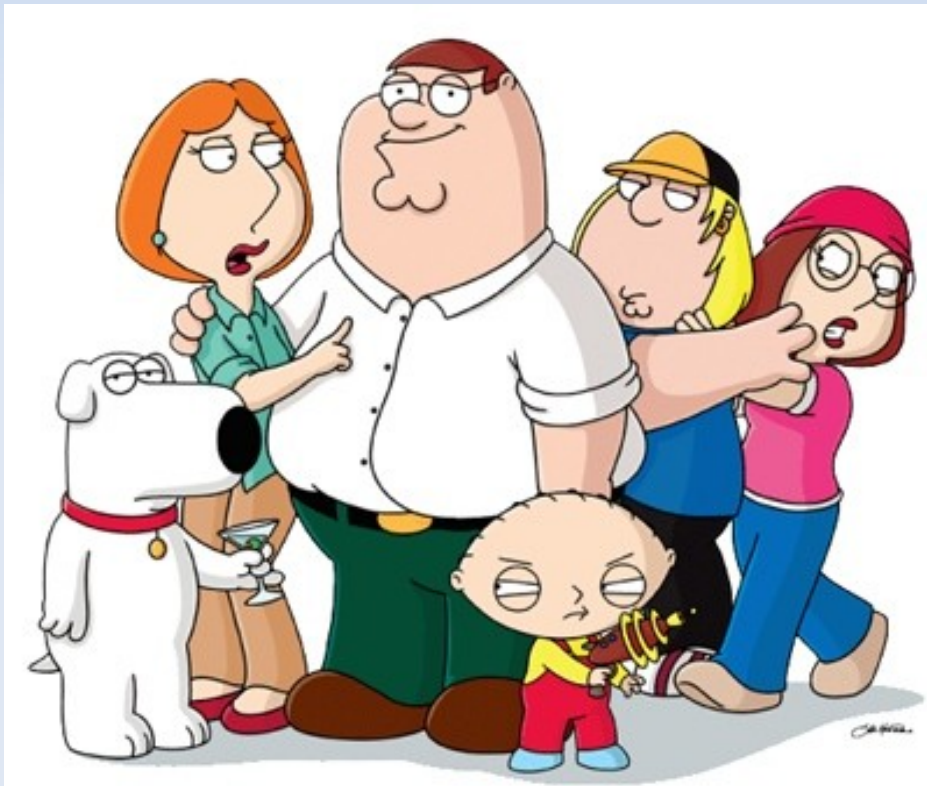# So, you want to buy a computer?

by Gregory Pickett

Who will be using the computer?

- You
- Your spouse
- Your kids
- All of the above

How will the computer be used?

- Business
- Entertainment
- Gaming
- All of the above

Types of computers

- Desktop
- Laptop
- Netbook
- Tablet PC
- Smartphone

Desktops

- System cost
  - Entry: $350 to $500
  - Mid-range < $1K
  - Power: $1.5 K - $2K
- Dell or HP are solid
- Intel CPU's prevalent
- Choose "White Box" computers carefully
- Customize wisely

Laptops

- Dual-core processors – a must for multitasking

- 16 inch screen can display a true 1080p (1920-by-1080-pixel resolution) picture – need HDMI

- Skimping on battery quality may cost dearly

- Buy a USB mouse designed for laptops

- Screen coating may effect outdoor usage

- Ethernet port is still important

- Docking stations are not just for work

Netbooks

- Inexpensive ($300 – 500) & portable
- Screen sizes of 12 inches or smaller
- Internet use and light word processing
- Run Windows XP
- Intel Atom processor

Operating systems

- Windows
  - Windows XP
  - Windows Vista
  - Windows 7
- Apple – Mac OS 10.6 ("Snow Leopard")
- Linux – Ubuntu, Red Hat, SUSE
- *Key question*: Will there be <u>driver</u> support for my printer, monitor, scanner, etc.?

Windows XP, Vista, or 7

- XP best selling OS for nearly 5 years; but it came out in 2001 and <u>mainstream</u> support ran out in 4-2009

- Just say no to Vista
  - Aero environment is a resource hog
  - Windows 7 is now out as of 10-2009
  - UAC not implemented well

- Windows 7 is getting favorable reviews and will run on hardware that Vista won't

Processor (CPU)

- Intel
  - Celeron (ugh!)
  - Atom
  - Dual-Core
  - Core 2 Duo
  - Quad-Core
  - Core I7
- AMD
  - Athlon 64 X2
  - K10

Memory (RAM)

- DIMMS
- 32 bit OS – 4 GB max
- 64 bit OS – over 4GB
- Maximizing RAM is one of the cheapest ways of increasing performance of a PC

Hard drive

- Long-term storage
  - 160 - 750 GB
  - 1 TB
- Drive speed is important
  - 5,400 RPM is average
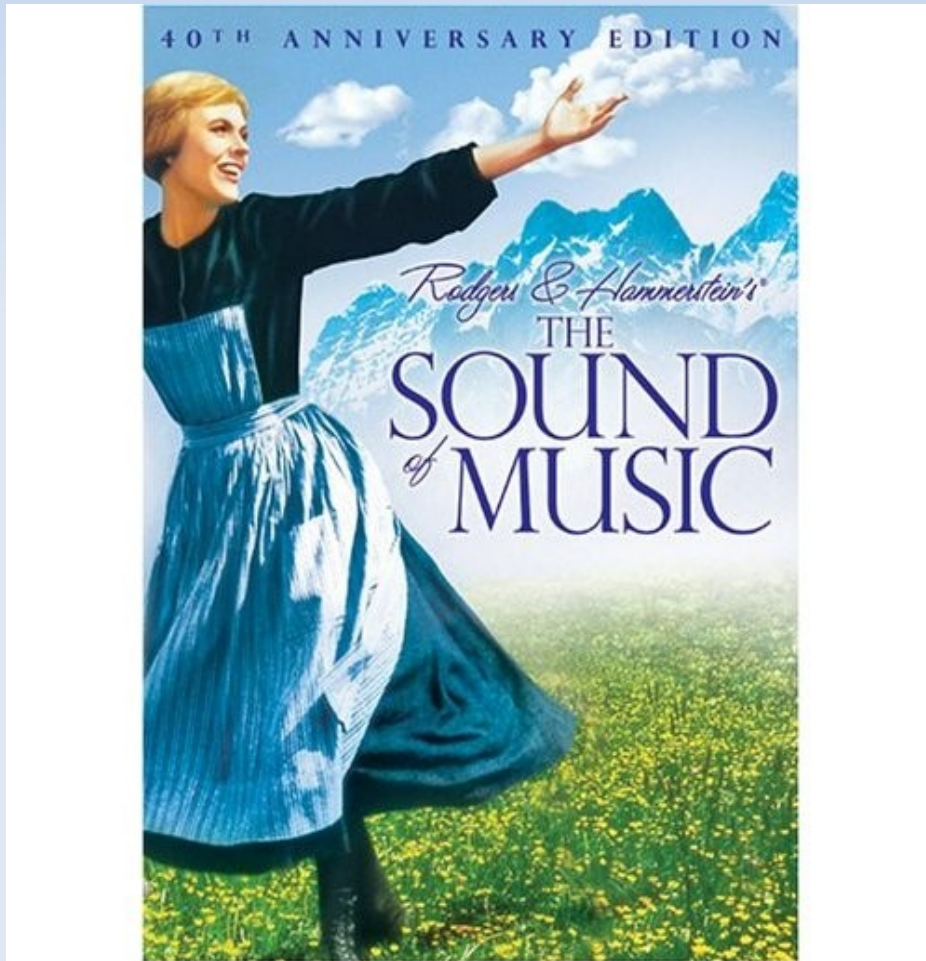 - 7,200 RPM is fastest

Graphics adapter

- Integrated on motherboard; <u>or</u>

- Separate internal plug-in card

- Video ram (VRAM) of 512 MB - 1 GB essential for PC gaming

- Ouputs

  - VGA or DVI to computer monitor

  - HDMI to HDTV

Monitor

- CRT now obsolete
- LCD sizes range from 17 – 24 inches and larger
- Some 26 inch HDTV's can double as a monitor – check for VGA, DVI, and HDMI connections

The hills are alive with the ...

- Home office: integrated sound ok
- Multimedia PC
  - Dolby 5.1 or 7.1
    - Surround sound
    - '0.1' is subwoofer
- Content still should be DVD or Blu-ray
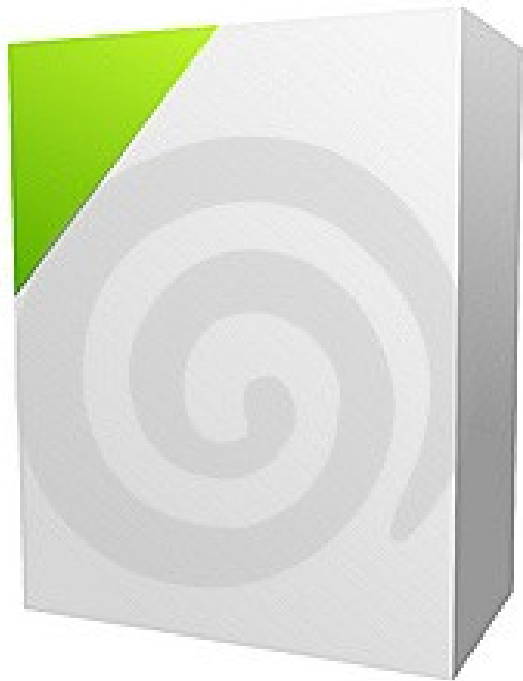
Networking

- Ethernet
- Wi-Fi
    - Class of wireless local area network (WLAN)
    - 802.11 b,g,n
- 3g
    - "mobile broadband"
    - Verizon, AT&T

External storage

- Floppy drive (1.44 MB) (rare in new PC's)

- CD-RW (700 MB)

- DVD-RW (4-8 GB)

- Blu-ray disc (50 GB)

- USB flash drive (1 GB – 64 GB)

- External USB HD (160 GB – 2 TB)

Software

- The Good
  - MS Office 2007
  - Adobe Acrobat Pro
  - Symantec
- The Bad
  - Bloatware
  - Trialware
- The Ugly – spyware

Computer case (desktop)

- Tower
- Gaming case
- Small form factor
  - Dell Studio Hybrid
  - Aplle Mac mini
- "All-in-One"
  - Apple iMac

Extras

- Printer
  - Inkjet vs. LaserJet
  - Photo printer
  - USB or wireless connection
  - Price vs. supply costs
- Scanner
- Digital camera
- Wireless router

Time to buy

- New
  - Best Buy, Dell, HP
- Refurbished
  - Tiger Direct
  - Dell Outlet
- 'But should I buy online or from a store...?'

Get your coupons

- Ebates.com

- FatWallet.com

- Techbargains.com

Price comparison

- PriceGrabber
- NexTag
- MySimon
- Amazon
- CNET
- Google

Things to consider

- Seller rating
- Tech support
- Protection plan
- Taxes & shipping
- Rebate – instant or mail in
- Warranty
- Return policy

How do I transfer my data?

- Flash drive
- Burn CD/DVD
- External hard drive
- Online storage

What about that old computer?

- File server

- Donate to school

- Give to a relative

- Give to an IT worker who hasn't bought a new computer in 8 years

For more information ...

- http://www.pcworld.com/printable/article/id,125647/printable.html

- http://www.pcworld.com/printable/article/id,125649/printable.html

- Consumer Reports *Electronics Buying Guide – Winter 2010*

Thank you

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