

# 7 THINGS YOU SHOULD KNOW ABOUT TABLET PC'S

---

## SCENARIO

---

Professor Anderson had his desktop office computer replaced with a Tablet PC this summer. He wants to try for a paperless semester in his English class. He set up his Tablet so that all he needs to do to write comments on a Word document is to simply use the stylus like a regular pen. He informs his class that he will only accept assignments via e-mail or by uploading onto WebCT. He knows that e-mail has a time stamp, and that WebCT can be set up for submissions during a certain time. All the students need to do is to type up their paper on the computer (which they do already) and send it in to him. He corrects the papers, and sends the hand written comments saved on the paper. For revisions of papers, the student can open the old copy and switch between windows to make revisions for later submission. He made the class paperless by sending the syllabus, handouts, and paperwork electronically.

keyboard which operates in a similar fashion to a convertible when attached. This is not to be confused with slate models that have a detachable keyboard—detachable keyboards for pure slate models do not rotate around to allow the tablet to rest on it like a convertible. At Ferris, we recommend the Toshiba Portege M400 Tablet, which is a convertible.

## WHO IS USING IT?

---

Students, faculty, and instructors alike are realizing the benefits of having a Tablet PC, and they are beginning to show up around college campuses nationwide. At Indiana University, 45 HP Tablet PC's were awarded by Hewlett-Packard to the Kelley School of Business. Trent University's forensic science program, in Peterborough, Ont. recently upgraded their labs with 21 Tablet PCs. At Ferris, the faculty at Granger have tablets, along with some other schools on campus like Allied Health Sciences.

## WHAT IS IT?

---

There are three types of Tablet PC's that are currently on the market. First, are the slate PCs. These resemble a writing slate, without a dedicated keyboard. Slate PCs typically have a LCD screen about the size of a piece of paper (8.4" x 14.1"). Next are convertible PC's. These computers closely resemble modern notebooks/laptops. Typically, the base attaches to the display at a single joint called a swivel hinge or rotating hinge. The joint allows the screen to rotate around 180° and fold down on top of the keyboard to provide a flat writing surface. Convertibles are by far the most popular form factor of Tablet PCs, because for people who are unsure about the practicality of using the pen as the primary method of input, the convertibles still offer the keyboard and pointing device of traditional notebooks as a backup plan. The final option for a Tablet PC is called a Hybrid. Hybrids share the features of the slate and convertible by using a detachable

## WHY IS IT SIGNIFICANT?

---

For many people, using handwriting or drawing with a stylus feels more natural than using a keyboard and mouse. Taking handwritten notes and drawing diagrams at a class or conference increases productivity and retention of information. The notes can also be searched automatically if handwriting recognition is implemented. Accessibility is also an important aspect. Those who are physically unable to type can utilize the additional features of a tablet PC to be able to interact with the electronic world. Digital art also has help from Tablet PCs. Tablets are often necessary for professional digital artist work. For many, mouse movement is too jerky to be used as a precision tool.

## WHAT ARE THE DOWNSIDES?

---

Higher cost of the convertible Tablet PC running roughly \$300 more than their non-tablet counterparts as of 2005. The size of Tablet PC screens currently peaks at 14.1 inches. Some models make up for this with very high resolution (a higher pixel density per unit area). The hinge of the Tablet PC is the weakest physical part of a notebook. Most convertible Tablet PCs have only one hinge rather than two in order to allow the rotation function. Single hinge designs are prone to additional wear and tear. Digitizer issues can also cause trouble. Some tablet digitizers cannot keep up if the user writes or draws too quickly, reducing the fluidity of the lines the computer captures. In addition, the signal from the pen may become distorted near the edges of the screen. Because Tablet PC's are handled more than conventional laptops yet built on the frames of conventional notebooks, and because their screens also serve as input devices, many Tablet PC's run a higher risk of screen damage.

## HOW DOES IT WORK

---

A Tablet PC has a touch screen or digitizing tablet technology that allows the user to operate the computer with a stylus or digital pen instead of a keyboard or mouse. A user can input text using the built-in handwriting recognition, on-screen (virtual) keyboard, speech recognition, or a physical keyboard (if available). Shorthand-like entry methods, which enable pen-driven input at touch-typing speeds, are also available, including AlphaTap and Shark. Many Tablet PCs use a Wacom digitizer, which delivers pen-position input to the computer at a fast rate. Tablets with these digitizers project a small magnetic field above the screen that interacts with electronics in the tablet's stylus. The user therefore is able to rest their hand on the screen without affecting the image or mouse pointer; only movement of the stylus affects the mouse pointer. The tablets that Ferris purchases comes with Microsoft

## WHERE IS IT GOING?

---

The Tablet PC is going not only into the classroom, but also into the courtroom, and the conference room. They are also being used in any situation where a signature needs to be captured. A Tablet PC can now replace mountains of paperwork, with electronic files. Tablet PCs are an ideal fit for the busy legal professional who needs to mark up documents or take notes during meetings, depositions, and in courtrooms. Companies are designing software to mimic existing field data collection processes but capture all data in an electronic format that can be communicated to the home office and integrated to back office data systems. Thus, it will reduce or even eliminate actual "paper"work.

## WHAT IMPLICATIONS ARE THERE FOR TEACHERS?

---

The Tablet PC can replace either an aging laptop or PDA with state-of-the-art portability. If you often need to be away from your desk or in an area where notebooks aren't practical then take a look at one of the many available models of the Tablet PC. It can be used when using a keyboard may be awkward, such as in classes and meetings.

The additional Tablet PC functionality added to the operating system allows users to:

- Control the Tablet PC using a digital pen
- Create handwritten documents on the Tablet PC
- Store, search, and review handwritten notes
- Convert handwritten notes into text to use in other applications
- Annotate documents imported from any application
- Use Windows applications in new ways with pen-driven input and ink.

To see ways a tablet can be used in academia, check out

[http://www.microsoft.com/education/downloads/asx/Tablet\\_PA\\_EDU.aspx](http://www.microsoft.com/education/downloads/asx/Tablet_PA_EDU.aspx). Also, you will want to look at <http://www.ferris.edu/tac/SoftwareHardware/hardStandards.cfm> for the recommended Tablet PC.