

## **GPS: A Path to New Applications on Mobile Devices**

By Harry Wang, Senior Analyst

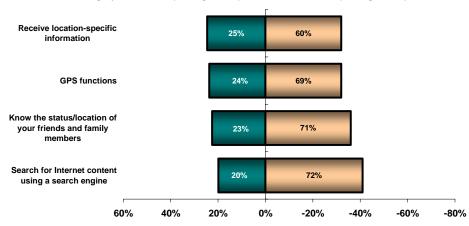
2Q 2008

### **Synopsis Consumer Interest In Location-based Services** This report analyzes Mobile Device: Location-based Applications (Q2/07)

how GPS technology drives innovative, location-based content development and navigation services. Besides highlighting the technology development and market trends for the major portable navigation platforms, this report analyzes the adoption of GPSenabled value-added content and services among hardware manufacturers, service operators, and consumers.

"How interested are you in having the following applications on a new mobile device?" (Among Internet HHs surveyed, n=2,000, +2.2%)

■ Highly Interested (Rating of 6-7) ■ Not Interested (Rating of 1-2)



Source: Mobile Entertainment Platforms and Services II © 2007 Parks Associates

Percentage of Internet Households

Publish Date: 2Q 08

"GPS technology is ready to shine," said Harry Wang, Senior Analyst with Parks Associates. "Device makers, application developers, and operators are looking beyond the basic GPS routing function to innovative, location-based content and services. The next few years will see a steady flow of valueadded content and services coming to market, and business model development will be the key challenge for vendors to figure out."

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## The Bottom Line is a

concise, executivelevel 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.



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# 5.0 Navigation Market Challenges, Opportunities and Business Models

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### **Resource Book**

Section I: Consumer Data: Market Adoption and Interest

Section II: Company Profiles—GPS Device Manufacturers

Audiovox Garmin Ltd.

Lowrance Electronics, Inc. Magellan Navigation, Inc. Mio Technology/Navman

Navigon Inc.

Pharos Science & Applications, Inc.

TomTom

# Section III: Company Profiles—GPS Software, Chipset, and Map Data Providers

Broadcom/Global Locate Destinator Technologies

Jentro Technologies

**NAVTEQ** 

Navicore Technology/Wayfinder Systems AB

Networks in Motion

Qualcomm

SiRF Technology Holdings, Inc.

Tele Atlas TeleNav Telmap Ltd. Webraska

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### The Bottom Line

Garmin 's PND Unit Sales Growth and ASP Trends (2005-2007)

TomTom's PND Unit Sales Growth and ASP Trends (2005-2007)

Major PND Brands and Their Marketing Strategies

Mobile Navigation Enablers and Services

Sales of Standalone PDAs Vs. Smartphones at Palm, Inc.

Navigation Market Ecosystem

Navigation Ecosystem Players and Their Roles

Navigation Market Value Chain Consolidation

**GPS** Receiver Technology Vendors

GPS Technology Trends

Map Content Providers

Examples of Navigation Software Applications and Developers

Connected PNDs: Adding New Capabilities Live Traffic Data and Service Providers

Mobile Carriers' Location-based Local Search Services



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Web-based Local Search: Yahoo Local and Google Mobile Map Evolution of Features and Applications for Navigation Market Forecast of GPS-enabled Mobile Devices (2007-2012): Figure Forecast of GPS-enabled Mobile Devices (2007-2012): Table Global PND Market Forecast (2007-2012)

Forecast of Mobile GPS User and Carrier Revenues

### **Resource Book**

GPS Device Penetration among Online Population
Trigger for Purchase Consideration of Handheld GPS Device
Trigger for Actual Shopping of Handheld GPS Device
Trigger for Actual Purchase of Handheld GPS Device
Influential Factors for Handheld GPS Device Purchase

U.S. Handheld GPS Device Owner Profile: Gender U.S. Handheld GPS Device Owner Profile: Age

U.S. Handheld GPS Device Owner Profile: Annual Household Income

U.S. Handheld GPS Device Owner Profile: Education Level U.S. Handheld GPS Device Owner Profile: Marital Status

Interest in Mobile Applications

Factors Influencing Mobile Phone Purchase Interest in Paid Mobile Application Services

#### **Attributes**

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