



Six Cloud Computing Benefits For SMBs

For small and midsize businesses, moving to the cloud for some or all IT needs can have significant upside from reducing costs to simplifying support and management.

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Cloud computing is still a relatively new technology for many businesses. However, the benefits that it provides to small and midsize businesses (SMBs) are vast and should not be overlooked. In particular, cloud computing can help SMBs in six different areas, which are outlined below. This article will examine each of these areas and analyze why the cloud is such a great platform for SMBs to take advantage of.

1. Cloud Economics Are Friendly

- Instead of building a data center full of equipment that won't be used for months or years, SMBs can rent small resources for protection, big resources on-demand (if and when necessary), and only rent these resources for the length of time that is needed. SMBs can avoid making large cash investments in a disaster recovery data center that doesn't help their business grow. Instead, they can pay small monthly fees for the service and invest in real growth opportunities.
- When building out a private facility there are always hidden or delayed costs (e.g. the unexpected increase in the power bill, or the forgotten travel expenses to the remote facility). With the cloud, SMBs only pay a set cost each month - nothing more. There are not any bills that arrive three months afterwards for some other random cost. Businesses pay for what they use when they use it. Additionally, SMBs have the option of stopping use at any time, which would immediately terminate the payments.
- The cloud enables SMBs to avoid over or under investment. When buying facilities or equipment, businesses can have trouble buying exactly the capacity that is needed. Support for one more production server might require a whole new rack, switch, or storage controller because the last one is full. With the cloud, SMBs can simply purchase one more without having to buy excess capacity.

2. Say Goodbye To Complexity

- Building and equipping a disaster recovery data center is typically a project that costs tens or hundreds of thousands of dollars, takes months and months of planning and execution, and requires specialists from multiple disciplines. Even if SMBs out-source all the specialty work involved, the project management work of defining requirements, managing budgets and schedules, and certifying the correct operation is a significant effort. The cloud enables SMBs to configure and start a new server in a remote data center with just a few mouse clicks.

- Disaster recovery, by definition, requires a remote data center. Managing operations, local utility services, and staff, is very difficult, and production experts may be required to configure, test, and validate the configuration, requiring travel to the off-site location. The entire operation becomes quite complex very quickly.
- The provider of a disaster recovery solution does not understand a SMBs specific disaster recovery data center environment - they just assume that one exists. Additionally, the provider of a remote disaster recovery data center environment may not understand a businesses' disaster recovery solution - the SMB is responsible for integrating the two disparate requirements. With Recovery as a Service, both solutions are packaged together, so unexpected incompatibilities are minimized.

3. Execute With Speed

- With physical resources it can take months to specify, order, receive, unpack, inspect, install, configure, and test - and only after all of those steps can SMBs begin solution integration. With cloud-based resources, the equivalent resources can be running in as little as a few minutes, and an entire solution could be configured in as little a few hours.
- When a project involves significant cost, manpower, external resources, and long time-tables, there is significant risk of project failure. For this reason, extensive planning and research is done prior to execution (the "ready, aim, aim, aim, fire" model). When a project can be completed in a few hours with little or no commitment and small amounts of money and manpower, the risk associated because very small.

4. Remain Flexible

- Business flexibility is dependent on the flexibility of the underlying infrastructure. When the basic operating practices of a business are built into the physical infrastructure, this makes changing products or strategy a very slow process. The faster the building blocks of a business can change, the faster a business can react to the market. When an acquisition, layoff, or reorganization changes the production requirements, cloud resources can immediately be scaled up or down to match. That way SMBs are not left stuck with over or under capacity infrastructure.
- Long term commitments (like buying equipment or building infrastructure) require precise planning for long term needs. Meanwhile, short-term commitments allow less precise planning over smaller time periods, and on-demand allows for trial-and-error. It's practical to pick a server size at random - if it doesn't fit, simply stop, and start up a new one that seems more appropriate.

5. Take Advantage Of Expanding Options And Falling Prices

- When Amazon Web Service began, they only offered on-line storage in one data center. Last year they offered five different sizes of virtual machines in two data centers on two continents. Today, they offer eight different virtual machine sizes in four data centers on three continents. During this period of expanding capacity and innovation, the cost to customers has actually gone down.
- When Amazon's Web Services began, they were pioneering the cloud computing idea (it wasn't even called cloud then). Today, Microsoft and Rackspace are both making credible large-scale offers in the cloud space, and VMware has begun selling software to help new vendors build their own clouds. Every hosting company is scrambling to create a cloud offering, and it is too early to tell which companies will succeed. However, customers are the clear winners in this space, as their options will continue to increase and become more appealing.

6. The Importance Of Security And Reliability

- Many critics worry about the security and reliability of cloud-based offerings. Anytime SMBs ask another company or vendor to take on their responsibilities, qualifications and reputation should be examined carefully. However, there are areas where scale matters: it is much easier to design a good security policy with five security experts on staff rather than with one person working part-time. It is also much easier to build highly reliable systems when a company is supporting thousands of systems, rather than a hand-full.
- Amazon, in particular, is a high-profile cloud services provider with many, many customers. To date they have not had any security incidents and have responded very quickly to outages. Although it is difficult to maintain a life-long perfect record in security and reliability, not using Amazon because of security or reliability concerns is basically making a bet that your security and reliability capabilities are, and will continue to be, better than theirs. Unless this is your specialty, this probably isn't a good bet to make.