

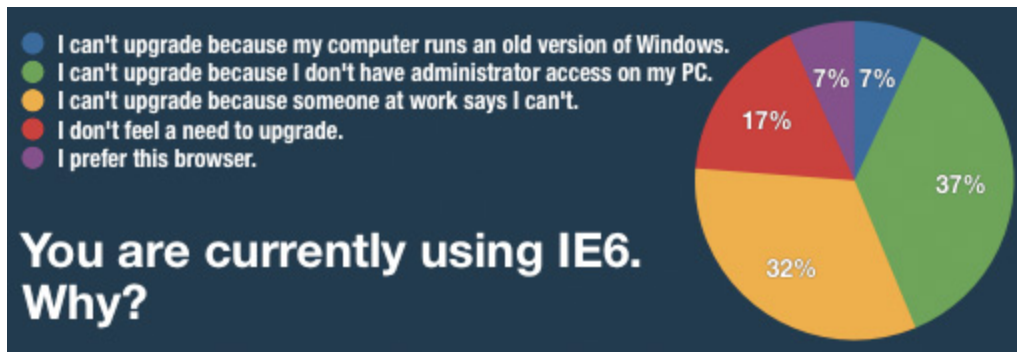
Why Your Company Should Offer an Alternative to IE6

There are no shortage of documents, blog postings, and hate sites on the Internet that list all of the reasons to upgrade away from Internet Explorer 6. However, very few attempt to address the business issues behind why this eight year old browser is still used by almost 10% of Internet users, and how these issues can be addressed¹. This article discusses why IE6 is still used, highlights problems with IE6, and outlines the benefits of offering an updated browser to your users. Finally, we provide tips on how to provide an upgraded browser to your users. This article is not about why developers should or should not support IE6 in their development efforts, because that's a topic worth its own article.

Legacy Software & Older Versions of Windows Have Kept IE6 Alive

There are two main reasons that companies still use Internet Explorer 6 and have not upgraded to a newer version:

1. They have legacy software that only works with IE6.
2. They have older versions of Windows (Me, NT, 2000), that do not support an upgrade to a newer version of Internet Explorer.



Source: [Much Ado About IE6, Digg.com \(http://blog.digg.com/?p=878\)](http://blog.digg.com/?p=878)

Many companies have invested significant time and money into software systems that, unfortunately, only work with Internet Explorer 6. For most, the time, cost, and/or expertise needed to update this software to work with other standards compliant browsers or newer versions of IE is not available, or cannot be justified. Therefore, these companies consciously restrict employee computers from upgrading to a newer version of IE.

1. <http://blog.digg.com/?p=878>

The second reason that IE6 persists in enterprise environments is because some organizations are using computers running older versions of Windows, such as ME, NT, and 2000. None of these versions of Windows support an upgrade to a newer version of IE, and hence all of these systems still depend on IE6. If these computers serve their function within a company, there may be little reason to expend the additional funds to upgrade the operating system. Some may not even have the option to upgrade because the existing hardware does not meet the hardware requirements for a newer OS, leaving the only alternative for upgrade being the need to purchase new hardware. Again, if the computers serve their purpose within an organization, there may be little justification or motivation to spend additional money to upgrade.

One other reason some users still use IE6, which is not often discussed, is that some companies/ individuals are running unlicensed copies of Windows XP, and cannot upgrade beyond Service Pack 1. You can't install IE7 unless you have Service Pack 2 (SP2), and SP2 requires a legitimate copy of Windows. These companies are not the intended audience of this article, since the purpose here is not to tell you how to improve your illegal copy of Windows. If your company is using IE6 because it is in this boat, then you are subject to a slew of other problems stemming from being unable to install essential operating system security patches.

The costs involved surrounding items 1 and 2 above may keep companies from upgrading Internet Explorer to a more recent version. However, as we'll describe below, **there are compelling reasons to give users an alternate, updated browser that can be installed and used simultaneously on their systems.** But let's first look at some of the problems of using IE6.

The Problems with IE6

There are many sites that can outline the deficiencies of IE6, and most users forced to use the browser already know that it is sorely lacking. Instead of going over all of the problems (we'll leave that to the other sites and high profile Internet campaigns to eradicate IE6), we'll just summarize the three major problem areas:

1. Security
2. Lack of Features
3. Lack of Support

Security

As of this writing, according to Security Monitoring company Secunia (<http://secunia.org>) IE6 has had 137 vulnerabilities, with 21 that are still unpatched (<http://secunia.com/advisories/product/11/>). This represents both the highest number of *total vulnerabilities* among any browser, but also the the highest number of *unpatched vulnerabilities* among any browser.

In addition to that, IE6 users are more susceptible to phishing, one of the fastest growing online security threats, because IE6 doesn't have built in anti-phishing filters. When you combine this with

the fact that the browser is no longer actively maintained by Microsoft, it doesn't take a security expert to see that IE6 is not the best choice if you are actively concerned about security.

If you still need additional validation, security experts, including wired magazine security columnist Bruce Schneier, recommend that users stop using Internet Explorer for normal browsing, and switch to a different browser instead. Several notable technology columnists have suggested the same, including the Wall Street Journal's Walt Mossberg, and eWeek's Steven Vaughan-Nichols. In 2006, citing its lack of security, PC World named Internet Explorer 6 number 8 on their list of the "25 worst tech products of all time."²

Lack of Features

IE6's serious lack of features is not really that surprising, after all the browser is eight years old. IE6 was not built to work with the modern Internet of today. Web users not only expect certain features for efficiency and productivity (think tabbed browsing), but also for security (think anti-phishing filters). Although the list can go on and on, a few of the most obvious deficiencies include:

- Lack of tabbed browsing (reason alone for many to curse IE6)
- Lack of anti-phishing filters
- Lack of proper CSS support (causing many sites to display incorrectly/not at all)
- Lack of proper javascript support (causing many site to function improperly or not at all). Microsoft doesn't support javascript - they have JScript, which happens to be similar.
- Lack of PNG transparency support
- Lack of stability (browser crashes that not only freeze the browser, but also the OS)

Finally, a general lack of W3C standards compliance significantly worsens the user experience, because with IE6 many websites are inaccessible or display improperly.

Lack of Support

As mentioned above, Microsoft no longer actively maintains IE6. Windows Vista and 7 do not support IE6, and newer Microsoft software such as Sharepoint 2010 will not support IE6³. Although many sites already do not support IE6, certain major Internet destinations such as Youtube and Facebook are beginning to phase out support or ask their browser to upgrade. Although both of these sites started as entertainment destinations (with many companies often discouraging users from visiting these sites), the current adoption of social media has made them important components of a business' online presence.

Even Microsoft thinks you should upgrade. A recent high profile campaign of the major websites in

2. http://www.pcworld.com/article/125772-3/the_25_worst_tech_products_of_all_time.html

3. <http://blogs.msdn.com/sharepoint/archive/2009/05/07/announcing-sharepoint-server-2010-preliminary-system-requirements.aspx>

Norway to get rid of IE6 prompted this response from Microsoft CEO Steve Balmer⁴:

"Microsoft recommends end users that are browsing the web with Internet Explorer 6 to upgrade today to benefit from numerous improvements including security features and usability enhancements.

Interoperability is key to enabling developers to continue to create great user experiences on the web. Our commitment to the technical community continues with our significant investment in Internet Explorer 8.

We continue to believe in the importance of supporting the end users and encourage the technical community to work with us in securing a good transition for the users that today are using IE6."

- Steve Ballmer, CEO Microsoft to *Teknisk Ukeblad* (Norway's leading Engineering Journal)

The Benefits of Offering an Another Updated Browser

If you are using IE6 because of legacy software or you have an older version of Windows, and it's the only browser you are making available to your users, you are unnecessarily subjecting all Internet use to these three problem areas. If you need IE6 for a legacy system, use it for that legacy system. But for your other Internet use, you should be using a more modern, safer, and more feature-rich browser. Even if you have an older version of Windows and can't upgrade to IE7 or IE8, you can install an alternate free browser for your users to use.



Some of the benefits of an updated browser include:

- Stronger security and anti-phishing filters
- Popup blockers
- Tabbed browsing
- Faster Internet browsing (through faster layout & javascript engines)
- Better stability
- Actively supported, developed & maintained (bugs & security issues are addressed quickly)
- Better CSS, Javascript, and PNG support means a better user experience. Websites look better and work better.

4. <http://www.larre.com/2009/02/23/the-norwegian-web-changed-in-48-hours-how-is-that-possible/>

- More customizable though plugins and add-ons.
- RSS feed support

Finally, by using other browsers, we are encouraging innovation and ingenuity, which means better browser features for everyone.

Your Browser Options

Below is a list of free browsers options for Windows users:

| OS | Firefox | Chrome | Safari | Opera | IE7 or IE8 |
|---------------|---------|--------|--------|-------|----------------|
| Windows ME | No | No | No | Yes | No |
| Windows NT | Yes | No | No | Yes | No |
| Windows 2000 | Yes | No | No | Yes | No |
| Windows XP | Yes | Yes | Yes | Yes | Yes (with SP2) |
| Windows Vista | Yes | Yes | Yes | Yes | Yes |
| Windows 7 | Yes | Yes | Yes | Yes | IE 8 Only |

Mozilla Firefox <http://getfirefox.com>

Google Chrome <http://google.com/chrome>

Apple Safari <http://www.apple.com/safari/>

Opera <http://opera.com> or <http://arc.opera.com/pub/opera/win/> (for older versions)

IE7 <http://www.microsoft.com/downloadS/details.aspx?familyid=9AE91EBE-3385-447C-8A30-081805B2F90B&displaylang=en>

IE8 <http://www.microsoft.com/ie8>

Dissecting the Cost Argument

Recently, during a State Department meeting, in response to a question about why one alternate browser, Firefox, could not be used by the State Department when it was being used by other Intelligence agencies, Senator Patrick Kennedy responded that "expense questions" were the issue⁵. This is an argument that some organizations make, and so let's examine it for a moment.

First, let's identify where the expense argument is coming from. As most people know all of the browser alternatives named in this article are free to download and install. Where the expense

5. <http://gizmodo.com/5315634/us-state-department-rejects-firefox-which-is-entirely-free-due-to-expense-questions>

argument comes into play is the download, deployment, and management of these browsers within larger organizations.

Large Organizations with Thousands of Windows Installations Do Have a Cost, But That Cost Must be Looked at In Perspective

Most large organizations (thousands of Windows computers) maintain Windows Server Update Services (WSUS) servers or something similar to centrally manage IE deployments. By using WSUS you can force certain policies down through Active Directory that affects IE, applying patches that you want, or disregarding ones you don't want. With these setups, organizations only have to download updates once, and apply policies in one place. The alternative browsers mentioned above do not have this central management capability, and so the time and expense associated with installing another piece of software, even if only one minute per user, can be substantial when you consider thousands of installations. This becomes even more of an issue if your IT department is in Hamburg, your support staff in Bangalore, and your marketing department is in Los Angeles. Additionally, if an organization is particularly diligent from a cyber-security standpoint, maintaining any software will cost man hours.

This is why IT departments within these large organizations resist supporting what they might consider a *redundant* piece of software.

Hopefully as time goes on, these alternative browsers will develop richer feature sets conducive to enterprise environments requiring centralized management.

However, these costs should be looked at in perspective. The outstanding vulnerabilities in IE6 are serious. If security is critical to your organization, this should represent a high cost metric. The potential cost of a security breach in actual damages and damages to brand image can be significant, and should be considered. Plus, writing updates to software for an outdated browser doesn't have a zero cost....so maybe those funds need to be diverted to updates for a newer browser. And if that effort is too costly, then the cost of maintaining an additional browser should be at least strongly considered.

If your organization has a legacy system that requires IE6, and you are large enough that you have thousands of installations, you should probably be looking into updating the legacy system to support, at minimum, a newer version of IE. Microsoft itself is phasing out the browser, and you will be unable to buy other new hardware and software needed for your business without upgrading to a platform where IE6 does not run.

Organizations without Thousands of Windows Installations Don't Face The Same Obstacles, and Should Provide an Alternate Updated Browser

For organizations without thousands of computers or centrally managed software deployments, the bandwidth usage and maintenance of updates should not really be an issue. If a company was really concerned with the bandwidth consumed by downloading installer and update files, they could set up a

proxy server so that the content would only be downloaded once. And by default, browsers like Firefox are set to automatically update themselves when patches are released, so maintenance becomes less of an issue. Organizations should not be unfamiliar or uncomfortable with this concept because a popular Adobe product, Acrobat Reader, which exists on almost every corporate Windows installation, works the same way (due to a lack of centralized management utilities). Acrobat routinely updates itself, unless you actively turn that functionality off.

The bottom line is that if you are forced to have IE6, you should provide an alternate updated browser so that Internet use not dedicated to legacy systems is not unnecessarily subject to security vulnerabilities and lack of features. If your company is concerned with security vulnerabilities, at even the simplest level, then this is a no brainer. The cost of security breaches is significant, and should be considered.

So Give Your Users an Updated Browser Already

Hopefully after reading this article, you will consider offering an updated browser for your users. Not only will they have safer and more pleasant Internet browsing experiences, you will be providing them additional tools to make them more productive, efficient, and empowered users, and thus increasing the value of the human capital within your organization. Both large and small organizations need to strongly consider offering an alternative to IE6. Finally, a side benefit of using alternate browsers is that competition breeds ingenuity, and that means better browsers for all of us.



This article was written by the staff at Mitto (<http://mitto.com>). Mitto is a safe and easy to use online password manager. Because security is such an important aspect of our service, we do not support IE6. However, we understand that there are users out there who only have IE6 on their computers at work. This document was written in to provide these people a document to take to their IT administrators and company officials to provide technical and business benefits of having an updated browser, whether it serves as the primary browser or as a backup browser.