1. Target Keyword: Top IT Needs for the Entrepreneurial Small Business
Page Title: Top IT Needs for the Entrepreneurial Small Business

Today's businesses are smaller, nimbler and more mobile than they have ever been before. Their employees are much less tied to landline telephones in "brick and mortar" offices than in the past, and this is a competitive advantage for them. It has however made a difference in the top IT needs for the entrepreneurial small business and in the barrier to entry into the marketplace.

If your business performs service calls for instance, lots of infrastructure used to be required – big expensive computers, a phone number, an office were you could put the phone system, employees to answer those phones and assorted office supplies.

All of that is very fine, you may be thinking, and you might like to have some of those "problems" yourself, but the point is, these are no longer the top IT needs for the entrepreneurial small business. You no longer need all of these things to get into the market place, at least not in the 21st century you don't.

What's required now? You need one smartphone to get into business. You can start there. Even once growth and success force you to scale up, there will be an app for that, guaranteed.

So, you say, what are these top IT needs for the entrepreneurial small business?

Smartphones for one are almost indispensable, whether they belong to the business or to the employee.

Either way, securing the business and customer data on the mobile devices that have made these changes possible qualifies in and of itself as the second of the top IT needs for the entrepreneurial small business -- unless of course you think that having your business name in headlines about data breaches is likely to be a business plus for you.

And all that mobility would hardly be possible without the third item on the list of the top IT needs -- cloud computing. The ability to access documents from the Starbucks up the street from your customer's premises, or to look something up while you're in line to pick your kids up from school is a huge productivity gain whose magnitude really, all hype aside, it's almost impossible to overstate.

Even if you are only using Google Documents or a shared wiki for collaboration, these tools should probably top the list of IT needs for your small business -- these are services that nobody dreamed of back in the days of the IBM Selectric or even in the giddy forecasts of internet entrepreneurs in the dotcom bubble. And yet they are almost indispensable now.

And that is why I would add a few intangibles to the list of the top IT needs… like

imagination and courage and working outside your comfort zone.

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2. Target Keyword: Making the IT Department a Profit Center
Page Title: Making the IT Department a Profit Center

Information Technology workers often lament that their departments are seen as cost centers where expenses should be minimized. Given a little imagination though, making the IT department a profit center is less difficult than you might think.

The details of exactly how you go about making the IT department a profit center will vary depending on the line of business your company is in, but there are some possibilities. When you get down to it, adding value for your customers is an exercise in information management that can be solved using information technology. Ask your sales people what customers ask for that they don't have to sell to them. Ask your customers what you could do better.

Maybe it would save their accounting department a lot of headaches if you could put your invoices into a specific format for them. How user friendly is your product catalog? How searchable? Does it suggest related additional items? Like nuts to go with those bolts? Odds are your customer would be pleased by this sort of improvement.

If your product comes with a manual, are you giving it to your customers on paper? Really? How about a searchable CD? With a good FAQ and links to manufacturers? Would they possibly find it useful to visualize their orders with you, whether by time or location or some other criteria?

It's not always easy. Making the IT department a profit center requires careful assessment of your company's business processes and your customer's product needs. But this is an information problem, and you are equipped to deal with that. These services may not close a sale, exactly, but they will allow you to position yourself as a cut above your competition and therefore justified in charging a little more.

Project management is another path to making the IT department a profit center. You may be a vendor on quite a few projects that are plagued by incompatible tools and file types and operating systems. If your information technology department can take this information and make it available to the various stakeholders in a form that is useful to them, it's a measurable benefit to your company, that will get you moving towards making the IT department a profit

center.

A web site or wiki for the particular project is a cost effective way to start making the IT department a profit center. But you can also integrate with your customers' accounting systems and bill them directly. Since this would be a premium service for which your customers would be willing to pay more, this is another example of a small step you can take to help you with making the IT department a profit center.

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3. Target Keyword: Best Ways for IT and Marketing Department Collaboration
Page Title: The Best Ways for IT and Marketing Department Collaboration

The advent of big data technology has met up with marketing analytics. It is now possible to create complete and very detailed profiles of individual users which may be anonymous but are still able to predict likes, dislikes and behavior to an uncanny degree.

This raises the hackles of some privacy advocates. Target for example famously knew that a teenaged girl was pregnant before her parents did and was already sending her ads for baby products.

Privacy concerns were also raised over the use of targeted advertising by both the Romney and the Obama campaigns in the recent US presidential election. The advantages of being able to target a message to a market segment as small as Latina mothers who are registered Independents, live in certain zip codes, and use Facebook, for example, are obvious with only a moment's thought. If you have cookies from Elle and Vogue and you live in Miami, the thinking goes, you may not interested in the candidate's position on the Second Amendment; better serve you instead an ad about his immigration plan.

The retort to these algorithms is of course "who said?" and the one of the concerns with this kind of target marketing is that it further balkanizes the American public and makes the public discourse even more of an echo chamber than it already is. Some such premises are also stereotypical and many are offensive. But the bottom line is that the capability is out there. It is being used today and clearly will continue to be used. Nobody wants to buy advertising that won't help sell their product (or candidate) and might even be problematic in other demographics.

 So marketing needs a way to sort and parse all this data. It's a case in point of

the best ways for IT and the marketing department to collaborate. Customer analytics are an excellent example of an application where marketing sees the need for the technology, which it doesn't always, and the IT department can understand its use. With a little cloud computing and a database, IT may be able to oblige.

The best ways for IT and the marketing department to collaborate are project oriented. Specific goals are best. Assign IT personnel who know a little marketing and vice versa. Encouraging this "bilingualism" may require some meetings. Marketing knows a great deal about your customers and if IT can help them, some truly powerful products become possible.

Ask them what products customers are asking for. A wiki or other collaborative area will also let each side in this dialogue ask questions or make suggestions. IT should also implement a sandbox where both sides can experiment with the proposed technology solutions. Good luck!

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4. Target Keyword: How Tablets have changed the IT Department forever
Page Title: How Tablets have changed the IT Department forever

Tablet computers were seen as novelty items when Apple introduced the iPad, which served as a second or third device for affluent technophiles who wanted a better way to look at expensive consumer items in Conde Nast magazines. Adobe understood the importance of mobile computing very early, for example, but initially saw the tablet as a way for print publishing to reinvent itself.

It turned out to be far more. How tablets have changed the IT department forever is a tale with several beginnings stemming from several economic and technical trends. Tablets had been introduced several times before. Star Trek's cast used devices back in 1966 that looked a lot like tablet computers and even were called PADDs. But the devices that made it to market before the iPad were bulky and had awkward interfaces. Apple made touch screens elegant. Consumers loved Apple's touch interfaces and clean uncluttered design. IPhones were suddenly all the rage and Apple's competitors scrambled to play catch up.

How Tablets Have Changed the IT Department Forever

In 2010 Apple introduced the iPad. It was widely mocked by industry magazines, which totally failed to foresee how tablets would change the IT department. Consumers didn't seem to care that the devices shared a name with hygiene products, or if they did, they quickly got over it. Sales of tablet computers soared

exponentially.

Why? They were cheaper than PCs and lighter than laptops, yet powerful enough to play video. And you did not have to sit at a desk to use them. How tablets have changed the IT department? By being adopted in such huge numbers, fueling the "bring your own device" or BYOD computing trend.

Sheer volume is also part of how tablets changed the IT department -- in 2011, 75% of all workers were projected to have a mobility component to their jobs, a stunning number. But so is this: tablet sales are projected to jump from 16.1 million in 2010 to 147.2 million in 2015. By then, one in three online consumers will be using a tablet, says Forrester. Forbes predicted that in 2015 mobile app development projects will outnumber native PC projects four to one.

When the story is told of how tablets have changed the IT department, the baseline will perhaps be 2011, when fully 41% of the tablets used in enterprises belonged to the employee who used them. Many made presentations with them, and 67% worked remotely. This telepresence is also how tablets have become so influential and no doubt will continue to do so.

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5. Target Keyword: Strategies for Finding the Best CIO for Your Company
Page Title: Strategies for Finding the Best CIO for Your Company

If you are in the market for a CIO for your company, start by making sure that all of the stakeholders in this decision agree on the vision for information technology.

How businesses see IT falls into one of two quite distinct patterns. Either IT is a cost center whose expenses need to be contained, or it is an exciting opportunity to grow the enterprise and foster innovation among employees, customers and partners.

Recognizing the pattern that applies to your company is important for finding the best CIO for your company. It doesn't matter which one it is. Both have their proponents and if you make widgets, perhaps innovation is not the key factor for you that it might be at a social media company. But understanding which of these categories applies to your company is important to selecting strategies for finding the best CIO for your company, one whose personality matches your corporate culture and whose goals won't clash with your organization's vision.

Strategies for finding the best CIO for your company

If innovation is important to you, you are looking for a thought leader, especially if you are a business of any size. You will not find a CIO of this type on Monster.com and odds are, this CIO is not seeking employment. Look for presentations at conferences and meet ups, an established blog, or a way of being cited in discussions on key industry issues, for example. Such a CIO will not be inexpensive and will probably need to be wooed over a period of time, but if you are in an industry where the rule is innovate or die; you really need a visionary leader. You will still need to consider your strategies for finding the best CIO for your company, because this type of executive will need to be convinced both that he can help you and that you fit his career strategy. Expect extensive discussions of positioning strategy and of the scope of his authority.

On the other hand, if you are a conservative business that is in cost-cutting mode or whose line of business is currently affected by the economy, you need an administrator. There is nothing wrong with that but it does mean that you will use different strategies for finding the best CIO for your company. You should consider internal candidates who already know the business' circumstances. But if not, your strategies for finding the best CIO should include ads in such near-legacy venues as Monster. For a candidate to maintain a holding pattern, strategies for finding a great CIO might include offers of perks and emphasizing the stability of your enterprise.

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6. Target Keyword: the latest in cloud technology…
Page Title: It's almost 2013! Here's the latest in cloud technology…

In 2012, the latest developments in cloud technology were in process and infrastructure. Trends from the previous year continued and even accelerated, in particular the explosion of mobile computing and especially the truly enormous growth in the popularity of video content.

Big data technology was still important, and applications for it began to emerge in web analytics and target marketing. In the US presidential election, extremely detailed customer profiles allowed very precise targeting of candidate messages. The Romney campaign said it could target market segments as specific as young mothers who are registered independents and live in specific zip codes in Miami.

The Obama campaign quietly took this a step further, with a sophisticated social media campaign that leveraged information available about individual users, and where advertising was seen only by the specified users. This allowed it to avoid fallout from other groups who might find the tailored messages offensive; a

problem experienced by their opponents a number of times. The Romney campaign for instance ran broadcast ads in Miami linking Obama to Hugo Chavez, Che Guevara and the family of Fidel Castro.

Both campaigns outsourced IT. But where the Romney campaign employed an army of consultants, Obama's kept the strategy and coding roles in-house, and leveraged Amazon's Elastic Compute Cloud instances to rapidly scale up under traffic as election night got closer.

The Obama campaign took advantage of its outsourced capabilities -- the latest in cloud technology, including Amazon's multiple availability zones. It built an encrypted, triply redundant, encrypted, and WAN-optimized tunnel between AWS regions using OpenVPN, CloudOptimizer, and DNS hacks. The Obama campaign also used Amazon's Route 53 service to reduce latency and simplify deployments.

In other news, the OpenStack Foundation launched in 2012. This means that the latest in cloud technology now has a stable home, one whose core goals are and always will be the development of the latest in cloud technology. Proponents of the open source cloud OS say the foundation will spur adoption and acceptance of the platform, and that fears that the infrastructure will fail to flourish or grow will fade away in the face of evidence that it is manifestly doing nothing of the kind.

The new foundation will also take over open source projects from NASA and Rackspace, who developed the original codebase in 2010. Management of open source projects by nonprofit foundations was successfully pioneered by Apache Software Foundation and the adoption of this established model helps may help with buy-in from traditionally risk-averse C-level executives.

The latest in cloud technology also includes the sixth release of OpenStack, named Folsom, with features that expand its scope, such as a network component and elastic cloud storage capabilities.

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7. Target Keyword: amazing things you can do in the cloud for B2B
Page Title: What? You can Do that in the Cloud Too?

We've all heard about saving documents in the cloud for easy access, music storage services and the relative merits of various collaboration platforms. But that doesn't begin to cover the many amazing things you can do in the cloud for B2B. Your applications may be a little smaller in scope than some of those

below, but consider them examples of great cloud ideas for B2B once you start thinking outside of the wiki.

Meanwhile a few scientists have quietly taken cloud computing to levels that most of us have trouble even imagining. Did you know, for example, that the Large Hadron Collider produces fifteen petabytes of data a year, which requires 5,700 computer systems comprising 36,600 processors to manage?

The Large Hadron Collider Grid is a collaboration between 170 computing centers in 34 countries and is a poster child for what can be done at scale by organizations. The solutions emerging in academia from scientific collaborations of this nature will become increasingly available to allow businesses to explore the amazing things you can do in the cloud for B2B.

Chances are that you aren't envisioning anything on that scale, but it may give you some ideas about the amazing things you can do in the cloud for B2B collaboration, projects that go a bit beyond just getting the IT department and Marketing to share a wiki (although that may be challenging at times as well).

There's the Johns Hopkins project to process microscopic images of individual cancer cells from thousands of patients for clues to personalized cancer treatments. They store the results in a database at Los Alamos National Laboratory. They will collate the clinical details of each cell for thousands of cancer patients. Doctors all over the world will have access to this data.

Large-scale collaboration also requires network infrastructure, of course, but that is coming online and there are some cool things you can do in the cloud for B2B. In the United States the Internet2 network joins research institutions and many industry partners, including Microsoft, Cisco, IBM, Juniper and Level 3 Communications.

This new fiber network allows for video collaboration that is so clean and free from latency and jitter that musicians can play a duet from opposite ends of the continent/ It's also been demonstrated with musicians in Paris and Trieste. And that just scratches the surface of the incredible things you can do in the cloud for B2B. Think of the telecommunications applications or even what video collaboration could do for your sales presentations.

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8. Target Keyword: How to Outsource the IT Department
Page Title: How to Outsource the IT Department and NOT spend a ton of money doing it

Everyone knows that outsourcing is a good way to save money. Right?

Well, you hired your current IT department employees because you needed them, presumably. So how to outsource the IT department? Think about how your outsourcer will be able to do the same job, and make a profit, and charge you less money than IT costs you now.

That's not a trick question, and good answers to it do exist. Outsourcing can put the power of economies of scale on your side. But you can't count paying as much, let alone less, for your outsourced operation unless you put some thought and planning into the process. That's how to outsource the IT department.

Almost all outsourcing discussions contain some cautionary tale – delicate electronic components being built by hand without the proper tools, impenetrable and uncommented application code that does not perform as expected and has mysterious undocumented features as well.

So when you plan how to outsource the IT department, make a very good detailed specification. This will avoid many pitfalls and become the reference for any disputes. So this is not the place to skimp or to rush. Get stakeholder input too, especially if you are offshoring from a country expert or two.

You cannot expect a lower headcount. If all goes well you'll probably manage a cost reduction of 20%, but staff will increase roughly 15% and turnover at the outsourced operation may range as high as 80%. Outsourcing will require more management time.

But it can work with careful selection of business processes. IT department functions that are resource intensive or require extensive investment infrastructure are probably the best candidates when you consider how to outsource the IT department.

So consider outsourcing the help desk and technical support. This is where the value of a specification becomes clear. We have all been upset by bad offshored technical support. Require staff with needed skills and yes, possibly accent.

Your best opportunities, as you consider how to outsource the IT department, lie in server management and database and web server functions. They require expensive equipment and continual upgrading and patching. You'll find optimum conditions for a good outsourcing project – high expenses for a function that other people have expertise in and you do not. The same caveats about how to outsource the IT department apply here as well. Carefully examine your service level agreement before you approve it. Make sure that it includes not only

commitments as to response time but also to average fix time. Ask about business continuity planning and server redundancy.

And above all, when you ask how to outsource the IT department, realize that the best answer is usually "very carefully".