

# tech smart™

getting smart with technology



ISSUE 76 January 2010

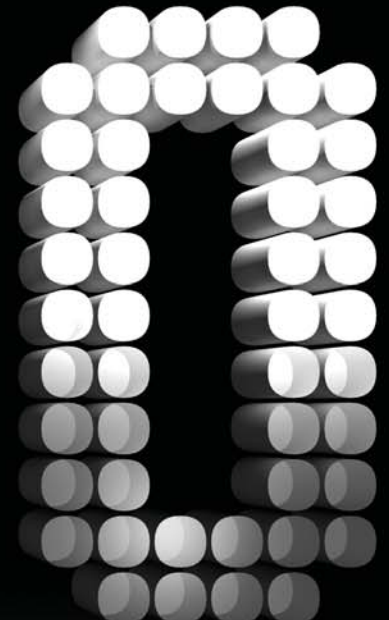
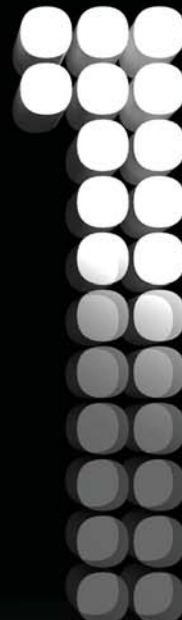
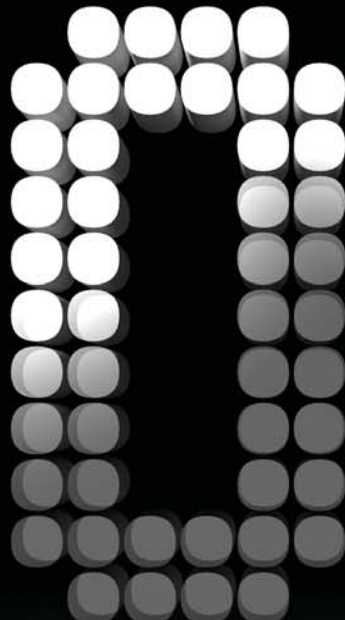
ISSN 1726-3358

**FREE!**

**TECH TRENDS**  
for 2010 (and beyond)

**CHINA RISING**  
The Legend of Lenovo

**WIN WIN WIN**  
R15 000 travel from Nokia



HTC Tattoo



Sony VAIO Z56GG



Canon PowerShot S90

# TECH TRENDS FOR 2010 ISSUE

SA's LARGEST TECH MAGAZINE

[www.techsmart.co.za](http://www.techsmart.co.za)



### One Big Idea

At the start of each year we stare into our crystal ball (or is that LCD screen?) trying to predict the big technology trends for the forthcoming 365 days. While the Google Chrome OS, commonplace 3D technology and Microsoft's Project Natal all seem very exciting, it's the unexpected that really interests me. It's that One Big Idea that finds fertile soil from which to sprout on the internet, and in a very short period of time explodes into a game-changing business. Take for example Facebook or

Twitter, did anyone foresee them taking off? I don't have a Big Idea of my own, but I do support this one: we as mankind must find a form of governance that doesn't involve politicians. Any takers?

Enjoy this issue.

Mike Joubert <michael@techsmart.co.za>  
I am holding the lovely Canon PowerShot G11.

Copyright © 2010. All rights reserved. No material, text or photographs may be reproduced, copied or in any other way transmitted without the written consent of the publisher. Opinions expressed are not necessarily those of the publisher or of the editor. We recognise all trademarks and logos as the sole property of their respective owners. TechSmart shall not be liable for any errors or for any actions in reliance thereon. All prices were correct at time of going to print.

Powered by

# HandyMAP

Still paying for GPS map updates?

## G10

**ATLAS GPS**  
- no HandyMAP user paid for map updates since 2003

**R 1199.00 incl. VAT**  
only at PDAShop 0861 627 911

**PDA SHOP.co.za**  
PDA.GPS.HTC Accessories.Repair

### Features

- 10 Trends for 2010, and beyond
- 11 Lenovo: Made in China, proudly

### Regulars

- 4 Feedback
- 6 Tech News: Titbits
- 7 Tech News: Hot New Tech
- 8 Sci News
- 9 Industry Expert: Liza van Wyk
- 24 The PC Medic
- 25 The Big Issue: Intel Brain Chip
- 26 Netsmart: The Internet Trends for 2010
- 27 Web Time Wasters

### PC Hardware

- 12 Samsung X460
- 13 Sony VAIO VGN-Z56GG
- 18 NComputing systems
- 19 Lexmark Prevail Pro705 All-in-One
- 19 HP Photosmart A646

### Mobiles

- 14 HTC Tattoo

### Audio Visual

- 15 Sony BDV-E300 Blu-ray HTS
- 15 Philips BDP3000 Blu-ray player

### Gadgets

- 20 Canon PowerShot S90 compact camera
- 21 LaCie Safe Biometric Hard Drive
- 21 Microsoft SideWinder X6 Keyboard

### Books

- 21 CompTIA A+ Complete Study Guide

### Office Solutions

- 22 Getting the office you need

### Software

- 23 Consilia Consult
- 23 Edutain Convertible Classmate

### Gaming

- 28 Left 4 Dead 2
- 29 Five furious games for 2010

### Competitions and Giveaways

- 4 Lexmark INTERACT 3-in-1 Printer
- 21 R15 000 travel and 3 Navigator handsets



**Editor**  
Mike Joubert > 083-290-2889  
michael@techsmart.co.za  
**Executive Editor**  
Suzanne Grobler > 083-742-6370  
suzanne@smartpublishing.co.za  
**Business Manager**  
George Grobler > 083-460-0402  
george@smartpublishing.co.za  
**Advertising**  
Suzanne Grobler > 083-742-6370  
suzanne@smartpublishing.co.za  
Anelda Strauss > 083-748-3413  
anelda@smartpublishing.co.za  
**Designer & Layout** Brett Wilson  
**Contributors** Mike Joubert [MJ], Thomas McKinnon [TM], Linda Pretorius [LP], Christina Rupp [CR], Hanleigh Daniels [HD]  
**Accounts & Subscriptions**  
Ronel Keet > 012-362-2732  
**Online Editor**  
Thomas McKinnon  
thomas@techsmart.co.za



98 772  
copies per month  
Consumer: SciTech  
[July - Sept 2009]

Published by



SMARTPUBLISHING  
MASS MEDIA SPECIALISTS

Distributed by



# COLLEGE CAMPUS

THE CAREER COLLEGE

Be the  
*genius*  
that lands the job

Whatever the DREAM, College Campus  
will make it happen!

## REGISTRATION IS OPEN FOR 2010

- ▶ College Campus is an educational brand of The Independent Institute of Education which is registered with the Department of Education
- ▶ We deliver quality Higher Education at an affordable price with attractive payment options
- ▶ Our accredited programmes are valued by those in the workplace
- ▶ Our focus is getting you ready for the working environment and significantly increasing your employability

**Pretoria Campus:**  
Cnr Jorissen & Johnston

**Randburg Campus:**  
Cnr Bram Fischer & Bond

**Parktown Campus:**  
6 Blackwood Ave

Call **0861 2LEARN** (0861 25 32 76) NOW.

- ▶ **Degree Programmes**  
Bachelor of commerce (UNISA)  
Bachelor of arts (UNISA)
- ▶ **Diploma Programmes**  
Business Management and Entrepreneurship  
Accounting and Financial Computing  
Marketing Management  
Advertising Management  
Public Relations  
International Travel  
Tourism and Tour Operations  
Graphic Design and Web Development  
IT Programming  
IT Management  
IT Networking
- ▶ **Higher Certificates**  
Business Principles and Practice  
Call Centre Operations  
Office Administration
- ▶ **Certificate Programmes**  
Business Computing  
Computer Engineering



College Campus is an educational brand of The Independent Institute of Education (Pty) Ltd which is registered with the Department of Education as a private further and higher education and training institution under the Further Education and Training Colleges Act, 2006 (reg. no. 2009/FE07/003, prov. to 31/12/2014) and the Higher Education Act, 1997 (reg. no. 2007/HE07/002).

**WE WANT YOUR FEEDBACK!!!** Comment on the news and reviews on [techsmart.co.za](http://techsmart.co.za) and you might win the incredible Lexmark INTERACT 3-in-1 printer, scanner and copier with touch-screen. It includes Eco Mode and a three-year guarantee with lifetime phone support.

## LETTERS / EMAIL

**Last month we asked you: What do you expect the biggest technological trend to be for 2010?**

Hi TechSmart,

The internet itself is likely to become "smarter" as more companies embrace Agile development models and Cloud Computing. These two approaches involve taking advantage of available resources in order to improve capability, performance, efficiency and fault tolerance etc.

Whilst most companies and individuals use less than 10% of the processing power of their computer equipment, wouldn't it make more sense to use Cloud computing, i.e. running applications as services off central servers and paying only the processing power they need to use? Much like using a metered taxi as opposed to owning a Rolls Royce you drive only twice a week.

Norman Pariza

Hi Norman,

Great letter, Enjoy your Lexmark printer! Mike

Write to us at [info@techsmart.co.za](mailto:info@techsmart.co.za)



## COMMENTS FROM TECHSMART.CO.ZA

This is a type of phone I want. Xcellent!!! – **ebenkoa19** on the Sony Ericsson Aino.

I'm impressed with this mean machine, although I'd like to dig in deep and see how to enable all them nifty features, anyone has a site I can check to tweak the device?? – **Doxin** on the HTC Touch Pro2.

[www.tp2forum.com](http://www.tp2forum.com) seems like a good place to start – Ed.

Got the E52 for 2 weeks now and must say that I am NOT impressed with battery life, only get 2 days of moderate use. – **Herbert** on the Nokia E52.

Here's a cool tip in Windows 7. You can pin programs to your taskbar, just right click an app and select pin to taskbar :) – **Jez**

## TechSmart.co.za online poll results

Top Tech 2009: What's your pick?

1. Windows 7	45%
2. iPhone 3GS	21%
3. Android	14%
4. Google Maps SA	12%
5. Nokia Comes with Music	6%

# LEXMARK

## GREEN Fast Fact

Lexmark's Life-Cycle Analysis found that most of a printer's carbon footprint actually comes from paper use (47%) – compared with around 10% from energy use and 11% from cartridge use.



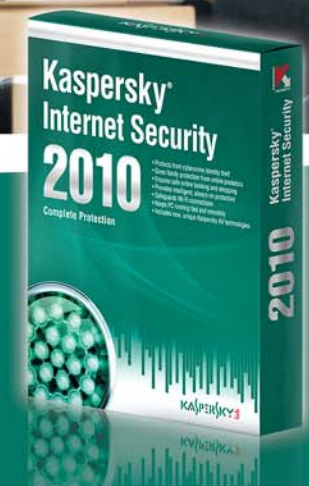
## Question:

Give us your feedback on any of the articles or leave comments on our website. Let us know by emailing us on [info@techsmart.co.za](mailto:info@techsmart.co.za).

The Feedback of the Month wins the incredible Lexmark INTERACT 3-in-1 printer, scanner and copier with touch-screen. It includes paper saving Eco Mode and a three-year guarantee with lifetime phone support.

Protecting you, wherever you may be

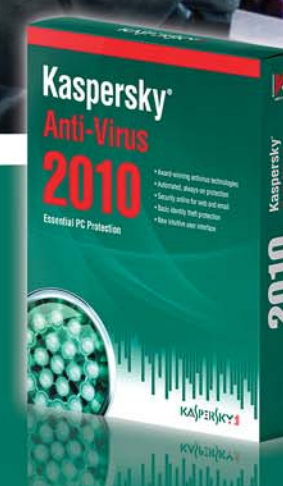
# KASPERSKY Lab



Kaspersky  
Internet Security  
2010

Kaspersky Internet Security 2010 automatically protects you and your family at all times – whether you work, bank, shop or play online.

- Scans files, web pages, emails and IM messages as you download, open, run or save them
- Prevents identity theft, keeping your logins and passwords Secure **Improved!**
- Safeguards wireless networks and warns you about unsecured Wi-Fi connections
- Prevents your PC from being hijacked by cybercriminals



Kaspersky  
Anti-Virus  
2010

Kaspersky Anti-Virus 2010 provides the basic tools needed to protect your PC.

- Scans files, web pages, emails and IM messages as you download, open, run or save them
- Monitors applications and blocks them if suspicious behaviour is detected **Improved!**
- Prevents your PC from being hijacked by cybercriminals
- Updates on schedule and as new threats appear



Kaspersky  
Mobile Security

World-class security for smartphones: at home, at work, at play, on the move.

- LOCATES lost or stolen phones
- SECURE contacts, photos and files, even on stolen phones
- PARENTAL CONTROL with SMS-Find
- PROTECTS against mobile cybercrime



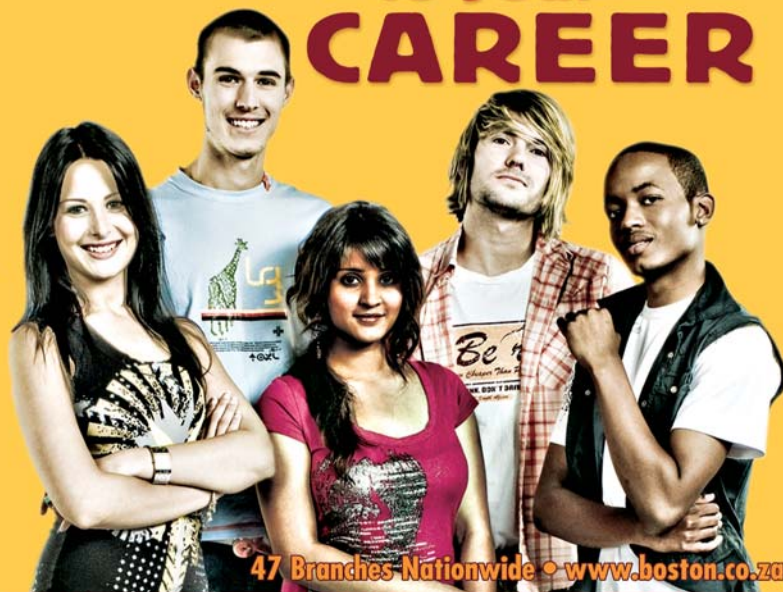
Kaspersky  
Open Space  
Security

World-class enterprise security solution for your business.

- Kaspersky Work Space Security – Protection for your workstations and smartphones
- Kaspersky Business Space Security – Protection for your workstations, smartphones and Servers
- Kaspersky Enterprise Space Security – Protection for your workstations, smartphones, servers and mailboxes
- Kaspersky Total Space Security – Protection for your workstations, smartphones, servers, mailboxes and gateways



## Get the right start to your CAREER



Like thousands of successful graduates, get the right start to your career at Boston. Studying at Boston ensures you graduate with an industry recognised qualification. Registrations now open!

## QUALIFICATIONS INCLUDE:

- IT & Computers
- Sports Administration
- Bookkeeping & Accounting
- Travel & Tourism
- Business Management & HR
- Marketing, PR & Media
- UNISA Degrees

47 Branches Nationwide • [www.boston.co.za](http://www.boston.co.za)

Alberton 011 869-4540	Germiston 011 872-0253	Pinetown 031 701-0645	Sandton 011 883-0933
Bedfordview 011 455-6992	Head Office 011 485-2838	Polokwane 015 291-2579	Somerset West 021 852-2893
Bellville 021 948 6761	Johannesburg 011 331-2455	Port Elizabeth 041 363-0778	Springs 011 815-6489
Benoni 011 421-3224	Kempton Park 011 970-2541	Port Shepstone 039 682-0164	Stanger 032 551-5566
Bloemfontein 051 447-5700	Kimberley 053 832-7273	Potchefstroom 018 297-6466	Swaziland Mbabane 09268 405-0719
Braamfontein 011 339-2153	Klerksdorp 018 464-4733	Pretoria Arcadia 012 343-1731	Swaziland Tshaneni 09268 323-2182
Cape Town 021 418-6265	Nelspruit 013 954-5232	Pretoria North 012 546-7798	Tzaneen 015 307-1717
Durban City 031 301-7469	Orange Grove 011 752-4560	Queenstown 045 839-7363	Umhlanga 031 561-5629
East London 043 743-7624	Newcastle 034 312-5206	Randburg 011 787-6945	Vereeniging 016 422-1725
Francistown 09267 241-8780	Paarl 011 640-4975	Richardsbay 035 789-8482	Welkom 057 357-4542
Gaborone 09267 319-0070	Pietermaritzburg 021 872-4387	Roodepoot 011 760-4455	Witbank 013 656-0876
George 044 873-3973		Rustenburg 014 594-0876	

[www.africasd.com](http://www.africasd.com)

**AfricoSD**  
Africa Solution Distributor

Tel: 012-665-2513 | Fax: 012-665-0509

E-mail: [info@africasd.com](mailto:info@africasd.com)

Website: [www.africasd.com](http://www.africasd.com)

## Aussie Government: Please use Facebook

In a draft report on new media issued by the Australian Government, state bureaucrats are encouraged to make active use of sites such as YouTube, Wikipedia, Facebook, and Twitter, in an effort to bring government closer to the public. A similar request has been made by local state officials, complaining that they are bored of playing Solitaire.

## 2011: A Space Odyssey

Sir Richard Branson is at it again, this time unveiling the first ever commercial space ship, the six passenger Virgin Galactic SpaceShipTwo craft. For about R1.5 million (\$200,000) rich people can enjoy a two-and-a-half-hour journey to just above the earth's atmosphere, with all politicians being left there in space. Flights start 2011, book now to avoid disappointment.



## Apple going upstream

Does the future of digital music lie in streaming content over the net rather than owning tracks outright? It just might be. Apple announced recently that they bought relatively unknown music streaming site LaLa. The buyout has fuelled speculation that Apple's iTunes store may offer a music streaming service in addition to selling tracks. Streaming is also believed to be a remedy to rampant piracy, as music streaming sites like Spotify.com and Pandora.com gain in popularity.



## Tweet in Klingon

The announcement that Twitter users are now able to tweet in Klingon (<http://tweetinklingon.com>) may just be the most significant development in its short history. Tweeting in Klingon: nuq DichDaq chaH Qub vo' SoQmoH?



## Google in the News

- Google chief executive Eric Schmidt, who once called Twitter a "poor man's email system", recently activated his own Twitter account. You can follow him @ericsschmidt.
- In an attempt to cosy up to the newspaper industry, Google has launched the Living Stories project. Basically it presents news headlines as topics (for example "The War in Afghanistan"), with relevant opinion pieces and news articles grouped below. It was created in collaboration with *The New York Times* and *The Washington Post*, and can be seen as a counter to the heavy criticism coming from Rupert Murdoch's News Corporation, which sees Google News as a threat. Visit it here: <http://livingstories.googlelabs.com/>
- In a bid to capture the real-time search market, Google will display recently submitted updates from social networking sites such as Facebook and Twitter. Real-time search has become important since people are turning to sites like Twitter for 'as-it-happens' updates to breaking stories and events.
- Google Goggles, a downloadable app for Google's Android cellphone operating system, enables you to search via pictures rather than words. Tourists for example can take a picture of the Eiffel Tower with their cellphone, submit it via Goggles and then receive search results back.
- 2009's most popular searches on Google for SA:
  1. facebook
  2. yahoo
  3. games
  4. lyrics
  5. jobs
  6. gumtree
  7. google
  8. gmail
  9. news
  10. absa



**FOLLOW US** Facebook: TechSmart Magazine  
Twitter: @TechSmartMag

Michael Jackson. Most searched term in 2009 on Google, Yahoo and Bing.

## The most drool-worthy tech from across the globe.

Following on the heels of the Amazon Kindle and the Foxit eSlick eReader, the Elonex eBook 511EB ebook reader is now available in SA. Compact, with a 5" display, the 511EB sports a full QWERTY keyboard for making notes as well as typing your comments on books. **R2499** from selected CNA stores.



Microsoft has announced that a free Beta version of its Office 2010 suite is now available to the public for download. Go to <http://tinyurl.com/moffic1> to try before you buy.

AMD released the ATI Radeon HD 5970, which according to them is the world's fastest standalone GPU with more than 5 Teraflops of computing power. The RRP is a bank-breaking **R7200**.



After many "no we will not" mutterings from Nokia SA, it has finally been announced that the N900 will be launched in SA. The N900 runs on the Linux-based Maemo operating system and sports a 3.5" touch-screen, 1 GB of RAM and the ARM Coretex-A8 processor running at 600 MHz. It will arrive in SA in the second quarter of this year. Airpunch.



Nokia is also set to release the 5330 Mobile TV Edition in SA in the first quarter of this year. The phone makes use of DVB-H technology, allowing for TV programs to be showcased via the sharp 2.4" screen.



Samsung has launched their open mobile Splatform, bada, and will stop making use of Symbian this year.



NAVIGON has introduced three new GPS units to the SA market. The devices include the entry-level 1400 with a 3.5" screen, the mid-range 3300 max with a 4.3" screen and the flagship 6300 also at 4.3". The 6300 includes City View 3D that indicates the shape and position of buildings in 3D, and Landmark View 3D that displays well known landmarks, like the Castle of Good Hope, in 3D. It retails at a recommended **R3299**.

**FOLLOW US** Facebook: TechSmart Magazine  
Twitter: @TechSmartMag

85 decibels. Maximum volume on MP3 players proposed by EU lawmakers.

1292 Heuwel Avenue | Centurion, 0157 | (Next to GWM) | Prices Quoted are CASH or EFT only!

LAPTOP City

FOR ALL YOUR NOTEBOOK NEEDS

012-663-1155 | [www.laptopcity.co.za](http://www.laptopcity.co.za) | [sales@laptopcity.co.za](mailto:sales@laptopcity.co.za)

### HP Elitebook 8530W

Core 2 Duo 2.8 GHz  
2048 MB RAM  
320 GB Hard Drive  
DVD-Writer  
Wireless LAN  
Bluetooth  
15.4" LCD Display  
NVIDIA FX770M 512 MB VGA  
Windows Vista Business

**R24 500**

### Acer Extensa 5635

Core 2 Duo 2.2 GHz  
3072 MB RAM  
320 GB Hard Drive  
DVD-Writer  
Wireless Lan  
Bluetooth  
15.6" LCD Display  
Windows 7 Professional

**R7890**

### HP 4310s

Core 2 Duo 2.2 GHz  
2048 MB RAM  
160 GB Hard Drive  
DVD-Writer  
Wireless LAN  
Bluetooth  
13.3" LCD Display  
Windows Vista Business

**R8390**

### Dell Vostro A860

Core 2 Duo 1.86 GHz  
2048 MB RAM  
250 GB Hard Drive  
DVD-Writer  
Wireless LAN  
Bluetooth  
15.6" LCD Display  
Windows 7 Professional

**R6900**

### Laptop Batteries

From **R980**

### HP Compaq 610

Celeron M 2.1 GHz  
1024 MB RAM  
160 GB Hard Drive  
DVD-Writer  
Wireless LAN  
15.6" LCD Display  
Built in Webcam  
Windows 7 Basic

**R4999**

### HP Compaq 610

Core 2 Duo 2 GHz  
2048 MB RAM  
320 GB Hard Drive  
DVD-Writer  
Wireless LAN  
Bluetooth  
15.6" LCD Display  
Windows 7 Professional

**R6900**

### Acer Aspire ONE

Intel ATOM 1.6 GHz  
1024 MB RAM  
160 GB Hard Drive  
Wireless LAN  
Built-in 3G  
8.9" LCD Display  
0.3 Mp built-in Webcam  
Windows 7 Home Premium  
With Free Bag

**R6450**

### 3 Fan Cooling Pad

**R120**

### Laptop Chargers

From **R330**



Terms and Conditions apply. Stocks are limited. E&OE. Product may vary from picture. Prices may change without notice due to Rand Dollar fluctuations. All prices quoted are cash or EFT only and Incl VAT.

## SPECIALISTS IN LAPTOP REPAIRS

Software | Hardware | Repairs | Upgrades | Projector Repairs | LCD Screen Repairs  
All repairs done in our workshop

HP, Acer, Compaq, IBM, Dell, Fujitsu Siemens, Mecer, Sony, Asus, Toshiba, Packard Bell, LG, Lenovo, Proline, Gigabyte, Apple Mac, BenQ, Sahara, and many more....



SA's best known independent  
**WIRELESS INTERNET**  
Service Provider



**A FIRST IN SOUTH AFRICA!**

Link Multiple SIM Cards to ONE Data Package and share your data usage!

**BUY WHOLESALE DATA**  
Netsurf Data Uncapped @  
**R 0.60 per MB**

(Conditions apply)

[www.goggaconnect.co.za](http://www.goggaconnect.co.za)

Call Centre No: 08600 GOGGA (46442)  
Email: [sales@goggaconnect.co.za](mailto:sales@goggaconnect.co.za)

Terms and Conditions apply

**WEBHOSTING ALSO AVAILABLE!**

**THE BEST DATA PRICING IN SA!**

January 2010 | [techsmart.co.za](http://techsmart.co.za)



### Feathered frequencies

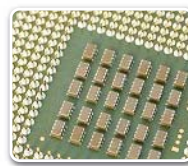
Male birds of a rare South American species seem to know just how to wing it to get a pretty girl's attention. According to a recent report in the *Proceedings of the Royal Society*, male club-winged manakins attract females by rubbing specialised wing feathers to produce a high-pitched, violin-like sound. These birds have nine neighbouring inner-wing feathers, with the sixth and seventh ones in the row having enlarged hollow shafts. When the feathers are rubbed at their natural vibrating frequency, all nine feathers join in. The feathers then resonate as a unit at about 1500 Hz, which is just what the females want to hear. A harmonic tone a bit louder than the fundamental tone is also produced. The researchers found that although all feathers naturally resonate at 1500 Hz, the vibration would not be audible without the amplification created by the two special feathers. Talk about dual functionality.



### Walky talky

People walking and talking are a common site in today's fast-paced world. But, researchers say talking while walking is perhaps not such a good idea. According to a study soon to be published in the journal *Accident Analysis and Prevention*, people who talk on cellphones while walking on busy streets are not as adept at navigating through obstacles as is widely believed. A group of college-age adults walked on a treadmill in a virtual environment that simulated a busy inner city street, complete with speeding cars and other pedestrians. Phone users took 25% longer to cross a street and were more likely to fail at the task in the allotted 30 seconds compared to a control group of iPod listening peers. The effect was even more

striking in a follow-up study with adults over 60: phone users got run over by virtual cars 15% more often than non-talkers. Walk the walk, but don't talk the talk.



### Switched on

Just over 50 years ago a tiny electronic switch called the transistor revolutionised the world of electronics. Now it seems a much smaller switch will help keep pushing PCs forward. Researchers recently wrote in the journal *Science*, that they successfully developed nanoscale transistors by alternately heating and cooling tiny particles of a gold-aluminium alloy in a vacuum chamber and then introducing silicon and germanium gases. Once the alloy was saturated with the gases, ultra-thin silicon wires and a sharply defined germanium layer precipitated on the alloy. With the precise configuration electron flow can be controlled so accurately that it can be switched on and off at will. For increased processing power more transistors need to be placed on a microchip, but because of their size, today's silicon transistors are expected to scale to their limit within the next decade. Nanoscale transistors may thus be just the breakthrough required to satisfy our need for ever smaller, yet more powerful electronic devices. [LP]

### Extra Extra Extra!

Reaching the stars via a black hole starship or a dark matter rocket: <http://tinyurl.com/gostar>  
The pick of last year's best science books: <http://tinyurl.com/scibooks>  
Explaining the hammerhead's wing-like head: <http://tinyurl.com/hammerh>  
A virtual journey through science thanks to the Royal Society: <http://trailblazing.royalsociety.org/>

50 million. Full touch-screen cellphones already sold by Samsung.

## New status update: Fired because of Facebook

Can a contentious Facebook status update cost you your job? TechSmart discuss some of Facebook's legal implications with Liza van Wyk, CEO of training, consulting and project management service provider AstroTech.



**ASTROTECH**  
KNOWLEDGE TODAY SKILLED TOMORROW

**"I hate my job". Can updating my Facebook status like this cost me my job?**

It depends on what your company policy and procedures say you can and cannot say on your Facebook profile. But it will probably more likely result in a disciplinary rather than dismissal.

**Why is there a problem with posting "My boss is a huge idiot" on Facebook, if I could just as well have said it round a braai to friends?**

The problem is that the comments are being broadcast more widely than if you simply said it at a braai. Also the comments are in a fixed medium on a website, which can be accessed subsequently to verify whether the comments are true or not. So this comment would definitely pose problems.

**We've heard stories of employers asking potential employees for permission to access their Facebook profiles during the interview stages. Is this legal?**

It is not a legal requirement that you do so but it may be part of character reference that the company may seek to obtain. But there is no legal obligation on you to open your Facebook profile to a potential employer. It is, however, not illegal for an employer to request this and perhaps even desirable if the position being sought is, for example, in National Security.

**Naturally, you shouldn't be stupid enough to post status updates of you having a good time, while supposedly being sick in bed off work. But, if you did, what type of action could an employer take against you?**

Absolutely, to claim that you are sick whilst actually just pulling a "quicky sicky" could be a dismissable offense.

**Is my boss allowed to track the sites that I visit while I'm at work? How about the mail I send out?**

Yes, Section 6 of the Regulation of Interception of Communications Act allows employers, under specific circumstances to intercept and monitor employee internet usage. One such requirement being that the employee must give either their express or implied consent. This consent is often obtained in the contract of employment.

> 350 000. Views of a YouTube video of a man updating his Facebook and Twitter pages during his wedding.

## THE COMPLETE AUDIO VISUAL SOLUTION

**IMPORTERS AND DISTRIBUTORS OF**

- SEAMLESS PLASMA VIDEO WALLS
- LARGE FORMAT PLASMA AND LCD SCREENS
- WIDE RANGE OF MOUNTING SOLUTIONS
- DATA VIDEO PROJECTORS
- WEATHER PROOF HIGH BRIGHTNESS LCD SCREENS

DAILY HIRE FOR PRESENTATIONS, LAUNCHES, EXHIBITIONS AND EVENTS

**SHARP**

CUTTING EDGE SOLUTIONS FOR OVER A DECADE  
TEL (011) 608-3410 SALES@SCREENCOM.CO.ZA  
[www.screencom.co.za](http://www.screencom.co.za)

**SCREENCOM**  
VISUAL COMMUNICATION SYSTEMS

**TOSHIBA**

What's MY Solution?



- ➔ DIGITAL COPIERS
- ➔ COLOUR COPIERS
- ➔ PRINTERS
- ➔ SCANNERS
- ➔ FAX MACHINES
- ➔ HIGH VOLUME DUPLICATORS
- ➔ COMPUTERS
- ➔ NOTEBOOKS
- ➔ PROJECTORS
- ➔ PLASMA SCREENS
- ➔ PABX SYSTEMS
- ➔ NETWORK SYSTEMS
- ➔ CCTV SYSTEMS

**A COMPLETE SOLUTION TO ALL YOUR OFFICE EQUIPMENT REQUIREMENTS**

**WE OFFER A COMPLETE SERVICE**

ASSESS ➔ SUPPLY ➔ FINANCE ➔ INSTALL  
➔ TRAIN ➔ MAINTAIN

TEL: 0861-462-782

0861-GNCPTA

Email: [info@gncholdings.co.za](mailto:info@gncholdings.co.za)

**TOSHIBA** brother. **SAMSUNG** **MECER**

**GNC** HOLDINGS

A content client is a GNC Holdings client.

# TRENDS FOR 2010, AND BEYOND

2010 looks to be stocked with some awesome new advances on the technological front. We say: "Bring it On!"

## Google Chrome OS



With Google officially releasing their open-source Google Chrome OS later this year, we could be in for one of the most interesting IT battles in recent history. Microsoft Windows vs Google Chrome OS – what a prospect. With a number of computer manufacturers including Acer, Lenovo and HP, planning to have machines running Chrome OS, Google has the support. But will Chrome turn out to be nothing more than a damp squid?

Last year November the Chrome OS was released to the open-source development community as Chromium OS. Its reception can best be described as muted, with Chromium said to be nothing more than the Chrome web browser supported by web-based applications. If Google's vice president of product management, Sundar Pichai, is to be believed, it won't even support hard disk drives, only SSD memory. Little wonder then that the Chrome OS is first to be released on netbooks. Whether Google is busy with major coding to get Chrome OS ready for mass release on regular PCs and notebooks is debatable, but for now the much anticipated Google operating system looks less like a bang, and more like a whimper.

## 3D technology



2010 will be the year 3D cracks the consumer electronics market. While the technology has been around in a number of forms for many years, consumers are likely to encounter a lot of 3D capable devices this year.

Sony, Philips, LG and Panasonic are all looking to launch 3D TVs in the consumer space.

We already looked at Acer's well priced 3D notebook last year, with a number of manufacturers hot on their heels with their own releases this year.

Watching movies and sports events in 3D from your own living room is literally just around the corner. Sony's announcement about 3D broadcasts and an 'official 3D film' for the 2010 FIFA World Cup, are examples of just how close we are. A draft standard for bringing hardware accelerated 3D graphics to the web has also been announced.

While not the same type of technology, 3D as a marketing trend is also extending to other devices, with compact cameras (Fujifilm's FinePix Real 3D W1) and GPS devices (using NAVTEQ maps) featuring 3D modes.

## Life Capturing

The extent to which we document our lives via capturing video, photos and recording audio is set to increase, again. If we're to believe Microsoft researcher Gordon Bell we'll be capturing our entire lives in digital memory by 2020.

Bell is a living experiment of so called "life capturing", having captured, catalogued and stored many years of his life in digital format. He also recently published *Total Recall*, a book that explores the idea of an e-memory revolution.

With inventions like Microsoft's passive, wearable SenseCam which automatically captures photos from around

## Gesture driven gaming

The Nintendo Wii was the first console with motion-sensing technology, with the Wiimote control emulating your movements on-screen. Now Microsoft is doing away with the need for a controller altogether, with their awesome looking "Project Natal" due for release in November. The Natal sensor device combines a depth sensor, an RGB camera, a voice sensor and its own processor to track movement in 3D, literally making your body the controller. It will work with any Xbox 360, and what's more, it can recognise voices and faces, respond to voice commands and scan in real life objects to use in-game.

The PS3 isn't standing idly by, although motion sensing on Sony's wand-shaped motion controller, rumoured to be called "Gem", follows Nintendo's path more than it does Microsoft's. Like Project Natal, it uses a camera to gauge your motion, but just as the Wiimote, the action in a game is still handled by a controller, rather than body movements. It's speculated that the Gem will see the light of day as soon as February, albeit for now in Japan only.



## Bluetooth 3.0 and USB 3.0

Higher data transfer speeds are on the agenda as both Bluetooth 3.0 and USB 3.0 are due for release to the consumer market in 2010.

Bluetooth 3.0 was formally adopted by the Bluetooth Special Interest Group (a not-for profit trade association) in April 2009. The new standard will benefit from the 802.11 radio protocol which translates to increased data throughput rates, from the current 3 Mbps to 24 Mbps. Basically, transferring large multimedia files like video, music and images wirelessly will no longer be an absolute pain in the backside, plus there's even talk of streaming video, say from your phone to your TV, wirelessly.

USB, the world's most popular peripheral interface is about to evolve into what is being called SuperSpeed bus. First demonstrated in late 2007, USB 3.0 includes four more channels, better power supply to devices and the ability to receive and transmit data. Wide scale consumer adoption is expected to occur in 2010, with the promise of 4 Gbps of raw throughput, 10x more than current 2.0 speeds.



your neck every few minutes, and the growth of free/cheap cloud storage his premise doesn't seem too far off. The important thing to remember is that life capturing is not about broadcasting interesting memories but about recording banal, everyday events and non-events that mean something to you. (See also the Big Issue article p25).



# lenovo

# MADE IN CHINA, PROUDLY

TechSmart was invited by computer manufacturer Lenovo to spend a few days in Beijing, capital of China and the heart of Lenovo operations. We came back with the impression that this Chinese dragon is not in dreamland anymore.

When a Chinese company took over IBM's strong ThinkPad laptop division in 1995, it left the industry stunned. How is it possible that a relatively unknown computer manufacturer from the East can take over arguably one of the most innovative and respected laptop brands? The question on everyone's lips was: "Who exactly is Lenovo?"

## Chinese innovation

As a brand Lenovo is relatively unknown in South Africa, but in China they are massive and the number one computer brand in the country. In fact one in every three computers sold is a Lenovo. Started as Legend in 1984 on a puny budget of only \$25 000, they soon started releasing a string of innovative products for the Chinese market, including the first PC to operate in Mandarin, and the extremely popular Wave PC in 1999. The Wave simplified a then difficult internet connection process (including signing-up for the net) by simply allowing users to press the single internet button mounted on the machine.

## Legend becomes Lenovo

Legend grew as the massive demand for PCs in China increased. Eventually hindered in their international ambitions by the name Legend, the company changed to Lenovo in 2003. From there it was a short jump to them buying over IBM's PC division in 1995 for \$1.75 billion. At first, both the name IBM ThinkPad and Lenovo appeared on all ThinkPad released, but IBM was completely dropped in 2008.

## Think and Idea

A key to understanding Lenovo's offering is in their segmentation of their business and consumer offerings, categorised under the Think- and Idea series respectively. While the ThinkPad notebook range still remains a mainstay under business users, provoking the same brand loyalty from ThinkPad users as most provincial rugby teams from their fans, it's the Idea series' consumer notebooks (IdeaPads) and all-in-



**Lenovo IdeaCentre B500, the ultimate all-in-one for gamers and multimedia users**

one PCs (falling under IdeaCentre) that grabbed our attention.

## Lenovo Design

It's the multi-national team behind the Innovation Design Centre that are responsible for Lenovo's range of interesting designs. These days the design of a laptop, and now also all-in-ones, plays an equally important role as the technology behind it. A simple aspect, such as a textured cover design that can be felt when touching the laptop (as featured on some of the latest IdeaPad range) helps for example for a more personalised product experience. Although Lenovo has been the recipient of major awards, including the prestigious Red Dot Best award, we noted that their design of the Beijing Olympic Torch is what they take the most pride in.

## Plans for Africa

The so called emerging markets, under which South Africa is categorised, is seen as a key area for growth by Lenovo. South Africa not just as a market, but also as a stepping stone into sub-saharan Africa is thus of major importance. While the Lenovo brand isn't yet as well known in SA as say Acer and HP, they have a lot to offer consumers. And from what we've learned from our trip to Beijing, Lenovo will soon be one of the key players here in the Southern tip of Africa. [MJ]

For more info contact Lenovo SA on 011-911-2000.


## LENOVO FAST FACTS

- Lenovo comes from the combinations of "Le" from Legend, and "novo" pseudo-Latin for new.
- Number one PC vendor in China since 1997, currently fourth largest in the world
- Lenovo was one of the main sponsors of the 2008 Beijing Olympics, and designed the Olympic Torch.
- There are 32 Lenovo ThinkPad T61p laptops onboard the International Space Station.



**LaCie SAFE Mobile Hard Drive**  
Hi-Speed USB 2.0 160GB

**Biometric fingerprint access**

  
UNLOCK

  
ACCESS

  
TRANSPORT

- Best value for carrying confidential files
- Biometric access
- Internal firmware drive lock
- Parental control

R999

(incl VAT, While stocks last)

compatible with

WINDOWS®

compatible with

MAC OS®

Available from

datashuttle

data storage specialists

JHB (011) 608-1965  
Jacques@datashuttle.co.za

CPT (021) 552-9439  
Mishrah@datashuttle.co.za

E&OE: All registered trademarks are the property of their respective owners.



SA's best known independent  
**WIRELESS INTERNET**  
Service Provider



**BEST DATA CONTRACT**  
PRICES IN SOUTH AFRICA!

**GOGGA LEADS THE**  
**WAY AGAIN**

PACKAGE	500MB	1GB	3GB
Our Price	R 194-00	R 344-00	R 644-00
Competitor 1	R 199-00	R 349-00	R 649-00
Competitor 2	R 249-00	R 349-00	R 649-00

**Netsurf Uncapped Bundles**  
**R 0.60 per MB** (Conditions apply)

[www.goggaconnect.co.za](http://www.goggaconnect.co.za)

Call Centre No: 08600 GOGGA (46442)

Email: [sales@goggaconnect.co.za](mailto:sales@goggaconnect.co.za)

Terms and Conditions apply

**PREPAID AVAILABLE SOON!**

**THE BEST DATA PRICING IN SA!**

Samsung X460  
**Thin, light and smart**



Thin-and-light notebooks are often referred to as the CEO notebook because of their mix of high-end features and mobility. Having looked at the entry level and high-end thin-and-light market we were excited to review Samsung's X460 with its mid-range price.

We've looked at a few thin-and-lights this year like Acer's well priced Timeline 8471 (R12 999) and Lenovo's pricey ThinkPad X301 (R24 999). [Visit [www.techsmart.co.za](http://www.techsmart.co.za) for these reviews.]

**Hardware**

As a mid-range thin-and-light the Samsung doesn't skimp on the components front, with a 2.4 GHz Intel Core 2 Duo P8600 CPU, 3 GB of RAM, a 250 GB hard drive and a Nvidia GeForce 9200M GS GPU. Running on a 32-bit Windows Vista Business OS we had few troubles. We ran multiple applications simultaneously, did a little work in Photoshop and even did some light gaming, all without hassle. It's not ideal for serious gaming however.

It also sports a very good 14.1" LED display that is bright and clear and is suitable for use indoors or out. All the connectivity features you would expect are present with three USB inputs, WLAN and a 7-in-1 card reader. Lastly the inclusion of an optical drive and an HDMI out was very thoughtful on Samsung's part, letting you explore the machine's full multi-media capabilities.

**Look and feel**

The X460 looks every bit the impressive business notebook. Its chassis is made of a hardened, matte black plastic that feels very sturdy. It features a two-textured lid, with two-thirds of the lid covered in a red brushed aluminium plate and the other third a glossy black plastic covering. Its keyboard is minimalist, but well spaced, lacking dedicated media keys. The trackpad is far too small for regular use, especially when enjoying the multi-gesture controls on offer. Where the X460 shines is its size, it weighs just 1.84 kg and has dimensions of 333 x 245.7 x 31.9 mm. This makes it one of the slightest 14.1" notebooks currently available.

**Conclusion**

Bang in the middle of the thin-and-light market the Samsung X460 looks good, performs well and offers all the extras you're looking for. While R14 799 is pricey it's well worth it. From Computer Corporation on 08616-08616. [TM]

Sony VAIO VGN-Z56GG  
**Moving on up**



Sony's VAIO notebook range has always had an air of sophistication about it. Ditto for the extra bucks on the price tag. One of their latest ultra-portable notebooks, the VAIO VGN-Z56GG, is no exception.

**Looks**

The VAIO comes with an Apple-like isolated keyboard, with the keys separated by brushed aluminium. It looks gorgeous and is a pleasure to type on. The trackpad was large enough, although it didn't include gesture controls as seen on some of the new Samsungs and Acers.

Although the 13.1" screen looks stunning and was marvelous for watching movies, with its 16:9 aspect ratio and LED backlight technology (plus really good onboard audio), it does seem very flimsy. The VAIO is not as thin-and-light as Lenovo's X301 but still a very decent 1.48 kg with a so-so thickness of 33 mm.

**What's inside**

As far as specs are concerned Sony really packed in some power. Onboard you'll find the powerful Intel Core 2 Duo P9700 running at 2.8 GHz, an almost overkill of 6 GB worth of DDR3 RAM and a very decent 320 GB of hard disk space. The Z56GG also carries two graphic processing units – the more powerful but battery intensive NVIDIA GeForce 9300M GS, and the less draining, less powerful Mobile Intel Graphics Media Accelerator 4500MHD. Using the dedicated Stamina/ Speed control you can choose between Stamina or Power, each utilising the appropriate GPU.

You'll also find two programmable buttons which can be used to launch applications or to change settings via VAIO onboard software. As with most laptops this onboard software is pretty much a hit and miss affair, with the distracting VAIO Gate application a good example of software we killed ASAP.

**Connectivity**

As far as connectivity is concerned Sony included a Wireless LAN up to the powerful 802.11 n standard, a FireWire (i.LINK) port, memory card readers, a VGA port and a HDMI port. We would have liked an extra USB port to add to the two Sony included, plus there's a PC card slot. We liked the little plastic covers on some of the slots, although the keyboard will get dusty since the lid (when shut) doesn't cover the keyboard sides. The machine runs on Windows 7 Professional.

As always Sony puts a premium on its VAIO range, so the R20 499 asked for the VGN-Z56GG isn't unexpected. Having said that, the Z56GG had very good performance and connectivity options and looks really smart, plus the ability to switch over to a less powerful GPU gave battery life a significant boost. From Laptop City on 012-663-1155. [MJ]

Facebook: Most searched term on Google in SA in 2009. Google. No 7 most searched term on Google in SA in 2009. 89.6%. Computers worldwide running a version of Windows OS. 8.9%. Running a version of Mac OS.

**THE COMPLETE**  
**SERVER ROOM**  
**MONITORING**  
**SOLUTION**  
**BOX**



**Contact Us Today!**



**EDP Communications**  
[www.avtech.co.za](http://www.avtech.co.za)

t +27(0)12 811 0931 e [info@avtech.co.za](mailto:info@avtech.co.za) W [www.avtech.co.za](http://www.avtech.co.za)

f +27 (0)86 688 3006

\*Terms and conditions apply

## HTC Tattoo Making its Mark

Trends often have a way of repeating themselves. As we move forward old ideas are habitually revived and updated. Samsung and HTC are bringing back interchangeable covers this year with the Corby and the Tattoo respectively. Not a bad idea, considering Nokia sold more than 126 million units of its cover-swappable 3310.

The HTC Tattoo is particularly interesting as it's the first Android device aimed at the trendy mid-range youth market. The fact that you can browse to [tattoomyhtc.com](http://tattoomyhtc.com) to buy and design your own covers (at €12 a pop) seems almost gimmicky in comparison to the value you get from a well priced Android device.

### A mid-range Android

For a recommended retail price of **R4599** you receive an Android device that features an uncompromised version of Android 1.6. It also includes the full implementation of HTC's Sense Experience, exactly as it appears on the HTC Hero,



which is incredibly user-friendly with seven customisable home-screens and excellent social networking integration.

### Hardware

Beyond running on a superb OS, the Tattoo offers all the latest connectivity options; Quad Band GSM, 3G HSDPA, Wi-Fi 802.11 b/g and Bluetooth 2.0. It's powered by the same 528 MHz Qualcomm processor as HTC's three other Androids. Also on offer is a 3.5 mm jack, an accelerometer, a 3.2 megapixel camera and GPS support with A-GPS.

### Touch experience

It's not without its faults though, especially using its touch-screen. The Tattoo is the first Android device to feature a resistive touch-screen, basically being activated via pressure rather than the electrical impulses in a human finger (like a capacitive touch-screen). The touch experience is consequently a little frustrating, especially when typing via the onscreen QWERTY in portrait mode. The device's smallish 2.8" screen and average native resolution of 240 x 320 don't help things either.

### Conclusion

The Tattoo highlights just how versatile and device agnostic the Android platform is becoming. While its display is a little too small for our liking, the device is fantastic value, offering the full Android experience on a mid-range budget. [TM]

300. People who've agreed to cough up R1.5 million for a Virgin Galactic trip to space.

## Sony BDV-E300 Blu-ray Home Theatre System Better Blu in a box



As Blu-ray players become more affordable manufacturers are producing a wider range of products. The Sony BDV-E300 for instance is a 5.1 channel home theatre system that comes with a Blu-ray player.

The BDV-E300 is incredibly easy to setup as everything you need comes in the box. Setting-up and calibrating the 1000 watt system takes just 20 minutes as the entire process is mapped out for you with colour coded wires and step-by-step instructions.

Sony's Xross Media Bar UI, which is very similar to the PlayStation 3's, is incredibly simple to navigate. Unfortunately the same can't be said of the BDV-E300's remote, which is cluttered and frustrating to use.

The quality of the sound output is decent, if not excellent. Sounds are crisp, clear and balanced, but the bass is a little underpowered.

The fact that its USB port is only useful for proprietary Sony products is frustrating, as you can't plug in a hard drive to playback other media like DivX videos.

The BDV-E300 retails for **R8499**, which is rather pricey, but well worth the quality.

## Philips BDP3000 Blu-ray player Blu-ray for a little less



The Philips BDP3000 Blu-ray player is one of the first to drop below the important R2000 barrier.

It sports a slick black look that fits in perfectly with the latest HDTV designs and we can definitely not fault Philips for their minimalist front panel design. Loading of Blu-ray disks is quick enough and operating through the easy to navigate menu structure is a breeze with the very likeable remote.

While the Philips has an Ethernet port to connect to the net to download extra content for BD Live enabled movies, the problem is that you don't have the memory on the Philips to host it. To navigate round this you need to stick in a 1GB or larger USB flash disk in the provided port at the back. You can of course view regular DVDs on your Blu-ray player, with the added benefit that the Philips upscales DVD content to give it a more HD gloss, although definitely not as good as a true Blu-ray disk.

At **R1999** the stylish and competent Philips BDP3000 makes Blu-ray video more accessible, it's just a shame about the cost of Blu-ray disks.

omnilog  
voice solutions (pty) ltd

# Omnilog Fly on the Wall

GSM

## Bug a room or office and listen in from your cellphone

The Omnilog Stealth Listener is a GSM device that works using a mobile network. All you need is the device and a SIM card.

### Easy Setup:

Just insert a SIM card into the Stealth Listener, send a text message containing the activation code from your mobile phone and it is ready to use.

### Two modes:

- It can call you when it detects sound in a room – acting as an alarm.
- You can call it to manually monitor a room or listen in on conversations.

For more information  
0861-66-66-66 • 011-954-5271 • [sales@omnilogsa.com](mailto:sales@omnilogsa.com)

[www.omnilogsa.com](http://www.omnilogsa.com)

49 000. Volunteer editors Wikipedia lost during the first three months of 2009.

## Use the power of Telephony

to empower your telesales team and debt collecting department

PowerCall *crm*

Know your customers and suppliers. Maximise Profits

**INCREASE SALES WITHOUT HURTING YOUR POCKET!!!**

PowerCall CRM includes the Powercall CTi phone & Powercall CRM software (headset optional)

MANAGE CUSTOMER/SUPPLIER CONTACT DETAILS, ONE-CLICK DIALLING, INCOMING POP-UP (FSK/DTMF CLI), VOICE RECORDING

Attention Software Developers:  
API for our CTi Phone is available so you can integrate your software with our phone

PowerCall CRM **R1800** (ex VAT)  
PowerCall for Outlook **R1250** (ex VAT)

[www.powercallcrm.com](http://www.powercallcrm.com)  
011-465-8579



## Looking for a cost effective way to communicate?

This Internet based SMS solution enables you to send and receive SMS messages from your computer.

Download the *BulkSMS Text Messenger* and start messaging today.

**BULKSMS**.COM

[www.bulksms.com](http://www.bulksms.com) | 0860 GET SMS | 0860 438 767



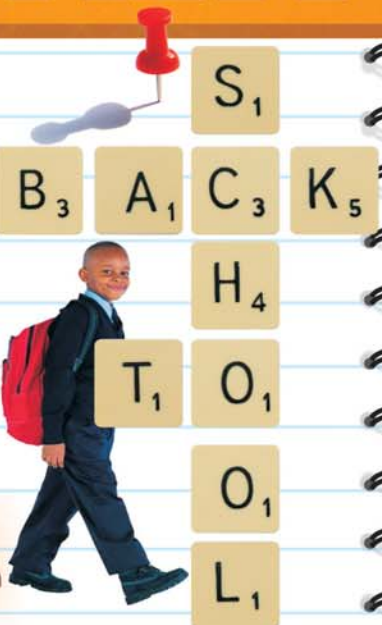


# COMPUTER CORPORATION

**INTEL ENTERTAINER**  
 •Intel® 1.80 GHz Processor 430 (512K Cache), 800 MHZ FSB  
 •1 Gb DDR 2 Memory •80GB Hard Drive •DVD Writer •32Mb Graphics •3D Sound Card  
 •Network Ready •PS 2 Mouse + Keyboard •No Operating System •1 year Warranty



**R1799.00**  
 Terms: R70pm x 36 MONTHS



**HARDDRIVE**  
 250GB R49  
 320GB R99  
 500GB R169

**MEMORY**  
 2GB R249  
**INTERNET**  
 56K MODEM R99  
 ADSL MODEM R199

**CPU**  
 INTEL E5300 R349  
 INTEL E7400 R949  
 INTEL Q8200 R1999

**SCREEN CARDS**  
 GEFORCE 7200GS R379  
 GEFORCE 8400GS R399  
 GEFORCE 9400GT R499



**DELL VOSTRO A860**  
 •Intel 560 (2.13GHz) •1GB Memory •120gb Harddrive •15.6" Widescreen WXGA •8x DVD Writer •802.11 •Intel GMA x3100 graphics  
 •Microsoft Windows Vista Home Basic •1 year warranty



Computer Corporation Recommends Genuine Microsoft Windows Vista Home Premium

No Contract Needed.

**R3999.00**  
 Terms: R155pm x 36 MONTHS



**22" LCD WIDESCREEN**  
 •Brightness 300cd/m2 •Contrast ratio -1000:1  
 •Resp time - 5ms  
 •3 Year Warranty

**R1699.00**  
 Terms: R66pm x 36 MONTHS



**Voted BEST COMPUTER STORE**



**HP COMPAQ NOTEBOOK 615 (VC402EA)**

•AMD® Athlon Dual Core 2.1GHz •1GB DDR2 Memory •160GB Hard Drive •DVD+RW Writer Optical drive •15.6" WXGA HD Brightview LCD Display •ATI Radeon HD3200 graphics  
 •802.11 b/g Wireless LAN •56k modem •10/100 Ethernet LAN •Web Camera •Bluetooth •Microsoft Windows Vista 7 Basic Edition •1 Year warranty

**4999**  
 From R192pm for 36 months



**VC398EA HP COMPAQ 610**

•Intel 570 2.2GHz •1GB DDR2 Memory •160gb Harddrive •15.6" HD BV Display •DVD Writer •Webcam •56K Modem •802.11 •Office Ready •Microsoft Windows 7 Basic •1 year warranty

**4999**  
 From R192pm for 36 months



**L500-1EL TOSHIBA**

•Intel 900 2.2GHz •2GB Memory •320GB SATA (5400rpm) •15.6" Wide SVGA LCD TruBrite •Intel GMA 950 •LAN 10/100 Mbit •VGA •Wireless LAN 802.11b/g •Integrated 0.3Mpix Camera •Microphone/ headphone jack, microphone jack •Windows 7® Home Basic

**5999**  
 From R230pm for 36 months



**1663 DESKJET PRINTER**  
 •4 ink •4800x1200dpi •mono: 20 ppm; colour:16ppm •80 sheet input tray •15sheets output •Duty: 750 pages per month •USB connectivity

**339**



**TX117**  
 •A4 •30ppm Black Printing •15ppm Colour Printing •USB 2.0 •100 sheets capability •Flatbed 600x1200 dpi •OCR

**599**



**3-in-1 Laser**  
**ML1915**  
 •18ppm mono print speed in A4  
 •Print Screen button  
 •1 touch printing  
 •250 Sheet Capacity  
 •Toner Save Mode to save up to extend your cartridge life up to 30% • Easy Setup

**895**



**BLUETOOTH DONGLE**  
 •Operation range: 100m  
 •Built-in antenna •Frequency band: 2.4GHz unlicensed ISM band

**59**



**NOTEBOOK COOLING PAD**  
 •Sleek design •Rubber grip prevents the notebook from sliding •Ergonomically designed •Optimized ventilation structure  
 •Reduces the notebook's temperature

**59**



**MP3 FM MODULATOR**  
 •Color LCD displays the name of song & frequency  
 •Supports SD/MMC Card, USB Flash Drive, MP3, etc  
 •Built-in FM Transmitter •5 EQ modes •Rotatable joint •Audio input/output function •Memorize the last frequency & track •Car cigarette lighter power supply (12-24V DC) •20 key infrared remote controller

**85**



**USB WEBCAM**  
 •High-quality VGA CMOS webcam •Video capture: true 640X480 Pixels  
 •Frame rate: UP to 30frames per second  
 •USB2.0 certified

**69**



**5.1 SOUND CARD**  
 •Dolby EX and DTS formats 5.1 channel DVD playback •48K/16 bit playback; 48K/16bit recording •5.1 virtual speaker shifter providing surround sound for CDs, and MP3s •EAX 2.0 and A3D sound support

**85**



**FULL GAMING KEYBOARD & MOUSE**  
 •Effective control for better gaming solutions  
 •Entire waterproof structure •Dual colour ingested WASD keys  
 •Game-grade mouse  
 •Ultra-high res 2000dpi •Suitable for either hands

**195**

COMPUTER CORPORATION PRODUCTS AVAILABLE IN THE FOLLOWING AREAS Phone 08616 08616 for details about your closest outlet

WARMBAD	BRITS	FAERIE GLEN	KLERKSDORP	MIDRAND	NORWOOD	PORT ELIZABETH	RICHARDS BAY	SECUNDA	WILLOWS	ZEERUST
BETHLEHEM	BROOKLYN	GEORGE	LENASIA	MOKOPANE	NYLSTROOM	POTCHEFSTROOM	ROOIHUISKRAAL	SILVERTON	WITBANK	SWAZILAND, Matsapha
BLOEMFONTEIN	CAPE TOWN	HILLCREST	MAFIKENG	MONTANA	PIETERMARITZBURG	PRETORIA CBD	RUSTENBURG	SOMERSET WEST	WONDERPARK	SWAZILAND
BRAKPAN	CENTURION	HARTIES	MAYVILLE	NELSPRUIT	POLOKWANE	PRETORIA SALU	SAN RIDGE	THOHYANDOU		www.computercorporation.co.za

Brits (012) 252 4212 • Brooklyn (012) 346 6720 • Centurion (012) 644 1674 • Mayville (012) 335 9097 • Montana (012) 548 0422 • Nelspruit (012) 745 7127  
 Polokwane (015) 295 4435 • Potchefstroom (018) 293 0999 • Pretoria cbd (012) 328 6798 • Rustenburg (014) 592 7407 • Secunda (017) 634 1210 Silverton (012) 803 6100  
 Sunnyside (012) 341 8939 • Thohoyandou (015) 962 3014 • Willows (012) 807 7235 • Witbank (013) 656 5363 • Wonderpark (012) 549 0210 • Zeerust (018) 642 1200



**Come and experience our legendary friendly personal service!**

ALL PRICES INCLUDE VAT - OFFERS VALID WHILE STOCK LASTS - E & OE - ACTUAL PRODUCT MAY VARY FROM ILLUSTRATION USED. \*TERMS & CONDITIONS APPLY

ALL PRICES INCLUDE VAT - OFFERS VALID WHILE STOCK LASTS - E & OE - ACTUAL PRODUCT MAY VARY FROM ILLUSTRATION USED.

Over 300,000 seats sold in South Africa

# EDUCATIONAL PROMOTION

The 1 watt PC

## NComputing™

Share the **POWER** of a single PC and **SAVE...**

Save 75% on computers

Save 75% on maintenance

Save 90% on electricity



**X350 Kit**  
(3 user kit)

**R1999** ea

**X550 Kit**  
(5 user kit)

**R3299** ea

**L230 Kit**  
(1 user kit)

**R1399** ea

We recommend LanSchool  
Simple, Reliable Classroom  
Management Software

**LanSchool**

Offer valid while stocks last  
"first come first serve"

Conditions apply • All prices exclude 14% VAT  
No further discounts apply • E & OE  
Prices are subject to the Rate of Exchange  
ruling at the time of invoice



Official importer and distributor of NComputing Products

To order call – (011) 465 7952 or email – info@ncs.co.za

Advertorial NComputing systems



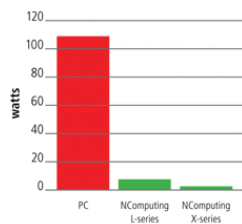
## The GREENEST computing on earth

### Eco-friendly computing

We can't live without PCs, but we need to learn how to live with them: they consume too much electricity and all too quickly become e-waste. A typical PC takes 110 watts to run, and there are almost a billion of them on the planet. And according to the Silicon Valley Toxics Commission, e-waste is the fastest growing part of the waste stream.

### The solution is simple

Today's PCs are so powerful that we no longer need one per person. We can tap into the excess power in a single PC and share it with many users. NComputing technology uses just 1 to 5 watts, lasts for a decade, and generates just a few ounces of e-waste.



### Global impact

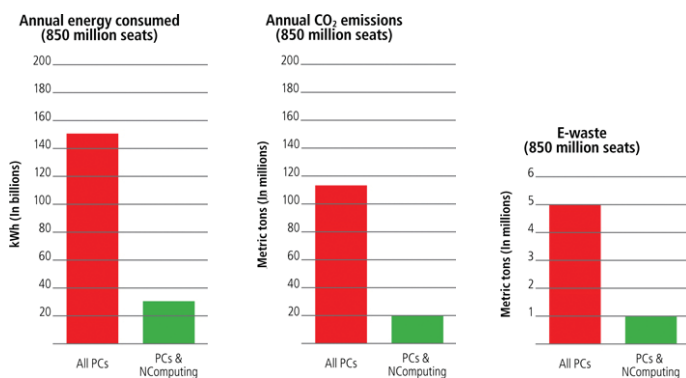
Over 850 million PCs are turned on every day. If NComputing systems were used at a ratio of 6 NComputing devices to one PC:

- Energy use would decline by over 120 billion kilowatt hours per year
- CO2 emissions would decrease by 96 million metric tons – it's like planting 460 million trees
- E-waste would be reduced by 6.7 million metric tons

### Save on computer costs & electricity

NComputing systems save you 75% on hardware, and since they draw less than 5 watts, you reduce your energy footprint by as much as 90% per user. And, because NComputing devices produce practically no heat, they reduce the need for energy-consuming air conditioning. Electricity savings alone can pay for the NComputing virtual desktops in as little as a year. It's little wonder NComputing has won so many green awards.

For a green multi-user solution, phone NC Solutions on 011-465-7962 or visit [www.ncs.co.za](http://www.ncs.co.za).



techsmart.co.za | January 2010

\$1 000 (about R7 500). The ridiculous price of a Platinum Starlight HDMI cable.

1.3 billion. Transistors that Intel's new Single-chip Cloud Computer contains.

## Lexmark Prevail Pro705 All-in-One Do we hear an Eco?



Apart from the wireless connectivity we've come to love from Lexmark, their Prevail Pro705 all-in-one also features an interesting Eco Mode button.

Press it once and it switches to double-sided printing to save paper, press it again and it introduces a lighter, ink-saving print mode. These are both excellent ways to cut office spend, and paper wastage.

Lexmark states maximum printing speed for black as 33 ppm and 30 ppm for colour. Although their quick print is very fast, we couldn't quite get the same amount of pages Lexmark claims. We did get very good quality of printing, even on the fastest printing speed. The flatbed scanner has a 4800 x 1200 ppi scanner head, which is above average and the Lexmark comes with the easy to use Printer Home software.

Onboard you'll find slots for memory cards, USB drives and PictBridge cameras, with printing being handled from the 2.4" LCD screen.

This business all-in-one is easy to use and performs well at scanning and printing, making it a good choice if you want fax, eco-mode and Wi-Fi support.

**R2499** from Computer Corporation on 08616-08616.

## HP Photosmart A646 A toast to printing

We've always enjoyed these little toaster size printers from HP.

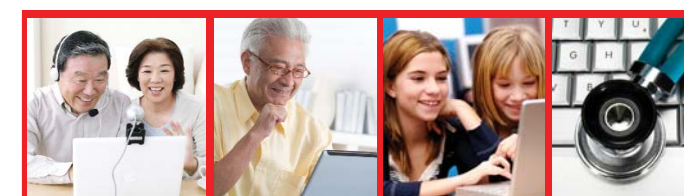
They're easy to operate, can print from a wide array of sources, and are small and compact enough to easily pack away when not in use. The new Bluetooth-enabled A646 is no exception.



HP is serious when it comes to PC free printing, slapping a massive 3.45" touch-screen on top of the A646 to make it easier to select images to print. Images can be sourced directly off the most popular memory cards, USB flash disks or from PictBridge enabled cameras. The A646 also includes Bluetooth, so all those pics residing on your phone are ready to be printed out. If you really want you can print off PC too.

We were surprised at the quality of prints coming out of these small printers. Unfortunately there isn't really a print-out tray to catch printed pics so they tend to spill around.

The convenience of the A646 doesn't come cheap though. It has a RRP of **R1980**, more than their recent Photosmart Plus 3-in-1. Visit [www.hpshop.co.za](http://www.hpshop.co.za) for more info.



## Computer problems? WE COME TO YOU!

We specialise in:

- MODEM/ROUTER SETUP & TESTING
- SOFTWARE INSTALLATIONS
- VIRUS REMOVAL
- SMALL NETWORKS
- HARDWARE TROUBLESHOOTING
- SOFTWARE
- SKYPE SETUP
- INTERNET PROBLEMS

**FREE** pick up and drop off for problems taking longer than 1 hour

**COMPUTER SHOP**  
012-368-1336 | 079-950-5196

SALES | UP-GRADES | REPAIRS | COMPONENTS

**CCTV SPECIALISTS**  
**CAMERATRON**  
Shop no 9A  
New Times Square  
Arena Close  
Bruma  
Tel: 011 622 0556  
Fax: 011 622 0557  
Email: sales@cameratron.co.za  
[WWW.CAMERATRON.CO.ZA](http://WWW.CAMERATRON.CO.ZA)

COME AND SEE OUR PC SHOP IN THE SAME COMPLEX!

Nature Observing Device  <b>R390!</b>	Wireless Inspection Camera With 3.5" Screen  <b>R2250!</b>	Sports Helmet Camera With SD Card Slot  <b>R999!</b>
Mini Dv Camera With Audio  <b>R290!</b> Each	500m Green Lazer Pointer, (Star Pointer)  <b>R590!</b>	Door Peephole Reverser  <b>R490!</b>
Motion Activated Gsm Listening Device  <b>R595!</b> Each	Spy Cap With 4 Gig Internal Memory  <b>R850!</b> Each	Clock Recorder 4 Gig Internal Memory  <b>R590!</b>

PRICES VALID WHILE STOCK LASTS  
PRICES ONLY VALID FOR THIS ISSUE OF TECHSMART

## Canon PowerShot S90 compact camera Now with Ring of Power



Canon's little black number, the S90, hides some powerful innovation in a very compact body, with the control ring situated round its lens being a game-changing feature.

### The control ring

This ring can be assigned to control certain functions, for example changing the exposure, selecting manual focus or auto-focus, selecting the white balance or changing the ISO. The most useful of the lot is what Canon calls Step Zoom, which lets you control the 3.8x zoom in fixed steps (28 mm, 35 mm, 50 mm, 85 mm, 105 mm). The ring helps by bypassing the tedious zooming-in motion, allowing you to quickly and easily frame your shot. We found it an absolute pleasure to use, although the 3.8x zoom doesn't really give you a lot to work with. The lens does come with an optical stabilizer though, a good wide-angle of 28 mm for nice landscape shots and a very impressive speed rating of f2.

### Low-light

The S90 also features a superb low-light mode. Initially we thought that using this setting might push up the graininess of captured images to such an extent that it would look unsightly. Not so, we were more than satisfied with the results, and it sure beat firing the life-dulling flash.

### The back

The 3" LCD display's quality was good and generally very bright,



and we didn't once miss the absent optical viewfinder. As much as we loved working with the front lens ring, the control dial present at the back was a pain, being so sensitive that we often changed settings by accident.

### No HD video

While the S90 has an HDMI port present to playback your photos on HD devices, the lack of

HD video shooting capabilities was a let down. The S90 seems like the perfect candidate for HD video, seeing that it carries the very speedy DIGIC 4 processor.

### RAW

Canon obviously thinks a lot of the shooting capabilities of the S90, so much so that they have included RAW capturing, usually found on their higher end models such as the G11 and dSLRs. It's testament to the excellent functionality that the focus ring brings to the table, making a lot of

features far more accessible than on regular compacts. We sure hope to see similar ring control functionality on the upcoming G12. The S90 is currently one of the best compact cameras available, and with an RRP of **R5499** you are paying a premium for it. [MJ]

10%. Increase expected from Nokia in mobile sales during 2010.

## Lacie Safe Biometric Hard Drive Your fingerprint for files

Biometric security has become an important method for keeping private and confidential files safe and sound.

With portable hard drives a popular way of transporting larger files, Lacie has come up with the Safe Biometric Hard Drive to keep larger files personal. This 160 GB hard disk only gives access if you swipe one of your registered fingers. **R999** from Datashuttle on 011-608-1965.



Microsoft SideWinder X6 Keyboard

## Game On

With your New Year's Resolution of playing as many games as humanly possible, you will need to source some serious gear to make your quest a practical one.



Microsoft's SideWinder X6 keyboard might not be the newest on the scene, but it does offer some good features. The keypad for example can be attached either left or right and is programmable as a macro gaming pad. Mode switching, automatic profile switching and adjustable backlight all form part of the X6 experience. **R799** from PC Pro Shop on 012-368-1336.

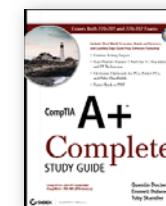
R111 billion. Estimated net worth of Microsoft CEO Steve Ballmer. R 25 billion. Net worth of Apple co-founder Steve Jobs.

## BOOKS

### CompTIA A+ Complete Study Guide For an A+ on A+

If you are preparing for your A+ certification then **CompTIA A+ Complete Study Guide** by Quentin Docter, Emmett Dulaney and Toby Skandier, makes for essential reading.

The book presents all the A+ exam objectives and makes use of easily understandable, short and snappy info on fundamental hardware and OS software maintenance and troubleshoot issues. It incorporates practical examples drawn from real-world experience, as well as exam tips and chapter reviews. The book covers all exam topics, including:



- PC Components
- Laptop and Portable Devices
- Operating Systems
- Printers and Scanners
- Networks
- Security
- Safety and Environmental Issues
- Communication and Professionalism

To prepare you for the A+ certification assessments the book contains exam preparation software comprising of a test engine as well as electronic flashcards and a PDF version of the book. There's also a lexicon of the most important terms used. **R690** from Intersoft (011-325-2643), or on [www.intersoft.co.za](http://www.intersoft.co.za).

techsmart.co.za | January 2010

# MISSING?

NO PROBLEM

*FIND IT FAST. YOUR KIDS  
WIFE - CAR - ANYTHING*

## Trackdown

CONSIDER IT FOUND

Once off payment,  
no monthly charges,  
rechargeable battery

GPS unit small enough  
to conceal in a bag or  
even on a dog collar



Visit: [www.trackdown.co.za](http://www.trackdown.co.za)  
or call Keith 082-344-3974

# LOST DATA

- PC & laptop disk recovery
- Server & raid recovery
- Tape recovery & conversion
- Data forensics services
- Flash media recovery
- Database recovery
- Mail recovery & conversion
- Data destruction
- CD/DVD recovery...

Tel : 0860 600 800

[www.datarecovery.co.za](http://www.datarecovery.co.za)

Helping you look after your data



**TECLEO**  
DATA RECOVERY LAB

## WIN WITH Ovi



Register on [Ovi.com](http://Ovi.com) and plan your dream South African holiday destination on Ovi Maps.

Simply send the route to [Lifetime.navigation@ovi.com](mailto:Lifetime.navigation@ovi.com) with a rationalisation explaining why this will be the holiday that will be remembered as the memories of a lifetime.

### Prizes

- 1st Prize: R15 000 towards your dream holiday + a Nokia 6710 Navigator handset
- 2nd Prize: R5 000 towards your dream holiday + a Nokia 6710 Navigator handset
- 3rd Prize: A Nokia 6710 Navigator handset

The competition closes on 30 January 2010.

**NOKIA**  
Connecting People

Imagine your employees working in their offices



... Instead of:

- Visiting Social networks
- Downloading Videos, Music & Viruses

Introducing BitDefender's Security Suite for Business.

It delivers next level automation and intelligence, vigilantly protecting your IT infrastructure and managing network security.

Proactive Management automatically takes action based on threat scenarios customized for your company's needs.

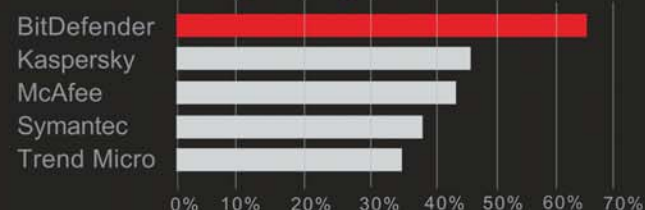
Our Proactive Security leads the industry\* at taking the offensive against stealth & zero-day threats. And it does it all while you're having lunch.



Bitdefender wins Gold Award  
Go to [www.tiptenreviews.com](http://www.tiptenreviews.com)

<http://internet-security-suite-review.tiptenreviews.com/small-business-internet-security/bit-defender-business-security-review.html>

Industry-leading Proactive Virus Detection



\*According to Anti-Malware Test Lab, January 2008

Find out more at [www.bitdefender.co.za](http://www.bitdefender.co.za) - [www.holton.co.za](http://www.holton.co.za)

The future of security now.

Tel:011 789 6181 • Fax: 011 787 3592



# Getting the office you need



January is the perfect time to revamp the office and get everything back in good working order. This counts for office automation as well; is that old printer really serving the company's needs?

Office automation company GNC Holdings, located in Centurion, is able to assist you with buying the right equipment every step of the way. With tailor-made packages and finance options available, GNC provides a one-stop solution to all your office equipment needs.

### Laser Copiers and Digital Copiers

GNC's selection of Toshiba multi-functional printers (MFP) will fit any office environment, from the office smart eStudio 207 (20 PPM) to the professional eStudio 600 (60 PPM). The Toshiba range easily copes with large volumes, but its main benefit is the value it will add to your business because of the low total cost of ownership. They provide a selection of finishes that make sorting, stapling and punching a breeze.

The Brother range of MFPs provides high speed monochrome as well as colour products. These feature copy/ scan/ fax/ print facilities, PC faxing and Scan to OCR (editable format).

### Duplicators

A duplicator is a cost effective machine for mass printing as it has a cost per copy of less than 2c. The Duplo DP-C100, for example provides copies at a rate of two pages per second and comes with an optional 10 page automatic document feeder. The faster DP-S550 handles 2.5 copies per second and supports A3 printing.

### PABX Systems

The Samsung PABX range starts with the basic DCS 408 with eight extensions, up to the OfficeServ 7200 that uses the latest in VOIP Technology and can manage over 380 extensions.

### Visual Equipment

Visual equipment solutions are tailored to your company's needs, offering a variety of boardroom presentation solutions to choose from, including plasma screens, LCD monitors, projectors, motorised screens, interactive white boards, audio systems and recording systems.

### CCTV Surveillance Systems

GNC can also provide companies with CCTV solutions, with either an embedded recording system, a PC based system or even an IP based system, accessible via a secure network.

### Computers, Notebooks and Servers

Every computer and server system is ordered to match your company's specifications and you'll have peace of mind knowing that most systems carry a 36 month warrantee. The vast selection of Toshiba notebooks means your entire company utilises the same brand, but each one is tailored to your employee's job requirements.

For these tailor made office solutions phone GNC on 0861-462-782 or see their AD on p9.

techsmart.co.za | January 2010

1.6 million. Assassin's Creed II copies sold globally in the first week of its release.

3. Attempts it took the Jaguar supercomputer to dethrone IBM's Roadrunner.

Advertorial Consilia Consult

## Peter J A Stuart Navigates with QlikView

Keeping track of 2 200 products, and far more than 800 clients will keep you busy for a while.

To simplify this Peter J A Stuart, the largest importer and wholesaler of Italian domestic, contract and corporate furniture in South Africa, has selected QlikView as a Business Intelligence (BI) solution. All the financial, sales and operational information is now within reach of all the end users and all answers are no more than six clicks away with the "Associative In-Memory" analysis of QlikView. This does not only provide end-users with a better decision support system but gives them up to date information in a crystal clear format.

Consilia Consult, a certified QlikView Partner, assisted Peter J A Stuart in implementing and deploying QlikView in the three functional areas of the business: Finance, Sales and Operations. This intervention has changed the way people at Peter J A Stuart engage with operational and financial information. Instead of printing hundreds of pages of reports, they use the powerful analytical capability of QlikView to tell them what is going on in the business.

According to Naldus Pienaar, MD of Consilia Consult, QlikView is like a good GPS Unit; things just become so much clearer in terms of where you are and where you want to go with your business.

**"I am convinced QlikView empowers end-users and management with relevant information to keep a laser sharp focus on sales and keep working capital to optimum levels. Jeff Schaffer, CEO Peter J A Stuart."**

Advertorial Edutain Convertible Classmate:

# A purpose built netbook for kids



The Convertible Classmate PC laptop makes learning fun and exciting

Electronic learning or "e-learning" opens up all kinds of new learning opportunities, with lots of English and Afrikaans educational software available.

One of the stand-out features of the Classmate is that this netbook can be used in tablet mode or the traditional laptop mode. The screen can swivel a full 180 degrees to share work with peers or teachers, plus it's a touch-screen, allowing kids to draw and write on-screen in a natural way. This promotes new models of interaction.

The Classmate contains built-in Wi-Fi, a webcam, a water-resistant keyboard, with durable construction housed in a rugged outer case with handle. It weighs only 1.2 kg and runs on Intel's Atom 1.6 GHz processor with 1 GB of RAM and a 60 GB hard drive.

There are lots of great games onboard that are designed to help your child learn in a way that suits him or her, making the Classmate the perfect "learning station". To find out more visit [www.edusphere.co.za](http://www.edusphere.co.za) or phone them on 011-450-4578.

techsmart.co.za | January 2010

CONSILIA CONSULT BUSINESS INTELLIGENCE

Consilia Consult is a professional consulting and training company that specialises in the fields of QlikView, Business Intelligence and Performance Management Solutions.

Let Consilia Consult show you how QlikView can provide you with a new level of operational clarity and strategic insight. Let us enable you to harness, analyse and get real value from your ERP and sundry data in a way you never thought was possible.

# QlikView

POWERED BY CONSILIA CONSULT

Consilia Consult (Pty) Ltd Building 11, Pinewood Office Park, 33 Riley Road, Woodmead Ext 3 | P O Box 5755, Rivonia, 2128, South Africa  
Telephone: 011-023-1341  
Website: [www.consilia.co.za](http://www.consilia.co.za)

logiC GROUP Partner

The Edutain **classmate** A purpose-built laptop for kids

Intel-powered classmate PCs include practical, education-oriented features that improve the learning experience for students, parents, teachers, and schools.

**Features Include:**

- Tablet PC Mode with Stylus
- Screen Swivels 180 degrees
- Built in Webcam
- Durable outer case
- Water resistant keyboard
- Touch optimised software

Rugged Design, Light Weight, Easy to Carry, Parents Carefree

Intel Learning Series Advancing Education Worldwide

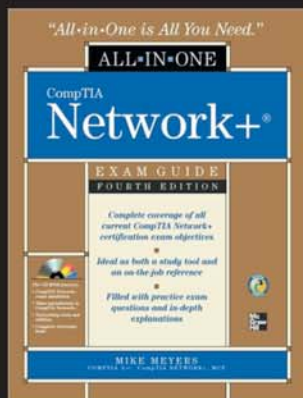
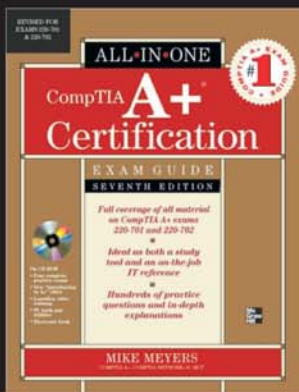
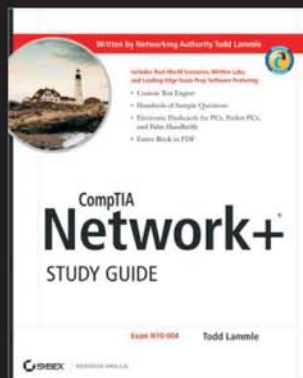
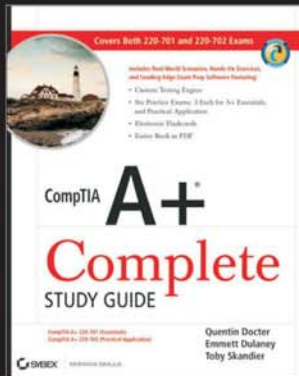
**Play Serious Games!** in English & Afrikaans

Buy a Classmate PC from [www.edusphere.co.za](http://www.edusphere.co.za) & you get the option of any 2 educational packages for only R295

purchase this online at [www.edusphere.co.za](http://www.edusphere.co.za) Back to school is easy, online! Get everything you need on edusphere.

For more info call +27 011 450 4578

# CompTIA Certification your pathway to success



These titles apply to the latest CompTIA exams  
Go to [www.intersoft.co.za](http://www.intersoft.co.za) for more information



## Ready to serve SIR!

**H**ardworking, ever vigilant and armed to the teeth with tips and tricks, the PC Medic is here to help you! Each Month the PC Medic will answer your questions about those nasty PC problems causing you to tear your hair out.

*Dear PC Medic,  
I've recently purchased a nice little 180 GB portable hard disk and have been using it to transport files between my Work PC and my PC at home, since I often take work home. The problem is the back-up software that came pre-installed is of no use to sync files between the different machines and I have often ended up replacing newer files with older ones. Any suggestions for a proper syncing tool?*

John Maphela

Hi John,  
I make use of a neat piece of software from Microsoft called SyncToy. Granted, it is not the best syncing software available, but it's small to download (about 3.5 MB), easy to install, and comes at the bargain price of mahala. Once installed on both PCs you can choose between three options. Synchronize should be the option you are after, since changes made on your work PC are implemented on your home PC and visa versa (with your portable HDD as go between). Both Echo and Contribute can be used to back-up certain folders, but changes made are one way only, with Contribute not deleting files deleted on your main PC. Visit [tinyurl.com/synctoy1](http://tinyurl.com/synctoy1) to download the appropriate version.

The PC Medic

### HELPFUL HINTS

The key with the little Windows logo at the bottom left-hand corner of your keyboard isn't just there for branding purposes – it can be a very useful short.

- Windows key:** Opens the Start menu.
- Windows key + D:** Minimizes windows and displays your desktop.
- Windows key + F1:** Displays the Windows Help and Support Centre.
- Windows key + F:** Takes you to the Search tool to look for a file or a folder on your PC.
- Windows key + L:** Locks your computer.
- Windows key + E:** Opens Windows Explorer.
- Windows key + Tab:** Cycles through the windows on your taskbar, press enter to maximize.
- Windows key + Pause:** Opens system properties.



126 million. Nokia 3310s sold between 2000 and 2005.

# Intel Brain Chip

Intel's Dean Pomerleau, in conjunction with Carnegie Mellon University and the University of Pittsburgh, is currently working on a project to implant chips directly in the human brain. The electronic chips will allow humans to operate computers, surf the web and manipulate other electronic devices without the need of a third party interface, like a mouse or finger.

What we're talking about here is the ability to control a device using thought alone. Imagine Googling with your mind – the possibilities for semantic search are just incredible. What about managing your home with thought – switching on the TV, turning off lights and getting a quick update on how much power you've used in a day? Productivity could also be greatly improved – what if you could prepare word documents a sentence at a time rather than typing letter by letter? If this sounds like sci-fi nonsense, then think again. In 2008 a University of Pittsburgh School of Medicine research project planted probes in a monkey's brain so that, using thought alone, it could control a prosthetic arm to feed itself.

#### Understanding the brain

Pomerleau's work is based on recognising common thought patterns in the brain using blood flow changes in specific areas of the brain. The team's research is attempting to map these patterns using fMRI (functional Magnetic Resonance Imaging) technology. Once the patterns are mapped researchers can program the chips to translate them into actions or commands. Pomerleau takes the idea of mapping brain patterns even further; claiming that understanding the brain will also improve microprocessor design, stating "if we can see how the brain

does it, then we could build smarter computers." This could further converge the brain and electronics.

#### Issues

Researchers on the Intel project believe that implanting brain chips will become a reality as soon as the year 2020. There are obvious concerns however, from valid privacy issues like brain cookies and activity monitoring, to sci-fi scenarios like brain hacks and brain chip software viruses. The issue of upgrading a chip implanted in your brain is obviously a little worrying as well. We can even expect religious unease, with the chip possibly stirring-up 'mark of the beast' type conspiracies.

Intel research VP Andrew Chien, counters these concerns by pointing out that, "[i]f you told people 20 years ago that they would be carrying computers all the time, they would have said, 'I don't want that. I don't need that.' Now you can't get them to stop carrying devices. There are a lot of things that have to be done first but I think implanting chips into human brains is well within the scope of possibility." The big question surrounding brain chips however, concerns what it will do for us as human beings. Will it make us more productive? Does it have the potential to make us more intelligent? What are your thoughts on this? Mail us at [info@techsmart.co.za](mailto:info@techsmart.co.za). [TM]



Superb Uniwell Systems  
555 Mitchell Street  
Pretoria West 0183  
South Africa  
Tel: 012 327 5855  
Fax: 012 327 6275  
sales@superb.co.za  
www.superb.co.za



#### IMPORTER & DISTRIBUTOR



[www.superb.co.za](http://www.superb.co.za)

Dealers Countrywide Franchise/Dealer Opportunity Available



sales@superb.co.za info@superb.co.za

#### DEDICATED TO POS

- Focus specifically on the Hospitality, Retail & ...Catering
- Global distribution and support network
- Software development for PoS, Back Office & Head Office
- Systems integration with option of embedded or PC based systems
- Range of PoS terminals to suit various styles of operation & budgets



\* Supermarkets \* Bottle Stores \* Butchery \* Convenient Stores \* etc

# The Internet Trends for 2010



Martin van Dyk has 20 years experience in the IT industry, of which six include work on international communication networks. He is currently director of internet service provider XDSL.

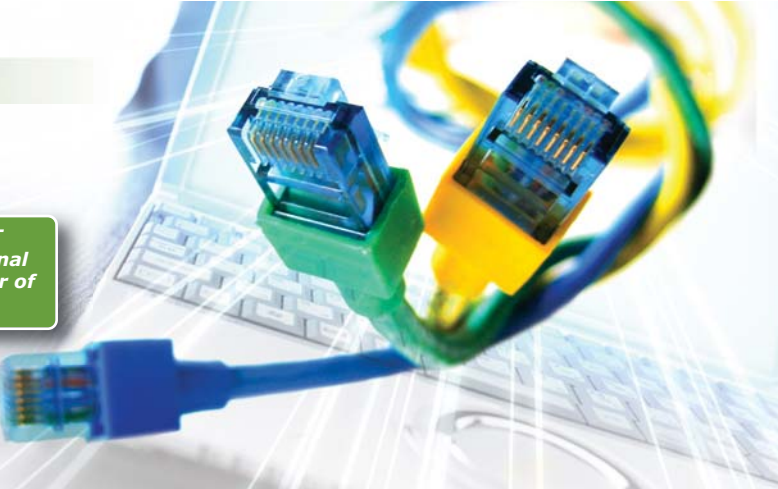
There was a lot of hype surrounding the landing of the Seacom cable last year, and although many ISP's have reacted positively with price reductions, the revolution everyone expected hasn't yet materialised.

Another bandwidth cable, the Eastern Africa Submarine Cable System (EASSy), should go live in the second half of next year, increasing our international bandwidth further. But if there's something we've learned from Seacom, it's that capacity alone doesn't make a difference. It's access and quality that will have the greatest impact.

The primary problem facing ISPs regarding pricing, is still getting huge volumes of data to various datacenters and then moving it, over the very costly IP Connect service, to ADSL customers. As a corollary, the primary expense of ISPs is still the local links, which are owned by Telkom.

Personally I don't expect much of a price change in 2010 unless there is a major shakeup by Telkom. Instead of the Competition Commission's hefty R3.59 bn fine imposed on Telkom for abusing its competitive position (upheld by the Supreme Court of Appeal), it would have been better if Telkom was forced to bring down the pricing of products that affect the public's broadband costs.

While we are still restricted by the costs of certain Telkom products, they are still in large part the leaders in connectivity technology. I expect a lot of businesses to take up Telkom's



new Metro Ethernet products which will bring massive amounts of bandwidth for internet and inter-branch connectivity.

With any luck, Telkom's largest fixed-line competitor, Neotel, will start delivering more stable products in 2010. Their 5000 km national fiber network project, currently being built in collaboration with MTN and Vodacom, looks to be progressing well. We can expect Neotel and the cellular operators to experience substantial cost savings, and to consequently deliver better coverage and pricing on voice and data.

2010 is of course the year of the World Cup, and it will be interesting to see if the networks are able to cope with the broadcasting and increased demand created by this wonderful event. The World Cup has been the driving force behind some of the higher capacity Next Generation Networks, which will be available for commercial use post the event.

In short 2010 will be a very interesting year in the ISP arena. The end user might not see the immediate effect, but there will be many positive things happening that will lead to better pricing, greater speed and more choice for consumers.

138 million. PlayStation 2s sold globally since 2000.

# January 2010 Web Time Wasters



## Coin Manipulation [www.coinmanipulation.com](http://www.coinmanipulation.com)

If you've ever wanted to learn how to entertain your mates with some slick coin tricks then this site is for you. It uses video, pictures and comprehensive instructions to teach you the moves. The Tricks section boasts plenty of content to amuse, educate and entertain.



## Cooking By Numbers <http://tinyurl.com/yezavm>

Buying Xmas presents has likely stretched you bare and you don't know what to make from the last remaining provisions in your sparsely stocked fridge and cupboards. No need to despair this website will put forward a list of tasty dishes you can conjure up from those scraps.



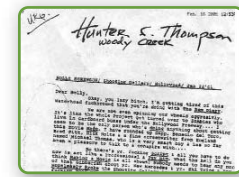
## The National Gallery [www.nationalgallery.org.uk](http://www.nationalgallery.org.uk)

The UK's National Gallery site enables you to zoom into some of the most prestigious paintings in the world. Additionally the site provides information on the artists and the artwork on display. Dig this art? Then also check out the Tate's excellent online learning site here: [www.tate.org.uk/learnonline](http://www.tate.org.uk/learnonline).



## 360Cities [www.360cities.net](http://www.360cities.net)

360Cities has a plethora of spectacular 360° degree panoramic views from across the globe, including Time Square in New York and the Eiffel Tower in Paris. You can view the most popular attractions or find something specific via the world map based on Google Earth, or upload your own.



## Letters of Note [www.lettersofnote.com](http://www.lettersofnote.com)

Letters of Note showcases letters that are either strange, funny or sad. Among these you'll find a letter by Winston Churchill addressed to his wife, with instruction to be only opened in case of his death, as well as one written by Mahatma Gandhi, the recipient being the German dictator Adolf Hitler. Also featuring Brian Wilson of the Beach Boys, Houdini and Kurt Vonnegut. If you like this you'll also enjoy the speeches at <http://tinyurl.com/cuz8>.



Here is a Special that will get your heart racing

# Shocking

# Webhosting

from as little as R 15 per month

includes

- 500MB traffic
- 2 mailboxes
- 50MB disk space
- & much more

Call us now on 086 100 9375

[www.xdsl.co.za](http://www.xdsl.co.za)

[info@xdsl.co.za](mailto:info@xdsl.co.za)



Terms & Conditions apply

MAHALA FESTIVE MADNESS!!



**Acer e-Machine Notebook**

- > Intel Core Duo 2.16GHz, T3400
- > 3 GB RAM
- > 250 GB Hard Drive
- > 15.6" LCD
- > Wifi
- > DVD-Writer
- > Card-Reader
- > Webcam
- > Windows 7 Home Premium

**R4899 excl**



**Potent Power Squared PC**

- > Intel Core Duo 2.8GHz CPU
- > 1024 GB RAM
- > 500GB Hard Drive
- > Intel LGA775 Motherboard
- > 22x Dual-Layer DVD-Writer
- > Onboard V.S.L
- > 1GB DDR2-800 RAM
- > 400W Tower Chassis
- > PS2 Optical Mouse
- > 104 Multimedia Keyboard

**R1999 excl**



**Samsung 1000GB Ext. HDD**

- > Samsung External Hard Drive
- > 1 Terabyte 32MB Cache Serial ATA Hard Drive
- > 3.5" SATA Connection incl. all Cabling
- > 3 Year Warranty

**R699 excl**



**iSonic HD Media Player**

- > Full HD 1920 X 1080 Multimedia Player
- > 1000GB Hard Drive
- > Built-in PVR (Record TV)
- > Watch downloaded movies
- > Reads USB Media
- > 10/100 Network Ready
- > Full Remote Control
- > Connect AV Device to Rip / Record

**R1699 excl**

**Remember:**

- Free Delivery
- We will beat any written quote
- 2 Year Warranty



Johannesburg: 011 444-5956 | 011 444-2347/8 | 011 262-0281 | 15 Dartfield Road, Kramerville, Sandton  
[directsales@phase2.co.za](mailto:directsales@phase2.co.za) | Trading Hours (Mon-Fri) 8h00 - 17h00 (Sat) 8h30 - 13h00  
 Price V.A.T. Exclusive | Terms & Conditions Apply | E&OE | Product might differ from Images



Refill your own ink cartridges and **SAVE 90%** or more



Top Quality German Ink for refilling (minimum 100ml)



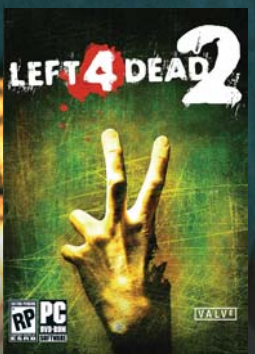
Cartridge chip resetters for Canon, Epson and HP models



Refillable cartridges with Auto Reset Chips for various brands

- Refill Training & Consulting
- Large Format Inks & Supplies for Epson, Roland, Mimaki etc
- 100% New Generic Cartridges
- Original Cartridges
- Niche Refilling Products
- Dealer & Affiliate Programs
- 7 Years industry Know-How

[www.thefillingstation.co.za](http://www.thefillingstation.co.za)  
Richard 084 770 0602  
[ink@thefillingstation.co.za](mailto:ink@thefillingstation.co.za)



## Left 4 Dead 2 Death by Zombie

When the zombie apocalypse comes, and trust us it will, you can learn a lot from studying Valve's instructional video game, *Left 4 Dead 2*.

The hugely popular *Left 4 Dead* demonstrated the basics of teamwork when struggling through hordes of the undead. *Left 4 Dead 2* (L4D2) ups the stakes in a number of ways, and finds four new survivors marooned in the American Deep South in what feels like an ocean of zombies.

**Deep South Hunting**  
In L4D2's case killing zombies means slashing, blasting, gunning, striking or chain-sawing your way through what feels like never-ending armies of infected undead. The hordes aren't your classic zombies either – they can sprint like Usain Bolt, and have a nasty tendency to mutate. Cue for example new special infected zombies like the Spitter with its terrible acid-reflux, or the aptly titled Jockey that rides you like a Durban July filly.



**Teamwork**  
Just like the first game, L4D2 needs to be experienced online to truly appreciate it. That's not to say single player mode is useless. Your three team mates can hold their own shooting and will heal you when you've been clawed, but they are particularly reluctant to throw Molotovs or move into proper defensive positions. This is of course why playing online is such a blast. Find the correct players online and your team will be mowing down zombies like it's grass cutting day at Wembley Stadium. Playing online in the Versus mode you can also spawn as special infected zombies, using their abilities to kill the survivors. A new edition to the series is Realism Mode in Versus which turns off the halo surrounding players so you can't see them behind a wall, significantly upping the importance of communication in game. The hectic short-play Scavenge is also new and it pits four survivors against four zombies in a battle to find fuel.

You won't be disappointed upgrading to L4D2 since it improves on the first one in a number of ways. And, if you haven't played *Left 4 Dead* yet, welcome to the best zombie slaughtering title around. [M]

**>> Our Best:**  
Difficult to decide – it's between a pipe bomb blasting a gang of raging zombies, the chainsaw going through limbs like a hot knife through butter, or feeling like Keith Richard smacking zombies with a guitar.

**>> Our Worst:**  
The witches' sobbing – spine chilling at first, irritating later.  
[techsmart.co.za](http://techsmart.co.za) | January 2010

72 million. Active Farmville players on Facebook.

# FIVE FURIOUS GAMES FOR 2010

2010 is shaping up to be an awesome year to be a gamer. Here are five hot titles to look forward to.

**Dante's Inferno**  
Dante's Inferno takes you on a journey through Hell as envisioned by 13th century Italian poet Dante Alighieri in his *Divine Comedy*. The game turns the poem into a battle packed 3rd person gaming experience, seeing you battle demons in the nine circles of hell in a quest to save your girl Beatrice.

**Why buy?** Because you're a fan of renaissance poetry. Nope – nine circles of hell to work through, that's why.

**Gran Turismo 5**  
To call Gran Turismo 5 highly anticipated is an understatement, since PS3 owners have been licking their lips for GT5 since the release of the console. 950 dream cars, 20 exotic locations sporting over 70 track variations, all in gloriously realistic 1080p high-definition, GT5 might just be the PS3's defining title.

**Why buy?** Gran Turismo in high-def. Enough said.

**Alien vs. Predator**  
Already banned in Australia thanks to the developers not "sanitising" the violence, *Alien vs. Predator* is back and looking better than ever. The first one was a classic so we can only imagine what 10 years worth of graphics technology development will do for the title.

**Why buy?** Rebellion, the team responsible for the first AVP is back at the helm. Plus if the Aussies banned it, it must be good.

**BioShock 2**  
It didn't take the BioShock developers, 2K Games, long to continue the weirdness of the original with *BioShock 2*. In *BioShock 2*, set ten years after the original, you are able to control the first Big Daddy ever created, which is not only faster than the rest, but also has free will.

**Why buy?** BioShock left us wanting more Big Daddies, Little Sisters and Splinters.

**Darksiders**  
Having been misled, War, the first Horseman of the Apocalypse, made the slight mistake of bringing about the destruction of earth ahead of time. Stripped of his abilities, tarnished and facing death, War returns to Earth in order to strike down enemies with great vengeance and furious anger.

**Why buy?** You get to see how the world ends, and it doesn't involve John Cusack, a Mayan prophecy and a ridiculous plot.

# WARNING!

## YOUR COMPANY IS AT RISK

OFFSITE DATA BACKUPS ARE CRITICAL TO YOUR BUSINESS. NOT DOING THEM COULD COST YOU IN THE LONG RUN!!

TRUST BSF AS YOUR OFFSITE DATA BACKUP STORAGE PARTNER, WE HAVE BEEN AT THE FOREFRONT OF OFFSITE DATA STORAGE FOR THE PAST 22 YEARS.

BRANCHES CONVENIENTLY LOCATED IN JOHANNESBURG, DURBAN AND CAPE TOWN.

**WE OFFER:**

- COLLECTION OF YOUR DAILY / WEEKLY / MONTHLY BACKUPS
- 24 HOUR, 7 DAYS A WEEK, 365 DAYS A YEAR SERVICE
- GUARANTEED COLLECTION TIME WITHIN 15 MINS OF SCHEDULED TIME
- EMERGENCY LEAD TIME OF ONLY 90 MINS
- 24 HOUR MANNED OPERATIONS CENTRE
- TEMPERATURE - CONTROLLED VAULTS

STORE 'N SCORE

Sign up a 12 month storage contract with us during the month of Jan and receive a FREE 250GB External Hard Drive

Terms & conditions apply: Product displayed in pictures may vary from actual product. Subject to availability: E & OE: Offer valid from 1st - 31st January 2010: BSF has the right to limit / replace any offer at its discretion.

Call us today, before it's too late!!

TEL: 011 900 2406 Ask for Steve  
For Express Service  
083 299 7157  
E-mail: [steve@bsf.co.za](mailto:steve@bsf.co.za)  
Web: [www.backupstorage.co.za](http://www.backupstorage.co.za)

BACKUP STORAGE FACILITIES (PTY) LTD



**Paying too  
much for  
hosting?**  
Have a look at our  
16 new exciting  
hosting packages

## GET AFFORDABLE BROADBAND TODAY

### Webonline 1GB ADSL ACCOUNT

# R49.00

(pm VAT Inclusive)

Affordable broadband is now within your grasp with the Webonline 1GB ADSL account tailored for the home user or student who needs the power of broadband at their fingertips.

Setup fee	Free
Monthly cost	R49.00 (VAT Inclusive)
Buy Additional Bandwidth	Yes
Cost Per Additional GB	R49.00 (VAT Inclusive)
Payment Methods	Credit Card / Debit Order
Recurring Monthly Service	Yes
No Contracts	You may cancel at any time*
Telephonic Support	Yes
Email Support	Yes
Usage Statistics	Yes
Location Locking	Available

Concurrent Connections	4
Dynamic IP	Automatically assigned
Local & International Access	Yes
Port Shaping	Yes
Uplink Provider	SAIX
ADSL line	Excludes line rental
POP3 Email Accounts	5
Virus Scanning	Yes
SPAM Filtering (SpamAssassin)	Yes
SMTTP Relay	Yes (smtp.saix.net)
Webmail	Yes

**For full details visit [www.webonline.biz](http://www.webonline.biz) or call us on 0861-666-555**



\* All services are subject to terms and conditions.  
E & OE. All names and trademarks are the  
property of their respective owners.