

ExpertAnswers: Keep Your Technology Plan Up-to-Date with David Tucker—Cisco Small Business Technology Group



Information technology (IT) may be the most critical element of a small business's operations, and the least understood. Yet without proper planning and updating, networking and communication infrastructure may fall short of what's needed to keep in step with both internal and client growth.

This month **David Tucker**, Vice President and General Manager for Cisco's Small Business Technology Group and a long-time observer of evolving network technology, helps de-mystify the options and opportunities within those "black boxes" upon which so many of today's small businesses rely.



David Tucker

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Q: Why does technology matter to a small business when there are so many things to spend money on? Is it really OK to "make-do" with what is already in place?

IT is moving fast and changing the way we live, play, learn, and work. Customers expect up-to-date information anytime and on any device. Technology can help small businesses stay connected with their customers and partners in a way that was unthinkable a few years ago.

Q: It's often assumed that technology is the solution to every business problem. Do you agree, or is the "human element" still necessary?

Small businesses quite often have good, personal relationships with their customers. Technology can help to keep up these relationships, while helping run their businesses smarter and more efficiently. But as with other tools, maintenance is a key factor to ensure continuous results and confidence. For example, you would typically not drive a car for 100,000 miles without any maintenance. If we extend this example to technology, maintenance means that we need to back up our data in a safe and secure way. And this includes not just the data but also the configuration of the network devices.

Q: Technology audits are a good way to assess current uses and future needs. How often should they be performed?

Technology audits should be done on a quarterly basis. In order to make this a smooth and easy process, a small business should know the status of its existing network and how it performed since the last audit. As a result, the audit will take a relatively short amount of time (between an hour or so to a day, based on the company size and the complexity of the network), and ensure that the network can keep up with the businesses needs.

Q: You also recommend that security be included with the audit.

Yes, this is to ensure that all machines are up to date, password changes are enforced, and so forth. If you combine this with a plan for the future—a new employee or adding a remote worker, for example—it provides a very robust plan for the network.

Q: How should a small business get started building a small office network, and what components are required?

Start with an assessment of what is needed—how many employees, remote workers, wireless, guest access, and so on. Then, you can start planning the network. The required products vary based on company size and needed applications, but in general a router is a necessity. It is the "gate" to the Internet, and provides virtual private network [VPN] and firewall functionality.

For very small companies—say, no more than five employees—Cisco offers "all in one" products that include a router, wireless, firewall, VPN, and a four-port switch. A larger company will need to add a switch.

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Q: What small business technology trends are you watching most closely?

- **Cloud computing** will offer new services and applications to small businesses in a way that we haven't seen before.
- **Security** is important, especially as we see multiple devices being used on a network. Enabling the use of tablet PCs or smart phones on the network without compromising security is key for all networks.
- **Unified communications** is becoming a reality in the Small Business segment. Network consolidation and collaboration are two key things in this area.

Q: What are two or three good sources of information that can help small business owners stay abreast of current and emerging technology trends?

- **Subscribe** to the IT publication of your choice. There are publications available for different knowledge levels—for people who are interested in staying up to date on new technology, and those who are interested in depth IT information.
- **Stay in regular contact** with a trusted IT advisor. This will ensure you are staying abreast of emerging technologies.

Q: Say a small business continues to grow; how can the network grow with it?

Even if VoIP [voice over Internet protocol] is not used today, a small business should consider a managed switch. This ensures that the network is ready for VoIP, video and other real time applications when the business is ready to add them. Wireless can be enhanced with additional access points for greater speed and better coverage, particularly if the business occupies a large area.

Small business owners should also consider having a network that's ready for unified communication—the consolidation of multiple technologies such as voice and data—to facilitate better collaboration. For example, Cisco's UC320W is purpose-built for up to 24 phones.

Q: When should a small business consider a network upgrade, and what factors should be considered in planning/implementation?

A network upgrade is ideally the result of the regular network assessment. This ensures that the network keeps up with the business needs and is not slowing down the company. Typical reasons to upgrade the network are the use of unified communication, higher network speed, and the use a unified threat management (UTM) device that provides firewall, spam filtering, gateway antivirus protection, intrusion detection or prevention, and other up-to-date security features.

Q: What are some sources of network and other technology disruptions, and how can they be prevented?

- **Loss of data** (e.g., presentations, documents, and network configurations). A good backup strategy will prevent this from happening.
- **Security and security holes.** We suggest the use of a UTM product such as the Cisco SA500 series. Regular updates ensure that the small business stays secure and can focus on their business goals.

Q: What can small businesses do to future-proof their technology investment?

Small businesses should continuously be aware of newly available technologies. If they do not currently use them, at least make sure the network is ready to integrate whatever new technology that is appropriate for their business. A good example is Internet Protocol version 6 (IPv6), a step up from version 4 that most networks currently use.

Q: It's essential to have expert advice with technology, and any other business-related issue. Why is a SCORE mentor a good source of insight and guidance?

In most cases, small business owners and managers are experts in their area of business, such as bookkeeping and accounting, car repair, or restaurant management. Technology is a tool to help experts achieve greater success, and they need a trusted advisor who understands their business needs and what sort of technology they require.