



## Windows, MacOS, Linux, or Something Else?

MICROSOFT MAY STILL OWN THE DESKTOP MARKET, BUT APPLE CONTINUES TO MAKE SLOW PROGRESS BEYOND ITS GRAPHIC DESIGN USER BASE. THERE'S ALSO LINUX AND MAYBE EVEN CHROME OS.

An operating system is an operating system. Windows isn't perfect. MacOS isn't perfect. Linux (regardless of the distro being considered) isn't perfect. Linux? Distro?

In the Linux world, a "distro" can be thought of as a version. Ubuntu is a distro; so are Fedora, Arch, Red Hat, Mandrake, and dozens of others.

Historically, Linux users have been like home auto mechanics — the people who enjoy getting their hands dirty and who understand what's going on under the hood. Some current versions of Linux, Ubuntu in particular, try to shield users from much of that, but the complexity can still be a challenge to those who don't have a background with Unix or Linux.

Windows traditionally has been used in both corporate and home setting and still has an overwhelming market share in both.

Microsoft's extensive enterprise applications will allow Windows to maintain that position for the foreseeable future even though Macs now show up in the management suite in addition to the design department.

MacOS machines continue to have a grip on the graphic design team, but Windows systems have made some inroads there. Additionally, software developers sometimes gravitate to Macs — at least for personal use — because of the Unix platform on which the MacOS was built.

### Which to Choose?

THERE IS NO RIGHT OR WRONG CHOICE. ALL OPERATING SYSTEMS PROVIDE SERVICES TO APPLICATIONS THAT RUN ON THE COMPUTER. ALL OPER-

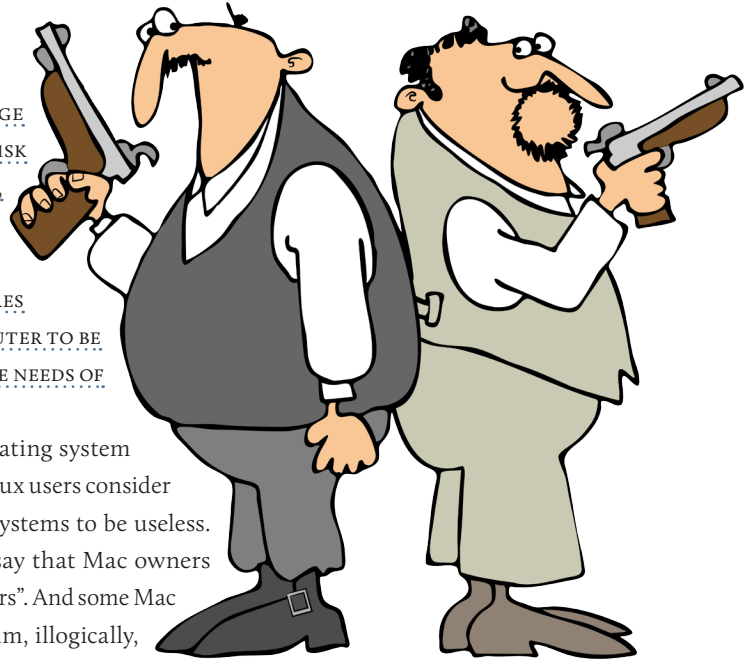
ATING SYSTEMS MANAGE PERIPHERALS SUCH AS DISK DRIVES, VIDEO MONITORS, AND INTERNET CONNECTIONS. ALL OPERATING SYSTEMS HAVE PROCEDURES THAT ALLOW THE COMPUTER TO BE CONFIGURED TO SUIT THE NEEDS OF THE USERS.

Unfortunately, operating system "wars" persist. Some Linux users consider Windows and MacOS systems to be useless. Some Windows users say that Mac owners should get "real computers". And some Mac owners continue to claim, illogically, that the MacOS is totally secure.

An operating system is an operating system, as I mentioned before. Most of the computers I work with run Windows 10, but I also use a MacOS (Sierra) computer nearly every day and usually there's at least one Linux computer on the premises. And there's also a Chromebook that runs Google's Chrome OS.

Those users who must run Windows Office suite or Adobe Creative Cloud applications have a binary choice: Windows or Mac. While it's possible to run these programs using an application such as WINE on Linux systems, it's not particularly easy or straightforward. And they won't run at all on a Chromebook.

Switching from one operating system to another can be troublesome. One office worker I know listened a bit too naively to a co-worker who prefers Macs and administers Linux systems. He



told her how easy Macs are to use, so she bought one. Her experience has not been pleasant. The Mac does everything her Windows machine did, but in significantly different ways; her next computer will not be a Mac.

Switching from the MacOS to Windows, from either Windows or MacOS to Linux, or from Linux to Windows or MacOS can be equally distressing. Probably the easiest possible transition would be from Linux to MacOS because so much of the underlying operation is the same.

So, if you're currently a MacOS user and you're content with the system, there's no good reason to look at Windows computers. The reverse is also true. Switching systems isn't a trivial task. You'll need to learn new keystrokes for familiar operations, deal with new methods to configure the computer, and understand the substantial differ-

ences between the way disk drives are mounted under Linux and MacOS as compared with the Windows system of assigning letters to drives.

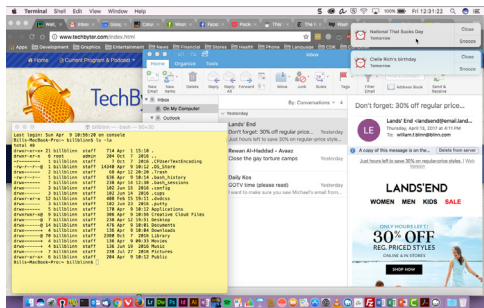
## Pros and Cons

EACH OPERATING SYSTEM HAS GOOD POINTS AND EACH HAS CHALLENGES. CHOOSING THE ONE THAT'S RIGHT FOR YOU REQUIRES CONSIDERING BOTH.

Nearly every application, driver, or game has a version that runs under Windows. Microsoft has adequate technical support and there's no shortage of on-line resources that can provide answers to questions. *Sometimes the answers are even right.*



Windows accepts a huge array of hardware and is highly configurable. Microsoft's new policy means that you'll never have to pay for an updated version of Windows as long as the device it's installed on remains in service.

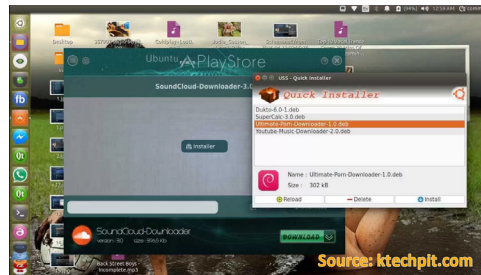


On the down side, Windows is the target for most malware, so you'll need protective applications. Because Windows accepts hardware and drivers from thousands of developers, conflicts are common.

The MacOS is built on BSD Unix. Because the operating system has native support for read, write, and execute permissions on a per-file basis, it's more resistant to malware. Even so, Macs do need protective software. The MacOS runs only on Apple computers, so hardware is strictly controlled and that all but eliminates hardware

and driver conflicts. (*Disclaimer: It is possible to run the MacOS on non-Apple hardware, but it's not easy.*)

Macs are considerably more expensive than equivalent Windows machines, though, and not all applications that are available for Windows computers will run natively on a Mac, but because Macs now use Intel CPUs, it's possible to run many Windows applications using an emulator.

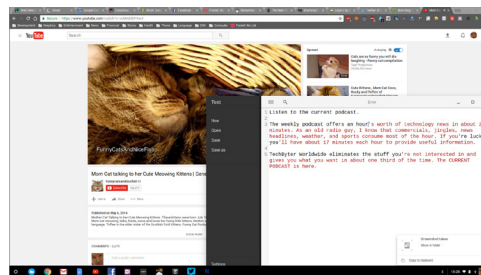


Linux, which is based on Unix, is free. It is, however, just the operating system "kernel". To be a full operating system, it needs additional software (also free) from the developer of what's referred to as a "distro" (distribution). Ubuntu, Red Hat, Fedora and literally hundreds of other distros exist.

Some distros are easy to set up and use, but all of them require considerable knowledge to configure. No Windows or MacOS programs run natively under Linux and open source applications such as LibreOffice and OpenOffice usually are less comprehensive than commercial software.

## Chrome is Different

CHROME ISN'T WHAT MOST PEOPLE WOULD THINK OF AS AN OPERATING SYSTEM BECAUSE IT DEPENDS ON THE CHROME BROWSER TO PROVIDE AN INTERFACE FOR MOST OF THE APPS.



For this reason, Chromebooks are not likely to assume a dominant position, or even a secondary position, on desktops or notebooks in homes or in offices. But these small and inexpensive machines do have a place.

Chromebooks rely on Google's applications. They expect an internet connection and a Google account. If Gmail, Google Calendar, and Google Drive are your main applications, a Chromebook may be all you need.

But if you depend on Apple, Microsoft, or Adobe applications, a Chromebook will be less appealing.

Adobe's Creative Cloud and Microsoft's Office suite, aren't available for Chromebooks. There is Microsoft Office Online, but it's a shadow of the full suite.

Chromebooks don't have a lot of storage, but they connect to Google Drive.

Microsoft Office suite files can be saved to the cloud and imported in to Google's apps. Although this is a good solution for occasional needs, it's not a good choice if you need to work with a team that uses Microsoft applications. Too much can be lost in the translation.

Most new Chromebooks can use a wide range of Android applications and this opens the door to games, messaging, and productivity tools. Although Chromebooks expect to have an internet connection, several hundred Chrome apps will work when you don't have access to the internet.

So while a Chromebook might not be your primary computer, it might be the perfect device when you're on the road.

## Choose Wisely

THE LATEST COMPUTER FROM APPLE OR ONE OF THE PC OR CHROMEBOOK MANUFACTURERS MIGHT LOOK GOOD, BUT A COMPUTER'S ABILITIES DON'T DEPEND ON ITS LOOKS.

Those who thrive on change might find switching from one type of computer to another entertaining and enjoyable. Those who are change averse will not enjoy the experience.

I offer these general guidelines in conclusion:

- If you use a Windows computer and find that it's suitable for your needs, your next computer should probably run Windows.
- If you use an Apple computer and find that it's suitable for your needs, your next computer should probably be a Mac.
- If you use a computer that runs a Linux distro and find that it's suitable for your needs, your next computer should probably run a Linux distro.  $\Omega$