



Streaming Media East

Pervasive
Computing
Internet Protocol
Communications
Video

IN3.ORG

Streaming Media East


Pervasive Video

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

IN3.ORG

Streaming Media East

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

IN3.ORG

Streaming Media East

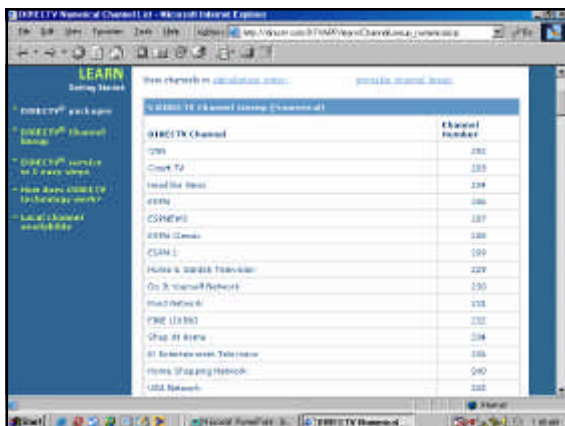
Consumer Television Trends

- ♦ Bigger and flatter screens
clearer pictures, better sound



- ♦ and many, many more channels



IN3.ORG



Streaming Media East

Consumer Access & Control

- ◆ **DVD Players**
 - Component
 - Standalone
- ◆ **PVR: Personal Video Recorders**
 - TiVo, Replay, SnapStream
 - Easy recording
 - Control live shows: pause, slo-mo, instant replay
 - Network and save programs

IN3.ORG

Streaming Media East

Consumer TV Choices

- ◆ High Definition TV and channel capacity



vs




IN3.ORG

Streaming Media East

Streaming Media

- ◆ Much lower quality
- ◆ Much more expensive receiver



- ◆ Many more choices

IN3.ORG

Streaming Media East

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

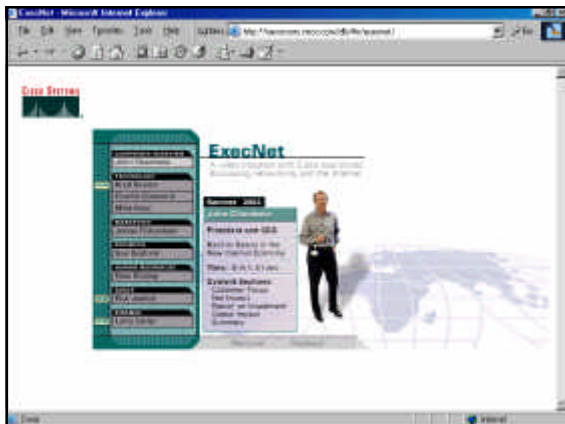
IN3.ORG

Streaming Media East

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

IN3.ORG



Streaming Media East

Content AI

- ♦ Tagging program data in XML
Pictron, TV-Anytime
manually or semiautomatically

A screenshot of a video player interface showing a grid of video thumbnails and a larger video player window. The interface is dark-themed with blue accents.

IN3.ORG

Streaming Media East

Content AI

- ♦ 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

IN3.ORG

Streaming Media East

Content AI

- ♦ Machine Vision

A collage of four images illustrating machine vision: a close-up of a person's face with facial recognition markers, a person in a control room with multiple monitors, a green-tinted aerial view of a city with highlighted paths, and a data visualization showing a network of nodes and connections.

IN3.ORG

Streaming Media East

Portable & Ubiquitous Devices

- ♦ PDAs, mobile phones, cars

Three images illustrating portable and ubiquitous devices: a PDA, a mobile phone, and a car interior with a screen on the dashboard.

IN3.ORG

Streaming Media East

Portable & Ubiquitous Devices

- ♦ Watches, pens, eyeglasses


Four images illustrating portable and ubiquitous devices: a pair of smart eyeglasses, a watch, a pen, and a hand holding a small device.

IN3.ORG

Streaming Media East

Flat, Light & Cheap Displays

- ♦ CRT: Cathode Ray Tube
- ♦ LCD: Liquid Crystal Display
- ♦ Plasma Display




IN3.ORG

Streaming Media East

Flat, Light & Cheap Displays

- ♦ OLED: Organic Light Emitting Diode



IN3.ORG

Streaming Media East

Projection Displays

- ♦ From wall size to super size



IN3.ORG

Streaming Media East

Virtual Signs

- ♦ Video signs in stores, ATMs, malls




IN3.ORG

Streaming Media East

TV Unplugged

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



IN3.ORG

Streaming Media East

Augmented Reality



IN3.ORG

