# **Top Ten Small Business Technology Trends For**

## **Compliments Of**









By Chip Reaves and David Perkovic Copyright © 2012 by TripleTech, LLC dba Bigger-Brains.com. All rights reserved.

No part of this book may be reproduced or transmitted in any form by any means expressed without written consent from TripleTech, LLC or its affiliated companies and websites.

The contents of this book reflect the authors knowledge and opinions based on their own professional and personal experience dealing with the subjects within the text. Information is provided with the understanding that the author is not engaged in rendering legal or accounting advice. If this type of assistance is required, it is recommended to seek the expert services of a professional in that field.

TripleTech, LLC, any affiliated companies and officers of those companies, the author, and the bigger-brains.com website accept no liability whatsoever for any losses or damages caused or alleged to be caused, directly or indirectly, by utilization of any information contained herein or obtained from the any of the persons or entities listed hereinabove.

Bigger BrainsDP Computing1621 E. Greenville StPO Box 712Anderson, SC 29621Noarlunga Centre SA 5168www.bigger-brains.comAustralia1-800-743-BRAINSwww.dpcomputing.com.auPH: 08 8326 4364

# Top Ten Small Business Technology Trends For 2013

# Fifty Actionable Steps To Save Money, Be Productive, and Choose Technology Wisely



If you feel like technology keeps moving faster and faster -you're right.

The good news is that new technologies like tablets, social media, cloud computing, and online learning bring an unprecedented set of benefits to small businesses.

The bad news? Sorting through the hype to find the right combination of technologies, gadgets, and solutions to fit YOUR unique situation can be challenging.

For the last 20+ years we have been working as a technology and business consultants, primarily supporting small to medium businesses around the world.

Our goal with this guide is to provide you with the background information you need on the top technology trends that may affect your business in 2013. In addition for each section we've included five real, actionable steps you can take in order to take advantage of the technology trends in ways that will have a real, measurable impact on your company.

### lech

# The "Tablet Effect"

Believe it or not, it was just April 2010 when the world was introduced to the Apple iPad. Less than three years later Apple has recently announced their 4<sup>th</sup> generation of iPads which, of course, are faster, better looking, more capable, more powerful, and more popular than ever - over 100 million iPads have been purchased by eager consumers and businesses. To put that in perspective, in just the USA alone there is approximately one iPad for every 9 people!

Despite the dominance of the iPad – studies show that 91% of tablet use is on an iPad – there are now compelling alternatives in new devices from Google, Samsung, and Amazon. Even Microsoft will be pushing its tablets hard in 2013. Manufacturers recognize the demand from customers and are working to be part of the "post-PC" marketplace.

How does this affect small business today? To understand the benefits and the risks tablets bring to your business, let's start by looking at the world of 2009 – before the iPad. In an article in Infoworld magazine, writer Randall Kennedy sums up the views of many pundits about the then-rumored Apple tablet (then often assumed to be called the iTablet), namely that it was doomed to flop for all kinds of reasons. It would be too expensive, it wouldn't work the same as a regular computer, it would be too big to be easily portable, and more importantly – according to Kennedy – it could never compete with the then-popular Netbook computers, those scaled-down, low-performance \$199 laptop computers that were very popular way back in 2009.

Fast forward a few years, and it's clear the market has spoken – tablets outsold every major PC manufacturer this year, and those once-popular Netbooks have all but disappeared. Why? People like the ease-of-use, portability, and simplicity of them, and they're finding ways to be more productive through well-designed "Apps" (See Section 9). And even in businesses that do not directly support tablets, employees are increasingly using their personal devices for business use, a phenomenon dubbed "BYOD" or "Bring Your Own Device".

Most small businesses I talk to recognize the popularity of the tablets, but often struggle with how to convert that popularity into business productivity. Just because everyone (it seems) has a tablet, does that mean they should use them at work? Doesn't "work" require a "regular computer"?

Trends

Maybe. The reason the iPad succeeded despite plenty of pre-launch naysaying is because it turns out to be a fabulous way to <u>consume</u> content. Reading books and documents, watching movies or training videos, listening to music or podcasts, and browsing through websites for fun or for research – these are the areas where the tablets excel.



Tablets though are less useful when it comes to creating actual content. Typing long documents, creating spreadsheets, maintaining a database or CRM system, or creating artistic content tends to be much easier on a conventional desktop or laptop computer rather than a tablet device.

So the obvious conclusion is that for business tasks which require mostly consuming content – reading email, researching online, watching online videos, etc – tablets may be more useful than a traditional computer. For jobs that require a significant amount of creating content, a good notebook or desktop PC or Mac is needed. And for many jobs there may be benefit in having both.

Certainly this is one case where the customers have spoken – they are here to stay, and savvy companies should spend time figuring out the best way to leverage the tablets strength to benefit their business.

Here are five action items to properly leverage tablet computers in your business in 2013:

- 1. Have a policy for "Bring Your Own Device" (BYOD) usage in your business. According to a recent Spiceworks survey a whopping 87% of IT Service Providers are supporting tablets for their small business clients, but 54% report some degree of problem or frustration in supporting different devices and different business applications. Work with your IT Service Provider to spell out a clear policy on:
  - What devices the company will and will not support.
  - Who is responsible for supporting company applications on personal devices?
  - Which company applications (including email) can and cannot be accessed from mobile devices. (Think of it this way

     if an employee's iPad were stolen, and critical company information were available in their email, documents, or apps stored on the device, how could that affect your business?)

- If you haven't already done so, try experimenting with a pilot project to test how tablets can be used in your business. This can be done with a small company-sponsored purchase or by working with your employees to leverage their personal devices.
- 3. **Test your websites and company applications for compatibility** For iPads and iPhones this means eschewing any Flash-based content, which can't be viewed on Apple's mobile devices. Identify critical applications or features that do not work well on mobile devices (for example, company CRM or training platforms) and work with your vendors and your IT consultant to update or replace those applications over the next purchasing cycle.
- 4. When purchasing new software or solutions, verify that they are designed to work with tablets. Even if you aren't using them today, it's clear this is an area of your business that will grow over time. Given that most vendors are supporting modern mobile devices, there is generally no reason to get locked into a multi-year relationship with outdated technology today.
- 5. **Discuss a Mobile Device Management (MDM) solution with your IT consultant.** New applications are becoming available which help to secure, monitor, and track mobile devices that are used for company business. This can be a lifesaver when, inevitably, a device with critical company information is misplaced or stolen.

6

# Touch-Everything (Windows 8)

In 2007 Apple introduced its first iPhone, a revolutionary device in many ways. One of the details rarely discussed outside of geek circles was the choice Apple made to use a capacitive touch screen instead of the standard resistive touch screen everyone else used at the time. Capacitive touch screens were more expensive, and they worked with your finger but not with your pencil or stylus (like most previous touch-screen devices) and wouldn't respond at all if you were wearing gloves. But unlike the old resistive touch screens on the PalmPilots of yesteryear (which often required you to tap or press pretty hard to get a response) using a capacitive touch screen meant the original iPhone was really easy to use. It responded quickly, and it could even respond to two touches at the same time (say, for "pinching" an image to zoom in on it).

As we know now, Apple was on to something. Today every smartphone features a capacitive touch screen, and the same technology has gone into making the iPads, tablet computers, ATM machines, airline ticket kiosks, GPS devices, MP3 players, automobile entertainment systems and hundreds of similar consumer devices touch-friendly.

There has been one notable exception though until recently: computers. Traditional PC and Mac computers have rarely had touch screens, and when they did it was more a novelty than a genuinely useful feature.

2012 may prove to be the turning point though, with Microsoft's release of their new Windows 8 operating system. Windows 8 is a radical redesign of the 17-year-old interface that really hasn't changed much since Windows 95. As a result there are some people who love the new design and some who really can't stand it.

The one thing everyone agrees on though is that Windows 8 is the first mainstream computer operating system designed for use on a touch screen. Many of the touchscreen features we've loved since the original iPhone, including pinchto-zoom, swiping left or right to change screens, and dragging icons with our finger are now part of the Windows OS that people will use on their daily work computer.

That's not to say that having a touch screen is required in order to use Windows 8 – it's definitely not, although the keyboard & mouse shortcuts for some features are perhaps less intuitive than their touchscreen alternatives.

Tech Trends



Still, most Windows 8 computers being sold today do NOT have a touchscreen. It's one more decision that you and your IT consultant will have to make when purchasing new equipment, along with the usual questions of "How much RAM?" and "How large a hard drive do we need?" you'll now have to decide "Do we want a touchscreen?"

Given that most companies are holding on to computer equipment for 3 to 5 years before replacing, this is a significant question. On most computers if you need more

RAM or a bigger hard drive you can add it, but adding a touchscreen to a computer that didn't originally come with one is often either cost prohibitive or just flat out impossible.

Is Windows 8 in your future? Statistically speaking, yes – unless you run your entire business on Apple computers, or choose to stick with older operating systems which will eventually become unsupported.

So how should your business plan for Windows 8 in 2013? Here are our 5 recommended action items:

1. When purchasing new equipment with Windows 8, investigate touchscreen options. Generally the price premium for the touchscreen (compared to the traditional, non-touch screen) is between \$US100 and \$US200, which will likely pay for itself with productivity improvements over the life of the device.

- 2. **Confirm your existing business applications will work with Windows 8**. Compared with past upgrades there are relatively few incompatibility problems when moving from Windows 7 to Windows 8, but you always want to be safe rather than sorry.
- 3. **Don't be mislead by the low-price Windows RT option.** Generally found only on tablets and "convertibles" (basically an iPad-like tablet with a detachable keyboard, like the Microsoft

Tech

Surface product), Windows RT looks a lot like Windows 8 but cannot run most Windows software. Instead it relies on special apps purchased exclusively from the Windows Store. For a limited-use tablet that may be OK, but for a business computer you'll want the full-fledged Windows 8.

- 4. Plan for training. Unlike the last half-dozen versions of the Microsoft operating system, Windows 8 really requires users to learn some new skills in order to be productive. It doesn't take much – there are videos on YouTube for instance which cover most of the essentials people need to know in order to make the transition and get the most from their new Windows 8 environment. But do plan to invest the time in those videos as it will be time well spent.
- 5. Plan for envy. Inevitably if some employees get Windows 8 and fancy new touchscreens, other employees will want them too. 2013 may be the year to consider a refresh on all your office hardware. It's a good time to do it major manufacturers including Dell, Lenovo, HP, and Asus (not to mention Apple) along with your local system builders are building better quality business-class equipment now than ever before, and all offer a variety of Windows 8-based touchscreen and non-touchscreen models.





Since at least 1994 people have used "the cloud" to describe the internet, but over the last 3 or 4 years the hype surrounding "cloud computing" has become overwhelming. While there are great examples of cloud solutions that are overwhelmingly beneficial for most people (Salesforce.com for example, or hosted spam filtering for email), for many situations businesses have had to weigh the pros and cons of a cloud-based solution versus a traditional, locally hosted version.

2013 looks to be the tipping point year where we see more businesses adopting cloud-based solutions than local ones. The biggest indicator of the change is the ubiquitous Microsoft Office software suite. In January we'll see the wide release of Microsoft Office 2013 in both its traditional, locally installed version (referred to as Office 2013) and the cloud-based version called Office 365. For the first time, Microsoft has lined up tremendous incentives to push businesses towards the cloud version. Consider the new small business pricing structure for Office 365 compared to the competition:

	Office 365	Office 2013 Home & Business	Office 2013 Professional	Google Apps
Price (US\$)	\$US150/user/yr	\$US219	\$US399	\$US50/user/yr
Includes web-based apps?	Yes	No	No	Yes
Includes traditional, downloadable programs?	Yes	Yes	Yes	No
Licensed for	1 user, 5 devices	1 device	1 device	1 user, unlimited devices
Includes Word, Excel, Powerpoint?	Yes	Yes	Yes	Similar Compatible Programs
Includes Outlook?	Yes	Yes	Yes	No
Includes OneNote?	Yes	Yes	Yes	No
Includes Access & Publisher?	Yes	No	Yes	No
Includes Professional Email, Calendar & Collaboration Tools?	Yes	No	No	Yes

While it may still not be right for every business, Microsoft's aggressive pricing indicates they want every business to take a hard look at Office 365 compared to the traditional Office 2013 (compared to the previous cloud-based champ, Google Apps or other alternatives).

Every situation is unique, but based on the chart above the users who are most likely to save money or otherwise benefit from the cloud-based Office 365 are the ones who use more than one device (i.e. a computer at work, a computer at home, and an iPad – by the way the iPad version of Office is rumored to be coming in early 2013 as well), who might like the flexibility of online web-based applications but does most of their work in traditional programs on their computer, or who uses Microsoft Outlook. Based on the small businesses we work with, that's probably 90% of all business professionals if not more.

Even one individual who has two computers would pay \$US438 to purchase two licenses of the lesser "Home & Business" package compared to just \$US150/year for Office 365. Assuming the average person upgrades every three years that's about break-even, but the Office 365 user pays less money up front plus gets business-class email and collaboration tools too.

Other companies are making similar offers. Creative professionals who rely on Adobe's Photoshop & InDesign tools often spend \$US2000 or more to upgrade their software every few years. Now Adobe's new "Creative Cloud" offering gives them every creative product Adobe makes, plus online collaboration tools, starting at just \$29 per user per month (when on sale). Like Microsoft that includes the ability to use the software on multiple devices, as long as it's limited to one user.

Other cloud-based solutions have been making inroads in the small business community for several years now, including hosted CRM applications, hosted email and hosted Exchange servers & spam filtering, hosted phone systems, hosted employee training solutions, online backup solutions, hosted training solutions like Bigger-Brains, and file sharing solutions such as Box.net, Dropbox, and MySecureBackup.

Like everything else, whether you move to the cloud will depend upon whether the pros outweigh the cons for your own situation.

**Con:** the data may be stored offshore (or backups taken offshore). Do the laws of the country where the data is hosted take precedence over local laws? What about privacy or other regulation issues?

**Pro**: the ability to access files and information from any internet-connected device, including those ever-popular tablets and smartphones.

**Con**: the security risk of having your information hosted online (but which is more likely – a major company like Microsoft or Google will slip up and give out your confidential information, causing global embarrassment for their brand, or that a rogue employee will take home a USB drive full of important information and accidentally lose it somewhere?)

**Pro**: the ability to easily share information and collaborate with colleagues, vendors, and customers.

Tech

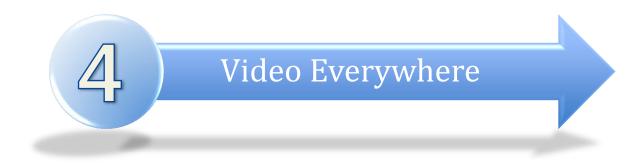
**Con**: Internet Access and Speed. Some parts of the service are inaccessible if your internet goes down (but how much work do any of us do anyway if the internet is down?). Also is your Internet speed fast enough?

**Pro**: not having to worry about backups and swapping backup devices every day.

**Con**: what happens if the company goes bankrupt or you forget to pay the cloud providers invoice? How easy is it to access your data if unforeseen problems occur?

What should your business do to take advantage of the cloud in a safe, productive way? Here are five action items for your consideration:

- 1. **Talk with your IT consultant about if and when you should make the shift to Office 365, Google Apps or another cloud based solution.** Because many of the benefits work best when everyone in the company makes the switch you should make a plan for when you will stop buying traditional software and when you will migrate the company over to a cloud-based alternative.
- 2. **Is your infrastructure prepared for cloud computing?** Accessing solutions via the Internet may require better routers, firewalls, and Internet connections than what you have right now, so address those first before migrating online. Also Internet speed has a marked impact on usability so make sure you have a fast Internet speed.
- 3. What security holes exist in your current network today? Before migrating to the cloud, talk with your IT consultant about ways to lock down your existing data to minimize the risks of employee theft, viruses, hackers, and data loss. If done properly a good cloud-based solution can often be MORE secure than the network environments many of our small business clients use today.
- 4. **If your business is a non-profit or school, make sure to ask about discount programs for your situation.** All major cloud solution providers offer deep discounts and in some cases free solutions for non-profit or academic users.
- 5. **Minimize your transition time and support headaches** with user training. Work with your IT consultant to include planned training, including ongoing access to supplementary online e-learning courses if possible, to reduce transition anxiety.



## Lync, Skype, IP Cams, Hangout, Streaming TV, & YouTube

Here's a test: look at the last five websites you visited. How many include video in some form? My guess is it's at least four out of the five. From video stories on news sites to video calling on Facebook to video sales pitches and product demonstrations on thousands of websites, video has become the new normal, and video-based solutions are exploding in popularity in many different areas.

Want to talk to someone, face-to-face? Microsoft, Google, Facebook, and Apple have free video conferencing options available. In fact Microsoft, with both Lync and Skype included as part of their Office 2013 cloud offering actually have two video conferencing solutions to choose from, each with its own pros and cons.

Want to learn a new skill? Thousands of training videos on websites like ehow.com or bigger-brains.com are just a click away.

Time to relax? Watch your favorite TV show online, on a TV network's website or on a service like Netflix or Hulu.

The Internet has evolved from text to graphics to video – has your business kept up?

Ten minutes of HD video takes as much bandwidth as approximately 50,000 text documents. If you imagine having multiple employees all watching HD training videos at the same time, you can imagine the effect on your network!

This evolution to video content has profound implications on your infrastructure, your equipment purchases, your marketing, and the productivity tools that can improve your bottom line.

If you're wondering where video might go next consider this: AT&T, the largest telephone utility in the US, now offers a 3-minute custom "video bill" for their cell phone and home TV subscribers! The video bills, which are in testing as of December 2012 and will roll out to all subscribers in 2013, have had favorable reviews and seem to make understanding a complicated bill much easier.

For AT&T the cost to generate tens of thousands of individually customized "video bills" for their customers is offset by the reduced number of support calls. What can video do for your business?

Trends

Let's look at five action items that can help you better prepare for video solutions in 2013:

- 1. **Plan Your Network Infrastructure & Internet Connections Appropriately.** Video hogs more network bandwidth than anything else – consider that a letter that takes 5 minutes to read may be 30k in size. A five-minute audio file may 2.5MB (2500k). A five-minute HD video clip can be 100MB or more, requiring more than THREE THOUSAND times more bandwidth on your network and on your Internet connection (not to mention storage space on your hard drive). Needless to say this is a significant change, and the demand is amplified further when multiple people are watching HD video in the same office. Before deploying video-based solutions into your company, work with your IT consultant to make sure your infrastructure can handle the load, and when making new purchases be sure your new equipment is suitable for whatever video solutions your company will need in the future.
- 2. **IP Cameras:** Yet another video application that is rapidly expanding today is the IP-based video camera. "IP" refers to "Internet Protocol", meaning these cameras work over typical office or home networks as opposed to the older, traditional CCTV-type wiring. IP Cameras provide a very flexible, low-cost way to handle things like security, employee monitoring, retail traffic monitoring, or even entertainment one nightclub I consulted with posted live video feeds from the IP cameras in their club onto their website, to show others what a good time they were missing.

Another advantage of IP Camera solutions is that many provide the functionality to let you monitor your cameras from your smartphone or computer, which is obviously helpful when you feel the need to check a security camera remotely. I've seen savvy entrepreneurs take advantage of this functionality for everything from nanny-cams, children's daycare centers, vacation homes and even car mechanics

IP Camera solutions range from do-it-yourself kits starting around \$200 to professional systems that can cost \$2000 to \$20,000 or more. Where could your business take advantage of an IP Camera solution?

Tech Trends 3. Marketing & Websites: In most countries the top search engine in 2013 is Google, so if you want to advertise online you know you want to be seen on the first page (for relevant searches) on Google. But many people are surprised to learn what the second most popular search engine is: YouTube (which, incidentally, is owned by Google). Consider that over 72 hours of video are uploaded to YouTube every minute – every MINUTE! – And over 4 billion hours of video are watched each month. That's just YouTube – there are many other places on the Internet where video can be hosted and viewed, including your own website.

For many businesses it can be a worthwhile investment having your own videos on the YouTube site. Uploading a high quality video with appropriate keywords and links can be a triplebenefit: Not only will you be found by searchers on YouTube itself, but Google and other search engines can give preferential treatment to websites with embedded video (which can come from YouTube) and to websites with links from videos on YouTube.

Even a simple recorded PowerPoint presentation can be helpful, but many businesses are taking advantage of low-cost HD cameras or the proliferation of friendly local video-editing businesses to create simple web-commercials which explain their company or offerings to the viewer. And a well-designed, well-produced video can be the cornerstone of a successful viral social media campaign!

Is video on the Internet right for you? I think the answer is always "Yes", the question is just whether you do it yourself or hire a professional marketing company or video firm to help you do it. For 2013, think about what message your business can convey on the Internet via video.

4. **Productivity Solutions & Video Conferencing:** Since the beginning of digital computers the ability to "chat" instantly with other users has been popular. From Unix's "talk" command to the Compuserve "CB Simulator" in the 1980's to AOL Instant Messenger in the 1990's to Facebook's chat feature today, it's clear that we find value in instant, text-based communication.

But today's powerful computers allow us to do send more than just text, and increasingly video-conferencing is becoming an

Trends

option for many people. Whether or not it's the right option (and often it is not) depends on your situation.

Dozens of video conferencing solutions are available for 2013, ranging from simple free solutions (Google Plus's "Hangout" feature, Microsoft's Skype, Facebook Video chat) to full-featured Video Collaboration solutions from companies like Cisco and Lifesize. In some cases video-conferencing may be built into other solutions, like the HUD feature in Fonality's VoIP phone systems or the Mondo Pad by InFocus, a giant wall-sized iPadlike device designed for business conference rooms.

If your business can benefit from instant video communications between employees or between employees and suppliers or even between employees and customers, work with your IT consultant to evaluate the solutions listed above to see which may be right for you. Keep in mind that video conferencing, like all video solutions, can be very demanding on computers and networks, so make sure you exceed the minimum listed requirements and test any solution before you commit to a company-wide implementation in order to avoid a potentially disappointing experience.

5. **Training & Webinars.** More and more businesses are using online training solutions to educate their staff and to make sure their team is all on the same page. We'll talk more in depth about e-learning solutions in the next section, but for this Action Item we're focusing on Webinars. Internet-based meetings are increasingly commonplace, with market leaders GoToMeeting and WebEx competing with upstarts like Join.Me and Fuzebox to offer the easiest/most powerful/most feature-rich solutions to their business customers. Increasingly this means bundling video conferencing features in with the expected screen-sharing and audio-conferencing benefits.

Video-based webinars can be very useful – just like with Video-Conferencing, there is something inherently useful in seeing the person you are talking to or listening to. But it also places a similar demand on your computer equipment- Consider that hosting a simple webinar with GoTo Meeting requires a 1GHz cpu, ½ GB of memory, and a 384k internet connection. Hosting a video-conferencing webinar with FuzeBox requires a 1.7GHz dual-core CPU, 2GB of memory, and a 1Mbps internet connection - in other words, more than twice the power! If your company can benefit from video-based webinars, evaluate the offerings from Fuzebox, GoToMeeting, and others, and work with your IT Consultant to make sure your computers and network are sufficient. Like I mentioned with video conferencing, trying to run a video-based webinar on a slowerthan-recommended computer or network will lead to frustration and a poor user experience.

# **E-Learning**

Once upon a time, communication was a very manual process. Need to send instructions to a distant colleague? Print a letter, stamp an envelope, get it to the post office, and wait a few days. Need to update directives to your employees? Type up a document, make dozens of copies, and then distribute by hand to everyone's desk. Email, text messages, and online chatting have revolutionized communication, so the time we used to waste in the mechanical logistics of communication can be better spent actually communicating.

Once upon a time, employee training was a very manual process, and it often still is. To learn a new skill, people would take entire days away from their main job to travel to classrooms to listen to skilled (or sometimes not-so-skilled) teachers. Sometimes companies would do the opposite and bring teachers in to teach classes to groups of employees at workshops or conferences. Like postal mail, traditional employee training is a very intensive, time-consuming process. And if your teacher missed a topic, or you need a quick refresher training later on – forget about it!

While there is still a definite place for traditional classroom learning (just like there is still a need for a physical post office), more companies are leveraging the power of modern technology to provide inexpensive e-learning options to their teams. Companies like Bigger-Brains.com, Lynda.com, or 360training.com provide easy online access to training classes on-demand, so employees can learn the skills they need right when they need them and right from their own desk (or smartphone). YouTube may also be adequate for small one off training topics.

According to the American Society for Training and Development, organizations with an above-average training program see at least an 11.4% improvement in employee productivity. It is no wonder that American companies alone spent over \$50 billion on Education & Training in 2011<sup>1</sup>.

While more money was spent on classroom training than online training (because of the disproportionately high cost of classroom training), an article by the New York Times<sup>2</sup> found that online training actually produced results which were 18% better than conventional classroom training. That same article states "Until fairly recently, online education amounted to little more than electronic versions of the old-

Tech Trends

<sup>&</sup>lt;sup>1</sup> <u>http://www.outsellinc.com/b2b/products/1001-education-training-2010-final-market-size-and-share-report</u>

<sup>&</sup>lt;sup>2</sup> http://bits.blogs.nytimes.com/2009/08/19/study-finds-that-online-education-beats-the-classroom/

line correspondence courses. That has really changed with arrival of Web-based video, instant messaging and collaboration tools."

If you think online training doesn't apply to your business, you might want to reconsider that. Online training marketplace OpenSesame counts over 20,000 training courses for sale from their partners, on topics ranging from business ethics to software training to sexual harassment. Many training platforms such as Moodle or Blackboard allow companies to create and post their own courses online, or hybrid platforms like Bigger-Brains.com combine the best of both with a pre-packaged content library and the ability to add custom-created content or courses purchased from OpenSesame.

Do your employees need on-demand skills training, or full-fledged college courses? Both are available from multiple vendors online, with varying price points and requirements. Generally speaking online colleges are used when an employee can benefit from a formal degree program, with the intensive assignments and assessments associated with that sort of program. On-demand skills training is a better choice for quick improvements in day-to-day skills such as Microsoft Office, Communication, or Presentation, or for disseminating company information such as HR procedures, company background, or company-specific processes and tools.

To take advantage of E-Learning in 2013, here are five action items to consider:

1. What is your budget? The great thing about online learning is there is a solution for every conceivable budget. And you don't always get what you pay for – sometimes the new, budgetfriendly solutions have features the older, expensive options lack. Let's take a look at different price levels available to a 5user office:

FREE: Yes, there are free e-learning options available – a lot of them! Literally thousands of free training videos are ready and waiting on general websites like YouTube.com or Ehow.com, or on manufacturer-sponsored sites like Office.com (for Microsoft Office) or Quickbooks.com (for, you guessed it, Quickbooks). The free training of course varies widely in quality, and by it's nature it's very unstructured so using it as the basis for a formal internal training program is difficult. On the other hand the popular e-learning platform Moodle is open-source, meaning you can download and install it for free as well. Moodle is a powerful e-learning platform, but you will have to add your own content and be ready to setup and maintain your own Moodle server.

Under \$1000 (for five users, per year): Bigger-Brains.com is a new online learning portal designed specifically for business professionals. Their unique video-based content is easy to watch and covers a limited (but growing) number of business topics, like Microsoft Office, Sales & Marketing, Time Management, Quickbooks, and more. Businesses can add custom courses specifically for their employees as well as accessing Bigger Brains' existing core content.

Under \$2000 (for five users, per year): Lynda.com is by far the most widely used online e-learning system, and starts at \$25 per month per user. Primarily focused on creative professionals, Lynda has a wide array of courses on website design, photography, graphic design, and programming, as well as a small but growing number of business-oriented courses as well. TotalTraining.com is similar to Lynda in pricing with more business courses, but not quite the same level of quality training courses as either Lynda or Bigger-Brains.

Over \$10,000: Traditional learning management systems like Topycx are designed to be installed on the local network (unlike Bigger-Brains, Lynda, or TotalTraining which are web-based). Unless bandwidth is a major problem these sorts of systems make more sense for larger corporations.

2. Is mobile important? Until relatively recently most e-learning platforms did not work well on mobile devices. But with the explosion of people using iPads, iPhones, and other devices to consume videos online there has been a scramble by e-learning companies to catch up. Newer vendors like Bigger-Brains.com were designed from the start to be mobile-friendly, while more established providers like Lynda.com have recently added mobile-app version of their platform as well. If accessing training content when it's convenient is important to you, make sure the e-learning solution you choose is compatible with mobile devices.

3. **Repackaging Existing Content:** Generally companies use elearning for two things: general skill development, and companyspecific knowledge transfer. General skill development means offering training for things like Microsoft Office, Time Management, Communications, Business Ethics, Sales & Marketing basics, etc. Company-specific topics might include pushing product training about new company offerings out to a distributed sales team, or making sure everyone is up to speed on the company's updated 5-year plan.

When it comes to general skill development, it's rare for companies to have existing training materials so they're likely to purchase courses from companies like Bigger-Brains.com, OpenSesame.com, or SkillSoft.

Company-specific training though is, as the name implies, unique to your company. Some materials, such as product information, might come from your vendors but much of it you'll want to customize to your specific situation.

Since the task of customizing this training often falls on busy employees with plenty of other tasks to do, the tendency is to just take whatever materials you have – PowerPoint decks, webinar recordings, PDF handouts, etc – and slap them up on your e-learning portal. But a few simple editing tips can make the difference between an e-learning resource that everyone relies on or a forgotten training portal that no one goes to.

-Trim out any unimportant parts. This is especially true of the beginnings of webinars where there tends to be a lot of "We're just waiting for people to finish logging in" and "Can everyone hear me ok?" administrative comments in the first few minutes – those don't need to be saved for posterity.

-Divide recordings into 5-15 minute "chunks". Studies show people are much more likely to use training when it does not require a large block of their time, such as watching a 2-hour webinar recording in one sitting. -Make sure to include the "What's In It For Me?". Tell people at the beginning of each module why this training matters – why it will improve their skills, or improve the company, and therefore improve their job and benefits.

4. **Incentivizing Skill Acquisition:** Many e-learning platforms offer two primary benefits, which I call the "acquire" or "access" options. Users who want to acquire a new skill can take a complete online course and often receive a certificate along with the knowledge gained. Or they can just tap into the e-learning portal whenever they need to access a quick refresher on a particular skill – what some call "just in time" learning.

Some employees are self-motivated and will dive into your elearning platform to improve their own skills. Others may need some encouragement. If improving employee skills is important to you, consider building an incentive program inside your company. Make completing one course per quarter part of your annual employee reviews, or pick a topic and have everyone in the company complete that course by a specific date. Build contests around courses completed, or add "badges" next to employee names to indicate which significant courses they have completed in your e-learning portal.

5. Having The Right Access: In the last point we focused on the "Acquire" half of e-learning's "acquire or access" options, so in this one let's talk about Access. There are times, probably more often than we think, when everyone hits a stumbling block. Maybe it's not knowing how to use a specific feature in Microsoft Word, or maybe it's being stuck in a rut and wanting to spruce up a given sales presentation. Maybe it's needing to know how to use a company database rule, or maybe it's not being sure whether something meets the company's compliance guidelines or not. These sorts of issues come up all the time, and often an employee's productivity. A good e-learning platform with a strong search function can help your team overcome these stumbling blocks quickly and with minimum impact on company resources, but to do that you need to plan in advance what sorts of topics these stumbling blocks may fall into, and make sure your e-learning platform includes content that will help.

6. Does your company depend heavily on a sales team? Make sure your e-learning courses include sales topics. Which software programs does your company depend on? Make sure they're covered (wherever possible) in your e-learning portal. Are you in an industry with specific regulatory requirements? Again, make sure those are covered in some way in the courses in your e-learning portal.

## The Battle Of The Ecosystems

#### **Google vs Apple vs Amazon vs Microsoft vs Facebook**

The "razor and blades" business model, where a company gives away one product for free or below cost ("razors") in order to make more money long term by selling another related product ("blades"), was not invented by Google. But on February 7, 2007 they took it to a whole new level when they introduced an innovative new email service called Gmail. Gmail offered better features than any other similar email service at the time – for free. Why free? Google used information from people's emails to show them relevant ads, which they displayed alongside the Gmail interface.

Whether they planned it or not, Gmail was he first volley in what has become an all-out war between five major technology companies: Google, Apple, Amazon, Microsoft, and Facebook. Each one is battling for ownership of YOU – they want your business, and each is willing to give away some products or services below cost or free in order to win your business (or at least your eyeballs) in other areas.

The good news? Thanks to this competition for your business, you have access to many solutions for free, including:

- Hosted email (Google, Microsoft and Facebook)
- Internet search (Google and Microsoft)
- Social Networking (Facebook and Google)
- Online file storage (Google and Microsoft)
- Online phone calls or video chat (Google, Microsoft, and Facebook)
- Online mapping services (Google, Microsoft and Apple)

In addition devices such as the iPhone (from Apple) and Kindle (from Amazon) can be sold for lower-than-market prices because their manufacturers expect to earn better profits on sales from their associated "app stores".

Having this much competition is always great for us as consumers, as these tech giants add innovative features and find new ways to lower costs in order to win our business.

The bad news is this "battle of the ecosystems" is also creating frustrating incompatibilities in some situations, as the competitors raise walls around their products to encourage customers to use their related products instead of those from other companies – especially mobile devices. For example:

• Apple's iCloud service provides email and file sharing, but doesn't work on Google's Android devices.

- Google Apps works on almost any device, but more features work on Google Android devices than on Apple's iPhone or Microsoft's Windows Phone devices.
- Microsoft's Office 365 will eventually work on Google and Apple devices, but right now it's only fully functional on phones and tablets from Microsoft.

As competition heats up we expect to see each company try to balance protecting their own sales while not alienating potential customers who might be part of a competing ecosystem. The upshot is that while most services will work reasonably well for any customer, choosing solutions from the same ecosystem will usually mean less frustration and more features.

In 2013 we expect to see the following changes in the ecosystem battle:

**Microsoft**: Microsoft is making the most aggressive moves by creating their own tablet (Surface, competes with Apple's iPad) powered by their own tablet-friendly operating system (Windows RT, competes with Google's Android or Apple's iOS). They've also updated their Windows Phone product, with handsets produced by Nokia.

On the desktop, Microsoft's new Windows 8 is designed to work on traditional computers and tablets, which Microsoft hopes will give them an advantage over Apple's separate operating systems for Macs and iPads/iPhones. Perhaps most significantly, Microsoft's new Office 2013 will be released in January and includes tight integration with Microsoft's cloud services, Windows 8, Windows Phone, and Windows RT. Microsoft has long been the dominant force in desktop computing and office productivity software

Meanwhile Microsoft has been dominating in another surprising arena with their Xbox 360 home entertainment & gaming console.

Microsoft's goals for 2013 include protecting its existing service areas while aggressively competing for new customers in online email & collaboration (Office 365) and mobile devices (Windows Phone, Windows RT).

**Apple**: Among the most secretive of the large tech companies, we can't be sure what Apple's plans are for 2013 – but we can make some educated guesses. Apple has the best smartphone, the best tablets, the dominant music & video store (iTunes), and the largest App store.

There are two areas where Apple is likely to try and expand in 2013. Credible rumors point to an Apple TV product (iTV?) which may compete with Microsoft's Xbox for home entertainment options.

More interesting for businesses though we may see Apple's iCloud solution expand to become a more worthwhile alternative to the email & collaboration platforms from Microsoft (Exchange/Sharepoint) and Google (Gmail/Apps).

**Google**: There was a time when Google products were seen as being very platform-neutral, working equally well on Apple or Microsoft computers. That was before mobile computing in the form of smartphones and tablets became the new frontier for IT productivity, and before Google's own Android operating system became the bestselling platform for mobile computing devices.

Google dominates in search and search advertising, as well as hosted email. Until recently they've also had the market for online office applications all to themselves, but with Microsoft's new Office 365 product launching in January Google finds themselves facing a superior product from a major (and highly motivated) competitor. It's reasonable to expect a response from Google, with an improved Google Apps product, perhaps incorporating the video chat features they've added to their Google Plus social network.

Unfortunately for Google they're no longer viewed as neutral – in the smartphone & tablet market Apple and Google are fierce enemies, which may mean that any improved Google Apps "Apps" will be blocked or handicapped for the millions of iPhone or iPad users.

Speaking of mobile devices though, expect the recent rapid improvements in Google Android devices to continue in 2013.

**Amazon**: Amazon has successfully leveraged their dominance in online merchandise sales to expand into digital distribution, with their streaming video and downloadable music services competing head on with Apple's iTunes. iTunes recent addition of the iBooks service for downloadable reading content is an obvious response to Amazon's more popular e-book sales via their Kindle devices and apps. Their newest Kindle tablets also compete with the Apple iPad devices, and just like Apple with the iPad Amazon can afford to subsidize the hardware in order to make money on content sales.

In 2013 rumors abound that Amazon may release their own smartphone, competing with Apple's iPhone and probably using a highly customized version of Google's Android operating system (just like the Kindle Fire tablets do today).

Separately Amazon dominates in an area many consumers are unaware of – cloud computing. Amazon's AWS and EC2 services are the backbone of many cloud computing companies, and recently Amazon has signaled that they will continue to reduce prices and add features in their cloud services to maintain their dominance throughout 2013. In this area Microsoft (with their Azure service) and Google (with Google App Engine) trying hard to catch up to Amazon.

**Facebook**: At this point it's safe to say that everyone knows Facebook – the service claims over 1 billion users use the social networking service each month. Really, in the battle of the ecosystems, Facebook is the dark horse – they don't directly compete with the other tech giants in search, or online applications, or cloud computing, or mobile devices. Or do they?

Tech Trends When a company has Facebook's commanding base of loyal users (studies show over 580 million people use Facebook every day), Facebook could easily expand into any of these areas if they wanted to. And they have indicated some interest: consider this quote from a TechCrunch.com article about Facebook CEO Mark Zuckerberg from September 2012:

"Mark Zuckerberg is on stage at Disrupt talking about the potential for Facebook to get serious about creating a search engine, saying "we're basically doing 1 billion queries a day and we're not even trying." He followed up noting "Facebook is pretty uniquely positioned to answer the questions people have. At some point we'll do it. We have a team working on it."

For comparison's sake, even if we assume the figures in the quote are correct, Google currently does 4.7 billion search queries per day (according to 2011 statistics, it's likely higher now). If I were Google, I would be concerned about Facebook as a future competitor.

In addition rumors abound about a possible Facebook-branded mobile phone, though Zuckerberg is on record as saying such a device "wouldn't make sense". What does make sense though is online applications – Facebook already offers free video chat to its users, competing with similar offerings from Microsoft and Google. And a modest, largely unpromoted Facebook email service was started in 2012 as well. Facebook has a massive online gaming segment, so a transition to a home entertainment service competing with Microsoft's Xbox or Apple's rumored iTV aren't out of the question either.

For this trend our recommended action items will focus on how each of the ecosystems can be used to benefit your business:

1. **Google**: It should go without saying that any business wants to be found in Google's search engine, and if you aren't already using search engine optimization and pay-per-click marketing to promote yourself to Google's audience you may be missing business.

Consider promoting your business on Google Plus too, which can help to boost your other Google advertising. Google Plus's free video chat feature called "Hangouts" has also been really useful for small teams who want an easy way to host virtual meetings.

If your document creation needs are relatively simple and you want easy collaboration with others, Google Apps is worth checking out.

Finally don't forget Google makes the Android operating system

found in many smartphones and tablets, and controls the app store (called Google Play) for most of them. Talk with your IT consultant about creating your own App to promote your business. Mobile apps can be anything from a simple brochure and contact page to a discussion and announcement mechanism to a full-fledged way to offer your products or services in a new way. Costs to develop your own mobile app may be less than you think!

2. **Apple**: The same recommendation to consider building your own "App" applies to Apple as well, although it can be a little trickier to get an App into Apple's App Store compared to Google's.

Similarly Apple has iTunes, the world's largest online music store. Most businesses don't think iTunes applies to them, but iTunes also distributes podcasts and audiobooks. Jeb Blount distributes a free podcast called "PowerPrinciples" through iTunes as a way to promote his SalesGravy.com website. Is there a promotion opportunity for your business through iTunes?

Are your employees primarily working on Mac computers? If so you'll want to check out iCloud, Apple's sharing and collaboration service.

3. **Microsoft**: Almost everyone participates in the Microsoft ecosystem in some way, but the big questions for 2013 will be whether you upgrade to Windows 8, and whether you make the jump to the cloud with Microsoft's Office 365. The updated pricing for 2013 makes both upgrades very enticing, and you'll gain new sharing, backup, and collaboration features. The downside is you'll have to learn a slightly different way of working – with the new touch environment in Windows 8, or in a cloud-centric environment with Office 2013 & Office 365. Is the upside worth the learning curve? That's a conversation you'll want to have.

Also don't overlook advertising via Microsoft's search engine (Bing) and new Windows App store. Both are much smaller then the alternatives from Google and Apple, but smaller can mean less competition for your products as well. 4. **Facebook**: For now, Facebook offers businesses just one easy choice: do you want to be there, or not? Considering that 580 million people visit Facebook every DAY and at least some of them are possible customers for your business, it seems reasonable to have at least some sort of presence on the site.

Businesses can setup Facebook "Pages" for free, which for many very small businesses may be the only website you need. If your company targets consumers you may also want to consider Facebook's paid advertising program as well.

5. **Amazon**: Like Facebook, Amazon's millions of customers are a hard market to ignore, but what can it do for your business? Amazon offers three opportunities that all businesses should consider: advertising, sales, and self-publishing.

Sales is the most obvious opportunity – if you create a unique product that can be sold to general consumers and businesses, you can partner with Amazon to have your products sold via their marketplace. There are different programs – in some Amazon stocks the product, in others you keep it until it's sold. Financial terms vary so you'll want to investigate the options before you decide.

Some people miss the fact that whenever you search for a product to buy on Amazon, ads come up. Most are ads for other Amazon-sold products, but some are ads for local businesses too. For example, if you are a local Accountant and someone is searching for books on doing your own tax returns, that may be a good place for you to promote your business?

Then there is self-publishing. Amazon makes it easy for content creators to sell physical books, DVDs, CDs, and downloaded media (through their CreateSpace subsidiary), or to publish e-books directly to the Kindle e-reader library (Kindle direct publishing). Generally this is done with little or no up-front costs to the creator, you just need to follow Amazon's rules for formatting, uploading, and pricing your content. Even if you don't intend to be a professional author or musician, being able to point to a book you wrote or CD you created in the Amazon store adds credibility to your local business and can impress potential clients.

Finally, since Amazon is now a major force in the tablet market with their Kindle Fire products, we should mention the same recommendations we made above for the App Stores from Google and from Apple, because Amazon has their own. If you want your "App" to be discoverable on Amazon tablets, make sure you publish it to Amazon's app store too.

## IT Vendors become IT Partners

In 1985 if you worked in a large corporation you most likely had an IT department (often referred to as Information Systems back then). If you worked for a smaller business you probably got most of your IT support from the store that sold you your computer hardware – and much of the time that support was provided for free in the hopes that you would continue buying those high-profit-margin machines.

In 1995 if you worked in a large corporation your IT department was probably much larger, and tasked with new responsibilities like setting up websites and supporting email accounts. In a small business your local computer store was probably gone, run out of business by the shrinking profit margins brought about by a new generation of direct-sales manufacturers like Dell computer. So instead you found local IT support companies and hired them by the hour for their expertise.

In 2005 large traditional corporate IT departments were shrinking due to budget cuts and the increasing ease-of-use of day-to-day applications, while at the same time more and more companies found themselves building up new departments to develop and maintain the company's online presence (now more than just a simple website) and even custom software development. An increasing number of outside consultants, with specific skillsets, were used to supplement the in-house team. On the small business side those same trends meant that multiple outside contractors were becoming more commonplace, with one vendor handling infrastructure issues, another handling online marketing, and others handling things like specific line-of-business software support or communications solutions.

This overall trend will continue into 2013, as an increasingly diverse set of ITrelated business needs (infrastructure, business applications, communication, online presence, marketing, application development, social media) require an increasingly diverse set of skills. Larger corporations will see a smaller central IT department managing or coordinating with multiple outside specialists or internal departments. The role of the CIO and their team becomes more about coordinating, collaborating, and managing the process(es) than just installing and maintaining servers.

Similarly on the small and medium business side, the "IT guy" (or gal) has had to change hats yet again. If in the 80's they were the computer seller, in the 90's they were the computer repairman, and in the early 2000's they were the network manager, in 2013 we'll see a continued shift to a role best described in a 2011 article by Intel as the "outsourced CIO".

Whether in a large or small business environment, the transition manifests itself in two critical ways: first, the skills needed by the CIO and their team are different, with a greater emphasis on understanding the business perspective and team management. Their clients are demanding more than just a reliable server and secure network, they want new ideas on ways technology can improve productivity, reduce costs, and help grow the business.

Second, the old compensation models need to be rethought, especially in the small and medium business marketplace. Between 1985 and 1995 the IT Service community shifted from a model largely based on hardware profits to a pay-bythe-hour model, and today that model is shifting again. Companies, large and small, prefer a more predictable IT budget, a more proactive support structure, and a partner who can help with profits and productivity rather than just being a vendor or employee looking for a paycheck. This means the pay-by-the-hour approach for outside consultants will continue to shift to compensation based on outcomes, including fixed monthly management & support fees and per-project pricing.

For our five Action Items in this section, we highlight five areas you should discuss with your CIO or "Outsourced CIO" (IT Consultant) and look for ways your company can improve productivity, increase profits, or grow the business using each one. Note that many of these correspond to other trends we've discussed in this document:

1. **Backup & Security:** There are numerous scary statistics about what happens to businesses that lose their data. There are equally scary statistics about businesses that ignore the previous scary statistics and still refuse to backup their data. Most take the head-in-the-sand, "It will never happen to me" approach, which any IT consultant can tell you will never end well.

What would happen to your business if a hard drive died tomorrow, either in your server or in a key employee's computer? Yes, data recovery from crashed hard drives is **sometimes** possible but not always, and Murphy's law says that the one file which is most important to your business is the one that can't be recovered. Do you have a backup? Are all the important files being included in that backup? How fast can you restore operations from that backup, and what will your business do during the restoration & rebuilding time? There are solutions on the market today which can reduce recovery time from a failed hard drive from days down to mere minutes, so this is something you should discuss with your IT consultant if downtime is important to you.

Similarly security is an increasing issue. We'll discuss the implications of spam, spyware, and viruses later (in Section 10), and we discussed the security implications of mobile devices back in Section 1. Suffice it to say you want to talk with your IT consultant about all possible security issues and make sure your business is taking an appropriate level of precautions relative to your business environment.

- 2. Infrastructure: By infrastructure I mean the backbone of your technology your network, your server, your internet connection, and your key applications. At any given point it's good practice to know which infrastructure piece is your weakest and plan for its replacement in a timely manner when it can be properly budgeted. That may mean upgrading an ancient server next month, or it could mean planning to swap out a consumer-grade router for a more suitable commercial one when the budget allows for it. Work with your IT consultant to make sure there are no surprises lurking in your infrastructure that may cause unexpected service interruptions or prevent you from upgrading to a new solution such as a video learning platform.
- 3. **Mobile Devices & iPads:** We discussed these in Section 1, but make sure your IT Consultant is comfortable supporting the devices and applications you are likely to need in the future.
- 4. **Online Marketing, Websites and Social Media:** These areas really require a specialist, so avoid the common mistake of thinking that just because technology is involved this is something your IT Consultant is automatically good at. However you may find that your IT Consultant can advise you on choosing a good partner to help in these areas, and it's likely that your chosen specialist (whether an internal employee or an outsourced marketing guru) will need to work closely with your IT Consultant to make sure your web servers & services can work well for their needs.
- 5. **VoIP & Communication:** A growing area many businesses overlook is the explosion in Internet-based telephone systems. If your only experience with Voice-over-internet-protocol ("VoIP") telephone calls is something like Skype or Vonage, you may be

surprised by how good the quality on a business-class VoIP system can be. When properly configured, a VoIP telephony system can give you better quality, better features, and a much lower price than traditional analog phone systems. However when poorly configured a VoIP system can sound worse than a walkie-talkie and create a terrible impression for your business. Your IT Consultant can advise you on what network upgrades and internet service changes may be necessary to take advantage of the benefits of VoIP while minimizing the risks. Note though that if the Internet or your VOIP server goes down then your phone system will also be down.



## ODESK & ELANCE, WORKMARKET, FIVERR, 99DESIGNS, &

### **K**ICKSTARTER

Since the dawn of time businesses have struggled with finding the right employees. Small businesses in particular find staffing a challenge because they have fewer positions to fill, and so any mistake, any incorrect hire or any inability to hire the right skills needed create a disproportionate problem for small businesses. Businesses like to say "We're only as good as our people!" or "Our people are our greatest asset!" – so if that's true, then any solution that improves the quality of a business's employees should be mandatory for any successful business. That's true of productivity tools, it's true of online training, and it's also true of outsourcing.

The term outsourcing can be controversial, associated with businesses that downsize their staff at home so they can make more profits by hiring less expensive employees or contractors overseas. Thomas Friedman in his book "The World is Flat" argues though that the efficiencies brought on by outsourcing can spur more hiring (albeit in different fields) at home by taking advantage of the most efficient, cost-effective ways to perform each business task. That's not an argument I want to get into here, however, except to say that there are pros and cons to outsourcing and in the free market businesses will always gravitate to the most efficient solutions.

What I do want to talk about here is a myriad of relatively new outsourcing tools which are becoming more and more commonplace in every line of business. While these tools generally won't replace an entire employee on your staff, they do give you new ways to supplement your internal skills with outside help in a very effective way.

For our five action items in this section we're going to take an in-depth look at each of the five unique and popular outsourcing channels – Odesk & Elance, Workmarket, Fiverr, 99designs, and Kickstarter – and discuss how each can be beneficial to your business in 2013.

1. **Odesk & Elance:** If you need an item, anything from an obscure computer part to a pair of shoes to a new automobile, you might

search for them on websites like Ebay or Amazon.com. If you need to find someone with a specific skill, you might search on Odesk.com or Elance.com.

Both sites are essentially "talent marketplaces", where people with skills come to be matched up to people who need those skills. You'll find thousands of website programmers (of every imaginable technical niche), creative & graphic designers, technical writers, marketing experts, translators, administrative assistants, multimedia gurus, and even engineers, all with posted profiles showing their skills, reviews from companies who have previously hired them via the website, and samples of their work where applicable.

If your business offers those services, Elance and Odesk might be an opportunity for you to sell your services, but this is more often true of freelancers than larger companies.

While you can communicate directly with specific contractors, it's more common to post a job and let others bid on it. Price competition can be fierce on both websites, but there is also an expectation that buyers will accept a higher price in exchange for higher quality work. For a recent job I posted on Odesk I received bids ranging from \$4 US per hour up to \$150 US per hour, and I chose someone charging \$33 – the lower priced options didn't seem qualified for the job, the higher ones would put it outside of my budget, and the gentleman I chose seemed to have the right balance of skills, positive reviews, and could do my job within 24 hours, which was important as it was somewhat urgent.

In my example, I posted an ad on the Odesk website one Friday evening, and within 45 minutes I had over 75 proposals (it was a fairly simple job – another posting for a very specific and complex request only received two or three postings after a week). Within 24 hours my job was complete, including 4 or 5 revisions I requested from the contractor along the way, and I had paid out \$33.

Both Odesk and Elance have mechanisms to prevent fraud on both sides, the buyer and the seller in each transaction. Odesk's software monitors the contractors work, recording their screen every few minutes and posting snapshots to the buyer so they can verify the hours worked. Some contractors view this as intrusive, so as a result, and also because it's a much older website, Elance tends to have more established, higher priced, and presumably higher quality contractors than Odesk. Odesk on the other hand is newer, faster growing, and tends to have less expensive contractors from a very diverse selection of countries.

Whenever you need help with a specific project or a specific skill, and if your internal team either lacks those capabilities or is just busy with other things, consider trying out Odesk.com or Elance.com in 2013.

2. Workmarket.com: Workmarket is also an online labor marketplace, which sounds at first like it would compete alongside Elance and Odesk, but it's completely different. Where those sites are focused on connecting you to contractors who can do work for you, Workmarket is designed to let you build a network of contractors who do jobs for your customers. This is most applicable for a service business, so for example many internet companies hire and manage installers via Workmarket, and many computer warranty companies manage networks of independent repair contractors via Workmarket.

If your business fits into that sort of category, check out the types of contractors and jobs available on Workmarket to see where your company can benefit from that environment.

Currently Workmarket is only available in the US and Canada. Expansion to other countries is currently underway.

 Fiverr is unique. That's not to say it hasn't been copied – it has, literally thousands of times, but Fiverr.com is still the original and best in its category. The "category" in this case is "anything for \$5" – Fiverr is literally an online marketplace where thousands of people and businesses offer to do a specific task for \$5.

And it can be a little bizarre: If you want someone to record a video of a pretty girl in a bikini doing a hula hoop while reciting your company slogan, this is the place you've been looking for. It's surprising the number of things people have come up with to do for \$5 – voice recordings, graphics, limited programming and

web design, advice and recommendations, search engine optimization, hand-made greeting cards, and videos – lots and lots of videos.

Look past the oddities and questionable online marketing efforts though and there are some real possibilities. If you're considering creating an online video to promote your company, why not spend \$5 to have one of Fiverr's colorful personalities do one for you? Granted it will be limited (some sellers offer extras for more money though), but those sorts of things can work well for some businesses.

On the other hand, you might also consider whether your company can offer something for \$5. Simple advice about your industry? A downloadable e-book? Like Elance and Odesk this may be better suited for freelancers than larger companies, but there is no doubt that there are opportunities for the right services in the \$5 marketplace.

4. **99designs.com:** There are many graphic designers who hate 99designs.com with a passion. Their dislike stems from the fundamental change 99designs is bringing to their business – in the past a customer worked one-on-one with a graphic designer, and the pricing was set somewhat arbitrarily by the designer based on how many businesses thought they were good. I'm not saying that any designer is not worth their asking price, but this is a fundamentally inefficient way to handle any transaction. And where there is inefficiency, you can count on the fact that one day an internet-based solution will find a way to make it more efficient in a way that brings down prices and improves quality. For graphic design (and to a lesser extent website and application development) that solution is 99designs.com.

99designs service is very simple – if you have a need, let's say for a new brochure, you can post a description of what you need as a contest on the 99designs website. Thousands of designers participate in the 99designs system, so a few will naturally check out your contest and mock up a quick version of what they think you're looking for. These mock-ups are publicly displayed in your contest; along with the comments and rating you give each one. Fairly quickly designers learn what you like and don't like and begin posting new improved designs based on your feedback. It's not uncommon for some contests to receive literally thousands of design submissions.

At the end of the contest the customer chooses their favorite, pays a previously agreed upon amount (99designs sets minimums but there are various ways you can pay more to encourage better participation in your contest by the top designers), and then receives the documents and/or files necessary for that solution.

Unlike the old days, where one designer works with one customer and tries to discern what will work best for them, 99designs provides a mechanism where dozens of designers work for one customer and use the feedback process to discern what that customer wants. It's a much more efficient system, and for the customer generally results in a better product at a lower price.

Unfortunately for the designers, while dozens of designers may offer designs for a given contest only the winning designer gets paid. (The customer does not receive the files necessary to recreate the 'losing' designs, but still those designers have worked hard for no compensation). Still, 99designs creates a marketplace where designers get instantly connected to potential customers without having to go out and market their services, so there are benefits on both sides.

It's hard to find a reason not to use 99designs, unless you don't want to wait through the contest period for your design or just want to hand off your needs to someone else without having to participate in the feedback process. Most businesses though will do well to consider using 99designs.com for their next graphic project.

5. **Kickstarter.com:** Maybe you heard a news article about a business who successfully used Kickstarter to launch a new product, or album, or entire business. The crowdfunding site has had a great deal of publicity over the last year as hot new products like the Ouya game console or Pebble watch raised millions of dollars (as well as hundreds of initial customers) through Kickstarter's fundraising system which connects businesses with "investors" who contribute money towards a new venture in exchange for predetermined "rewards" (but not actual ownership equity in the company).

Unfortunately Kickstarter is not a great choice for most businesses. While it can be a great place for a musician to get funding for a new album or a writer to get funding for a new book, relatively few businesses can take advantage of the website due to the limited types of ventures that Kickstarter allows.

For businesses looking for Kickstarter-esque funding and promotion, three other sites may be a better fit. Check out IndieGoGo, Fundable, and RocketHub as potential partners for your business.

## Its an Appy, Appy World

Did you notice? Apps are EVERYWHERE. Early Palm phones and Blackberries had access to downloadable, installable apps, but things really didn't take off until the iPhone. Today you can find App Stores on lots of devices: iPhones, iPads, Android phones, Windows 8 PCs, Macs, Amazon devices, and more.

Why have Apps become a household word? Simple – they fill a need. If you want to do something, like calculate a scientific formula, get a recipe for chicken soup, or throw animated birds at animated pigs, you can find a simple, cheap app that will help you accomplish your task. Apps help us do our jobs, they help improve our lives, and they help us relax in our free time too. No wonder the world has started to revolve around Apps!

If your business involves making mobile video games then it is self-explanatory how Apps apply to your business, but most other business owners may wonder how this trend applies to them.

Let's take a look at five ways Apps might benefit your business:

#### 1. Produce Your Own App - the Easy Way.

What would happen if your customers and potential customers had an icon on their phone that connected them to your business? Maybe it provides your store hours, your contact information, driving directions to your location, and maybe a virtual coupon for your services? Other options could include content from your website, your Facebook page, or your videos on YouTube.

Dozens of vendors provide solutions which will create an App for your business with those sorts of features for just a few hundred dollars. Depending on the vendor they can also submit your App to the App stores for Google, Apple, Amazon, and Windows for you, and provide monthly updates for a small ongoing fee. Work with your IT Consultant to research the best way to produce an easy App for your business.

#### 2. Produce Your Own App – the Professional Way.

What if your needs are more complex than we outlined in point 1 above? You can still create your own App, with any feature or function you desire, by hiring an App developer. Start by talking with your IT Consultant to see if they have an App development partner they work with. If not, check out Odesk.com (discussed on page 35) as a place to start recruiting potential developer partners.

#### 3. Make Sure Apps Can Find You.

Whether you have your own App or not, if you are in a retail or consumer-oriented business you want to make sure your customers can find you. Your potential customer may be using an App from OpenTable, Yelp, LinkedIn, Facebook, or Angie's List. Or they might just be using Google Maps or Bing Maps to look for local businesses. Make sure your business is listed properly in each of these websites – when you do you should automatically be discovered by potential customers using those associated Apps when they do a relevant search.

#### 4. Advertise in Someone Else's App.

Mobile advertising, especially in Apps, may be out of reach for most small businesses. Consider that many mobile marketing programs have a minimum investment of \$100,000 and it's easy to see why most of the ads you may see inside mobile games and apps are from large, multi-national brands.

But that doesn't mean you can't find creative ways to do it on a more limited budget. For example, if you identify other local businesses with a popular App, talk with them one-on-one about potential joint-venture opportunities. Perhaps your company can sponsor a virtual coupon for their business, in exchange for joint promotion in their App.

Also consider advertising with Google Adwords and Facebook Ads, both of which have mobile advertising options in a pay-perclick format.

#### 5. Find Apps You Can Use

It probably goes without saying, but you should look for Apps which will help your business be more productive. Here are a few to get started with:

- Scheduling: Doodle or TimeTrade
- Ideas/Brainstoriming: Workflowy, MindMeister, or iThoughts
- Fitness: GarminFit or FitBit
- Relevant News: Zite
- File Sharing: Dropbox, Box.net, or Jungledisk
- To-Dos: Due, Toodledo, RememberTheMilk
- Social Media: HootSuite



## Spam, Spyware, Viruses

In 2006 I remember very clearly standing on a stage in front of a room full of IT professionals and making a bold statement: I said that we had seen the peak of the Spam/Spyware/Virus threat, and that improved protection and improved user awareness meant that the threat would diminish in the years ahead.

Sadly I was wrong - very wrong.

Malware (malicious software, including viruses, spyware, and similar baddies) is a highly profitable business, and where there are profits to be made there will always be enterprising criminals working hard to get a piece of the pie. In May of 2012 one malware author, Georg Avenesov was sentenced to 4 years in prison for being the mastermind behind the Bredolab malware. According to authorities, Bredolab earned \$125,000 USD *per month* for its creator by renting out infected PCs in order to send out spam emails. And Bredolab is just one of thousands of malware producers in the world today.

I was about the pending-decline of malware in 2006, and similarly I find that many business owners and managers have misconceptions about how viruses, spam, and spyware can be a serious threat to their businesses today.

For our last five Action Items let's look at five common misconceptions about Spam, Spyware, and Viruses (aka Malware):

#### 1. If I have an anti-virus program I'm safe.

Unfortunately this is not entirely true. Granted having a good anti-virus & anti-spyware program (nowadays both features are generally included in the same package) is an important step in the right direction. However malware creators work hard to sidestep the common protection programs either by exploiting newly discovered security holes quickly, before they're patched, or by using "social engineering" to trick users into opening infected files directly.

While there is no guarantee of total safety, experts recommend a

combination of the following for reasonable protection:

- Professional Anti-Malware Software
- Regular Software Updates ("patches") for your operating system (Windows or Mac OSX), Java, Adobe products, and Internet Browsers
- User education (e.g. "If you don't recognize the sender, don't open the attachment")
- Perimeter defense (firewall, hosted spam filtering, DNS and UTM protection)
- Regular, automated backups
- 24/7 System Monitoring

#### 2. If I have a Mac I'm safe.

Once upon a time this was mostly true – when Macs were a tiny slice of the overall market it just wasn't worth the malware writer's time to learn how to infect Apple computers. With the growing popularity of the Macintosh though comes a growing interest from online criminals. In 2012 over 600,000 Mac computers were infected with the Flashback malware, and security maker Sophos currently tracks over 4500 Mac-specific viruses & malware currently in use around the world.

Like PC users, the time has come for Mac users to add antimalware software and make sure they are being diligent with software updates and backups.

#### 3. If I protect just my computers I am safe.

Also not true – as of 2012 the fastest growing segment of both malware quantity and malware profitability (for the criminals creating these things) is the smartphone and tablet market, and more specifically Android-based devices. (iOS devices, including iPhones and iPads, are still largely malware-free, though a June 2012 article in Forbes magazine titled "There is too malware on the iPhone!" makes the point that iOS device users should not assume they are completely invulnerable.

With the increase in Android malware, Android-based protection software has increased along with Android management tools for IT departments to use both in protecting and securing mobile devices. Talk to your IT consultant to make sure you're using the right level of mobile security in your mobile devices.

4. No one would be interested in hacking into my computers.

Really? I hear this a lot, often from people who:

- Have a reasonably powerful computer, and
- Have a high-speed internet connection

That's really all criminals need. With that computer infected and under the control of a malware-enabled criminal botnet it can be used to spend thousands of spam messages per day, attack other computers on the internet, or control other infected computers so that authorities can't trace the real controller's point of origin. They can also of course watch every keystroke entered in the computer, looking for patterns that might be credit card numbers, social security numbers, bank accounts, passwords, etc. These can be bundled and sold on the online black market, and of course since the entire process is automated it's common for thousands or even hundreds of thousands of infected computers to be under the control of just a handful of people.

The take-away here is, no matter how unimportant you think your computer might be, you should still take precautions to protect yourself AND others.

# 5. If I do get infected, it just means I'll get some error messages or pop-up ads.

Unfortunately this is also wrong. As mentioned above Malware is a serious, money-making business for the creators. We already talked about some of the ways they can make money – hijacking your computer to send spam or to capture your credit card info for example. In those cases people generally have no idea their computer is infected until they notice problems on their credit report.

A more aggressive version of malware is becoming more common though. Imagine this scenario – a thief uses malware to learn your email and Facebook passwords. One day they login to your accounts and change your passwords to something new, then proceed to contact all of your friends and business associates. The most common ploy is to send around a note from "you" claiming that you had to travel unexpectedly to a foreign country because of an emergency. You have become stranded and desperately need \$2000 wired to your hotel so that you can purchase airfare for the trip home. "You" know this is highly unusual and you are very very sorry to have to ask, but is there any way that Fred / Wilma / Jane / whoever receives this note can wire the money right away? "You" promise to pay them back as soon as you return home.

Hopefully most of your friends will realize this is a hoax before they send the money, but we routinely find people who have lost thousands of dollars to this sort of scam.

Or try this one: You turn your computer on one day. Instead of the normal startup screen you get a message saying that your computer's files are encrypted and the only way to get them back is to wire \$500 (or more) to the hackers. After they receive the money they will give you the password to get all your data back. (Although they're more likely to just demand more money).

These are increasingly common strategies that these online criminals use to make money. To fight back, use these three tips:

- Use strong protection (see point 1 above)
- Backup regularly
- Don't just use a password but a strong passphrase (ie a combination of 2 or more words, numbers and special characters) and change it often.
- Make sure any hosted email accounts you may have, including Gmail or Hotmail, include a second authentication method such as a cell phone or alternate email account. Usually with this in place you will be notified whenever your primary password is changed and you can contact the service provider immediately if you weren't the one who changed it.

Tech Trends

### For More Information:



## David Perkovic DP Computing Adelaide, South Australia

Phone:
Fax:
Web:
Email:

08 8326 4364 08 8382 3785 <u>www.dpcomputing.com.au</u> <u>support@dpcomputing.com.au</u>



www.facebook.com/dpcomputing

www.twitter.com/dpcomputing

dpcomputing.blogspot.com

www.linkedin.com/in/davidperkovic www.linkedin.com/company/dp-computing

You Tube ww

www.youtube.com/dpcomputing

Tech