# Technology User's Advisory: Guiding consumers through the digital marketplace

Thursday, September 25, 2014 12:00 PST Presented by Rita Gavelis

## Technology Users Advisory Cheat Sheet

## Part 1 – Assessing the Patron's Technology needs

### **Patron Assessment Questions:**

#### **Tablets & eReaders**

- 1. Are they planning to replace their PC or Laptop with the device? If yes, they will need the following:
  - Lots of memory / storage
  - o May need LTE / g4 services
  - Sufficient cloud services
  - Compatibility with printers / other devices
  - Adapters for other devices
  - Bluetooth devices
- 2. What do they use their current computer for? Do they:
  - o Download music, videos, and books?
    - They will need lots of memory
    - An memory card slot could be useful
  - Stream music or movies?
    - They want good audio
    - Screen should have good resolution
  - o Edit photos, video, music?
    - Might need a bigger screen
    - More memory
    - Access to good apps
  - Create documents, spreadsheets, and databases?
    - Might want access to good cloud services
    - Ability to synch with apps

What programs do they currently use?

- o Can they load the same programs/apps on the device?
- 3. What are their hobbies / interests?
  - Are there apps for those hobbies available?
- 4. Do they travel often (car, plane, train)?
  - Might want a good camera on the device
  - o Might need storage for books, movies, & music for the trip
  - o LTE / 4g plan could be useful for non-wifi areas.
  - o Might want smaller screen lighter & easier to carry









#### Other Devices

- 5. What kind of computer are they using now?
  - o Devices using the same or similar OS tend to have better integration
- 6. What do their friends have the same device? Do they like it?

They may want to buy what their friends have.

- o Their friends can provide assistance with training
- o They are already familiar with the device and know what they are getting
- 7. Do they have wifi at home?
  - o Is the device wifi enabled? (image of tablet or printer)
- 8. How much do they want to spend?
  - More memory = higher cost
  - Higher screen resolution = higher cost
  - o Better camera = Higher cost
  - o Bigger screen = higher cost
  - $\circ$  LTE / 4G = Higher cost
  - WiFi compatible = higher cost (for items other than tablets & smart phones)



There are some great devices for under \$200 that do everything the more expensive models do. The screen might not be high definition, the speakers might be weaker, the device might have less memory, and it might have one camera or none at all.

- o Can you download books, movies, and music? Yes
- o Can you stream movies and music? Yes
- o Can you play games? Yes
- o Access email? Yes
- o Surf the web? Yes
- o Download apps? Yes, but depending on the device, the selection might be limited.

## Part 2: Not all Devices are Created Equal

### **Operating systems**

#### Android

- o Google, Samsung, Nook, Kindle use some variation of Android
- o Many inexpensive devices use this as OS.
- o Hundreds of thousands of apps available, depending on the version of Android used w/ Google devices having the most, then Samsung, Nook, and Kindle with the fewest number of apps.
- o Android can be found in chrome books, tablets, Smartphones, & eReaders
- o Few viruses, some hacks

## Apple iOS

- o Apple devices only (iPad, iPhone, iPod)
- o More expensive than some of the other devices
- o Hundreds of thousands of apps available.
- OS more uniform / stable because only one vendor makes the devices
- o Few viruses, some hacks



#### Windows 8

- Available on tablets made by Microsoft, Dell, HP, and many more
- o Price range varies greatly
- Uses regular PC software
- Windows 8 on tablet the same as PC, so learning curve may be smaller
- More viruses and hacks



## **Apps / Applications / Software:**

Operating Systems are an important consideration because they all apps and software are OS specific, meaning you cannot load an app designed for Android onto an iOS device and visa-versa. The only way this is possible is if your computer / devise is able to run two different operating systems at once.

Apps are purchased through iTunes App Store, Google Play, Amazon App Store, and the Microsoft Store to name but a few.

Applications can cost anywhere from nothing to \$200. Most apps are under \$25. As with most merchandise, they occasionally go on sale.

## **Device Specifications**



To provide good advice to customers, it is important to understand the various features found on each device. You can find these listed in the device specifications or "Specs".

Below are some of the common features found on tablets, Smartphones, laptops, eReaders, printers, and cameras.

# Understanding the Specs

## **Spec Sheet Glossary**

#### **Storage / Memory Terms**

3 types of memory:

**Hard Drive:** commonly referred to as storage or capacity. This determines how many apps, documents, books, videos and songs can be stored on the device. For hand-held devices, like tablets and phones, the amounts are usually in increments of 8 gigabytes (GB). 16 gb, 32 gb, 64 gb, 128 gb...



**Random Access Memory (RAM):** This is a type of memory used for multitasking or running more than one app at the same time. RAM is important when purchasing computers and laptops. It will become more important in tablets when they are able to "juggle" multiple apps at once.

**SD/MicroSD/SDHC/SDHC:** This is a form of expanded storage using a small or "micro" storage disk. These are little cards that are commonly used in digital cameras and some eReaders & tablets.



### **Processor Terms**

**Processor / Chip:** A processor is the heart behind the machine. There are a few factors to consider when selecting a processor:

**Gigahertz (GHz):** The processor speed is measured in gigahertz (GHz). Most new processors are between 2 and 4GHz, the higher the number, the faster the computer.

**32 Bit vs. 64 Bit:** Each processor contains transistors that handle "bits" of information. Most devices come with either 32 bit or 64 bit chips. The higher the number, the more it can process.

**Multi/Quad/Dual Core vs. Single Core**: A "core" is another name for Computer Processing Unit (CPU). If there is a single core, the processor contains 1 unit. If there are 2 or more, there are two units, which give you more processing power as well as, on some computers, the ability to run two different operating systems.

## **Battery Terms**

Different devices use different batteries, each with their own pros and cons. Below are some of the common phrases you will see in a spec sheet.

**"2800 mAh battery"**: Describes the amount of electricity a battery uses: In this example, the battery uses 2800 mega Amps of electricity per hour. In theory, a 2800 mAh battery will last longer than an 1800 mAh battery.

"Up to 10 hours of video": An estimation of how long the battery is expected to last while performing that task. In this example, up to 10 hours if you are watching video.

- o If you are doing something less intensive, such as browsing the web or reading an eBook, the battery should last longer.
- o If you are doing something more intensive, such as viewing a video and surfing the web at the same time, the battery will not last as long.

"Charging via power adapter or USB to computer system": This means you can charge the device either by plugging it into the wall, or plugging it directly into a computer via USB port.

o If you plug the device into a USB hub that is connected to the computer, it may not charge your device or synch files.

## **Connectivity Terms**

**Internet Access:** Many devices now have access to the Internet, whether through an Ethernet cable, wireless modem, or through a cell phone tower.

**Ethernet Cable:** A cable used to attach a computer, laptop, TV, or Printer to your Internet modem (a device necessary to transmit data via the Internet).

- Used by most laptops & desktops
- More secure than wireless access
- Better signal than wireless access

**WiFi:** The ability to connect to the Internet without a cable. A wireless router is required. WiFi is usually designated by the Institute of Electrical and Electronics Engineers (IEEE) Local Area Network (LAN) standard of 802.11. Different versions are differentiated with a letter (i.e. 802.11a/b/g/n...)

- All tablets are WiFi capable
- Some TV's & Printers are Wifi capable
- WiFi TVs & Printers tend to cost more than non-WiFi.
- Dual Channel WiFi can handle two different bandwidths at once. Bandwidth is the data transfer rate or capacity of a web connection. Currently two bandwidth speeds: 2.4 GHz and 5 GHz.



**3G/4G/LTE (Long-Term Evolution):** These are standards for wireless transmission of high-speed data through cell phone towers.

- Not all tablets are capable of 3G/4G/LTE
- You must sign up with a cell phone provider to use a 3G/4G/LTE device
- If you do not have Internet Service at home, you can still access the Internet through your cell phone plan.
- 3G/4G/LTE capability increases the cost of the device.



**BlueTooth:** A standard for transferring data between two devices wirelessly. Bluetooth technology allows people to connect cell phones to car speakers, wireless keyboards to tablets, wireless headphones to mp3 players.

Most new devices are Bluetooth enabled (including computers, cars, cell phones, and tablets). Bluetooth capability may slightly increase the cost of some items such as headphone, speakers, and radios, but not tablets and computers.

## **Display Terms**

Almost all devices require or come with a display of some kind, whether it is a TV, monitor, or built-in screen. They come in all shapes and sizes, and have numerous features.



## **Common Display Features:**

#### Screen Size:

The size of the device screen is measured from a top corner, diagonally to the bottom corner in inches.

- o The larger the screen:
  - The more it costs
  - The heavier it is

**Pixel:** A pixel is a square, digital tile containing 1 color. Placed together, pixels create a mosaic of colored tiles that create an image.

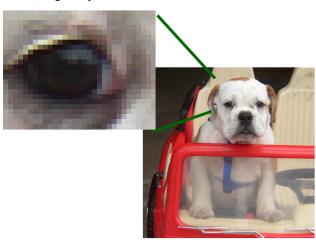
**Resolution**: The level of detail an image contains, usually measured in pixels or "picture elements".

- o The higher the resolution:
  - The better the image
  - The more the device costs

#### **Pixels Per Inch (PPI):**

The number of pixels per square inch of screen. The higher the number, the crisper the image.

- The higher the PPI:
  - The better the image
  - The more the device costs



**Retinal Display:** A term Apple uses for displays with more than 300 PPI.

**High Definition (HD):** HD simply means something that is better than previous standards. In regards to televisions, it is a TV that has a combination of:

- o Better aspect ratio of 16:9 (16 units wide by 9 units high). A standard TV size is 4:3 (also referred to as full-screen) vs. a movie theater screen 16:9(referred to as wide-screen)
- o Better resolution: at least 1280 x 720
- o Frame rate of at least 24 frames per second. The higher the number, the smoother the action on the screen.

## **Terms for Common Types of Displays**

TVs & Monitors: A display that can be connected to other devices via a cable or wireless connection. LED vs. LCD vs. Plasma: This is how the picture is projected via the physical construction of the screen.

#### LCD (a Liquid Crystal Display):

- Uses Cold Cathode Fluorescent Lamps {CCFL} as their light source
- Very bright picture
- More glare, reflection (lower "Black Level")
- Lower contrast ratio (less "depth of image"/ realistic)
- More motion blur (bad for watching sports)
- Narrower "viewing angle" (best picture is from directly in front of screen)
- Thinner & less heavy

## **LED** (Light Emitting Diodes):

- An LCD that uses Light Emitting Diodes as a light source
- Very bright picture
- More glare, reflection (lower "Black Level")
- Lower contrast ratio (less "depth of image" / realistic)
- More motion blur (bad for watching sports)
- Narrower "viewing angle" (best picture is from directly in front of screen)
- Thinner & less heavy

## Plasma:

- Uses ionized gas as a light source
- Not as bright a picture as the others
- Less glare, reflection (better "Black Level")
- Better contrast ratio (better "depth", more realistic)
- Less motion blur (best for watching sports)
- Better "viewing angle" (great for big rooms, doesn't matter where you sit, the picture is good).
- Thicker and heavier
- Tend to be less expensive than LED, LCD

## **Hand-held Device Displays**

### Touch Screen:

• The screen is interactive. You manipulate the device by tapping, pressing, or swiping across the screen with your fingers.

#### eInk / Paperwhite:

• The screen display has the same brightness & contrast as paper.

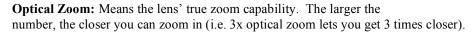


#### Camera Terms

**Digital Cameras**: A camera that store images digitally. Most new devices such as computers, laptops, tablets, and cell phones come with at least 1 camera.

- Digital camera resolution is measured in Megapixels (MP)
- 1 Megapixel = 1,000,000 Pixels
- The more Megapixels, the greater the detail in the photo The more Megapixels a camera has, the higher the cost.
- A 24 MP digital camera has roughly the same resolution as a 35mm camera

**Digital Single-Lends Reflex (D-SLR)**: A camera using a mirror & prism system to let the photographer view the image through the lens.



**Digital Zoom**: A virtual zoom is not true zoom but simulated by the camera by enlarging the existing image's pixels and cropping the edges. The image quality is lower than with Optical Zoom.

**Burst Mode:** The camera captures multiple shots in quick succession with a single click. Useful for shooting subjects in motion such as during a sporting event.

**Geotagging:** The camera recognizes your location via GPS and stamps it onto your photos – also available in some tablets and smartphone cameras

**High Dynamic Range (HDR)**: This is an imaging capability, where the camera takes photos at three different aperture settings, then melds them into one image. It is good for landscapes, portraits in sunlight, and backlit scenes. This feature is also available in some tablets and Smartphones.

**Tap to Focus**: A feature allowing you to tap on a region in the screen to focus that area in the photo. This feature is also available in some tablets and Smartphones.

**Face Detection**: The camera recognizes human faces in a photo and automatically puts them in focus. This feature is also available in some tablets and Smartphones.



**NOTE:** Tablet & Smartphone cameras tend to:

- \* Have fewer MPs than a digital camera.
- \* Have at least one camera, if not two:
  - Front-facing / "Facetime" cameras are on the front of the device
    - They have fewer MPs than rear-facing cameras
    - o They are meant for video conferencing & "selfies"
- Rear-facing / "iSight" cameras are in the rear of the device
  - o They have more MPs than front-facing cameras
  - They are meant for taking photos or videos.
  - Sometimes come with a flash or "backside illumination"

#### **Ports & Connection Terms**

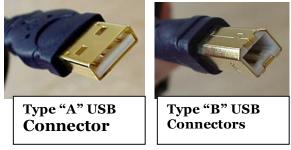
**Ports**: Slots or areas on your device where you can plug in or connect other items such as cameras, printers, projectors, tablets, and headphones.



NOTE: In order to plug a tablet or smartphone into another device such as a projector, you may have to purchase an adapter.



**USB** (Universal Serial Bus): USB is a type of port for connecting peripherals to your computers. They come in all shapes and sizes. Almost all devices use some version of USB.



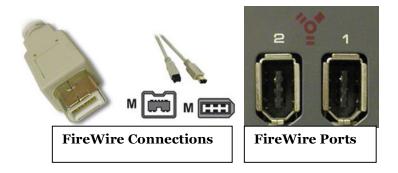
**USB 3.0 Connectors:** Transfer data at a higher rate than previous versions, i.e. USB 1 & 2.0



Micro & Mini USB: Used for charging smaller devices such as tablets, eReaders, and keyboards



**FireWire:** Transfers data at a higher rate than USB. It is primarily used with video devices like camcorders, DVD players, and other digital equipment.



**Thunderbolt:** A high-speed port used to connect peripherals to Apple computers.

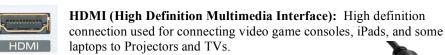


**Lightning:** The type of USB adapter used by Apple for its newer iPhones.

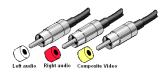
**30 pin:** Connector used in early Apple products, as well as some Nooks and Samsung devices.



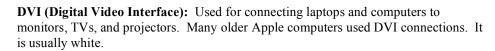
**MagSafe port:** The magnetic port for attaching the electrical cord to the Mac.



**S-video (Super Video, Separate Video, Y/C):** A connector used for video cameras, computers, TVs, and projectors. The video quality is better than RCA, but not as good as HDMI.



**RCA (Radio Corporation of America):** These are three cables denoted by the colors white, red, and yellow. These are found in speakers, stereos, projectors, amplifiers, VCRs, and TVs. The red and white jacks are for audio and the yellow is for video.





VGA (Video Graphics Array): Used for connecting PCs to monitors, TVs, and projectors. It is usually blue.



1/8" Audio (3.5mm, Mini-stereo, Audio out / Audio in): It is a small connector usually used for earbuds, newer headphones, mp3 players, and speakers. The plug has two stripes for the stereo audio connection.

1/4" Jack (Audio out / Audio in / Instrument Cable): This is a connection used for many musical instruments, microphones, and older, heavy-duty headphones. The jack has a 1/4" diameter and is significantly larger than the 1/8" jack.

**Audio Cable with Microphone:** It is a 1/8" (3.5mm) audio cable that combines stereo audio with a small microphone. These are used mostly with smartphones. It has three stripes on one plug: two for the stereo audio and 1 for the microphone.



## Part 3: Shopping for Technology

Shopping for technology can take a great deal of time, between doing the research for what you need and negotiating for the best prices. A good rule of thumb is: If the time spent doing research saves you more than your salary for that time, it is worth it.

#### Cost

There are some basic factors affecting the cost of gadgets:

- 1. **Emerging Technology**: If the device is an emerging technology, it is usually used in industry or science. It can be years before the manufacturer builds a desktop version and mass-produces it for the home market.
- 2. **Competition**: When only one company is making the device, they can set the price as high as they think the market will allow. Once a competitor starts manufacturing something similar, it either drives the price down or gives buyers less expensive options.
- 3. **Availability:** If an item is popular and flies off the shelves, the price will be high. This is especially noticeable with video game consoles. Once used items start coming into the resale market, usually after a year, the price for the new consoles drop.
- 4. **Unique Features:** New, unique features tend to cost more than established, common ones. WiFi capability used to make laptops more expensive, now it's standard.

The following are features that currently raise the price of devices:

- HD / Higher Resolution
- More Memory
- 4G/LTE
- Faster processors

## Shopping

Many people are hesitant to purchase new gadgets. Technology is expensive. It evolves quickly. Few people are willing to risk spending their limited computer budget on a fad.

### Three Keys to Shopping for Technology:

- Know what you want
- Know what it should cost
- Know where to get it

#### Knowing what you want

The first step in determining a purchase is to decide exactly what you need. Ideally, you want a device that will be relevant for years to come, has features you need, and is of good quality.

1. Is the technology a fad or will it be around 5 years from now?

It will be around if:

- The new gadget replacing something older (CDs vs. Analog tapes)
- Other industries are adopting the new technology (3d Printing)
- Other countries have already been using the technology for years (QR codes)



2. Does it have features that will still be used years from now?

The answer is "yes" if:

- It has ports that the newer peripheral devices (printers, cameras, video game consoles)
- There are adapters available so that device can connect the peripherals (cables, plugs)
- 3. What brand / device is best?

The best brand / device has:

- All the features you need now (and those you will need later)
- All the cables come with the device, so there is no additional expense (Batteries not included, subscription is not required)
  - Replacement parts are easy to get (They are affordable / available)
  - It can be upgraded easily (RAM, Graphics Cards)
  - It has great reviews
  - Read user reviews vs. those of the editor
    - o Amazon.com: http://www.amazon.com/
    - o Cnet's reviews: http://reviews.cnet.com/
    - Macworld: http://www.macworld.com/
    - o PCmag reviews: http://www.pcmag.com/reviews
    - Wired's gadget reviews: http://www.wired.com/gadgets/gadgetreviews/

Note: Always read the "Specs" and reviews for each gadget so you know if it can do what you intend for it to do.

### Knowing what it should cost

The second step to making a purchase is knowing the retail price range for the item.





- Checking what the search engines are showing as a price range (Bing, Google, Yahoo Shopping)
  - Google, Yahoo, and Amazon all require their vendors to pay a fee to show up in a search.
     Therefore, many good vendors do not show up in those search engines.
  - One of the only search engines that doesn't "require" payment is Bing. At this time, however, many vendors do pay to be listed in Bing.com.
- Looking in the local Sunday sales flyer (This helps identify what the prices are in your area).
- See what used items are selling for.

Note: Avoid shopping at office supply chains, unless you are only buying a few inexpensive items, or paying shipping fees offset any savings from shopping elsewhere.

#### Knowing where to get it

The third step is selecting which vendor to purchase from. There are some basic factors to help you decide:

- Look for the store or vendor with coupons or rebates for the product (This can save you hundreds of dollars)
- See who will give you the best bulk discounts if you plan on purchasing multiple items (Salespeople will be more willing to drop prices when you are buying large quantities of items)
  - Check if your organization has access to a purchasing cooperative
  - Determine if you have access to a municipal or government contract for those items.
- Many computer manufacturers offer educational, municipal, and government discounts. Check their websites for details or to see if your organization qualifies.

Here is a sampling some of the many sites for technology deals:

o Apple.com ed / govt contracts for California:

http://www.apple.com/education/shop/contracts/states/ca.html

- o **Dell** Government Discount page: <a href="http://www.dell.com/learn/us/en/6099/campaigns/segmentor-usmpp">http://www.dell.com/learn/us/en/6099/campaigns/segmentor-usmpp</a>
- o Govconnection: <a href="http://www.govconnection.com/">http://www.govconnection.com/</a>
- O HP Government Discount Page: http://government.hp.com/
- o J & R Music World: <a href="http://www.jr.com/">http://www.jr.com/</a>
- Macmall.com: http://www.macmall.com/
- Microcenter: <a href="http://microcenter.com/">http://microcenter.com/</a>
- Microsoft Government Discount Page: <a href="http://www.microsoft.com/government/en-us/How">http://www.microsoft.com/government/en-us/How</a> to buy/Pages/default.aspx
- o PCconnection: <a href="http://www.pcconnection.com/">http://www.pcconnection.com/</a>
- o Smalldog Electronics: <a href="http://www.smalldog.com/">http://www.smalldog.com/</a>
- o **Supermediastore**.com: <a href="http://www.supermediastore.com/">http://www.supermediastore.com/</a>
- o **TechSoup**: <a href="http://home.techsoup.org/pages/default.aspx">http://home.techsoup.org/pages/default.aspx</a>
- o **Tigerdirect**.com: <a href="http://www.tigerdirect.com">http://www.tigerdirect.com</a>
- o **Woot**.com: <a href="http://www.woot.com/">http://www.woot.com/</a>

#### Haggling

Besides research, getting the best price often requires good negotiating skills.

- Many times another vendor will give you a better price than the municipal or government bid winner
- If you have purchased from a vendor in the past, mention your long history with them and any big purchases you are planning in the future.
- If you are buying many items, you may want to split your purchase between multiple vendors (if one store is giving you a great price on software but not the computer, buy the software from him and the PCs from someone else)

### Buying New vs. Used / Refurbished / Off lease / Demos / Open Box

In general, it is always nicer to purchase a gadget that is new. It is in better shape and should, therefore, last longer. Unfortunately, technology changes so quickly, sometimes the item becomes obsolete long before it has a chance to break. Luckily, there are other options available. If you wish to provide your customers with devices to use but cannot afford the newest, latest items, it's possible to purchase used products for a fraction of the cost.

Here are some buying options:

New: The item has never been used, is still in the box and shrink wrapped

Pros:

All documentation that comes with it should still be in the box.

It should be in pristine condition

It usually is under a free, limited warranty

It theoretically should last longer than used items

Cons:

It is more expensive

**Used:** The item has already been purchased and used, then resold or traded in.

Pros-

Usually costs less

Depending on where you bought it from, it may have been cleaned up

Cons:

Probably not covered by a warranty, though you should check with the manufacturer.

It may not work properly, unless checked and sold by a store

It may be dinged, dented, or scratched Sometimes the product is old and outdated **Refurbished:** The item was purchased, used, and then returned due to some defect. The manufacturer or store then fixes the issue and resells it.

Pros:

Costs less

Usually covered by a limited warranty Can usually purchase additional warranties

Defects have been fixed and the item should, theoretically, work

Cons:

Item may be dinged, dented, or scratched

Sometimes a defect hasn't been completely addressed

**Off-Lease:** Similar to used. A company leased the item, used it, and returned it after the lease ran out. It then gets cleaned up and resold.

Pros:

Costs less

Usually covered by a limited warranty
Can usually purchase additional warranties

The item has been cleaned, checked, and should, theoretically, work

Cons:

Item may be dinged, dented, or scratched

Item may be a few years old and somewhat outdated

**Demo:** The item has been used as an in-store display. It then gets cleaned up and resold.

Pros:

Costs less

Usually covered by a limited warranty Can usually purchase additional warranties

The item has been cleaned, checked, and should, theoretically, work

Cons:

It may show slight wear & tear It may be last year's model

**Open-Box:** The meaning of "open-box" can differ, depending on the vendor. It generally means a product whose box has been opened. It might have been used and returned by a previous customer, used as a floor model by store personnel, or opened by store personnel for inspection because the product's packaging was damaged (the item falls on the floor, the box breaks, and staff open the box to check on the product). You must read the vendor's definition of what they consider "Open-Box" to mean.

Pros:

Cost less

Current or recent model

Might not have been used except when checked by store personnel to ensure it works

Usually under a limited warranty
You might be able to purchase additional warranty

If an item needed repair, it is usually listed as refurbished instead of open-box.

Cons:

You have no idea why the box was opened

Original packaging may be missing

Sales may be final (no returns)

Any manuals, instructions, cables, or disks may be missing



## Buying online vs. Going to the store:

#### Online:

Pros:

Usually less expensive

You can apply coupon codes found on Twitter, Facebook, and other sites.

More convenient

Many sites include links to manufacturer rebates

Many online stores accept purchase orders, you may have to email or call them.

Cons:

Have to wait for item to ship

Some companies do not accept purchase orders

Returns can be difficult

You cannot try the item out before you buy it (unless you go to a store first, then order online)

If you have questions, you have to call, email, or instant chat.

#### Buying at the store:

Pros:

Stores usually match the price of other brick & mortar stores (some might also match online prices) – bring the flyer or a printout with you

You can try the item out first (there are usually demo models available)

You don't have to wait for it to ship

You can ask the sales person questions

Returns are processed faster

Better for buying an "open-box" item, you can test it out before taking it home.

Cons:

The prices tend to be higher (unless the store matches online prices)

You have to spend time & gas to drive to the store

If the item is large, you have to deal with getting it to the office

You may have to go to manufacturer website to learn about rebates

It's inconvenient

## Part 4: Resources for Keeping up with Technology

Keeping up with technology can be difficult unless you know where to go to find information. Books, in general, are outdated by the time they are published, so your best sources are those where the information is posted without major delay.

The following are 4 great methods for finding information on technology and how your organization can use it.

Networking with colleagues via committees or social media. LinkedIn has some great technology groups.

Attending conferences (along with the various library conferences: ALA, PLA, SLA):

- o Infotoday conferences: <a href="http://www.infotoday.com/conferences.asp">http://www.infotoday.com/conferences.asp</a>
- o MacWorld / iWorld conference: http://www.macworldiworld.com/
- International Conference on Information Technology: <a href="http://www.itng.info/">http://www.itng.info/</a>
- o **Educause**: <a href="http://www.educause.edu/">http://www.educause.edu/</a>"

#### Magazines such as:

- o Macworld
- > Wired
- o PC Mag

#### Websites & Blogs:

- o **ABI Research:** Technology Market Intelligence site http://www.abiresearch.com/
- Gartner Special Report: Technology Trends site http://www.gartner.com/technology/research/top-10-technology-trends/
- o **Mashable:** Their "Next big Thing" in Tech page http://mashable.com/tech/
- o **Techdirt:** Their "Case Study" page http://www.techdirt.com/blog/casestudies/

## **Part 5: Digital Literacy – Patron Training Options**



#### Patron training

Technology User advisory doesn't end with making purchasing suggestions. Part of advisory includes digital literacy. Once your patrons have made their purchase, they will want to learn more about their device, whether it is as a group or one-on-one.

#### One-on-One

Many libraries offer one-on-one, or on-demand training for their customers. Sometimes this is referred to as "renting" or "booking" a librarian. A customer will sign up or schedule time with an instructor. This can be for training on a topic set by the library or to answer questions the customer comes in with.

If you have limited staffing, it is a good idea to have handouts available with instructions for some of the more popular devices. This can be useful for tablets or eReaders you do not have handson experience with, but get numerous questions about. You can also get handouts from other libraries, product vendors (overdrive), and discussion groups on social media sites such as LinkedIn.

#### **Formal Class training**

If your organization has a computer lab, you can hold formal training sessions, where patrons can get a hands-on approach to learning.

Some of the skills they can gain are:

- o How to use software
- Synch tablets to a computer
- Download eBooks or other online materials

#### **Demonstrations**

If your organization does not have a computer lab, but does have access to a meeting room, demonstrations are a great way of sharing information. Most computers and tablets can be connected to a project with the right adapter and cable. Participants can bring in their own device or simply observe the instructor and take notes during the demonstration.

Some of the common topics demonstrated are:

- Searching databases
- o Introductions to new services
- Downloading eBooks
- How to use tablets and eReaders

#### Partnering with businesses

Businesses are a great, often unused resource for libraries. If you do not have enough staffing to be able to teach your patrons, many businesses, from large retail stores like Best Buy to local banks, have outreach programs. They will send people to your

library free of charge, to talk to your patrons. It is a tax break for them and an opportunity for your organization to provide technology programming to your customers.

Banks and finance companies have people who can teach courses like Microsoft Excel. Call them and see if they can come in and talk about "Banking and Tablets", "Financial Apps for the iPad", or "Best Business Apps".

Technology stores are great if you are interested in a "Technology Petting Zoo" for patrons free of charge. Their training staff have access to the newest technology and many times will pass the items around for your customers to handle. It is a wonderful learning opportunity for both patrons and staff.

#### **Web Tutorials**

If space and staffing prevent you from holding any kind of in-person training, you can create video tutorials to post on your website, blog, Youtube, or Vimeo accounts.

There are some inexpensive screen recording tools: **Jing** (<a href="https://www.techsmith.com/jing.html">https://www.techsmith.com/jing.html</a>) and **Screenr** (<a href="https://www.screenr.com/">https://www.screenr.com/</a>). They are both free and easy to use. Jing is software you can download on your computer and Screenr is web-based. Both enable you to record the mouse movements and actions on your computer. Short videos (5 minutes and less) are perfect for demonstrating how people can use your organization's resources: from how to search databases to downloading eBooks.