



# Wholesale Dial: E-Commerce for the Late Majority

**Jack Musgrove**

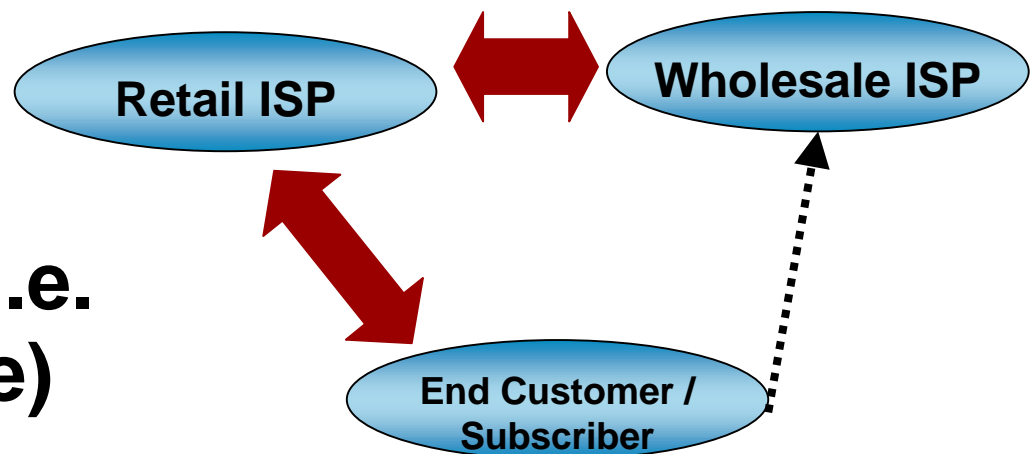
**Director of Marketing, Remote Access Group**

**Cisco Systems**



# What is Wholesale Dial?

- **Wholesale ISP provides “virtual dial ports” to Retail ISPs**
- **Subscribers get Internet access (i.e. not a VPN service)**
- **Retail ISP owns relationship with user base**



# History of Wholesale Dial

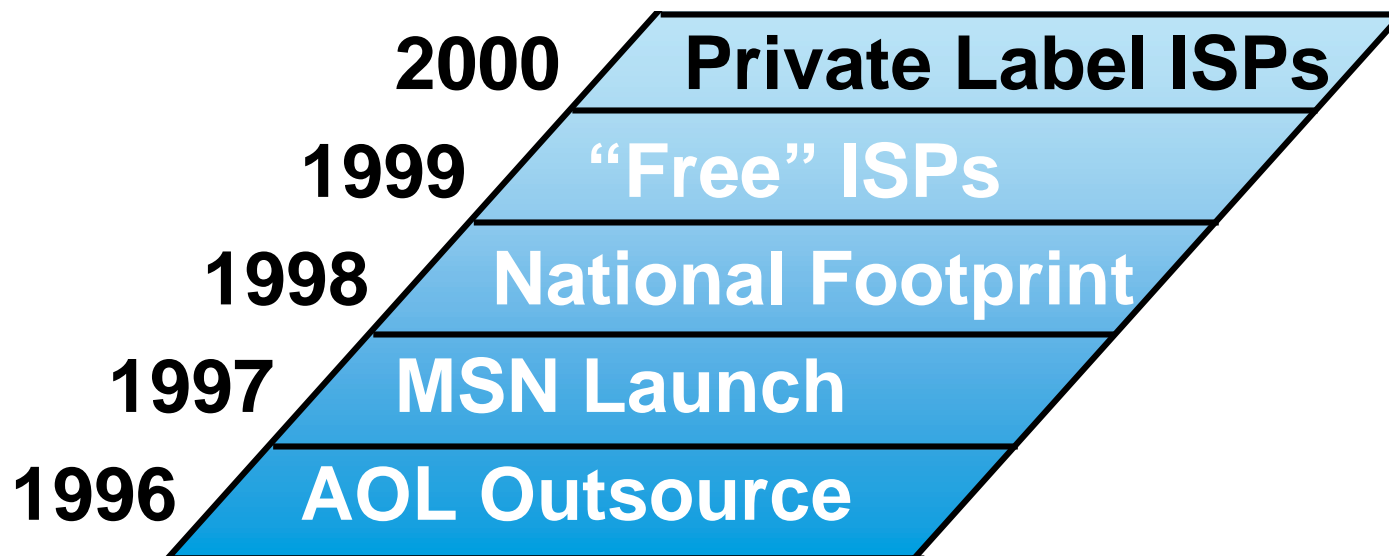


# Who Are The Wholesalers?



# New Opportunity in Wholesale Dial

- Private Label Internet is branded Internet access where consumer's Internet dial-up is free



# Private Label Internet Access Components

- **Enterprise / Private Label ISP**
- **Consumer**
- **Wholesale Dial Provider**
- **Advertising Technology**

# Private Label ISP Segments

## Portals / Content

**Rocky Mountain News**  
**AltaVista      NBCi**  
**Dallas Morning News**  
**Seventeen.com**

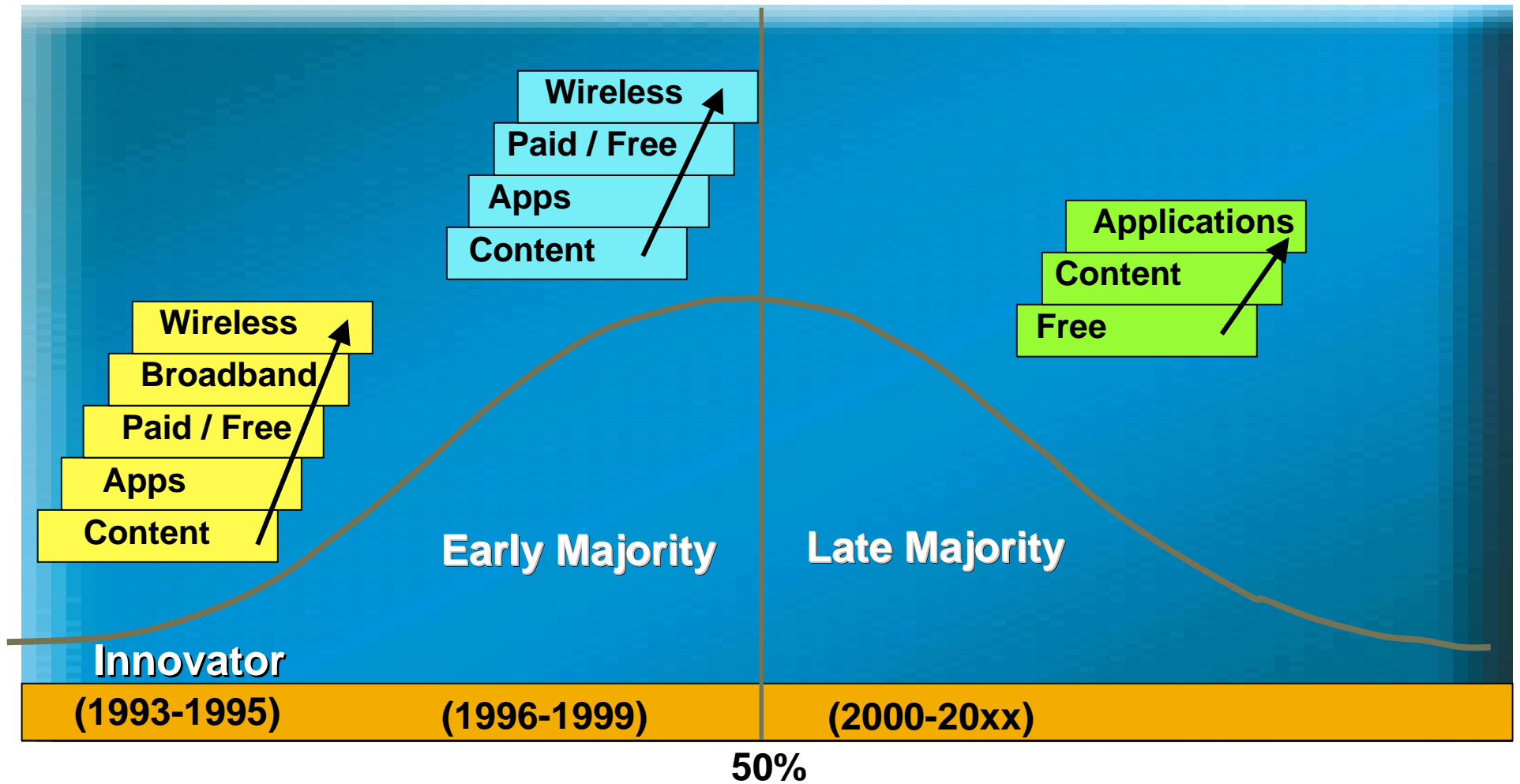
## Commercial

**JB Oxford**  
**Tesco.net**  
**Ameritrade**  
**Virgin.com**  
**Bluelight.com**  
**Dixons Freeserve**

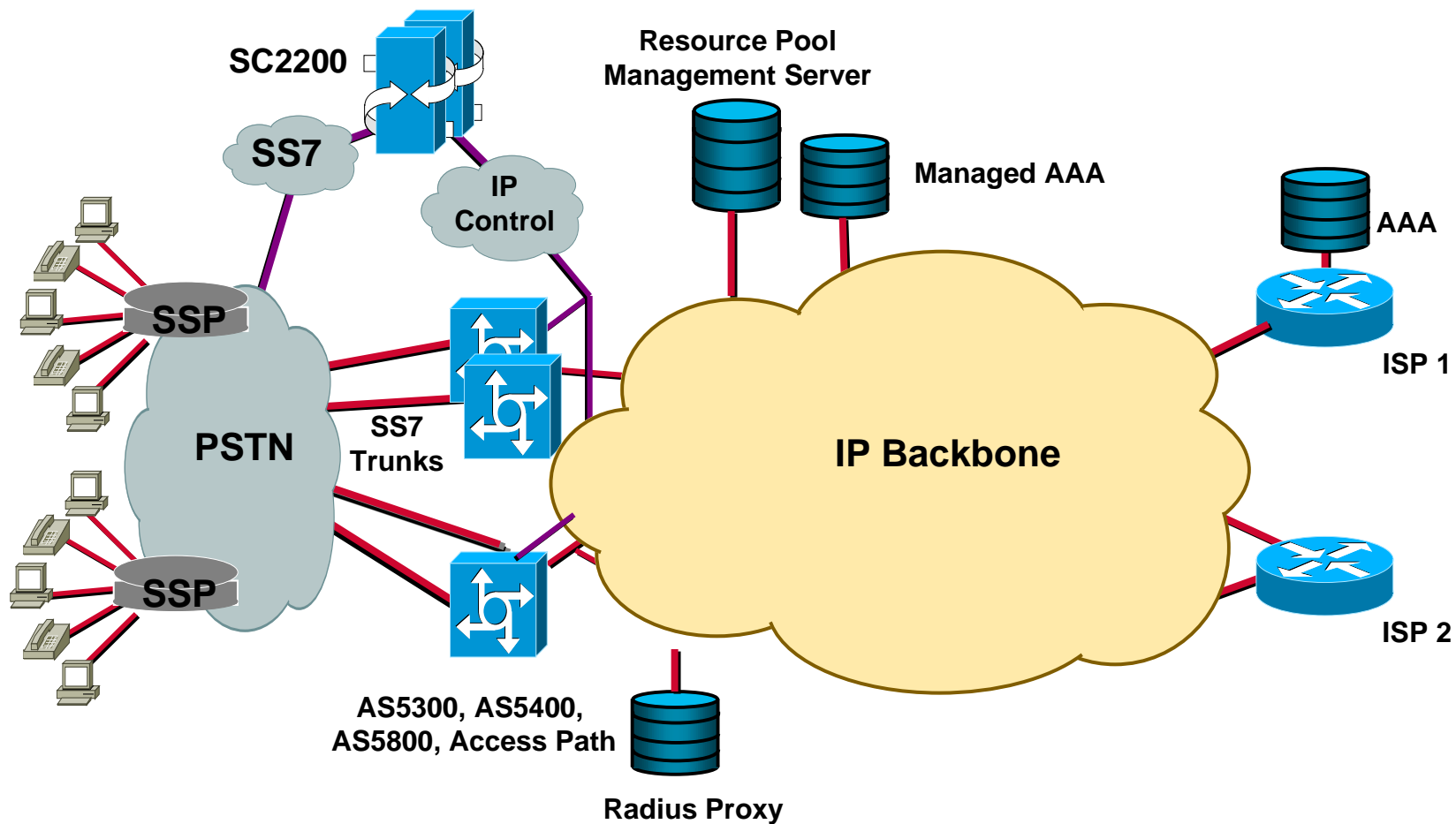
## Personal Identity

**YankeesExtreme**  
**Chipshot.com**  
**Megadeth.com**  
**Gay.com**  
**Simpsons.com**  
**GOPNet.com**

# Private Label Consumer Groups



# Cisco Wholesale Dial Infrastructure



# Wholesalers Need Advertising Delivery Technology

- Branded ad banners
- Accurate data tracking
- Persistent, branded navigation bar
- Targeted impressions based on user profile and web behavior



Your logo here

Actual Size

# Advertising Intermediaries

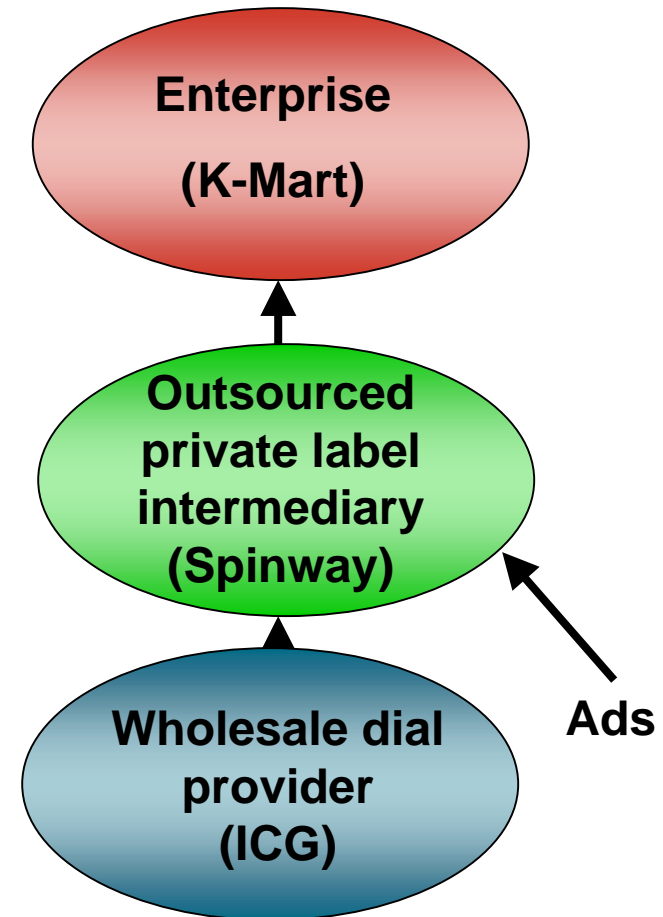
**Focuses on  
*advertisers'* needs**

**Outsource entire  
private label solution  
for enterprise**

**No direct relationship  
between wholesaler &  
enterprise**

**Wholesale dial provider  
sells ports to  
intermediary**

**E.g. 1StUp.com, Freei,  
Spinway.com**



# Advertising Technology Partners

**Focus is on enterprise  
*brand control / positioning***

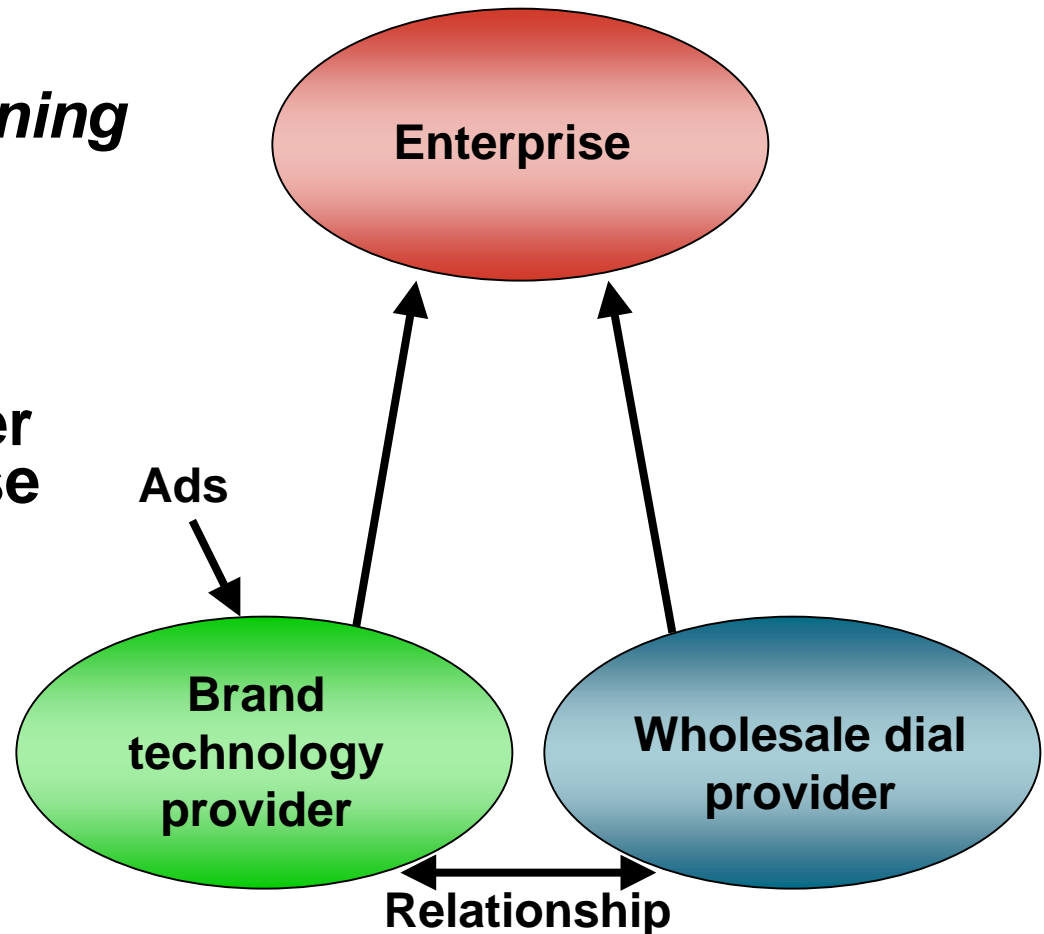
**Provides brand  
management tools to  
enterprise**

**Wholesale dial provider  
sells ports to enterprise**

**Direct relationship  
between wholesaler &  
enterprise**

**Partnership between  
wholesaler & ad tech.**

**E.g. Brand3**



# Private Label Internet Access Benefits

- **An interactive, direct e-channel to consumers**
- **Highly targeted advertising relevant to each individual consumer**
- **Immediate feedback**
- **Strong branding opportunity**

# Adoption of Private Label Internet Access

- **Bluelight.com exceeded 3m subscribers in 7 months**
- **Freei had 2.2m subscribers in 8 months**
- **NetZero offers ad supported Internet access to 5 million subscribers**



# Adoption of Private Label Internet Access

- **Excite@Home** signed up 500K subscribers in 6 weeks
- **Seventeen.com** provides free access to 500K readers



# Benefits of Wholesale Dial

- **Revenue opportunity**
  - Fast-growing market**
  - Facilitate enterprise e-business model**
- **Leverage Existing Infrastructure**
  - Dial-up & backbone networks**
- **Avoid capital-intensive retail ISP model**
  - Retail ISP brand establishment prohibitively expensive**
- **Foundation for future services**
  - Unified Communications, Access VPN, Internet Gaming, Web Contact Center, etc.**

# US Wholesale Dial Market Growth



# Issues in Wholesale Dial

- **Footprint**
- **Port Capacity Planning**
- **Bandwidth allocation**
- **Privacy**

# Footprint

- **Strong competition in NFL cities**
- **Strong requirement to reach population outside NFL Cities**

**K-Mart / Wal Mart / Target locations**

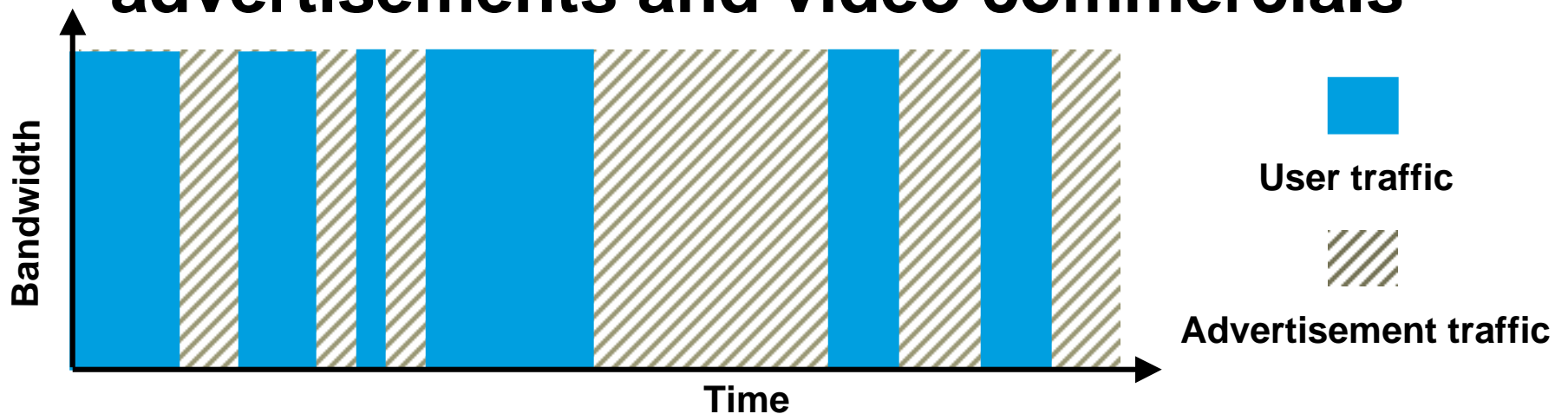
- **2nd tier cities easier**
- **Rural coverage important**
- **Getting easier with reduced bandwidth prices due to fiber deployment**

# Port Capacity Planning

- **Intermediaries / free ISPs lack capacity planning expertise**
- **Uncontrolled oversubscription on shared ports leads to dissatisfaction**
- **Use information from NASes / port policy managers / SS7 gateways**
- **Port guarantees for those who'll pay and oversubscription control for those who won't**

# Bandwidth Allocation

- Typical user has low overall bandwidth requirement
- Bursty traffic pattern
- Ad-supported ISP always downloading advertisements and video commercials



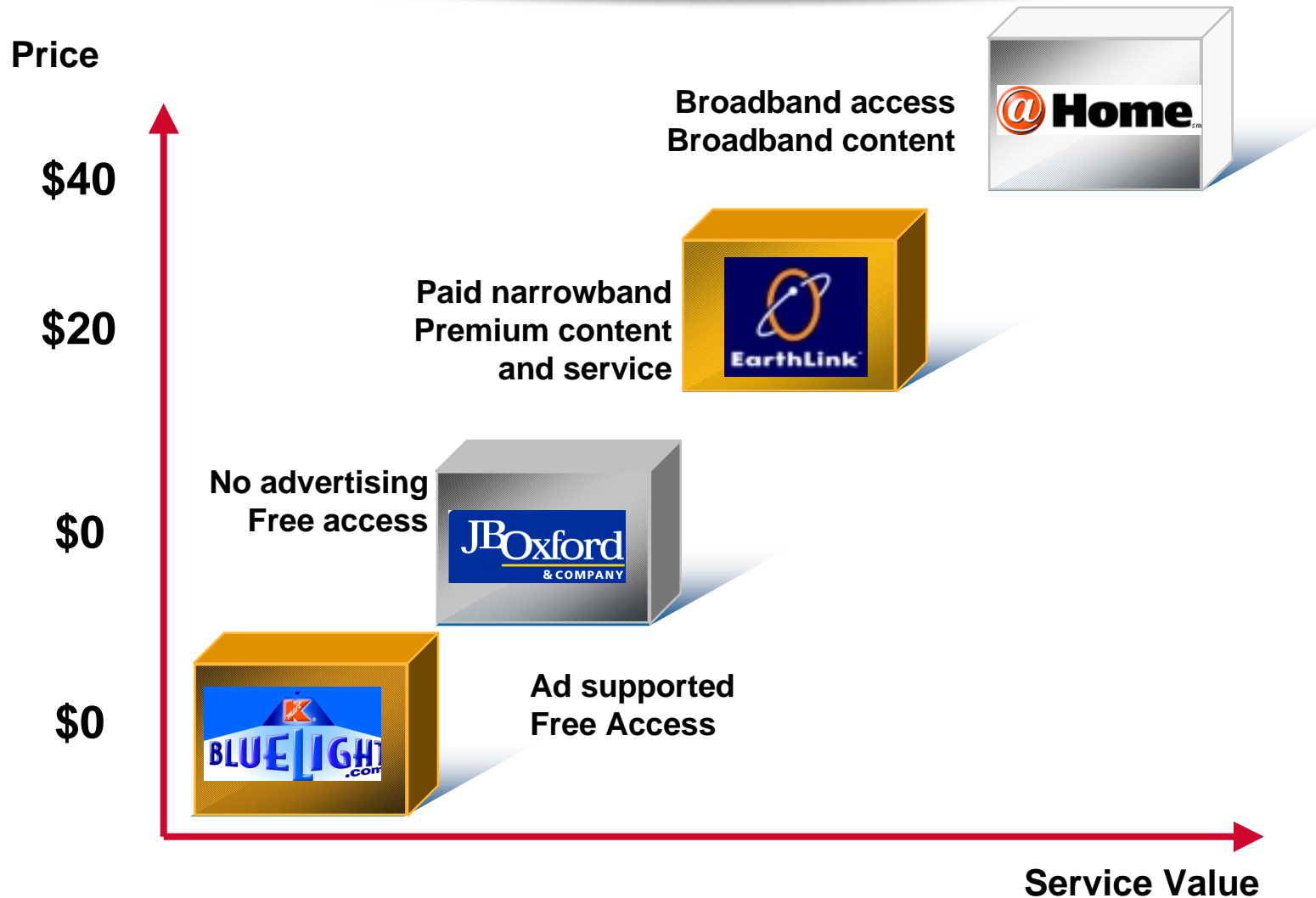
# Privacy

- **85% of Internet users concerned about privacy**  
(source: Pew Charitable Trust)
- **Internet users want “permission based” personal information usage**
- **Service providers should proactively work with governments to pass sensible privacy protection laws**

# Wholesale Dial Future

- **Differentiated Internet Access**
- **Foundation for future IP services**

# Internet Access Differentiation



# Wholesale Dial as a Foundation for IP Services

**Virtual  
Private  
Networks**

**Mobile  
Wireless**

**Internet  
Gaming**

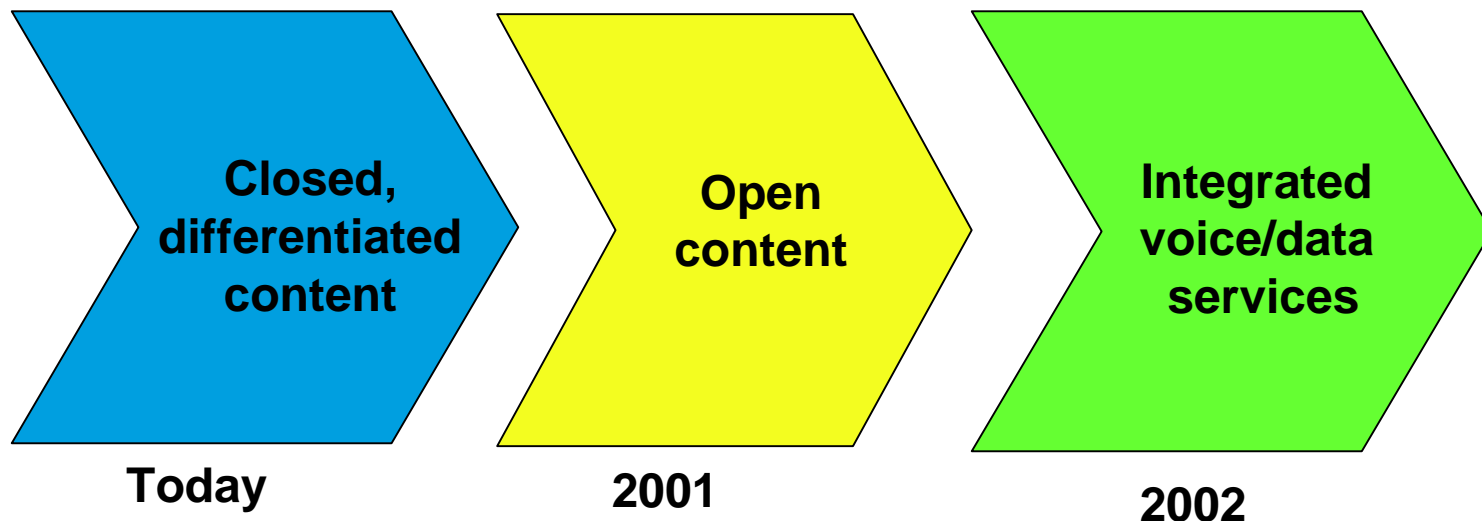


**Voice  
Over IP**

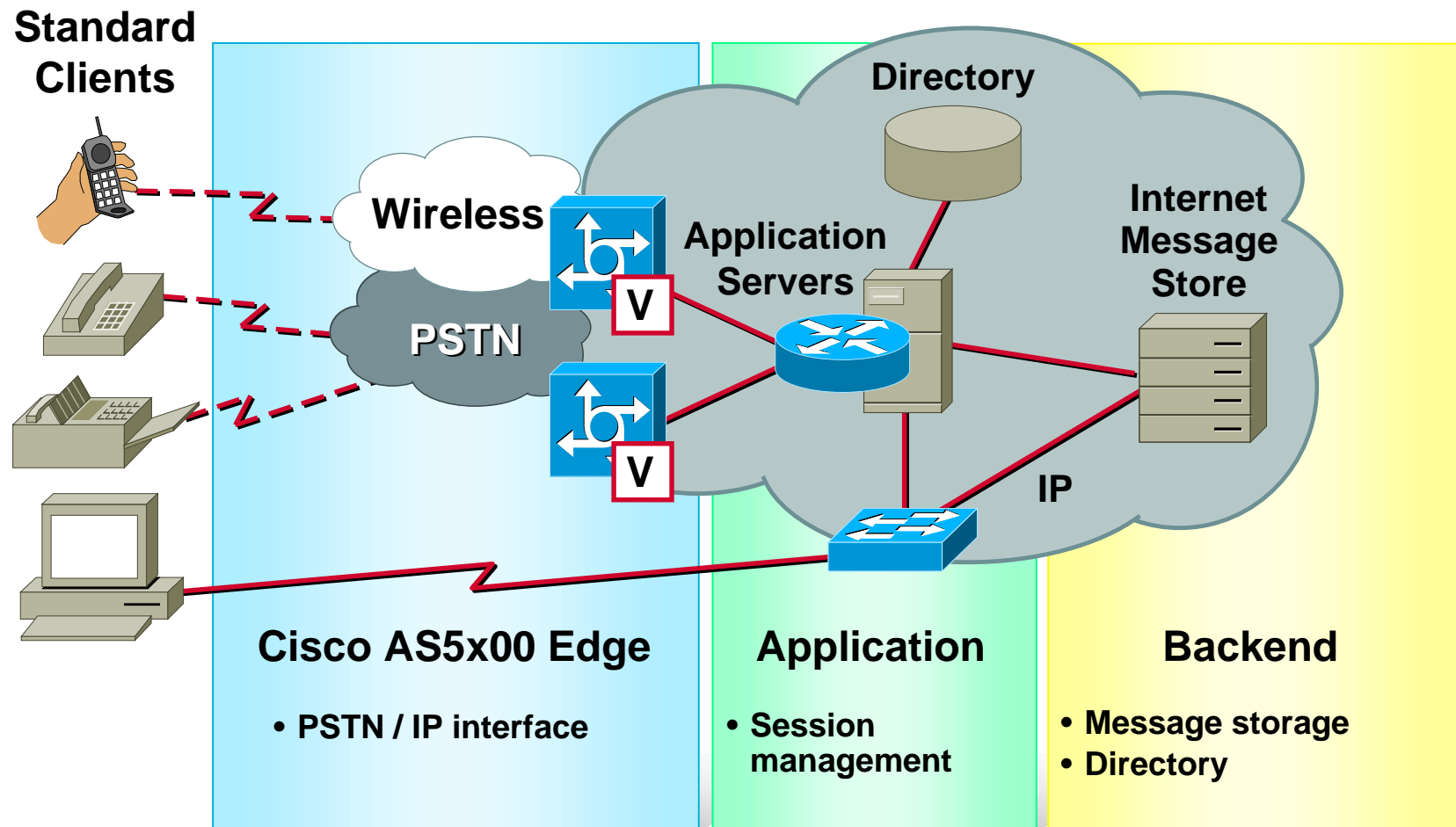
**Unified  
Communications**

# Mobile Wireless

- Wholesale dial infrastructure enables outsource of Internet connectivity for wireless handsets



# Unified Communications



# Internet Gaming



# Summary

- **Wholesale dial is a large, growing market**
- **Majority of growth driven through private label and free ISPs**
- **Wholesale dial infrastructure lays foundation for future services**
- **Becomes springboard to broadband and mobile wireless Internet access**



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