

Computing for the Consumer - The Entertainment PC

Jon Peddie Research

- ♣ Founded in 2001 - *our 18th year*
- ♣ Focus and emphasis on Digital Technology, Multi Media, and Graphics
- ♣ Consulting and market research - Advisor to industry leaders and financiers
- ♣ Bi-weekly report, various Digital Technology Market Studies

The Business of Multimedia and Graphics

JPR What is an Entertainment PC (EPC)?

- ♣ An EPC is characterized by:
- ♣ A powerful CPU >2GHz
- ♣ Large system memory (512 MB)
- ♣ A high performance graphics board with HDTV output
- ♣ A high quality 5.1 sound card (6.1 desirable)
- ♣ A TV tuner (multiple tuners desirable – multiple standards)
- ♣ A FM tuner (optional a satellite radio tuner)
- ♣ A large (>60 GB) disc
- ♣ A DVD player (writer desirable), CD R/W
- ♣ A robust operating system
- ♣ A Unified User Interface with remote control
- ♣ Photo processing and organizing software
- ♣ Music organizing and ripping software
- ♣ Movie organizing software (writing desirable)
- ♣ And optional features like high speed internet access, EPG, transcoding,

Do you have to have all those things?

- ♣ Yes, anything less is just a PC, best case a multimedia PC
- ♣ The point is – to be an EPC it has to be something special.
- ♣ It has to:
 - *Unify the user's entertainment experience*
 - *Concentrate and manage all media (not just some media)*
 - *Be friendly, inviting, and provide a satisfying experience*

How in the world

Are we ever going to control all that?



That's what a Unified User Interface is all about

And what differentiates an EPC from any other CE or PC device

What if users don't want all those features?

- ♣ Why wouldn't they?
- ♣ Price
- ♣ Duplication
- ♣ Complexity
- ♣ Unused functions or features
- ♣ Technophobia

The compromise is a collection of multimedia PCs

- ♣ A music PC
- ♣ A photo PC
- ♣ A video (DVR) PC
- ♣ A gaming PC
- ♣

And all the combinations

What about segmentations and differentiation?

| | Entry Level (Value) | Midrange (Mainstream) | High End (Performance) |
|----------|------------------------|--------------------------|---------------------------|
| CPU | 2 GHZ | 2.5 GHZ | >3 GHZ |
| Memory | 256 MB | 512 MB | 1 GB |
| GPU | IGC | \$150 | \$250 + |
| Sound | 16 bit, 48 KHz, 2.1 | 24 bit 96 KHz, 5.1 | 32 bit 128 KHz, 6.1 |
| TV Tuner | Analog | Analog & Digital | Dual Analog & Digital |
| FM Tuner | - | Basic | High quality |
| Disc | 40 GB | 80 GB | 120 GB |
| DVD | Reader 4x | Reader 8 x Writer 2X | Reader 16 X Writerr 4X |
| CD | Read 16x write 8x | Read 32x write 16 x | Read 32x write 24 x |
| SW | Min | Mid | Max |

Segmentation by OS and UI

- ♣ Linux OS, Open UI
- ♣ Examples of UI
- ♣ Microsoft OS, 3rd party UI
- ♣ *ATI, CyberLink, InterVideo*
- ♣ Microsoft OS and UI
Media Center Edition

Disk sizing

| Disk size in GB | 40 | 80 | 120 | 160 | 200 | 250 | 300 |
|-------------------------------|--------|---------|---------|---------|---------|---------|---------|
| Hours of DV Video | 3 | 5 | 8 | 11 | 14 | 17 | 21 |
| Number of video games | 19 | 39 | 58 | 77 | 96 | 120 | 144 |
| Hours of WM9 video | 51 | 101 | 152 | 203 | 253 | 317 | 380 |
| Hours of MP3 music | 667 | 1300 | 2000 | 2650 | 3300 | 4100 | 5000 |
| Number of RAW photos | 5492 | 10000 | 16000 | 21500 | 27000 | 34000 | 41000 |
| Number of fine photos | 22222 | 44444 | 66667 | 88889 | 111111 | 138889 | 166667 |
| Number of normal photos | 30769 | 61000 | 92000 | 123000 | 150000 | 190000 | 230000 |
| Number of economy photos | 44944 | 89000 | 134000 | 179000 | 224000 | 280000 | 337000 |
| Number of camera phone photos | 975000 | 1951000 | 2926000 | 3900000 | 4878000 | 6097000 | 7317000 |

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THE BUSINESS OF GRAPHICS AND MULTIMEDIA



FACTS & Predictions

EPCs

- ♣ 200k Entertainment non-mobile PCs in 2002
- ♣ 5k Mobile EPCs in 2002

FACTS

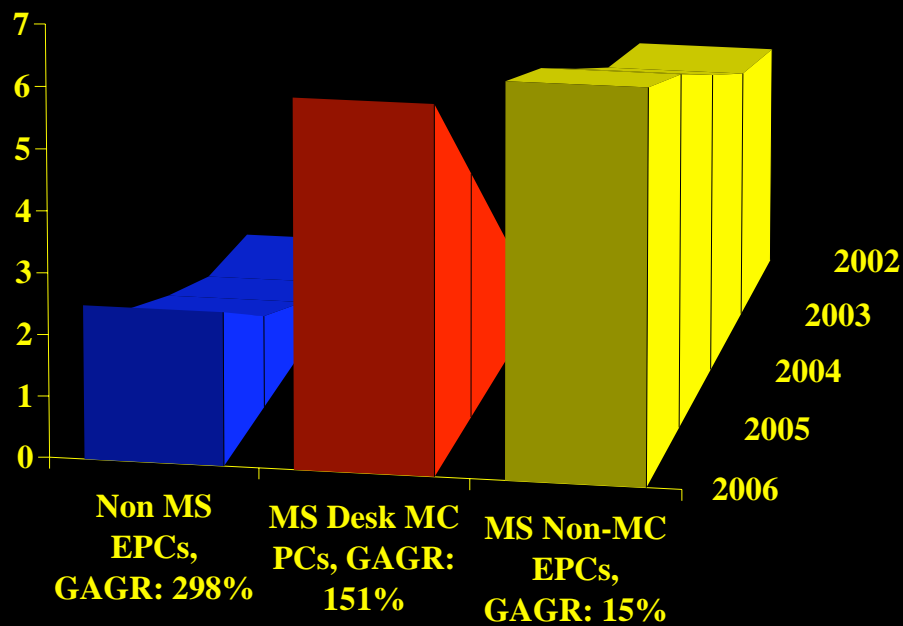
EPCs

- ♣ 10m non-mobile EPCs in 2007
 - *CAGR: 132%*
- ♣ 3m Mobile EPCs in 2007
 - *CAGR: 259%*

Predictions

Entertainment PCs

Worldwide sales of EPCs
Millions of units per year worldwide
CAGR 2002 to 2006: 14.9%
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Gaming

- ♣ 7 million PC consumers in the Enthusiast PC gaming market in 2003
- ♣ 8 million PC consumers in the Enthusiast PC gaming market in 2006
 - CAGR: 5%
- ♣ 20 million PC consumers who play games occasionally
- ♣ 25 million PC consumers who play games occasionally in 2006
 - CAGR: 8%

Digital Imaging

Almost every PC user has some type of a camera:

- ♣ 59 million PC users own a digital still camera
- ♣ 7 million PC users own a digital camcorder
- ♣ 76 million PC users own a film camera
- ♣ 40 million PC user have an analog camcorder

FACTS

DVD Playback and Record

- ♣ 6.6m DVD players in desktop PCs in 2000
- ♣ 107m desktop DVD RW + 48m players 2006
 - CAGR: 69%
- ♣ 2.6m DVD players in mobile PCs in 2000
- ♣ 33m mobile DVD RW + 5m players in 2006
 - CAGR: 57%

FACTS

Is an EPC a media server?

- ♣ Can be, but not necessarily
- ♣ Media servers and Extenders add complexity
- ♣ Raise issues of DRM
- ♣ Give a mixed marketing message
- ♣ Media Server Strategies - Blueprint for Success
(an overview and industry discussion on the media server system.) Friday, 7 Jan 11:00 am

The EPC as THE Media Center

It brings us real convergence

Oh, man,
this is *SO*
cool



Is your PC
REALLY
doing this?

Thank you

