

# TechSmart **Business**

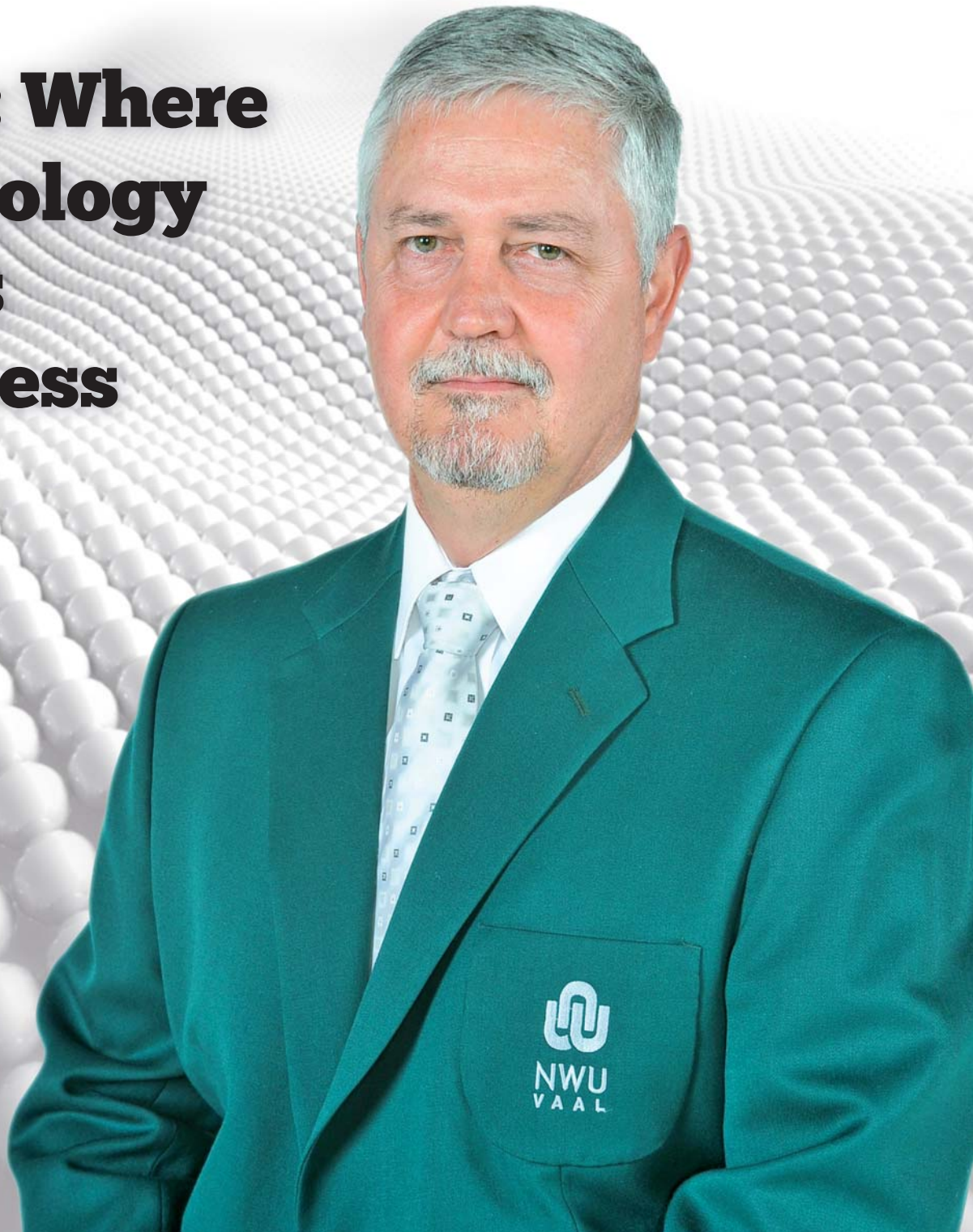
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May 2013

## **NWU: Where technology meets business**

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corporate  
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mobility  
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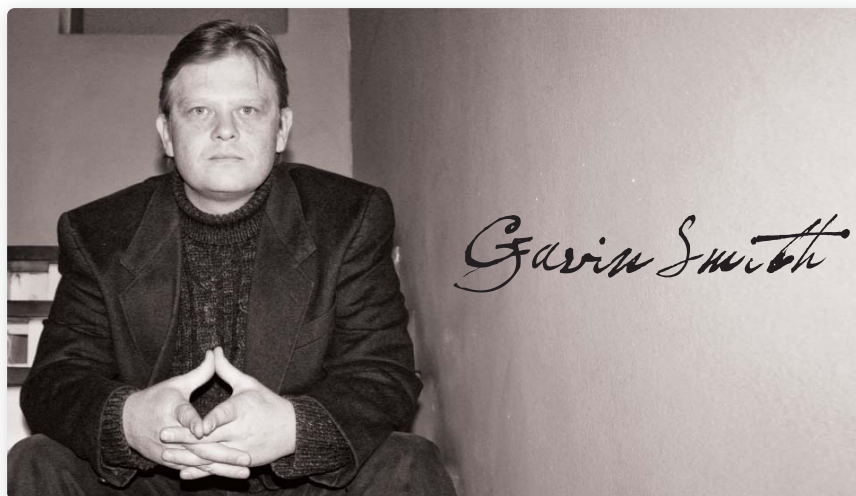
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## And we're off

As I sit here and think back on the process behind getting this first issue of TechSmart Business together it seems like only yesterday that the team sat down with just the seed of an idea. In just 12 short weeks we have taken that concept and turned it into something tangible and I can't help but feel a certain amount of pride in the end product and the amount of work everyone has put into making this title a reality.

In this first issue we have quite an eclectic mix of content which mirrors the nature of the industry we cover. There is no business segment left that has not been touched by technology and our choice of editorial was infinite. Coupled to that, the companies we visited, and the people we met have a passion for their products that I have seldom seen in other industries.

The cover story takes us to the Vaal Triangle where we have a look at the plethora of opportunities available at the North West University. Professor Herman van der Merwe, Executive Dean, of the Faculty of Economic Sciences and Information Technology is spearheading the drive to ensure the campus is a hub of innovation, research and study. Among their many offerings they boast the School of Information Technology; School of Accounting Sciences and the School of Economic Sciences making the Faculty the first – and only one of its kind in the world – where business and information technology are combined.

Our main feature this month revolves around the ever more important question of security within the digital world. We chatted to some of the leading providers and had a look at the current landscape globally and in South Africa. The big surprise that came out in the wash was the ever increasing threat to mobile devices. I, like every other layman, never gave any thought to the fact that someone may want to attack my smartphone or tablet or use these devices as a gateway to more secure networks. I will definitely think twice before I blindly accept terms and conditions on 3rd party apps which I download.

As for the rest of the magazine, we have a real potpourri of features, comment and insight from fleet management to education. We have tried to include a broad range of topics in this first issue to whet your appetite and give you a little taste of things to come in the next few months. With that in mind, we would love to hear from you and find out what exactly it is that you would like to see. Going forward, we will be depending on you, the reader, to keep us in the loop with all the latest goings-on in the industry, all the new products, events, and everything else. All that is left to say is full speed ahead, and damn the icebergs.

Gavin Smith  
(gavin@techsmart.co.za)

## Features



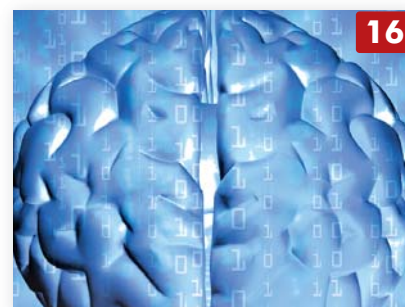
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## Perfect partnership

**W**D, a Western Digital company, has appointed Sahara Computers as its official distributor for its range of internal and external hard drives, as well as its storage solutions for the connected life. Sahara is one of the largest independent distributors in South Africa with operations in all nine provinces of the country and a footprint which extends into the SADC region.

"For the past few years Sahara has been a sub-distributor for a number of hard disk brands. However, we wanted to increase our focus and secure official distribution rights. As a leading global brand that is making its presence felt in the local market, WD was our first choice. WD's products complement the focus of our business and the product quality is world-renowned," says Stephan Nel, executive director at Sahara.

The partnership will enable both parties to expand their market reach. Sahara now has access to a full range of storage products for all markets, from entry level to high-end enterprise offerings, which enables the distributor to target new customers with tailored solutions.

The distributor will also have access to a global support network, extending WD service to its resellers through the myWD channel programme. Sahara will help to further grow the WD brand in South Africa, and will provide



Anamika Budree, WD's country manager South Africa, Branded Products

access to new markets through its well established and extensive channel network. Sahara's resellers will in turn have access to an expanded storage portfolio, as well as the myWD partner programme.

"Sahara is a unique distributor that is always looking to create new markets and market segments. They not only service the traditional IT retail market, but also other retailers such as furniture

chains and home stores. This gives WD new avenues and channels to explore and enables us to reach a far wider market," says Anamika Budree, WD's country manager South Africa, Branded Products.

## Shopping made easier

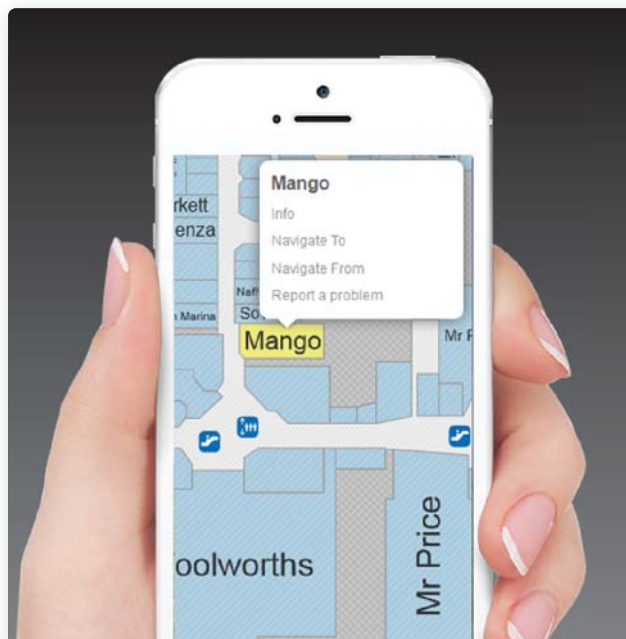
**R**ecently mapIT announced that Micello, it's international partner, has 15 000 indoor venue maps worldwide including 65 shopping malls and nine airports in South Africa. This data enables enterprises to deploy an extensive array of maps in mobile and desktop applications.

"mapIT are pleased to bring yet another international solution to the South African mapping market with this partnership," said Etienne Louw, managing director of mapIT. "With 40% of mobile search having location intent, indoor mapping will offer our clients a whole new dimension to their businesses."

The latest maps strengthen the already extensive collection which now includes;

- 3 700 000 000 + mapped square feet
- 50 000 + individual buildings
- 775 000 + places of interest (POI)

"As the indoor mapping industry heats up, especially with recent news about Apple's acquisition of WiFiSlam, we are positioned perfectly to help grow the ecosystem by focusing on generating geo-accurate indoor venue maps," said Ankit Agarwal, CEO and founder of Micello. "Micello is already the leading indoor map and navigational data supplier for many GIS and mapping platforms and this additional content will enable a new class of mobile location experiences for



markets like retail, healthcare, entertainment and enterprise."

Micello was able to achieve this milestone using in-house technology, which has been developed over the last several years to create a quick yet highly scalable operation designed to meet the growing needs of the indoor industry.

## Soarsoft now SMART

**S**oarsoft Africa, exclusive South African distributors of global messaging platform migration specialists Binary Tree, have announced their adoption of Binary Tree's revolutionary SMART migration methodology. With this move the company becomes one of the first global SMART migration partners, in line with their status as a Preferred Binary Tree distribution partner.

The SMART Partner Program is offered to select partners who have a core focus on complementary lines of business to Binary Tree, and uphold the global organisation's strict service standards. Preferred distributor designation is offered by invitation only, and was granted to Soarsoft in 2012 based on its continuous commitment to providing superior services and support to end user customers as well as partners.

"As distributors of Binary Tree products for more than two years, we have executed many large and complex migrations across multiple platforms and in complicated environments with vast amounts of legacy data housed in various third party applications. Based on this experience, the move to adopt SMART methodology was a natural fit for our organisation," explains Chris Hathaway, director at Soarsoft Africa.

By adopting the SMART methodology, Soarsoft is able to harness a refined end-to-end process for migrations, beginning with the correct analysis of the environment and



*Chris Hathaway, director  
at Soarsoft Africa*

continuing through to project signoff. This migration roadmap benefits organisations by ensuring zero downtime, simplifying complex migration processes through enhanced communication and ensuring reduced project timelines and therefore reduced costs. By leveraging a proven framework, SMART enables better planning and enhanced quality of messaging migrations.



## BlackBerry gets Skype

**B**lackBerry has announced that it plans to fill one of the biggest gaps in the app line-up on its new BlackBerry 10 devices with a long-awaited Skype application.

Skype, which was acquired by Microsoft in 2011, allows its users to communicate via voice, video or chat over the internet, by-passing traditional telephone networks.

The service has hundreds of millions of users across the globe.

The announcement comes a day after BlackBerry said its new Q10 smartphone will be available in Canada and South Africa on 1 May, and in the United States before the end of May. The Q10, which comes with the physical keyboard that many of BlackBerry's core fan base cherish, is the second device to be powered by the company's new BB10 operating system.

Skype will be available on the Q10 on launch day. Users of the existing Z10 touchscreen device will have to wait a few weeks more to get Skype, after a software upgrade on the operating system, BlackBerry said.

## Aspect Software new senior VP announced

**A**spect Software, provider of next generation customer contact and enterprise workforce optimisation, has announced the appointment of David Herzog as senior vice president, Aspect Professional Services (APS). In his new role, Herzog will be responsible for Aspect's Professional Services worldwide capabilities, processes, people and knowledge across the organisation. He will be tasked with establishing learning networks across services, building on Aspect's key disciplines and pushing its services capabilities to deliver high customer value while cultivating close working relations with sales.

Herzog, a 17 year Aspect employee, most recently held the position of vice president of Aspect Professional Services for North America where he led implementation services, solution consulting and innovation, and staff augmentation for Aspect customers. Prior to that, he was the global leader of Aspect Customer Experience and Product Management which included an assignment as Head of APAC and Middle East. Herzog also served as regional vice president with Aspect and was responsible for driving revenue growth and profitability for National Accounts and leading sales for the southwest and south central regions. He also held a similar position at Concerto Software prior to its merger with Aspect Communications.



*David Herzog  
senior vice  
president, Aspect  
Professional  
Services*

"As an organisation, we're very fortunate to have an industry leader with the skill and experience of David's caliber within Aspect and be able to tap him for a higher level of responsibility," says Stewart Bloom, Aspect CEO. "David and his team have already made tremendous progress this year standardising development toolsets and processes, as well as taking Aspect's Professional Services operating performance insights to the next level. I am confident that David's extensive experience, energy and passion will build on Aspect's current success by driving growth, as well as delighting our customers."

## Banking app from Absa arrives

**F**inancial services group Absa Bank launched its much anticipated app as part of its strategic digital journey, which forms part of its ambition of becoming the go to bank in South Africa.

The app builds on a strong foundation of infrastructure developments whilst leveraging shared global resources to deliver value to customers. The technological capability built up over the last two years lays a solid foundation of infrastructure, products and services, taking one step further in the bank's digital journey in South Africa and the rest of Africa.

With this launch, Absa customers can enjoy the speed and convenience of simple, intuitive payments and easy navigation with fewer clicks to perform their banking transactions.

Absa said the app would be the first real, native financial services app for smartphones and tablets in South Africa available for both retail and business customers.

"This means our app is optimised for smartphone and tablet screens and encompasses a visually rich interface," explains Arrie Rautenbach, Absa head of Retail Banking.

The app provides access to a built-in video tutorial that will assist customers on a journey of learning. It will permit multiple



users in one household the ability to link into a single device or to have one user connect their profile to multiple devices.

"The new technology, which also integrates seamlessly with all other Absa digital banking channels incorporates many aspects of traditional transactional services, whilst combining smart device features such as your GPS location to allow for easy and instant search to the closest Absa branch or ATM," continues Rautenbach.

It is currently available for Android and Apple devices with support for BlackBerry devices expected to be released shortly. "The launch of our app simplifies our customer experience, while permitting us integrated digital presence in Africa that offers customers internet banking in 11 countries, mobile banking in six countries and a financial services app in six countries" concludes Rautenbach.

## FNB goes mobile

**F**NB has released a new banking app customised for tablet devices, which is available for download now in app stores across Apple, Android and Windows 8 devices.

Called FNB Banking App for Tablet, one of the app's distinctions is that, in a first for any retail bank in South Africa, an FNB account can now be opened via the app in a few minutes and in real time.

"The new Banking app, designed specifically for tablet devices, was developed with ease-of-use as a key priority and utilises the full capability of the latest tablet devices. It is completely custom-made and not a re-skin of our existing smartphone app," says Farren Roper, head of FNB Connect ISP and Business Operations.

FNB states that its new app for tablets is fully interactive and content rich, both inside and outside of login. While



FNB customers will be presented with customised content according to their profile, non-FNB customers will have access to information about FNB products, promotions and rewards.

## Apple down after a decade

**A**pple's phenomenal money making streak seems to be winding down, with the Cupertino-based tech firm's announcement of its financial Q2 2013 results.

The company posted quarterly revenue of \$43.6 billion, up from Q2 2012's \$39.2 billion and quarterly net profit of \$9.5 billion, which is down from net profit of \$11.6 billion posted during the same period last year. This marks the first time in almost ten years that Apple's quarterly profits have shrunk.

International sales accounted for 66% of the company's quarter revenue, with Apple selling 37.4 million iPhones in the quarter, up from the 35.1 million the company sold during Q2 2012. Cupertino also sold more tablets, as iPad sales rose from 11.8 million within Q2 2012 to 19.5 million iPads during Q2 2013.

In terms of computer sales, the company sold just under 4 million Macs, falling short of equalling Q2 2012's 4 million

tally. The company's iPod sales of 5.6 million not only marks a decrease of 27% from the same period last year, but also a drop of 50% from the previous quarter.

"We are pleased to report record March quarter revenue thanks to continued strong performance of iPhone and iPad," said Tim Cook, Apple's CEO. "Our teams are hard at work on some amazing new hardware, software, and services and we are very excited about the products in our pipeline."

Peter Oppenheimer, Apple's CFO added: "Our cash generation remains very strong, with \$12.5 billion in cash flow from operations during the quarter and an ending cash balance of \$145 billion."

In other Apple related news, recent rumours have suggest that the next iPad (5) will be thinner, weigh less than the iPad 4 as well as the iPad 3, and will also draw some design inspiration from the iPad Mini.

## Planting a seed

**A**pplications are open for the second Seed Engine Business Accelerator, which is offering R100 000 each for up to ten tech business ideas as well as a 13 week boot camp. The programme offers coaching, mentoring, workspace and access to investors on demo day. According to the company, during this event, more than R2 million per venture can be raised for second round funding.

Entrepreneurs can enter by going to [www.seedengine.co.za](http://www.seedengine.co.za) and completing the application process. The next programme begins in June 2013. The application should clarify points of difference, scalability, disruptive strategies and team details.

Seed Engine is a Redwood Capital initiative powered by supporters of entrepreneurship, as well as offering support for employment creation in South Africa. The company describes itself as a "kickass" business accelerator, partnering for a 20% equity stake.

Says Marc Elias, CEO of Seed Engine: "We are looking for early stage entrepreneurs who have ideas which have international application. Seed Engine is South Africa's first true business accelerator and we are looking to grow ideas into top commercial realities. We offer entrepreneurs extensive support and access to the right investor networks."

## Pint-sized projectors

**N**ashua Limited recently launched the ultra short throw projector (USTP) range. The product is recognised as one of the world's smallest and lightest mirror reflection type ultra-short throw projector to date. This range includes two devices namely the PJWX4130 and the PJWX4130N.

The ultra short throw projector is a high-end digital presentation tool that can be used for business, education, retail or leisure purposes. The unique feature which defines this product is the ability to project from a short distance of only 11.7cm as the unit is generally placed on the floor or flat surface, to project vertically and not horizontally, onto any screen, wall or flat surface.

The product provides customers with more flexibility and movability while not compromising on quality. It is packaged with a range of accessories, which enable a more congenial ultra short throw projector experience, such as a wireless remote, and a specialised carrying case for ease-of-use.

Other features that enable the ultra short throw projector to rise above its competition include easy network connectivity, device management capabilities, user logo identification, an AV mute and freeze button, an HDMI interface and is also 3D-ready (optional 3D glasses are available).



## Canon refreshes home office printer range

**C**anon has refreshed its PIXMA MX printer range with the launch of four new all-in-one devices. The PIXMA MX394, MX454, MX524 and MX924 replace the PIXMA MX374, MX434, MX514 and MX714/MX894 respectively. Offering high-productivity and sophisticated software for home office environments, all the new printers feature print, copy, scan, fax and ADF functionality.

Featuring enhanced hardware, designed to improve productivity for home office users, the PIXMA MX924 comes with new double front paper cassettes that hold up to 250 sheets of plain paper and up to 20 sheets of photo paper. Print speeds for the PIXMA MX924 have been increased, with A4 documents being produced as fast as 25 cm/min in colour and 38 cm/min in mono.

Scanning and copying multi-page documents is quick and easy with a fully-integrated 30-sheet ADF (Automatic Document Feeder) available on the PIXMA MX394, MX454 and MX524 printers, whilst the PIXMA MX924 features an even-more productive 35-sheet ADF. The PIXMA MX524 and MX924 printers help users to save paper and produce professional-looking documents fast with double-sided printing, through Canon's Auto 2-sided Print. These models



also feature a large colour display which provides direct access to cloud services while the dual function panel makes it easy to print, copy, scan and fax directly from the printer.

The PIXMA MX454, MX524 and MX924 come with a range of connectivity features including support for printing from smartphones and tablets through Canon's built-in Wi-Fi. This allows the printers to be easily shared between multiple PCs around the home or small office.

The PIXMA MX394, MX454, MX524 and MX924 are available in South Africa from May 2013. **TSB**

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**T**he Faculty of Economic Sciences and Information Technology on the Campus represent a powerhouse of academic activities, innovative technologies and groundbreaking research.

The Faculty consists of three academic schools, namely: School of Information Technology; School of Accounting Sciences and the School of Economic Sciences – making the Faculty the first – and only one of its kind in the world where business and information technology are combined.

The Faculty offers both undergraduate and postgraduate programmes to prepare students for the fast-growing world of financial services industries, information technology, business mathematics, informatics, accounting, chartered accountants, economics, business management, marketing and sports sciences.

Research projects in the Faculty include the development of speech technology in conjunction with Google, the establishment of a chair in applied risk management (with the focus solely on industry), and a cell phone laboratory – sponsored by the World Bank – that tests the hardware and software of different cell phones for South Africa.

The Faculty of Economic Sciences and Information Technology aspire to be the preferred choice for business and IT studies. By providing innovative, relevant, teaching

# North-West University has it all

and learning, as well as research, their graduates make a positive impact in their chosen sector. These programmes, which address various domains of academic enquiry, are geared to provide solutions to real-life situations within a vibrant economy.

## **Learning is a Serious Game: SGI-SA (Serious Games Institute – South Africa)**

Since November 2011 the Vaal Triangle Campus is housing South Africa's first Serious Games Institute. This institute is involved in pioneering work in the field of Serious Games in South Africa, particularly with respect to mobile apps and games programming for commercial purposes.

SGI-SA is affiliated with the International Serious Games Institute at Coventry University in the United Kingdom. This institute was established in 2007.

SGI-SA's objective is twofold: one part is aimed at the academic world, and the other at industry. As far as the academic side is concerned, the design of basic elements of Serious Games forms part of the projects of third-year BSc IT students. From next year, two Serious Games modules will be included in the expanded BSc IT curriculum, while a Serious Games project will form part of the honours level of this qualification. A master's degree in Serious Games is also in the pipeline for the near future – a first for the African continent.

As far as the commercialisation of Serious Games is concerned, the institute supplies games or elements of games to organisations, thus generating additional income for the University. Furthermore the institute tries to introduce industry to the many benefits of Serious Games.

These games offer training possibilities to organisations in the private and public sector and in this way also contribute indirectly to the economic development of the country. The institute is already involved in numerous projects, including 'mind games' and games for financial management, risk management and safety training.

### **These include the following:**

- A life skills game played on Mxit, with soccer as the theme
- A game known as TASK (Teen/Adult Survival Kit), also for Mxit



- That's Life, a board game for tablets
- Royalopoly, a game about team work in business, for tablets, PCs and cell phones
- A safety game for risk management in factories, among other work settings, for tablets, PCs and cell phones

These projects also create opportunities for research, which in turn contributes to the promotion of Serious Games in South Africa.

#### UARM Centre for Applied Risk Management

Ideally, business and risk managers play complementary roles in the process of setting and achieving an organisation's objectives. Business managers identify, create and execute the initiatives required to achieve an organisation's objectives. In support of the business manager's role, risk managers should actively participate in the process of defining organisational objectives and risk appetite and provide assurance that the risks taken are adequately managed in line with the organisation's objectives.

In practice, a lack of knowledge and understanding of the interconnectedness of these roles can create misunderstanding and conflict between business and risk managers. When business managers understand the role risk management plays in achieving and sustaining business performance, they are better able to integrate risk management principles and practices into their daily business practices. On the other hand, risk managers who understand the needs of business managers to increase organisational profits and meet other business objectives are able to optimally support business to achieve their tactical and strategic objectives.

The Centre for Applied Risk Management caters for the further education and applied research needs of risk stakeholders in organisations. They focus on the application and development of risk principles in practice. Their qualitative approach to risk management aims to fill the gap in higher education due to the current dominance of quantitative risk programmes. To aid them in this endeavour, they are in the privileged position to leverage off strong working relationships with leading experts, academic institutions and risk organisations locally and internationally.

#### Bhive Enterprise Development Centre (bhive EDC)

The Enterprise Development Centre within the Faculty of Economic Sciences and IT is the home for young and inspiring entrepreneurs. The main focus of bhive EDC is to bridge the gap between business and education by establishing a hub of innovative ventures and expertise.

#### The Enterprise Development Centre is an:

- entrepreneurial development initiative for prospective and current students
- establishment for "women" who would like to become entrepreneurs
- development centre to potential and existing community members and businesses in and around the Vaal region.

In essence, the EDC is an incubator for entrepreneurial student and potential existing community members and businesses in and around the Vaal Triangle region by empowering anyone to become entrepreneurs.

#### The bhive EDC prides itself on offering the following services to potential entrepreneurs:

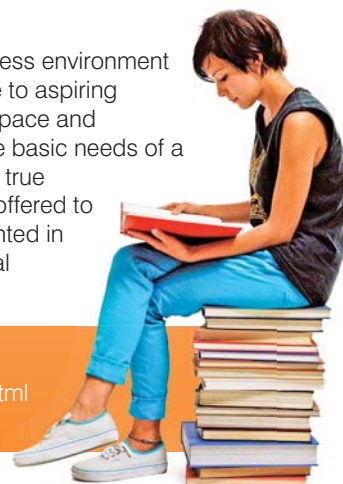
- support to start-up your business
- coaching and mentoring to entrepreneurs
- supply the infrastructure for newly created business to incubate
- help you to convert your business idea into a concept.

#### The bottom line

In an ever more challenging business environment NWU has become a vital resource to aspiring entrepreneurs. By offering office space and equipment, NWU takes care of the basic needs of a fledgling business but ensure that true mentorship and guidance is also offered to ensure that entrepreneurs are pointed in the right direction to attain financial assistance. **TSB**

#### Contact details

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Tel: +27-(0)16-910-3261



# This is serious!

By Werner Ravyse, Program Leader Serious Games (School of IT)

The Serious Games Institute of South Africa (SGI-SA) is involved on all fronts of the North-West University: Vaal's activities. Serious games are simulations of real-world events specifically designed to allow the player to solve an array of problems that may occur in a specific real-life situation.



Werner Ravyse, Program Leader Serious Games

**T**he immediate thought that comes to mind when considering a university is the teaching and learning facet. SGI-SA plays a twofold role in this. Firstly, we strongly believe that we have moved into a new era where today's students are no longer enthralled by the talk-and-chalk teaching methodology of old; they are after something refreshing. To this end, SGI-SA is constantly looking to leverage our complement of lecturing staff with PC-based or mobile games that can be incorporated as part of their lessons. Secondly, SGI-SA also hosts a series of mobile development, animation and game modelling workshops throughout the year. Should you be a more aspiring games creator, we also offer a short course in game development.

Universities pride themselves greatly on being at the cutting edge of developing new concepts and solutions. As a research body of the highest distinction in the fields of Electronic Games Based Learning (EGBL) and Mobile Tech, SGI-SA aims to provide Africa with tools suited to our continent's training needs and conditions. Furthermore, for post-graduate (MSc and PhD) students who wish to specialise in Serious Games and/or Mobile Tech, SGI-SA's research activities provide an environment of unsurpassed distinction for nurturing prominent specialists in these fields.

Other than teaching and research, universities also play an important role in a region's business activity. SGI-SA is continuously involved in commercial projects, bringing the latest EGBL and Mobile solutions to clients in a myriad of sectors and industries ranging from banking, health and right through to heavy engineering. These tools come in the form of reusable technologies (adaptable to many scenarios) or as bespoke interventions that address key concepts and situations unique to the subject company.

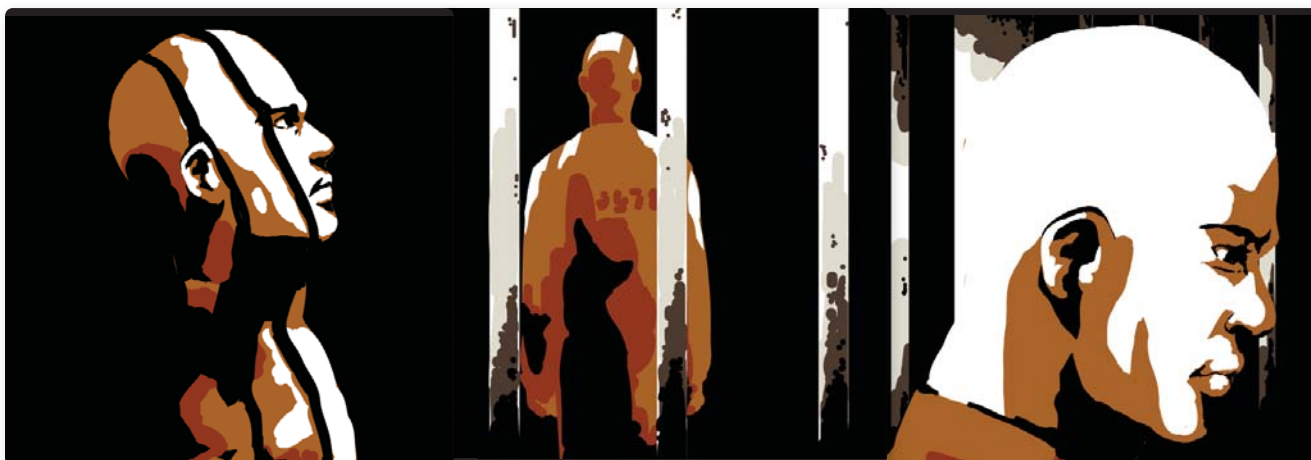
## The question that remains is "Why EGBL?"

Games are known to cause flow, tele-presence and immersion for the participants – meaning that gamers are part of the game world, more than they are aware of their real existence. With this in mind, the positive efficacy of serious games as a learning tool has been shown to be beyond doubt. Adding a good dose of entertainment to this advocating of EGBL, we strongly believe that we can make a difference for all walks of training and educational requirements. Through presenting real life scenarios in a game environment, users are able to engage better with the material they need to comprehend. The learning environment becomes a virtual environment which has no 'real' risk or cost to the organisation's stakeholders. In turn, their employees become fully equipped in an entertaining and engaging way (i.e. without displaying the usual traits of training reluctance and disinterest) to face the organisation's real challenges.

## FinMan – a case study at NWU: Vaal Triangle Campus

Financial management has been seen as a stumbling block by many students in their quest to completing their School of Accountancy qualifications. In our pursuit to identify novel ways of connecting students with the study material, we have decided to use a serious game. FinMan, a 3D game written in Unity and making use of Blender for the modelling and animation of its characters, is a serious game in the sense that it makes use of gaming technologies to promote an engaging environment in which effective learning of financial management concepts and principles can take place.

Best practice dictates that subjects which require students to make calculations need to be practised on a continuous basis. Through observation and interviews with students, it was found that students do not invest enough of this required practice time into their homework. As a result, students fall behind in their work and are not able to maintain pace with the increasing difficulty of the subject matter.



Mandela27 Pictures – Artist: Tiwonge Kanchenche, Graphic Design, Vaal University of Technology (VUT)

FinMan is developed with the purpose to motivate students in doing exercises in an immersive and explorative environment. FinMan specifically focuses on the Time Value of Money (TVM) principle, as it is the foundation for the rest of the financial management concepts. Various game world challenges within FinMan have been designed and developed to address common difficulties that students face in financial management.

One important issue is that many students do not sufficiently understand the scenario-based questions (case studies) they are confronted with. They find it difficult to dissect the scenario into the relevant information required to successfully answer the question. In order to progress through the game, students are required to put the facts they find into categories. For instance, a fact may be that you would like to invest R10 000. This fact points to the present value of a TVM problem. By iteratively doing this exercise (i.e. playing the game), students start to recognise these facts when they find them in questions.

Another critical issue that has been identified is that many students do not know how to use a financial calculator. FinMan provides fun tutorial scenes that guide students in calculating the answers to the provided questions using an onscreen financial calculator. The game calculator has been modelled to suit the FinMan's look and feel without compromising the recognition of real calculator button inscriptions. Furthermore, the tutorials are designed in such a way that students have to answer the questions correctly in order to progress.

A first version of FinMan has been put through a series of focus group research discussions and has also been piloted with a group of last year's Financial Management students. The feedback received from the debates and pilot study point to a very positive recognition of the added value a game such as FinMan will have to the Financial Management module. FinMan will be fully integrated into the Financial Management module in the second semester of 2013. We intend to statistically show the effectiveness of the FinMan implementation by comparing 2013 key performance indicators, such as student throughput and average, with those of past groups.

## Other significant projects

### TimesTravel

This is a serious game aimed at helping primary school pupils with learning their times tables which is expected to be completed in October 2013.

## Mandela27 – [www.mandela27.eu](http://www.mandela27.eu)

This is an EU project that aims to raise cultural awareness between Europe and SA for the time period in which Nelson Mandela was incarcerated. SGI-SA is responsible for creating a serious game about life in Robben Island prison.

The style of serious game that has been selected for this project is an interactive graphic novel with a mystery component that will depict life as it was for the political prisoners held captive in Robben Island Maximum Security Prison. The aim of the graphic novel is to educate people in Europe as well as South Africa about the conditions of prison life on Robben Island.

With this in mind, we are making use of students to create the content and artwork for the graphic novel. The students are given the artistic freedom to create compelling and engaging material that will be readily appreciated by their peers (the primary target audience of the educational graphic novel).

On the other side of the spectrum we at SGI-SA feel that it is paramount to keep the content sensitive to the actual conditions in the island prison, without trivialising it. To achieve this, we have communicated with ex-political prisoners as well as viewed recorded interviews, made available to us by Robben Island Museum, with people who were held captive on the island.

Furthermore, SGI-SA intends to host focus groups with various audiences and stake holders in order to determine the most suitable story line, both visually and as a whole, for the graphic novel.

By the end of May a full story board for the novel will be presented on the website and the full Interactive Graphic Novel itself will be available in November of this year. **TSB**

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# Crossing the language divide

Language localisation tips to unlock the emerging middle class opportunity in Africa.

*By Ian Henderson, CTO Rubric South Africa*



*Ian Henderson, CTO Rubric South Africa*

**A**s more and more companies line up to enter Africa, the world's second most populous continent with a rising middle class of more than 300 million, companies with language localisation strategies will enjoy early-mover advantage.

## Why local language is important

According to research from Common Sense Advisory, 72.4% of consumers are more likely to buy a product with information in their own language.

But English is spoken as a first language by less than 5% of the world's population, and by only 470 million to 1 billion as a second language. In South Africa, English is the official language that predominates, and yet it is spoken as a first language by only 9.6% of people – far fewer than isiZulu (22.7%), isiXhosa (16%) and Afrikaans (13.5%).

Further north, Africans have for decades had to be satisfied with being served in English, French and Portuguese. Colonial languages are seen as destructive of local languages, and even as tools by some to keep control over the masses.

## Market opportunity beyond elites

The economic picture taking shape on the continent is one of growing affluence. In fact, the International Monetary Fund says that between 2011 and 2015, African countries will account for 7 of the top 10 fastest-growing economies. Companies that want to share in this stupendous market opportunity must translate to penetrate the market beyond the elites.

Already, leading South African companies are immersing themselves in the real Africa – including Business Connexion, Vodacom, MTN, Checkers and Nandos. These front-runners are learning hard-won language lessons, some of which can be summed up as follows.

### • Gear up for greater human effort

Translators in Europe and the Far East have it relatively easy. Terms like 'IP address' or 'software' have been thrashed out, codified and are available with the minimum of internet-based research.

Not so in Africa. A huge amount of grind is needed to unearth local language translations for many modern concepts. Many



African languages have not even been committed to books. Translators in more mature markets are also more adept at working with translation technology. In Africa, the level of required training and support is much higher.

The way to get around this is to partner with a language services provider that understands local conditions and has built up and trained an extensive network of translators, skilled in using modern translation technology.

#### • Take care of quality

Community translation initiatives and projects such as those under the auspices of the African Network for Localisation (ANLoc) do fantastic work at heeding commercial and language preservation goals.

But ANLoc has also shown that quality control is very important with such ventures. To this end, the organisation is currently working with industry players to use commercially proven quality assurance processes for its own community translation initiatives.

Make sure your localisation partner has the skills to test and ensure the quality of translations to avoid missing the mark or, even worse, causing offence.

#### • Developed for, and by, Africans

Localisation isn't only about adapting to the language and cultural sensitivity of a specific country, but also about the value of a local footprint to tap into unique local thinking.

Companies like Adobe have set up development centres in India – originally to cut back on production costs, but the rejuvenating influence of emerging market cannot be discounted.

Pay-as-you-go originated in a country with a very different world view from developed markets – South Africa. And M-PESA was developed by Kenyans, for Kenyans living and working abroad, as well as for other African Diaspora.

#### Start small, but plan to scale

It's good to start small, but look to the future. 20 years ago, Toshiba started its multinational ambitions with translations

in three languages. Today, with competitive pressure from HP and Dell, the company translates into 24.

Toshiba's language localisation solution is clever and simple – it uses a computer-aided translation solution that speeds up the translation-to-publishing process by cutting repetitive formatting out of the translation refinement process.

Typesetting (in XML/DITA) is done once in English, and used to automatically typeset all the translated languages. This cuts days out of each new translation effort, reducing costs significantly. In addition, the existing language databases assist in future updates of texts, greatly expediting future outcomes. **TSB**

#### Contact details

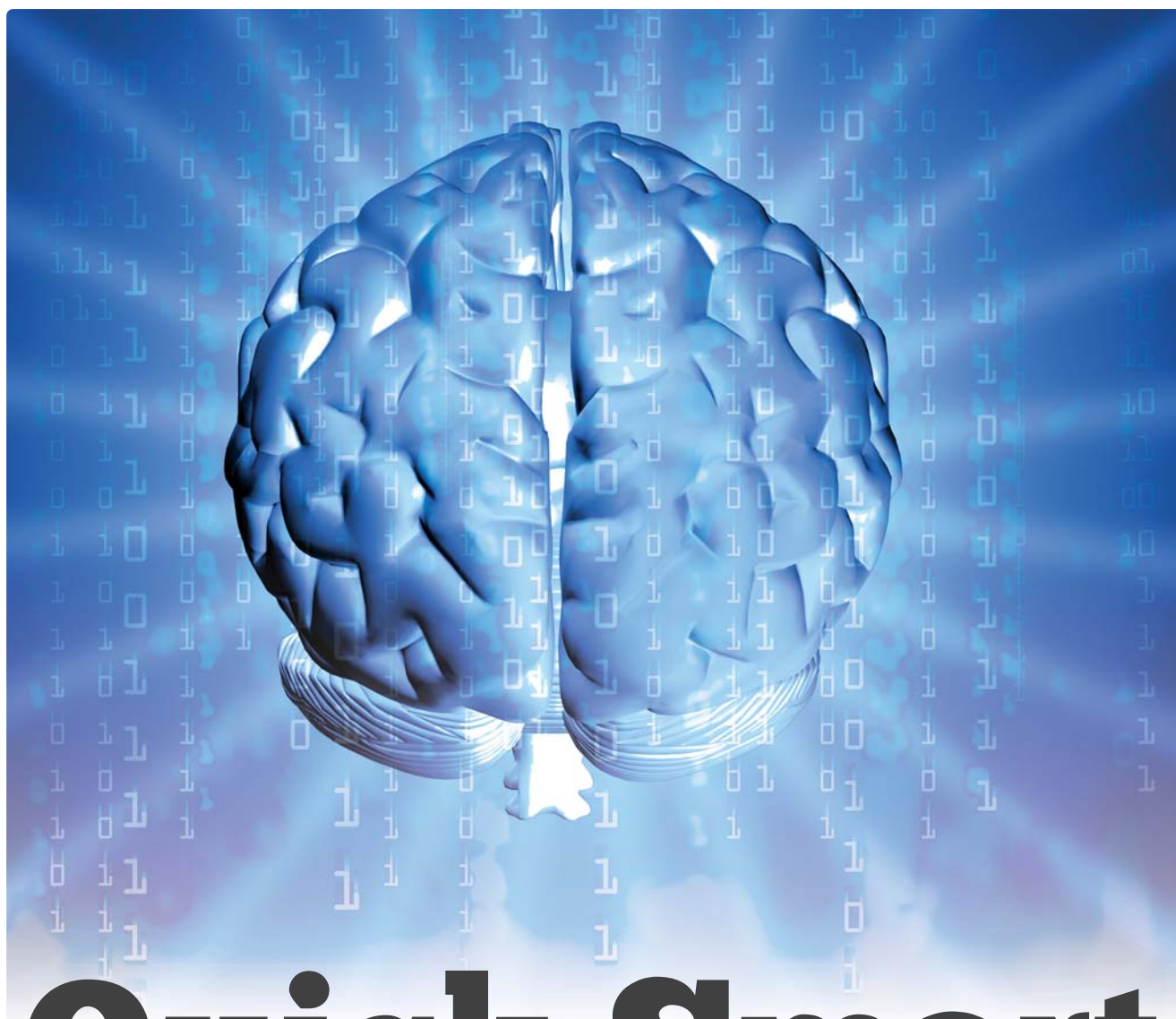
[www.rubric.com](http://www.rubric.com)

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### Localisation: It's not just manuals

A few rudimentary checks before you get started:

- When entering a new market, consider more than your literature – how will you deal with local-language support calls?
- Consider your customer segment – do you serve businesses or consumers? For the former, English may suffice.
- Plan long-term – for now, the bilingual person in your office may be enough, but for your next software release, translation automation by way of a database of phrases is the way to overcome this.
- Get clean – experience has taught us that fragmentation is bad when multiple translations are under way. Quality assurance of the master document will flow through to every subsequent translation in the same format. Before embarking on translations, clean up the English document first.
- Ensure compliance with local regulations that have an impact on the text – such as business approval, foreign exchange, electric Type Approval etc.



# Quick Smart

We have all heard the old adage that knowledge is power. This is true in all facets of life but is especially relevant in the corporate business world of the 21st century.



**Y**our company power, in this instance, comes from how well your staff is trained and how adept they are at their respective tasks. That said, technology constantly evolves, new people are hired and things are perpetually in a state of flux. Keeping your employees up to scratch is vital but who, in this 24/7 world, can afford to have a revolving training door at their company where people are constantly on courses for extended periods of time?

With this in mind TechSmart Business had a chat to Leon Smalberger from Learnfast, a company that specialises in delivering short courses to the corporate world that are,



above all, practical in their application. "Many companies need to enhance their employees' soft skills in a variety of areas and cannot afford, be it time or money, to send them on long term programmes. Our gamut of courses, in excess of 200, cater to just about every training need a company may have, and we specialise in short form courses. We make sure that our training is relevant to the job the learner is doing and we generally do not offer anything over five days in length."

Learnfast has an extensive network with campuses in Centurion, Sandton, and Boksburg, and training facilities in the North West Province, which puts them in a great position to cater to a wide geographic area. "That said, we also do on-site training at the customer's premises. We will go out and assist in building a custom curriculum for the companies' specific needs so they get exactly what they need in terms of training. Should the customer not have on-site facilities or is located in a rural area, we have mobile training centres that will go to the students."

As with any industry, there are a number of fly by night operations that offer training courses which are not worth the paper they are written on. Smalberger says that there are a few things to look out for when choosing your service provider, among them, accreditation. "We go to great lengths to ensure we are accredited with the respective institutes and organisations. For example, all our computer training is accredited by the various software vendors namely Microsoft, Pastel, Corel, ComTIA, etc. Coupled to this, you should always ask for references and follow up on the performance of the prospective vendor with other companies."

With over 200 current courses on their books, and more being added every week, Learnfast has a solution to fit your training needs and budget. On offer is everything from computer skills and project management to stress management and labour relations. "To further facilitate success we strive to make the whole experience pleasant. Our offices, campuses, and brand has been designed to make sure that the learners not only enjoy the content presented, but the whole flow of the course, the facilities and the outcome of their efforts." **TSB**

#### Contact details

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### Computer Courses

All computer courses provide and develop essential skills to assist in growth and improvement of computer abilities.

- Microsoft SQL Server
- Microsoft Office
- Adobe Creative Suite
- CorelDraw
- Apple
- Pastel Accounting
- CAD
- PC Technician (CompTIA)
- Microsoft Visual Studio

### Soft Skills & Business

Soft skills enhance an individual's interactions, job performance and career prospects. Soft Skills relate to a person's ability to interact effectively with co-workers and customers and are broadly applicable both in and outside the workplace, this is an important part of their individual contribution to the success of an organisation.

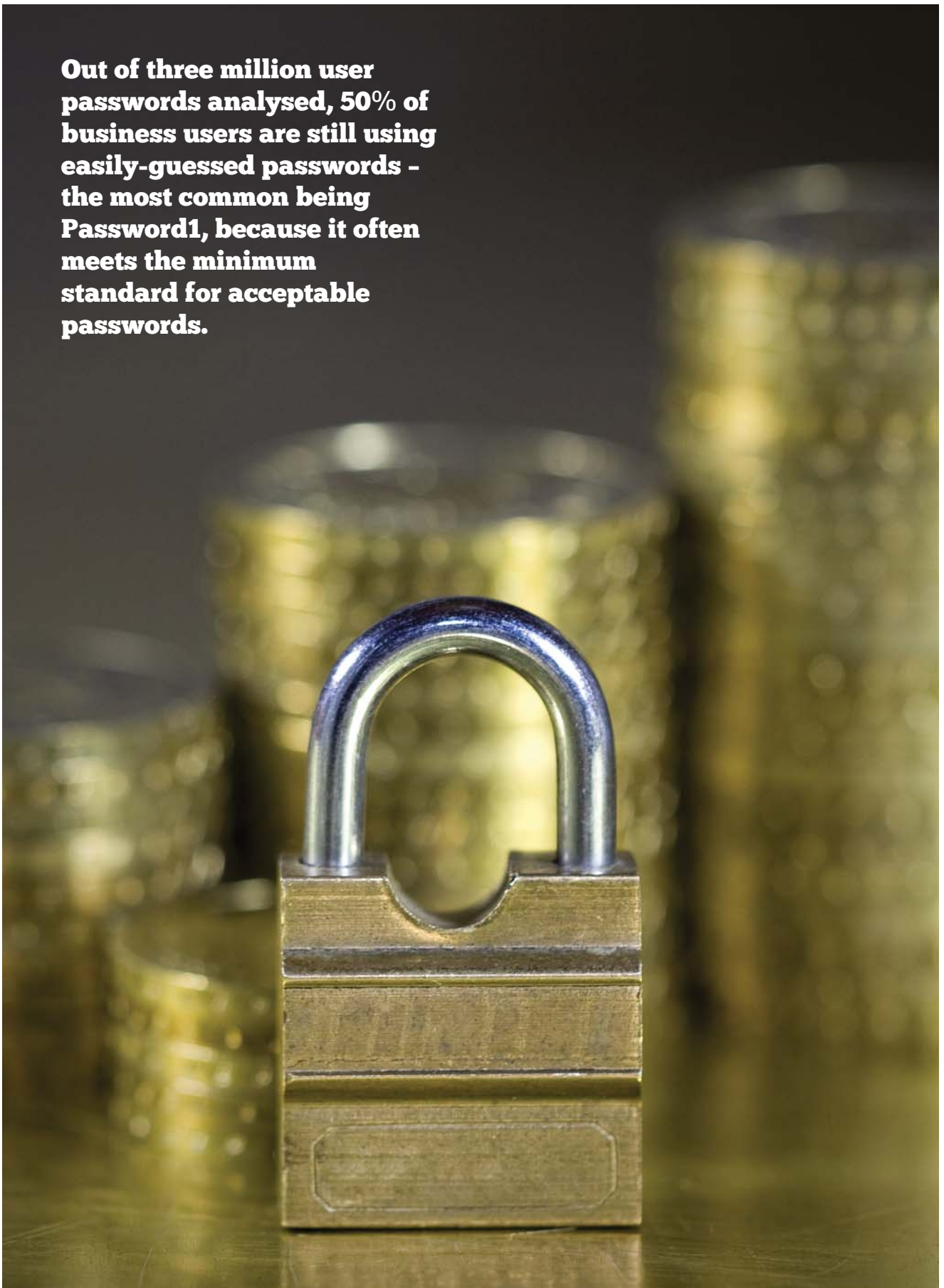
- Marketing Basics (Plan, Create, Execute)
- Train the Trainer
- Effective Presentation Skills
- Time Management
- Presentation Skills Bundle
- Conflict Management
- Professional Business Writing
- Consumer Protection Act

### Workshops

A range of affordable half-day workshops and seminars

- Get Started with Google AdWords
- Submitting Your Personal Tax Returns
- Using your Apple iPad / iPhone

**Out of three million user passwords analysed, 50% of business users are still using easily-guessed passwords - the most common being Password1, because it often meets the minimum standard for acceptable passwords.**



# Cyber Barbarians at the gate

If you think the generic, off-the-shelf security solution you have for your IT Infrastructure is doing the job, think again. Hackers and organised crime syndicates are constantly knocking at your cyber door looking for any weakness to exploit – but there are ways to fight back.

**A**s an organisation Trustwave has been around since 1995. The company initially started out focusing on consulting within the security and compliance environment. This, however, changed once all the major card companies nailed their colours to the mast and took a stand against card fraud. Then followed the birth of the standard Payment Card industry Security Standard (PCIDSS) which is a standard for anybody who accepts credit cards from the merchant to the bank, and everybody in between. Trustwave was the first organisation to be globally recognised by all the card companies as a qualified security assessor (QSA) to go out and do audits on organisations to see whether they comply with the standard.

Through this process, the assessors at Trustwave started identifying gaps in many organisations' information security platforms. With this in mind, Trustwave has been on an acquisition drive over the last few years and have acquired certain companies and technologies that add value to an end-to-end security platform. The idea behind this lies in the goal to provide a completely unified process from a single supplier. "We want to be seen as specialists in information security with specific focus on certain types of technology within that platform," says Trustwave country manager Andrew Kirkland. "Trustwave wants to offer companies solutions that address business issues relating to security. Many of these issues revolve around credit cards being stolen and turned into cash very quickly. Essentially this is the mantra of hackers and cyber criminals – they look for breaches where data or information can quickly be turned into cash. Coupled to that we also see data such as personal information being stolen, identity theft, financial results, insider trading etc. which all comes out in the wash during the PCIDSS assessments. It was because of this that we have decided to offer a more holistic security offering with multiple product sets and technology platforms to



*Trustwave country manager, Andrew Kirkland*

## **High-end security is essentially a grudge purchase.**

ensure comprehensive data security. We will, essentially, probe and test your system, find all the weak spots and put measures in place to plug all the gaps."

### **Africa prime target**

Kirkland notes, high-end security is essentially a grudge purchase. "It's a lot like insurance, nothing may happen for years but in a crisis you wish you had it. In addition to this Africa has become a prime target for criminals because companies are behind the curve as far as their security is concerned. This is not altogether a bad thing as we can



play catch up quite quickly because the solutions have already been developed elsewhere. We can quickly go and pick out a blueprint that suits our business and apply it to suit a model. There are solutions for every situation.”

#### Retail bears the brunt

To further highlight the problems the 2013 Trustwave Global Security Report had some interesting insights into the global security situation. The report highlights details and trends from more than 450 global data breach investigations, more than 2 500 penetration tests, nine million web application attacks, two million network and vulnerability scans, five million malicious websites, 20 billion emails as well as extensive research and analysis of zero-day security threats. All of the information is Trustwave’s own data collected and analysed by Trustwave security experts, not surveys.

This year’s findings revealed the retail industry is now the top target for cyber-criminals. For the first time, the retail industry made up 45% of Trustwave data breach investigations (a 15% increase from 2011) with e-commerce attacks emerging as a growing trend surpassing the amount of point-of-sales attacks. Additionally, mobile malware increased 400%, with malware found on Android devices growing from 50 000 to more than 200 000 samples. The report also revealed that out of three million user passwords analysed, 50% of business users are still using easily-guessed passwords – the most common being “Password1” because it often meets the minimum standard for acceptable passwords. The findings indicated that in 2012, nearly every industry, country and type of data was involved in a breach of some kind with cyber-security threats increasing as quickly as businesses can implement measures against them.

“Cyber-criminals will never stop trying to compromise systems to obtain valuable information such as customer and private user data, corporate trade secrets and payment card information,” said Robert J McCullen, chairman, CEO and president of Trustwave. “This year’s Global Security

**Educate employees.**  
**Employees are the first line of defense against attackers.**  
**Organisations should conduct security awareness training on a regular basis for all existing and new employees.**

Report pulls back the curtain revealing how breaches happen and how potential victims around the world can protect themselves so that they stay one step ahead and eliminate potential security threats. After reading this report, businesses and government agencies will be one step closer to building a comprehensive security strategy to reduce risk, protect data and safeguard their reputation.”

#### Other key report findings

- Applications emerged as the most popular attack vector.
- E-commerce sites were the number one targeted asset accounting for 48% of all investigations.
- 64% of organisations attacked took more than 90 days to detect an intrusion with the average time for detection being 210 days – 35 days longer than in 2011; 5% took more than three years to identify the criminal activity. Most victim organisations still rely on third parties, customers, law enforcement or a regulatory body to notify them a breach has occurred – a worldwide security problem.
- Employees leave the door open to further attacks. Whether due to lack of education or policy enforcement, employees pick weak passwords, click on phishing links and share company information on social and public platforms.
- Attacks were discovered in 29 different countries. The largest percentage, 34.4%, originated in Romania.
- Spam volume shrank in 2012 but still represents 75.2% of a typical organisation’s inbound email and roughly 10% of spam messages are malicious.
- Businesses seem to be rapidly adopting an outsourced, third-party information technology operations model. 63% of investigations revealed a third party responsible for system support, development or maintenance, introduced security deficiencies easily exploited by hackers.
- The two most noteworthy methods of intrusion, SQL injection and remote access, made up 73% of the infiltration methods used by criminals in 2012.
- Out of the 450 cases investigated in 2012, about 40 variations of malware were found. Trustwave attributed the 40 unique types of malware to six



criminal groups. Three criminal teams caused the majority of payment of service credit card breaches. Russia and the US are the largest contributors when it comes to malware attacks making up 39.4% and 19.7% of hosted malware, respectively.

"Businesses should take a step back and re-evaluate their security posture," added McCullen. "All developers, particularly in the e-commerce industry, should implement a

full lifecycle security plan that includes thoroughly educating themselves and their employees, equipping themselves with the best tools to protect themselves against attacks and making sure they are using the most reliable resources for zero day detection." **TSB**

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## Top Security Recommendations for 2013

To improve security posture, Trustwave recommends six focus areas for organisations in 2013:

- **Educate employees.** Employees are the first line of defense against attackers. Organisations should conduct security awareness training on a regular basis for all existing and new employees.
- **Identify Users.** Every user-initiated action should be tagged to a specific person, whether in a physical or digital environment. Every year, a significant number of data breaches occur as the result of an attacker obtaining access to a user's account.
- **Register Assets.** With the increase of bring-your-own-device (BYOD), it is more important than ever to have a complete inventory or registry of valid devices. A device should never be allowed access to a controlled environment unless it's registered and known. In addition, the patch levels and vulnerabilities should be assessed on a regular basis not only to work to improve the security of those in the environment but also to understand what risks exist when issues can't be resolved in the short term.
- **Protect Data.** Attacks are more sophisticated than ever, and keeping cybercriminals out requires a multi-faceted approach. Businesses should implement a 'more than technology' approach to security that includes team training and education, secure code review, and periodic penetration and vulnerability testing for e-commerce web applications, as well as a data lifecycle methodology that governs data from creation to destruction. They should also create resiliency in systems by layering proven technologies such as a powerful secure web gateway and a web application firewall that can be deployed to improve protection and performance of business-critical applications, with virtual patching capabilities that combat threats in real-time.
- **Unify Activity Logs.** Most businesses today treat physical and information security controls separately. Badge systems, HR records, and even loss prevention are not typically tied to the same team that monitors firewalls, intrusion detection and other security technology. Businesses should employ technology like security information and event management (SIEM) to take over the processing of these logs.
- **Visualise Events.** The ultimate goal for organisations should be to develop an environment in which security threats are discovered innately – by both responsible security professionals and others in the organisation. Security event visualisation allows businesses to identify patterns, emerging vulnerabilities and attacks, and respond quickly and decisively across the organisation when an attack does occur. Using the right data sources, advanced SIEM analytics, and data modelling, security event visualisation prepares businesses to effectively mitigate current and future threats.

# Total security across all platforms



*Gert-Jan Schenk, President McAfee, EMEA*

McAfee president for the EMEA region, Gert-Jan Schenk, recently visited South Africa and TechSmart Business sat down with him for a candid, informal look at the evolution of the security landscape and what McAfee is doing to combat ever increasing threat levels.

According to Schenk, the intensity and sheer quantity of malware and cyber attacks are growing exponentially. "You cannot open a newspaper or listen to the news today without hearing that something has been breached or a website has been brought down. The motivation for these attacks has also changed dramatically over the last few years, from hackers plying their trade for status within their community, to breaches being perpetrated by large, extremely well funded, professional organisations with specific agenda's. These motivations include political agendas – hacktivism – governments engaged in cyber-warfare, and, most obviously, organisations that just want to steal money, intellectual property and valuable data. Coupled to this, it is getting easier to get your hands on malware which is freely available online and you can tailor it to fit your specific needs"

## All platforms are under threat

The three biggest targets at the moment are the oil and gas industries, critical infrastructure and financial services. "We also see that mobile devices are being targeted more frequently today as the barriers to entry are not that sophisticated. If we look at PCs, almost all of them have some form of security in place but most mobile phones have none at all. This is a big reason why cyber-criminals are shifting their attention from servers and PCs to devices that, in essence, have the same functionality and access to business systems."

The biggest challenge at the moment, says Schenk, is defining who is responsible for security due to the blurring lines between business and private devices. "It is very difficult to implement restrictions on how people use their personal devices in the business space. Traditionally, security was about ticks in a box – parameters were defined and could be addressed. This is not good enough anymore. The whole threat landscape and the dynamic of security has changed, fundamentally, over the last few years."

## Mobile: The new doorway

Going forward, McAfee and Intel, known for driving innovation and standardisation, are looking at securing the mobile, wireless space. "Intel has seen that mobile devices are only going to become more prominent and, that said, need to be secure. To this end, Intel has a



**The biggest challenge at the moment, says Schenk, is defining who is responsible for security due to the blurring lines between business and private devices.**

strategy called Hardware Assisted Security. There are so many hooks and angles within the Intel processors for security, which have been there for years, but are underutilised. What becomes very important, if you want to protect the system against root kits, then it is not good enough that the security software runs as an application on top of the operating system. What happens is, you start the system, all the root kits are coming out, the operating system boots up, and only then are the applications initialised. This is too late for total security.

"During the bootup process the device is completely unsecured and this is exactly where we see sophisticated attacks occurring. To defend against these new threat vectors, McAfee has introduced two products, McAfee Deep Defender and McAfee ePO Deep Command, that leverage the power of Intel vPro Technology to extend client security beyond the operating system. Deep Defender uses McAfee DeepSAFE technology, jointly developed by McAfee and Intel, to detect and block stealthy attacks like no other security solution. McAfee ePO Deep Command provides a new approach to security management by working with Intel Active Management Technology (AMT) to enable an advanced level of control over PCs. Both Deep Defender and ePO Deep Command are available as an extension to the Security Connected framework from McAfee." **TSB**

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#### **A risky app may allow someone to:**

- Steal personal information such as banking, email or wireless account details and combine that with location data to put together a complete picture of who you are
- Perpetuate fraud such as an SMS scam that will charge you without your approval
- Abuse a device by making it part of a criminal bot network, which allows someone to remotely control your phone

## Quick Facts

### Risky Apps:

Cybercriminals are going to great lengths to insert infected apps into trusted sources such as Google Play and the risks within each app are becoming more intricate. As a matter of fact, McAfee Labs found that 75% of the malware-infected apps downloaded by McAfee Mobile Security users, who are apt to be more security conscious than the average consumer, were housed in the Google Play store, and that the average consumer has a one in six chance of downloading a risky app.

Nearly 25% of the risky apps that contain malware also contain suspicious URLs, and 40% of malware families misbehave in more than one way.



# Malware on the move

\*\*\*\* VIRUS WARNING! \*\*\*\*



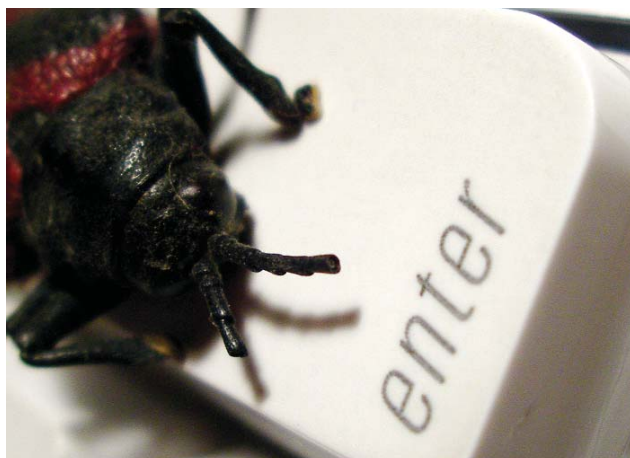
*Justin Lee,  
country  
manager,  
Blue Coat  
Systems*

Phones are smarter, faster, and indispensable in business today. That said, what precautions have you taken to ensure your mobile is not attacked by malware looking to infiltrate your company IT infrastructure?

**W**hen it comes to protecting our data and sensitive information a lot of effort is put into security initiatives both physical and virtual. There is, however, a blind-spot at the moment which allows intruders access to our networks – our mobile devices. Justin Lee, country manager from Blue Coat Systems sat down with TechSmart Business to discuss this ever growing problem and share some of the findings of the Blue Coat Mobile Malware Report 2013.

“Mobile malware is most certainly not new,” says Lee. “We saw the first incarnation some two years ago and, while it may have started out as pure mischief it has quickly graduated into a global money-making enterprise. There are some pundits in the marketplace who state that, because it does not damage your device there is really nothing to worry about. It must however be understood that malware and spyware are not written to break the device, it is written to steal your digital identity.”

This may not seem to be of much concern to large corporate entities but, there is a growing trend of people using their own devices at work, and connecting through the company infrastructure. “The biggest problem with mobile devices lies in the fact that it belongs to the individual and not the company. This creates a problem in being able to restrict what sites the device can visit and what information is transmitted to and from the device. In our study we found that 70% of people that are connected to the internet via their phone also want to be connected to their office as well. Any organisation that wants to allow any device to be able to



**The biggest problem with mobile devices lies in the fact that it belongs to the individual and not the company.**

connect into the enterprise infrastructure has to have the systems in place to be able to safeguard their information.”

Currently the way the malware gets installed is a very targeted process. “We still see search engine poisoning. This is where you will find a site being hacked but not to bring it down, merely to change the content. The most well-known example is when the CNN site was hacked. The hackers do nothing else but change the link to one of the stories. Once you click on the link it still looks and feels like CNN but, in the background, there was a Java exploit running and malware was installed on your PC.”

#### **Automated protection**

The Bluecoat solution offers the protection against malware hitting your machine by sitting between all your devices and

the web. “There is no restriction on what you can view on the internet but anything malware related, any app or script that tries to load in the background, will automatically be blocked. It is nice to know that you have a big brother in the back-end permanently looking after you and protecting you from all the malware, spyware and viruses on the internet today. The biggest selling point, in my opinion, is the ease of use factor. We are constantly writing apps, and programmes to make our life easier and this is the ethos Bluecoat follows. People can continue to use their apps, transact online, whatever they want, and they do not have to worry about the risks involved – we will take care of it.” **TSB**

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## **Anatomy of a Mobile Malware Attack**

In September, Blue Coat Security Labs examined an Android attack launched by a known malnet. In this particular attack, a user was offered an Android version of Skype via a website that lived on a sharedweb host with many other sites. There was nothing suspicious about the web host though the fact that the offer was delivered via a Russian website should have been an immediate red flag for users.

When a user clicked on the download button, they were relayed to a different website that was in a bad internet neighbourhood – one known to be associated with suspicious and malicious activities. The user was then relayed to another known suspicious site for the actual download. At the time of this attack, the download was recognized by only 10 of the 41 anti-virus engines in Virustotal.

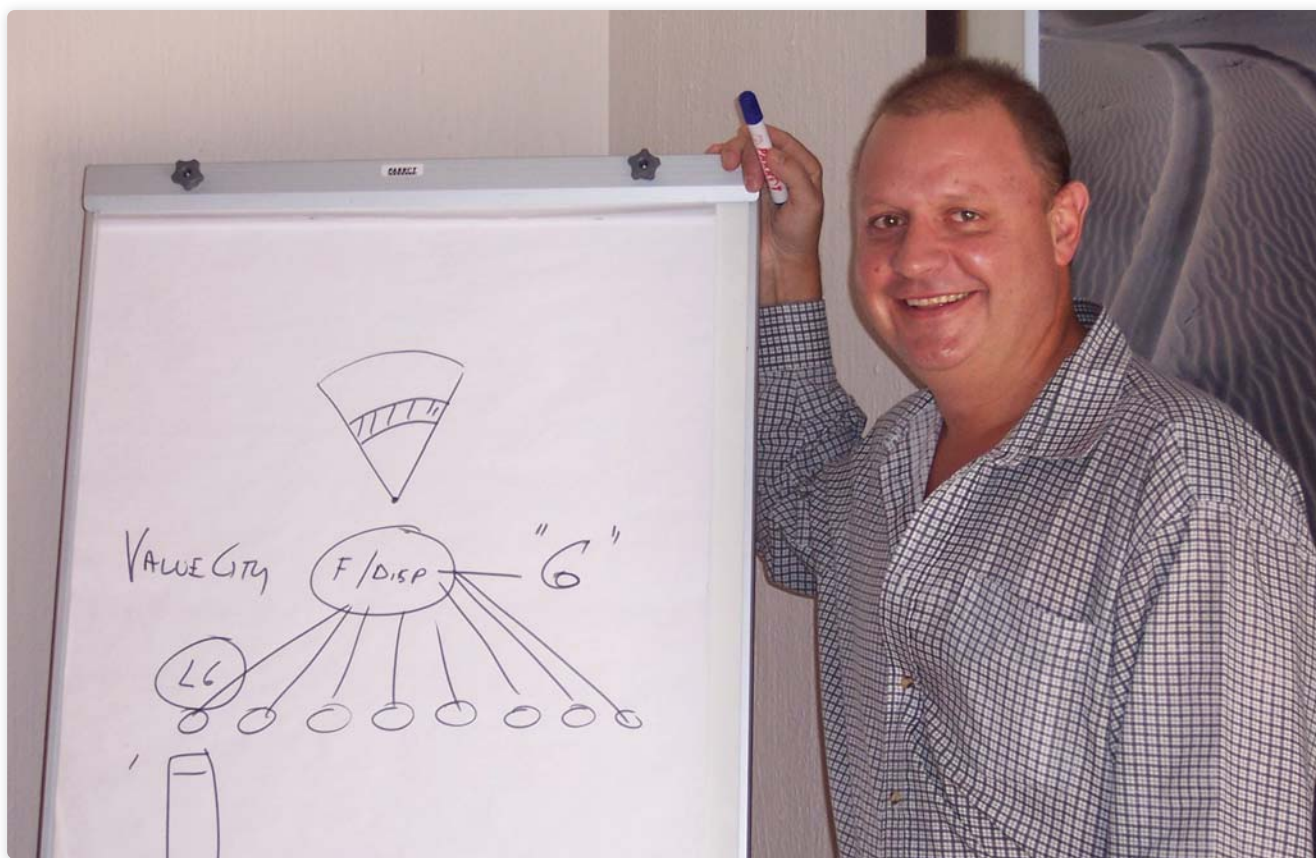
During the same week that this attack occurred, one of the mobile malware malnets used 38 domain names and another used 14 domain names for a variety of sites that were involved in attacks. Among the sites were two Flash update sites, four pornography sites, a movie site, a

couple of browser sites and several general file and app sites. The diversity of these concurrently running attacks shows that although mobile malware is in the early stages, it is clear it will continue to grow and become a problem for users as well as businesses that allow those users access to the corporate network.



# Fleet management vs asset recovery

By Deon Bayly, MD, MTrack



**It is a common misperception that fleet management systems are also effective recovery systems. This is absolutely not the case.**

**I**n South Africa the term “vehicle tracking” has become so entrenched and generic that people tend to take it to mean any supplier who provides any system which combines the installation of an electronic device in a vehicle, or fleet of vehicles, with purpose-designed computer software to enable the owner or a third party to track the vehicle’s location, and collect data in the process.

This term has come to mean both fleet management (and vehicle monitoring in its simplest form) and asset recovery,

but, these two applications are not one and the same thing.

A vehicle tracking system is basically an electronic device installed in a vehicle that emits a signal that allows its location to be pin-pointed almost anywhere in the country. It can then be used to transmit data, or it can be located by land or air-based recovery teams.

The actual technology used differs from supplier to supplier in that some employ satellites (GPS) and others radio signals or cellular technology. Most modern vehicle tracking systems use Global Positioning System (GPS) modules for accurate location of the vehicle. Many systems also combine a communications component such as cellular or satellite

**GPS signal too is easily shielded - it generally needs to see the sky - so when the asset is moved indoors or into a basement GPS tracking usually fails.**



transmitters to communicate the vehicle's location to a remote user.

Vehicle information can usually be viewed on electronic maps via the internet or specialised software.

#### **Fleet management**

Fleet management in Southern Africa, has evolved over the last decade in a combination of both vehicle and driver management. This can have a major impact on vehicle running costs.

Fleet systems are designed to address many of the operational challenges prevalent amongst commercial fleet operators. These include basic activity monitoring, reduction of operating costs and enhancing the management of the supply chain.

Fleet systems are of course also supposedly designed for asset tracking and recovery, but this they do far less effectively.

#### **So, what is asset recovery?**

Asset recovery is quite simply the ability to track and recover a stolen asset when required. It's a simple definition, but extremely difficult to get right in practice on a consistent basis.

#### **Limitations of fleet management?**

The harsh truth is that, despite the claims and assurances of the many suppliers, a wired fleet system is largely ineffectual as a recovery tool. Suppliers – and there are many of them – often who claim recovery rates for their wired products in the high 80 percents for commercial clients. Well I quite simply do not believe them.

Unfortunately, suppliers of wired vehicle tracking or fleet management systems have systematically been programming customers to believe that fleet management systems are also viable methods for the recovery of the asset in the event of a loss.

Fleet management systems by their nature have to be wired into the vehicle. A GPS system, particularly one drawing and transmitting relatively large amounts of data requires a great deal of power. This makes them effective for vehicle

monitoring but notoriously weak at recovery of assets as, being wired, they are extremely easy for criminals to locate and deactivate, rendering them useless.

GPS signal too is easily shielded – it generally needs to see the sky – so when the asset is moved indoors or into a basement GPS tracking usually fails.

This of course all usually happens in the horse. As far as the trailer is concerned, generally the lack of a reliable power source in the trailer has meant that such tracking devices have been largely ineffective. This essentially leaves the trailer untracked, which is often where the value and the interest of thieves lie. Criminal gangs know this, and have recently started driving their own trucks to pull the untracked trailer unit with its full load.

#### **Some issues**

The issue has always been that no tracking systems were available that could be concealed within the load itself as well as inside trucks and storage depots. Why? Battery power has always been the problem. Every time one has to access a unit to recharge or replace the battery your security is compromised.

It is also difficult to get GPS lock in these locations. As far as recovery goes, the best feature of a typical FM system is the typical power off alarm. At best a fleet management system indicating a power off alarm then acts as an early warning that something is amiss with that vehicle. After that the client is usually very much on his own as far as recovery goes.

#### **Asset recovery**

In terms of asset tracking and recovery, there is no doubt that the most effective systems are wireless, meaning that they can be embedded anywhere in the vehicle, trailer or cargo and there are no wires or antennas to trace. However, the majority of such wireless systems suffer from very limited battery life and as such are unable to report any meaningful vehicle information in order to conserve battery life.

Also, each time that device has to be accessed in order to change the battery or recharge it, your security is compromised. In many cases the drivers or other staff are

## No system can do everything perfectly.

involved, and the more times one has to access the tracking unit the more opportunity there is that the wrong people will get to know that it is there.

There is no system in the world that can protect an asset if the perpetrators realise that it is there and know where it is located. Most thefts involve an insider, and they will very soon get to know that there is a wireless tracking device. In some cases the thieves park the stolen vehicle in an underground garage to block its signal. They then leave it for a few hours or days to see if the tracking company or police arrive on the scene. Hence the need for technology that can still be recovered underground.

In order to be effective, a recovery device needs to be self contained and wireless with exceptional battery life. This enables tracking and recovery of vehicles and assets throughout the country, using a combination of GSM and RF technology, which does not need an external antenna or to be mounted where it can see passing satellites, as is the case with GPS systems.

### Limitations of asset recovery

Just as Fleet systems are limited when it comes to recovery, so too recovery devices are limited when it comes to fleet management functionality. Being battery powered, the management of power consumption is obviously of paramount importance. There is therefore limited positional reporting and virtually no telematic data.

That said, remember:

- You get your asset back!



- You don't let down customers
- You save on insurance excesses and maintain your premiums
- If you are self insured it is a straight bottom line gain
- You are able to break syndicates, preventing them from targeting your business in future

### The ideal solution

No system can do everything perfectly. The “best of both worlds” solution then is a top of the range fleet management system able to manage the fleet through delivery of all of the functionality requirements of the clients. The ability to couple this with the peace of mind of a proven wireless asset tracking and recovery device with exceptional battery life, enabling the unit to be “embedded” into an asset and left for a year, would be pretty close to an ideal solution. If this could also be sourced from a single vendor, managed and monitored by a single control room and if both products could be web based enabling the client to access his data from anywhere in the world, then surely this would be the ultimate solution!

Of course, these measures are not foolproof in a society with very innovative criminals, but they make the process of stealing much harder, the rewards lower and the potential of being caught much, much higher. **TSB**

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# Open

The mobile era has opened up a raft of new possibilities as far as doing business is concerned. That said, it is daunting for companies to choose and implement point solutions tailored to their specific needs and this is especially true in the retail space. The exercise can be prohibitively expensive and, with the ever-changing technology landscape, become redundant in no time at all.

**W**iGroup has, however, addressed this issue in the mobile payments and marketing arena. TechSmart Business spoke to wiGroup CEO, Bevan Ducasse about ensuring that your ad spend translates into actual feet through the door.

**TSB: What are the challenges associated with mobile marketing in South Africa today?**

BD: The key challenge has been the lack of an open platform providing a single point of access to the retailers' points of sale (POS). A fragmented landscape, combined with an understandable reluctance on the part of the retailers to lock themselves in to a point solution has limited the reach and effectiveness of mobile as a channel to transact and to run effective marketing to date.

**TSB: What has wiGroup done to address these challenges?**

BD: wiGroup has developed and commercialised an open and scalable platform that allows retailers to integrate any kind of mobile transaction or app with their point of sale (POS). Retailers no longer need to go through the pain of multiple integrations, or take the risk of being locked into a particular point solution. wiGroup's modular product suite, which sits on top of the wiGroup platform, enables a wide range of mobile marketing, insights gathering and transacting opportunities. As an example, true 'closed loop' mobile couponing, vouchering and rewards campaigns are now a reality for the first time. We already have a range of high profile retailers and brands currently running campaigns through our platform

**TSB: Do you find retailers reluctant to implement this type of technology?**

BD: No, the fact that retailers now only have to integrate once to gain access to and be able to accept any kind of mobile transaction is a very compelling proposition; the value to retailers

# and Shut

is clear and we're seeing strong interest in our platform both in South Africa and internationally.

**TSB: During implementation what are your biggest challenges?**

BD: 'Mobile' has been promised as the next big thing for years now. Business has been exploring the space for a long time and we've seen some traction in certain areas. However, 'mobile' as a marketing and transactional channel is still relatively new to consumers, so at the macro level consumer awareness and understanding is critical to uptake. For mobile marketing, specifically, to achieve high adoption, consumer behaviour must adapt. People must feel comfortable being marketed to and confident in transacting via their phone.

If we're talking about challenges in specific implementations, then beyond the obvious requirement of getting the technical implementation done correctly, it's very important that retailers train their staff how to deal with, accept, and process an in-store mobile transaction, be it a voucher, coupon or reward. wiGroup supports retailers in staff training initiatives.

**TSB: Do you have specific real-world examples of a successful implementation?**

BD: Yes. The platform is currently being used by a range of retailers, the largest of which is Shoprite. The wiGroup platform underpins and provides the technical base for their mobile couponing initiative. Our platform also serves as the backbone for the Mobile Banking partnership between Pick n Pay and MTN

**TSB: With all the spam and scams lurking in the ether, how has the public accepted your product?**

BD: We have seen strong uptake and redemption rates across the majority of campaigns and initiatives that have been run through the wiGroup platform, which strongly suggests that the public is accepting of, and excited about, the ability to receive and redeem value and discounts via their phone. I think the fact that we have such credible partners, retailers and brands, driving these mobile initiatives with us goes a long way to addressing the 'trust' question in the eyes of the consumer.

**TSB: Has there been education campaigns for both staff and customers?**

BD: Yes, before a mobile campaign goes live in any retailer, test



*Bevan Ducasse, CEO wiGroup*

campaigns are run and staff training is given as required. In-store promotion to consumers is also a key part of the education process. It is vital that retailers pro-actively promote the campaigns to drive adoption and uptake, but also to show consumers how to interact with the campaign.

**TSB: How do brands and retailers measure ROI?**

BD: Our platform and product suite provide detailed, real-time reporting across a wide range of key metrics including impression volumes, redemption rates and values, which can be split out by specific mobile channels such as SMS, mobi sites, apps and USSD. Having access to this sort of information is important to brands and retailers as it enables them to monitor the success of their campaigns and react to live consumer behaviour and interaction whilst the campaign is in market. This is a fundamental shift from the days where campaign success or failure was only evident in the post-campaign review. **TSB**

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# The mashup of stuff

by Clive Brindley, Solutions Architect, HP Software, South Africa



Clive Brindley, Solutions Architect, HP Software, South Africa

**I** was recently asked by a friend about what was happening at work and specifically the IT industry. I normally respond to such requests with purpose and no hesitation. But this time he got me, because there I was trying to figure out what to say. Not that I did not have anything to say, I just had too much to say.

The reality is that there is so much happening in the IT industry that it is difficult to know where to start. I told him: "Kev, it's a mashup of stuff". So, what do I mean by this?

Let's unpack the obvious ones. SOA, cloud, enterprise architecture, agility, mobility... The list goes on. Then we must analyse why this 'stuff' is important – why do we actually care about the mashup, as I call it.

Fundamentally speaking it is because this is the stuff that allows business to make things happen. We often talk about business agility, listening to what the business drivers are and making IT relevant in a very new and increasingly competitive landscape.

Each of these 'stuff' elements has been important in the past, but now more so than ever and in a more integrated and 'mashed up' manner. Let me offer an example. Imagine you finished a meeting with the business and left the room with a clear directive. The CIO to Brindley: "I expect the new functionality in three weeks, no delays and with all the requirements fully realised."

## Understanding the impact

So we are talking about the rollout of a new application functionality, quick, on time, secure and ultimately meeting all business requirements. You walk to your enterprise architects and start the discussion, think about the services that you will re-use, build and integrate with. Thanks to your SOA governance strategy and platform, this is easy to obtain and soon you are well on the way to understanding the impact of change to the application architecture, SLAs, service request and the like. You have a full view of the various gates as you move through the Software Development Life Cycle. The business requirements are documented in your application governance solution, synching the business

**The reality is that there is so much happening in the IT industry that it is difficult to know where to start.**

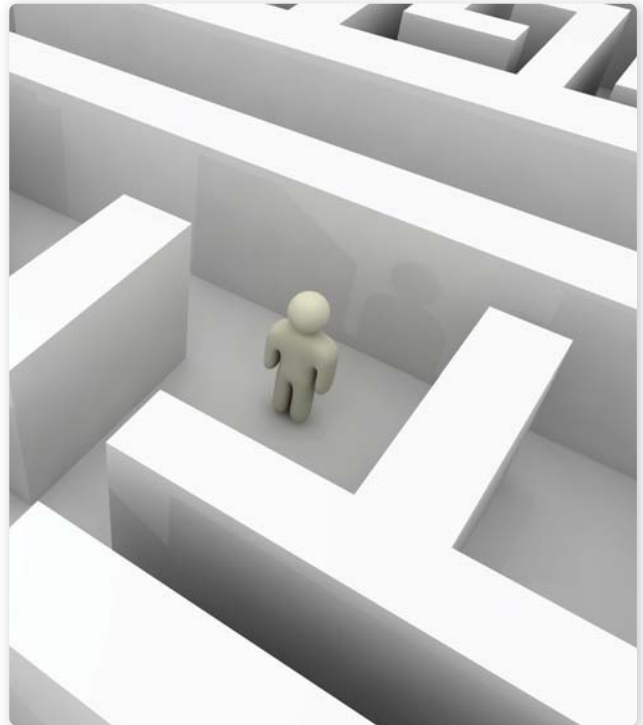
analysts, developers and quality engineers. This allows for agile development and faster releases of required functionality, the right people scrumming together to get the job done. They are all working from common systems of record.

The developer accesses his lab management solution to access his infrastructure services, deploys three virtual servers pre-configured with the required application configuration and starts testing, fixing and then testing again. One week later all the required work is done and the subscription to the cloud service is terminated. Final application testing happens on the mobile device including iOS, Android, Windows and more. The application is tested for performance and stressed to accommodate 10 000 online users, all from the very same integrated application quality assurance platform. This, by the way, occurred on a separate cloud platform that the QA team use. Due to the immediate nature of the business requirement, an external service provider was used.

Oh, I forgot to mention that the new code was loaded into the cloud to be tested for application vulnerabilities. 24 hours later critical security defects are identified and the developers know what to fix, or else bad things might happen and all that new sexy functionality will be pretty much irrelevant. Functionality, check. Performance, check. Security, check.

Initiate the change management request, provide the relevant data for impact analysis, appease the change management gods and we're ready to go. There you have it, zero to 300km/h in no time. All possible because of an integrated ecosystem of "stuff", supporting the modern application lifecycle.

It is simply not good enough for these acronyms to live in silos, they all have purpose but nothing like when they come together to support the promise that I made at the beginning of the story. The response went something like this: "No problem boss, this will be an easy one to deliver. I would like to get a game in next week, tee off at 9am?" **TSB**



# The true cost of freeware

By Bruce von Maltitz, 1Stream



Bruce von Maltitz, 1Stream

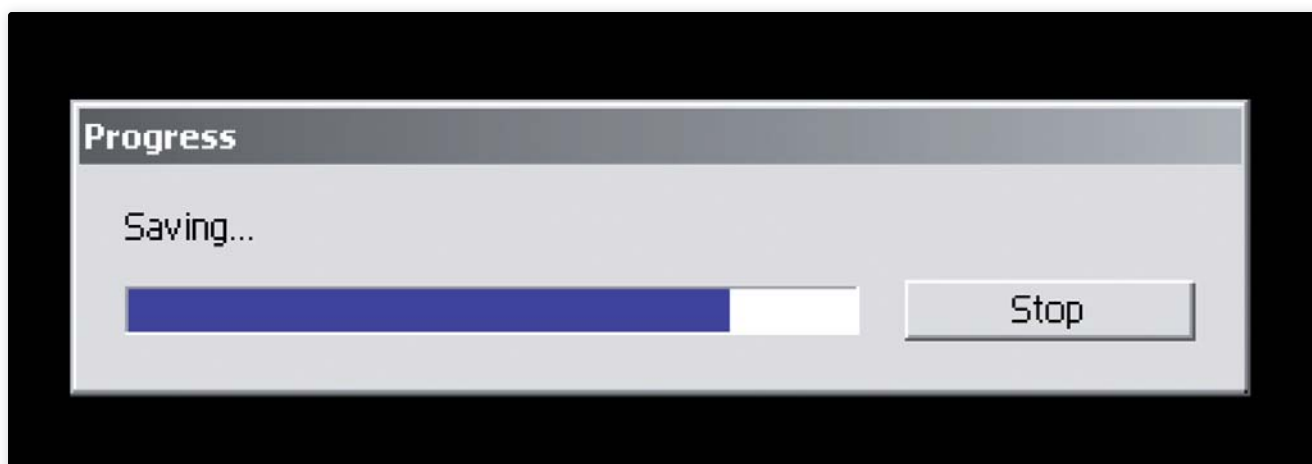
Freeware may seem like an attractive alternative to expensive vendor options but there are a number of pitfalls that need to be considered.

**S**maller or new call centres are often lured by the promise of free call centre software that can be downloaded and cobbled together by an "IT professional", thus reducing their initial capex investment. Usually, this works for a short time. But there is no such thing as a one-size fits all free call centre solution. Over time, as new functionalities have to be added or updates need to be made, costs start

to accumulate and the vulnerability and dependency on one IT professional begins to show.

There are hidden costs to consider too. Yes, the actual call centre product (that allows an agent to pick up a ringing phone and transfer the call) is free, but the management, reporting and analytics tools that are required to keep the business running efficiently are not. And there are numerous risks associated with that too.

Let's say that a freeware package is installed and a freelance IT person is contracted to amend or upgrade the



software for your business. Then, in a few months, a new report has to be added to the system. The IT person who originally put the software together is the only one who can make the change. That means that your IP is in danger of walking out the door and never returning again – and it happens often.

#### Long term view

You might install freeware and find that it crashes after a few weeks for no apparent reason. Who is your point of call to get it fixed? Usually only an email address on the freeware site. If a product is bought from a reputable local specialist company, chances are there is a dedicated team of engineers appointed to provide support.

**It's not that freeware never works. But you have to remember that software is only part of any given system.**

It's not that freeware never works. But you have to remember that software is only part of any given system. There are hardware and LAN considerations, operational differences and fluctuating requirements as the team grows. The natural progression of any call centre that is increasing its maturity is that of optimisation – adding more technology to keep up with the growing demand and complexity of your business. You might get away with using a freeware solution for a short time, but often it doesn't have resilience, redundancy or the ability to scale. More often than not, you will either outgrow your free solution or lose money over the long-term as you need to keep adding developers to your team to keep up with the increasing change control issues.

#### Know what is going on

There is also a lack of accurate reporting with these free packages. They might reflect your call volume, but fail to analyse who's doing what, when and why. This means that you might not have an accurate reflection of what's going on and could end up with idle agents or an understaffed contact centre. You have to have an accurate reflection of what your staff are doing so that you can eliminate

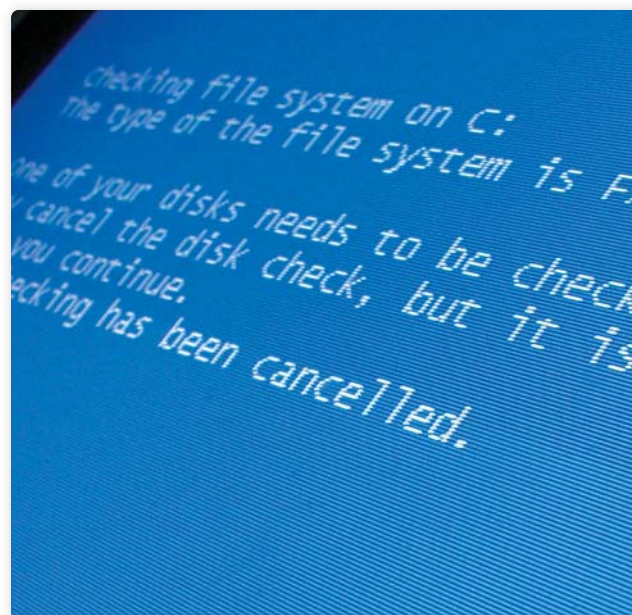
unnecessary costs acquired through staff abusing the system and incentivise the team members that are doing a good job. At one call centre we found that staff members were making calls from the contact centre, transferring them to their personal cell phones and having lengthy conversations at the company's expense. The contact centre's phone bill had virtually doubled – but without reporting, they could not trace the source.

Contact centre tech accounts for only about 10% of the overall costs, whereas staff costs make up about 70% of the budget. It's better to invest in reputable software that reduces staff costs through more effective performance management than to cut corners with bargain shopping.

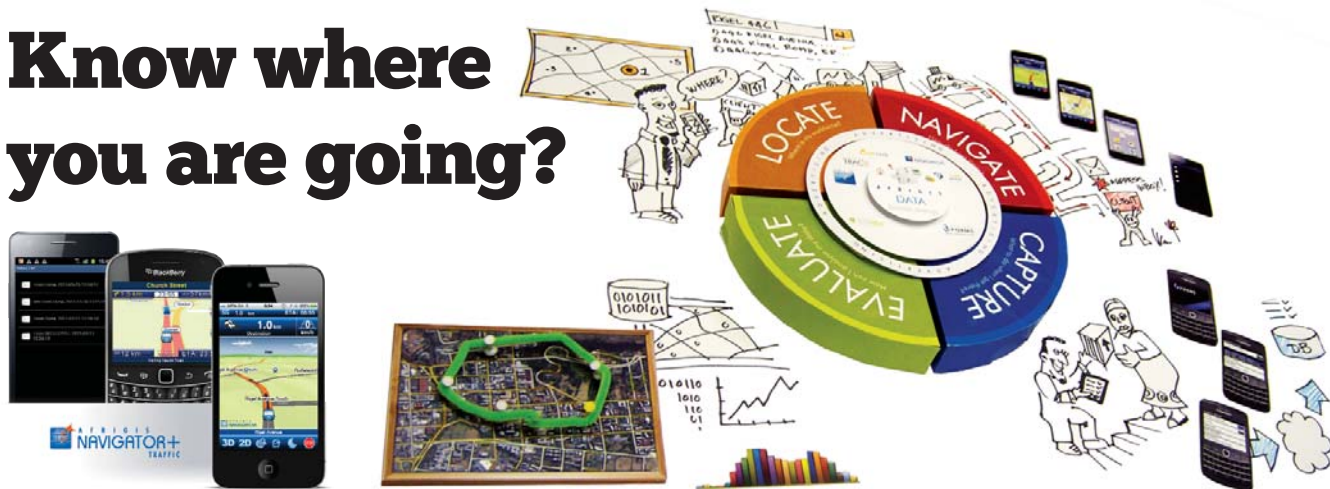
Freeware may seem tempting at first glance, but the risks far outweigh the benefits. Do not fall into the trap of thinking that free software will lead to a cost savings – chances is that it won't. Always consider the real cost. **TSB**

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# Know where you are going?



Technology today ensures that we are constantly bombarded with data from all sides. This data is, however, useless unless it can be understood, manipulated and turned into information. Geographic information and communication company AfriGIS does just this and has a carefully designed product portfolio that will give you the competitive edge in today's business environment.

**M**agnus Rademeyer, managing director at AfriGIS, drilled down into the company and its various functions during an informal session with TechSmart Business. "In a nut shell, AfriGIS is a technology innovation company. We create geographic information and communication solutions across the board for government, business and consumers. This said, our primary focus does lie within the business to business sphere where we feel we generate the most value for our customers."

The company uses geographic data as the basis of many of their particular functions and, from there, they have developed four technology enablers which leverages the wealth of information generated from the geographic data. "The first technology we have on hand is AfriGIS Mapserver, a mapping technology which is similar to that of Google Maps. The next level enables one to search the geographical information data sets. This means that any geographical information you need is readily available whether it is addresses, or specific elements around demographics to name but a few. The third leg revolves around communication, specifically focussed on mobility. This gives you the ability to communicate the answers generated from the first two tiers and receive questions via the mobile network. The last aspect involves payment integration. We do not profess to be a payments company but realise that if you have a mapping, searching and communications ecosystem there is, on occasion, the need to integrate with a payment capability."

This, if you understand it all, is gold, but for the laymen out there it essentially boils down to 'what am I buying?' "To me," says Rademeyer, "these enablers are beautiful. I understand them and have been working on them for many years. We have, however, realised that they need to be shrink-wrapped and made consumer-friendly. With this in mind we have created easy to use applications for the mobile industry at large. The first is

the AfriGIS Mobility Framework which answers four basic questions in order to fully utilise the geographic data on hand. The first question is "Where?". To answer this we position a mobile device either through the cellular network, GPS or via an address, point of interest or landmark."

The next question that is asked is, "How do I get there?" "Whether it be a customer or asset the most efficient route is planned and customers and employees are sent there via turn by turn, voice guided, navigation. We created a platform that would work on all mobile phone brands making access simple and user friendly. With the Inbox functionality a user can be directed to a destination with one click and no need to enter an address."

The third quadrant addresses the question "What do I do when I get there?" "This could range from taking orders, dropping off merchandise, receiving payments or whatever function needs to be addressed."

Closing the loop, the fourth question is boiled down to – so what? "Essentially, this is where we analyse and evaluate the data and report back on the performance. This is vital in planning and production in any company. If we look at what we have just achieved we can break it down as follows; where was I supposed to go in the first place, was I correct, did I take the most efficient route, did I get to all the customers I planned on? We can then extrapolate and analyse the data and implement processes and procedures to make us more effective and efficient. We can see what the catchment area looks like, how many customers there are, how many sales reps are servicing the area, etc. With this information we can assign resources and ensure maximum utilisation. In summary, by applying the components within the mobility framework you generate the data to improve your planning and execution."

The complete solution would seem to be a logistics managers dream and AfriGIS has a number of products that serve the four quadrants.

- Where: AfriGIS TRACB, Simseek.
- How: AfriGIS Navigator
- What: AfriGIS Forms Solution
- Evaluate: GISlike **TSB**

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# All for one

Jacques du Toit, CEO Vox Telecom

Vox Telecom has been going through a transformation process to make the company leaner and meaner and more competitive going forward. Jacques du Toit, new CEO, sat down with Techsmart Business and gave us a glimpse into his vision for the future of Vox and the industry as a whole.

**D**u Toit explains the transformation as a calculated move to increase efficiencies across the board. "Over the past 10 years all our various divisions have operated as separate entities.

This was a great business model at the time as all the brands were, in their own right, strong and successful ventures. The time has now come to consolidate all the various units and strengthen the overall brand. This process started in September 2012 and we have been focussing on implementing a unified system for everyone to follow. This is the first step to increasing our overall efficiency as a company. In essence, eight mindsets need to be one."

**We believe that YahClick signifies a considerable, transformative shift in terms of connectivity around the country**

Taking a leaf out of a maturing ICT market, du Toit notes that the big trend at the moment is the drive toward the convergence of voice, data and video. "We are extremely lucky that, within our stable, we have a strong footprint within all three spheres and products that are mature and embedded within the marketplace. Individually, we were strong, but, when one starts to embrace convergence, the key is to bring all those

businesses together to form a single, powerful product offering – one-stop shopping if you will."

Going forward, du Toit believes that Vox is in a strong position to cater to the particular South Africa milieu and continue to grow their footprint. "South Africans are unique in what they want and the way they do business. I am yet to see one international player that puts down a price plan and product portfolio that immediately gets traction. 99% of the time we they have to tweak and change their offering turning the strategy into a South African solution for South African people."

It is with this in mind that Vox has launched, and is making massive headway with their YahClick Go product.

YahClick Go provides fast, transportable connectivity to organisations and businesses that may require access to the internet whilst on the move, such as broadcasters, event companies, mobile marketing vehicles, news stations, mobile offices or disaster management services. It can be used by anyone who needs to access the internet "on the go", says du Toit.

YahClick Go, which is part of Vox Telecom's suite of pioneering satellite services, can be mounted on any SUV or trailer and is lightweight enough to transport anywhere. "The system can be operated by a single user and does not require any technical skills," du Toit explains. "The user simply presses a single button and the unit will automatically search for a connection via an auto-pointing antenna.

This is particularly beneficial when broadcasting information using live streaming, as the Ka-band allows for uplink speeds of up to 3 Mbps per second. A vehicle or trailer is all that is needed." **TSB**

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# Nology unveils the new Yealink Business IP DECT Phone

**Y**ealink, the “Global Top 5 SIP Phone Supplier” recently announced the release of its next generation SIP cordless phone, the W52P. Designed and developed specifically for small-to-medium sized businesses for cost-saving, yet scalable SIP-based mobile communication systems. The W52P represents the epitome of everything Yealink has learned over the past decade about designing powerful IP phones. Nology, the official South African distributor for Yealink is offering the W52P, an advanced and powerful IP DECT phone to the local market.

## Energy efficient

Equipped with a high quality full duplex speakerphone (using the G.722 Codec), the W52P meets the highest professional HD voice standards and is designed to impress with its innovatively brilliant broadband sound. Its integrated Power over Ethernet (PoE) technology drives modern standards of installation, allowing different sized organisations to enjoy more flexible, efficient network designs, while supporting environmental protection and low-carbon emissions. This allows the user to either power their unit via the provided power adapter or directly via the Ethernet cable, which needs to be connected to a PoE switch. The W52P includes enhanced versions of standard IP DECT phone features and accessories, such as call waiting, LCD screen, speakerphone and headset.

The use of DECT Wireless technology ensures that the W52P is portable without compromising on voice quality. DECT offers excellent call quality, exceptional security and great range, without causing interference to your existing wireless networks.

## No compromise

Yealink's W52P broad compatibility inherits all the functions and interoperability of its predecessor the SIP-T2X, heralded by All-Over-IP Forum as the best all-round IP phone – ensuring new, best-in-class capabilities while refusing to compromise its existing top-of-the-line infrastructure. This HD IP DECT phone displays supreme quality under the strictest testing and the highest levels of operational simplicity, definitely a must have



for any business aiming to save costs, yet not compromise on quality of communications.

Yealink will also be launching a DECT Repeater specifically to complement the Yealink IP DECT Phone. By adding a DECT Repeater, users can effectively double the coverage of their DECT base station. This is ideal for users who need to be mobile throughout the office without dropping calls.

## To the point

The W52P is the ideal option for a large number of markets and industries, as it is a cost effective option that offers a rich set of features. This HD IP DECT Phone bridges the gap between current IP Phones used in a business environment and cordless DECT technology enabling users to enjoy the benefits of both. **TSB**

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# Taking the pain out of print

**Print management solutions help companies overcome problems by providing functionality that is geared towards minimising costs and furthering efficiencies**



In the modern office environment, companies are constantly seeking ways to improve their proficiency and minimise their expenses. Inefficient printing practices have been identified as an important factor of stifled productivity during the work day, as well as a main source of wasting valuable company time and money.

**M**anaged Document Services' (MDS) solutions are constantly being developed in order to help companies become far more efficient, prudent and sensible by offering print management solutions that enable complete control over the printing environment.

These solutions add considerable value and result in reduced printing costs and complete control over environmental impacts, as the actual cost of the print job or transaction can be tracked and reported accordingly.

## Things are changing

Nashua Limited's Optimum Solutions consultant, Herman Otto, notes that print management solutions are changing the face of printing functionality.

"Until recently, most companies have lacked the tools required to adequately monitor and control printing within

an organisational environment, with users largely unaware of the costs of printing a page.

"These print management solutions help companies overcome these problems by providing functionality that is geared towards minimising costs and furthering efficiencies, whilst taking into account the need to reduce an organisation's environmental impact.

"Subsequently, companies and organisations have the means to conduct daily office activities in a far more prudent and green manner, which allows them to be more efficient, cost effective and play an important role in contributing towards environmental sustainability."

## Convenient

Today's Print Management Solutions are implemented via a web-based user interface which allows organisations to easily monitor and manage an individual's use of printing resources. The offering of document security reduces the volume of unclaimed printouts by ensuring users release print jobs at the point of printing. Users are able to queue print jobs to a virtual queue within the online interface, and subsequently release documents for printing at their convenience at an available and network connected multi-function device.

Furthermore, an employee within the network can release the print job from another branch of an organisation's network, no



matter where they are located, from their mobile phone. Print jobs can be secured through either a pin or swipe card release, and only authorised users are able to print and collect sensitive documents through customised authentication.

Users are subsequently able to accurately account for each page printed, and responsible printing is encouraged through software quotas and print policies, decreasing paper usage, toner costs and power consumption.

#### Environment matters

Reports are also able to track which employees are the major print users and identify maximum print activity departments, and can also provide feedback on toner levels, errors, active jobs and average volumes, whilst defining peak printing times of the day.

Specific rules can also be applied to print jobs on the print server to enforce a company's particular print policies or rules. This might include converting print jobs to duplex, or converting colour prints to grayscale, or routing the print job to the cheapest compatible device.

Green savings are also an important consideration of these solutions, with at-a-glance reporting on CO<sup>2</sup> and carbon emissions spent, by CO<sup>2</sup> volume or by trees utilised measuring a company's environmental impression.

#### Across the board

Many Print Management Solutions can be customised to suit any organisation's requirements, and has a multi-operational compatibility with the Windows, Mac, Linux and Novell servers and workstations, and offers ERP print tracking and a live fleet dashboard.

These solutions are ideal for use within a large variety of industries, including healthcare, architecture, hospitality, as well as the corporate, education and banking sectors.

Otto concludes that several industries could benefit from Nashua's expertise, experience and capabilities.

"Nashua Limited has an extensive solution comprising of fleet management, efficient device deployment and document management solutions.

"Moving forward, we are confident that many organisations and industries will benefit from tailor-made print management solutions that have been designed to considerably enhance printing operations within a company and ensure that daily workflow is far more productive, time efficient and cost effective." **TSB**

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# The changing landscape of MPS

By Mark Hiller, country general manager, Lexmark South Africa



Mark Hiller, country general manager, Lexmark South Africa

**The distinguishing features of a modern MPS project go far beyond the initial assess, manage and optimise process of a traditional implementation.**

Managed Print Services (MPS) has been around in various forms for a number of years, through a mix of software tools, services and custom solutions and strategies. During this time, these have proven to have the power to transform an organisation, initially by improving overall print efficiency and then going beyond to deliver incremental savings and business process improvement.

**U**ltimately, a managed print services engagement is, and will remain, an equal balance of products, processes and people. Changing the physical print devices that people use is one thing, but changing their print practices, processes and behaviours is quite another. However, as technology and trends have evolved, so the delivery of MPS has needed to evolve along with it.

In the beginning of MPS, providers concentrated on the standardisation and consolidation of the output environment. The second stage became the optimisation of the fleet, and the final step involves looking at the processes and how those can be optimised. These three stages are the basis of every modern MPS project.

One of the most significant changes has been how business process optimisation has become part of the managed print services offering. Many of our customers already have an existing Basic Print Services (BPS) contract and are now looking for the next step. They often expect from their service providers to be able to deliver standard MPS – or even more advanced services covering workflow solutions that simplify paper-based and digital processes as part of its business activities. This became necessary due to the growing amount of information and documents that a company has to deal with. Therefore it makes it easier and faster for employees to find the relevant information when needed.

The distinguishing features of a modern MPS project go far beyond the initial assess, manage and optimise process of a traditional implementation. Instead,



experienced vendors and customers work together in an equal partnership to deal with the issues of process improvements and document workflow. This helps overcome the greater business challenges and achieve even higher savings and business efficiency. This is highlighted by MPS moving forward from having just regular tactical updates and summaries to quarterly or even bi-annual business reviews, incorporating strategic discussions on a higher management level. This includes identifying upcoming challenges and defining common business targets.

Although the growth in the MPS market is expected to continue unabated in the coming years, it is also reinforcing the current gap between those providers that deliver primary basic MPS and those more experienced, that are leading the ongoing development of MPS to the next level.

MPS is no longer the preserve of larger enterprises, as more vendors are developing packaged services to target the small and mid-sized business, often via the channel.

New providers are constantly entering the market and bringing new definitions to the term MPS, often to their own tastes and particular offerings. Similarly, the SME market is highly competitive and more vendors constantly entering the market, assisting their customers in the classic MPS areas such as assessment, consolidation and page accurate billing. A much smaller number of MPS providers are able to extend these offerings into the areas of Business Process Optimisation (BFO), and Enterprise Content Management, and herein lies the difference. In these cases the move is away from basic procurement models to a collaborative, partnership model in which shared goals and responsibilities are implemented as part of a complete MPS approach.

Lexmark for example supports its customers to transform from basic MPS models to move to more advanced services. This includes consulting on how they could optimise their business processes by deploying document solutions. We have made this an integral part of Lexmark's enterprise MPS offerings.

One thing that is consistent is that the majority of those looking at MPS are experiencing significant shifts in the overall structure of their output device fleet and strategy, including seeking consultancy on process optimisation. As a result, over the next two or three years there will be a continued move towards MPS including BPO.

MPS remains an attractive means by which organisations of all sizes can drive cost efficiencies in their print infrastructure. However, today's market goes beyond device consolidation and cost savings to pursue business process transformation as businesses prepare to get greater value from their MPS engagements.

As core MPS offerings become more commoditised, the major providers will continue to innovate and focus more on the delivery of business transformation. Leading MPS providers are those continuing to work side-by-side with customers to develop their MPS offerings in order to meet the changing requirements. Those that are truly excelling are those that go beyond this to drive MPS development one step further, beyond even customer expectations.

In order to capitalise on this, MPS providers must be able to articulate a clear strategy on how they can support their customer's business on an ongoing basis. Those providers that can support ongoing innovation, internally and externally as well as help customers contain costs and improve efficiency will be the ones that thrive in this time of change. **TSB**

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**MPS is no longer the preserve of larger enterprises, as more vendors are developing packaged services to target the small and mid-sized business.**



# TechSmart 2013 Reader Survey

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## 1st prize

### Toshiba Excite 10 tablet worth R5 500 courtesy of Toshiba

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- 5 MP camera
- SD card expansion
- Wi-Fi 802.11 b/g/n
- Durable aluminium surface

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#### What TechSmart said in our Toshiba Excite 10 review:

“Toshiba certainly knows how to make solid devices, and its Excite 10 tablet is ample testimony to this fact. The Excite 10 feels somewhat more compact than other 10.1" devices that have crossed our path, a factor which certainly counts in its favour when holding it in one hand. One considerable differentiating factor of the device, and something we appreciate in any tablet, is the presence of expandable storage via a full sized SD card slot, making this one tablet that can actually host up to 128 GB of storage.”

Read our full review here: [bit.ly/10toshiba](http://bit.ly/10toshiba)

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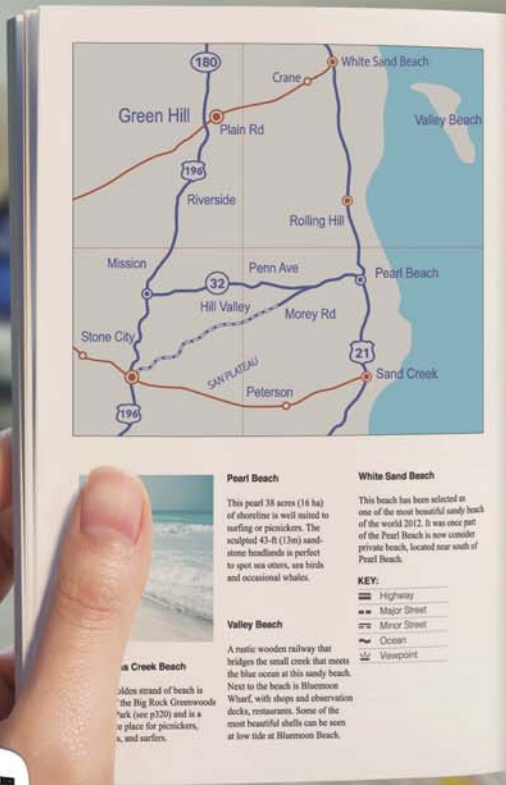
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# Mobility, connectivity and the cloud – trends driving ICT

By Eckart Zollner, Business Development Manager at Jasco ICT Solutions



Eckart Zollner, Business Development Manager at Jasco ICT Solutions

In the last few years, there have been several factors that have driven the Information and Communication Technology (ICT) market, creating shifts in the way businesses operate. These trends include the explosion of the smartphone and tablet market, the Bring Your Own Device (BYOD) revolution and the emergence of cloud computing locally as a truly viable technology in a host of different areas.

**A**ll of these trends however are driven by one overarching megatrend – increased connectivity and a move towards always on, always connected technology. The move towards enhancing connectivity and meeting an insatiable and ever-

growing demand for data capacity revolutionised the business world, and this trend will only continue, further entrenching connectivity and mobility and reaching up into Africa to help bridge the digital divide.

## Growth in mobility

One of the biggest changes in recent times, and one that caused a fundamental shift in business thinking and operations, is the rapid and exponential growth of the commercial tablet and smartphone market. The battle for domination of this market has seen new models introduced by multiple players, and a host of solutions available at all different price points. This has ushered in a new era of mobility both in the consumer and business markets, and also accelerated the BYOD trend. The demand from business users to be able to use their own choice of devices in the workplace has forced businesses to adapt their processes and networks to accommodate mobile technology. With this has come security and management challenges, particularly around the protection of corporate data. On the other side of the coin, the proliferation of mobile devices and the BYOD trend have made workforces far more mobile and flexible, and this has allowed businesses to distribute information far more easily to a broader audience.

## A mature market

South Africa's internet connectivity and broadband market have also reached increased levels of maturity, with more terrestrial bandwidth availability as well as new wireless broadband technologies emerging in line with the rise of tablets and smartphones, enabling greater penetration of connectivity. The unbundling of the local loop, which has been steadily gaining traction, as well as increased rollout of LTE and other wireless broadband technologies, will enable more competitive services from a greater variety of market players, allowing further inroads to be made into connecting South Africa.

While Africa remains behind this curve, the landing of two new undersea cables will make further inroads into connectivity. The ACE cable, connecting France with the West African coast as well as South Africa, links West Africa to the world and provides unprecedented levels of connectivity, beginning at coastal towns and then penetrating into the interior. The South Atlantic Express Link will see South Africa and Angola connect with Brazil and the United States, enabling a direct connection for South Africa into South America. This cable also runs along the South African coast, connecting Cape Town, Durban, Port Elizabeth and East



London and providing alternative connectivity for areas along the Garden Route. The landing of these cables will drive down prices and drive up demand at the landing stations, and push connectivity towards the interior of the continent. These cables not only help to connect Africa, they will have a positive impact on South African broadband prices, further driving down the cost of international bandwidth and providing direct links to more countries.

#### In the cloud

The increasing maturity of the local broadband market has also begun the successful commercial uptake of cloud services and solutions, mainly across applications. The cloud trend is only likely to accelerate as the benefits become more widely accepted and as bandwidth becomes increasingly stable and available. As the cloud market matures, tools like offsite storage, backup and recovery and even hosted voice solutions will become more common. The trend towards hosted VoIP and hosted PBX solutions has also begun to

grow, and is another area where connectivity is changing the business world, enabling organisations to take advantage of advanced voice services without the need to purchase expensive switchboard and PBX equipment.

These trends, including BYOD, mobility and the cloud, present a variety of opportunities for business, along with multiple challenges. The focus has shifted from owning internal architecture and infrastructure to centralised services and outsourcing these functions in order to provide solutions and applications that support the mobile, connected workforce. Systems integrators will need to adapt their business model to meet these changing



### While Africa remains behind this curve, the landing of two new undersea cables will make further inroads into connectivity.

demands, focusing less on selling hardware and more on providing integrated service models. The cloud and increased connectivity offer opportunities for smart players to add value and deliver services that change the game for businesses.

#### New opportunities

These trends also present a number of opportunities for local government, particularly in the fields of education and healthcare. With increased connectivity and the ready availability of smart devices, opportunities for e-Education and telemedicine are becoming a reality. Distance learning can be enhanced using video, allowing experienced teachers and lecturers to transfer knowledge to wider audiences. Digital learning content, recorded lectures, video streaming and more can all enhance the education experience for learners across the country. Doctors can collaborate with nurses, specialists and other practitioners using conferencing and collaboration tools. Knowledge transfer and training of doctors and teachers can also be similarly improved. This will enable government to fulfil its mandate for improved service delivery without dramatically increasing costs.

Connectivity is the driving megatrend behind a host of other trends, including the cloud, mobility and BYOD. These trends are set to accelerate, and organisations of all sizes would be wise to spend their money on firstly ensuring stable, available connectivity and then adopting cloud services. The barriers to entry for advanced technology are greatly reduced with the cloud, enabling smaller and medium business to take advantage of enterprise-grade technology at an affordable price. Connectivity, mobility and the cloud present an opportunity to address the digital divide in South Africa by proliferating connectivity and harnessing the power of connected technology to deliver better services for all. **TSB**

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# Windows 8 is innovative, but not inevitable

By Peter Scheffel, BBD Chief Architect



Peter Scheffel, BBD Chief Architect

It's clear Microsoft has done a substantial amount of work in producing Windows 8 while also taking a significant risk in completely changing the way its user interface looks and operates for the first time since Windows 95. The question is whether the operating system will be adopted by businesses, many of which are still using Windows XP because of its stability and reliability.

**C**eo of software development house, BBD, Peter Scheffel, says the business uptake of Windows 8 has been poor to date and suggests that, while there are enhancements and benefits to the new operating system, there are also a few issues that need to be dealt with before a broad business adoption uptake is likely. For example, Microsoft must ensure that all traditional Windows applications, written for Windows 7 and earlier, run seamlessly on the Windows 8 desktop.

"More importantly," adds Scheffel, "one of the biggest concerns for business users involves using the non-touch user interface. The omission of the start button and its compact menu structure that offers fast and easy access to functionality such as the control panel and printers is a cause for concern for many. All Windows 7 and earlier users are familiar with these easy, quick and productive features."

Microsoft has stubbornly refused to bring back the Start orb as an option for those users who want it, even though the other benefits of Windows 8 could still be experienced behind this

**While many are still using Windows XP, its general support runs out next year so those organisations will need pick up the pace and migrate.**



popular interface. The only solution to business users, as well as consumers, is to install an application that provides a similar "Start" experience.

Scheffel says there are open source Start button emulators such as Classic Shell (<http://classicshell.sourceforge.net/>) and others. For those prepared to pay the price for a good tablet app, about \$5, they can consider Start8 from Stardock (<http://stardock.com>). "This provides a start button that looks and feels exactly like the Windows 7 Start orb."

### Significant improvements

On the positive side, Scheffel notes that there are also benefits associated with moving to Windows 8. For example, there are significant power usage improvements over Windows 7. Notebook users who upgrade to the new operating system will notice significant battery improvements on the same hardware. For mobile users, better battery life is a noteworthy benefit in its own right.

"There are also subtle improvements to the legacy desktop interface," adds Scheffel. "Ironically, Microsoft has done extremely well in making the desktop more effective. Windows Explorer, for example, now has a full Office-style toolbar for everything from New Folder to View Large icons.

"Another welcome return is the "Up-Directory" arrow that was dropped in Vista and Windows 7 when the breadcrumb location was introduced. While these are subtle changes, desktop users will find these enhancements a great improvement when navigating files, a task they perform regularly."

Another long overdue improvement is the significantly improved Startup, Shutdown and Hibernate speeds, which are dramatically improved.

### Sweet spot

Despite the benefits, Scheffel says it is unlikely that businesses will switch to Windows 8. "Early sales figures show that Windows 8 is performing worse than Windows Vista, which is really hard to fathom since it is being sold at a significantly discounted price to consumers.

"Users running Windows 7 are definitely on the sweet-spot operating system at the moment. And while many are still using Windows XP, its general support runs out next year so those organisations will need to pick up the pace and migrate to Windows 7 if they want to continue experiencing the stability they have become accustomed to. Only the minority will make the switch to Windows 8."

Another consideration before upgrading is that Microsoft will be releasing a new operating system later this year. At this point it's unclear if it will be a fix and stabilisation patch to Windows 8, like Windows 7 was for Vista, or if it will be a major overhaul. However, businesses cannot gamble at this point so Windows 7 is the safer bet for the foreseeable future. **TSB**

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**There are subtle improvements to the legacy desktop interface, ironically, Microsoft has done extremely well in making the desktop more effective.**

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# Samsung GALAXY S4

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# 10 Ways that BlackBerry 10 will impact your business for the better



**A**n important goal of the BlackBerry 10 platform is to improve the mobile experience of businesses and their staff. Building on the long-standing reputation of BlackBerry smartphones in the business community, here is a look at several business objectives that IT professionals can look to achieve with BlackBerry 10.

## 1 Meet increasing employee demands

The consumerisation of information technology has changed the workplace and brought with it increased employee demands. As mobile technology continues to evolve, businesses are under pressure to either provide employees with high-performance mobile devices that offer a seamless experience, or to allow employees to bring in their own mobile tech. On BlackBerry 10, features such as the BlackBerry Browser and Keyboard have been made more powerful and intuitive. In addition, new advanced features

such as the flow of BlackBerry 10 and BlackBerry Hub will make it easier for employees to navigate their phone and manage information, all within the context of their world-class security and management capabilities. With these features, as well as all of the apps available, BlackBerry 10 provides an experience that employees will love and the security and manageability that businesses need.

## 2 Increase productivity and mobility

The BlackBerry 10 platform is built for business, providing your mobile workers with secure access to information and internal systems. One exciting BlackBerry 10 feature is remote desktop access provided by app developers like Splashtop. This feature will allow BlackBerry customers to access and control a desktop computer from their BlackBerry 10 smartphone. By using such tools to increase mobility, employees will be able to carry critical business information and tools on the go, thus also increasing their productivity.

## 3 Encourage organisational collaboration

Businesses can further look to improve productivity by facilitating a culture of collaboration. Several upcoming BlackBerry 10 apps will help encourage this collaborative culture, such as Cisco WebEx Meetings. This app helps customers with scheduling meetings, sharing screens and sharing content for collaboration on the go. In addition, BlackBerry 10 includes integrated cloud storage capabilities from Box, which allows employees to share files directly from their devices. Supported by the BlackBerry 10 secure environment, businesses can encourage collaboration confidently, knowing that measures have been taken to help make sure that data isn't compromised. BBM video chat and screen sharing is another example of a fantastic collaboration opportunity provided by the BlackBerry 10 platform, not to mention Documents To Go, Work Drives, and more.

## 4 Contributing to lower costs

BlackBerry Balance has been completely redesigned for BlackBerry 10, providing customers with a seamless flow between work and personal use. BlackBerry Balance also helps to lower costs for IT departments by allowing employees to bring their own devices to work. By separating work and personal data, business professionals can use personal online accounts and consumer apps on their work



device without needing to worry about unintended interactions.

#### 5 Integrate your mobile computing capabilities

More than just a smartphone, BlackBerry 10 is a mobile computing platform built to power an entire ecosystem of devices and systems. Businesses can offer their workforce greater connectivity by expanding their focus from just devices to platform-based environments. Designed to support the concept of a 'mobile office'.

BlackBerry 10 will consolidate desktop computer and phone capabilities into a single, integrated platform. This integrated approach provides IT departments with the versatility to prepare for the mobile landscape of the future. With apps like SAP and Cisco WebEx Meetings, you can extend your existing investment in these services and pursue a truly integrated approach.

#### 6 Develop and deploy enterprise applications

With BlackBerry 10, you can take advantage of the best ecosystem for business app developers. In the weeks leading up to the BlackBerry 10 launch, we saw an exciting acceleration of developer momentum culminating with the availability of key business apps. With BlackBerry 10, enterprise developers specifically have much to be excited about. Enterprise applications can be tailored to specific jobs and work processes within your company. Your business can deploy BlackBerry 10 applications for your employees through BlackBerry World for Work and manage them securely with BlackBerry Enterprise Service 10 (BES 10).

#### 7 Increase customer satisfaction

To keep customers satisfied, businesses must adopt an effective framework for internal communication. More specifically, customer-facing employees must have real-time access to critical information in order to accurately assist customers. With the new user experience of BlackBerry 10, your employees will be able to access information in an effective, intuitive manner. In addition, tools for the BlackBerry 10 platform such as HTML5 WebWorks make it easy to develop custom applications for customers to interact with your company.

#### 8 Reduce staffing costs with global technical support

Are you familiar with BlackBerry Technical Support Services

(BTSS)? It's their global enterprise support program that provides businesses with affordable technical support directly from BlackBerry support experts. For BlackBerry 10, they have streamlined the program into three tiers – Basic, Advantage, and Premium – as well as offering BlackBerry 10 Readiness Services. With direct access to a Support Service Specialist as an option at the Advantage tier, you can reduce internal staffing costs while still equipping your business with the technical support you need.

#### 9 Provide access to critical business information

Whether you are making a presentation, joining a meeting, or making a business decision, it is important to be prepared and well-informed. BlackBerry 10 provides hands-on access to industry news and other business content, mobilising your workforce with tools to work effectively on the go. With the SAP applications that are coming to BlackBerry 10, your employees will be able to make informed decisions by accessing and interacting with the latest data available.

#### 10 Simplify your IT manager's job

Your IT manager faces a mobile landscape that is constantly evolving toward greater complexity. As demands from business users increase, your IT department will need to properly balance mobility and security needs. BlackBerry 10 introduces a mobile platform that meets both the consumer demands of business users and the security demands of IT departments. In addition, BlackBerry Enterprise Service 10 (BES 10) simplifies your IT manager's job with a single, unified platform to manage BlackBerry, iOS and Android devices securely. **TSB**

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## Pinnacle Africa and Samsung - unique solutions for unique needs



Pinnacle Africa and Samsung have partnered in South Africa to bring you a raft of cost-effective new packages to meet companies' mobile needs.

**Pinnacle**  
AFRICA

**O**ver the last few years Pinnacle Africa, distributor of advanced ICT equipment and manufacturer of products such as the Proline PC range, has been focussing on the business sector in conjunction with all the major software and hardware providers within the IT and mobile environments. Likewise, Samsung has followed on its consumer strengths with a targeted focus on corporate customers.

Now the two companies are joining forces by offering smartphones and tablets; value-add services; and customised bundles, directly to the end-user. Many institutions can benefit from this, including those seeking to outfit their staff, along with educational institutions looking for cost-effective digital solutions for teachers and students, for example.

The model essentially allows corporates to leverage existing IT budgets which have been dedicated for device capex spend, and to procure mobile devices via traditional IT channels. Pinnacle Africa fits nicely into this channel as they are a major distributor of mobile technology.

### A new approach

As this new business model has evolved, Pinnacle Africa has listened to what their clients need. "Initially, when we first tried this model," says Gerhard Hartzenberg, divisional head of Samsung, Pinnacle Africa, "we noticed that, from a pricing perspective, the markets we were targeting were extremely price sensitive. A more

innovative approach was needed, so we started offering lower memory variance devices and, most importantly, Wi-Fi only options too. This is most definitely a unique selling point from our perspective as it can be deployed to staff or students without any additional fees." The idea has found traction within the education and corporate world because there is a significant price difference between Wi-Fi only and 3G models. The option to go with Wi-Fi only models is further enhanced by many big organisations having easy access to Wi-Fi infrastructure.

Pinnacle Africa also saw that many of their customers needed to have mobile business apps or content loaded onto devices before sending it to the end-user. "It was impractical to order 1 000 units and then have users physically install the required software on each unit themselves. We decided to offer a service whereby we would preinstall content that the client needed" Hartzenberg noted.

### Personalisation is key

The product customisation does not end here. Pinnacle Africa is able to put specific branding and covers onto smartphones and tablets. "Further, we can insert marketing collateral inside the device packaging, so that if the customer wants any particular communication around a specific offer, it is available. This allows for the product to become a client-specific out-of-box experience which has been extremely popular as many of our clients want to personalise their offering going to the end user. We are, at our core, hardware movers and our entire drive is to create value for people who

are buying hardware from a capex perspective and need reliability, after-sales service and product flexibility," Hartzenberg continued.

Hartzenberg further believes that the success of Pinnacle Africa's various packages is based around a trend where consumers realise that they can purchase a device of their choice, and then look for a separate voice and data bundle. "What we have seen of late is consumers actually going out and buying devices and using them on a pay-as-you-go basis. You may want two or three different devices but don't necessarily need a contract for each of them. Furthermore, customers may find a great deal and want to upgrade without having to take out a new contract. You can simply use your existing contract on your new device."

### Service is everything

To complete their value-add offering, Hartzenberg says that Pinnacle Africa have launched an industry first. "For the first time in the mobile industry, we are offering a two-year on-site, next-business-day warranty on Samsung smartphones and tablets. This means that if customers have a problem with a device, they can phone one number and we will send out a technician who will offer post-sales service and support. If the technician cannot fix it on the spot he will do a swap-out. This, we believe, will be of great benefit to the corporate world, since smartphones and tablets have evolved into critical business tools. It is simply not viable to wait 14 days to get a device back." **TSB**

### Contact details

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Tel: +27-11-265-3000

## LiveScribe Wi-Fi Pen

**W**ish your written notes could more easily be transplanted into your tablet or PC? Then the LiveScribe Wi-Fi pen is worth a look. The pen enables you to write as you would on special notebooks, and these are then recorded as image files that can be uploaded to your Evernote account and show up in a variety of iOS or Android devices. Another bonus is that you can complement your written notes with audio recordings, specific to the exact point you designate within your notebook. R2 200 for 2 GB version.



## Victorinox Swiss Army Bike Tool

**H**itting the road on your bicycle to get away from – or in certain countries, to – the office? Then this nifty multitool from Victorinox has you covered in case of a breakdown. The Swiss Army Bike Tool boasts the sorts of tools that cyclists could need, such as an L-wrench, a tire lever, and eight bits for the most common types of screws that you might encounter. Admittedly, it's not the only piece of repair kit you should pack, but it certainly belongs amongst the rest. It costs \$50 (R450).

## Bushnell Tour V3 Rangefinder

**F**or those times when you are sealing the deal on the golf course rather than in the boardroom, and you need your golf game to be above par, the Bushnell Tour V3 Rangefinder is a valuable virtual caddy to have at hand. The laser rangefinder, which boasts PinSeeker with JOLT Technology, confirms that the laser has locked onto the flag by delivering short, vibrating bursts. It offers a 5x magnification and accuracy within 0.9 metres. Expect to pay around \$200 (R1800) for the chance at a better golf game. <http://bit.ly/11HmFAi>





## Handcrafted wireless bamboo keyboard

**N**o one said technology couldn't be green, or that doing business couldn't also be eco-friendly. The best reminder we've come across of that is this handcrafted wireless bamboo keyboard. Sporting keys that are 100% natural bamboo, the keyboard is easy to install and connect, using the 2.4 GHz USB nano receiver. As a bonus, the durable bamboo keyboard also acts as an anti-static device with radiation control, enabling you to avoid any unwanted static shocks from your computer. R390 from [www.mantality.co.za](http://www.mantality.co.za).

## Digital head and neck massager

**S**itting at a desk for hours on end or dealing with business-related stress certainly doesn't do your neck any favours. That is where this digital head massager comes in. The device, which has been inspired by Chinese meridian treatment, aims to relieve tension, headache, and revitalises your brain and body in a jiffy. The digital head massager has been designed with air sacs which massage different parts of the head and neck area. It costs R1 400 from [Mantality.co.za](http://Mantality.co.za)



## Nitecore TM26

**S**tuck in the office during a rolling blackout? No problem. There are small and bright flashlights, and then there are mighty lightbringers in a class of their own, like NiteCore's Tiny Monster. The flashlight's claim to fame is that it packs a wallop of 3 500 lumen in a small, 142 mm body that weighs in at 438 g. The device's night-flooding capacity is due to its four CREE XM-L LEDs, while users will have eight brightness levels from which to choose. Expect to pay close to \$400 (R3 600). <http://bit.ly/XUENo9> **TSB**



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