



Untethering Content: The Business Case for Providing Content and Services to Consumers over Wireless Hand-Held Devices

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Outline

- **Part I: Why offer content wirelessly?**
 - The Growth of Wireless Data
 - Supported Business Models
 - Demographics
- **Part II: Why use Web Clipping?**
 - Technology Introduction
 - The Importance of the Palm OS®
- **Part III: How can Palm Inc. help you?**
 - Www.Palm.Net
 - www.Palm.com/devzone/webclipping



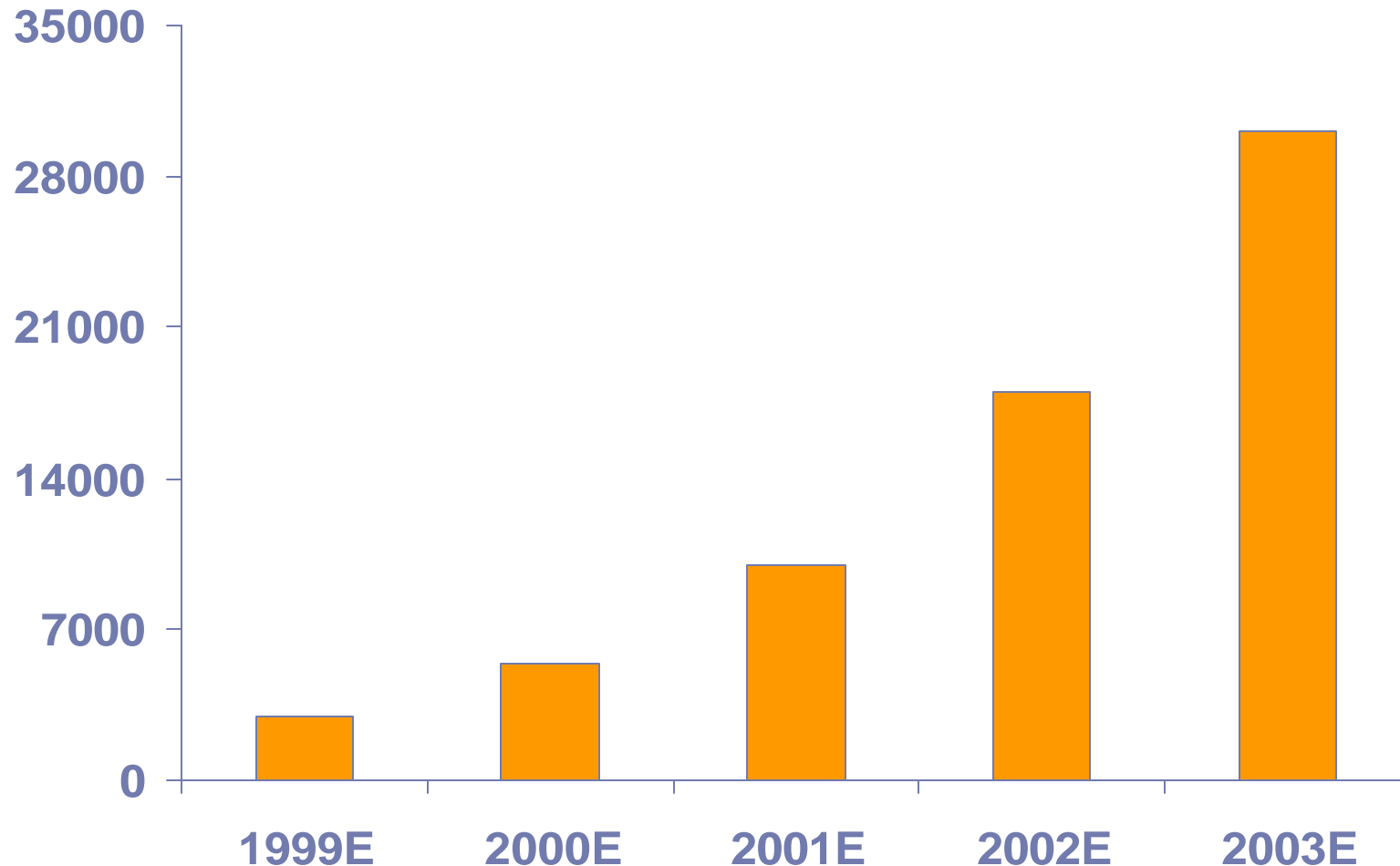
Part I:

***Why offer content
wirelessly?***



1.1 The market for wireless data delivery is growing.

Subscribers (K)



U.S. Mobile Data Forecast, 1999-2003

Source: "US Mobile Phone Markets Overview, Winter 2000", DataQuest / Gartner Group



Some content categories are ideal on wireless devices.

- **Immersion Experience**
 - Example: Interactive video game requiring fat bandwidth, full color, fast processing, and large memory.
 - Implication: Not appropriate for wireless. Yet.
- **Traditional Web Content**
 - Example: Finance, Travel, News, E-mail
 - Implication: Works well on wireless devices, especially for real-time access anywhere, anytime.
- **Mobile Content**
 - Example: Directions, Emergency info, Personal travel details
 - Implication: New opportunity, especially appropriate for wireless.



Traditional business models are fully supported.

- **E-commerce** (e.g. Amazon)
- **Subscription** (e.g. eTak Traffic)
- **Advertising** (coming soon)
- **Customer Generation / Brand Extension** (e.g. ABCNews.com)
- **Customer Retention / Loyalty** (e.g. Fidelity)
- **Cost Reduction** (e.g. American Airlines)
- **Demographic data gathering** (e.g. Excite)



These business models are enhanced by wireless.

- **Clicks-to-mortar**
 - Connect online sites to retail outlets
 - (e.g. Barnes and Nobles)
- **Geographic Targeting**
 - More precise, real-time ability to target offers
 - (e.g. “Eat at Joe’s. Behind you to the left.”)
- **Micro-payments**
 - Could be enabled by infrastructure carriers
 - (e.g. AOL has done this already)



Hand-held devices currently hit a demographic sweet spot.

- **Male**
- **Aged 42**
- **Earning \$80,000 annually**
- **About 1/2 are NEW to the electronic organizer category**
- **Use the device 2/3rds of the time for business and 1/3rd for personal purposes**



Demographic sweet spot continued.

- ***Very connected and/or equipped with other high tech products***
 - All use a computer (desktop and/or laptop), e-mail and the Internet on a regular basis,
 - 80% use mobile phone,
 - 60% use a corporate Intranet, and
 - 50% use a pager



***And the sweet spot is evolving
to include more areas.***

- **More customers new to the category than ever before.**
- **Expanding to include more female customers.**
- **Less expensive devices are enticing people with lower incomes.**
- **More representation in the financial and professional service industries.**



Part II:

Why use Web Clipping?



Web Clipping: An Introduction

- **Rich content on a small screen**
- **Standard HTML**
- **Fast and inexpensive data transfer**
 - wireless friendly protocol
 - powerful security
 - efficient compression
- **Easy way to extend content into wireless devices.**





Web Clipping: An Example

LAUNCHER



QUERY APPLICATION



CLIPPING





Many different Palm OS licensees use web clipping.

- **Hardware:**

- Palm: Palm™ VII organizer
- OmniSky: OmniSky™ solution
- Nokia: product unannounced
- Other unannounced licensees



Current prominent content partners include...

- ABCNews
- Amazon
- American Airlines
- Alta Vista's shopping.com
- Bloomberg
- Barnes and Nobles
- Bank of America
- DLJ Direct
- eBay
- eHome
- ESPN
- eTrade
- Excite
- FedEx
- Fidelity
- Fodors
- Go Network
- HomeStore
- MapQuest
- Merriam-Webster
- MovieFone
- New York Times
- PCFlowers
- Prudential
- Starbucks
- TheStreet
- TicketMaster
- Travelocity
- United Airlines
- UPS
- USAToday
- Visa
- Wells Fargo
- Wall Street Journal
- Washington Post
- Weather Channel
- Yahoo!
- ZDNet



Web clipping is better than browsing.

- **Wireless devices have special needs.**
 - Small screen
 - Slow connection
 - Battery
- **Wireless users also have special needs.**
 - Focused queries, provided in stages.
- **Wireless data must be presented and managed in a more efficient way...**



The Importance of an Operating System

- **Interactivity**

- Relatively large screen
- Touch sensitivity
 - Hyperlinks, pull-down menus, check boxes
- Graffiti and pop-up keyboard

- **Integration**

- Combining Internet data and on-board applications
- Open APIs to leverage large and exploding developer base



The Power of the Palm OS®

- **Optimized for hand-held devices**
 - Parsimonious
 - Powerful
- **Focused on user experience**
 - Simple
 - Mobile
- **Popular and Growing**
 - 50,000+ registered developers
 - 6,000 applications



Web Clipping and WAP

- **We are protocol agnostic.**
- **Web Clipping currently supports HTML.**
 - It is a stable standard.
 - Everyone understands it.
 - There is a massive amount of high-quality content available in HTML today.
- **WAP will come soon.**
 - 3rd party WAP browsers already exist for the PalmOS.
 - WML must stabilize and be adopted.
 - We are investigating various WAP options.



Part III:

How can Palm Inc. help you?



***We are and will continue to be
your wireless strategy.***

- **We will grow the market by improving...**
 - the operating system and the infrastructure via the Palm Platform.
 - the number and types of protocols, networks, and connection methods we support.
 - the hardware, product marketing, and the size of the installed base via Palm OS licensees.



The Success of the Palm OS®: Market Share Data



**Worldwide
70%**



**US
79%**



Global Alliances

**COMPUTER
ASSOCIATES**



 **SYBASE**

ORACLE®

Lotus®

 **Remedy®**
Corporation

PEOPLE®
Soft


AMERICA
Online

 **Sun**
microsystems

SIEBEL



Palm OS® Platform Announced Licensees and OEMs

IBM®

symbol®

SONY


handspring™

QUALCOMM®

TRG

NOKIA



We have created a marketing infrastructure to help you.

- **Palm.Net**
- **Web clipping applications can be directly distributed from your site to promote your wireless capability.**
- **InSync Online and other tools communicate with our large and growing installed base of wireless users.**
- **Licensees will promote content with their own solutions.**



Some licensees offer “in-box” bundling opportunities.

- **They require that content meet ALL of the following criteria:**
 - Elegant, powerful functionality.
 - Significant consumer brand, online and off.
 - Large, loyal customer base.
 - Overlapping demographic with potential device purchasers and/or users.
 - Ability to generate substantial additional sales of wireless devices.



To proceed with web clipping and content distribution..

- Create the application and the HTML content feed.
- Post your application to www.palm.net.
- Allows users to experiment with your application.
- Join the Solution Providers Program (a free service) so our licensees can reach you.



To begin development, visit...

- **www.palm.com/devzone/webclipping**
 - Documentation
 - White papers
 - Procedures
 - Knowledge Base
 - Sample Code
 - Developer Forums
 - Emulators