Mobile Technology Choices and Considerations

Purdue maintains and manages desktop and laptop computers for learning, research, engagement, and business use. Over the years, the University has established good models for maintaining these types of devices. Programs have been established to standardize device types and to maintain and manage the machines, as well as to provide best practices in security.

Beginning early in 2008, Purdue established an Electronic Devices and Services Policy privatizing most cellular technology (phones). Along with privatization came an expectation that primary support for the devices could and should be performed by the individual user (or their third-party vendor). Vendors make support, patches and updates fairly simple and straightforward since these are typically user owned and operated devices.

But what about those mobile devices that fall in between a smartphone and a desktop or laptop? The industry has exploded with a new class of personal devices that are just a bit bigger than a phone, but a bit smaller than a laptop computer. You might recognize them as Apple’s iPad, Motorola’s Xoom, Samsung’s Galaxy Tab, RIM’s Blackberry PlayBook, etc. These devices are primarily targeted for the mobile user who wants something larger than a smartphone but more mobile than a laptop computer.

The IT support areas on campus are being asked for advice on what to buy and what we’ll support. Here’s a compilation of our best advice on things to consider when making a purchase decision.

**Support**
For university owned devices ordered through your local IT support area a small one-time support fee will be charged at time of order. The support charge will cover initial configuration, network and email setup. A brief one-on-one tutorial will be provided that will include instructions on how to maintain and patch the device. Additional support for University and privately owned devices may be requested and purchased from local IT groups and charged in 30-minute increments based on an hourly rate.

**Upgrades, Maintenance and Patching**
The types of devices being discussed here are typically built for both personal and business use. Most vendors provide support, upgrade, maintenance, and patching mechanisms. **It is the responsibility of the owner/user of the device to make sure the device is kept current by installing all vendor recommended upgrades and patches.** Upgrades/patches should be performed on a monthly basis at minimum. This includes keeping the applications and system software patched.

**Device and Peripherals**
As with any major purchase, the best advice we can give is to decide why you need something, what you’ll use it for, where you intend to use it, and how much money you want to spend. These devices are no different and that’s why we don’t have a standard answer on what to buy. Along with those considerations, there are issues related to operating systems, applications, management tools, pricing schemes, storage strategies, network access, etc.

A good starting point is to determine if you need to run Windows or Macintosh programs to access and edit work files stored in your home directory. If so, you should probably purchase a traditional PC laptop or Mac laptop. Although remote access applications for mobile devices are available, you might be frustrated trying to remotely control a desktop PC or Mac in your office (if service is available)
because its operating system was not designed for use without a mouse. Most of these devices do not support a mouse. Some support external keyboards.

**Battery and Power**
Think about the maximum length of time you need the battery to last. Keep in mind when vendors state maximum battery life that typically means the only thing running is the operating system. Wireless connectivity will draw down the battery on some machines faster than others. Look at the power adapter for the device and determine if it’s something you’d be willing to carry around with you all day. A device with a battery life of five hours will probably require recharging midday. Buy a device that maximizes battery life based on your needs. For example, if you plan to watch a lot of video purchase a device that states its battery is designed for that purpose.

**Applications**
Think about what type of applications you want to run on your device. Choose a device that supports the type of applications needed in your mobile world. If you’re looking for a device that you can write and take notes on make sure you investigate that capability prior to purchasing. Don’t assume that just because you can buy a stylus the device will be able to recognize handwriting. Some do, some don’t.

Applications are very device specific so don’t expect to buy an iPad application and run it on your Xoom, or Galaxy. Even if devices come from the same vendor like the iPhone and the iPad, applications may or may not operate on both platforms.

**Application Ownership and Licenses**
Most applications are purchased and licensed through personal accounts. For example, Apple applications are purchased through the Apple App Store, Blackberry PlayBook apps through the Blackberry App World store. Typically the device owner downloads a purchased application through an account connected to a personal credit card. When the application is purchased the holder of the credit card is the owner and holds a license that in most cases is non-transferrable. These applications are very personal and device specific so we do not recommend using a University owned credit card for purchases.

**Equipment and Data Plan Reimbursements**
Equipment and data plan reimbursements should follow the University’s established [Electronic Devices and Services Policy](#).

**Internet access via Wi-Fi (for free), 3G (for a monthly fee), or both**
Most devices have built-in Wi-Fi for accessing the Internet where free Wi-Fi networks are available, such as Purdue's on-campus PAL network; free or paid wireless networks in coffee shops, restaurants, hotel conference rooms, and other locations; and home broadband networks with a wireless router. Some models also include the ability to use a carrier like Verizon, AT&T, etc. for Internet access via a 4G/3G cellular network; this is typically a $15 to $30 month-to-month service. Note: most devices are carrier specific so be sure to purchase a device that is compatible with your carrier of choice. Instructions on how to connect your device to Purdue’s wireless network (PAL) can be found [here](#).

**Security**
Due to the mobile nature of the devices, they should be locked or password protected in case of theft. Do not store passwords on the device that automatically log into your Purdue accounts/information. It’s never good practice to store passwords that access financial or personal information.
**Exchange Access**
If you plan to access your Purdue Exchange account for email and calendaring on the device, purchase a device that supports Microsoft’s ActiveSync technology.

**Microsoft Office**
If you plan to use the device to create or edit Microsoft Office documents you might want to consider a device that is fully compatible with the Windows operating system. Applications like Documents To Go are great for reading Office documents but few offer the same level of compatibility as Office running in Windows.

**File Storage and Management**
By design, these mobile devices are not intended to store or easily manage data files. They typically do not contain a hard drive, which allows the manufacturers to keep the weight of the unit to a minimum. New options are being introduced frequently, such as “cloud storage” from companies like Dropbox, but those options are not guaranteed to be safe and secure within the standards defined at Purdue. While it is possible to remotely connect to Purdue’s data network, mapping drives in a manner you may be accustomed to on your desktop or laptop computer is not possible with these devices. Some but not all devices provide USB storage capabilities. Purdue secure data storage policies should be followed at all times.

**Printing**
Options for printing are limited. For example, printing capabilities from an iPad or Xoom either don’t exist at this time, or are very limited in functionality.

**Video output limitations**
If you plan to use the device to project its content you will most likely need to purchase some type of connector as an additional accessory. Unlike a traditional PC laptop or Mac laptop, most of these devices do not simply mirror their screens to a projector or monitor. Rather, the developer of each application controls whether any video output is sent to an external display. These limitations are described in the device documentation (which anymore is usually not shipped with a device but found on the company website). HDTV or HDMI-compatible displays might not be available in campus classrooms or conference rooms, though. If you hope to use the device instead of a traditional laptop as a teaching or presentation tool, these video output limitations may prove frustrating.

As with any device all Purdue policies and data handling procedures apply.