2013
MOBILE PATH TO PURCHASE
UNDERSTANDING MOBILE’S ROLE IN THE CONSUMER’S PATH TO PURCHASE
RETAIL EDITION
xAd.
telmetrics®
the power of numbers
KEY FINDINGS

Mobile now represents a significant portion of online Retail shopping

1/3

of all online Retail activity comes from mobile devices

1/3

Location is most important to Smartphone user – while price and deals are top of mind for Tablet users

57%

of all Smartphone users expect locations to be within 5 miles of their location

57%

Smartphone purchases are completed in-person while Tablet purchases are completed online

77%

of Smartphone users complete their purchases in person

77%

Mobile usage converts into sales

55%

of all mobile Retail users went on to make a purchase

55%
TOPICS COVERED

» Mobile Reach & Usage
» Profile of the Mobile Retail User
» Mobile Shopping Drivers & Behaviors
» Mobile Advertising – Awareness & Impact
» Mobile Showrooming
STUDY METHODOLOGY

xAd, and long-time partner Telmetrics, have collaborated with Nielsen to expand on the findings from the first-to-market mobile behavior study executed in 2012, tracking the mobile consumer from initial purchase intent to conversion, while exploring ad effectiveness and examining the various profiles of mobile Retail users.

This study combines online survey data from 2,000 U.S. Tablet and Smartphone users, as well as actual observed behaviors from Nielsen’s Smartphone Analytics Panel of 6,000 Apple and Android users – each group reporting they had engaged in activity related to Retail information, products and services in the past 30 days.

Respondent totals are as follows (none of which are mutually exclusive):

- Smartphone owners: 1,765
- Tablet owners: 1,526
- Retail users: 1,889
MOBILE REACHES A SIGNIFICANT SEGMENT OF ONLINE RETAIL SHOPPERS

<table>
<thead>
<tr>
<th>Device</th>
<th>Number of Shoppers (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>154</td>
</tr>
<tr>
<td>Mobile</td>
<td>89</td>
</tr>
<tr>
<td>Tablet*</td>
<td>62</td>
</tr>
</tbody>
</table>

Source: Nielsen Online panel, Nielsen Mobile panel, Nielsen iPad panel – October 2012
*Tablet estimates are directional

60% of online retail users are now coming from smartphones, 40% from tablet.
1/3 of online shopping time has shifted to mobile.

Source: Nielsen Online panel, Nielsen Mobile panel, Nielsen iPad panel – October 2012
*Tablet estimates are directional
The average shopping session on mobile is short, lasting only 4 minutes.

Average Shopping Session Length

- **PC**: 9.2 Min
- **Mobile**: 4.4 Min
- **Tablet***: 4.5 Min

Shorter shopping sessions reflect higher urgency and immediacy of need for information from mobile Retail users.

Source: Nielsen Online panel, Nielsen Mobile panel, Nielsen iPad panel – October 2012

*Tablet estimates are directional
THE HEAVIEST RETAIL MOBILE USAGE OCCURS BEFORE LUNCH

INDEX OF MOBILE SHOPPING ACTIVITY BY HOUR
(100 = AVERAGE AMOUNT OF SHOPPERS FOR THAT CHANNEL)

Source: Nielsen Online panel, Nielsen Mobile panel – October 2012
WHILE MOBILE WEB HAS THE HIGHEST REACH, APPS HAVE THE HIGHEST ENGAGEMENT

UNIQUE AUDIENCE AND REACH
US, ANDROID AND IPHONE, OCTOBER 2012

<table>
<thead>
<tr>
<th>Apps</th>
<th>Web</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.9%</td>
<td>53.1%</td>
<td>91.0%</td>
</tr>
</tbody>
</table>

MONTHLY TIME PER PERSON
(HH:MM:SS) US, ANDROID AND IPHONE, OCTOBER 2012

WEB 30%
00:14:42

APPS 70%
00:46:27

Combined Mass Merch Retail
App/Web Time per Person
00:38:10

Source: October 2012 Mobile Database
*Reach % calculated based on consumers with Smartphone devices, 109.2MM
Mobile Retail Users Are Most Likely to Access Android Over iOS

Android users are most likely to visit Retail related sites and for a longer period of time.

**Mobile Unique Audience and Reach - Mass Merch Retail**
US, Android and iPhone, October 2012

- **Android**: 42.9M (39.3%)
- **iOS**: 29.3M (26.8%)

**Mobile Monthly Time Per Person**
Mass Merch Retail (HH:MM:SS) US, Android and iPhone, October 2012

- **Android**: 00:41:14 (64%)
- **iOS**: 00:33:68 (36%)

Combined Mass Merch Retail App/Web Time per Person 00:38:10

Source: October 2012 Mobile Database
*Reach % calculated based on consumers with Smartphone devices, 109.2MM*
PROFILE OF THE MOBILE RETAIL USER

Demographic Insights
MOBILE RETAIL USERS ARE TYPICALLY 25-44 MAKING BETWEEN $50K-$100K IN HHI

GENDER COMPOSITION
US, Android and iPhone, October 2012

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Applications</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Browser</td>
<td>55%</td>
<td>45%</td>
</tr>
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</table>

AGE COMPOSITION
US, Android and iPhone, October 2012

<table>
<thead>
<tr>
<th></th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55+</th>
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<tbody>
<tr>
<td>Total</td>
<td>17%</td>
<td>27%</td>
<td>24%</td>
<td>17%</td>
<td>16%</td>
</tr>
<tr>
<td>Applications</td>
<td>14%</td>
<td>28%</td>
<td>25%</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>Browser</td>
<td>17%</td>
<td>28%</td>
<td>23%</td>
<td>16%</td>
<td>15%</td>
</tr>
</tbody>
</table>

HOUSEHOLD INCOME COMPOSITION
US, Android and iPhone, October 2012

<table>
<thead>
<tr>
<th></th>
<th>&lt;$25K</th>
<th>$25-50K</th>
<th>$50-100K</th>
<th>$100-150K</th>
<th>$150K+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>13%</td>
<td>27%</td>
<td>35%</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>Applications</td>
<td>12%</td>
<td>21%</td>
<td>35%</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>Browser</td>
<td>14%</td>
<td>21%</td>
<td>34%</td>
<td>18%</td>
<td>13%</td>
</tr>
</tbody>
</table>

RACE COMPOSITION
US, Android and iPhone, October 2012

<table>
<thead>
<tr>
<th></th>
<th>White</th>
<th>Black or African-American</th>
<th>Asian or Pacific Islander</th>
<th>Mixed Racial Background</th>
<th>Other Race</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>73%</td>
<td>13%</td>
<td>5%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Applications</td>
<td>74%</td>
<td>13%</td>
<td>5%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Browser</td>
<td>71%</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>5%</td>
</tr>
</tbody>
</table>
MOBILE SHOPPING DRIVERS & BEHAVIORS
60% of Smartphone Retail usage is outside of the home, while 83% of Retail related Tablet usage is in the home.

Question Used: CQ16A, CQ16B, CQ16C, CQ16D Where were you when accessing the website/app on your smartphone/tablet? Total Smartphone owners (n=419), Total Tablet owners (n=763)
MOBILE IS NO LONGER A LAST MILE MEDIA

1 OUT OF 4 MOBILE USERS NOW LEVERAGE THEIR DEVICE ALL THE WAY THROUGH THE PURCHASE PROCESS

STAGE OF RETAIL RESEARCH PROCESS IN WHICH DEVICE WAS USED

<table>
<thead>
<tr>
<th>Device</th>
<th>At the start</th>
<th>At the end</th>
<th>In the middle</th>
<th>All the way through</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphone</td>
<td>21%</td>
<td>11%</td>
<td>16%</td>
<td>53%</td>
</tr>
<tr>
<td>Tablet</td>
<td>32%</td>
<td>3%</td>
<td>16%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Questions used: CQ39A/B/C/D: When visiting the <CATEGORY>, at what part of the research process did you use your <DEVICE>? Total Smartphone owners (n=860), Total Tablet owners (n=848)
MOBILE RETAIL SHOPPERS USE MOBILE IN COLLABORATION WITH OTHER MEDIA OUTLETS

Questions used: CQ8G: When thinking of all the media outlets available when searching for <CATEGORY>-related information, which is most important?
Total Smartphone owners (n=860), Total Tablet owners (n=848)

TOP RANKING RETAIL MEDIA CHANNEL

<table>
<thead>
<tr>
<th>Media Outlet</th>
<th>Smartphone</th>
<th>Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online/PC</td>
<td>54%</td>
<td>48%</td>
</tr>
<tr>
<td>Mobile Phone</td>
<td>27%</td>
<td>6%</td>
</tr>
<tr>
<td>Television</td>
<td>10%</td>
<td>38%</td>
</tr>
<tr>
<td>Newspaper</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Yellow Pages</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

HOWEVER, 2 OUT OF 5 USERS CONSIDER MOBILE THEIR PRIMARY MEDIA SOURCE FOR RETAIL RELATED INFORMATION

xAd/Telmetrics Mobile Path to Purchase Study: Understanding Mobile’s Role in the Consumer Path to Purchase - Retail Edition
Consumers turn to mobile in search of a variety of retail items.

Questions used: CQ8D: When accessing information about Retail stores on your <<DEVICE>>, what type of Retail store related products/services were you looking for? Total Smartphone owners (n=860), Total Tablet owners (n=848)
Questions used: CQ8E: When accessing <CATEGORY> information on your <DEVICE> what were you looking to ultimately accomplish?
Total Smartphone owners (n=860), Total Tablet owners (n=848)
MOBILE HAS THE ABILITY TO INFLUENCE PURCHASING DECISIONS

60% OF MOBILE USERS STILL HAVE A DECISION TO MAKE WHEN ACCESSING INFORMATION VIA THEIR DEVICE

Questions used: CQ17A, CQ17B, CQ17C, CQ17D Upon accessing the app/website on your <<INSERT DEVICE>>, which of the following best describes you? Total Smartphone owners (n=860), Total Tablet owners (n=848)

- 40% I KNEW EXACTLY WHAT I WAS LOOKING FOR
- 60% HAD NARROWED DOWN THEIR OPTIONS OR HAD NO IDEA
SMARTPHONE USER NEEDS REVOLVE AROUND LOCATION

1/4 SMARTPHONE USERS CONSIDER PROXIMITY OF THE RETAIL BUSINESS LOCATION THE MOST IMPORTANT FACTOR WHEN LOOKING FOR INFORMATION VIA MOBILE DEVICE

Compared to Tablet users, Smartphone users are...

130% MORE LIKELY TO BE IN SEARCH OF DIRECTIONS

43% MORE LIKELY TO BE IN SEARCH OF A SPECIFIC RETAIL LOCATION

25% MORE LIKELY TO BE IN SEARCH OF CONTACT INFORMATION SUCH AS A PHONE NUMBER

Question Used: CQ15C: During this visit, what are some of the ways you used the app/website on your smartphone/tablet? Total Smartphone owners (n=860)
Questions used: CQ28A, CQ28B, CQ28C, CQ28D: When looking up information related to <CATEGORY> on your <DEVICE>, which of the following do you expect regarding the location of the business?
Total Smartphone owners (n=860), Total Tablet owners (n=848)

SMARTPHONE USERS
- 27% No expectation of distance
- 53% Within 5 miles
- 16% > 5 miles

TABLET USERS
- 38% No expectation of distance
- 45% Within 5 miles
- 16% > 5 miles

1/2 of mobile users expect retail locations to be within 5 miles of their current location.
TABLET USAGE IS DRIVEN BY DEEPER RESEARCH NEEDS

TABLET USERS CONSIDER A TABLET-OPTIMIZED SITE OR LANDING PAGE THE MOST IMPORTANT FACTOR WHEN LOOKING FOR INFORMATION VIA MOBILE DEVICE FOLLOWED CLOSELY BY THE SEARCH FOR COUPONS/OFFERS

Compared to Smartphone users, Tablets users are...

- **55%** More likely to be in search of general research information
- **29%** More likely to be in search of reviews
- **22%** More likely to be looking for and comparing prices

Question Used: CQ15C: During this visit, what are some of the ways you used the app/website on your smartphone/tablet?
Total Tablet owners (n=848)
MORE THAN HALF OF MOBILE ACTIVITY LEADS TO CONVERSION

MOBILE USERS THAT MADE A PURCHASE RELATED TO THEIR RETAIL SESSION

<table>
<thead>
<tr>
<th>Device</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smartphone</td>
<td>56%</td>
<td>42%</td>
</tr>
<tr>
<td>Tablet</td>
<td>51%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Questions used: CQ19A, CQ19B, CQ19C, CQ19D: Did you ultimately visit a store/make a purchase or transaction related to your visit to the App/Site on your <<INSERT DEVICE>>?

Total Smartphone owners (n=860), Total Tablet owners (n=848)
SMARTPHONE AND TABLET USERS EXPECT TO MAKE RETAIL PURCHASES QUICKLY, OFTEN WITHIN THE DAY

Over 30% of Smartphone users and 25% of Tablet users want to make a purchase within the HOUR.

Questions used: CQ18A, CQ18B, CQ18C, CQ18D Still thinking of this most recent visit, how quickly were you looking to make a purchase/transaction?
Total Smartphone owners (n=860), Total Tablet owners (n=848)
SMARTPHONE USERS CONVERT OFFLINE, WHILE TABLET USERS CONVERT ONLINE

¼ of Tablet users complete their online conversion via mobile device

Question Used: CQ41C: When visiting the <CATEGORY> on your <DEVICE>, how was the actual purchase completed?
Total Smartphone owners (n=860), Total Tablet owners (n=848)

7% of online conversion is completed via smartphone
24% of online conversion is completed via tablet
TOP FACTORS THAT LEAD TO CONVERSION BY DEVICE

SMARTPHONE USER
- 34% - Fit what I was looking for
- 21% - Was the right price
- 16% - Close to my location

TABLET USER
- 37% - Fit what I was looking for
- 25% - Was the right price
- 13% - Deal that required immediate attention

Questions used: CQ20C: Why did you go to the location/make a purchase that you did following your visit to the <CATEGORY> on your <DEVICE>? Total Smartphone owners (n=860), Total Tablet owners (n=848)
40% of users exclusively used mobile in their purchase decision.

**Media Used to Aid in Retail Purchase Decision**

- **Online/PC**: 45% (Online: 41%, PC: 4%)
- **Newspaper**: 12% (Smartphone: 10%, Tablet: 2%)
- **Television**: 6% (Smartphone: 6%, Tablet: 0%)
- **Mail**: 6% (Smartphone: 6%, Tablet: 0%)
- **Tablet**: 17% (Mobile: 17%, Tablet: 0%)
- **Yellow Pages**: 1% (Smartphone: 1%, Tablet: 0%)
- **Other**: 5% (Mobile: 4%, Tablet: 1%)
- **No Other Media Outlets Were Used**: 40% (Mobile: 40%, Tablet: 44%)

Questions used: CQ36C: Other than on your mobile device, what other media did you use to aid in your purchase decision? Made a retail purchase and owns a Smartphone (n=244), Tablet (n=390)
MOBILE ADVERTISING: AWARENESS & IMPACT
3/4 RETAIL USERS NOTICE MOBILE ADS

RETAIL USERS THAT HAVE SEEN AN AD IN THE PAST 30 DAYS

74% SMARTPHONE
72% TABLET

21% OF SMARTPHONE & TABLET USERS CLICK ON ADS

C22/22A. Have you encountered/clicked any of the following types/categories of advertisements on your device(s) in the past 30 days?
Smartphone Owner for Retail (n=419), Tablet Owner for Retail (n=590)
1 IN 5 RETAIL USERS WHO VIEWED A MOBILE AD TOOK ACTION, MOSTLY VISITING THE ADVERTISED SITE

C24. You mentioned that you encountered an ad during the past 30 days on your <<INSERT DEVICE>>. Did you do any of the following after viewing the ad? Smartphone for Retail Smartphone Owner for Retail (n=311), Tablet for Retail Tablet Owner for Retail (n=553), Smartphone Owner for Retail(n=311), Tablet Owner for Retail (n=553)

<table>
<thead>
<tr>
<th>Action</th>
<th>Smartphone</th>
<th>Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visited Site that was advertised</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Utilized a coupon/offer</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Visited advertised retailer</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Looked online for more info</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Considered buying product</td>
<td>3%</td>
<td>5%</td>
</tr>
</tbody>
</table>

15% of users got what they needed without having to click on the ad.
LOCAL RELEVANCE IS IMPORTANT FOR BOTH SMARTPHONE AND TABLET USERS FOLLOWED BY THE ABILITY TO UTILIZE A COUPON OR OFFER

CQ27. When it comes to mobile advertising on your <<INSERT DEVICE>>, what kind of ads are you most likely to click on?

RETAIL ADVERTISING MOST LIKELY TO CLICK ON

Top rank by device

<table>
<thead>
<tr>
<th></th>
<th>Smartphone</th>
<th>Tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad That Offers Coupon/Promotion</td>
<td>28%</td>
<td>21%</td>
</tr>
<tr>
<td>Ad That's Locally Relevant to Me</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Ad That Features a Brand I Know</td>
<td>22%</td>
<td>18%</td>
</tr>
</tbody>
</table>
MOBILE SHOWROOMING
MOBILE RESEARCH IS HAPPENING OUTSIDE OF THE STORE.

ONLY 6% WERE AT A RETAIL STORE THE LAST TIME THEY ACCESSED RETAIL-RELATED INFORMATION ON THEIR DEVICE.

Since in-store shopping is low via mobile device – is Mobile Showrooming really an issue?

<table>
<thead>
<tr>
<th>Category</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groceries</td>
<td>111</td>
</tr>
<tr>
<td>Consumer Electronics</td>
<td>105</td>
</tr>
<tr>
<td>Home Goods</td>
<td>103</td>
</tr>
<tr>
<td>Clothing/Apparel</td>
<td>73</td>
</tr>
<tr>
<td>Drug and Beauty</td>
<td>72</td>
</tr>
<tr>
<td>Pet Supplies</td>
<td>70</td>
</tr>
</tbody>
</table>
Pre-Visit Consideration:
Considering that most Smartphone users are looking to make a Retail purchase within the day (60%) and in person (77%), there is strong indication that any research driving their decision has already occurred.

Online Research:
Mobile Users that conduct retail research online finalize their decisions with the help of sites such as Amazon. Amazon is a top 5 reference for Smartphone users narrowing their Retail decisions. Tablet users are 124% more likely to use Amazon throughout the decision making process than Smartphone users.
THE amazon® EFFECT

Amazon leads the majority of mobile retail reach online at 55%, with Walmart and Target coming in a little over 10% each.

COMBINED RETAIL MOBILE WEB/APP REACH
% by entity - US, Android and iPhone, October 2012

Amazon drives nearly 25 percentage points of unique retail reach.

Source: October 2012 Mobile Database
*Total: 2.7MM Retail Minutes
NEARLY THREE QUARTERS OF SMARTPHONE RETAIL MINUTES ARE SPENT ON Amazon

74.4%

COMBINED RETAIL MOBILE WEB-APP MINUTES
% BY ENTITY - US, ANDROID AND IPHONE, OCTOBER 2012

Consumers spent 2MM minutes on Amazon in October 2012:
- 79% on the App, 21% on the web
- 64% on Android, 36% on iOS

Source: October 2012 Mobile Database
*Total: 2.7MM Retail Minutes
• Less than 2% of Smartphone Retail users say they actually made a purchase via Amazon as the majority of purchases were made in-store (77%)

• On Tablet, Amazon was the top retailer brand utilized when completing purchases
CONCLUSIONS

- Mobile now represents a significant portion of online Retail shopping. As a result, both online and brick and mortar retailers must understand how to integrate this fast growing media into their overall media plans.

- Smartphone and Tablet users have very different needs and intent. By taking into consideration user need by device (location for Smartphone users and pricing and deals for Tablet users) marketers can effectively reach their mobile audiences.

- Although the phenomenon of in-store “mobile showrooming” doesn’t appear to have broad usage among the general mobile user – online comparison shopping is definitely happening and should be taken into consideration when trying to reach and impact consumer purchase decisions.
Additional study details and findings can be found at MobilePathToPurchase.com.
For questions or to provide feedback, please contact us at 888.234.7893 or requests@xAD.com

ABOUT xAd
Since 2009, xAd has grown to become one of the largest mobile-local advertising networks in the U.S. and the only one offering the ability to target mobile audiences using a combination of location signal and search context, leading to performance that is 3 to 5 times above the industry average. Across its network, xAd aggregates and manages the largest network of location verified mobile inventory in the industry, resulting in billions of location-specific ad impressions per month and over one million national and local advertisers. xAd is based in New York City with several satellite offices across the U.S. and internationally. For more information, visit xAd.com.

ABOUT Telmetrics
For more than 20 years, Telmetrics has been the call measurement industry leader. Telmetrics’ call tracking solutions, which are available in North America and across Europe, track the lead generation quality of local search advertising and pay per call programs for the leading brands in local search. This includes both publishers and agencies that serve millions of SMBs and national franchise locations across North America and Europe. With greater visibility into advertising performance across all media channels—digital, mobile, print and more—media publishers, agencies and advertisers can optimize the media mix for higher quality lead generation, resulting in increased revenues and a more complete picture of ROI across converging media. For more information, visit Telmetrics.com

ABOUT Nielsen
Nielsen Holdings N.V. (NYSE: NLSN) is a global information and measurement company with leading market positions in marketing and consumer information, television and other media measurement, online intelligence, mobile measurement, trade shows and related properties. Nielsen has a presence in approximately 100 countries, with headquarters in New York, USA and Diemen, the Netherlands.
TERMINOLOGY

• **Mobile Application/App**: mobile content portal which does not require access via a mobile browser, though does still require internet access to reach.

• **Mobile Website/WAP**: mobile content source accessible via a mobile browser such as Google or Safari, which requires internet access to reach. Desktop-accessible websites visited with a smartphone are then called mobile websites.

• **Showrooming** is the practice of examining merchandise in a traditional brick and mortar retail store without purchasing it, but then shopping online to find a lower price for the same item.