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Specializing in
Custom Technology Solutions

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What should you be looking for in Small Business Technology?

If you are thinking of starting a new business or have an existing business that you are looking to improve or grow, you hopefully have a business plan that will help guide you through to success. But have you created / included your technology plan?

Technology is playing an increasingly important role in today's business world. Fewer and fewer people are using paper directories and instead using online search engines. E-mail is quickly becoming the preferred method of communication, and digital records are becoming the preferred alternative to walls lined with office file cabinets. While most people create a business plan, which includes a marketing plan, advertising plan, etc. with a budget for each, many forget to include technology. It is essential for you to create and execute a complete and well thought out technology plan to help your business be successful. But what should be in this plan?

The following describes some of the basic considerations and functionality that a typical Small Business should consider when creating their technology plan. **It is essential to work with a skilled IT consultant who is familiar with current technologies, alternatives and can understand how they can best be applied to your business.**

My Business / Technology goals – what do I want to accomplish? –.

Skipping the obvious (e.g. electricity, phone, HVAC), and assuming that Email and Internet access are a given, what else do you want from technology? What do you want to be able to do?

Consider some of the basics:

- Calendaring and scheduling
- Document preparation, sharing and collaboration
- Receiving and sending FAXes, paperless where possible.
- Messaging
- Online conferencing
- Time tracking
- Inventory management
- Bookkeeping and financial management
- Record keeping and data mining / analysis
- Customer Relationship Management (CRM)
- E-commerce / Online sales
- General business applications.
- Line Of Business (LOB) specific applications (e.g. medical billing, inventory mgmt, etc.)
- Etc..

Creating this list early on can help you select the right solution that will grow with your business and save you money. Minor course corrections are expected, but changing paths at a later time can create a costly migration or upgrade.

Choosing my technology platform – should I buy a server, get a hosted solution or reach for the Cloud¹?

Choosing the right technology platform is a crucial decision and obviously should be based on the business / technology goals described above and outlined in advance. While each of the alternatives has strong benefits and limitations, planning is key, where the selection process can be helped by performing a cost-benefit analysis.

For example, a small (1-3 person) home or small office that only wants support for low volume email and basic calendaring may be better off paying a monthly (or yearly) subscription for a hosted or “cloud computing” solution² rather than setting up and maintaining their own in-house mail server. Alternatively, a company setting up an e-commerce business on the web might choose a hosted solution, rather than setting up and maintaining their own in-house web server(s). However, a business with a large number of users or heavy email volume, data sharing and collaboration needs, with server based applications or databases may be served best by an in-house technology solution / server.

Again, this is a crucial step; make it **carefully** and do not hesitate to get **help**. You want to be sure you have the **right tool for the right job** so your business will be successful!

I've listed my goals, selected a platform – what else should I think about?

Just because you have picked out a car and chosen a dealership to buy it from, it doesn't mean you are ready to drive off the lot. It is time to choose the right package and options – those extra requirements and features you can't do without or want to leave to chance. Technology is no different.

Applications: Make a list of the most important applications (programs) you will be using and verify that the platform you selected will support them.

In the early days of personal computers there were fewer options and people were making their choice based on one or two applications; “I want a computer that will run Lotus 1-2-3 and WordStar”. I realize that was a long time ago and things have gotten both easier and more complex at the same time; however the principle is still the same. I want a technology solution that can do A, B, C, etc. for N number of employees ...

At the same time, you want to select the correct version of the application. Depending on the package, software can cost anywhere from hundreds if not tens of thousands of dollars per user. Getting the right version can be confusing. For example: Email is a program that the average office worker has open and sits in front of for most of the day, and therefore might require setup (and a license) for everyone. In a 15 person office there may be software that is only needed by 3 users at any given time. In this case, the software vendor may offer a flexible license manager that allows the software to be installed for all 15 employees, but restricted to 3 simultaneous users. This can save a great deal of money, and increase productivity. Think carefully about what you want and research carefully.

Remote Access: Where will I or my employees want to access to the technology from?

Gone are the days when people only work when they are in the office. If you are not in the office, do you want to be restricted from accessing your information or systems? If an emergency comes up while you are on vacation, do you want to cut your trip short and rush back to the office to access your technology? Remote access is essential – getting access to your information from

¹ Wikipedia: “Cloud computing is a style of computing in which dynamically scalable and often virtualized resources are provided as a service over the Internet. Users need not have knowledge of, expertise in, or control the technology infrastructure in the cloud that supports them.”

² Examples of Cloud Computing service providers are Google, Microsoft, Amazon and others. For more information see: <http://jefric.com/blog/2009/05/26/10-cloud-computing-companies-to-watch/>

any place, at any time, from anywhere. It is also a key element of (IT) support and managing costs.

Remote access is a powerful requirement and can save a business a great deal in both dollars and productivity. Very often all that is needed is a public computer with a web browser. Consider it carefully and plan accordingly.

Mobile Computing: Very similar to Remote Access, Mobile Computing allows you to use an alternate device to perform similar or reduced functionality away from your desk with limited or no connectivity³. Such devices include PDA's, Smartphone's, and NetBooks. You see people using these devices nearly everywhere, and in some cases are highly addicted to them. Fortunately, mobile computing devices are very accessible, and it is becoming harder and harder to buy a mobile phone that makes only calls and does not do something else (e.g. text messages, SMS, e-mail, web surfing, etc.). It is really not fair to call an iPhone or BlackBerry just a telephone. These have quickly become more powerful than desktop computers produced in the recent past. Regardless, choosing the correct device that integrates well with your platform and business requirements is essential, and can enhance productivity and efficiency.

Security: Protecting your environment and your intellectual property.

One of the most important concerns of selecting a IT solution is security; protecting both the technology and data against all types of malware; viruses, spyware, etc., as well as the Intellectual Property of the business, insuring that employee access is correctly controlled, restricted and monitored.

Speaking to the first, malware can infect a business through a variety ways; such as email, attachments, web pages, USB devices, or any other digital doorway. It is not only important to have an up to date solution, but something that is suited to every possible point of entry. You wouldn't want to spend money for a state of the art alarm system for your house, but forget to alarm a window that someone can crawl through. Malware solutions are applicable to every platform discussed here. If you don't see it mentioned, ask.

Moving on to the second, security also involves having the necessary controls in place to limit or restrict access to company information so as not to expose your business data, client data, or intellectual property to someone who is not entitled. This includes accounting for situations like lost or stolen devices, employee separation, burglaries or break-in's, etc.

If you are using your own in-house technology, be sure you are comfortable with the controls you have in place to protect your systems and data. If you are using a hosted or cloud computing service, don't hesitate to ask the service provider what they are doing to monitor and protect access to your data.

Availability / Contingency: Insuring that your technology is online and working for you when you need it to.

Computers do not require sleep, need to take a vacation, or even a coffee break. They do however require periodic attention for tuning, optimization, maintenance, or upgrades and can suffer from an unexpected failure. The result of this can have a material impact to your business, and should be incorporated into your technology strategy. Setting expectations and contingency planning for scheduled or even unscheduled outages is vital. You may only need your office computer for a few hours during the day, you may want to receive email 12 hours a day or one of your goals for creating an e-commerce site may have been to conduct business 24x7.

³ Wikipedia: "Mobile computing is a generic term describing one's ability to use technology while moving, as opposed to portable computers, which are only practical for use when deployed in a stationary configuration."

Regardless of which platform you select, having a (formal or informal) Service Level Agreement (SLA) will help you set and manage expectations for the time when things are not working as expected or maintenance is required. Ask yourself the question: “What is my tolerance for a loss of data or technology?”

While formal SLA's are often found in hosted and cloud platforms, you can create a similar (formal or informal) measure for in-house platforms. Furthermore, you want to make sure you understand the measurement. For example: If you are offered 99.5% availability, what does “availability” mean and during what hours of the day is it being measured? If I can browse the Internet but not read email, are my systems available? If I experience a machine failure, do I have a spare to use while it is being repaired? Thinking of others and planning ahead can save you money and aggravation.

Backups: Planning for the un-expected.

Statistics have shown that 50% of small businesses do not perform backups, and of those who do, 85% never test them to make sure their information is accessible for the time that they need them. Whether you mistakenly delete a memo you were working on for the past few days, you need an old version of your finances from the past or suffer from a virus attack or hardware failure, a backup plan is a key part of your technology strategy. Like availability, it should be based on and include a measure of your tolerance for data loss, the granularity that you would need to restore, and the location of the data backup. For example: Do you want an hourly, daily weekly or monthly snapshot? If my technology resides in my office, do I want to keep an offsite copy in case of fire or some other natural disaster? If my technology platform is hosted or lives in the cloud, with what frequency are the backups done and how easy it is to perform a restore?

Remember: backups are essential, and testing them is just as important.

Technology Portability: Making sure you always have access to your information in a format that can be used elsewhere.

Just because you have a working solution today doesn't mean that it will be working tomorrow, or the service provider / tech support will be around either. People change services for a variety of reasons. Fortunately the post office helps with mail forwarding when you move, but it took years before telephone number portability became available and even longer for mobile phones. Before that it was a major headache for people who switched carriers, contacting dozens if not hundreds of people with the new information. The same is happening today with email addresses.

If you have selected a technology platform, either in-house, hosted or in the cloud, make sure you are comfortable with the ability to import and export your data to and from other systems and service providers. You want to avoid the scenario where the vendor of your platform or service provider goes out of business and you cannot move your technology or data to someone else.

Budget: Run the numbers, they should not deceive you.

In the Small Business world of today technology is NOT a discretionary spend. Touching nearly every aspect of the modern day business, technology is a multi-phase investment that includes setup, maintenance, subscriptions, renewals, growth, upgrades, etc. Regardless of which platform you select, and whether you buy or lease your equipment, creating a budget to fund your technology will help you plan and account for many of the items discussed here. You may not need to buy every new version, upgrade or solution that comes to market, but with a budget, you can prioritize your technology spend and (re-)invest based on the ROI.

Do I have an employee with an old (slow) computer who would be more productive with a newer and faster model? Do I need to upgrade to the latest version of QuickBooks every year? Should

I be an early adopter of the latest version of Windows? These are just a few of the many questions that you may come across, but working from a budget it will be easier to pick and choose and allocate the dollars. If you selected a hosted or cloud platform, many of these decisions may be done for you. However, changes in your company size or work patterns may show up in your technology budget suggesting a change from a previous selection⁴.

This all makes sense, but how do I get started?

The information presented here is readily available and openly discussed in the news, online on web sites, blogs and forums. Sorting through all of the information, and understanding it is the challenge, especially if it is not the business that you are in. Everyone who drives a car doesn't know how everything in the engine works; they just know that it serves a purpose that is key to their driving experience, without which they might not be able to get from point A to point B. They may also find it necessary to enlist the help of an expert if something is broken or not working the way they would expect. Technology is no different.

Find an IT consultant who will work with you and understand your business. The right technology can **improve office efficiency, increase revenue and help you grow your business and profits**. All these things will help you be **successful**.

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⁴ For example: A business with 3 employees paying \$20 per user, per month for 3 services may have selected a cloud solution for a total cost of \$1,080 / year. If that business grew to 8 employees requiring 5 services at \$50 per user, per month, they are now paying \$4,800 / year. Perhaps an in-house solution would be less costly.