When the first call was placed on a handheld mobile phone in 1973, the prototype device used was capable of less than 30 minutes of battery life and took 10 hours to recharge. Fast-forward some 40 years later and mobile device ownership has reached critical mass around the world. Today, these devices serve as the primary communications and media vehicles for many and play an increasingly important role in the daily lives of consumers in both developed and high-growth economies.

To better understand today’s mobile world, we’ve selected data from the following countries – Australia, Brazil, China, India, Italy, South Korea, Russia, Turkey, the United Kingdom, and the United States – for an in-depth look at mobile consumers and how they use their devices around the globe.
DEVICE PENETRATION AND USER DEMOGRAPHICS
Smartphone owners may be the majority of mobile users in countries like the U.S. and U.K., but the trusty feature phone (devices with no touchscreen or QWERTY keypad that operate without an advanced operating system) continues to be the mobile device of choice in places like India, Brazil and Russia where the network infrastructure required for smartphones and next generation mobile devices has yet to appear outside of large, urban centers. In general, younger consumers around the globe are more likely to embrace smartphone devices. It can be expected that their interest will help drive smartphone adoption as they age and make up a greater percentage of the consumer base.

The increased functionality smartphones offer also means increased data and bandwidth usage, which comes at a price. While consumers in countries with higher smartphone ownership, like South Korea, the U.K. and the U.S. seem resigned to pay a fixed price for an unlimited or tiered data plan, consumers in countries with fewer smartphone owners and less of the 3G or 4G infrastructure in place are more likely to rely on pay-as-you-go data options or use WiFi.

CONSUMER SMARTPHONE HABITS AROUND THE WORLD
With operating systems and device capabilities that provide consumers more access to content and multimedia features, smartphones are transforming mobile habits in markets around the world. Games and social networking apps are generally the most popular across the countries selected.

MOBILE SHOPPING
Mobile shopping via smartphone is still in its infancy in many countries around the world. Among the countries selected for this report, mobile wallet or NFC usage is still gaining traction with consumers; only the U.S. had a majority of smartphone users who use a shopping or retail app at least once a month. But smartphone users in a variety of countries are using their mobile devices to browse, if not purchase, products, conduct price comparisons and read product reviews.

MOBILE VIDEO
A clear global preference for how to view mobile video content has yet to emerge. Mobile web and apps are the most likely choices for most smartphone users, with downloading video clips seeming to be a less popular method for most.

While generally not considered a replacement for traditional TV viewing, mobile video is providing consumers with more opportunities to engage with content at any time, anywhere. The majority of smartphone consumers said they don’t feel as though mobile video viewing has any impact on their normal TV habits. The greatest impact of mobile viewing appears to be in high-growth economies. For example, roughly one-third of Chinese smartphone users surveyed online said they have increased their traditional TV viewing habits, while 28 percent of Indian users believe they watch less traditional TV because of mobile viewing.

MOBILE ADVERTISING
With the dramatic growth in mobile usage around the world, content providers and other publishers are increasingly seeking out new ways to create value for their content, and brands and advertisers are looking for more opportunities to get their messages in front of the right audience. In all countries except India, smartphone owners are most likely to receive mobile ads about once a day. Indian smartphone owners receive mobile ads less frequently, with 70 percent seeing them about once a week or less. In general, smartphone owners in developed markets are the least likely to engage with mobile ads, while smartphone owners in high-growth economies are more likely to engage.

ABOUT THIS REPORT
Nielsen’s 2013 Mobile Consumer Report pulls together findings from surveys, custom and syndicated research conducted around the world in 2012. Data collection methodologies and geographic representations vary by country. Countries where data collection was conducted in person or on the phone include India and Turkey. For Brazil, data collection was conducted online, except for mobile and smartphone penetration figures which were collected by phone.

The following pages contain a snapshot of the differences and similarities among mobile consumers around the world and offer a glimpse of the early demographic and behavior trends associated with new mobile devices in emerging markets. Representing just some of Nielsen’s mobile capabilities, these insights provide a better understanding of both the challenges and opportunities that exist as the mobile landscape continues to evolve.
WHO, WHAT, & WHERE?

Mobile devices have reached critical mass, with a majority of consumers in both developed and high-growth economies now owning a mobile phone as of the first half of 2012. Even so, there are still notable differences in the types of mobile devices owned. For example, in China and India—the largest of the high-growth markets—consumers are at opposite ends of the mobile ownership spectrum: two-thirds of Chinese mobile subscribers surveyed online own a smartphone, compared to only 10 percent in India where feature phones are the overwhelming majority (80 percent penetration).

South Korea, home to popular phone manufacturer Samsung, leads in both overall mobile ownership (99 percent) and smartphone ownership (67 percent). Among developed markets, smartphone ownership is lowest in the U.S. based on data collected during the first two quarters of 2012, but has steadily increased over the last few years, reaching 61 percent by December 2012. Brazilian and Turkish mobile subscribers are the most likely to own multimedia phones, which have similar capabilities as smartphones, but without an advanced level operating system, such as Android or iOS.
WHAT TYPES OF DEVICES DO WE USE?

SMARTPHONE
Includes devices with and without touchscreens

MULTIMEDIA PHONE
Touchscreen and/or QWERTY keypad, but without an advanced operating system

FEATURE PHONES
No touchscreen, QWERTY keypad, or advanced operating system

Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012
Reported percentages for U.S. are based on Q2 2012 data.
WHO ARE MOBILE CONSUMERS?

There are differences in the device penetration rates between men and women among all countries, with China and Brazil showing the largest gender divide among smartphone owners (12 and 16 percentage points, respectively, skewing male). In general, smartphone owners globally tend to skew male (except for Australia) and feature phone owners tend to skew female.

Younger users are more likely to own a smartphone and older users are more likely to own a feature phone, which makes sense since feature phones are more established in the marketplace. Though there are some exceptions – in Italy consumers have higher smartphone ownership among users ages 35-64, whereas in India feature phones have far more penetration than smartphones across all age segments – the broader trend suggests that smartphone adoption will likely continue to rise as younger consumers age.

<table>
<thead>
<tr>
<th>Country</th>
<th>Feature Phone</th>
<th>Smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>6%</td>
<td>64%</td>
</tr>
<tr>
<td>Brazil</td>
<td>11%</td>
<td>57%</td>
</tr>
<tr>
<td>China</td>
<td>54%</td>
<td>66%</td>
</tr>
<tr>
<td>India</td>
<td>5%</td>
<td>66%</td>
</tr>
<tr>
<td>Italy</td>
<td>7%</td>
<td>65%</td>
</tr>
<tr>
<td>Russia</td>
<td>62%</td>
<td>66%</td>
</tr>
<tr>
<td>South Korea</td>
<td>62%</td>
<td>65%</td>
</tr>
<tr>
<td>Turkey</td>
<td>64%</td>
<td>65%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>78%</td>
<td>66%</td>
</tr>
<tr>
<td>United States</td>
<td>68%</td>
<td>65%</td>
</tr>
</tbody>
</table>

Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012
HOW MANY MOBILE DEVICES DO WE OWN?

As mobile technology plays an increasingly important role in both our personal and professional lives around the world, some consumers are relying on multiple mobile devices to stay connected. More than half of Russian mobile subscribers (51 percent) own two or more mobile devices.

Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012
HOW MUCH DOES MOBILE SERVICE COST AND WHO HAS A DATA PLAN?

The cost of a data plan can be a major factor when choosing both a mobile provider and the device itself. Smartphones, with added features and functionality, often require more data. In some countries, like India and Russia where the median smartphone bill is significantly higher than that of all mobile users and feature phones have a higher penetration, consumers are opting for more flexible, less expensive options, such as "pay-as-you-go" data pricing, or taking advantage of WiFi connectivity.

<table>
<thead>
<tr>
<th>Country</th>
<th>Have a Data Plan?</th>
<th>Avg Monthly Bill</th>
<th>Data Plan Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Korea</td>
<td>89%</td>
<td>€5000</td>
<td>57%</td>
</tr>
<tr>
<td>Australia</td>
<td>81%</td>
<td>AUD$50</td>
<td>50%</td>
</tr>
<tr>
<td>Brazil</td>
<td>43%</td>
<td>R$50</td>
<td>49%</td>
</tr>
<tr>
<td>China</td>
<td>77%</td>
<td>¥1000</td>
<td>49%</td>
</tr>
<tr>
<td>India</td>
<td>57%</td>
<td>¥499</td>
<td>50%</td>
</tr>
<tr>
<td>Italy</td>
<td>57%</td>
<td>€22</td>
<td>43%</td>
</tr>
<tr>
<td>Russia</td>
<td>43%</td>
<td>¥500</td>
<td>30%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>96%</td>
<td>£93</td>
<td>99%</td>
</tr>
<tr>
<td>United States</td>
<td>96%</td>
<td>$66</td>
<td>99%</td>
</tr>
</tbody>
</table>

1 Data plan percentages for all countries are based on smartphone users only.
Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012

DO WE PRE-PAY OR SIGN A CONTRACT?

The majority of mobile subscribers in India seemingly prefer pre-paid service to a fixed contract.
In all countries, except Russia and South Korea, mobile subscribers tend to use a pre-paid service on non-smartphone devices.
HOW DO WE DECIDE WHICH MOBILE DEVICE TO BUY?

Consumers around the world are collectively embracing mobile devices and the criteria they use to determine which device to buy vary from country to country. Getting good value for the money spent on a device matters more to consumers responsible for purchase decisions in the U.S., U.K., Italy and China. Russian consumers say they care more about “stylish design” when deciding which mobile device to purchase, while Chinese consumers are more concerned with having a wide choice of applications to use on their device.
WHERE DO WE BUY MOBILE DEVICES?

AMONG THOSE WHO PURCHASED THEIR OWN DEVICE IN THE PAST 6 MONTHS.

49% of Russian mobile users purchased their device at a major electronics or media retail store.

46% of South Korean mobile users purchased their device at a mobile operator/cARRIER retail store.

37% of mobile users in the U.K. purchased their mobile device online.

15% of Chinese mobile users bought their device direct from the manufacturer.

WHAT DO WE DO WITH OUR SMARTPHONES?

Even with operating systems that offer consumers high-speed connections, built-in multimedia features and access to a multitude of apps, text messaging is still one of the most popular mobile activities among smartphone owners in all countries. South Korean smartphone owners are generally the most active when using their smartphone for multimedia or commerce activities such as web browsing and online banking, and Brazilians are the heaviest users of social media on their smartphones.

AMONG ALL U.S. MOBILE POST-PAID/CONTRACT USERS

- 164.5 average number of calls sent/received per month
- 644.1 average voice minutes used per month
- 764.2 average number of text messages sent/received per month

Source: Nielsen Customer Value Metrics, 2012

Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012
Across the board, top smartphone shopping activities include browsing products, price comparison, and reading product reviews.

Smartphone owners in the U.S. are the most likely to use their device for in-store price comparison, online coupons and purchasing products.
WHICH APPS DO WE USE?

Apps continue to increase in popularity. Chinese and American smartphone owners are the heaviest app users overall, with games being the most used type of app in more than half of the selected countries (China, Australia, Italy and Brazil). Social networking app usage is strongest in the U.S., with 85 percent of American smartphone owners as regular users. Smartphone owners in India and Turkey are the least likely to regularly use all categories of apps, but the most popular tend to be more entertainment driven, like social networking and games.

AUSTRALIA  
BRAZIL  
CHINA  
INDIA  
ITALY  

- RUSSIA  
- SOUTH KOREA  
- TURKEY  
- UNITED KINGDOM  
- UNITED STATES

WONDERING ABOUT MOBILE WEB USAGE?

Facebook, Google, YouTube, Twitter and eBay consistently rank in the top 10 sites among mobile web users around the world.

1 Types of apps used regularly among smartphone app users
HOW DO WE WATCH MOBILE VIDEO?

Smartphones are a popular device for watching video, despite the smaller screen size. In most countries, mobile web is the most popular means of accessing mobile video, while smartphone owners in the U.K. and South Korea are more likely to watch mobile video using an app. In the U.S., smartphone owners are equally likely to watch video via mobile internet and apps (72 percent), and Indian smartphone owners are the most likely to view downloaded video clips (57 percent).

Source: Nielsen Smartphone Insights, first half of 2012; Nielsen Mobile Video Report
HOW OFTEN DO WE WATCH MOBILE VIDEO ON SMARTPHONES?

Chinese smartphone owners are the heaviest users of mobile video, as 17 percent access more than three times a day. Mobile video viewing is fairly infrequent among the developed markets, as a third of smartphone users in the U.K., Australia and Italy access less than once a week. American smartphone owners are the exception, leading all countries in daily mobile video usage (31 percent use at least once per day).

Source: Nielsen Smartphone Insights, first half of 2012; and Nielsen Mobile Video Report
HOW DOES WATCHING MOBILE VIDEO IMPACT TV VIEWING?

While mobile video viewing is not considered a replacement for other TV viewing, it does provide consumers around the world with more opportunities to view content, regardless of their location. The majority of smartphone owners surveyed in all selected countries say their viewing habits have been unaffected by mobile video usage and they still watch the same amount of traditional TV. Smartphone owners in high-growth economies reported the most drastic impact: nearly a third of Chinese smartphone owners surveyed say they now watch more traditional TV, while 28 percent of smartphone users in India say they felt their traditional TV viewing decreased.
WHAT TYPE OF MOBILE ADVERTISING DO SMARTPHONE USERS RECEIVE?

With the dramatic growth in mobile usage around the world, content providers and publishers are increasingly seeking out new ways to create value for their content, and brands and advertisers are looking for more opportunities to get their messages in front of the right audience. Smartphone owners in India and Turkey are the least likely to receive or see any ads on their device. With the exception of the U.S., in developed markets, smartphone owners are most likely to receive mobile ads via apps. Russian smartphone owners are the most likely to use their phone for texting (95 percent), so it’s no surprise that text messages are the most common method for receiving mobile ads. Chinese smartphone owners say they receive the most mobile ads, topping all countries in ads received via online games, mobile video/TV, streaming radio and location-based services.
HOW OFTEN DO WE RECEIVE MOBILE ADS ON OUR PHONES?

In all countries except India, smartphone owners are most likely to receive mobile ads about once a day. Indian smartphone owners receive mobile ads less frequently, with 39 percent seeing them about once a week.

AMONG SMARTPHONE OWNERS WHO HAVE RECEIVED ADS

<table>
<thead>
<tr>
<th>Country</th>
<th>At Least Once a Day</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Less Than Once per Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>57%</td>
<td>25%</td>
<td>8%</td>
<td>9%</td>
</tr>
<tr>
<td>Brazil</td>
<td>62%</td>
<td>26%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>China</td>
<td>65%</td>
<td>26%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>India</td>
<td>30%</td>
<td>39%</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Italy</td>
<td>53%</td>
<td>25%</td>
<td>8%</td>
<td>13%</td>
</tr>
<tr>
<td>South Korea</td>
<td>78%</td>
<td>16%</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Russia</td>
<td>55%</td>
<td>27%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>Turkey</td>
<td>74%</td>
<td>16%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>58%</td>
<td>29%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>United States</td>
<td>57%</td>
<td>24%</td>
<td>10%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012
HOW DO SMARTPHONE USERS FEEL ABOUT MOBILE ADVERTISING?

In general, smartphone owners in developed markets are the least likely to engage with mobile ads, while smartphone owners in high-growth economies are more likely. For instance, Indian smartphone owners are among the least likely to receive ads on their smartphone, but don’t seem to mind the ones they do see and are the most likely among smartphone users in all countries to engage with ads. Indian smartphone owners are also more likely to be comfortable providing some kind of personal information if it means being served an ad that is more tailored to them and their interests.

AD CLICKERS
33 percent of Chinese smartphone owners say “sometimes” they click on mobile ads they’ve viewed. An additional 4 percent say they “always look at the ad and sometimes click on it”.

AD INTRIGUED
36 percent of Russian smartphone owners looked online for more information on an advertised product.

AD TOLERANT
Smartphone owners in India are the least likely to be annoyed with mobile ads.

Source: Nielsen Smartphone Insights, first half of 2012

FEELINGS ABOUT MOBILE ADVERTISING

Sources: Nielsen Global Smartphone Insights, first half of 2012; Nielsen Mobile Insights, 2012
METHODOLOGIES

GLOBAL SMARTPHONE INSIGHTS

METHODOLOGY

AUSTRALIA
Online interviews conducted nationally. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 1,158 random contacts. Detailed interviews were completed with 1,682 mobile users, 1,063 of which were smartphone users and 619 of which were non-smartphone users. Interviews were conducted during February 2012.

BRAZIL
The incidence module was conducted over the phone while the detailed module was conducted online nationally. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 986 random contacts. Detailed interviews were completed with 1,603 mobile users, 748 of which were smartphone users and 855 of which were non-smartphone users. Interviews were conducted during April-May 2012.

CHINA
Online interviews conducted in urban areas. Sample was sourced from the following cities: Shanghai, Nanjing, Hangzhou, Guangzhou, Shenzhen, Nanning, Beijing, Tianjin, Shijiazhuan, Chongqing, Chengdu, Kunming, Zhengzhou, Wuhan, Changsha, Shenyang, Changchun, Haerbin, Xian, Lanzhou, Xining. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 1,210 random contacts. Detailed interviews were completed with 2,472 mobile users, 1,639 of which were smartphone users and 838 of which were non-smartphone users. Interviews were conducted during February 2012. Due to the online-only methodology in China, which excludes a large portion of China’s rural population, smartphone penetration may skew high.

INDIA
Face-to-face interviews conducted in 8 Indian cities (Mumbai, Delhi, Kolkata, Bangalore, Hyderabad, Ahmedabad, Pune, Lucknow). Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 3,203 random contacts. The detailed module of mobile users only interviewed a total of 3,067 mobile users, 1,553 of which were smartphone users and 1,474 of which were non-smartphone users. Interviews were conducted during March-April 2012.

ITALY
Online interviews conducted nationally. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 1,062 random contacts. Detailed interviews were completed with 1,632 mobile users, 1,026 of which were smartphone users and 606 of which were non-smartphone users. Interviews were conducted during March 2012.

SOUTH KOREA
Online interviews conducted nationally. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 1,041 random contacts. Detailed interviews were completed with 1,765 mobile users, 1,145 of which were smartphone users and 620 of which were non-smartphone users. Interviews were conducted during February 2012.

RUSSIA
Online interviews conducted in 12 major metros. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 1,039 mobile users to determine the type of primary handset used. Detailed interviews were completed with 1,645 mobile users, 912 of which were smartphone users and 733 of which were non-smartphone users. Interviews were conducted during March-April 2012. Due to the online-only methodology in Russia, which excludes a large portion of Russia’s rural population, smartphone penetration may skew high.

TURKEY
Face-to-face interviews conducted in large and medium metros. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 4,042 random contacts. Detailed interviews were completed with smartphone users only. The sample achieved was 776 Smartphone users. Interviews were conducted during April-May 2012.

U.K.
Online interviews conducted nationally. Respondents were between the ages of 16 and 64. The incidence module interviewed a total of 1,025 random contacts. Detailed interviews were completed with 1,607 mobile users, 995 of which were smartphone users and 612 of which were non-smartphone users. Interviews were conducted during March 2012.
ADDITIONAL METHODOLOGY

NIELSEN MOBILE INSIGHTS
Online interviews conducted nationally among U.S. mobile users. Respondents were aged 13+. The incidence module interviewed a total of 84,565 random contacts. Detailed interviews were completed with 76,204 mobile users, 54,585 of which were able to identify their mobile phone. 28,103 respondents were smartphone users and 26,482 were non-smartphone users. Interviews were conducted during April-June 2012.

NIELSEN MOBILE VIDEO REPORT
Online survey of 5,719 mobile users that had accessed video on their mobile phone in the past 30 days. The survey is conducted nationally and respondents are re-contacted based on the Mobile Insights syndicated survey. Interviews were conducted during April-June 2012.

NIELSEN CUSTOMER VALUE METRICS:
A bill-scraping platform that measures actual mobile charges and usage by passively collecting information from online bills. The sample consists of 30,000+ opt-in panelists and 65,000+ line-level bills each month using advanced e-bill scraping technology. The sample consists of postpaid, non-corporate liable consumers that belong to the top 4 carriers (AT&T, Verizon, Sprint and T-Mobile). Nielsen Customer Value Metrics data cited in this publication was collected during April-June 2012.

NIELSEN SMARTPHONE ANALYTICS
Nielsen’s on-device software is installed with permission on panelist Android and iOS smartphones. Mobile app and web usage are electronically measured through this fully opted-in panel. There are ~5,000 panelists ages 18+ that participate in the panel nationally. Nielsen Smartphone Analytics data cited in this publication was collected in June 2012.

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.

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