What is Apple's iCloud?

Brooke Gurnick

IT 103 Section 002

October 1, 2013

George Mason Honor Code:

Introduction

Apple is one of the leading information technology companies around the world. It has many competitors so the need to stay up-to-date with technology and have new and frequent programs and products out on the market is necessary. One of Apple's newest programs is called iCloud. A cloud computing program is defined as, "…a type of computing that relies on *sharing computing resources* rather than having local servers or personal devices to handle applications" (Webopedia). Basically with iCloud you can manage, view, and use all applications and sources from one device to another as long as you are backed up through iCloud. There are many competing cloud computing services and programs that have surfaced in the last year that Apple is up against.

Since Apple is competing with so many other companies they must find a way to make their cloud computing stand out from all the others. Apple products are being bought every day (iPhone, MacBook computers, iPad, iPod, etc.) and with those products iCloud is automatically installed. Steve Jobs, the creator of Apple and the inventor of iCloud (Apple's cloud computing system) was weary of coming out with this program mainly because he was competing with so many others. Bob Evans stated in his article, *Apple's Next Billion-Dollar Idea,* "If he [Steve Jobs] creates the iCloud – an enterprise-mobility cloud service – he'll position Apple at the incredibly strategic intersection of real-time information and robust mobile access to it" (Evans, 2009, pg.1). Through research and intense analysis I hope to answer what iCloud is, why it is better than its competitors (Google, Microsoft, etc.), what the risks are, and why I should use it with my devices.

Background

Cloud computing has been around for a few years now but consumers are recently having access to it. In the article, *A Critical Review of Cloud Computing: Research, Desires, and Realities,* the authors noted that, "Around 2007 the term cloud computing began to be used to reflect the use of the Internet… to connect to such devices" (Venters & Whitley, 2012, pg.3). There are many name brand companies such as Apple, Microsoft, and Google that all have their own form of cloud computing. Greg Notess stated, "After 6 years of rumors, Google finally launched Google Drive; Microsoft has significantly improved its Sky Drive; and Apple is pushing iCloud on all sorts of iDevices" (Notess, 2012, pg.1). These are just to name a few of the major brand name companies carrying cloud services.

Greg Notess asked, "Do you plan to read a document at work, at home, and while traveling, perhaps on a computer, a tablet, and a Smartphone? If so, having it accessible in the cloud makes it retrievable from all three locations…. Synchronized cloud storage makes this possible and relatively easy without restoring to copying the file to a flashdrive or CD or bring a laptop for a single file" (Notess, 2012, pg.1). Therefore, with a cloud program on my devices I am able to do practically anything at anytime and anywhere I want. Other critics named Will Venters and Edgar Whitley stated that, "The idea of providing computing as a service through networks dates back to the 1960s…when the provision of computing utilities' became a driving force behind the early development of the Internet" (Venters & Whitley, 2012, pg.2). Cloud computing has been around for some time now but the advancements are just now becoming acclimated into the consumers everyday lives.

Potential Benefits

After using research to find out what cloud computing was and how it can make my life easier I wanted to know the benefits of using Apple's iCloud instead of the other companies such as Microsoft or Google. According to Greg Notess' article, *Cloud Storage and Synchronization: Information Management Tools,* "…it [iCloud] provides 5GB of free storage. For those fully ensconced in the Apple universe and just syncing between a Mac, iPad, iPhone, and other iDevices, iCloud can work well" (Notess, 2012, pg.2). Apple's iCloud is the leading competitor in holding the most gigabytes. Unlike Apple the other cloud computing programs can only hold up to three or four gigabytes.

Although storage space and capacity are a huge benefit for iCloud there are also other factors that contribute, one being the reduction in cost. Venters and Whitley state that, "…for large companies, who have already undertaken extensive consolidation of their existing infrastructures, the cost savings associated with moving to the cloud may be significantly lower" (Venters & Whitley, 2012, pg. 3). Because there is more storage space and less of a cost, I deem this cloud service to be beneficial.

Along with the benefits there are also disadvantages to using Apple's iCloud. One being that if you have iCloud you can only sync information from your other Apple devices. For instance one cannot use a PC computer and an iPad and intend to sync them through iCloud because the PC computer is not compatible. Kevin Fitchard wrote, *is Apple's Success Now a Self-Fulfilling Prophecy? Or will the Cloud Break the Grasp?,* and stated, "iOS content can only be used on iOS devices, so the more money a customer invests in the iTunes App Store, the more likely they'll remain an Apple customer as they buy new phones, tablets and even PC's in the future" (Fitchard, 2011, pg. 1). Although some may not see this as a disadvantage others may mainly because of the inconvenience

of having to buy new computers or tablets to continue their iCloud connection through Apple.

Security

One major concern for almost every consumer is the risk of security hacking or lack of security for any device or service. As a consumer, I too am concerned about this topic. Will Venters and Edgar Whitley noted in their article that it was, "…suggested in interviews that the cloud providers may be better able to manage security, respond to distributed attacks and invest in sophisticated security hardware and software; facilities that are unavailable to all but the largest enterprises" (Venters & Whitley, 2012, pg. 7). Therefore, "largest enterprises" being Apple, Microsoft, and Google do have access to the newest and most beneficial facilities for security software and hardware for their customers.

Since there is a risk of being hacked through cloud Notess suggests in his article, "The simple approach is to keep the more sensitive files out of the cloud. Yet for an organization beginning to rely more heavily on cloud computing, evaluation the potential security implication is an important criterion in choosing a cloud storage service" (Notess, 2012, pg.3). Therefore, Notess is saying that because there are security risks it is important for any cloud user to look into and research each specific cloud company to understand their security options.

Like Notess said there is a certain risk for each cloud company, and because I am interested in Apple's iCloud I looked on Apple's website to learn more about their iCloud security. The website states, "iCloud secures your data by encrypting it when it is sent over the Internet, storing it in an encrypted format when kept on server…. and using

secure tokens for authentication. This means that your data is protected from unauthorized access both while it is being transmitted to your devices and when it is stored in the cloud" (Apple Website).

Conclusion

In conclusion, I have answered all of the hopeful questions I was looking to answer. For one, I wanted to know what iCloud was, and as I said before it is a service that connects all of your Apple devices, otherwise known as iDevices, in order to make work and school life easier. The second question I was looking to answer was why iCloud is better than the competing services such as Microsoft and Google's cloud computing. I found out through analysis of research that iCloud is cheaper and can hold more data, but in the long run it may be more expensive because one may have to update their computers and tablets to Apple products if they want to continue using and connecting everything through iCloud versus another cloud computing program.

The third question I was looking to answer was what the major risks were. As stated earlier the biggest risk is security. After reading information straight from Apple's website it was clear that iCloud is secure both when information is transferring from each device and when the information is saved and stored in the cloud. Therefore making me believe that iCloud is very secure with a minimal risk or hacking. The final question I wanted to answer is why I should use iCloud with my devices. Well I do have a MacBook Pro laptop, which is an Apple device, so that is mainly why I was interested in iCloud versus the other competitors, but in conclusion I think that the other cloud computing programs are just as good if not better than iCloud. Although I do have an Apple computer I think that it may be cheaper and easier to use a Google cloud

computing system to back all of my information up to.

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