Pervasive Video

The Future of TV Everywhere

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Pervasive Video

Computing
Internet Protocol
Communications
Video

Pervasive Video

- Consumer Television
- Streaming Media
- Content Artificial Intelligence
- Portable & Ubiquitous Devices
- Flat, Light & Cheap Displays
- Virtual Signs
- TV Unplugged
- Augmented Reality
- Video Culture

U.S. Consumer Television

- 105 million U.S. HUTs (homes using TV)
- 70% cable or satellite connected
- $54 billion advertising market
  - $14 billion to ABC, NBC, CBS, Fox
  - $12 billion to cable networks

Consumer Television Trends

- Bigger and flatter screens
clearer pictures, better sound

- and many, many more channels
Consumer Access & Control
- DVD Players
  - Component
  - Standalone
- PVR: Personal Video Recorders
  - TiVo, Replay, SnapStream
  - Easy recording
  - Control live shows: pause, slow-mo, instant replay
  - Network and save programs

Consumer TV Choices
- High Definition TV and channel capacity
  - HBO
  - IFC
  - Vs

Streaming Media
- Much lower quality
- Much more expensive receiver
- Many more choices

Streaming Media Acceptance
- 35% of adult Americans are streamies
- 83 million have tried it
- 38 million streamed in the past month
- 28% of home users have broadband
  Arbitron/Edison Media Research

Enterprise Television
- Streaming to the business desktop
  - for fun or for profit
- Investor and press conference calls
- E Learning
- Web cam teleconferencing
- Customer relationships
- Product launches
- Easy ROI
Content AI
- Tagging program data in XML
  Pictron, TV-Anytime
  manually or semiautomatically

Intelligent program guides
LEARNING about user preferences overtly or covertly
JUDGING which programs are the best match
ACTING as an entertainment agent to retrieve, record, search or someday create video content

Portable & Ubiquitous Devices
- PDAs, mobile phones, cars

- Watches, pens, eyeglasses
Flat, Light & Cheap Displays
- CRT: Cathode Ray Tube
- LCD: Liquid Crystal Display
- Plasma Display

Flat, Light & Cheap Displays
- OLED: Organic Light Emitting Diode

Projection Displays
- From wall size to super size

Virtual Signs
- Video signs in stores, ATMs, malls

TV Unplugged
- Wireless LAN and WAN networking
  WiFi, Bluetooth, UWB
- Pocket-sized TVs
- Pocket-sized cameras
- TV anywhere

Augmented Reality
Augmented Reality

Video Culture
- The moving image rules.
- Audiences continue to fragment.
- Stories become sound and picture bites.
- Attention becomes more scarce.
- Everybody is on TV all the time.
- Human information capacity skyrockets.

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