

Thursdays @ Maxwell: Buying a Mobile Device

Maxwell Memorial Library

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Definitions

- A **MOBILE DEVICE** is a computer device you can hold in one hand.
- A **PHABLET** is a smartphone as big as a tablet.
- Back in 1991 — long before smartphones and tablets were around but just as laptops were starting to be a thing — Mark Weiser, came up with terms to distinguish among types of mobile devices.¹ Though his terms aren't really current, the categories are still relevant.
 - **TAB-SIZED DEVICES** are those that are no larger than a hand in either width or length. They are measured in centimeters (so less than 4" — more or less the width of an adult's hand), so this category includes most smartphones.
 - **PAD-SIZED DEVICES**, while portable and holdable with one hand, don't fit into the hand. They are measured in decimeters (hence, 4" and over), and most tablets are in this category.

Comparison of types of mobile devices

		Tablet	Smartphone	e-Reader
Size	Height	5.8 to 10.8"	5 to 6.3"	Often the same as a small tablet
	Width	3.3 to 7.5"	2.2 to 3"	
Versatility		Very versatile and portable	Versatile & portable but limited by small screen	Less versatile, just as portable
Wireless		Uses wireless	Generally can use wireless	Uses wireless
Data		Sometimes has a data plan	Uses data plan	Usually no data plan

Considerations

The Big Choice: Operating System

- **Apple iOS**
- **Android**
- **Windows 10**
- **Kindle (Amazon)**

Adapted, modified, and updated from Schult, Julia E. "Buying a Mobile Device." Library program from Baldwinsville Public Library, Baldwinsville, NY, November 29, 2016.

1 Weiser, Mark (1991). "The Computer for the Twenty-First Century". *Scientific American*. 265 (3): 94–104. doi:10.1038/scientificamerican0991-94.

What to think about in deciding which OS to go with

- **Versatility**
 - iOS, Android, and Windows 10 all have similar levels of versatility in terms of the variety of apps that you can get for each.
 - The Amazon Fire runs a modified version of the Android OS, but it does not come with Google's PlayStore, so you are limited to apps from Amazon.
- **Familiarity**
 - Which OS are you most familiar with?
 - Which do people who can help you know best?
- **Which empires do you already have accounts with?**
 - An Amazon account?
 - A Google account (Gmail family)
 - A Microsoft account (includes outlook.com, msn.com, & hotmail.com)
 - An Apple ID?
- **How much money are you willing and able to spend?**
- **Security**
 - Androids are most open, so least secure (but also cheapest)
- **Privacy**
 - Whichever you choose, some company will be able to see everything: Apple, Google, Microsoft, or Amazon.
 - **Example**

Kindles are pretty secure, but every single thing you put on your Kindle — including library books — goes through your Amazon.com account.

Amazon's terms of service allow them to share your information and book history with any of their affiliates. Therefore, Amazon and their business partners can market to you based on your selection of library books, purchases, and even Web activity.

Some details

- **Apple** — iPad, iPhone
 - Costs more
 - Apple enforces its style standards rigorously, so there tends to be more consistency to interfaces/apps/applications (even for 3rd-party ones) in the iOS/macOS world than with other OSes.
 - Local support through Apple Store
- **Android**
 - Sold independently on devices from many manufacturers.
 - Positive: Large variety of choices in price, hardware, and configuration.
 - Negative: You will have to research the quality of the manufacturers you're considering as well as of particular models.

- **Windows Surface**
 - Mostly used by people who have a business account with Microsoft
- **Kindle**
 - Beloved by many because easy to use.
 - No in-person help and ultimately limited.
 - Unless you're willing to do some hacking, you're limited to apps from Amazon.

What do you plan to do with it?

- Are you wanting to carry only 1 device with you?
 - Then you'll probably want a smartphone.
- If you just want to read ebooks, any tablet or e-reader will do.
 - Many people like the Kindle's e-reader controls for turning pages, making text bigger, etc
- If you want to use the Web, make sure it has a Web browser.
 - Most devices (including modern e-readers) do.
- To play games, view videos or listen to radio or podcasts, you want a device that can add Apps and has a screen big enough for what you want.
 - That probably means getting a tablet.
- To create documents or edit spreadsheets, most people really want a laptop/desktop, though some of this work can be done on a tablet.

Price

Currently about \$50-\$3,000+ but you don't get what you don't pay for.

Refurbished items can save you some money but probably not much more than 10%.

Price ranges that seem to catch prices for nearly all of popular models

- iPhones: \$800 to \$1,200
- iPads: \$300 to \$1,300
- Android-compatible phones: \$700 to 1,000
- Android-compatible tablets: \$100 to \$500
- Amazon Fire e-reader: \$50 to \$200

Size

Consider screen size, controls, and size and weight of the device.

Battery life:

Measured in days for eBook readers, 9 to 10 hours for tablets.

Storage capacity

- How much can you afford?
- How much will you need?
 - Keep in mind that the OS itself together with some basic apps will take up about 6 GB.
 - Given that fact, the difference between 16 GB and 32GB isn't one of just doubling usable capacity but of multiplying it by around 2.5 (16 – 6 = 10; 32 – 6 = 26).
 - Will you want to keep a lot of large files on it at one time?
 - Since some video streaming services now allow temporary downloading of videos for viewing while away from wi-fi, this could easily be true for you even if you don't plan to keep a full library of cute cat videos with you at all times.
 - An hour of 720p (1280×720; HD ready) video might run around 1.2 or 1.25 GB.
 - That's 2 GB for a feature-length movie lasting a little over an hour and a half.
- Comparisons:
 - Phones: 16 GB to 256 GB
 - iPhone: 16 GB to 256 GB
 - Median model capacity: 128 GB, but a large number of models are available at each step from 32 GB to 256 GB.
 - Prices seem to cluster in the \$800 to \$1,000 range.
 - Android compatible: 16 GB to 64 GB
 - 64 GB seems to be the most popular.
 - Prices for 64 GB cluster from \$750 to \$1,000.
 - Tablets:
 - iPad : 32 GB to 512 GB
 - The median model size seems to be 128 GB.
 - Prices for that size cluster in the \$500 to \$750 range.
 - Android compatible: 8 GB to 128 GB
 - Median model size of 16 GB.
 - Prices for that size cluster in the \$100 to \$250 range.
 - e-Readers
 - Amazon Fire: 8 GB to 64 GB
 - Median model size of 16 GB or 32 GB.
 - 16 GB prices cluster from \$75 to \$100.
 - 32 GB prices cluster from \$100 to \$150.

Camera Quality

Usually more megapixels is better, but some special software can make a camera work better.

Also: Does it have:

- A flash?
- Video?
- 360° (for example, panoramas or virtual reality captures)?

Personal choices

- Color of the case
- Who can help you with it?
- What do you have already? What are you used to?

For Smartphones: You'll need a service provider

You have a lot of choices among vendors. One big consideration here is whether you will be able to use your phone in the places you go to.

Even after you choose a vendor, you will still probably have choices with regard to particular plans.

- Some split out
 - Voice calls
 - Texts
 - "Data" usage. That is, all of the following when you're away from wi-fi:
 - Web
 - Email
 - Some apps (especially streaming video)
 - Live streaming radio
 - Face-to-face talking
- Will the limits on use (included minutes of talk/text, gigabytes of data, and so on) for a given package match your monthly needs?

Online tools for further research

[Consumer Reports Cell Phone & Service Buying Guide \(https://www.consumerreports.org/cro/cell-phones-services/buying-guide\)](https://www.consumerreports.org/cro/cell-phones-services/buying-guide)

[Consumer Reports Tablet Buying Guide \(https://www.consumerreports.org/cro/tablets/buying-guide\)](https://www.consumerreports.org/cro/tablets/buying-guide)