IT Proves King Solomon Was Right!

President, Ministry Business Services, Inc.

Reprinted from *The Clergy Journal*

"Cloud computing" is the latest concept to capture Information Technology (IT)'s minds and imagination. Many are embracing it even though it is still in development; others are looking at it cautiously and with concern. Over the next few years we will all be basing our IT strategies on cloud computing. But what is it, and what does it have to do with Israel's third king who lived nearly 3000 years ago?

What is Cloud Computing?

Cloud computing is an IT strategy that places all data and programs on a server. Most believe that server would be available only via the Internet. But many in corporate IT are uncomfortable trusting all their sensitive data to someone else's care, so the concept has recently evolved to mean placing all data and programs on a server— whether available only via the Internet or in your server room!

That broadening of the concept to include storing all data on servers (rather than on local hard drives) and running all programs from a server has a certain familiarity!

Why Does it Sound Familiar?

Those of us who have been engineering networks for a long time recognize this as the way we used to set up early PC networks! In the 1980s, when WordPerfect and Lotus123 were king, that's the way we did networking!

Novell had come up with a way to reliably standardize PC networks, and the most efficient way to set up workstations was to have them run their programs from the server. The benefit was that when a program needed to have a fix, or patch applied, doing it once immediately benefited all the computer users.

But networks were new to PC users, and the biggest challenge was getting them to save their data on a central computer, or server. "What if it crashes?" was the most common objection. Our job as network engineers was to design networks whose servers were extremely reliable so users' confidence would grow. The benefit in doing so was that their data was centralized, making it less dependent on less technically capable workstations. It also made it easy to backup the data every night, something users were unlikely to do on their own.

Enter the Age of the Internet

That concept is being re-introduced with the same benefits, and people are being asked to trust their data to Internet servers that could be located anywhere in the world. Servers today are very reliable and cost effective, but the Internet is not always available. In fact, Denial Of Service (DoS) attacks have taken Google, Twitter, Amazon, Microsoft, Facebook, and many others offline many times this year!

In addition to DoS attacks, some early adopters of cloud computing who have entrusted their data processing to Google Apps have found themselves unable to do their work four days this year! These outages were without warning, and users could not call technical support to find out what was wrong; they could only go to a web page that said the system was down for maintenance.

The firm I work for has been engineering and supporting computer networks for churches and ministries for many years. If our networks experienced that kind of downtime, we would have been out of business a long time ago! Instead, we strive hard for— and achieve— 99.999% uptime! That's less than five minutes of unscheduled downtime each year! We learned in the early days of PC networking that network users would only entrust their data if the system had that kind of reliability.

What Does It Have To Do with King Solomon?

In Ecclesiastes 1:9 King Solomon said, "What has been will be again, what has been done will be done again; there is nothing new under the sun." (NIV) IT proves Solomon right often by introducing "new" technology that is really old technology with a new name!

We have seen many new technologies excitedly embraced that were really a rebranding of previous technologies. Fortunately, each rebranding brought with it technological advances, sort of like dipping a candle in wax— each time the candle comes out with more resources. In IT, it appears we're about building a better candle!

Conclusions About Cloud Computing

Cloud computing will impact all of us who use computers. Whether we entrust our data to servers only available via the Internet or on our own servers, we will all move in this centralization direction because the computers we will want to use will require it.

Computers are getting smaller and more mobile. We'll soon be wanting to do most of what we previously did on computers on our cell phones! And they are being developed with the capabilities to accommodate us, but their storage capacities are small. Many of us already use SmartPhones, or PDA phones, and their processing power is getting better every year!

Internet-based cloud computing will get better and will likely be ready by 2011; internal-based cloud computing will require a shift from workstation software that must be installed locally, like Microsoft Office 2007, to software (or versions or current software) that run optimally from the server. In the meantime, keep storing all data on your servers so it gets backed up nightly… the first step into the cloud.

Nick Nicholaou is president of MBS, a consulting firm specializing in church and ministry computer networks, operational policies, and CPA services. You can reach Nick via email (nick@mbsinc.com) and may want to check out his firm's website (www.mbsinc.com) and his blog at http://ministry-it.blogspot.com.