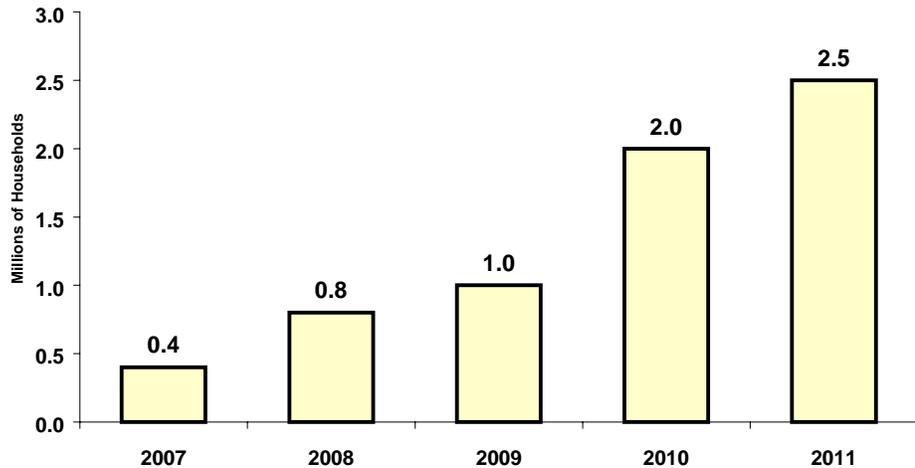


Synopsis

FTTx and BPL: Analysis and Outlook analyzes market trends and significant events that will impact FTTx and BPL deployments over the next five years. It also addresses consumer and competitive pressures that will influence these methods, the economics associated with the deployment of these technologies and the opportunities FTTx and BPL provides for vendors and service providers.

Yearly Growth of BPL Subscriber: 2007-2011

Forecast of U.S. BPL Residential Subscribers



Source: *Digital Living Forecasts*
© 2007 Parks Associates

Publish Date: Jan 07

“Both consumer demand and business factors will drive growth in BPL,” said Chris Roden, research analyst at Parks Associates. “On the consumer side, many rural residents don’t have access to DSL or cable, but every house in the U.S. has access to power lines. This technology is often the only option for these residents to receive broadband service. On the business side, utility companies will also drive BPL’s growth. BPL gives utilities more information to better manage power demand and troubleshoot line issues.”

Contents

The Bottom Line is a concise, executive-level summary of the current state of the market, evolutionary path, and the implications for companies doing business in this space.

A Parks Associates’ **Resource Book** contains a wealth of consumer survey data and company profiles—a must-have reference for product/market planning.

The Bottom Line

1.0 Notes On Methodology

2.0 Internet Services Market Overview

- 2.1 Today’s Internet Services Market
- 2.2 Internet Services Market Opportunities
 - 2.2.1 The Rural Gap
 - 2.2.2 Bandwidth Demand

3.0 Broadband Over Power Lines Market Analysis

- 3.1 BPL, what is it and why now?
 - 3.1.1 Communication over the grid
 - 3.1.2 Utility Company Perspective
 - 3.1.3 Internet Service and Content Provider Perspective
 - 3.1.4 Wireless, Friend or Foe?
- 3.2 Impact of Regulations and Standards
 - 3.2.1 Regulatory and Legislative Landscape
 - 3.2.2 BPL Industry Standards
- 3.3 Economics of BPL
 - 3.3.1 BPL Costs
 - 3.3.2 Economic Distribution Models

3.4 BPL Deployments

4.0 FTTx Market Analysis

4.1 The Move to Fiber

4.1.1 The Threat of Cable

4.1.2 Demand for Broadband Services

4.2 Fiber Deployment Strategies

4.2.1 How "Deep"?

4.2.2 Strategies of Telcos

4.2.3 Regulation and Legislative Impact

4.3 Fiber Network Deployments

5.0 Market Forecasts

6.0 Market Implications

Resource Book

Section I: Trends in Internet Adoption

Internet Service Penetration

High Intenders

Section II: Consumer Satisfaction, Retention and Churn

Section III: Service Options, Awareness and Utilization

Bundled Services and VAS Options

Service Provider-Provisioned Home Networks

Internet/PC Security Services

Storage/Backup Services

Section IV: Interest in Guaranteed Bandwidth and Upload Speed Perception

Section V: Profiles of FTTx Product and Service Providers

Verizon Communications Inc.

SBC/AT&T Inc

BellSouth Corporation

SureWest Communications

Nippon Telegraph and Telephone (NTT)

Korea Telecom (KT)

Alcatel

Motorola, Inc.

Tellabs

Section VI: Profiles of BPL Product and Service Providers

Current Technologies, LLC

Corinex Corporation

MainNet – Power Line Communications, Inc.

Ambient Corporation

Utility.net, LLC

International Broadband Electric Communications, Inc. (IBEC)

Telkonet, Inc.

Motorola, Inc.

Design of Systems on Silicon (DS2)

Intellon

TXU Electric Delivery

Duke Energy

CenterPoint Energy

EarthLink, Inc.

Figures

The Bottom Line

Residential Subscribers by Access Method
 Internet Penetration vs. Area of Residence
 Broadband Penetration vs. Area of Residence
 High Intenders for Broadband Adoption vs. Area of Residence
 BPL Equipment Summary
 BPL Vendor Summary
 Utility BPL Deployments in the U.S.
 ISP and Content Provider Developments in the U.S.
 Costs to Pass a Home by Broadband Technology
 BPL Industry Standards Groups
 BPL Economic Models
 Service Bandwidth Requirements
 FTTx Network Comparison
 PON Technology Summary
 Verizon vs. AT&T FTTx Strategy Comparison
 Passed/Pending State Video Franchise Laws
 FTTx Summary by Region
 FTTx Forecast of U.S. Broadband Subscribers by Access Method
 Forecast of U.S. FTTx Internet Service Revenue
 Forecast of U.S. BPL Internet Service Revenue
 U.S. ARPU Forecasts by Access Method

Resource Book

Residential High-Speed Lines
 Internet Access
 Current Internet Penetration vs. Area of Residence
 Cable and DSL Penetration vs. Area of Residence
 High Intenders for Broadband Adoption vs. Area of Residence
 Likelihood for Narrowband Users to Upgrade to a Broadband Service
 Preferred Service Provider for Broadband Upgrade
 Preferred Service Provider for Broadband Upgrade by Area of Residence
 Satisfaction Level with Current Broadband Service Provider by Type of Broadband Access
 Factors Influencing Satisfaction Level with Broadband Service Providers by Type of Broadband Access
 History of Switching Broadband Service Providers by Type of Broadband Access
 Primary Reasons for Switching Broadband Service Provider by Type of Broadband Access
 Likelihood to Switch to a Different Broadband Provider in the Next 12 Months by Type of Broadband Access
 Awareness of and Subscription to a Multiple-Service, One-Bill Option
 Awareness of and Subscription to Bundled Services
 How Did You Hear about the Multi-Service Option?
 Current Market Penetration of Multi-Play Services
 Number of Broadband Households Subscribing to Bundled Services
 Service Providers for Multi-Service Packages
 Reasons for Not Subscribing to a Bundled Service

Adoption of Dual-Play Services among Broadband Subscribers
Dual-Play Services: Type of Service Providers
Adoption of Triple-Play Services among Broadband Subscribers
Triple-Play Services: Type of Service Providers
Current Penetration for Quad-Play Services: by Industry Type
Current Subscription to Dual-Play Services by Type of Internet Access
Current Subscription to Triple-Play and Quad-Play Services by Type of Internet Access
Has Your Service Provider Ever Offered You a Home Networking Solution?
Penetration of Home Networking Solutions from Broadband Service Providers
Important Factors that Prompted One to Accept Home Networking Services from a Broadband Service Provider: U.S.
Reasons for Not Accepting a Home Networking Offer from a Broadband Service Provider
Factors that Impact the Decision to Accept a Home Networking Solution from a Broadband Service Provider
Internet or Home Computer Problems Experienced at Home in the Last 12 Months by Type of Internet Access
Has Your Internet Service Provider Ever Offered You Any Internet Security Services for an Additional Fee by Type of Broadband Access
Adoption of Internet Security Services Provided by Internet Service Provider: by Type of Broadband Access
Reasons for Not Accepting Security Service from Internet Service Provider: by Type of Broadband Access
Internet Service Provider's Role in Communicating New Security Threats in an Appropriate and Timely Manner: by Type of Broadband Access
Internet Service Provider's Role in Recommending Appropriate Actions/Solutions to Resolve Security Threats: by Type of Broadband Access
Internet Service Provider's Role in Providing Service Response if Computers Become Infected by Viruses/Spyware: by Type of Broadband Access
Interest Level for Online Storage Solution: by Type of Broadband Access
Would You Subscribe to an Online Storage Solution at \$14.99 per Month above the Cost of Internet Subscription: by Type of Internet Access
Interest in a Broadband Service that Provides Guaranteed Bandwidth
Interest in Guaranteed Bandwidth: On-Demand Bandwidth vs. Always Optimized
Perception of Broadband Upload Speed among Cable and Broadband Subscribers
Verizon FTTx Deployment by State
Verizon FiOS Service Plan and Pricing
AT&T U-verse Service Plan and Pricing
Alcatel's Fiber-to-the-User Solution (FTTU)
Motorola Fiber-to-the-Premise and Node Solutions
Tellabs® DynamicHomeSM Solution
Current Technologies Products
Current Technologies BPL Deployment
Corinex Products
Corinex BPL Deployment
MainNet Products
MainNet BPL Deployment
Ambient Products
Ambient BPL Deployment
Telkonet Products

Motorola Canopy™ Wireless Broadband Platform
DS2 Powerline Communication ICs for BPL Deployment
Intellon HomePlug® Products

Attributes

Parks Associates
5310 Harvest Hill Road
Suite 235
Lock Box 162
Dallas TX 75230-5805

800.727.5711 toll free
972.490.1113 phone
972.490.1133 fax

parksassociates.com
sales@
parksassociates.com

Authored by Chris Roden
Executive Editor: Tricia Parks
Published by: Parks Associates

© January 2007 Parks Associates
Dallas, Texas 75230

All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the publisher.

Printed in the United States of America.

Disclaimer

Parks Associates has made every reasonable effort to ensure that all information in this report is correct. We assume no responsibility for any inadvertent errors.