

Mobile Computing with the Tablet PC

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What is a Tablet PC?

It's essentially a lightweight notebook PC plus...

- Windows XP Tablet PC Edition
 - A superset of Windows XP Professional
 - Can run all Windows XP desktop programs
 - Optimized for using a touch-sensitive screen, a tablet pen and a pen interface
- Microsoft and 3rd-party applications to take advantage of the new OS extensions and the new hardware
- Physical keyboard is not required
- Have integrated wireless networking

What is a Tablet PC?

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- **Built-in support for digital ink**
- Built-in support for multi-language handwriting recognition, gesture and voice recognition
- Includes Windows Journal note-taking accessory
- Other hardware requirements
 - Lightweight design, high-resolution display
 - Straight-forward screen rotation, longer battery life
 - Fast resume from StandBy and hibernation modes
 - Optional dock stations, hot docking and undocking

What is a Tablet PC?

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- Tablet PC Input Panel (TIP) accessory
 - Allows for handwriting and voice input recognition
 - Writing Pad for handwriting recognition into typed text
 - Write Anywhere capabilities
 - On-screen keyboard for typing text and making corrections
 - Also Pocket PC Letter Recognizer and Pocket PC Block Recognizer (like Graffiti)
- These days, Tablet PCs cost about 10% to 20% more than comparable sub-notebook computers

Types of Tablet PCs

- Convertible models
 - Like conventional notebook computers
 - With attached keyboards and screens that turn and flip to cover the keyboards and have the touch-sensitive screens face up for pen user interface
 - One-spindle, and now: **two-spindle models**
- Slate-style models
 - More lightweight units
 - Without integrated keyboards (use optional detachable USB-connected or wireless keyboards)
 - Other external peripherals typically required

Current Tablet PC offerings

- Acer TravelMate C100/C110 Series (convertible)
- Toshiba Portege 3500 Tablet PC (convertible)
- Fujitsu Stylistic ST4000 (slate)
- ViewSonic V1100 Tablet PC (slate)
- Motion Computing M1400 (slate)
- Acer C300, Gateway M275 two-spindle models
- HP Compaq Tablet PC TC1100 Series (hybrid)
- Other models available; see
 - <http://www.tabletpctalk.com/faqs/hwcomparison.shtml>
 - **Best units to get: Intel Centrino-based models**

Uses of Tablet PCs

- Reading digital content: Web pages, Acrobat and Word documents, eBooks, etc.
- Taking notes at meetings, classrooms, hallways, anywhere, anytime, napkin--brainstorming
- Store working notes in searchable format
- **Comfortable computing:** walk-around, standing, reclining position, laying down, resting on lap, held with one hand
- Collaborative capabilities via integrated wireless networking and collaborative apps like Groove

Uses of Tablet PCs

- Taking notes, making drawings, annotating documents and giving presentations
- Incorporating digital ink into a new personal computing experience
- Easy note-taking in math, statistics, economics, chemistry, whenever drawings may be needed
- Vertical mobile applications in health care, business, research, engineering, higher ed.

Tablet PC applications

- They run all Windows XP desktop software
- New applications
 - Tablet PC-specific Windows apps — Windows Journal, Windows Snipping Tool, Sticky Notes
 - Extensions to conventional desktop apps — Microsoft Office XP Pack for Tablet PC, Groove WorkPlace
 - New 3rd-party apps — Corel Grafigo, Zinio Reader, Alias Sketchbook, FranklinCovey TabletPlanner, Mindjet MindManager, Ms-Office system 2003
- Demos...

Windows Journal

- A note-taking accessory that lets you create and organize handwritten notes
- Handles digital ink for notes, drawings and diagrams (pens, highlighter and eraser)
- Use it to take notes at meetings and in the classroom (insert space wherever needed)
- Supports text boxes for handwriting recognized typed text (can export typed text also)
- Search at later (w/o handwriting recognition)

MS-Office XP Pack for Tablet PC

- A free download to support digital ink and pen UI
- Jot down handwritten notes (and email them)
- Mark up PowerPoint presentation files (including live presentations)
- Annotate Word and Excel files
- Add handwritten comments in Word
- Quickly draft drawings and notes using your handwriting
- <http://www.microsoft.com/office/tabletpc>

Other Tablet PC applications

- **Corel Grafigo**
A graphics application that allows you to quickly visualize and communicate your ideas; great for making schematic diagrams (free download)
<http://www.corel.com/grafigo>
- **Zinio Magazine Reader**
Allows you to download and read digital copies of print magazine under a subscription service
<http://www.zinio.com/tablet>
- **Groove WorkPlace**
Desktop collaboration software for shared spaces, superior file sharing, real-time collaboration, flexible tools
<http://www.groove.net/microsoft/tabletpc>

Microsoft OneNote

- A new MS-Office component that allows you to capture, record, organize, search and reuse information, inc. digital ink (good edu price)
- Designed for desktop, laptop and Tablet PCs
- The OneNote interface is similar to a notebook with dividers, and supports typed text, hand-written notes, hyperlinks and multimedia
- Smart features handle bullet lists and content searching, organization and manipulation
- MS-OneNote interactive live Webcast: next Wednesday 10/27 at 12 pm

Microsoft OneNote

Cardiovascular Systems

9/18/2002 Page Group
11:11 AM 1 of 2

Circulatory System Variations

Gastrosplanteric cavity Tubular heart Dorsal blood vessel
Pharynx Mouth Lateral hearts Ventral blood vessel
Planarian: gastrovascular cavity Insect: open circulation Earthworm: closed circulation

You will be on the test!

Human Heart

- Primordium forms in cardiogenic plate at cranial end of embryo
- Angiogenic cell clusters lie in horseshoe shape

Microsoft OneNote

Tahiti

Journalist Anafi Coast Caro Madives Tahiti New Notebook 1

Tahitian Adventure

Handy Links <http://polynesianslands.com/fp/>
<http://www.tahiti-tourisme.com/EI/menus-principal.html>
<http://www.travelian-espel.com/operation-Tahiti-5tag.asp>

11/2/2002
2:27 AM

Open air market - **Marché du Papete**
Unique holidays - **Week of the Fish** (last week in March)

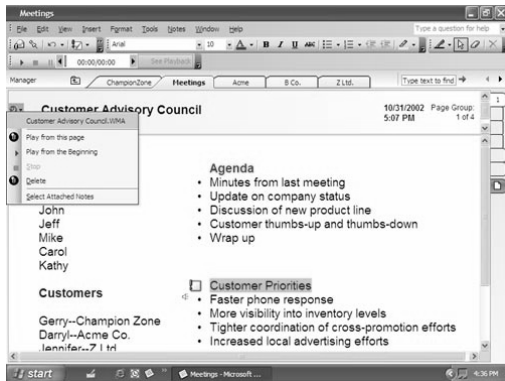
Currency
The currency of French Polynesia is known as the **French P CEP** (or sometimes **XPF**). The rate of exchange for this cure is the rate of 119.3317 **CEP** to 1 Euro. For exchange with the **U CEP** to \$1

Top Resorts

- Bora Bora - Hotel Bora Bora
- Tahiti - La Meridien Tahiti
- Moorea - Moorea Beachcomber Intercontinental

History
Just how the Polynesian peoples came to populate their islands of the Pacific is a subject of some debate. What is clear is that great sailors and navigators who traversed vast distances of open ocean to settle as far and wide as present-day French Polynesia.

Microsoft OneNote



Tablet PCs in higher education

- Both, students and teachers are mobile users
- Revolutionary digital note-taking in the classroom: take, keep, organize, search and manipulate digital notes in one's own handwriting, inc. diagrams and doodles
- Windows Journal provides unlimited anytime-editable sheets of paper to capture what is on the blackboard
- Students expected to be attracted by sleek designs, portable form factors and better ergonomics
- You cannot hold a laptop with one hand, while talking to a professor, in the hallway, and jotting down a note
- Teachers might be lured to mark-up live presentations

Tablet PCs in higher education

- Potential use of interactive whiteboards (pen control and application sharing by students from their seats)
- Teachers could accept digital assignments and use Tablet PCs to comfortably comment and grade papers, in digital ink, and email them back to the students
- Ad hoc collaboration and team learning possibilities
- Pen and paper has always been a comfortable medium at schools — Tablet PCs digitize this popular medium
- In-class access to class Web sites and other content
- One device to hold handwritten lecture notes and all sorts of faculty-provided educational materials

Tablet PC Issues

- Prices need to come down some more
- Battery life needs to improve (3-4 hours today)
 - new Intel Pentium M (Centrino) — 4 to 8 hours/charge
- Problems projecting in portrait mode
- Unproven ruggedness, So-so built-in voice recognition
- Hardware overheating problems
 - Resolved by new Intel Pentium M (Centrino)
- Awkward WriteAnywhere functionality
- Many Web sites not designed for portrait viewing
- Weight still needs to come down for extended comfortable tablet PC computing experience

Summary

- **Same functionality of laptops with more flexibility**
- Designed for mobile computer users, walk-around computing, comfortable computing and note-taking
- Intended to be carried and used throughout the day
- Simplicity of pen and paper by letting you use the display as a writing tablet
- Touch screen navigation more natural than mouse-based
- Outstanding digital note-taking capabilities
- Tablet PCs provide anytime-anywhere computing, communication and collaboration

Summary

- Tablet PC appeal is expected to quickly grow as new Tablet PC-intelligent applications become available
- Microsoft's new OneNote Office component will revolutionize note-taking and replace the yellow pad
- Mainstream notebook computers to evolve into Tablet PCs by 2005-2007
- Tablet PCs are not in direct competition with personal digital assistants as PDAs, although they will discourage pocket reading in favor of the much larger viewing screens
- Please email any questions to Ed Garay at itf@uic.edu

Related links

- Microsoft Tablet PC home
 - <http://www.tabletpc.com>
- Tablet PC Talk
 - <http://www.tabletpctalk.com>
- Tablet PC hardware
 - <http://www.microsoft.com/windowsxp/tabletpc/evaluation/tours/default.asp>
- 3rd-party applications
 - <http://www.tabletpctalk.com/faqs/apps.html>
- Microsoft Tablet PC newsgroup
 - <http://www.microsoft.com/windowsxp/tabletpc/using/newsgroups/default.asp>
- TabletPCHome.com -- <http://www.tabletpchome.com>
- TabletPCBuzz.com -- <http://www.tabletpcbuzz.com>

- Book: *How To Do Everything With Your Tablet PC*, by Bill Mann, McGraw-Hill Osborne Media
