The new chief financial officer believes that all of the Windows XP computers should be upgraded to Windows 10 because Windows 8.1 was not well received in the marketplace. What are the advantages and disadvantages of upgrading to Windows 10 compared to Windows 8.1? Include a discussion of the total cost of the upgrade (TCO).

Step 1:

Windows 10 is the operating system that replaces Windows 8, yet it is essentially what Windows 8 ought to have been. Windows 10 combines the greatest features of Windows 7 and Windows 8, much like the redesigned Start menu. Unlike the full-screen Start of Windows 8/8.1, the brand-new Start menu in Windows 10 feels like it was made for both touch and PC-based devices.

You can still upgrade from Windows 7 or Windows 8.1 to Windows 10 and get a free digital licence for the most recent release of Windows 10 without having to pass any additional tests.

Step 2:

The boot times of these two operating systems don't appear to differ significantly. This is at least accurate for the two devices we tested, the Microsoft Surface Pro and the Lenovo ThinkPad X1 Carbon. With only a few milliseconds separating the boot timings on either device, both devices loaded the login screen in exactly eight seconds with Windows 10 and Windows 8.1.

The facial recognition feature in Windows 10 could, however, help reduce the amount of time needed to boot onto the desktop. Given that Windows 8.1 no longer requires a secure password to be entered, this biometric layer of security would enable a user to instantly log into their system by simply sitting in front of their PC.

Because a specific Intel RealSense 3D camera must be placed on the device in question, this capability isn't available on all Windows 10 devices. However, Windows 10 has an advantage over Windows 7 on business-oriented notebooks where these cameras and fingerprint scanners are rather widespread.

The user interface of Windows 10 and Windows 8.1

Without a question, Windows 8's original insistence on forcing the tiled Start screen onto devices that didn't even have a touchscreen killed any chance the operating system ever had of becoming widely used in businesses. Despite the fact that Windows 8.1 partially fixed the issue by allowing desktop PC and laptop users to boot directly to the desktop and pretend it didn't exist, the Start screen was still required for many essential tasks, ranging from starting programmes.

The Start screen in Windows 10 fixes the majority of Windows 8's flaws, and improved file management and virtual desktops may increase productivity. It's a clear win for desktop and laptop consumers.

Stability of Windows 10 vs. Windows 8.1

Even though Windows 8 was the most significant OS update since Windows 95, it was amazingly reliable and bug-free right out of the gate. In fact, we got it operational on standard business systems six months prior to launch.

To put it mildly, Windows 10 has been a little bit shakier. Microsoft updates the software on a regular basis, however these updates frequently have issues. It seems like there are new reports of unintentional file deletions, malfunctions, crashes, and other other faults every few months. General stability is undoubtedly preferable to it  was, but the fact that these errors persist is frustrating.

However, it must be acknowledged that reliability isn't Windows 10's strong suit - and it doesn't appear to be one that it ever will be. So far, we haven't noticed any flaws that we'd consider enough to warrant switching to an earlier version of Windows. However, Windows 10 Enterprise users can greatly reduce this annoyance, which will make it less of a problem. We'll discuss this in more detail in a moment.

Windows 8.1 is the winner. Although many of the problems caused by Windows 10's rolling updates can be avoided, the necessity of doing so is hardly motivating.

Enterprise features in Windows 10 vs. Windows 8.1

Actually, Windows 8.1 performed a good deal of legwork for business users. The emphasis on touchscreen devices eclipsed features like Secure Boot, Windows To Go (which lets you boot from a USB stick), and Hyper-V virtualization of guest OSes.

The fact that Microsoft has refrained from making companies install the same rolling updates to Windows 10 that are already required for consumers, who can no longer opt out of Windows Updates, is commendable caution. Another Linux-inspired solution that allows enterprise users to deploy a stable version of Windows 10 on mission-critical devices that will only receive needed security upgrades and not the new features that will be periodically rolled out to regular Windows 10 users.

Users of Windows 10 Pro can postpone upgrades, allowing new features to take root on consumer systems for a few months before being added to a corporate machine.

Windows 8's enterprise capabilities weren't given the respect they deserved, but Windows 10 expands them much further and eases the burden of rollouts on IT departments.

Windows 10 vs. Windows 8.1: Security

Windows 8's Secure Boot controversially removed the threat of some of the most dangerous types of malware, despite the fact that it excluded several Linux distributions. Despite the fact that Windows Defender consistently performs poorly in independent testing conducted by Dennis Technology Labs, it was also the first version of Windows to come with built-in antivirus protection.

Microsoft is tightening the screws with Secure Boot in Windows 10, giving PC manufacturers the option to block customers from disabling the feature. The vast majority of business PCs only ever boot into the OS the device was shipped with, which almost eliminates any potential of dangerous rootkits or other low-level malware entering the boot process. This may annoy consumers who want to dual-boot OSes.

Users and IT departments may find it more convenient with the inclusion of face and iris recognition to the variety of user authentication methods currently available in Windows 8. (unlike passwords or smartcards, nobody forgets their face). Both, however, call very specialised hardware, and neither is widely used enough to serve as a current global standard.

Windows 10 surpasses its predecessor by a small margin, but the new authentication methods have yet to gain wide acceptance.

Microsoft previously provided a free upgrade to Windows 10 for customers of Windows 7 and Windows 8. Users who had valid licence keys could upgrade to the most recent operating system without paying any further fees thanks to the upgrade programme. Although the free update programme was discontinued in 2016, it appears that the deal is still in place.

Customers can still benefit from Microsoft's no-cost Windows 10 update. Users who have a valid licence for Windows 7 or Windows 8.1 can upgrade to Windows 10 for free and receive a digital licence, according to testing by Windows Latest.

Windows 10 costs $139 and can be purchased and downloaded from the Microsoft website. Even though Microsoft officially stopped offering free Windows 10 upgrades in July 2016, as of November 2021, CNET has confirmed that users of Windows 7, 8, and 8.1 can still get the free update.

If your PC is already running Windows 8 (or Windows RT), you can typically get the free upgrade to Windows 8.1. The system requirements for Windows 8.1 and Windows RT 8.1 are essentially identical to the requirements for Windows 8. (or Windows RT 8.1).