## PROBRAND

MAGAZINE

GROUP



REINVENTING
DESKTOP
COMPUTING
Sandra Vogel

Page 15



TAKING THE
COLLABORATIVE
TECH APPROACH
Rob Bamforth
Page 20



PROCUREMENT: CAPTURING INNOVATION Peter Smith Page 29



**OUR** INNOVATION

**OUR** COMMITMENT

**OUR** INTEGRITY

THE **VALUE** IN EVERYTHING WE DO.

#### **YOUR TECHNOLOGY PARTNER**

Probrand Group consists of three award-winning businesses specialising in IT Products, IT Services and Software.

Whether you're looking to save time and money buying IT products, get more from your IT with services or transform the way you work with innovative applications, we have a specialist dedicated to meeting your needs. Let us help you thrive with relevant technology.

0121 605 1000 | www.probrand.co.uk | ■ ¥ @Probrand























**Peter Robbins**Managing Director, Probrand Group

urther to lots of very positive feedback and engagement from our partners, customers and broader readership, I am delighted to welcome you to Issue 3, one year on from the launch of our first edition.

The last twelve months have seen significant developments in business, the IT market, technology and Government – all of which are transforming the way we live, work and interact with each other.

Throughout this edition we review new technologies which are helping organisations to manage change in a positive way. Our Product section (p6-15) takes a look at several devices, such as desktops and printers, which have adapted to accommodate these new ways of working.

In line with the consumerisation of IT, we have also seen the employee's contribution to the IT estate extend beyond BYOD in the last year – with the age of user generated apps in business kicking in. Quocirca's Rob Bamforth elaborates on this 'mass participation' and crowd-sourced technology on page 20.

For businesses, this trend has meant bespoke apps are now more accessible than ever before and our cover article (p17) looks at how disruptive innovation like this is being seized upon by businesses and IT leaders alike. We also examine how these developments are helping to drive the growth of smart cities (p30) and changing attitudes towards digital transformation in the public sector (p34).

Many of these innovations have been fuelled by the continued growth of 'third platform' technologies – cloud, mobile, big data and social media. These technology mega trends have become a concurrent layer influencing all businesses.

This development is still being met with trepidation by some, however, with many wondering if cloud solutions are a threat to internal jobs. This is certainly not the case. There will always be a case for a degree of on-premise infrastructure but we need to consider all those services that businesses have dreamed about implementing, yet couldn't due to budget constraints. Well, with cloud, the deployment is now done for you and the costs are spread. Moreover, businesses can get productivity software on-tap, while IT's job has been elevated to that of a consultant or project manager delivering huge business impact and the plaudits that come with that. Our Infrastructure section (p42-46) explores several current trends and how organisations are facilitating these solutions.

With the rising dollar rate impacting on our ability to buy IT products in recent months, it's essential that procurement professionals make budgets go further this year.

In this edition, Gary Price offers advice on the best ways to absorb the impact of fluctuating currency (p22). We also reveal surprising research that shows some buyers are paying up to 920% mark-up on IT (p24) and Spend Matters' Editor, Peter Smith talks innovation in procurement (p29).

On that point, our innovative IT Index marketplace is now live and delivering personalised catalogues and pricing to IT buyers by sector. We've also rolled out our award-winning KnowledgeKube aPaaS, using Microsoft Azure to deploy to a global customer base.

Now is a great time to be passionate about technology! I hope you find that this edition shares that passion.

Peter Robbins

Managing Director, Probrand Group



#### Contents

#### News

05 Technology research in brief

#### **Products**

- 06 Tracking the IT product market
- **08** Should analyst predictions affect buyer behaviour?
- 10 Mobile computing devices
- **12** The future of office printing
- 13 Don't get swept along by hype
- **14** Windows 10
- **15** A desktop for modern times

#### Business Transformation

- 17 The era of disruptive innovation
- 20 Crowdthinking

#### **Supply Chain**

- 22 The savvy buyer
- 24 Know your margins
- 26 Benchmarking helps South Staffordshire College

#### **Procurement**

- 28 What next for public sector ICT after the General Election?
- 29 Innovation in Procurement

# 

#### **Driving Innovation**

- **30** Realising the potential of smart cities and urban communities
- 32 What's on the CIO's agenda?
- **34** Changing attitudes to digital innovation in the public sector

#### **Security**

- **36** Never be too paranoid with network security
- **38** How to train employees in cyber security
- **40** Security reviewed in numbers and words

#### Infrastructure

- **42** Is it time to rethink your tape backup strategy?
- **43** Mitigating risk when migrating to the cloud
- 44 Infrastructure reviewed in numbers and words
- 46 Cutting the cord

#### **Probrand Group**

48 What we offer

















Contact us:

0121 605 1000

enquiries@probrand.co.uk

Probrand Group Magazine provides news, views, analysis and information on pivotal subjects relevant to IT, procurement and business leaders looking to thrive with technology.

Please get in touch and share your views on any of the subjects tackled or any you would like to read about.

#### Technology research in brief

#### Third of small businesses believe BYOD poses no risk

Research by Kaspersky Lab has found that a third of small business owners believe bring your own device (BYOD) poses no risk to their company.

The report said that, although BYOD is now a widelyaccepted business practice, more than four fifths of SMEs have no interest in managing information security on mobile devices.

Konstantin Voronkov, Kaspersky Lab's head of endpoint product management, said: "The loss of important corporate data via personal devices is a common occurrence, and a negligent attitude towards the security of mobile devices could pose a serious risk to a company's business."

#### UK cloud adoption rate reaches 84%

Well over four fifths of UK businesses have now adopted some form of cloud service, according to the Cloud Industry Forum (CIF).

The industry body's survey of senior IT and business decision makers in both the public and private sector found there had been an 8% increase in cloud adoption since last June. Alex Hilton, CEO of CIF, said: "Cloud computing has come a long way in just a few short years. Cloud has moved from the edge of the IT estate to its centre, and it is now largely regarded as just another way that we do IT."

### IT spending on the up as leaders look to boost revenues

The number of IT leaders planning to increase spending has risen sharply this year, according to new research from tech publication CIO.

The poll of top IT executives found that more than three fifths (61%) plan to boost new or discretionary spending - up from just under half (47%) last year. Adam Dennison, senior VP at CIO, said: "Emerging technologies are the key to enterprise innovation. Emerging tech vendors should take this cue to showcase how their agile and innovative technology solutions can help businesses succeed."

#### Four fifths of businesses see healthy ROI from IoT

More than 80% of companies have boosted revenues as a result of investments in the Internet of Things (IoT), a survey from Tata Consultancy Services (TCS) has revealed.

The study, which surveyed 795 executives from large multinationals, found that those who have invested in IoT have seen an average revenue increase of 15.6%. Natarajan Chandrasekaran, CEO and MD of TCS, said: "The age of IoT is well underway. The question is, whether businesses are ready to realise the full potential of this technology."

#### Wearables move from consumer niche to enterprise tool

Smart watches and other wearable devices could soon find a welcome home in enterprise, according to 451 Research.

The analyst said the release of the Apple Watch had 'opened the flood gates' in regards to wearable adoption. "Now that the river is running, it's less about where it will end and more about where - and when - to start. We expect wearable technology to deliver a key interface and input into the Industrial Internet of Things (IIoT)," said Ryan Martin, IoT and wearable technologies analyst at 451.



#### Tracking the

## IT product market

Dominic Ashford, of leading market research company GfK, takes a look at the IT product market to review the latest trends and forecast the future of product buying.





by Dominic Ashford

he latest market figures show that businesses are continuing to invest in areas that facilitate the storage, transmission and manipulation of data. Investments in several key product areas, such as software, networking and storage, resulted in a healthy business-to-business market in the third quarter of 2015. As a result, the value of sales increased by 20% compared to the same quarter of last year. In this buoyant market, vendors have also been able to re-engage with the market in areas previously seen as challenging.

#### **Storage**

Being able to access data rapidly and securely is absolutely key in the modern age as organisations look to facilitate increased remote working and bring-your-own-device policies. This has led to high growth in two of the key areas within the storage segment, namely Solid State Drives (SSD) and Network-Attached Storage (NAS).

The importance of businesses having rapid access to data was demonstrated during the third quarter by significant growth in the value of the B2B SSD market – which increased 35% between Q3 2014 and Q3 2015. Similarly, the value of NAS in Q3 2015 was 7% higher than in the third quarter of 2014.

The average price of NAS devices sold in the B2B channel also increased by 35% year-on-year which shows that companies are investing in more high-end solutions. Manufacturers, distributors and resellers will be looking to push this product area as it represents an opportunity for growth.

Conversely, the price of SSD is declining, with a fall of -8% Q3 to Q3. With higher capacities now more established for this market, pricing will be key for this storage segment as the market matures.



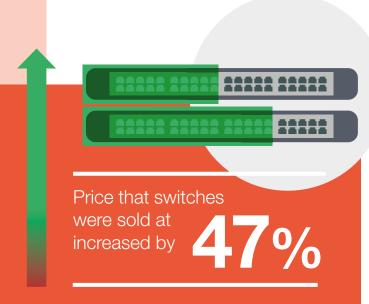
**Computing and Printing** 

Mobile computing (such as laptops) has grown 24% year-on-year, driven by the preloading of Windows 10 on devices. Although there have been some areas of decline in the overall computing channel with desktop computing and tablets continuing to decline in value in 2015. Similarly, the sales value of print hardware declined by 10% over the same time. This suggests that these markets are being impacted by lengthening replacement cycles, as well as the growth of managed services and the cloud.

However, vendors are rising to the challenges they face in this market and developing new product areas which are seeing growth. For example, sales of All-In-One desktops (where the chassis and the monitor are one unit) grew in value by 25% year-on-year. The growth of this form factor is likely driven by aesthetic or space considerations from businesses and shows there is still an appetite in the market for the right products. Furthermore, in recent months traditional computing has returned to growth in retail channels suggesting that hardware may also follow suit for B2B overall.

#### Networking

The growth for networking reflects the ongoing need businesses have to process significant amounts of data. This can be seen from the fact that in Q3 2014, large enterprise switches (above eight ports) accounted for 44% of the value of B2B networking and by Q3 2015 this had grown to 28%. The average price that these switches were sold at increased by 47% over the same time period, demonstrating that businesses are investing in more comprehensive networking solutions and are prepared to pay a premium for them.



Overall decline in

desktop computing,

mobile computing,

laptops and tablets

#### **Products**



by Gary Price, Probrand product and category manager

n the first ever edition of the Probrand Magazine, published a year ago, analysts Gfk forecast that tablet computers sales would stop growing and remain static over the next 12 months. Until that point we had witnessed an unfaltering rapid increase in this device market since the iPad hit the shelves in 2010.

The test of time proved Gfk partially right - sales did stop growing, but where they got it wrong was that sales actually fell into decline. Nonetheless, the analyst was right to cast the spotlight on this market and identify the problems it was facing. It said that 'productivity' and the fact that working on tablets is a 'large step change' would put the brakes on sales.

In truth the tablet market has become saturated. Most people who want a tablet now have one, and with the products lasting longer than was previously predicted, fewer than expected tablets are being replaced. But the productivity problem was a factor. The increased popularity of convertible devices, such as the Lenovo Yoga and HP's Revolve, which can flip between being a notepad and a tablet has also emphasised this issue.

On the whole, analysts do a good job in highlighting these types of issues and identifying trends in the IT market. For any IT buyer, it is well worth listening to what they have to say. Although what they say should form part of a larger conversation.

Buyers also need to talk and listen to the vendors and understand how product specifications are changing to better meet the needs of individuals within an organisation.

When Lenovo first brought out the Yoga, the product was hampered by its weight - the glass screen was just too heavy. This may seem a small thing but the consequence was that it made the device awkward to handle in tablet mode. Tablets still held the advantage as the ultimate portable computing device. The next generation Yoga, however, was much lighter and more appropriate for mobile workers. This resulted in a sharp increase in popularity and in other manufacturers following suit to create lighter products.

It is only by reviewing the specifications and by talking to vendors and their channel partners that we begin to understand how the features of a device will be practically applied when in business use. The analysts will cast the spotlight but it is up to the IT buyer to examine the details. And ask the question, is it really better to stick with what we currently deploy or would we be better served by new designs and the latest technological advances?

## Should analyst predictions affect buyer behaviour?

Gary Price discusses the value of predictions in the buying process.





#### Let's face it... We've all got better things to do.

How about saving time and money buying IT?

Introducing...

Europe's largest IT marketplace for business

#### Catalogues and pricing personalised to you.

Multiple suppliers

Frameworks

Exclusive promotions

Self-service advisors

Accredited by Finance

Accredited by Procurement

202486 items updated today

Last update: Just now

#### Free login Register today

https://marketplace.theitindex.co.uk

**EXPLORE** over 150,000 products and services from 2,500 brands

BUY from 'live' catalogues ranking best price with stock

**SAVE** a day a week in time and 10% on ICT budgets







Commercial Service

C O M P A N Y



### Choosing the right

## mobile computing device

ith an ever-expanding range of mobile computing products, choosing the right device in an evolving market can be a real challenge.

All these products offer exciting new features which sound compelling but, instead of becoming too focused on the latest innovations, IT buyers should be concentrating on the end user. What are their urgent requirements - portability, connectivity, raw computing power? When using their device, how much will they really need to move around? Do they need to hook up devices, such as projectors and monitors? Is there a need for lots of storage or just access to cloud services?

To help IT buyers make purchasing decisions, we've taken a look at four of the main mobile computing categories and assessed their pros and cons.

#### BUSINESS NOTEBOOK

Packed with power and performance this computing device could be viewed as the ideal desktop replacement. They are suitable for the occasional mobile user who may take their laptop to a meeting room or occasionally visit a customer off-site. Specifically designed to be a great all-rounder, they should be able to cope with whatever the user throws at it. It should take connectivity issues in its stride and accommodate projectors, printers and other peripherals.

#### Top five tips

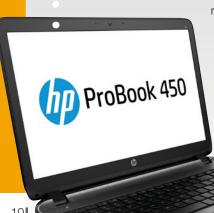
- How much moving around is needed? If this is more than occasional it might be worth looking at a lightweight alternative.
- Don't overestimate how much storage is needed, especially if your company uses cloud storage services.
  - Don't underestimate computing power requirements. Upgrading later may be costly or even impossible.
    - Optical drives are increasingly being removed from these devices, so if burning or reading files on disc is necessary, make sure the notebook has this capability.
      - Make certain the notebook can easily connect to other devices.



Coined by Intel in 2011, the term 'ultrabook' describes high-end notebooks that have removed bulk without compromising battery life. Using low-power Intel Core processors, these devices have axed optical drives and utilised solid-state drives within a unibody chassis to reduce size. The laptop of choice for those who want power and portability, they are best suited to the worker who spends most of their time on the move. An expensive option, they often use premium materials to create a sleek design suited to those who value style in their tech.

#### Top five tips

- If the end user is not going to be on the move that much a standard business notebook could provide the same functionality for less.
- Make sure there are enough USB ports and appropriate connection cables for peripheral devices.
- Cutting down on size may compromise keyboard ergonomics it's best to test typing before buying.
- If the end user is always on the move you'll need to ensure suitable Wi-Fi connectivity.
- While Intel has a set limit for thickness, weight isn't regulated.
   Make sure the ultrabook is as light as possible.



#### CONVERTIBLE ULTRABOOK

Offering the best of both worlds, the convertible allows users to change their notebook into a tablet and adapt to working needs. Benefitting from the weight savings and increased battery life of the ultrabook, this '2-in-1' has added versatility. It is ideal for anyone who wants to sit and work but also needs to stand up and deliver presentations.

#### Top five tips

- Depending on price, users could find compromises are made, often in regards to the ability to fully twist and rotate the screen, hide or protect the keyboard and with the weight.
- Make sure the power and storage requirements are enough - it can be difficult or impossible to upgrade after purchase.
- Is the OS tailored for tablet or notebook mode? This
  has previously impacted usability when switching although the release of Windows 10 should provide
  greater comfort in both forms.
- If typing is a priority, make sure the keyboard ergonomics have not been compromised.
- If the primary use will be in tablet mode, the extra weight of the keyboard could prove an inconvenience. Would a tablet be better?





This highly portable device takes its inspiration from the smartphone market by utilising touchscreens. Originally designed for the consumer market, the lack of a physical keyboard may well compromise productivity but manufacturers have bolstered security and the ability to pair with peripheral devices to add more business functionality.

#### Top five tips

- Decide on whether you need 4G connectivity (and research price plans) before the purchase, as this won't be an add-on option later.
- Consider storage carefully. Cloud services are an option but, in the event of connectivity issues, how much storage is required?
- Although Bluetooth keyboards can be purchased separately, if there is a lot of typing to be done would a convertible ultrabook be better?
- File management, access to VPNs and critical business applications are often limited - consider whether these will be required regularly.
- Unlike the notebook equivalents, the screen will always be exposed. Buying a case is an option as are other peripheral accessories, but they come at additional cost.

#### Daniel Barham, HP mobility business development manager

"Mobile technology is transforming the world around us. It is transforming not only our personal, but also professional lives. One third of the world's working population is mobile today. Mobility is as transformative for businesses as the internet was in the 90's. At HP, we see this as an evolution that will forever alter the way we operate, the way we do business and even the way we interact as a society. Mobility is a "New Style of IT" that is changing the world we live in and moulding the future.

"Mobility should be a tool for your organisation, not a BYOD nuisance. With true business mobility, retailers can enhance their customers' experience and close sales. Healthcare providers can give patients higher-quality care without constraints and manufacturing organisations can empower their employees with rugged water, dust and drop-resistant devices. HP is enabling high-performance, businessgrade mobile computing that is secure and manageable across Windows or Android environments. Supported by a full complement of accessories and services these devices are allowing business to untether workflows, get work done anywhere and interact with customers in a whole new way."

## The future of office printing



by Sandra Vogel, freelance technology journalist

## Sandra Vogel takes a look at the evolution of printers into multifunction devices

he paperless office that's been 'just around the corner' since computers arrived on our desks in the 1980s has long been talked about but has never fully materialised. Instead, as our working habits have evolved, printers have kept pace, and they are now providing increasingly sophisticated and integrated services.

The growing popularity of mobile working, combined with the increasing ease of working on screen rather than paper, has meant more and more information is digitised. Andy Johnson, product and solutions manager at Brother UK, says digital natives are actually using around 50% less paper than the generation before them.

As working from tablets, laptops and even handsets increases, Steve Mitchell, group product marketing manager at Kyocera, says what is now required is, "the increased use of safe and secure storage and retrieval systems, including the use of cloud."



#### **Connected Devices**

As a consequence printers have evolved into Multifunction Devices (MFDs) which both scan, print and connect to services like Dropbox, Google Drive and the corporate cloud. Kyocera's Cloud Connect, for example, built around the company's HyPAS (Hybrid Platform for Advanced Solutions) platform, enables corporate wide, geographically agnostic access to information direct from the printer.

Wireless access to MFDs, already common, are destined to become even more widespread and varied as NFC, Wi-Fi Direct, Apple's AirPrint and Google Cloud Print sit well with the growing preference for Bring Your Own Device (BYOD) policies in many organisations.

Web connected printers are also a natural fit. Brother's Andy Johnson notes that "Printers that offer web connect features are time efficient, allowing users to print directly from cloud-based services such as Google and removing the need to log onto a desktop device."

#### Driving business growth

All this evolution puts modern MFDs at the heart of the business. Indeed some see their future as a driver for business growth.

Francis Thornhill, product marketing manager at Canon, believes that during the next two or three years we will see, "the development of automated processes and workflows that put the combination of device and software at the heart of an organisation's connected system."

He gives some examples: "Customer on-boarding and enrolment processes will be more streamlined, with MFDs automatically verifying the data and extracting the relevant information and feeding it into different business channels for further processing."

Thornhill adds that MFDs are now helping to speed up workflow within organisations and are allowing employees to spend more time focusing on their core responsibilities.

#### Don't get swept along by the hype

Nicolò Lettieri, Linx product manager, explains what's really important when buying tablets for education



ablet computers are increasingly becoming standard equipment within the classroom. Research by the British Educational Suppliers Association (BESA) has revealed three quarters of secondary schools are now providing pupils with access to these devices.

The same report claimed, however, that many schools have faced issues integrating tablets fully – with connectivity seen as a key issue.

There are of course huge advantages to deploying tablets - price, portability and ease of use being just a few. But when schools and colleges buy in bulk they need to ensure their tablet of choice fits easily with their current infrastructure.

To ensure tablets are used to their full potential there are a few important practical considerations:

#### 1. The operating system

This is not always the first consideration. After all, the operating systems used by premium priced tablets have never conformed to the standard Windows environment, common across educational institutions and the world of business in general.

Yet the emergence of Windows tablets has changed this and removed a crucial stumbling block to tablet use. Windows 10 allows seamless movement and a familiarity between all forms of computing - smartphone, tablet and PC.

With a device like the Linx 10, for example, you also get a full OS - not a mobile version. This means users can download any software they like and they don't have to wait until 'there's an app for that'.

#### 2. Price

Most people are aware of the premium tablet brands due to the huge amounts they invest in marketing. These products are often deliberately over-priced to create a sense of exclusivity. For schools and colleges, working within a budget, they cannot afford to be swept along with the hype - especially when the only difference to a lower priced brand may be the resolution of the camera.

People are, however, starting to realise that they can get the same for less, and as they share their reviews on sites likes Amazon, attitudes are changing. This has to be a key consideration, as schools can now buy three of these lower priced tablets for the price of one premium product - without sacrificing any features.

#### 3. Connectivity

When using a tablet in an educational setting, there is a huge advantage if the device can easily connect to a projector or a larger screen. If students want to give a presentation or collaborate in numbers, connection has to be quick and easy. For this, the device needs sufficient USB and HDMI ports, which is often not the

When buying a tablet you'll also want to check that any accessories such as keyboards and cases are reasonably priced and don't end up chewing a hole in the IT budget.

#### 4. Infrastructure

It is important when deploying any device that it fits within your existing infrastructure. If you are storing data with a cloud service, is it straightforward to do this with the new device? Can the device connect to shared facilities, such as the print service, and join a domain without complications? These are all major considerations that should not be neglected as they can make a huge difference to functionality and the ability to get the most out of a tablet computer.



## Windows 10

#### Good news for business users

ou don't need to be eagle eyed to spot an unusual step change in the naming of Windows' latest operating system (OS). What has happened to Windows 9?

It has been suggested the skip straight from Windows 8 to Windows 10 is all down to a little-known piece of code in legacy applications used to detect whether the computer is on Windows 95 or Windows 98, which could create compatibility issues. Others speculate it could have been Microsoft's significant presence in Japan that put them off using the number nine - a figure widely regarded to be unlucky in Japanese culture.

Whatever the reason, Windows' new OS has made a serious jump not just in the number but in re-engaging with business customers - following criticism its predecessor was too consumer focused.

"Microsoft is taking a dramatically different tack here and very much wanting to re-engage with those business customers, listening to customer feedback far more than they were doing with Windows 8," said Mark Lomas, Icomm IT consultant.

One of the biggest headlines which followed the launch has been Microsoft's decision to bring back the muchloved Start menu, with its familiar and popular programs list and shortcuts to the most recent applications.

Another major development is Microsoft's focus on creating a more responsive OS that adapts to different devices. Hybrid computer users, for example, will notice the system switch more fluidly between a full screen tablet UI and the desktop with the Start menu.

"It's certainly a big step forwards for users who have a hybrid laptop where you can flip, re-attach or detach a keyboard. It will allow them to flip between these two modes of tablet and desktop much more easily than in Windows 8," Mark said.

Microsoft has also tackled criticism that 'store apps' in Windows 8 were largely

irrelevant to users who wanted to work from the desktop. Well users will now be able to run their Windows store apps in both modes.

"This should make those apps a lot more relevant to desktop users," said Mark. "We'll also see Microsoft introduce a new virtual desktop feature which will allow you to have multiple desktops run on one screen that you can switch between as easily as you'd switch between different applications."

So with all these improvements in place, should businesses be looking to upgrade to Windows 10 immediately?

Mark says: "We never advise anybody to upgrade straight away. Certainly in our experience it's always better to let other people take a look at the bugs first.

"There is a difference with Windows 8 though, where there was a lot of fear and a lot of unpredictability around the OS. There is significantly less of that wall to get over when you're moving to Windows 10.

"It's going to have the Start menu, it's going to have the desktop, it's going to work exactly the way businesses need it to work without that learning curve that would be a barrier to adoption for staff and users within a business."



#### A desktop for modern times



As computing devices become increasingly tailored to different ways of working, Sandra Vogel investigates how this is impacting on traditional desktop computing.

nalysts agree that sales of traditional desktop computers are in decline. GfK identified a 9.2% fall in the value of the market during 2014, and it expects this decline to continue as 'the demand for mobile computing continues'. Despite a fall from grace for these formerly ubiquitous machines, it seems manufacturers are not planning on giving up on the desktop anytime soon - nor do they intend to leave all innovation to the mobile market.

## A complex computing landscape

Computer makers are aware of the complexity of the modern business computing landscape, and their own financial imperative is pushing them to produce products that are closer suited to market requirements. In order to give business what it wants, product developers are focusing on making their machines more niche. For example, Graham Thomas, lead technologist at Lenovo UK & Ireland says, "Lenovo is making desktops smaller and smaller. They can be used to drive pit walls in Formula 1 and be fitted into the boot of a police car."

At the other end of the scale, HP's unusually named creation, Sprout, has incorporated 3D scanning and a second interactive display where the keyboard normally sits. The advertising blurb says Sprout is "a revolutionary all-in-one computer and 3D scanner that makes it easy to go from thought to expression in an instant."

#### **Covering the basics**

For all the excitement of products like Sprout, most office-based workers have relatively basic computing needs built around writing documents, accessing spreadsheets and using the web. And with the proliferation of private and public cloud solutions, desktop computers are perhaps more powerful than necessary for everyday tasks.

Mini PCs have become an option for those seeking a traditional desktop PC type arrangement. Mini PCs come in tiny cases but have SSD storage or hard drives, good internal specifications, wireless connectivity and plenty of ports for wired connections. They're very portable, so personal storage can also be moved from desk to desk with ease. However, these mini PCs can be relatively expensive and may still offer more power than many of us need.

#### Stick computing

As an alternative, Lenovo recently unveiled ideacentre Stick 300, to be priced at \$129 at its US launch later this year. With security features and the ability to convert any display into a PC, Lenovo's Gareth Thomas feels the Stick is particularly suited to campus style environments. "Many users only need to work at their destination and don't need a mobile device that allows them to work on the move," he says.

Lenovo is not alone in the stick approach.

Dell's director of client solutions Jamil

Nathoo says, "We have seen high interest in our computer on a stick offering, because it delivers extreme mobility with enterprise-level security, manageability and reliability all at a low cost."

As such, the ideal office environment of the future could be one leverages the cloud and allows all workers to move around work spaces with their computer on a keyring.

## Sick and tired of IT problems?

Let someone else take the strain.

Get proactive
IT support from
award-winning experts

- Less hassle
- More productivity
- Simple monthly payment
- See page 63 for details

Get started FREE IT consultancy\*

### Claim now

www.icomm.co.uk

0121 248 7931 www.icomm.co.uk

@icommtechno





isruptive is the latest buzz phrase to take the IT industry by storm. The theory suggests that a confluence of factors - including rapid economic change and the rise of digital technology - has created the perfect storm for new market entrants and new markets to develop. But embracing and de-risking this transformation are key.

Entrepreneurial individuals and businesses can now use a mixture of cloud, mobile, big data and social technology to challenge long-established firms, sectors and ways of working. Such is the scale of change that 2015 could potentially be seen as the year of disruptive innovation.

IDC suggests Europe is at a tipping point in terms of digital transformation. The researcher says markets in all sectors are being disrupted by digital technology and a range of innovative accelerators, such as the Internet of Things, advanced robotics and wearable computing.

Global trend lab VINT also says 2015 is the year of disruption, suggesting customer behaviours are changing and that companies must transform their approach in order to survive. IT leaders, as the executives responsible for technology implementation, must take note and respond accordingly.

### How is disruptive innovation impacting on organisations and CIOs?

Former CIO turned digital advisor Ian Cox is an expert on disruptive innovation. Working as a consultant for Axin, he helps executives at some of Europe's largest private and public sector organisations to cope with change. Cox, who has collated some of his best practice experiences in the book Disrupt IT, says disruption usually happens in industries that have not seen any major change in business models, products and services for prolonged periods.

"The incumbents have probably enjoyed many years of strong revenues and profits, with little or no incentive to innovate beyond incremental improvements in their offerings," he says. "Their main focus is on growing their business by selling more of what they already do and, as a result, they are unlikely to think about doing things differently, or doing different things. They have become comfortable and are reluctant to do anything that threatens their current revenue streams."

But then a company - often a new entrant to the market - takes a different perspective and uses this alternative approach to create a new offering. "This could be by finding new ways to meet existing customer needs or identifying additional needs that are not currently being met," says Cox. "And usually these new entrants use technology to enable their business models."

As research from the BCS - the Chartered Institute for IT - suggests, the businesses that have responded best to disruptive innovation are those that have embraced digital technologies to offer new services and products to their customers. Online letting specialist Airbnb, for example, has redefined the accommodation rental sector. Uber has created similar levels of disruption in the transportation sector, creating a technology giant that has been valued as much as \$50bn.

"If customers prefer this new way of meeting their needs, and start to switch their business in significant volumes, then the market is being disrupted by new innovation," says Cox, referring to the rise of new models. "At this point, the existing players that are willing to make major changes are likely to survive. Those that are unwilling to make the necessary changes, or who cannot react quickly enough, face an uncertain future."

Continued

#### Thank You for previewing this eBook

You can read the full version of this eBook in different formats:

- HTML (Free /Available to everyone)
- PDF / TXT (Available to V.I.P. members. Free Standard members can access up to 5 PDF/TXT eBooks per month each month)
- Epub & Mobipocket (Exclusive to V.I.P. members)

To download this full book, simply select the format you desire below

