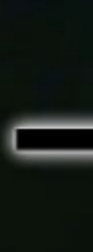
Navigating Wireless/Mobile

Devices and Applications Today

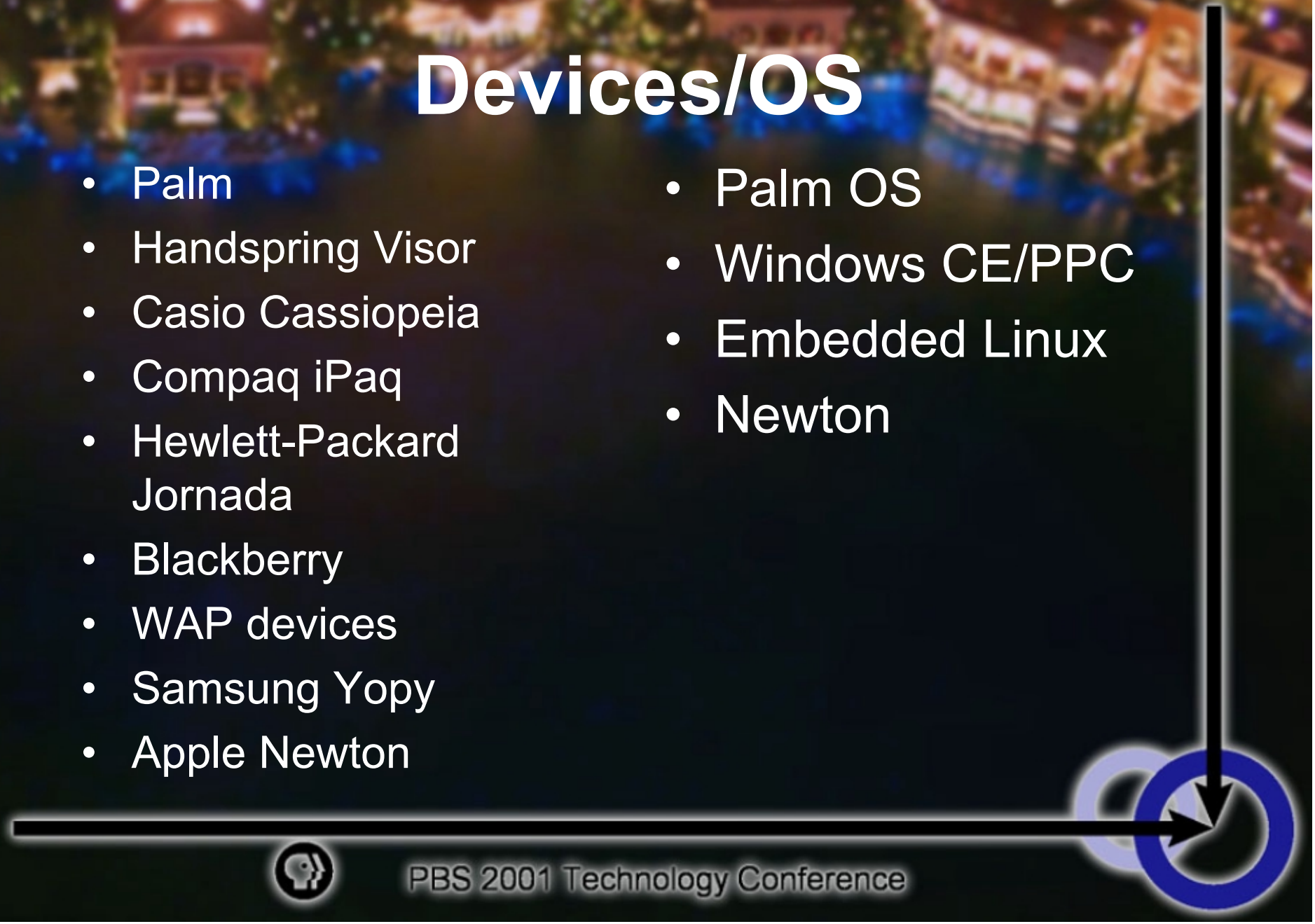


PBS 2001 Technology Conference

Devices/OS

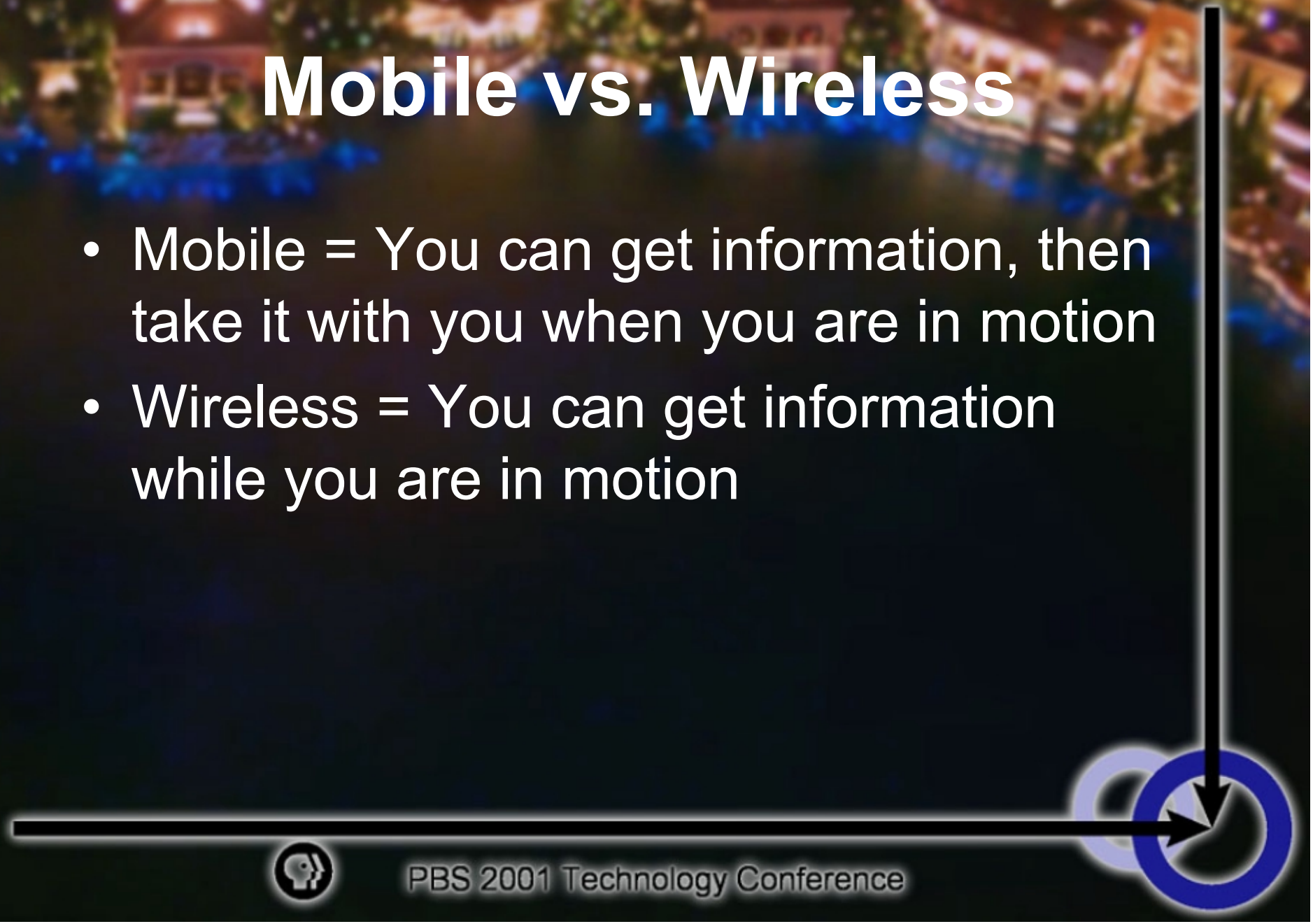
- Palm
- Handspring Visor
- Casio Cassiopeia
- Compaq iPaq
- Hewlett-Packard Jornada
- Blackberry
- WAP devices
- Samsung Yopy
- Apple Newton

- Palm OS
- Windows CE/PPC
- Embedded Linux
- Newton



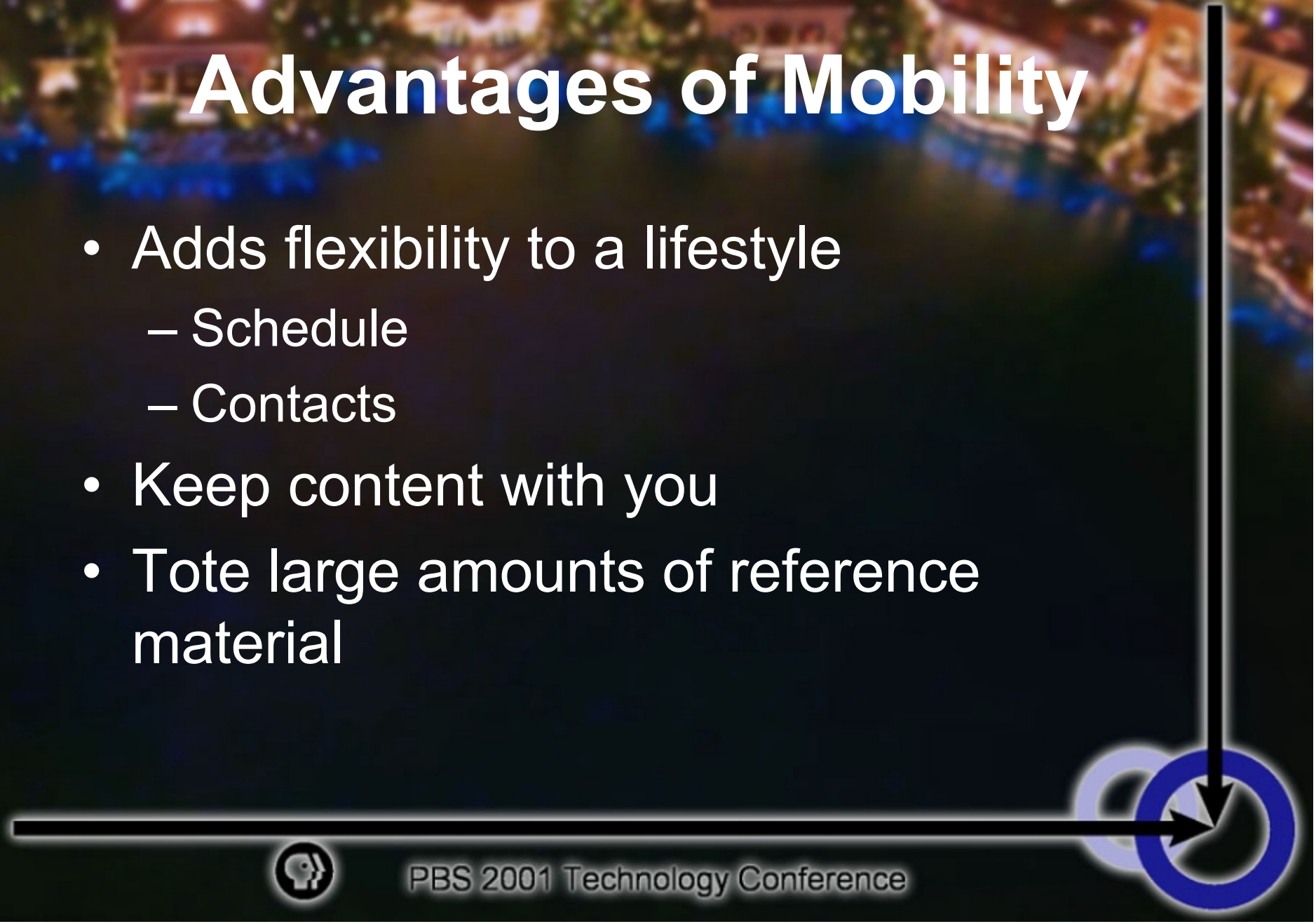
Mobile vs. Wireless

- Mobile = You can get information, then take it with you when you are in motion
- Wireless = You can get information while you are in motion



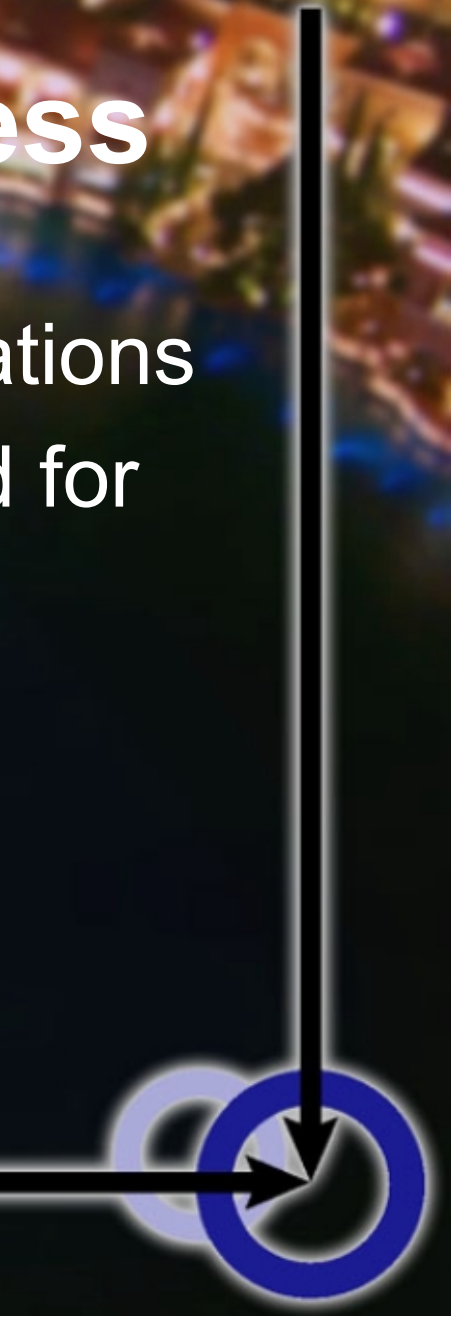
Advantages of Mobility

- Adds flexibility to a lifestyle
  - Schedule
  - Contacts
- Keep content with you
- Tote large amounts of reference material



Advantages of Wireless

- Real-time interaction with applications
- True on-demand eliminates need for forethought



Applications and Content Available Today

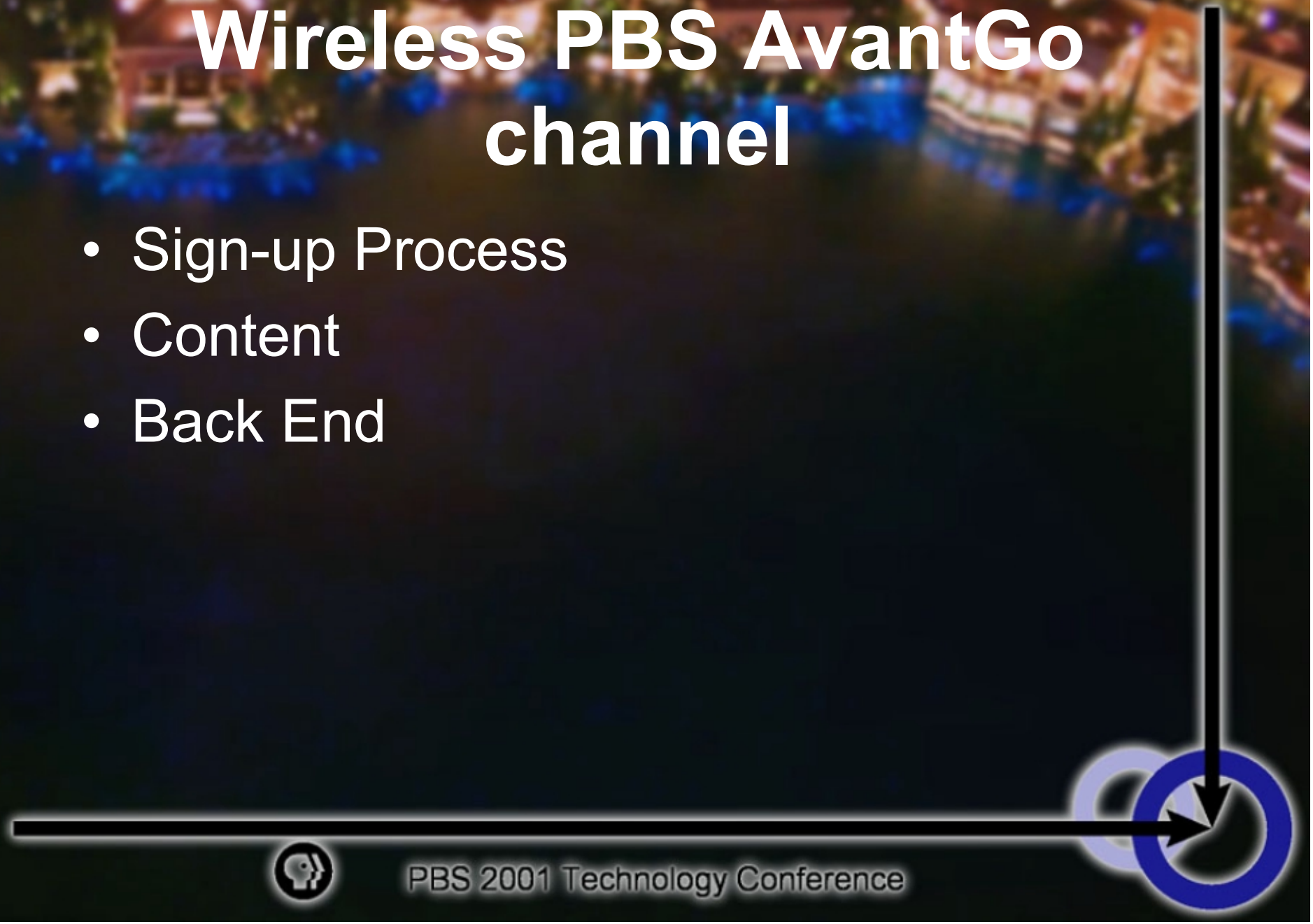
- Yellow/White Pages
- Driving Directions
- Movie Listings
- Encyclopedias and dictionaries
- Financial Info
- Email and IM
- Amazon
- Yahoo!
- MSN
- Weather Channel
- ESPN
- AvantGo
- eBay

Funky New Low Real Estate Space

- Test the platforms you want to support
- PDA browser support for HTML is inconsistent
- Akin to building for the Web of ’93-’95
- This “HTML Lite” is almost HTML 3.0, but not quite.
- Best use of images

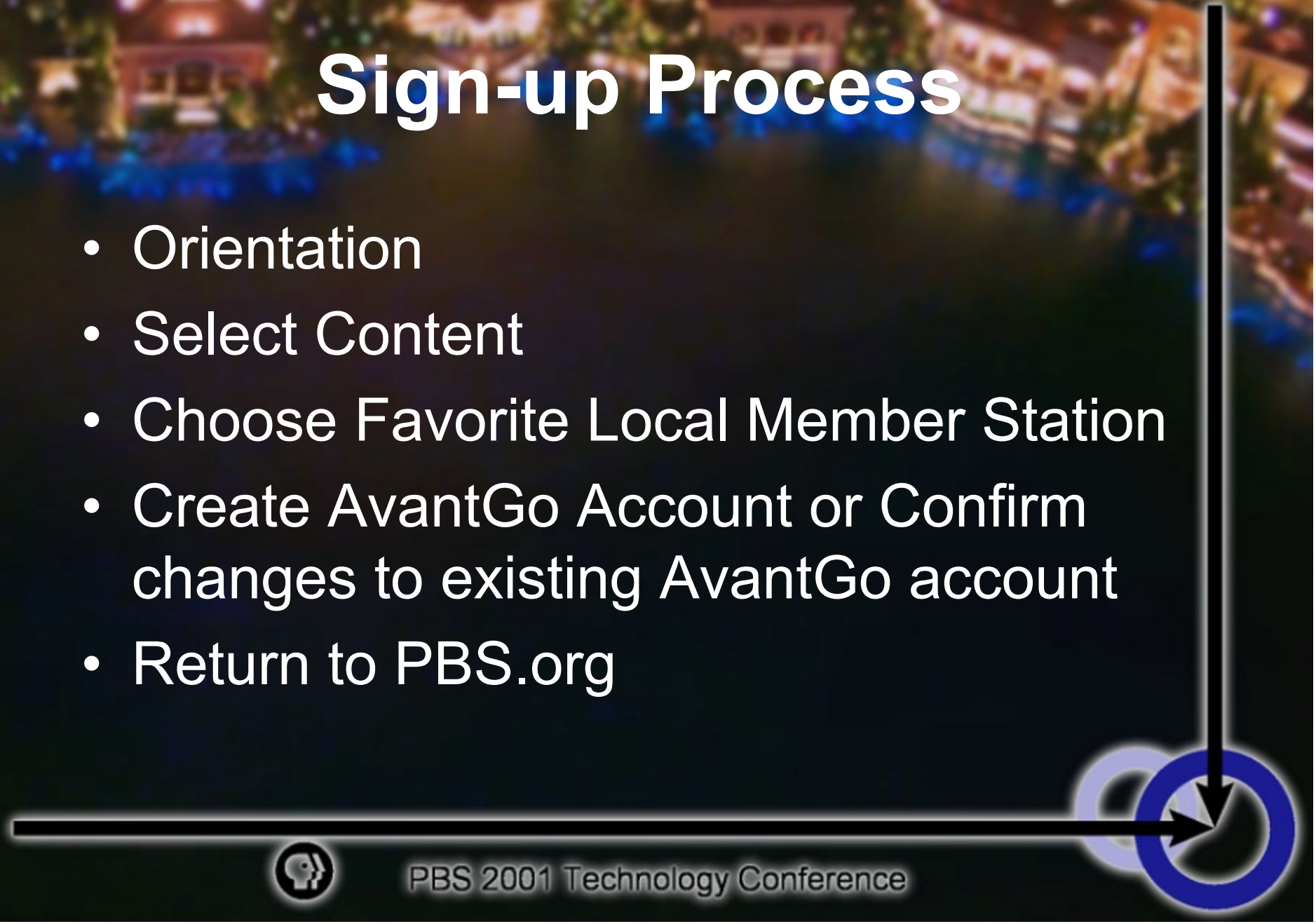
Wireless PBS AvantGo channel

- Sign-up Process
- Content
- Back End

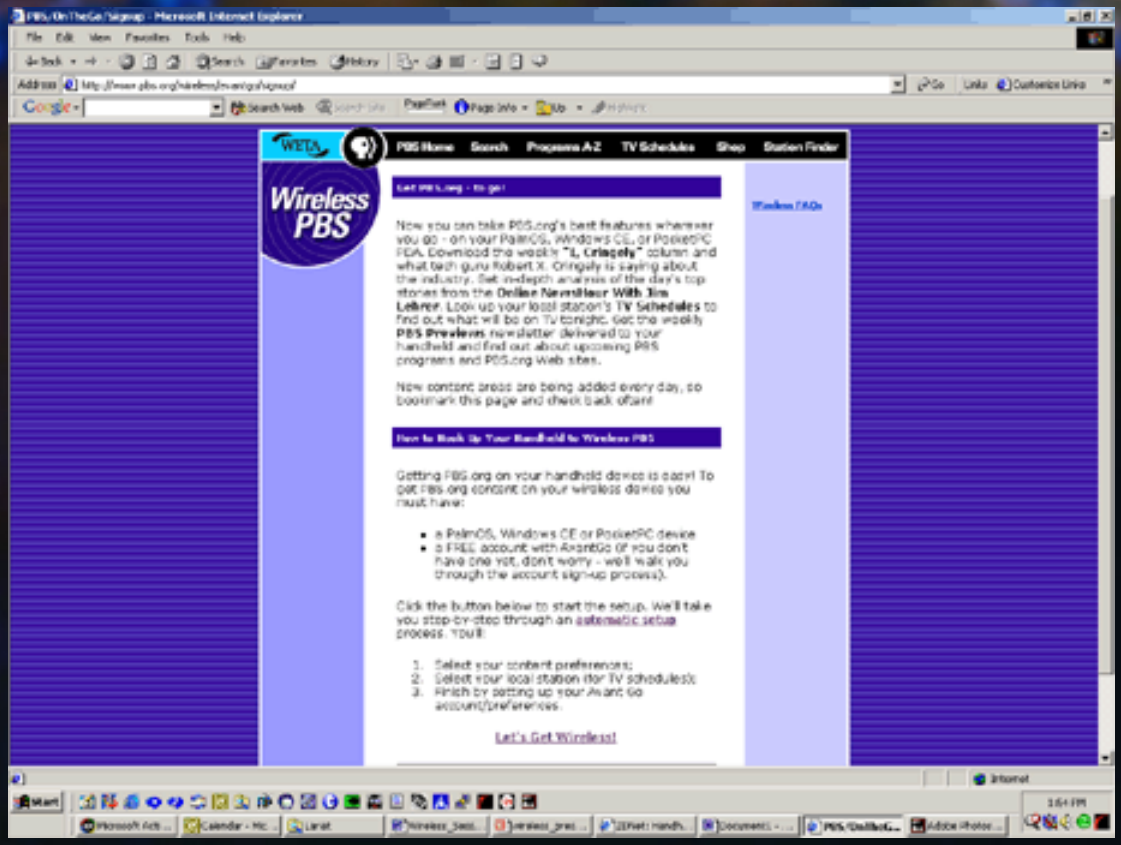


Sign-up Process

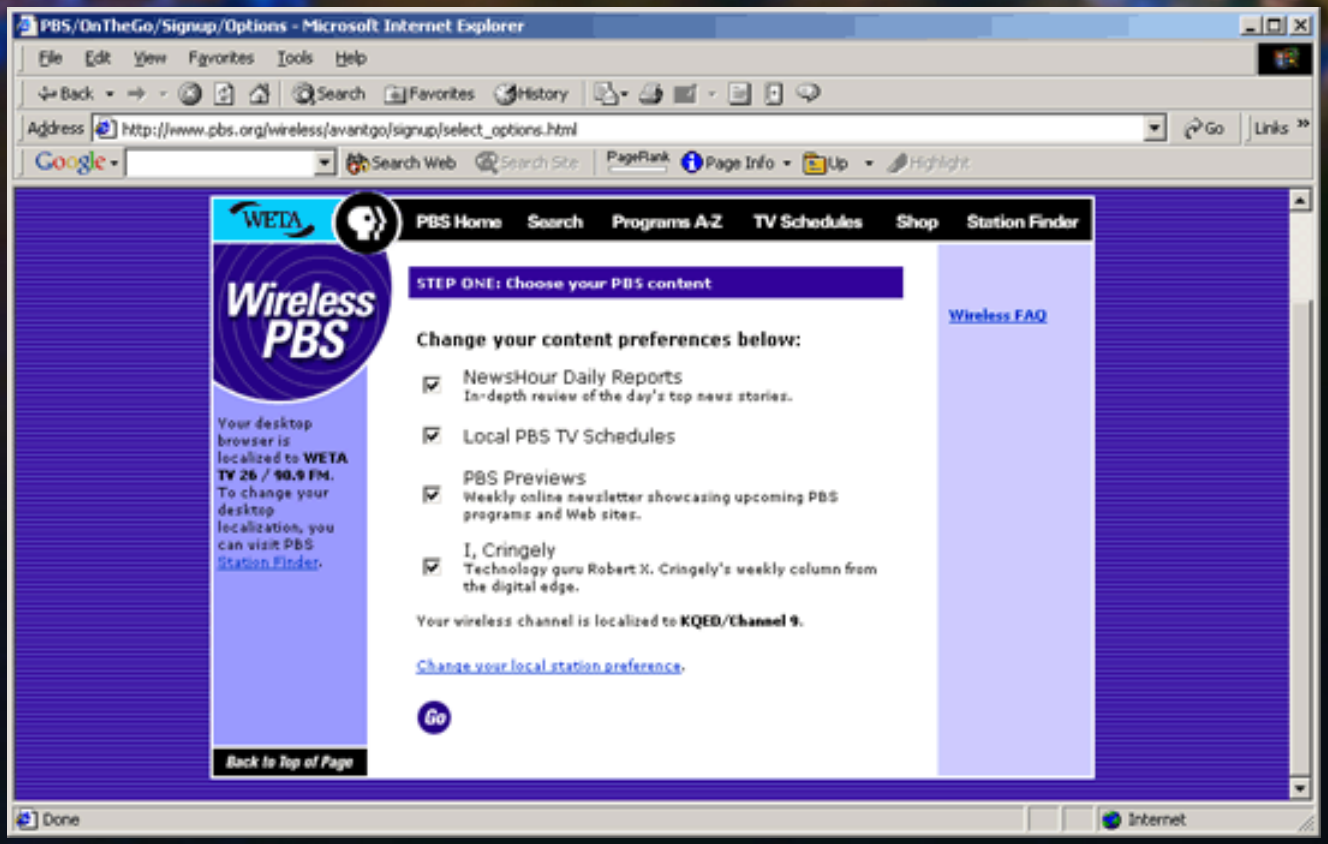
- Orientation
- Select Content
- Choose Favorite Local Member Station
- Create AvantGo Account or Confirm changes to existing AvantGo account
- Return to PBS.org



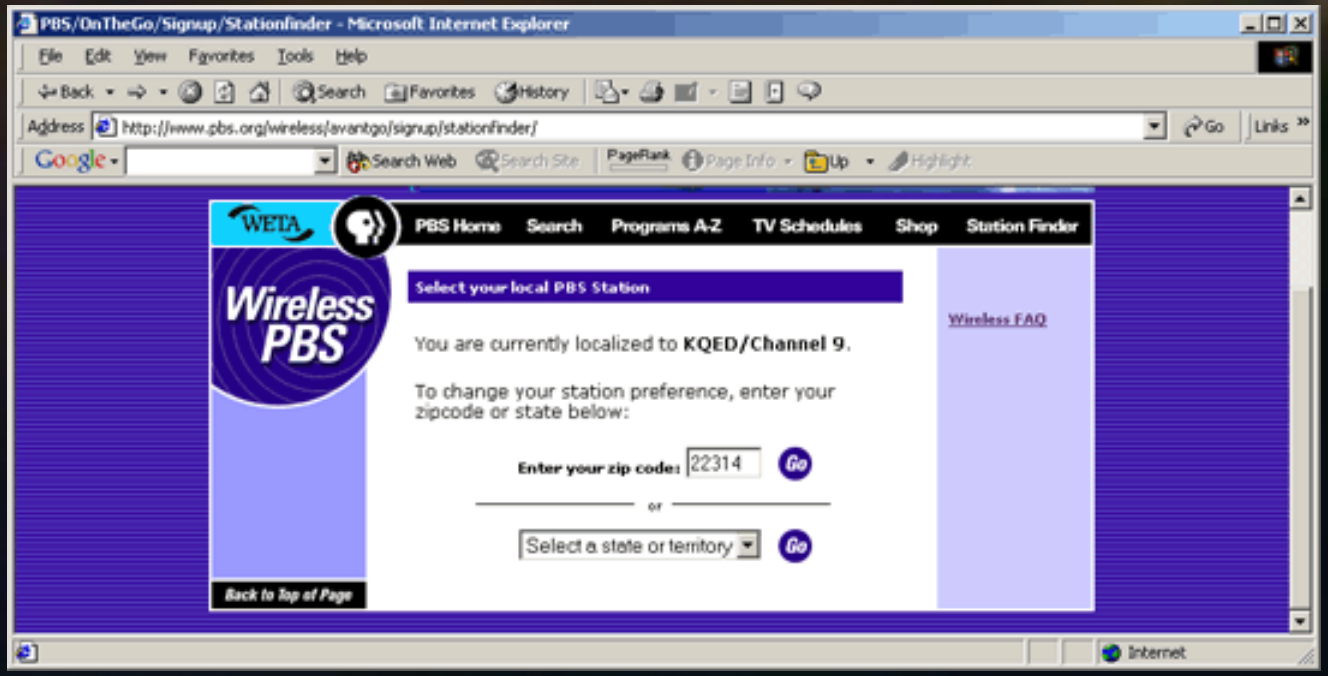
Sign-up: Orientation



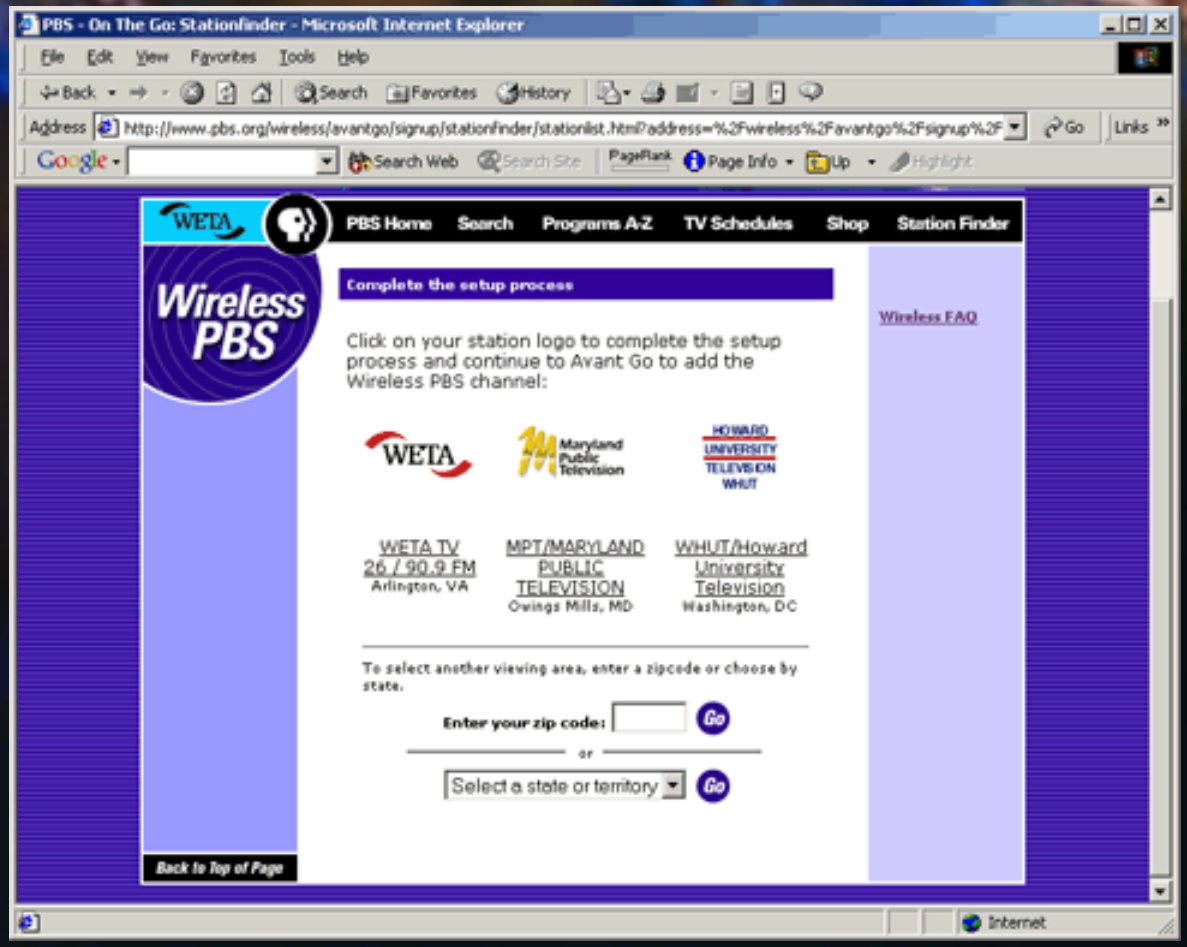
Sign-up: Select Content



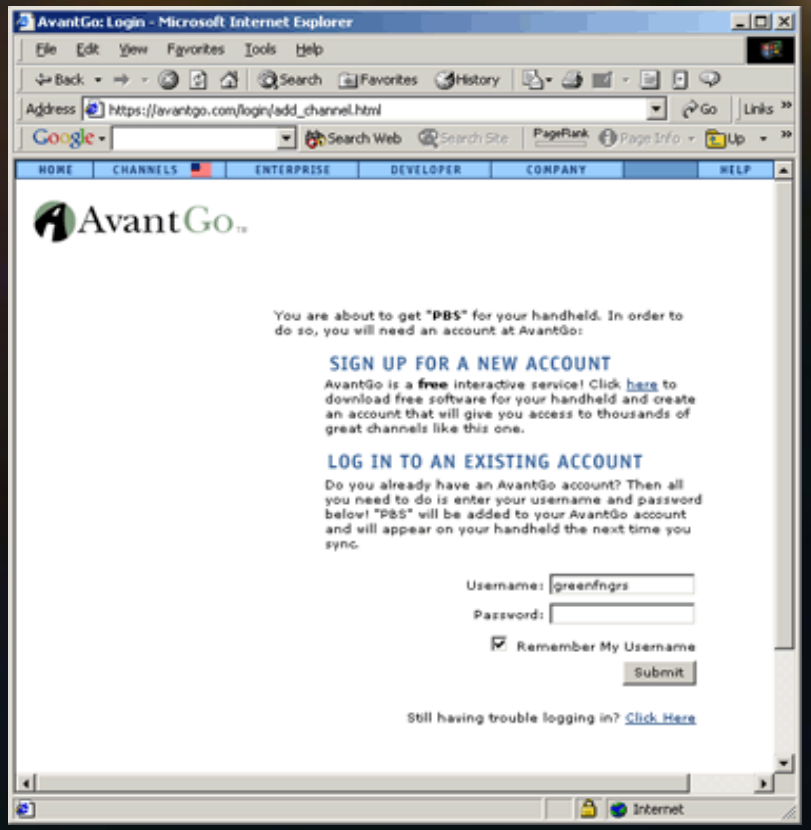
Sign-up: What Area of the Country?



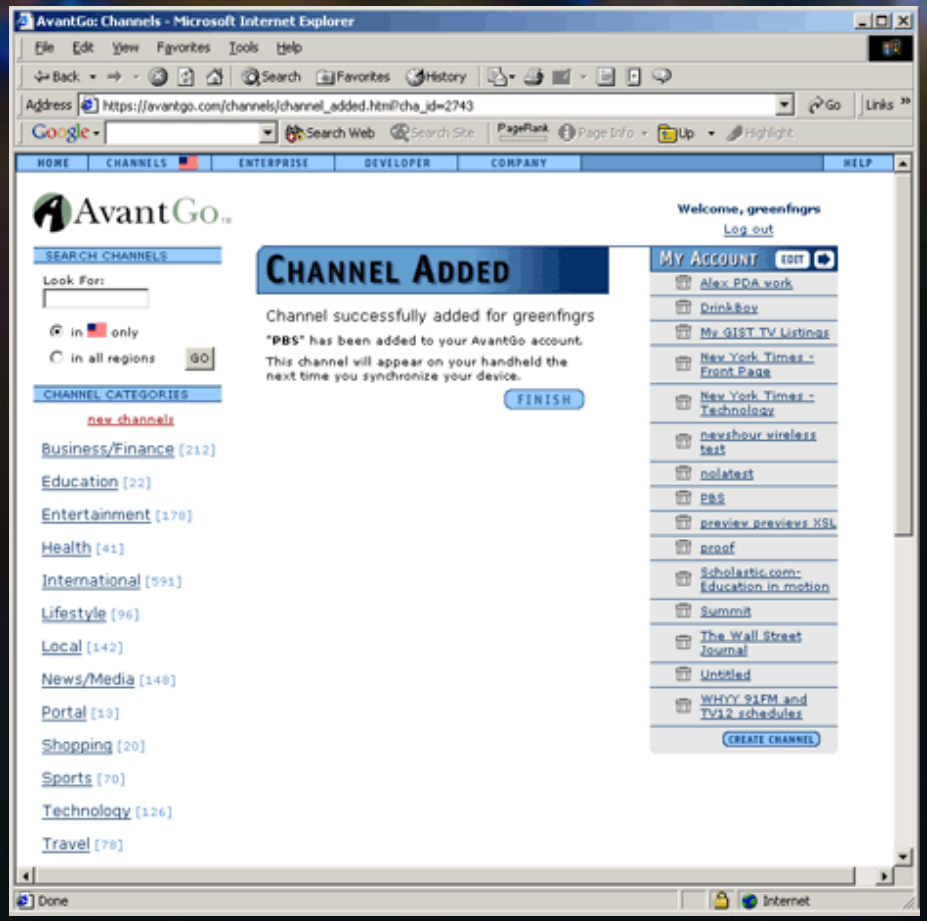
Sign-up: Choose Station



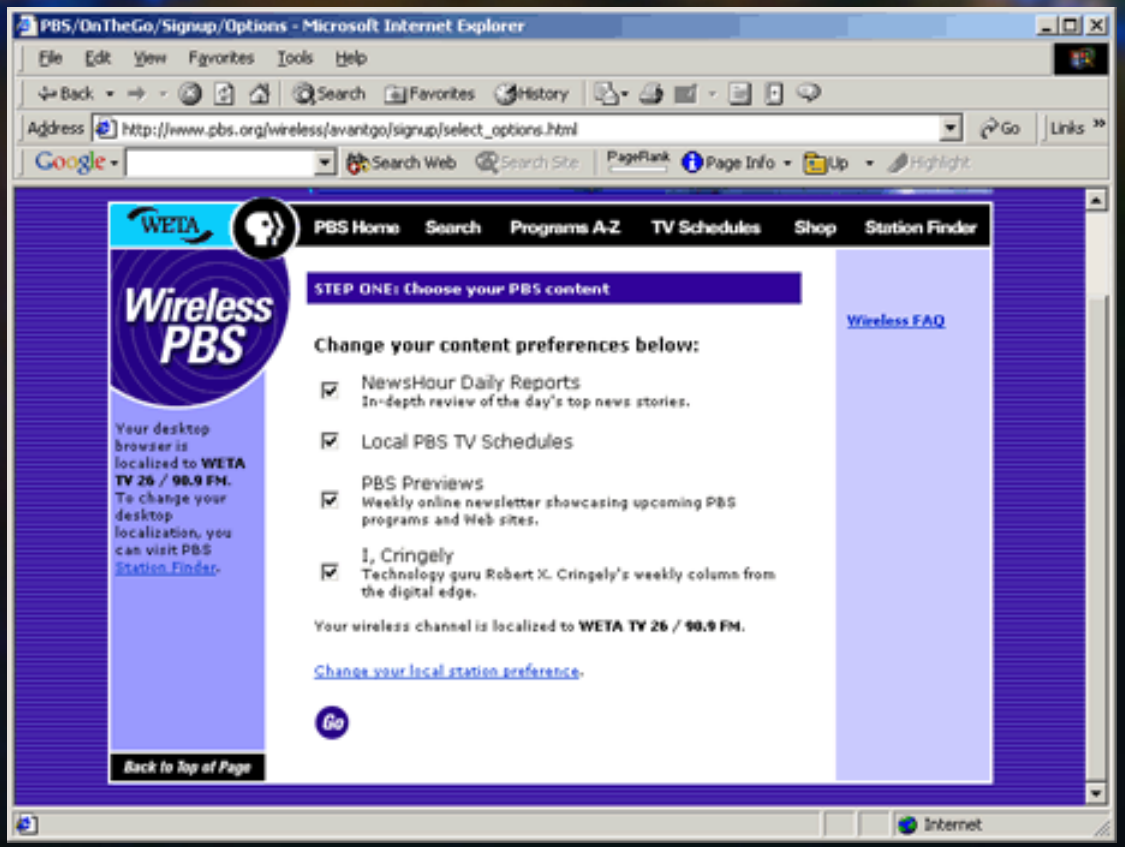
Sign-up: AvantGo



Sign-up: AvantGo Finish



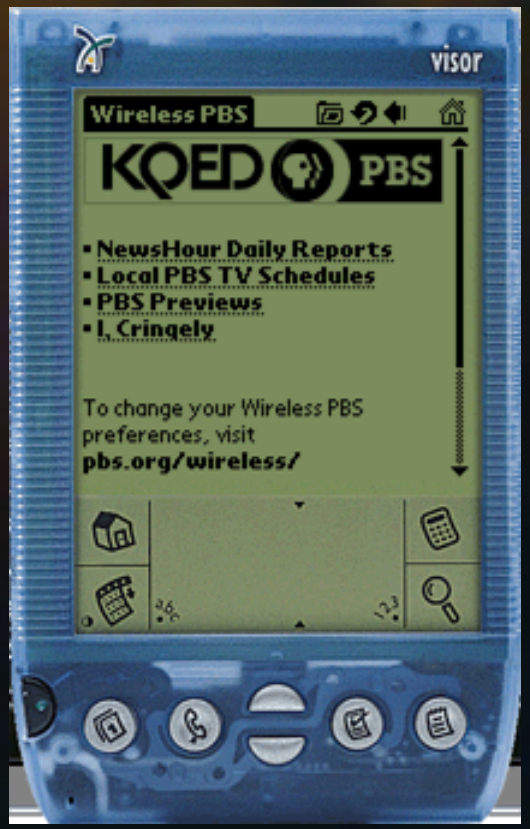
Sign-up: Return to PBS.org



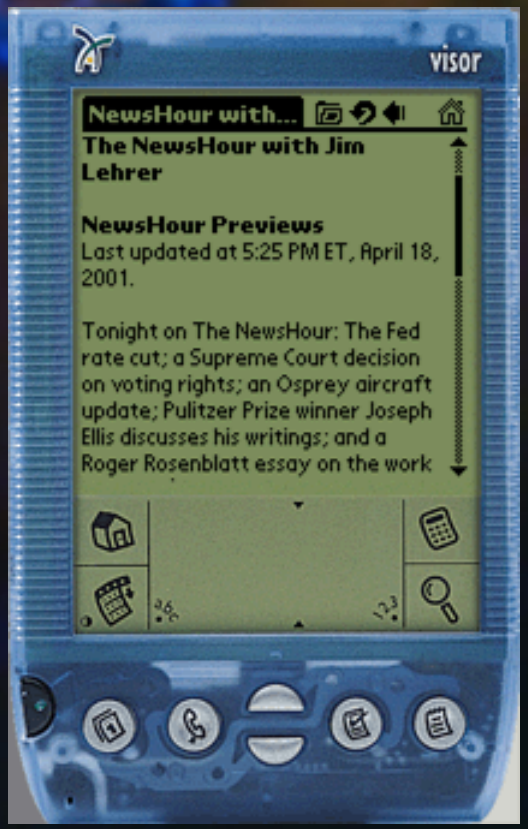
Wireless PBS Content

- NewsHour Previews and Reports
- Local TV Schedules
- PBS Previews
- I, Cringely
- Other?

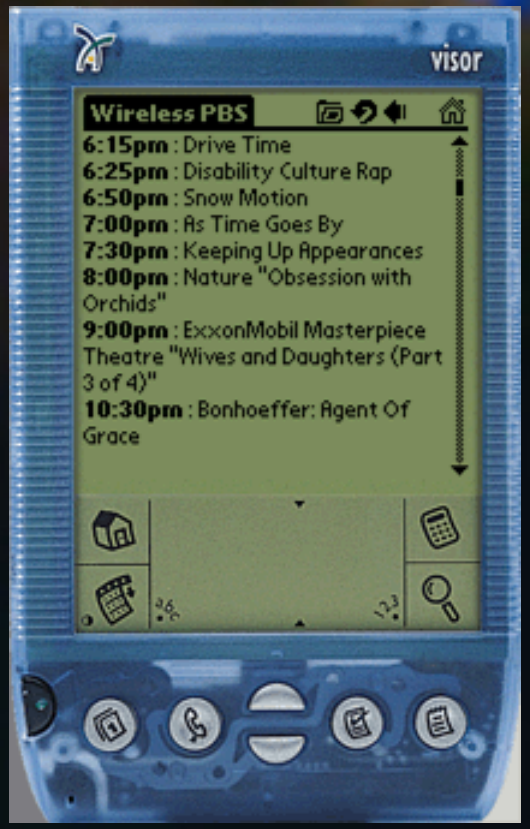
Wireless PBS



Wireless PBS: NewsHour



Wireless PBS: TV Schedules



Wireless PBS: Previews

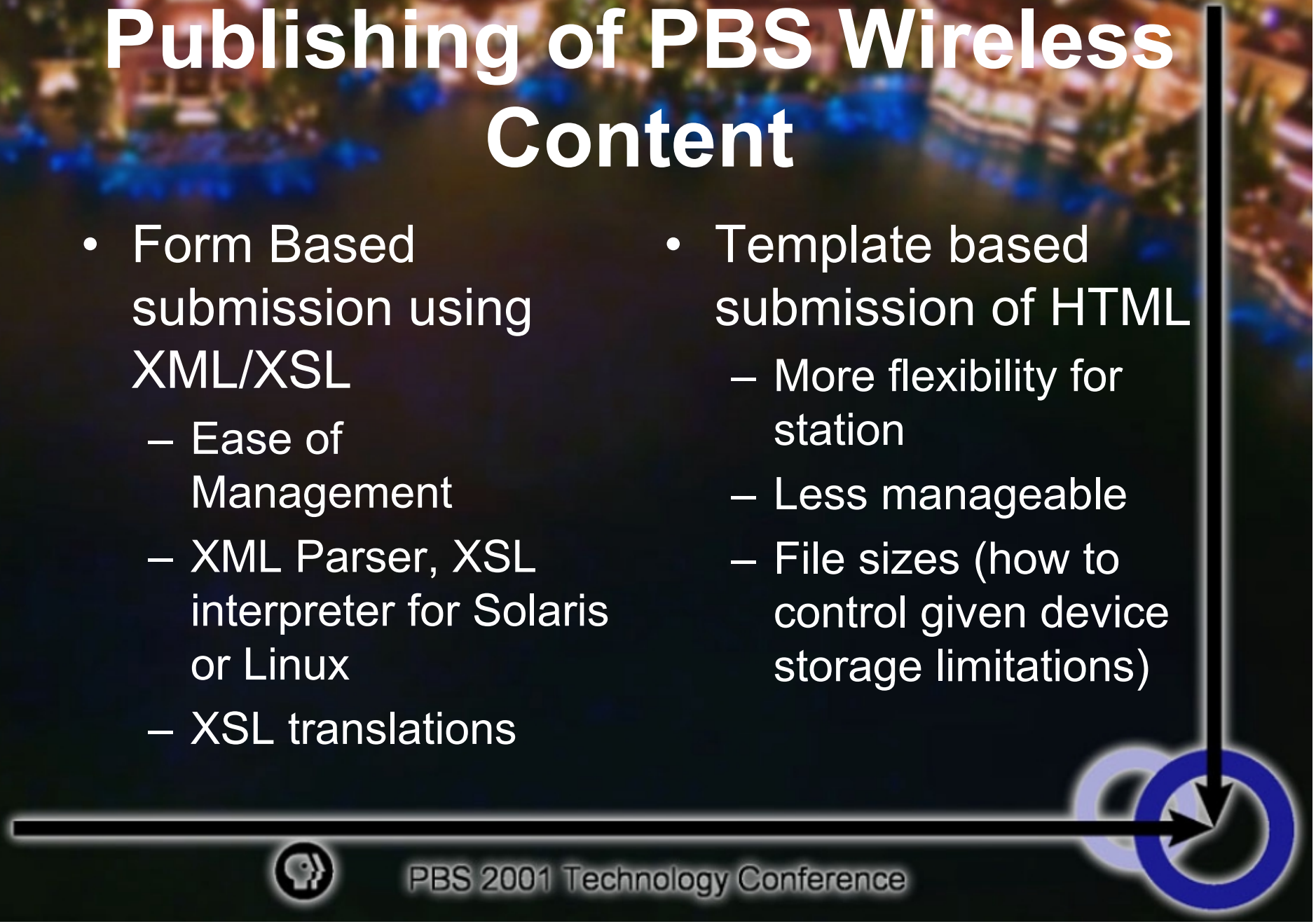
Wireless PBS: I, Cringely

Local Content

- Local Community Events
- Local News
- Other Member Station Content?

Publishing of PBS Wireless Content

- Form Based submission using XML/XSL
  - Ease of Management
  - XML Parser, XSL interpreter for Solaris or Linux
  - XSL translations
- Template based submission of HTML
  - More flexibility for station
  - Less manageable
  - File sizes (how to control given device storage limitations)



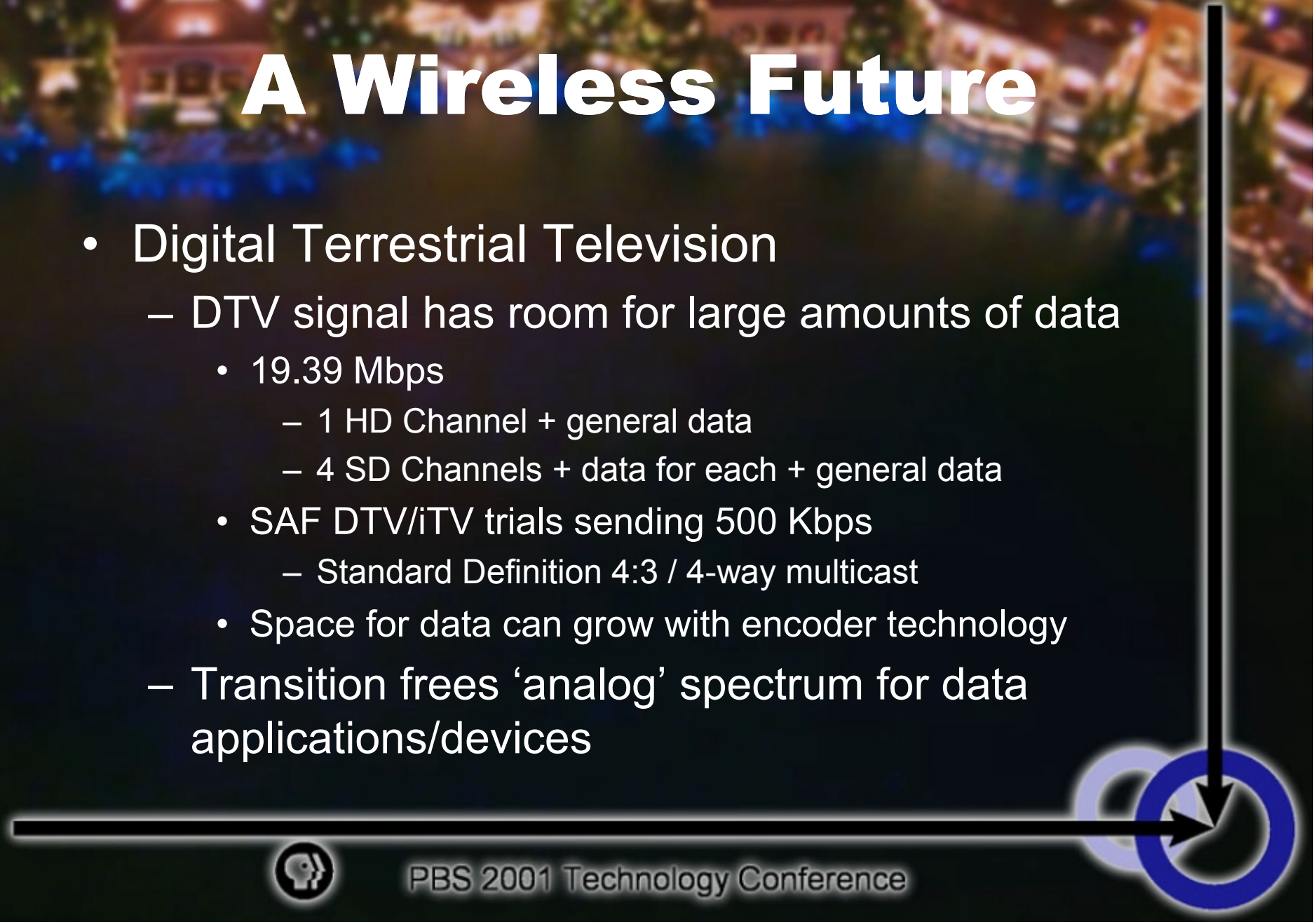
Wireless PBS

pbs.org/wireless/

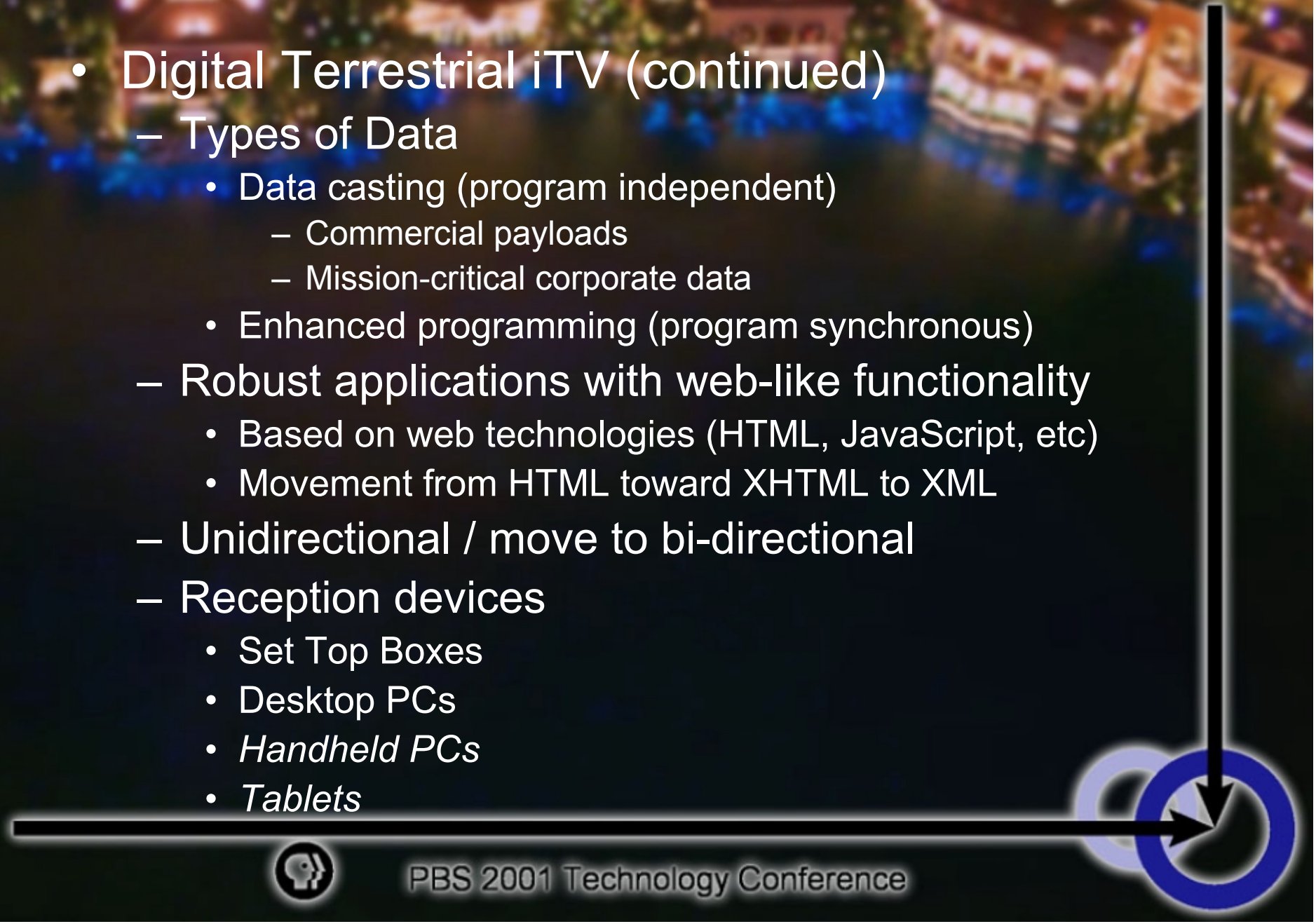
Navigating Wireless/Mobile
Directions of Devices and Applications
PBS 2001 Technology Conference

A Wireless Future

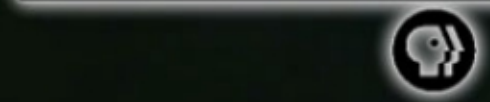
- Digital Terrestrial Television
  - DTV signal has room for large amounts of data
    - 19.39 Mbps
      - 1 HD Channel + general data
      - 4 SD Channels + data for each + general data
    - SAF DTV/iTV trials sending 500 Kbps
      - Standard Definition 4:3 / 4-way multicast
    - Space for data can grow with encoder technology
  - Transition frees ‘analog’ spectrum for data applications/devices



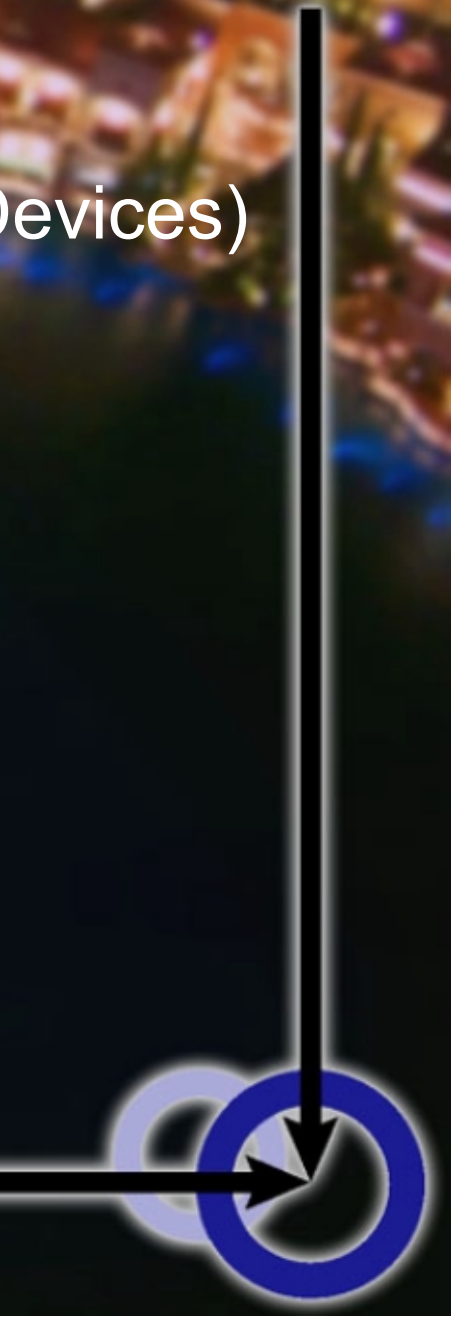
- Digital Terrestrial iTV (continued)
  - Types of Data
    - Data casting (program independent)
      - Commercial payloads
      - Mission-critical corporate data
    - Enhanced programming (program synchronous)
  - Robust applications with web-like functionality
    - Based on web technologies (HTML, JavaScript, etc)
    - Movement from HTML toward XHTML to XML
  - Unidirectional / move to bi-directional
  - Reception devices
    - Set Top Boxes
    - Desktop PCs
    - *Handheld PCs*
    - *Tablets*



- Wireless PDAs
  - Two-way connectivity paves way to robust, real-time interactive applications
  - User experience/content converges with web
  - Ultimately devices merely another access device to singular content



- Future wireless devices
  - PDAs to PADs (Personal Access Devices)
  - LAWN Tablets
    - Schools
    - Work environments
  - PrAWN
    - Banks
    - Secure environments
  - Dick Tracy wristwatch

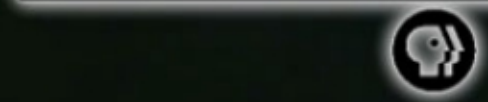


Thank You

Jeremy Roberts

Broadband and Streaming Media Evangelist

Chris Atienza

Associate Director of Technology

PBS Interactive