

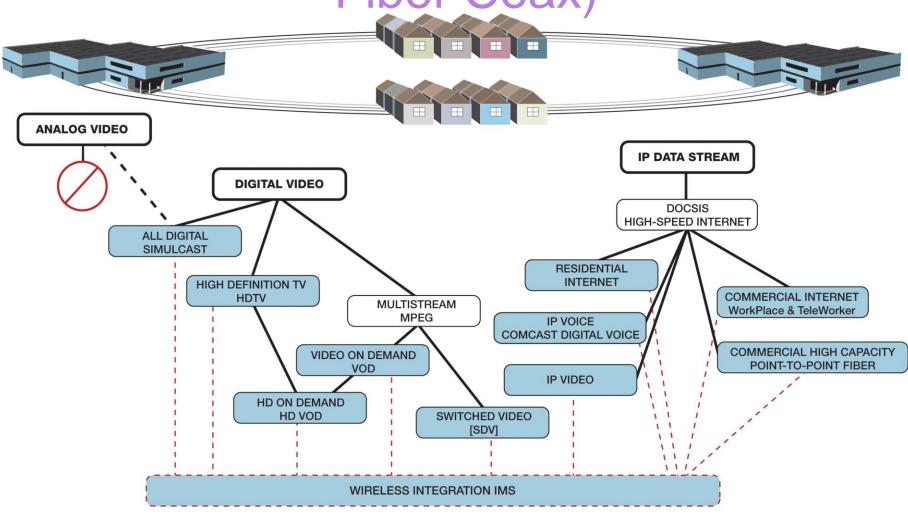






internet

# Fiber to the Neighborhood (Hybrid Fiber Coax)









# Implementing the Network, Step by Step

#### All-Digital Network

- Effectively triples capacity
- Scalable

### Channel Bonding

- Utilizes "dormant" bandwidth across multiple channels
- Exponential increase in data rates

#### Transition to IP

 Facilitates unified management, messaging and content sharing among devices in the home

#### HFC Node Architecture

- Designed for future splits
- Reduces number of homes sharing bandwidth resources

### Switched Digital Video

 Increases bandwidth efficiency with intelligence at the edge of the network



Scalable architecture provides greatest flexibility









# Video Evolution: Migration to All-Digital

Comcast moves to an all-digital platform

- A controllable and scalable transition
  - All analog products simulcast in digital
  - Greater digital compression with 1024 QAM
  - Launched IP based telephone service
  - To ensure a smooth transition, Comcast will:
  - Eventually convert analog channels to digital
  - Continue to add nodes to reduce the homes per node
  - Maximize bandwidth capacity through channel bonding
  - Employ switched video for more efficient bandwidth utilization

Controllable product migrations ensure smooth transitions









## The Impact of Digital Migration in the All-Digital World

### Today

Channels Analog



100Mbps or 100 homes VOD 4 Bonded Channels

400 phone lines or 25 HDTV

4 Bonded Channels

80 Analog Channels become available for Channel Bonding









### One Integrated Platform

Integration of IP Platform will add enhanced features across all product groups























Video IM



Video Phone



All the Same IP Platform!







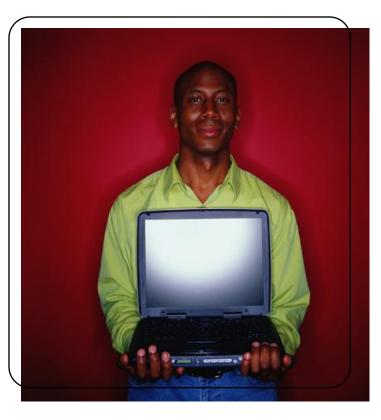


## Flexibility – Intelligence at the Edge

- Comcast will add intelligent services at the edge of the network to facilitate:
  - More efficient bandwidth utilization
  - Video only delivered to the homes requesting that program
  - Remaining bandwidth can be utilized for other purposes within that node



## Comcast's Strategy for Delivering Services for Tomorrow



- Deliver "Everything" ON DEMAND
- Video will drive capacity in both video services and broadband data delivery
- Support "Instantaneous" Data Transfer:
  - Increasing data rates
  - Improving bandwidth efficiency
  - Handling the most challenging user requirements



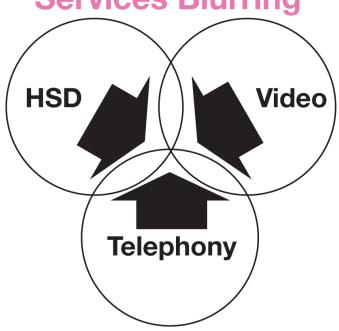




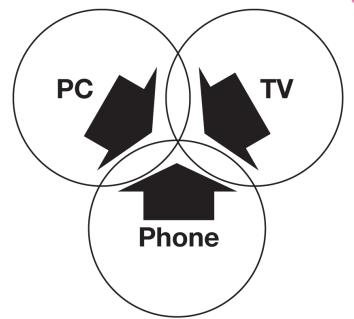


## All Devices, All Services, One Network





### **Devices/Portals Blurring**



New integrated devices & services - we are driving that convergence







