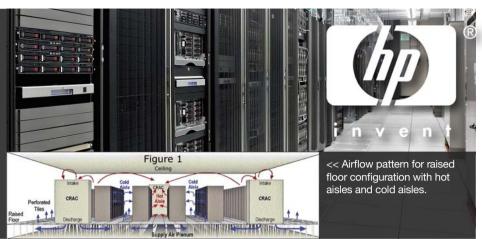
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HP: Data centre power and cooling

Efficient practices to reduce heat loads

Existing data centres have had three major operational and fiscal constraints – power, cooling and space. As existing data centres are required to support increasingly dense configurations, power and cooling requirements can outstrip the capabilities of the data centre infrastructures. In fact, the issue of space becomes moot because existing data centres are projected to run out of power before they run out of space.



P understands that individual data centre challenges, such as rack and processor-level power and cooling, cannot be viewed and managed as disconnected issues. To this end, HP has developed solutions to the fundamental issues of power and cooling at the processor, server, rack, and facility infrastructure level. The company has also created proven management tools to provide a unified approach to managing power and cooling in data centres.

Efficient practices for facility-level power and cooling

In the past when data centres mainly housed large mainframe computers, power and cooling design criteria were designated in average wattage per unit area (W/ft2 or W/m2) and British Thermal Units per hour (BTU/hr), respectively. These design criteria were based on the assumption that power and cooling requirements were uniform across the entire data centre. Today, IT managers are populating data centres with a heterogeneous mix of highdensity hardware as they try to extend the life of their existing space, making it important to understand power density distributions across the facility.

Airflow distribution for high-density data centres

The front-to-rear airflow through HP equipment allows racks to be arranged in rows front-to-front and back-to-back to form alternating hot and cold aisles. The equipment draws in cold supply air from the front and exhausts warm air out the rear of the rack into hot aisles (Figure 1). Most data centres use a downdraft airflow pattern in which air currents are cooled and heated in a continuous convection cycle. The downdraft airflow pattern requires a

raised floor configuration that forms an air supply plenum beneath the raised floor. The computer room air conditioning (CRAC) unit draws in warm air from the top, cools the air, and discharges it into the supply plenum beneath the floor. (Figure 1).

To achieve an optimum downdraft airflow pattern, warm exhaust air must be returned to the computer room air conditioning (CRAC) unit with minimal obstruction or redirection. Ideally, the warm exhaust air will rise to the ceiling and return to the CRAC unit intake. Mixing occurs if exhaust air goes into the cold aisles, if cold air goes into the hot aisles, or if there is insufficient ceiling height to allow for separation of the cold and warm air zones. When warm exhaust air mixes with supply air, two things can happen:

- The temperature of the exhaust air decreases, thereby lowering the useable capacity of the CRAC unit.
- The temperature of the supply increases, which causes warmer air to be re-circulated through computer equipment.

Raised floors

Raised floors typically measure 46 cm to 91 cm from the building floor to the top of the floor tiles, which are supported by a grounded grid structure. Ideally, the warm exhaust air rises to the ceiling and returns along the ceiling back to the top of the CRAC units to repeat the cycle.

Air supply plenum

The air supply plenum must be a totally enclosed space to achieve pressurisation for efficient air distribution. The integrity of the subfloor perimeter is critical to prevent moisture retention and to maintain supply plenum pressure. This means that openings in the plenum

perimeter and raised floor must be filled or sealed. The plenum is also used to route piping, conduit, and cables that bring power and network connections to the racks. In some data centres, cables are simply laid on the floor in the plenum where they can become badly tangled.

Summary

Data centres are approaching the point of outpacing conventional methods used to power and cool high density computing environments. Escalating energy costs and cooling requirements in existing data centre facilities call for better methodology in the areas of planning and configuration, and more capable analytical and management tools to handle power and cooling demands.

Data centre and facility managers can use best practices to greatly reduce the heat loads. These practices include:

- View data centre and data centre components as a completely integrated infrastructure.
- Assess existing facility power and cooling resources.
- Maximise power and cooling capabilities at the component level
- Optimise facility for efficient power distribution.
- Institute floor plans and standard practices that maximise rack and aisle cooling.
- Promote highly automated and virtualized data centre operation
- Manage power and cooling as variable resources that dynamically respond to processing.

21

- Employ continuous and comprehensive monitoring.
- Choose an integrated approach to data centre hardware, software, applications, network and facility.

For more information, please contact Gregory Deane at HP on 082-882-4444, or email gregory.deane@hp.com.

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Make a commitment to lifelong learning

Further training and education a necessity

By Terry Erdle, Executive Vice President, Skills Certification, CompTIA

In a recent column in The Wall Street Journal, Wharton School professor Dr. Peter Cappelli contended that reported shortages of skilled workers is a myth and an illusion. He believes one of the main reasons why jobs go unfilled is because employers are seeking perfect candidates ready to perform from day one without any training or ramp-up time. The better solution, Dr. Cappelli argues, is for employers to seek out workers who could fill open jobs with just a little more training.

he call for more training is spot-on, but The call for more uniting is specific, this isn't just a matter for employers to address. It's a three-way dance involving the employers who invest in ongoing training to keep their employees' skills up to date; the individuals who commit to a regimen of lifelong learning; and the education, training and credentialing communities that deliver content and programs that are current and relevant to continually build and enhance the skills of the global workforce. Technology permeates every facet of every organisation, accelerating the transition to a knowledge-based, information-intense economy. At the heart of transition is education and training, not just from grades 0 through 12, or for those who move on to colleges and universities, but for all workers (and their employers) who

seek careers that are personally, professionally and financially rewarding. On-going training and education is not a luxury, it's a necessity.

Technology is changing training options Advancements in technology have enabled a broader range of training offerings, such as online self-study and webinars, to keep workers' skills up to date. This allows companies greater efficiencies as they can better tailor and support training methods based on what works best for them.

The Social Web has rapidly become the primary venue for social interaction. It's where we go to communicate, interact and learn. Whether through blogs or tweets, RSS feed or e-communities, wikis or podcasts, individuals are using these tools to link to one another based on common interests. The use of these tools is becoming more prevalent in the learning realm, too.

A 2009 CompTIA survey of 1500+ IT professionals found that 36% utilised some type of internet-based study application, while one in five participated in an online training session led by an instructor. Looking ahead, all signs point to an even greater leveraging of technology as students and instructors seek more flexibility, collaboration and interaction.

Students more engaged

Students and instructors are more engaged when training and learning

The winners of the CompTIA, Incredible Connection, CRS and Kaspersky competition, as featured in the October 2011 issue of Techsmart, are:

Samsung notebook, sponsored by Incredible Connection: Stuart Reid.

CompTIA Security+ Certification course bundles, sponsored by CompTIA and CRS: Ockert Jacobus van Rensburg, Justin Archer, Robin Kearney, Elise Knight and Dawie du Preez.

Kaspersky Internet Security 2012 packages, sponsored by Kaspersky: Shari Fallet, Graham Cooper, Gail Luanda van der Merwe, Ontefetse and Retha Olivier.

One-hour on-site consultation services, sponsored by Incredibles OnSite: Jean-Marc de Robillard; Kate Olivier and Stuart Saggers.

incorporates Web 2.0 tools and social media. Web 2.0 tools allow content to be tailored and personalised, even down to the individual student level. Similarly, students can quickly and easily communicate with the instructor when course content is on the mark or not. That allows the instructor to assess and improve course material based on immediate feedback.

E-learning made possible by Web 2.0 tools goes beyond use in compliance testing or straightforward, onedimensional training scenarios. One solution is to use tests based on the model of confidence-based learning, which measures a learner's knowledge quality by determining both the correctness of the individual's knowledge and confidence in applying this knowledge. This combination yields a profile of the individual's knowledge base, and identifies the difference between what the individual thinks they know and actually know.

At the organisation level, early adopters have found that blogs, social networking and customer forums offer the biggest bang for the buck among Web 2.0 tools in terms of measurable benefits. And coming soon to a desktop or handheld near you is Web 3.0 and 4.0, featuring rich media with full high definition video, sound and even emotive and touch features.

Lifelong learning is no longer limited by calendars or schedules. With Web 2.0 tools and beyond, it can take place at virtually any time and at any place. It's up to all of us to use it. 🍾

About the Author



Terry Erdle is the executive vice president for skills certification, for CompTIA, the leading trade association for the world's information technology industry. He

is responsible for the association's global certifications programs, including product development and delivery, partnership relationships and cooperation with the education and training communities.

For more information on CompTIA or any of their certifications, visit their website on www.comptia.co.za or call 011-787-4841/3.

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Norton launches 2012 product, extends "Norton Everywhere" initiative

Consumer business extends security leadership and continues to expand to mobile devices

Norton by Symantec has recently released Norton Internet Security 2012. and announced a new product, which further its Norton Everywhere initiative to protect consumers everywhere they go - across locations, platforms, devices and digital experiences. The company is delivering on the initiative with mobile and cloud-based technology, including new features in Norton Internet Security 2012 and introducing Norton Online Family for Android and iOS users.

Internet Security 2012 3 PCs 1 Year Protection Your power against online threats

N orton Internet Security 2012 is designed to improve on the already industry-leading benchmarks for protection and performance, while enhancing the overall user experience. The other new Norton offering goes beyond traditional internet security to provide mobile device protection and family safety solutions.

"For the past few years we have witnessed an explosion of devices, platforms and applications for consumers to enjoy. However, with these exciting changes come new digital dangers and an even greater need for consumers to be protected from cybercrime," said Kara Rawden, senior marketing manager, Consumer - Middle East and Africa, Symantec Corporation. "As a world leader in security, Norton will continue striving to ensure that our customers are protected wherever they go, whatever digital experience they choose to have."

Norton 2012 security product

Norton 2012 brings key new features to address emerging threats and powerful protection against one of today's greatest consumer concerns: ensuring online personal information remains confidential. Additionally, Norton brings a powerful combination of reputation, file, behaviour and network based protection to provide their most comprehensive security to date. Key security technologies and usability improvements, include:

Norton Identity Safe in the Cloud -Protects personal and financial information from cybercriminals and keeps users protected from fraudulent websites. New streamlined interface, simplified login experience, and ability to store passwords in the cloud makes accessibility easy from

any computer with Norton Internet Security 2012 installed.

- Norton Management New web-based functionality lets users manage their Norton products from anywhere in the world. Users can remotely add Norton products, manage security settings and update subscriptions, making it simple to check on the health of their devices or fix issues without needing to be there in person.
- Norton Insight Norton's exclusive reputation-based security technology leverages the anonymous software adoption patterns of millions of contributing Symantec users to automatically identify and block never before seen malicious software.
- Download Insight Checks every downloaded file for safety before installation and now provides users with additional data about the predicted stability of the application in their environment based on the stability experiences of millions of other Symantec users.
- SONAR Improved SONAR technology monitors running applications for suspicious behaviour to quickly detect and disable previously unknown threats.
- Norton User Experience From the streamlined main user interface, Norton 2012 offers quick access to Norton Cybercrime Index, Norton Online Family and website ratings service Norton Safe Web.

Norton 2012 also continues to set the industry bar for protection and

performance. For the second year in a row, Norton placed first in overall protection according to testing from AV-Test Institute. In addition, Norton Internet Security 2012 ranked first in overall performance testing by both PassMark Software and AV-Comparatives. According to Symantec's internal testing, Norton 2012 even outperforms the award-winning 2011 version with 30% faster scans, 17% faster boot time and 24% faster file copying.

Pricing and availability

Norton Internet Security 2012 is now available for purchase through various retailers and the Norton online store at www.norton.co.za. The suggested retail price for Norton Internet Security 2012 is approximately R490, which provides one year of protection for up to three PCs. Norton Internet Security 2007 or later users with a valid product subscription are eligible to receive the latest product updates via the subscription service model. For more information, visit the Norton Update center at http://updatecenter.norton.com.

Protecting people and their information

Norton has also announced a new offering under its Norton Everywhere initiative that goes beyond internet security and gives consumers the power to protect themselves and their families across multiple devices and platforms. Norton Online Family for Android and iOS users is now out of beta, and this free mobile application allows parents using Norton Online Family to view their children's online activities and manage each child's "House Rules" from their iPhone, iPad and iPod touch or Android device. www.norton.co.za 🍾



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Samsung Galaxy tablet P7500

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General Enquiries: info@learnfast.co.za Training Enquiries: training@learnfast.co.za 78%. Percentage of children in SA who, according to Norton, reported having had a negative experience online such as being bullied or becoming the victim of cybercrime

Belkin covers and screen overlays

A case for every character

With the imminent arrival of the iPhone 4S here in SA, it's a good opportunity to enhance your phone with Belkin's range of covers and screen overlays. With a case for every character including the iPhone 4 (which is compatible with the iPhone 4S) and Samsung Galaxy SII the accessories offer a stylish way to keep your phone's surface protected while on the go.

Cases:

Belkin's cases not only complement today's mobile lifestyle, but also cater to the different ways a phone is carried. Whether you carry your phone in your pocket, in your hand, in a bag or while exercising, Belkin makes it easier to access your phone's features at any time.

If you keep your phone in your pocket, the range of slim cases is easy to grip. slide in and out of a pocket and provide impact protection from everyday drops. For those who keep their phone in hand, the cases are comfortable to hold, shockabsorbent and easy to grip. If you keep your phone in your bag, Belkin's cases make your phone easy to find in a travel bag while protecting it against constant contact with other items.

Belkin also offers a range of armband cases which gives you the freedom to access music and other features while exercising.

Screen overlays:

To keep your device looking as good as new,

Belkin's extensive range of screen overlays for the Samsung Galaxy SII, iPhone 4 and 4S, iPad 2, iPod touch and nano is designed to provide your screen with the best protection.

Strong yet thin, the Anti-Smudge overlays resist fingerprints, makeup transfer and dirt build-up. The Clear Screen overlay ensures optimal screen visibility without affecting the touch screen's functionality. Part of the new range is the Mirror overlay which gives your screen a high quality mirror effect that is perfectly reflective.

> and easy. The overlays can be purchased in packs of three for smartphones and in a single pack for tablets and iPads. All packs include a cleaning wipe and smoothing card to rub away creases

Tudortech supplies Belkin products in South Africa. For stock list details contact belkinsales@tudortech.co.za or for additional product information visit www.belkin.com. 4

Belkin also offers an Anti-Glare screen quard with a matte finish to reduce harsh reflection in bright light. Fitting the cases and screen overlays is fast

Norton Internet Security 2012

All but the kitchen sink

It's a sad fact that in our digital world, security is simply essential. To this end, we decided to put Norton Internet Security 2012 through its paces.

o start with, just like the previous version, Internet Security 2012 offered a quick, no fuss installation. Beyond entering our product code and after a quick five minute installation, we were presented with a screen that reassured that we were now ready to start configuring our security settings. To start with, Norton Internet Security 2012 offered up a clean, uncluttered interface divided into three sections: Computer Protection, Network Protection and Web Protection. Beneath this though, lay a well organised abundance of features.

Computer protection

Under the computer protection section, common tasks such as initiating a scan, seeing our history, and which items had been quarantined, were front and centre. Additionally, features such as Insight protection, antivirus, and antispyware were also available. SONAR protection, which provides proactive real-time protection from unknown threats depending on the behaviour of applications, was also an option.

Network Protection

Under Network Protection, we were offered vulnerability protection from a staggering number of programmes that were known to be susceptible to attack. While Internet Explorer showed a not surprising count of 92 vulnerabilities,

Windows XP topped the list with 140. A network security map is also found here, which showed at a glance where and why our network wasn't secured. Our wireless network was included in this and if you're one of those computer users who has not secured your wireless network with a security key, that would be revealed here, along with guidelines as to how to fix it.

Web Protection

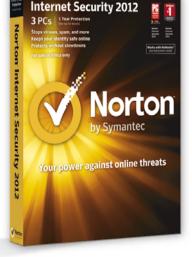
Under this section, we were first tasked with

setting up Identity Safe, a password protected feature which can store and protect sensitive information such as usernames, passwords, physical address and credit card numbers and then automatically fill these in as required. Once done, we could then enter our login for protected websites, create information cards (such as credit card details), and set parental controls.

To the point

Norton Internet Security 2012's features are logically accessible according to their functions, while there is enough depth to go beyond the surface and customise

one's security settings to one's own preferences and personal usage patterns. It neither hogged memory nor processing speed, with the exception of running full scans. Although there is some work involved in getting the most out of it, for peace of mind and the imperative cyber security that comes with living in a digital age, we believe it is time well worth investing. R490 for three users for one year. [RN] &



Full review:

bit.ly/nortonis2012



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LIGHTBULB SPEAKER SYSTEM

This ingenious invention screws into any recessed light socket. transforming it into a wireless speaker, and providing bright LED illumination. Set has 2 speakers and base station with iPod dock The light contains a 5W LED light bulb



Flashback to the glory days of gaming with iCade! iCade integrates your iPad into an

authentic, arcade-style cabinet complete with joystick and buttons! Impress your friends, family and co-workers with iCades greatlooking retro design, and then challenge them for high-scores on the most entertaining iPad accessory imaginable!

AR Drone

Control it with your iPad, . iPhone or iPod touch devices) using the built-in accelerometers which will sense which way you tip the phone and maneuver the AR.Drone accordingly

and 10W, 2.25 inch full range speaker.

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256 GB. Amount of data that can be stored on Kingston's Hyper 3.0. R6799. Its retail price

The

Jabra Active headset » Music and talking on the move

As many athletes and active users take their cellphones and MP3 players on the road or into the gym, there is a definite need for earphones that stay securely in one's ears while working out or doing strenuous exercise.

he Jabra Active headset fills this niche perfectly, fitting snugly into one's ears and staying there.

The Jabra Active further offers a discreet imbedded microphone for taking and making calls, along with wind noise reduction, as well as an on-cord volume control and a clip for attaching the headset to one's shirt. They are distinctively designed, which the company explained is intended to follow the contours of the ear. Appropriately, the buds, which offer three different size eargels, are sweat and water

The sound on offer is rather impressive, rendering both satisfying treble and deep bass, which should prove enough to blot out most ambient noise. A carrying case is included. The Jabra Active headset retails for R425, visit bit.ly/jabraactive for more info. &





Kingston Media Reader USB 3.0 flash memory reader » Fast flash memory transfer

With the amount of data stored on portable storage media, the likes of SDHC, microSD and Compact Flash cards, increasing thanks to HD video, having a quick and easy way to get data onto your PC is becoming more important.

he Kingston Media Reader USB 3.0 flash memory reader is The Kingston Media Reduction 55 3.0 mastructure, for those lucky enough to have a USB 3.0 port available on their PC. With the Kingston connected, your data transfer rate from your flash memory to your PC increases considerably. When connected with a Superspeed (USB 3.0) slot, it provides a transfer rate of up to 5 Gb/s - up to 10x more than USB 2.0. This resulted in significantly faster data transfers, for example copying 225 MB of music from a microSD card took us around 35.3 seconds on a USB 2.0 connection. When the Media Reader was plugged into a USB 3.0 slot, this same amount of data took just 11.9 seconds. A movie file (1.38 GB) from SDHC card took 64 seconds on USB 3.0, and over 90 seconds on USB 2.0.

It comes with a recommended retail price of R222, visit bit.ly/kingstonsa for retailers %

ISSUE 99 | December 2011



COMPUTERS

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Android Apps of the month

With over 100 000 apps available for Android smartphones at the Android Market, TechSmart would like to help you get to the good ones first. Here are our top Android Apps of the month.











StumbleUpon

With literally millions, if not billions of websites online, the chances of missing out on some gems are extremely high. StumbleUpon enables users to discover new sites by simply clicking a button. This free app, which requires Android 1.6 and up, does this by offering up interesting websites for the user's approval. Giving a site a thumbs up, enables the discovery engine to 'learn' what you like. Alternatively, users can also specify their interests or enter search terms and have only sites that match these shown.

Repligo Reader

pening, reading and especially editing PDFs is invariably a painful experience, particularly on small screens. Repligo Reader goes a long way to easing this annoyance by enabling one to view PDFs as well as annotate and fill out PDF forms, as well as adding sticky notes and highlighting text. The app also integrates with Gmail, Dropbox and Evernote, and functions very well as an ereader for ebooks. The fast and responsive productivity app works on Android 2.0 and up, and costs R39.

Perfect Viewer

 $\mathbf{I}^{ ext{f}}$ you want to turn your Android device into a comic book reader, or are just looking for a capable image viewer, then Perfect Viewer is ideal. The free app supports multiple file formats, including JPEG, PNG, GIF, BMP, as well as compressed formats such as CBZ, ZIP, CBR, RAR, 7Z and CB7.

A freely available plugin offers PDF support as well. The app, which runs on Android 1.6 and up, offers both left to right and right to left reading and five viewing modes.

Unicorn Dash

nicorn Dash is quite simple in concept, but in play, it is pretty addictive. You play as, you guessed it, a unicorn that has to run as far as possible across a series of disjointed cliffs. However, littering the hand-drawn ledges are obstacles you can either jump over or charge through. Additionally, green gems and blue shields litter this horizontal platformer's landscape, and timing your jumps appropriately enable you to gather both.

Enchanting backgrounds and music make this free 7.1 MB title a must play. &



Apple iOS Apps of the month

Apple's App Store houses the largest selection of applications (over 500 000) available in the world. TechSmart brings some of the best free apps that the App Store has to offer.















Instagram

Instagram is an iPhone classic and in a big part responsible for the rise of iPhonography. With this app you are able to choose from several filtered effects to liven-up boring pics. These include tilt-shift that enables you to focus on a particular section of the photo, inkwell which is a classic black and white filter, as well as sutro which lightens the centre of the image. You can share the photos over Twitter, Facebook, email or invite friends who also have this app installed to a private stream.

Helicopter Builder 3D

f you were a fan of the TV If you were a range series Airwolf or have dreamed of getting into the pilot seat of your very own helicopter, then Helicopter Builder 3D will enable you to give lift to those aviation aspirations. It allows you to create your own helicopter and then take to the skies for a test flight. If you want to add some firepower by way of rockets, or wish to alter the look of your creation, you can simply head back to the builder to customise body, rotors, or to add accessories.

Find my iPhone

his app is an essential security tool if you own an iPad and iPhone. It will enable you to employ another iOSoperating device to locate your missing iPhone and to protect the data stored on it. All you have to do is install this free app on another iOSpowered device, launch it and sign in with your Apple ID. You will then be able to locate your missing smartphone or tablet on a map and also be able to perform functions including displaying a pleasereturn-to-owner message or perform a remote wipe.

White Christmas

eeing that it's December Sand the holiday season is upon us, we thought it fitting to include and Xmas application. This app enables users to get into the Xmas spirit by incorporating falling snowflakes into photos and inserting props such as Santa and Rudolph the red-nosed reindeer. Both the front- and rear-facing cameras can be employed to snap the pics and once you are done capturing the moment, you are able to save it to your phone, email it or upload it to Facebook or Twitter. %

HOLIDAY BEST BUYS

Not sure what to buy that special someone? Here are some great gadget gift ideas.



Holiday Best Buys

Belkin Music Receiver R599

Belkin's Music Receiver enables music lovers to play music from their iPod touch or iPhone through their home stereo or stand-alone speakers, wirelessly. This nifty receiver delivers stereo sound and the ability to control one's playlist directly from one's device from the comfort of the couch. Belkin's Bluetooth Music Receiver is now available at the retail price of R599. Tudortech supplies Belkin products in South Africa. For stockists contact belkinsales@tudortech.co.za.



www.belkin.com

RapMan 3.1 3D printer



So what do you give the man that has everything this Xmas? How about the ability to print his own 3D objects? With four motors, a controller board and the print head, the amazing RapMan 3.1 3D prints whatever CAD drawing it's provided with via its SD card slot. For those looking to build the RapMan 3.1 3D printer from scratch, or for a pre-constructed unit, call CAD House on 087-944-2072/3.



www.3d-printer.co.za

iCade iPad arcade machine



Remember the days of playing Donkey Kong at the corner cafe? The retro iCade marries the hightech functionality of an iPad with the nostalgia of arcade style gaming, by offering seamless integration into an authentic, arcade-style cabinet complete with joystick and buttons. The iCade is compatible with 100 classic Atari games. Call The G.A.D.G.E.T. Shop on 012-346-2726.



www.thegadgetshop.co.za.

Interactive Whiteboard system



The Interactive Whiteboard system from Mimio converts your normal whiteboard into an interactive whiteboard in minutes. It's easy to use, portable and much more affordable than other interactive whiteboard solutions. As a special for schools only, buy two Mimio Teach units and one Mimio View for only R16 965 excluding VAT (save R4960 excluding VAT). Contact them at sales@businessdatacom.com



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Digitus Wireless 150N USB Adapter DN-7045

VKOM WNL108 firewall router



If your notebook or office PC does not include Wi-Fi, the Digitus Wireless 150N USB Adapter DN-7045 can fix this problem in no time. Offering Wireless-N speeds of up to 150 Mbps. Advanced Security with 128 bit WEP, WPA and WPA2 encryption to keep your wireless network safe and secure.

The VKOM WNL108 firewall router, aimed at the home user, featuring Wireless-N connectivity (Max 150 Mbps) and enables users to share ADSL access with a downstream rate of up to 24 Mbps, while the firewall feature protects one from intrusions and hackers. This plug and play router offers a web-based graphic user interface for quick and easy network management.

For more information contact Nology (www.nology.co.za) or 012-657-1317.

32 | techsmart.co.za Decen

R250

R68

Holiday Best Buys



Not sure what to buy that special someone? Here are some great gadget gift ideas.

Spirit M6500 7" tablet

Spirit M7500 7" tablet

Spirit Data Accessories



ooking to buy a tablet this Xmas? How about the Spirit M6500 that runs on a powerful 1.2 GHz dual-core processor? This 7" Android 2.2 tablet does not only connect via Wi-Fi, but is also capable of making calls or downloading data via 3G/ GSM connectivity. It has heaps of ports including a mini HDMI and a mini USB port. With 8 GB of onboard memory, and the ability to expand on this via microSD card, the M6500 is a must-have this Xmas. Available in red, black or white.

he Spirit M7500 tablet is another The Spirit Myour Lablet is unstalling good choice for your Xmas stocking, seeing that, unlike the M6500, it has both front (1.3 MP) and rear (5 MP) cameras. Running Android 2.2 with an 800 MHz processor, this 7" tablet further boasts Wi-Fi and 3G connection plus the ability to make cellular calls. It also has a mini USB port with a standard USB converter dongle included in the box, while its 8 GB worth of memory can be expanded to 32 GB via microSD card.

ne of the benefits of the Spirit tablets is the low cost of accessories. Take for example the leather look carry-case with embedded keyboard (R250), which not only protects the tablet but also makes typing a breeze. There is also a car mounting bracket (R68) which allows one to make use of the Spirit M7500 and M6500's GPS capabilities. A

car charger (R68) ensures that you never

run out of juice while on the road.

Both units include Bluetooth. For more info contact Spirit Data on 011-781-6992/7926 or email tablets@spiritdata.com.

beyerdynamic DTX 101 iE earphones



 $W^{e'\!\, ve}$ been using the DTX 101 iE earphones at the office, and we can only describe them as a treat for the ears. Featuring Neodymium acoustic drivers, these earphones from German company beyerdymanic, delivers excellent sound while doing a lot to cancel ambient noise. If you want to treat yourself to good sound this Xmas, this is it.

beyerdynamic T 50 P headphones



We know that headphones have become a bit of a fashion statement of late, but if you're looking for sound to match, then the Tesla T50P headphones are for you. Usually the domain of sound engineers, it includes Tesla transformers which provide extraordinarily precise and detailed sound. A must have for audiophiles.

For more info contact Technology Innovated Distribution on 010-5000-111.



his highly sensitive capacitive touchpen is unique in that it combines both stylus and phone functionality into one slim device. The stylus is ideal for tablets, such as the iPad and Galaxy Tab, as well as smartphones and the iPhone. The device's features include a built-in Super Quality ISSC chip and support for Skype calling, while sustaining a Bluetooth connection of up to 10 metres.



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Chaka's Rock Chalets

KwaZulu-Natal – Coastal

The fully self-contained chalets each have ceiling fans, M-Net, selected DStv, shower over the bath with toilet and basin. You can enjoy starry evenings around your own private braai facility and each unit has one under cover parking and one extra parking available. The kitchen is fully equipped with microwave, fridge, energy saving oven and hob as well as the full complement of cutlery and crockery.

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It is a getaway commanding an equally extraordinary location at the foothills of the Central Drakensberg. For visual impact, recreational variety and luxurious splendour, the hotel is pretty close to being an ultimate experience. Whether you walk or hike, go trout fishing or horse riding, play golf or tennis, swim or bowl - everything at Champagne Castle has been configured to embrace the magnificent amphitheatre of the Little Berg.

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112 km outside of Pretoria, with the Waterberg mountains forming a tranquil background, lies Mabalingwe Nature Reserve. Ideally situated for Gauteng travellers, the 12 500 ha reserve hosts the big five, 260 bird species, hippos and crocodiles. Mabalingwe has a range of accommodation including catered, self-catering and camping options with swimming pools and playgrounds. This nature reserve comes highly recommended. **DISCOUNTED RATE (10%)**

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URL: http://spe.bz?48b5f7

Web Time Wasters » Selected sites to spend the holidays with









www.picnik.com

Picnik

Picnik is an online photo editing site which enables you to choose photos from your PC, Picasa, Photobucket, Flickr or Facebook to edit them to your heart's content. Some functionality includes cropping, resizing, and adding special effects, shapes and frames without ever having to install a photo editing program on your PC. It does offer some additional premium functionality for those who subscribe (R200 a year) but the free version is a very handy way to edit photos online without shelling out for a dedicated program.

http://sourcemap.com

Sourcemap

Sourcemap is an unusual website for all the right reasons, namely that of promoting social and environmental awareness. It helps consumers track the impact of their choices by showing where and how products originate plus their carbon footprint (impact on the environment). The site explains that its goal is to enable people to make sustainable decisions. This is done through offering up 'sourcemaps' which tracks where things - most specifically food, beverages, clothing and electronics, amongst others - originate.

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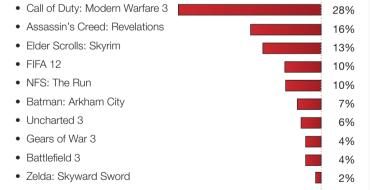
 $\mathbf{I}^{ ext{f}}$ you love to read, and are constantly searching for new, different ebooks, Smashwords is an excellent site to go spend some time on. Essentially a hub for independent authors and publishers, the site enables users to download free or moderately priced ebooks, or publish and sell their own to a global readership. Books are available in a range of categories, including adventure, sci-fi, fantasy, thrillers, biographies, cooking and poetry. Well worth bookmarking (pun fully intended).

www.springleap.com Springleap

't's not often that we Lcome across good customer service, but when we do it's worth talking about it. Springleap.com has some excellent t-shirts available and when one of our orders got bogged down, they went out of their way to sort us out. Their prints are out-of-theordinary, while you can also submit your own design in competitions that run once every two weeks. So if you don't mind a t-shirt that gets delivered directly to your doorstep, with Springleap you won't go wrong. &

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Ratchet and Clank: All 4 One » Co-operative Contender

While Insomniac Games' latest Ratchet and Clank: All 4 One (A4O) title is different to its predecessors, it's no less fun.



Full review: bit.ly/ratchet4

From the very start, the game begins with the series' trademark humour. Add to this a growing variety of deliciously oddball weapons and sumptuous environments, and A4O immediately made us want to play more. Most notable changes include the character models which reflect a slightly more cartoonish look, and the camera, which has been pulled back slightly to accommodate co-operative play.

Storytime

Through a bizarre twist of fate the buffoon Captain Qwark is made Galactic president, and goes to accept the 'Galactic Tool of Justice' award with Ratchet and Clank in tow. Unbeknown to them, it is a ruse by their nemesis, Dr Nefarious. His plans are interrupted by a new menace called the Creature Collector which deposits the foursome on another planet, which has become a home for some of the most dangerous creatures across the galaxy. This forces them to work together to survive and unravel the mystery behind their capture.

Once again you have a quickly expanding arsenal at your disposal. You start off with the combuster and plasmabomb launcher, which expands to include the doppelbanger (a deployable decoy), Mr Zurkon (the slightly psychopathic and

hilarious bodyguard) and the blitzer (melee gloves) to name but a few.

Co-operative Chaos

This sets the stage for the four player co-op, in which up to four players can assume Ratchet, Clank, Qwark and Nefarious to traverse this beautifully varied world. We found that two player offline co-operative player was ideal, and while four player co-op was a great deal

"All 4 One oozes charm, personality and quality out of every pore."

of fun, it does present some of the game's drawbacks. These include the frantic pace of the game, and less time to explore the rich and varied environments. However, the game can also be played completely on one's own with an AI buddy (namely Clank).

To the point

A4O oozes charm, personality and quality out of every pore, and is yet another distinctive entry into the Ratchet and Clank universe. The fact that we wanted more and more, is one of the reasons why Ratchet and Clank has remained amongst our favourite series for so long. Our advice: don't miss it. [RN] \(^{\cup}_{\cup}\)

Uncharted 3: Drake's Deception » Greatness, again

There are some games that we cannot wait to start playing, and those that we never want to stop.
Uncharted 3 is quite easily both.



Uncharted 3:Drake's Deception sucked us in from the beginning, with a clever twist that left us chuckling. While it is not essential to have played the previous two titles, doing so certainly aids in the feeling of returning to the lives and exploits of treasure hunter Nathan Drake (Nate), his mentor Victor Sullivan (Sully), as well as Elena and Chloe who make a welcome return.

Nate and Sully's friendship is more fully explored this time around, alongside an engaging flashback to how the two first met. This highlights the game's most notable strengths, namely superb characterisation and engrossing storytelling that continues throughout and that complements the title's superlative graphics and sound.

Where did he go?

This time round Nate and Sully are following the footsteps of the great Francis Drake, who spent some unaccounted time on a mission for the Queen. However, they are not the only ones following the famous explorer's trail, as they find themselves having to contend with a secret society led by the chillingly ruthless Katherine Marlowe, with sinister motives of its own, while searching for the fabled Atlantis of the Sands. This leads players from one city to the next, uncovering secret pathways

and hidden chambers, and into tantalisingly esoteric puzzles (there are more of them than in Uncharted 2). Additionally, jaw dropping action sequences are frequent, as one battles through Marlowe's formidable forces.

Gameplay

Combat is mostly familiar when it comes to wielding a variety of weapons, although you can still only carry one small firearm and one larger assault weapon, such as a shotgun, along with a few grenades. However, hand-to-hand combat has been greatly improved, made more engaging as well as offering more ways to defeat an opponent unarmed, while the trademark platforming and animations are as smooth as ever.

Joining a thrilling campaign is an equally superlative co-op and multiplayer modes, such as team deathmatch, plunder, team objective and free for all. Co-op arena and Co-op adventures are also included, and make for a no less thrilling and immersive experience.

To the point

Uncharted 3 offers a stellar action gaming experience and is quite simply a masterpiece in the current generation of console games. We cannot recommend it highly enough. [RN] *



As one of the big first person shooter franchises out there, Battlefield 3 (BF3) has a lot to prove. especially with a certain Modern Warfare 3 also

Full review: bit.ly/bf3online

aiming at the

market.

lucrative Xmas

Battlefield 3 ->> Winning the online battle



While previous incarnations have been well received, there has been some critique levelled against the single-player campaign, while multi-player also had a few niggles. Let's

get it out of the way then - if you are looking for a hang-on-tight rollercoaster of a single-player campaign, you can do better than BF3. But if your interest is in a most-excellent multiplayer experience that will suck away most of your freetime, well step right this way gentlemen (and ladies).

Multiplayer carnage

BF3 takes the best from Battlefield 2, including excellent maps accommodating different playing styles, a large array of vehicles including jets, and combines it with the limited player classes from Battlefield 2142. The result is certainly some of the best multiplayer action ever experienced online, with the PC version supporting up to 64 players simultaneously. Helping to keep things interesting in multiplayer, is BF3's excellent stats and progression system. As you gain more experience you rise in rank, while better weapons and upgrades in equipment are also provided. It can be a bit daunting for new players to start out

in multiplayer, since it might feel that emptying a cartridge into a more advanced player does next to nothing, but it forces you to invest the time and effort into gaining more experience.

Game play
One of the biggest changes in BF3 is the increased focus on strategic game play, with BF3 making large strides to focus more on team-play than ever before. It is quite possible to not take down a single target, but still rank as one of the best players in the game. This is because the game rewards players handsomely for team-based play, such as providing med and ammo packs, engineering repairs, spotting targets, flag capture assists, kill assists etc.

Conclusion

When you buy Battlefield 3, you're not buying it for its single-player campaign (told via flashbacks experienced by Staff Sergeant Henry Blackburn, currently under interrogation by the CIA), since its real fire-power lies in multiplayer. We're happy to report that DICE have learned from the previous Battlefields' mistakes to make BF3 certainly one of the best, if not the best, online multiplayer experience. R399 for the PC version. [MJ + JS] &

PES 2012



» Fanning the football fires



n the one side, you had Othe ultra-realistic PES range which could on many occasions run circles round FIFA in terms of gameplay and graphics. Unlike FIFA though, it would fall prey to

the red card known as the lack of licenced teams. For the most part PES 2012 ticks all the boxes you look for in a football game - excellent graphics, challenging and authentic gameplay, as well as impressive player and stadium models.

PES 2012 is lagging a few paces behind FIFA 12 when it comes to player animation, due to FIFA 12's new player impact engine that makes collisions and interactions between players, as well as players with the ball, and the referee, come off as a lot more genuine. As PES 2012 doesn't have these elements, its gameplay feels a lot more arcade-like when compared to the simulation gameplay within FIFA 12. This is especially evident when taking PES's fastpaced gameplay and fighting-game inspired button combos for special trick moves into consideration.

There's no I in team

The new Teammate Control system is one of our favourite new additions to PES

2012. This allows you to take control of one of your AI-controlled teammates within a given gameplay situation. For instance, whilst you are taking a free-kick or corner kick, you not only control the player making the kick, but by moving the right analogue stick on your joypad, you can also move a teammate into the space where you are kicking to. This also works great whilst you are trying to make your way through the opposition's defence.

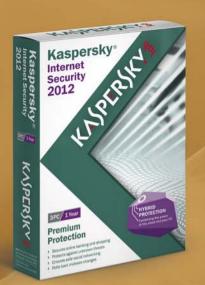
Fantasy football league - less authentic, but does it matter?

The biggest issue that most gamers will have with PES 2012, is one that the franchise has experienced from the very beginning and that is lack of licensing. For example, only Manchester United and Tottenham Hotspur are represented within the Barclay's Premier League, which is called the English League.

Final word

PES 2012 boasts excellent graphics and arcade gameplay, but it misses out on most of the licence fanfare and simulation style gameplay of FIFA. PES makes up for it with fast-paced arcade fun that will have you controlling the ball as skilfully as an overpaid Ronaldo. R269 for the PC version. [HD] &

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