Chromebooks: Another Google Breakthrough



by Bob Ringo and Terry Rooney

What is a Chromebook?

A <u>Chromebook</u> is usually a laptop. Instead of <u>Windows 10</u> or <u>macOS</u>, <u>Chromebooks</u> run Google's Chrome OS. <u>Chromebooks</u> are designed to be used primarily while connected to the Internet, with most applications and documents living in the cloud.



Information, Creation, and Consumption

- Smart Phones
- Tablets
- Laptops >13"
- Desktops

- Information, Consumption
- Information, Consumption
- Information ,Consumption, & Creation
- Information, Consumption, & Creation



What is Google Chrome OS?



Chrome OS is an operating system designed by Google that uses the Google Chrome web browser as its principal user interface. The Chrome OS primarily supports web applications. In May 2011 the first Chrome OS laptop, known as a Chromebook, arrived.



Why a Chromebook?

- All your work is done in Chrome—a fast secure browser (now 65% market share)
 - Gmail
 - Documents
 - Photos
- All your work is instantaneously saved securely in the "cloud"
- Google provides 100 GB storage for two years with a Chromebook purchase



Chromebook Connectivity

- Chromebooks come with wireless connectivity.
- Some Chromebooks have 4G cellular capability.
 - Better to use your cell phone's HOTSPOT capability.





Supported Chromebook Devices

Chromebooks support many of the following USB devices utilizing a feature similar to <u>plugand-play</u> on Windows operating systems.

- External Hard Drives
- Flash Drives
- MP3 Players
- Monitors
- Webcams
- Most Bluetooth Devices



- External Keyboards
- Mice
- HDMI Audio Devices
- Headsets
- USB Hubs
- Scanners

Advantages of a Chromebook

- Price
- Speed
- Battery
- Security
- Parental Controls



- Automatic Sync
- Cloud Storage
- AutomaticUpdates
- Weight
- Android Apps
- MS Office Online

1. Price

- Majority of Chromebooks cost less than average laptop.
- Many Chromebooks cost less than \$200.
- Mid-range Chromebooks cost \$300-\$500.
- On Black Friday a Samsung Chromebook for \$99.



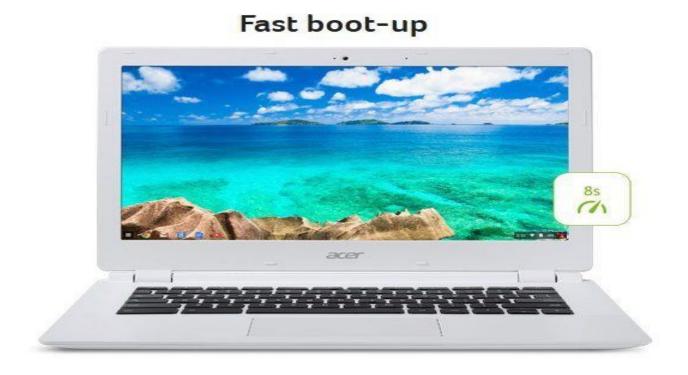
2. Speed

Chromebooks can power up and be ready to use in around eight seconds. They can do this because of their SSD and the lightweight Chrome OS platform.



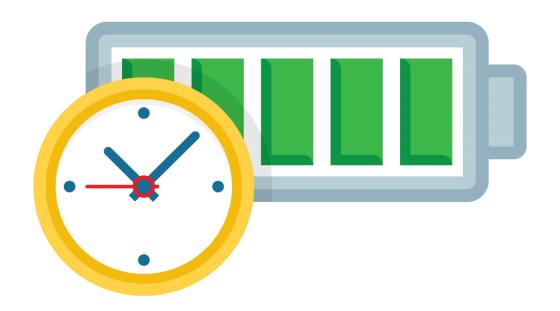
3. Battery

- Expect 6 hours or more from Chromebook battery.
- Some Chromebook models claim 13 hour battery life.



4. Security

The Chrome OS has built-in virus and malware protection that is continually updated to the latest version, so you almost never need to worry about malware when using a Chromebook.



5. Parental Controls

- Chromebooks allow supervised accounts to monitor kids online activities.
- Chromebooks make great family-friendly computers.



6. Sync

Chromebooks sync all your apps and passwords with Chrome browsers on all your other computers.



7. Cloud Storage

You get 100 GB of Google Drive storage free for two years with all new Chromebooks.

100 GB of additional storage is only \$1.99/month.



8. Updates

Chromebooks update themselves silently, automatically, and in the background. So, your device is always up to date.



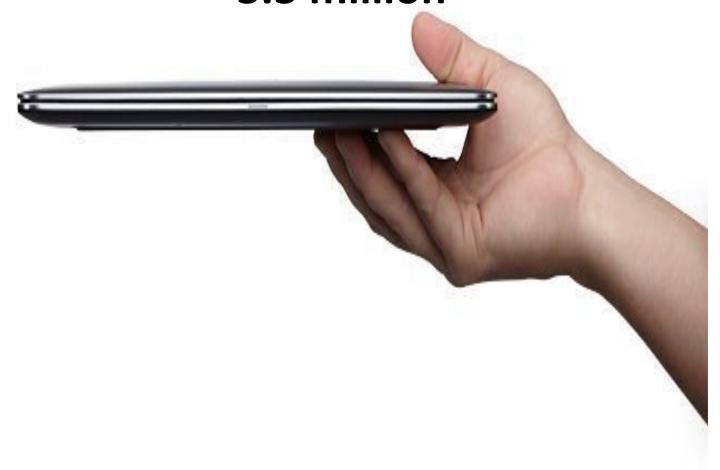
9. Weight

- Although weights vary, Chromebooks are lightweight devices.
- Chromebooks are portable and easy to carry.



10. Android Apps

Available on Many New Chromebooks 3.3 million



11. MS Office for a Chromebook

Microsoft offers a completely free web-based version of Office called Office Online, complete with Word Online, Excel Online, and PowerPoint Online. Microsoft makes these apps available in the Chrome Web Store



Disadvantages of a Chromebook

- Won't Run Windows Applications
- Somewhat Limited Local Storage
- No Optical Drive
- Video Editing not great
- No Photoshop
- Printing is more complex
- Compatibility



1. Chromebooks Won't Run Most Windows Applications

Chromebooks don't <u>normally</u> run Windows software. You can't install Skype, full Microsoft Office, or other Windows desktop applications.





Crossover Chrome OS Beta

2. Limited Local Storage

Chromebooks typically only have 16 to 32GB of local storage. Limiting storage keeps the price down. However, Google wants you to store your data in the cloud. That is why it includes 100 GB of free online storage with new Chromebooks.



3. No Optical Drive

A CD/DVD drive is a thing of the past with new laptops, but if you really need one, you should know that you won't find one on a Chromebook.



4. Video Editing

There are good video editors you can use on the Chromebook. However, if you need more control over your media, or deal with a lot of HD footage, the Chromebook might not have the horsepower you need because there are no offline editors like Apple iMovie, Adobe Premiere Elements, or Windows Movie Maker.



5. No Photoshop

If you are a heavy user of Photoshop, Photoshop Elements or other Adobe desktop solutions, you will need to look for an equivalent online application. Things like PixIr, or the online Photoshop Express Editor, are perfectly good for casual family photo editing, but lack the fuller feature set of Adobe's premiere editing products.



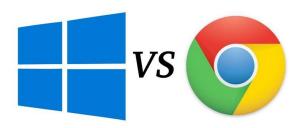
6. Printing

You can print on a Chromebook without too much difficulty, but depending on the printer you have, it might not be as easy as it used to be because you are required to use Google Cloud Print.



7. Compatibility

No doubt about it. Windows is the most widely used desktop OS in existence today (90% market). You will find no shortage of apps and accessories to use with a Windows PC. A Chromebook is more limited in this regard. It has a growing library of software applications, and can be used with a increasingly wide variety of accessories, but Windows machines still win the battle for compatibility.



Cloud Computing in the Future

- CDs and DVDs are fading fast.
- Many laptops won't come with an optical drive.
- Internet speeds will be faster and faster.
- More and more of what you do will be done online.



Web-Based Applications

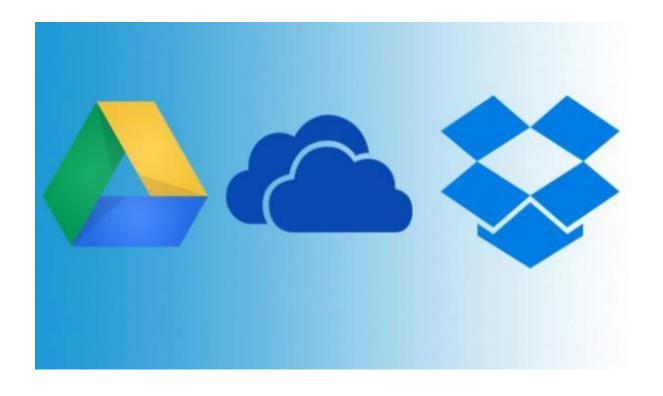
• Online applications or web applications are becoming more popular, particularly since broadband Internet access has become more common and more available. With online applications and services, you do not need to download and install them in your computer to use them—you just need to open up your browser and access them online.





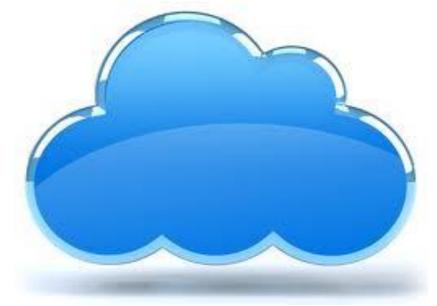
Google Drive, Microsoft OneDrive, and Dropbox are each cloud-based data storage providers.

Do You Really Care Where Your Computing is Performed or Where Your Software and Data are Stored?



Cloud Data Storage Defined

CLOUD Data Storage is the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than on a local server or a personal computer.



Cloud Data Storage Simpler Definition

• The CLOUD is nothing more than a figure of speech for the Internet, or more literally, the vast array of storage servers around the globe that comprise it. When a file is stored in the cloud, it simply means the file resides on one of those servers and can be accessed through an Internet connection.



Key to Cloud Data Storage



High Speed Broadband Internet Service

Google Toolbox for Users

- Gmail
- Google Contacts
- Google Calendar
- Google Alerts
- Google Search
- Google Image
- Google News

- YouTube
- Google Books
- Google Drive
- Google Docs
- Google Translate
- Google Maps
- Google Photos



Make Your Own Chromebook for Free

Neverware.com has released an open source version of Chromium.

This Cloud Ready version is free.

Turn old XP/Vista/Windows 7 laptop into a pretty fast
Chromebook



Samsung Chromebook for \$99 on Black Friday

- 11.6 inch screen
- 2 GB of memory
- Intel Celeron N3060 processor
- 16 GB SSD





Acer Chromebook 14 \$199.99

At Costco November 17-27

- 14" screen
- 4 GB RAM
- 32 GB SSD
- Celeron N3160 processor





Asus Chromebook Flip \$429.99

- 12.5" screen
- 4 GB RAM
- 64 GB SSD
- Core m3-6Y30 processor













