

A Really Small Computer User in Education, (About one year later)

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Abstract

Our Association was originally organized in order to support small computer users in Education. The nomenclature of small computing is making a come back and this time it fits into a shirt pocket! This presentation will review statements and predictions made last year. It will also show the latest benefits of using a pocket computer by demonstrating the practical uses for it in education. The presentation will be given using pocket presentation software on the hand-held computer to a projector.

Adventures of the One ARMed Man

'Memory' Lane

At the Convention of World Future Society in 1977, the President of DEC, Kenneth Olson declared these words. "There is no reason for any individual to have a computer in his home." With the advent of mobile computing this supposed foolish statement is not too far off the mark.

Writing about technology is like writing about vapor over a coffee cup. Here in an instant, and gone just as suddenly. The pocket-pc currently is an evolving breed of computer. Much of this paper may be put the recycle bin within six months. Many of the web sites may disappear, and another pocket pc will undoubtedly have much more to offer next year. Change is a constant.

The hand-held computing device came in the early 80s with the introduction of Radio Shack's "PC-1." Later the "PoquetPad"¹ came and it ushered in the PCMCIA (Personal Computer Memory Card International Association) device. Apple's "Newton" made its debut in 1993 with a suggest retail price of \$699. Many of these represent the early Personal Digital Assisatnt or PDA. Today, notable brands such as the "Palm," or "Hanspring" are in the PDA category, while the more powerful PDAs are called Pocket PCs. Hereinafter, referred to as the PPC.

This new breed of hand held device exceeds the capabilities of its forerunners by including common applications found on most desktop computers. The entrance of the PPC brought with it anywhere, anytime communication. Frankly, it also brought with it a higher price tag. But, the added value outweighs the added cost.

¹ Poquet Computer Corp., developed one of the first MS-DOS palmtops; MSRP: \$2500.

Hand-held vs. Pocket-PC

When classifying a *really small* computer, the main consideration is the display. A PPC has a quarter VGA screen (320x240). A hand-held has a half VGA (640x320) or full VGA (640x480, 800x600) screen. A laptop falls into the column of Hand held computer. Laptops are not designed for the ordinary shirt pocket. However, the PPC does a marvelous job of it.

The CPU

The PPC made its debut equipped with Intel's 206 MHz Strong Arm chip.

Operating System

Most of the PPCs come standard with a pocket version of Windows called Windows CE.2 Linux exists for the PPC. Some PPCs can be purchased with Linux already installed. The majority of PPCs are using the Windows CE environment.

Recently, third party developers have made a Palm emulation package for the PPC. This is primarily useful for running some of the older (and perhaps out-of-print) titles for the earlier PDAs aforementioned.

Applications

At the 2001 ASCUE Conference, Applied Business Technologies introduced to attendees of their presentation the use of PPCs and rightly predicted that the "demand for this hand-held device will grow as more education-focused applications are created for these devices."³

As of this writing that demand is still increasing and applications for the Pocket-PC are growing exponentially. It is possible to find nearly all of the favorites available.

All of the Pocket devices (including mobile-phones) have some kind of contact/address list. The PPC (with Windows CE) uses full integration with most e-mail systems and includes a Personal Information Manager (PIM), Pocket Word, Pocket Excel, MS- Reader (.lit), Media Player (audio/video), and Pocket Internet Explorer (affectionately known as "PIE").

Popular/Necessary Software Add-ons

Map Applications, Genealogy, Pocket TV, LiesureWare (Games), GPS and Financial products. At the end of this paper please find a listing of web sites that promote thousands of useful software titles.

² The desktop version of this operating system can be found on the WebTV system, Microsoft's X-box, MSN Web companion and the eBook Reader.

³ 2001 ASCUE Proceedings, "Breaking Away From the Desktop: Applications that synchronize PocketPCs and Campus Database Systems. Page 155.

Programming the Pocket-PC

Basic CE
Windows .NET
VB6 (Visual Basic and Visual Studio)
eVB (embedded Visual Basic)

Accessories (to avoid being out-gadged)

Memory

CF—Compact Flash
SM—Smart Media
SD—Secure Digital (SDIO)
MMC—Multi-Media Card

Storage

Memory cards, Iomega “Drive,” IBM Drive (From Megabytes to Gigabytes of portable space)

Styli – single, multi-purpose

Carrying cases (leather, plastic, cloth)

Video Display module (PCMCIA or CF device for displaying PPC on a projector.)

Add-ons

Networking and wireless
Phone (cell phone add-on) – Phone handheld
Camera (plugs into socket or slides onto unit for taking moving or still shots)

Using the PPC in the classroom and office

At the beginning of the 2001-2002 academic year, Baptist Bible College and Seminary faculty using the Pocket-PC numbered one. By the end of Winter break that number saw an increase of 400%. In the spring semester the Bible faculty began using the Pocket-PC in class as a ready reference tool. Several versions of the Bible are available including the Greek New Testament and Hebrew Old Testament (their original forms). Beyond this practical use one of the faculty from another department uses his for class attendance as well. Since the Pocket-PC has the ability to recognize hand writing, he has each student write their name onto the notes application. Then later he verifies their attendance. The 2002-2003 year has yielded greatest use.

This staff member introduced the use of “Avant-Go.” It is an on-line service, which synchronizes content web pages with the PPC. There are thousands of sites participating in this means of mobile communication.

Since word processing and spreadsheet applications are available, users employ either of these “anywhere” “anytime.” The Pocket Power Point programs available implement all of the functionality found in their desktop counterpart. Some faculty members are using the video display capability with a version of presentation software.

Change is a constant?

Much of this paper may find the recycle bin within six months. Many of the web sites may disappear, and once again, the PPC will undoubtedly have much more to offer next year.

Pocketic Justice

There once was a pocket, which had no friend,
Eventually it got to a place at its wits end,
Until one day the Personal Computer became small,
And the pocket was befriended once and for all!

Useful PPC Internet sites:

The latest software:

www.pocketgear.com

www.pocketpccity.com

www.pdacity.com

PPC News

www.pdabuzz.com

www.mobilecritics.com

www.ppcpsg.com

www.pocketpcminds.com

www.pocketpcpulse.com

www.pocketnow.com

www.pocketpccentral.net

www.pocketpcpda.com

1000s of E-books

www.memoware.com

www.mslit.com

Current device specifications:

www.microsoft.com/mobile/pocketpc/hardware/default.asp

Programming helps:

www.deVBuzz.com (since November 2000)

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