Chromebooks

By Russ McGuire - russ.mcguire@gmail.com

The Christmas season is always a time of year when I consider new technologies. Being a gadget guy, it seems like a great time of year to think about whether there are any great new products that I want to humbly recommend to my wife as a potential Christmas gift for me. This year, my list for review includes the new Chromebooks from Acer and Samsung. Especially as follow-up to last month's column on the Cloud, I thought it would be particularly relevant to consider the pros and cons of a cloud-based computer.

What is a Chromebook?

A Chromebook is simply a notebook computer that runs the Google Chrome operating system. The Chrome OS has a linux-based kernel and the Google Chrome browser as the primary user interface. Most Chromebooks have very little local storage – instead they rely on the Cloud for application operation and data storage.

Because of the heavy reliance on the Cloud, using a Chromebook requires a completely different approach to most computing tasks. Although embracing this change is valuable in preparing for a cloud-centric future, making the transition isn't painless.

What are the Chromebook challenges?

Using a Chromebook is different from using a laptop computer. Most Chromebook models have a very small storage drive (typically 16GB). You don't install software on a Chromebook – you run applications inside the Chrome browser. You don't store files on your computer – you store them in the cloud.

The Windows or Mac applications that you're used to probably don't run on a Chromebook, although there may be an equivalent in the Chrome app store. There's no optical drive for installing software and not much of a hard drive to install software to. Even if there was a physical way to install the software, the Chrome OS doesn't run Windows or Mac applications.

Although you can use Microsoft Office Live via the Cloud, and Google's own Docs capabilities (now part of Google Drive) are getting better at working with Microsoft files, the way in which you interact with traditional PC documents will fundamentally change. The way in which you handle collaboration and version control will be different - you'll probably come to consider it "better" but it will definitely be different.

The device is completely dependent on the Internet. As long as you can access WiFi, everything should work fine. But once you go off-net, most of the functionality will cease or change. While most Google apps (most notably Mail and Docs) have strong support for offline use, you do need to think ahead a bit and make a few extra steps to be ready for offline use.

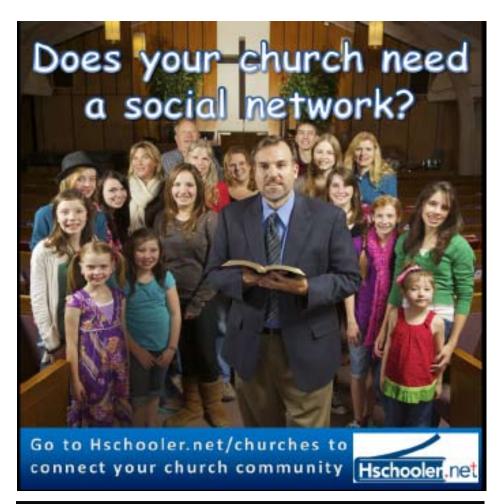**What are the advantages of the Chromebook?**

Counterbalancing those challenges are the significant unique benefits of the Chromebook. The simple operating system means that the device boots very quickly (less than 10 seconds). The minimal hardware means the devices are very thin and light and generally have very good battery life.
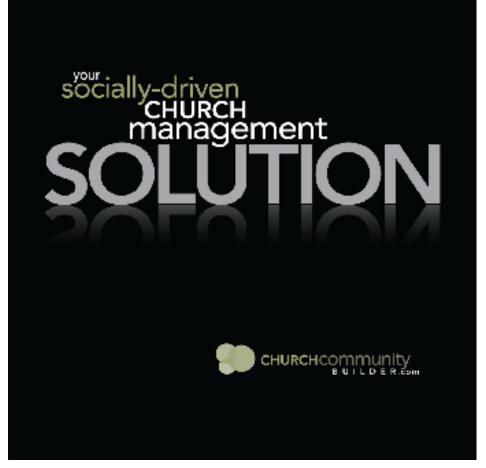
Because there's no software to install, there's also no need to worry about anti-virus solutions. Since the software resides in the cloud, you always have access to the latest version without buying and installing upgrades. There's no need to back up your data, because it's already securely stored (with disaster recovery) in the Cloud. Most applications you'll use are actually free – no need to worry about expensive licensing fees.

The latest versions of Chromebooks are also quite affordable, ranging from $199 to $549.

Should Churches and Ministries consider the Chromebook?

For a use case that is totally web-based, the Chromebook may be a great solution. If you have a place in your ministry for a computer that you want people to be able to use to access the In-

ternet, then a Chromebook can be a low cost option with the added benefit of not having to worry about software or files being installed on the computer that could cause problems.

Similarly, if you are ready to embrace cloud-based documents, a Chromebook may be a great solution for all the touchpoints for those documents – from the church secretary to the sanctuary media booth. With a Chromebook, you never need to worry if a critical file is locked up on someone's hard drive, or if you've got the final version with the latest changes.

Especially if your church is using Google Mail, Google Apps, Google Calendar, Google Voice, etc., then it may be worth considering Chromebooks for many of your church staff. The upfront cost and ongoing support benefits could be significant.

However, for anyone that regularly uses specific desktop software that hasn't yet been moved to the Cloud, the Chromebook could be a disaster. For any use that requires traveling out of WiFi range on a regular basis, a Cloud-centric solution may be very frustrating.

And of course, as with any new technology, you might also think about who in your organization is quick to embrace the latest and greatest and who is more change-averse. As Paul charges us in Romans 12:18 "If possible, so far as it depends on you, live peaceably with all." (ESV)

What about me?

I started this article noting that the Chromebook was on my list for consideration as a possible Christmas gift request. Am I hoping to find one under the tree come Christmas morning? I'm afraid the answer is no.

The Chromebook looks like exciting technology, and I'll continue to monitor for future gift requesting potential, but there are three key issues that are holding me back. First and foremost, my laptop continues to serve me well. Lord willing, I think it's got at least another year of life in it. Second, I spend a fair amount of time programming. Although there are cloud-based development environments, I'm pretty comfort-

able with my local set-up. I'm not ready to disrupt that. Finally, in many ways I still live in the old world, including how I buy music. I buy the physical CD, then rip it into digital format for distribution across multiple devices. Although Google Drive and Google Play work well with digital media, the Chromebook isn't designed for ripping CDs into the process.

It is my hope and prayer that these articles on the power and danger of technology will encourage you in your daily walk with Christ. Whether it is the printing press, radio, television, personal computers, the Internet, the Cloud, mobility, Wi-Fi, or Chromebooks, new technologies continue to advance our ability to know God and to serve Him, wherever we go.

Russ McGuire is an executive for a Fortune 100 company and the founder/co-founder of three technology start-ups. His latest entrepreneurial venture is Hschooler.net (http://hschooler.net), a social network for Christian families (especially homeschoolers) which is being built and run by seven young men under Russ' direction.