**20150404 Web Apps, Windows 10, ChromeOS and why we should care!**

Ok, So this week I was going to demo Windows 10 a little bit, sounds simple enough, a lot of people haven’t seen it yet. And I setup a developer account a long time ago, so I get notifications of MS products to try out. This time around anyone can download Win 10 Tech Preview and use it. So it’s not like I am super special, I just happen to know where the download is!

<http://windows.microsoft.com/en-us/windows/preview-iso>

Web Apps - Web Apps are small applications that run in the cloud, you only need a browser to use them. Actually web apps have been around for a very long time, but until recently you really could only play games, (IE: Java, Flash) Now, you can do real things in the cloud, cloud storage has become very cheap, and most large companies offer free space to store your stuff in the cloud. (Google, Microsoft, Dropbox, ect) Normally this free space is limited to 5GB, but Google Gives you 7GB to start, plus some for storing small pictures, Microsoft I think is at 15GB Free (But they offered 25GB to a few select people, I am one of the select), Dropbox 5GB but will add more if you use some of their other apps, or share pictures - I think total free space you can get from Dropbox is 50GB - not too bad. Each one of these companies has a way to sync what is on your computer with what is in the cloud. Google doesn’t offer Document sync yet, but I think they will (Actually they do have document sync in the ChromeOS) But they do sync email, contacts, calendar, and any apps you have installed on Chrome.

Google Docs is a web app, that can and does for many people take the place of a Office package (Word Processor, spreadsheet, presentation, database and more)

Microsoft also offers a similar web-app - Microsoft 365 (office.com) it’s a pay web-app but takes the place of a Office package on your computer, for a flavor of one in the cloud.

There is a limited free version of Word, Excel, and PowerPoint avaiable at onedrive.live.com

Microsofts web-app does give the ability to open the document in a off-line version of Office for editing.

Both Google, and Microsoft offer Email (Hotmail/Outlook and Gmail) both offer Calendar Sync, both offer a contact sync. As well as web search (Google and Bing), Both offer Maps.

Both also have virtual assistants - Google is “Ok Google” and Microsofts ‘Hey Cortana”

Apple of course also offers a virtual assistant in the form of “Siri”, and Amazon is beta testing a virtual assistant.

Virtual assistants, are a whole other topic, like which one is better, which one can do more, and ultimately which one will win the virtual assistant wars.

Google offers some additional apps - Google Plus, You Tube, Translate, Books, Blogger

helpouts, Hangouts and more.

To be fair, Microsoft also offers some of these services - they do have a translate app, I think they have books as well. They own Skype which would be in direct competition with Hangouts & Google Voice. They have given in on some of the more social aspects of web-apps, and have made some twitter and facebook clients

Where they differ greatly is Microsoft has dozens and dozens of websites, almost every web-app they have has it’s own web-site, it’s own team, and it’s own look - there is not one unified experience.

With a few exceptions however, Google has maintained all of it’s apps branching from it’s own site. In most cases you can just type the name of the app dot google dot com and it will bring you to the right spot. For instance.

Google Plus - <http://plus.google.com>

Hangouts (Bad example) - hangouts.google.com Why is this a bad example, because you can use hangouts online, but to do it, you just open up plus.google.com and click the link from there. Hangouts.google.com will give you information about the app.

Google Drive, and Google Docs - drive.google.com or docs.google.com

and many more.

The obvious exception to this would be Youtube that has it’s own URL but is still part of the google experience

Googles end user experience is much more unified. Every page that is running as a web app has the same header, and works more or less the same way.

Some drawbacks - Both Microsoft and Google as so large, and do so much, at times they feel like they are fight with themselves. One prime example is

Youtube Live, vs Hangouts Live - These two products to virtually the same thing, but from different directions, even when you select use like a “hangout” in youtube live you get something that is not quite the same as just starting a hangout.

Hangout also handles SMS on phones, and can do Voice calls - directly competing with Google Voice.

Microsoft, still owns and operates MSN which Now does use Bing as it’s search provider, but when Bing was just starting MSN still had its own search, competing with Bing.

Yes, MSN, AOL, Yahoo are all still around, and are still Web portals - Yahoo does offer a few web-apps, but is a minor player.

So I’ve focused on only two companies that offer web-apps, there are literally hundreds of Web-Apps, if not thousands of them.

You might ask why did I just look at these two. Well in my opinion these are the two big players to watch.

Both Google and Microsoft want a unified user experience. Googles method of doing this is different than Microsofts method. But right now Google is the leader in delivering this promise. And Microsoft wants to catch up.

In 2005 Linux was brought to the Masses, Ubuntu made a big push into free and low cost software. Ubuntu brought the OS back to the people. And People took notice, Governments, and Education took notice as well.

A unified experience.

With the help of Ubuntu and some other Linux based OSes Google brought ChromeOS to life.

In late 2009 the first Chromebooks came on the market, and the ChromeOS has not changed that much in the past 6 years, there was a major update to it in late 2012, the workings of it didn’t change much - but the user interface did (in other words it got a face lift) ChromeBooks, and ChromeTops (Desktops running ChromeOS) show just what can be done with minimal hardware, but a google browser and web-apps.

Chromebooks nowadays can run some android software, and do have an off-line mode so they don’t always need to be connected.

Now finally, Microsoft stood up and took notice of this operating system, and just what Google was doing (Maybe for the 1st time the took Google as serious competition?)

Microsoft was still thinking like Microsoft - yes I know that sounds weird, but it’s true. And it bit them hard this time around.

A brief history of Windows Operating Systems. (or maybe not so brief)

Before there was Windows there was DOS - came with every IBM type machine in the world, Microsoft paid very little for DOS, and sold trillions of copies of it.

Who did they sell it too - Large Companies, and OEM computer manufacturers. The OEMs would include it with the computer “at no cost” so you could start using the computer right away. It was rare for an individual to buy DOS until DOS 5 or 6 came out, them Microsoft saw some decent sales outside of the normal channels.

There were at least 7 versions of DOS before Windows. DOS was expensive to the OEM, and a few went out on their own and created a compatible OS .

Windows 1.0 - Nov 1985 - Originally called a Interface Manager - this was not a complete OS, it relied heavily on DOS. It was also mostly text based (no icons) it did have some graphical programs included.

Windows 2.0 - Dec 1987 - again relied heavily on DOS, brought a bit more usability into the interface.

(Side note: I have used both Windows 1.0 and 2.0, they remind me a lot of how DOS 6.22 Shell worked)

Windows 3.0 - May 1990 - True Multitasking, and a real GUI, better virtual memory, and mouse usage.

(Microsoft and IBM created a new OS together in the late 80s, in early 1990s conflicts between the two caused the relationship to dissolve - in 1992 IBM released OS/2)

Windows 3.1 / 3.11 - 92 and 93 - Major improvements to fonts, work-groups, networking, and more native Windows software - starting to make a break from DOS (well, it’s an early move as Win 3 still relied heavy on DOS)

Windows NT 3.x - This line started about the same time as Windows 3.1 - and parts of it went into Windows 95 (Which unified the NT product line and the 9x product line)

Windows 95 - Aug 95 - 32bit preemptive multitasking, with a 16bit kernel for backward compatibility. Many changes to the GUI, still had DOS underlining it.

There were are least 5 versions of Win 95 - 95B USB included basic USB support (Yup USB was supported in Win 95) 95C had a vastly improved Internet Explorer (IE 4.0)

Windows NT 4.0 - July 96 - New Explorer shell from Windows 95, scalability and features

At least 4 different versions of NT 4.0

Windows 98 - Jun 98 - new hardware support, FAT32, Hard drives larger then 2GB, and USB support

Windows 98SE - 1999 - Internet connection sharing, and a form of NAT, better USB support, and better hardware support. IE5.0

Windows 2000 - Feb 2000 - version number Windows NT 5.0 - server and workstation, it also supported direct x, and windows media player. Not intended for home users.

Windows ME - Sept 2000 - “Millennium Edition” - Last DOS-based OS from Microsoft, new multimedia-edition, IE 5.5, Windows Media Player 7, and system restore.

(As a side note, I like Windows ME, when you got a good install of it, it worked great!)

Windows XP - Aug 2001 - this was a merging of Windows NT/2000 and Windows 95/98ME lines - using Windows NT 5.1 kernel. This became a very stable, OS that lasted over 10 years, had many different reversions, and become one of the best OSes that Microsoft released. Covering both the Home users, and the Business Users.

There are a least 10 different editions of this product.

Windows XP Home, Windows XP Professional, Windows XP Media Center Edition (Having at least 3 different MCE releases itself), Windows XP Tablet PC Edition, Windows XP Embedded, Windows XP starter Edition, Windows XP Professional x64, and Windows XP 64-bit edition.

Windows Server 2003 - April 2003 - Update it the Windows 2000 Server line, with many new security features.

There are at least 6 different versions of Win Server 2003. (including 32bit and 64bit, multi core, single core editions)

Windows Server 2003 R2 - Dec 2005

(2 Lesser known OS from Microsoft)

WIndows Fundamentals for Legacy PCs - 2006 - a thin-client version of XP SP2 that would upgrade old machines, was released only to Software Assurance customers

Windows Home Server - 2007 - based on Windows Server 2003, but marketed to the consumer market.

Windows Vista - Nov 2006 - User Account Control (Admin by default is gone), Windows Aero GUI, new look, new feel, still windows

At least 6 different versions of Vista (this doesn’t count 32-bit vs 64-bit)

Starter, Home Basic, Home Premium, Business, Enterprise, and Ultimate

64-bit versions broke 4gb memory barrier.

Windows Server 2008 - Feb 2008 - builds on technology and security advances first introduced with Windows Vista

(At Least 10 different versions of Server 2008 were released)

Windows 7 - July 2009 - “Windows NT 6.1” - faster booting, windows powershell, better user account control, better GUI, and Introductions of Windows LIVE!

Six different editions (Not counting 32-bit vs 64-bit)

Starter, Home Basic, Home Premium, Professional, Enterprise, and Ultimate

Windows Home Server 2011 - April 2011 - built on Server 2008 R2, added support for Windows 7 - this was a major release.

Windows Thin PC - 2011 - Locked down version of Win 7 designed to turn old PCs into thin clients, and was only available to software assurance customers. It relies on cloud computing

Windows 8, Windows Server 2012 Windows 8.11

Win 8 redesigned user interface, easy touchscreen use, metro screen, programs are now apps, and run full screen. Fast boot (UEFI), and a Windows Store.

At least 4 versions (not counting variations of the OS for different platforms, IE: Phones, tablets, convertibles)

Windows 8, Windows 8 Pro, Windows 8 Enterprise, Windows RT.

Win Server 2012 - 2012.

Windows 8.1 - Attempt to correct the UI, FREE upgrade for Windows 8 users. adds new options for resizing tiles.

Windows 10 - Not yet released projected time Mid-2015

So why is this important, because sometimes you just need to know where you were to see where you are going.

Windows 7 first introduced some “live” features, and this was Microsofts 1st attempt for integration of the OS with Web Apps.

<http://en.wikipedia.org/wiki/Windows_Live>

This wasn’t entirely successful attempt. Windows 8 took this a step closer to what was envisioned. And overall, worked as it was suppose too.

Windows 8 had a major downfall in changing so much of the UI, that users became confused and frustrated. Opting to stay with Windows 7, and not really seeing the benefits of what was being offered.

Windows 10, brings the UI back to what people expected, The apps don’t open in full screen by default. You start on a desktop, with a start button, control panel, and settings are back, thou, they are in slightly different spots, and still not as easy to find as they were in Windows 7.

Windows Live Apps are included, and expanded upon. Skydrive works, and syncs across different computers (Works very much like dropbox).

There is a decent balance between installing new programs and using web apps.

Something that ChromeOS hasn’t quite got right yet (and maybe that is because it started life as a web-app OS, and turned into something a little more)

Both Google and Microsoft are staying pretty separated from each other, In other words, Windows 10 doesn’t have an app that will sync with your Google Drive

ChromeOS doesn’t have an app that will sync with your SkyDrive

But both will let you goto the website (you just can’t sync)

This make since, because they are in direct competition with each other, but from a user standpoint it does kind of stink.

Why will Microsoft give away Windows 10?

There are a couple of really good reasons to do this from a business standpoint. There are a few reasons that make sense from a customer relations standpoint.

Microsoft has stated publicly they will be giving a free upgrade to Windows 10 for both Windows 7, and Windows 8 lines, they will ask giveaway Windows 10 even if your product is not valid (IE: illegal) - Speculation is that Even Windows 10 Technolo preview will be upgraded to the full product.

Why?

Let’s looks at this - Microsoft is a Billion Dollar company several times overs (They might even be getting into the low trillions)

Who is their core customer? It’s not you or me, or even all of us put together.

Thier core customer is the OEMs, Business, and Enterprise, it always has been, end users (us) are just a by product of the OEMs. Does this mean they never sell a product to us directly NO, it does not, what it means on a whole, end users make up a very small amount of of the overall income.

so the next question would be doesn’t Microsoft provide support for end users, and the answer to that is yes, of course they do. But in most of the OEM agreements, that is something Microsoft provides. Honestly, even if it wasn’t I think Microsoft would still provide the support, they want to know what kind of issues and problems are coming up from the products. OEMs spend millions every year for Microsoft to support the software.

So, now that we know who Microsoft's customers really are.

We now look at normal end user habits,

Really computers become obsolete much faster than people buy new machines.

A machine’s real life should be about 6 months to a year, People will push that to 5 to 10 to even 20 years. And as long as the machine still turns on they will use it.

Forget the fact that the software is very out of date, and probably has big security issues.

Windows before XP (The 9x line) will have problems with modern websites, Even XP has issues with HTML 5.0 - The last truly usable Windows OS is Windows 7.

But there are millions of XP machines still online, and people are still using them.

The sad truth is most people don’t even let Windows update on it’s own, and systems are very out of date.

People really don’t get a different version of Windows until they buy a new computer! It’s a fact. There are of course exceptions to this rule, but, in general end users think if it’s not broke don’t fix it. Or it’s going to be so different I’ll never get use to it. (While the last is true at least about Windows 8, it’s not so true about Windows 10)

You think end users are bad about no getting a new OS - Well, Enterprise and Business users are worse. In some cases it’s justified, like I had a customer who had a very old CNC machine, the software would only work on Windows 98 (and Not 98 SE that was different) - The machine cost a half million when it was new and a replacement something more modern was going to cost them a quarter of a million (yes, cheaper then half million, probably better tech, etc.) But from a cost of $200 bucks to get the Windows box working again, or spending a quarter of million, the choice was clear.

That machine also never connected to the internet, so security wasn’t that big of a deal for them, they just needed it to work.

Enterprise level users need the systems to run very stable, with little to no intervention of users, you have to prove that they need to upgrade, and that the upgrade will be at least as stable, and work as well as what they have. And you need to be able to transfer the data with minimal loss of work.

Enterprise pays greatly for services like this, and for them it is usually cheaper to fix a broken machine, then to replace it.

So, what does this mean for Microsoft - at this time, not much, they will have to work to convince Enterprise level users to change no matter what they do. For them, it’s all about the service calls, and the support they can provide.

So what does all this have to do with giving away Windows 10, it pretty much has everything to do with it.

From business standpoint, giving it away (while still selling it to Enterprise, OEMs, and businesses) will not affect the bottom line, or it will effect it very little.

They will still have to sell the OEMs support, they will still have to provide service to Enterprise.

For the end user, getting everyone on Windows 10 will unify the experience, Windows 10 provides to upgrade options - a Fast and a Slow.

Upgrade as in getting another OS, updates are checked and install automatically.

A Fast upgrade path means you want the latest right now, and want to try out new untested features.

Slow means you want a stable path, it’s more important to you that stuff just works.

While it has not been announced yet how long it would be to get a upgrade (if any at all)

This sounds very much like how Linux works.

They have a LTS (Long Term Support) version which usually is supported for upto 5 years. And a normal release version, a new version of most linux distros comes out every 6 months. LTS releases do updates, but the core is left alone, kernel version not changed, and in theory at least they run more stable than getting a upgrade every 6 months. LTS support releases are typically released every 3 years (With support for another 2 years) thou that is not always the case.

This is how I see Windows 10 working now, following a release schedule, with fast being the “6 months” and slow being a LTS

And this is how I see Microsoft marketing Windows 10 to Enterprise level users.

By default at least in the preview, Slow is selected.

Everyone needs to be on the same OS, it will make support a lot easier, it will make doing releases a lot easier. Once you get a user on a OS they like, it’s much easier to keep them, I mean you really have to do something messed up to make them leave. And you really have to work hard to get them back.

Which brings me to the from the Customer point of view, giving Windows 10 away shows a lot of good will from Microsoft for the massive fail from Windows 8, and the half-assed attempt to fix it with Windows 8.1

This will or should bring back a lot of customers that are just fed up with Microsoft.

Windows 10 a Unified experience.

Ultimately, when Windows 10 is released, it will be a unified experience,

All of my settings from my Windows 8 machine, synced to my Windows 10 machines, desktop wallpaper, some apps from the store, contacts, skydrive, emails, etc, all simply synced.

I have Windows 10 installed on 4 different machines, all of them have the same look and feel to them.

ChromeOS has the same unified experience, but it extends to the web-apps as well (of course you have to use Chrome Browser on your desktop to get the full benefit of ChromeOS)

Google said we can give you the same experience on different devices, with different OSes and you’ll still think you are on one platform.

They have pretty much delivered on that promise.

Contacts, docs, G+, sms, etc is synced across my ChromeBook, Chrome browser, and Android phone and Tablet - my phone is running Android 4.4.4 and tablet 5.0

The experience on any of those devices is pretty much the same.

Windows 8 and 8.1 wanted to give a unified experience without taking into consideration of screen size, type of device, if it had a touch screen or no touch screen, etc.

It was so different and so much more confusing, they had to dump it quickly.

At least it looks like they are putting some thought back into Windows 10, Windows Phones and Tablets will probably end up running a slightly different OS something tailored to what they are (Like Google did with Android and ChromeOS)

SO Finally, Why should we care:

put very simply a unified experience. What is on one device is on another, no longer will I need to carry around different devices to do different things. One device will rule them all. (Lord of the rings reference)

Web Based apps are here to stay, changes to a web-based app, can be make quickly and easily. Everyone will/should have the same experience using the app, independant of what browser or OS they are on. (We haven’t quite gotten to the “OS they are on” part yet, but we will)

And Linux free and open source software, while still having a small “market” share of users, has had a large impact on how the giants in the field do business.

The future of OSes will be free.