

CONNECTED EUROPE

How smartphones and tablets are shifting media consumption

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Foreword

We are currently witnessing a mobile revolution. Smartphones and tablets are being used in more and more areas of our daily lives. They are essential work tools - freeing us from the boundaries of our offices and becoming our personal assistants. They are the fast emerging devices of choice for digital media consumption. Mobile devices also have a profound impact on the relationship between companies and consumers. Today's customers can get instant and in-depth information about nearly every available product through a smartphone or mobile device.

We know that entering the digital age is a very dynamic process. Markets change rapidly and we need to keep up with our consumer demands. Therefore, I am proud to present the report "Connected Europe". The study, conducted by our partner comScore, contains not only the latest data on connected devices, but also gives insight into the rapid mobile evolution in five major European markets. It also confirms the rise of mobile retail and the behavioural changes of consumers in a connected world. Let me draw your attention to three findings that I think are particularly interesting:

First, content is increasingly consumed via a mobile channel. Publishers at this year's DLD will find that mobile channels can extend the reach of their content and attract additional users.

Second, mobile retail is growing fast. One out of ten smartphone owners are already scanning codes when shopping. This opens new opportunities for companies, as more and more owners of smartphones and tablets are willing to use their device for mobile shopping. Mobile retail is changing from a niche market to a core sales channel.

Third, the study delivers a fascinating insight into the German market. We see that Germany is trailing in almost every area – from penetration of smartphones or adoption rate of tablets to the usage of mobile retail; however, we also have the highest growth rates in all these areas. One might ask: Are we Germans late adopters? Or did we just need to climb the threshold of the digital age and are now diving head first into the vast possibilities?

The study holds a lot of discussion points for this year's DLD. I am confident that you will find many more interesting facts about the digital age in this report.

René Schuster, CEO Telefónica Germany

Executive Summary

Today's digital environment is rapidly evolving, driven by the proliferation of devices people use to consume content at home, at work and on-the-go. Not too long ago, European consumers depended solely on their desktop computer or laptop to connect to the internet. Today, a growing number of consumers are likely to access a variety of digital content across a multitude of devices on a daily basis.

Key findings are summarised below:

- **Smartphones and Tablets are gaining on the PC.** With lower hardware costs, increased subsidies, and aggressive operator price plans, smartphone proliferations is driving a majority of non-computer web traffic, but tablets are picking up momentum. In the EU5, comprised of France, Germany, Italy, Spain and the United Kingdom, mobile phones accounted for 65 percent of non-computer traffic, followed by tablets that generated more than 1 in 4 non-computer page views.
- **Mobile Media is booming.** The EU5 market for mobile media users is large – and growing fast due to ubiquitous 3G/4G networks delivering mobile ready content to multiple screens (PC, Smartphone, Tablets). 75 percent of smartphone users in the EU5 used mobile media in October 2011, an increase of 62 percent in the past year.
- **The EU5 market is fragmented across ecosystems.** Nokia, Google, and Apple are the key players in the European market for smartphones and tablets. Nokia's Symbian and Google's Android currently have the highest market share among smartphone platforms, but Apple's iOS has the top spot when combining smartphones, tablets and other devices with a 30 percent share of connected devices in use.
- **Apple's halo continues to expand with the iPad.** Apple's control and integration of Software, Hardware, and Services has extended iPad's popularity beyond traditional Apple customers. Across the EU5, iPhone owners were 66 times more likely than the average smartphone user to have an iPad, but iPad enthusiasm is not limited to Apple enthusiasts. Users of other phones such as LG (86 percent more likely) and Motorola (72 percent more likely) were overrepresented amongst iPad owners, as compared to their respective shares of the smartphone market.
- **Mobile commerce is taking off and reshaping expectations for the retail industry.** Mobile retail is one of the fastest growing phenomena amongst smartphone users with double or triple digit growth rates across European countries. Germany had the fastest growing (up 112 percent year on year) user base and witnessed the quickest adoption of emerging technologies, such as QR codes.

Data Sources:

comScore MobiLens is based on a survey of mobile subscribers age 13+ and refers to their primary mobile device. Additional data for mobile devices and consumption comes from other products in the comScore mobile solutions suite –including, Device Essentials and GSMA Mobile Media Metrics (MMM). More detailed methodology information can be found at the end of this report.

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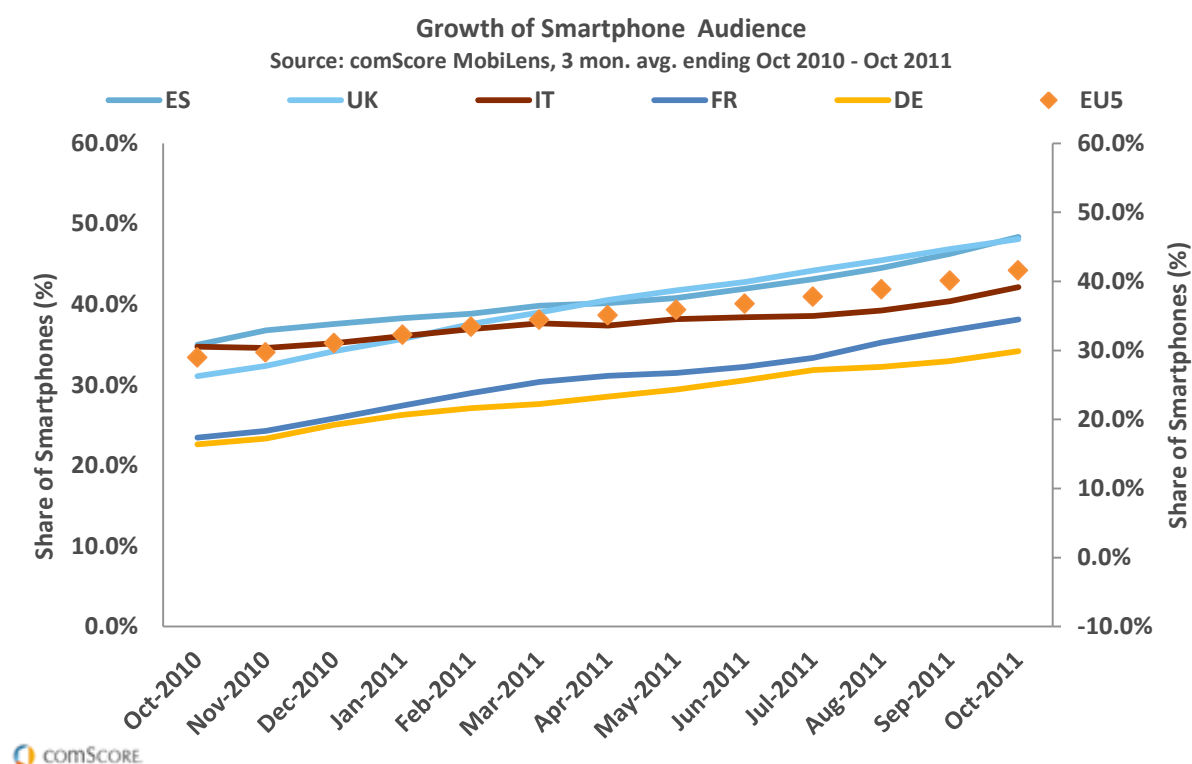
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Smartphone and Tablet Landscape

The rise of smartphones

Mobile phones began a worldwide revolution when they provided consumers with the first experience of connecting online, away from a computer and a fixed internet connection. The development of smartphones¹ took the power of mobile technology a step further and increased consumers' expectations for accessing digital content. Today, new devices such as tablets and gaming consoles – collectively known as “connected devices²” – have emerged and continue to gain popularity. These devices have contributed to notable shifts in the global and European consumer's digital behaviour. Mature technology markets, such as the EU5 region, are experiencing rapid adoption and usage of smartphones and tablets.

In the EU5, smartphone adoption has reached nearly 42 percent an increase of 13 percentage points over the past year. The highest penetrated market is Spain (48.4 percent), followed closely by the UK (48.1 percent). In Italy 42.1 percent of mobile owners used a smartphone, while in France penetration was a bit lower at 38.1 percent. Germany currently shows the lowest penetration of smartphones with only 34.2 percent, but the growth rate is the highest amongst the European countries with a 64 percent increase in the number of smartphone users within the past year.

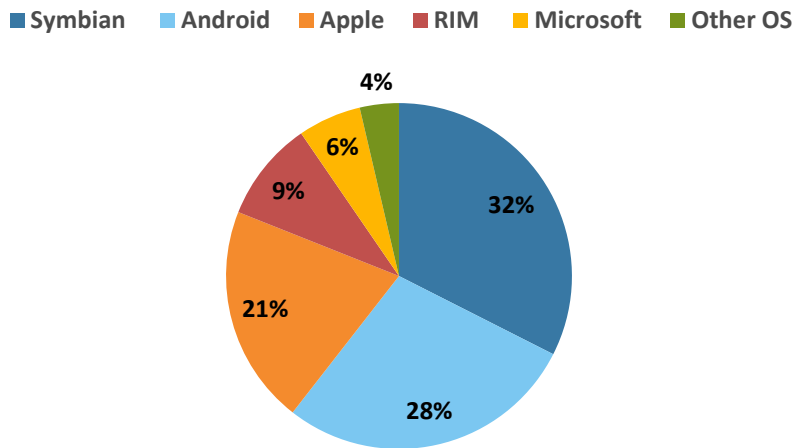


The rising adoption of smartphones in Europe has created a highly competitive landscape for the top mobile operating systems: Symbian, Google, Apple, and Research in Motion (RIM).

¹comScore defines smartphones as a mobile device with a predefined list of operating systems, mainly from the following companies: RIM, Apple, Microsoft, Google, Palm, Symbian

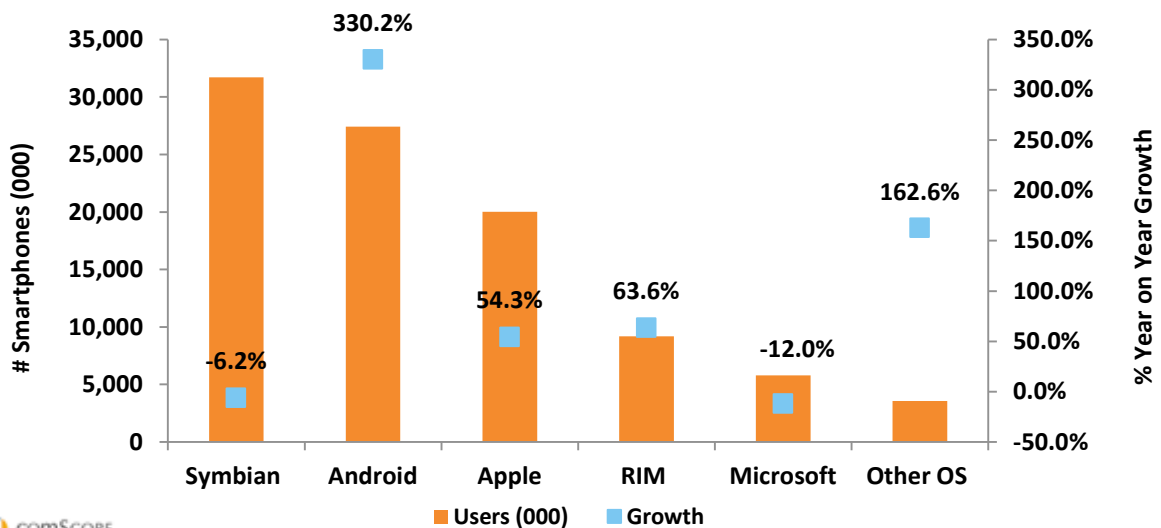
²Connected devices are defined as tablets and other web-enabled devices, such as gaming consoles and media players.

Smartphone Operating Systems by Market Share
 Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011



Symbian’s stronghold on the European market has loosened in recent years as other platforms such as Google’s Android and Apple’s iOS gain traction. Symbian has seen its smartphone audience decline by 6.2 percent since October 2010 to a smartphone market share of 32.5 percent in October 2011. Android, the second largest platform, has more than tripled in that timeframe, with 28.1 percent of smartphone users now owning a handset running Google’s operating system. Apple has also attracted a considerable amount of new users (54.3 percent increase) with its share growing to 20.5 percent of the smartphone market. RIM, which owns a 9.4 percent market share, has grown its audience by nearly 64 percent in Europe over the past year. Other operating systems such as Samsung’s Bada and Linux’s LiMo, grew by a considerable 162.6 percent since October 2011.

Smartphone Operating Systems
 Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2010 - Oct 2011

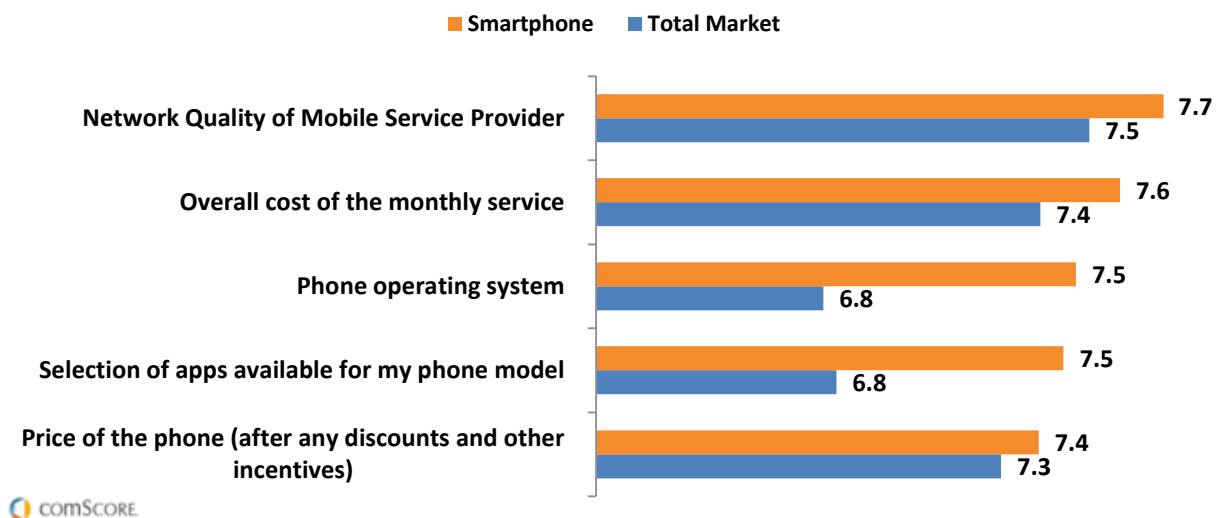


With continually increasing competition, it’s important to understand what drives consumers’ mobile purchase decisions across these markets. When new mobile phone purchasers were asked about purchase consideration factors, network quality as well as the cost of their monthly service, were key drivers. This was true for both smartphone and feature phone purchasers.

However, as shown in the chart below, the mobile operating system, and the selection of apps available was also a significant concern, especially for smartphone buyers. These consumers are looking not just for a phone, but for a device that is part of a larger ecosystem that will provide a complete mobile media experience. Remarkably, it was just a few years ago when only technology geeks had an awareness of mobile operating systems and apps, but today these rank as some of the most important factors when purchasing a new smartphone. This suggests mobile phone users - particularly smartphone buyers - are becoming increasingly sophisticated across the largest Western European markets.

**Smartphone vs Mobile Purchase Consideration Factors
(1-10 scale, 10= most important)**

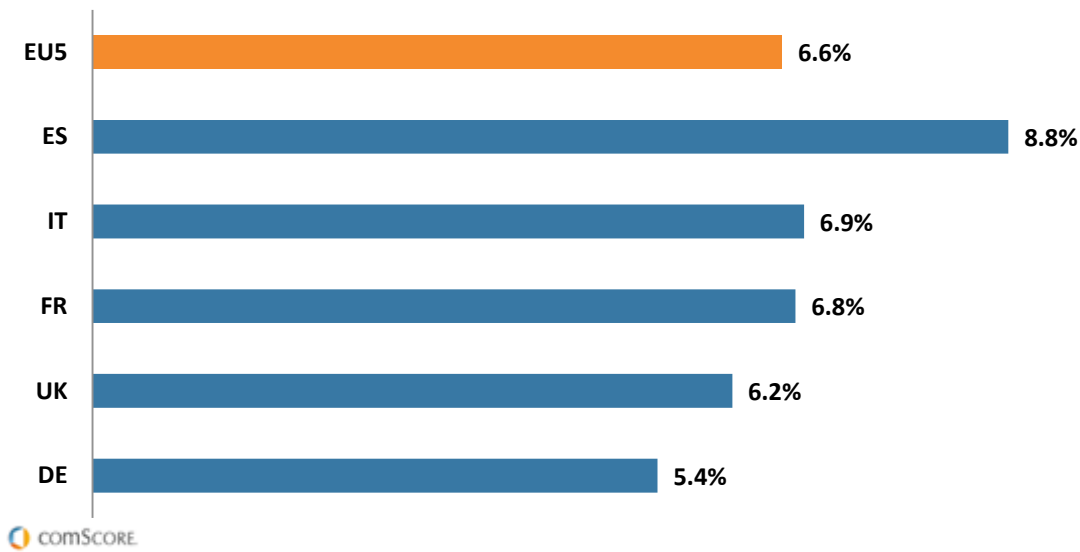
Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011



Tablet Ownership

For some of today’s European mobile users, one device simply doesn’t do the job anymore. People are increasingly seeking a more sophisticated multimedia experience through tablets. Across the EU5 region, 6.6% of mobile phone owners also owned a tablet in October 2011. Similar to the smartphone trend, Spain is leading the charge in tablet adoption, while Germany lags. Although the relative penetration of tablets varies by country, all five countries have similarly sized markets with between 2.9 million and 3.2 million tablet users.

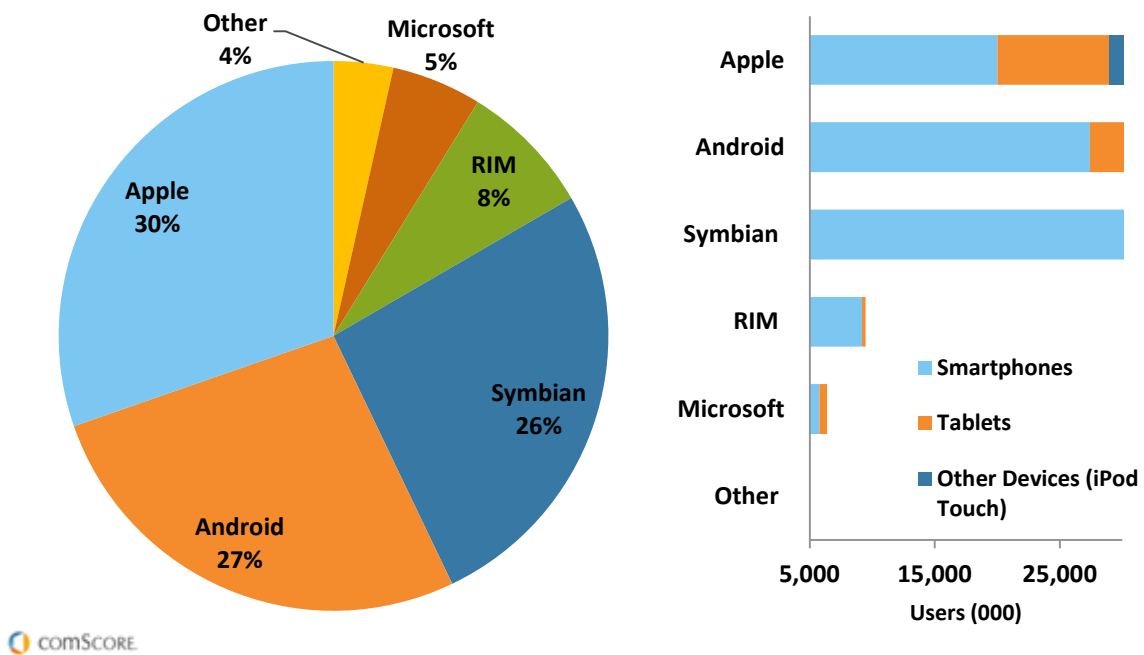
Percent of Mobile Owners That Also Own Tablet
 Source: comScore MobiLens, 3 mon. avg. ending Oct 2011



A closer look at the EU5 region reveals that operating systems (OS) play a key role in driving the diverse usage of devices for consuming content. In today's digital world, the reach of an operating system such as the Google Android platform and Apple iOS extends well beyond smartphones to tablets and other connected devices. Although Symbian and Android lead the smartphone market, Apple takes the top position when combining smartphones, tablets and other devices with a 30 percent share of devices in use. Android follows closely with 27 percent of the total mobile and connected device universe³. The largest base of Apple devices was iPhones (20 million), followed by iPads (8.9 million) and iPod Touches (7.7 million). In the EU5, nearly 5 million tablets in use were running on Google's Android platform in October 2011.

OS Market Share Audience

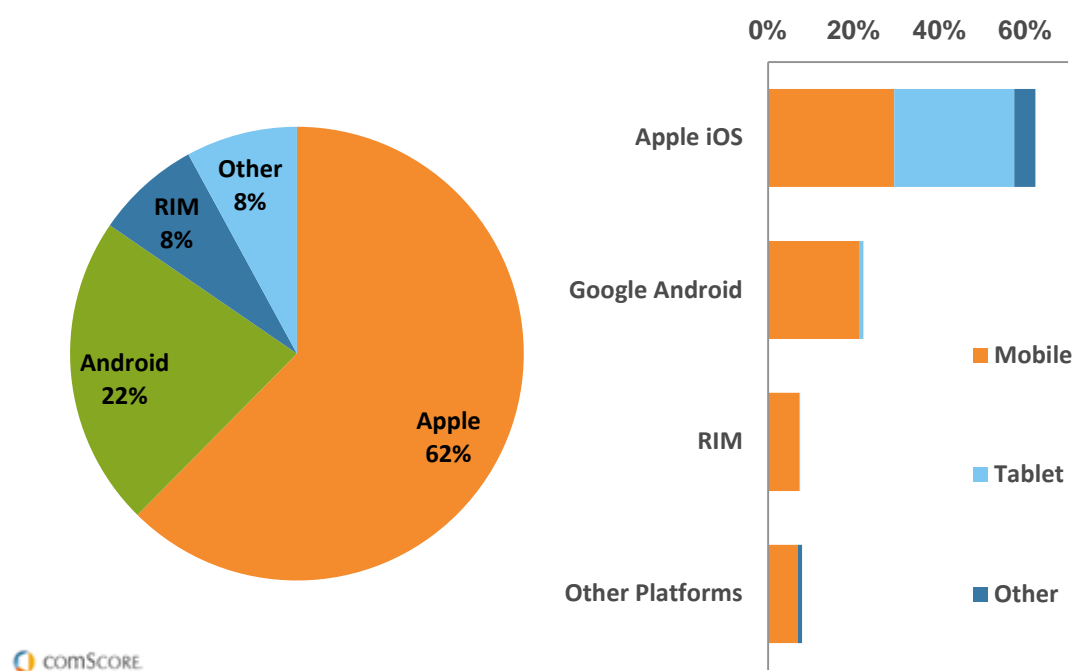
Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011



³The total universe of devices in this computation excludes feature phones and e-readers.

The size of the user base for these devices is not the only relevant measure; however, the platform market share as defined by the share of internet traffic measured through browser-based page views paints a different picture. According to this definition, Apple owned nearly two thirds of the EU5 market. The iOS platform (including iPad, iPhone and iPod Touch) accounted for 62 percent of all non-computer traffic generated in the region in October 2011. iPads heavily contributed to Apple's leading position, with 28 percent of all iOS browser-based traffic generated from these devices. In fact, iPads delivered nearly as much traffic as iPhones (29.5 percent of iOS traffic) in Europe. Google's Android ranked second with 22 percent of overall non-computer traffic in October 2011. Blackberry manufacturer RIM followed with an 8 percent market share, while other platforms such as Nokia's Symbian combined to account for 8 percent of non-computer traffic.

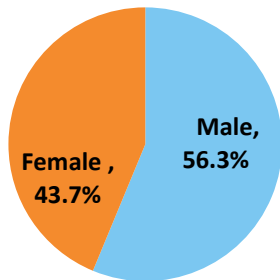
Platform Market Share of Digital Traffic
Source: comScore Device Essentials, EU5, Oct 2011



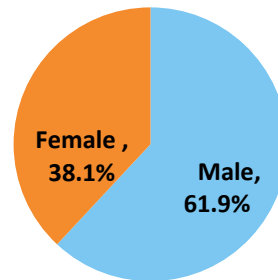
Demographic Analysis of Smartphone vs. Tablet Users

In the past year, tablets have played a key role in changing media consumption globally and across Europe. Although the Apple iPad continues to stand out as the leading tablet, the emergence of more affordable devices and new features promises to make tablets more accessible to a broader audience in the future. Currently, the European tablet audience is predominantly male (61.9 percent). Users age 25-34 accounted for the largest share of tablet owners at 22.3 percent, while those aged 35-44 accounted for an additional 19.6 percent. The most extreme gender divide was amongst German tablet owners where 65.3 percent of users were men. Amongst the smartphone audience, the UK was closest to an equal gender divide with 47.6 percent of all smartphone users being female.

EU5 Smartphone Owners by Gender



EU5 Tablet Owners by Gender

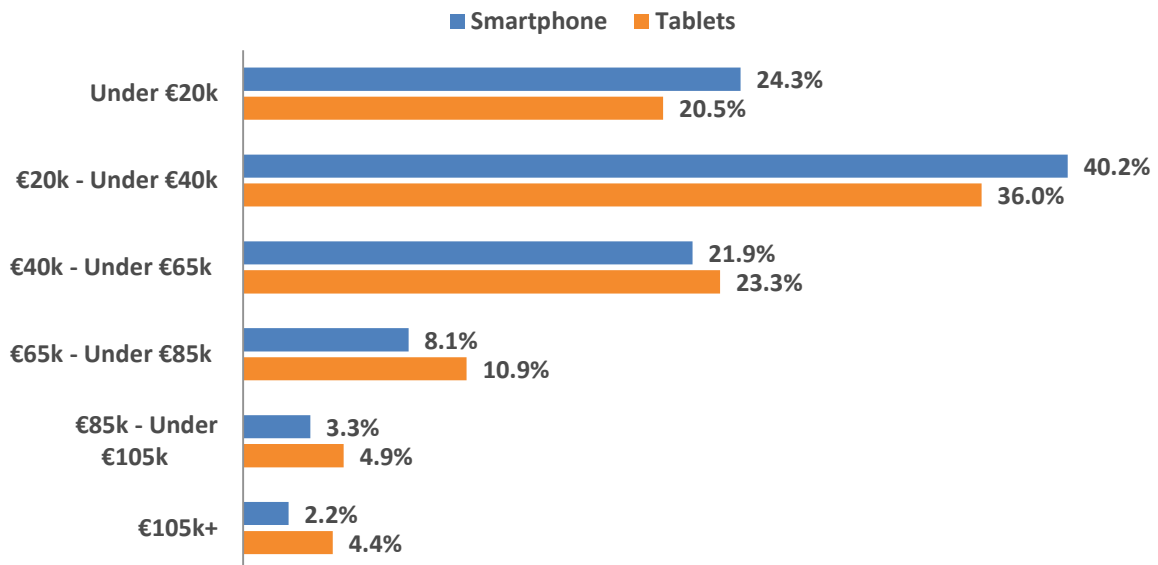


Source: comScore MobiLens, 3 mon. avg. ending Oct 2011

Smartphones and tablets are democratising the mobile internet – close to 60 percent of smartphone and tablet owners have incomes of less than €40,000. As the chart below illustrates, both smartphone and tablet ownership skews towards lower income households, smartphones more so than tablets. This might be surprising, given their price points. However, well over half the user base for both smartphones and tablets is in the lowest two income brackets. This suggests that internet enabled mobile devices are not exclusively enjoyed by the wealthy. Clearly, both smartphones and tablets are playing a big part in bringing internet technology to the masses. This trend will likely continue as more tablets at lower price points continue to become available.

Smartphone and Tablet Owners by Household Income

Source: comScore MobiLens, EU4*, 3 mon. avg. ending Oct 2011

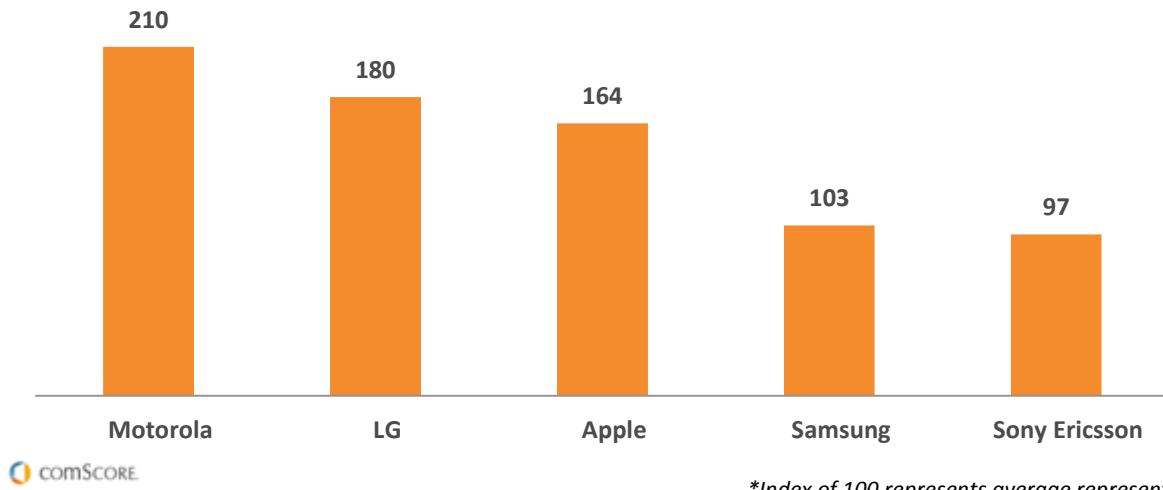


*EU4 includes France, Germany, Italy and Spain

Cross Device Ownership

Although a perception may exist that iPad owners all tend to have a strong affinity for Apple products, a cross ownership analysis indicates that may not be the case. Across the EU5, iPhone owners were 64 times more likely than the average smartphone user to also have an iPad, but users of other phones showed a similar tendency. Motorola owners, for example, were 110 percent more likely, and LG owners were 80 percent more likely to own an iPad. This cross device ownership analysis demonstrates that the iPad’s popularity extends well beyond loyal Apple customers.

Index *of Smartphone OEM Owners to Apple iPad Owners
 Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011





*Index of 100 represents average representation

Amongst all owners of Android tablets, 23.6 percent also used a smartphone running on Google’s OS and 20.1 percent of Playbook (RIM) owners were also loyal Blackberry users. It might not come as a surprise that Apple has the highest share of loyal users across devices, as services such as iTunes and iCloud create a well-integrated multi-service experience.

Smartphone Ownership Amongst Tablet Users
 Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011

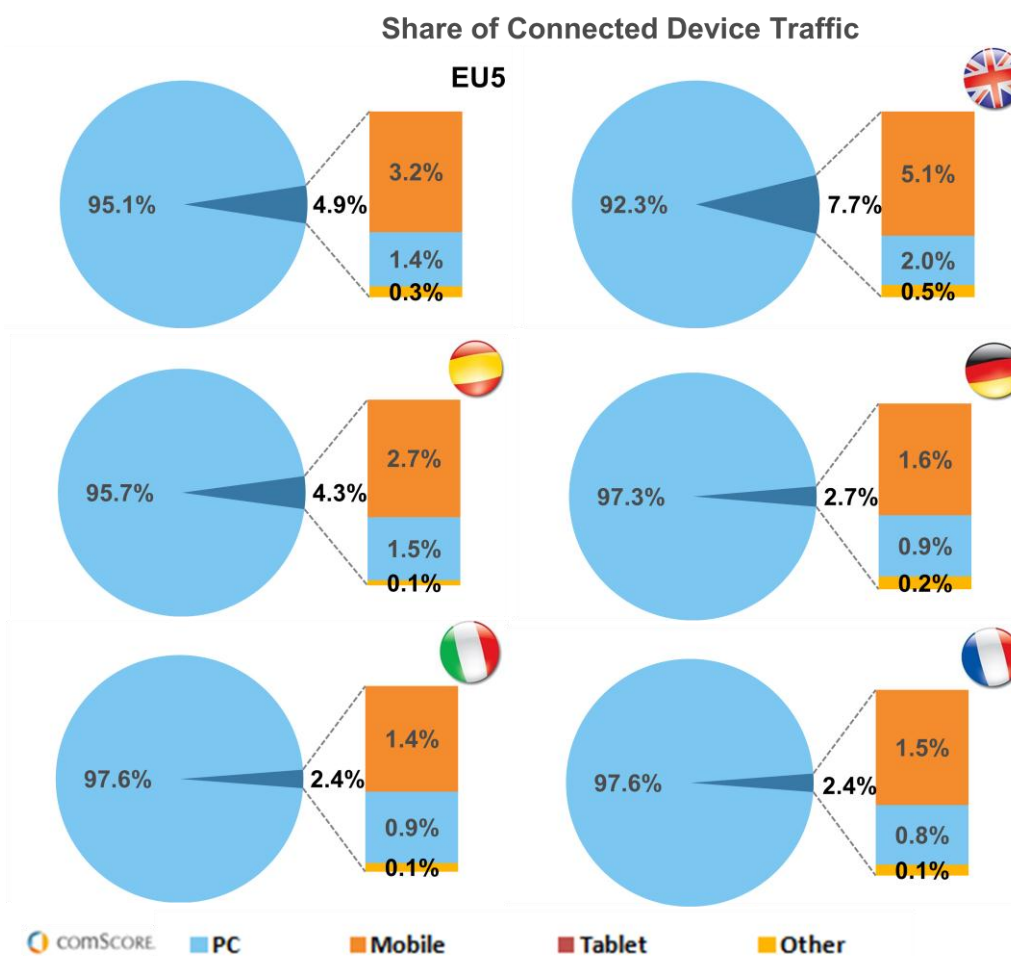
	Apple	Google	RIM
Apple	33.7%	7.5%	6.3%
Google	12.7%	23.6%	8.8%
RIM	5.4%	3.5%	20.1%

comSCORE

Connected Device Overview and Analysis

In an analysis of October 2011 internet traffic⁴ from the EU5 markets, the UK led with the highest share coming from non-computer sources (i.e. connected devices and mobile phones) at 7.7 percent. Across the EU5 region computer usage accounted for 95.1 percent of all browser based page views, with mobile devices (3.2 percent) accounting for a considerable amount of the remaining 4.9 percent of non-computer traffic. 1.4 percent of digital traffic in Europe can be attributed to tablets, while the remaining 0.3 percent to other connected devices such as games consoles. France and Italy had the lowest share of traffic coming from non-computer devices, whereas the UK leads the EU5 markets with 7.7 percent of all browser based traffic coming from connected devices. The majority of this non-computer traffic is from mobile phones (5.1 percent) and tablets (2.0 percent).



Source: comScore Device Essentials, Oct 2011

Content Consumption by Device

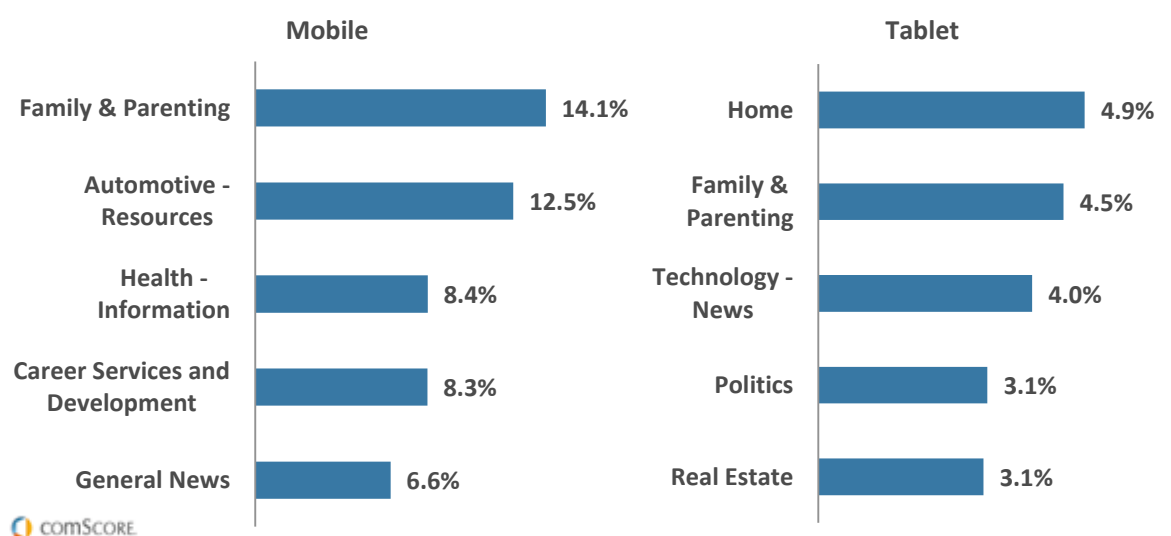
As a wide range of connected devices gain popularity in Europe and content consumption on mobile devices increases, it is essential to understand how users interact with digital content and which categories are popular. It won't come as a surprise that some types of media lend themselves more to the tech-savvy tablet users and that other activities are still mainly performed on computers. Please note that the data below only highlights content categories that have a very strong adoption of our

⁴ Internet traffic is measured here and throughout the paper as browser-based page views going to more than a million domains tagging with comScore from computers, mobile and other connected devices.

Unified Digital Measurement methodology. Other categories, where less than the majority of publishers have tagged their pages with us, such as Social Networking or Retail, are analysed separately later on in the report. The following analysis is an early representation of non-computer behaviour in Europe and shows interesting usage patterns per country.

In the EU5, the Family & Parenting category, including sites such as Disney and Glam’s Family sites, has been very popular amongst mobile users with 14.1 percent of browser-based page views to this category coming from mobile devices in October 2011. The Automotive Resources category, which includes sites such as AutoScout 24 and Trader Media’s Autotrader.co.uk, also stood out as a category exhibiting high relative activity via non-computer devices. Tablet users in the region showed the highest relative interest in sites providing information about Home Decor and Gardening, followed by Family & Parenting sites. The fact that Family & Parenting sites are more frequently visited via connected devices relative to the total internet raises the question if devices are used by multiple people per household, such as kids using their parents’ devices to visit Disney sites, for example. At the other end of the user spectrum, it is interesting that 4 percent of all traffic going to Technology News sites came from tablets – significantly higher than the tablet share of traffic going to the total internet – a strong indicator that tablet owners are technology early adopters.

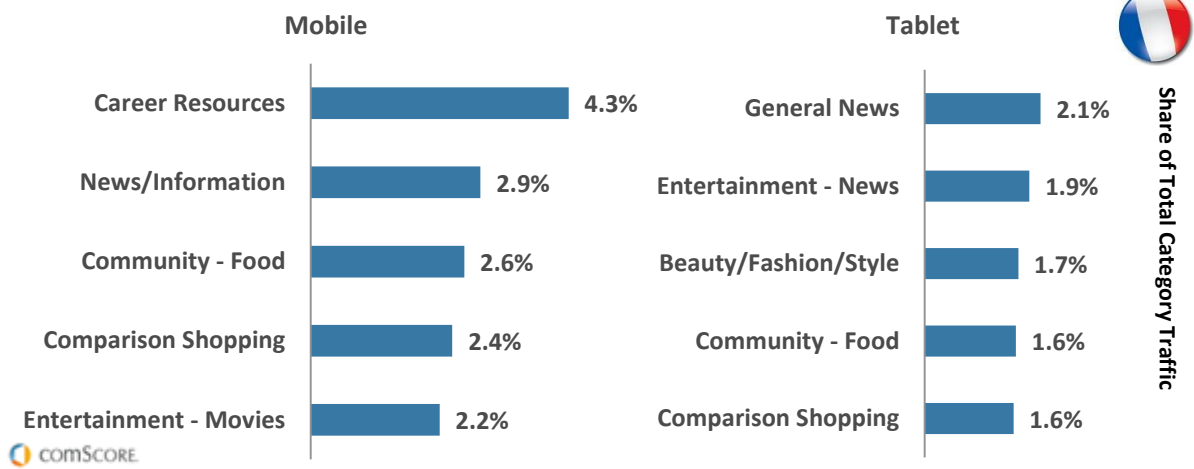
Leading* Categories Accessed in EU5
 Source: comScore Device Essentials, Oct 2011



**Based on categories in which a majority of the sites have adapted our UDM Methodology, which utilises census-level information from tagged web page content.*

It is a very different story in France, where mobile users show the highest relative propensity to seek career information on-the-go, with non-computer traffic accounting for 4.3 percent of total traffic to the category. News/Information (e.g. Le Monde and Le Figaro) and General News (Yahoo! News Network) were also amongst the leading categories for mobile and tablet users.

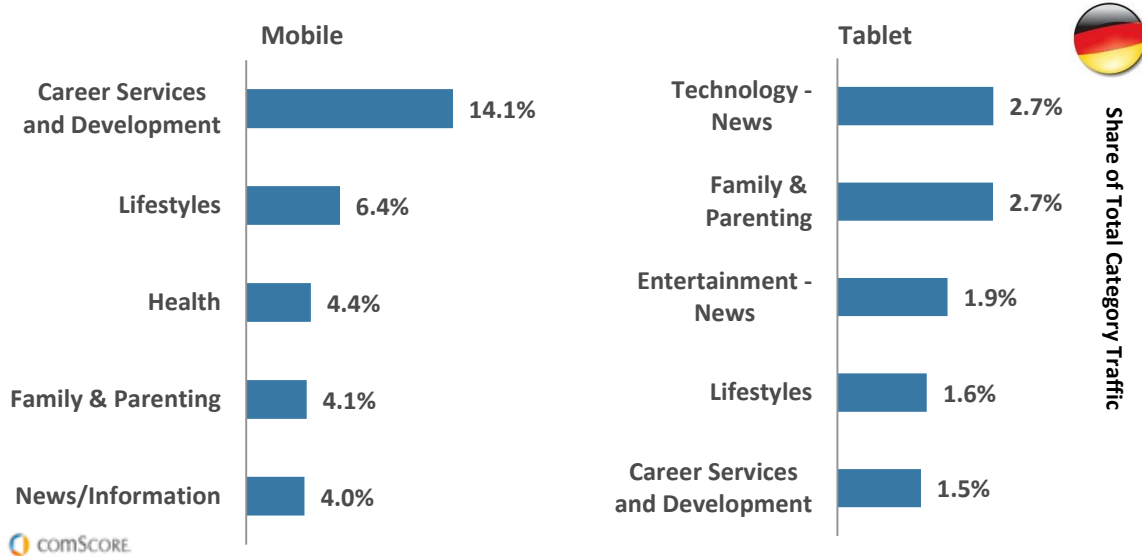
Leading* Categories Accessed in France
 Source: comScore Device Essentials, Oct 2011



*Based on categories in which a majority of the sites have adapted our UDM Methodology, which utilises census-level information from tagged web page content.

In Germany, sites in the Career Services and Development category such as Stepstone and Monster succeeded in attracting mobile users to their platforms with 14.1 percent of browser-based page views to this category coming from mobile devices in October 2011. Another category that attracted a high share of traffic from mobile users was Lifestyles (e.g. Glam Media and auFeminin) with 6.4 percent – well above the average share of browser based page views coming from mobile devices in Germany. As already observed in other European markets, Technology News sites and Family & Parenting sites also attracted a considerable share of page views from tablets.

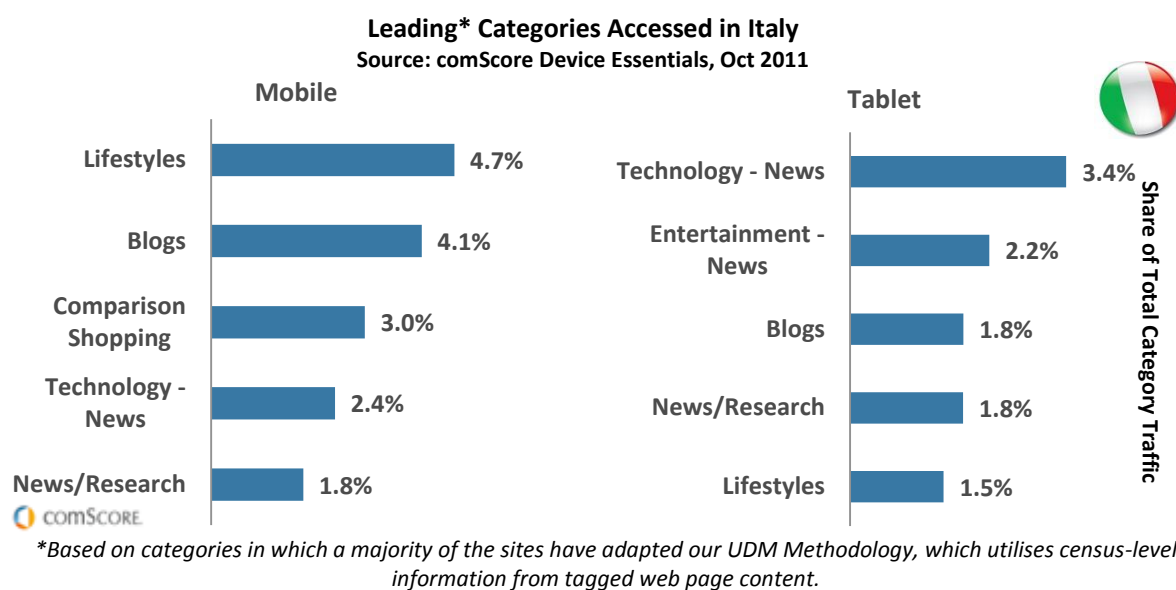
Leading* Categories Accessed in Germany
 Source: comScore Device Essentials, Oct 2011



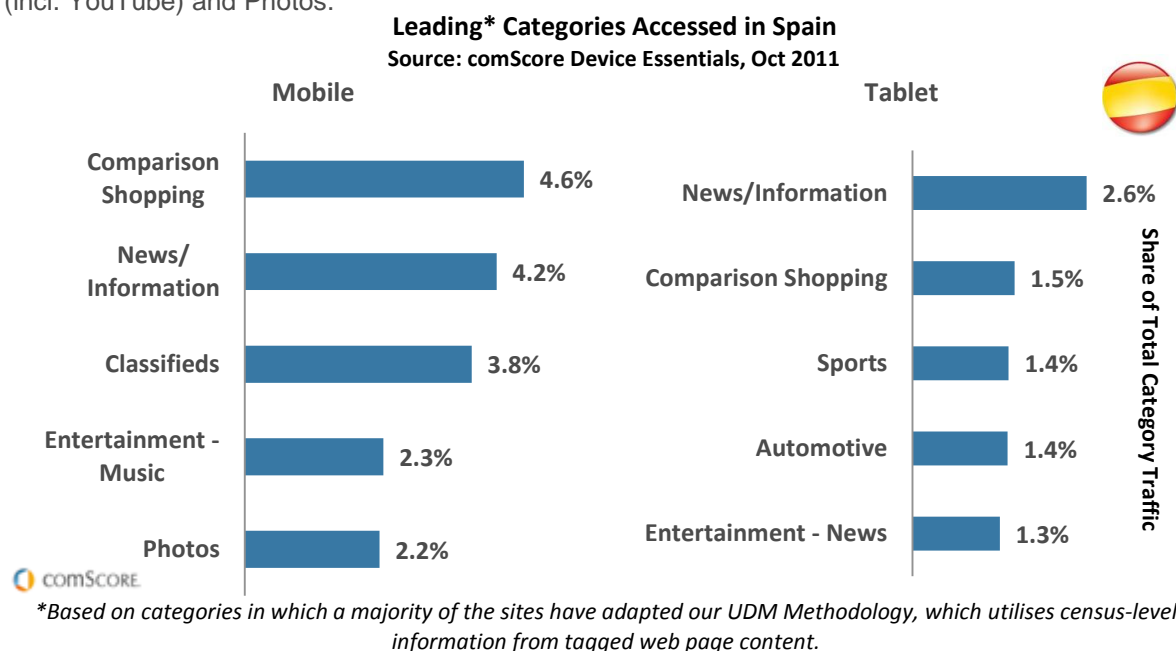
*Based on categories in which a majority of the sites have adapted our UDM Methodology, which utilises census-level information from tagged web page content.

Lifestyle sites, Blogs and Comparison shopping sites stand out as examples of categories in Italy, with 4.7 percent of total traffic going to Lifestyle sites coming from mobile devices. Categories of sites that exhibited high relative tablet traffic activity were Technology News and Entertainment News with 3.4 percent and 2.2 percent, respectively. Another group of sites that attracted a high share of traffic from

tablet users were Blogs with 4.1 percent – well above the average share of browser based page views coming from tablets in Italy.

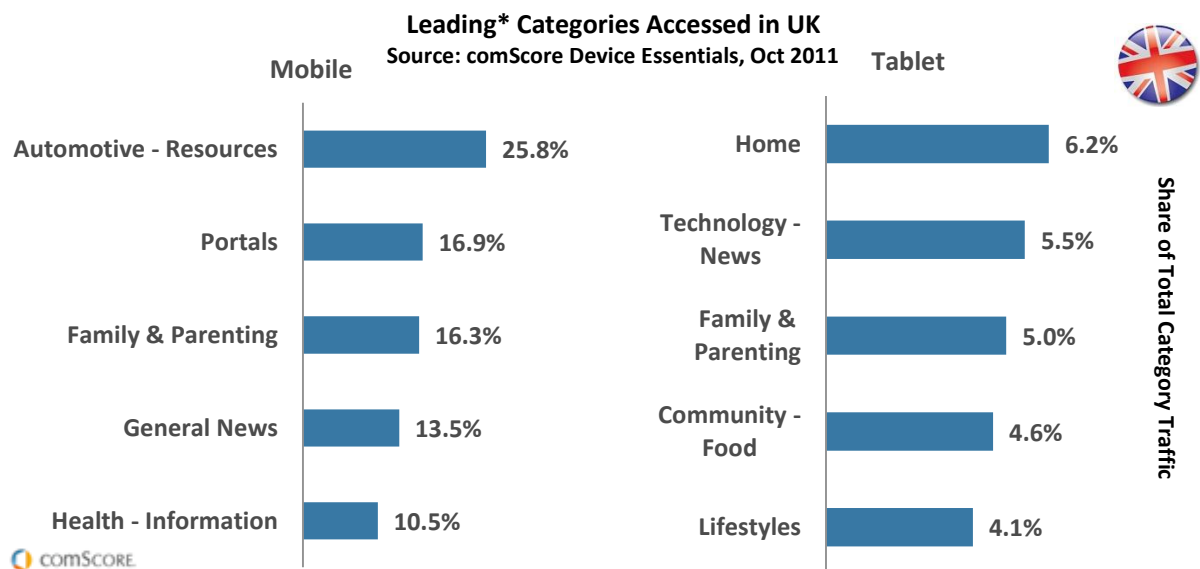


In October 2011, 4.6 percent of all traffic to comparison shopping sites in Spain came from mobile devices and 1.5 percent from tablets, making it the category with the highest share of mobile traffic and the second highest share of tablet traffic in Spain. A category with an even higher share of tablet traffic was News/Information including sites such as El mundo.es and Elpais.com. Other categories that accounted for above average tablet consumption in Spain were Classifieds, Entertainment Music (incl. YouTube) and Photos.



The UK ranked ahead of other EU5 markets in terms of browser based non-computer traffic at 7.7 percent in October 2011. Nonetheless, it is surprising that more than 25 percent of the total traffic to the Automotive Resources category came from mobile devices – by far the highest share amongst any category across Europe. Other categories with more than 10 percent of browser-based traffic were Portals, Family and Parenting, General News and Health Information. The differences between

the UK and other European markets are less apparent when analysing categories heavily used by tablet owners. In October 2011, the Home category had high relative tablet traffic (6.2 percent), followed by Technology News (5.5 percent).

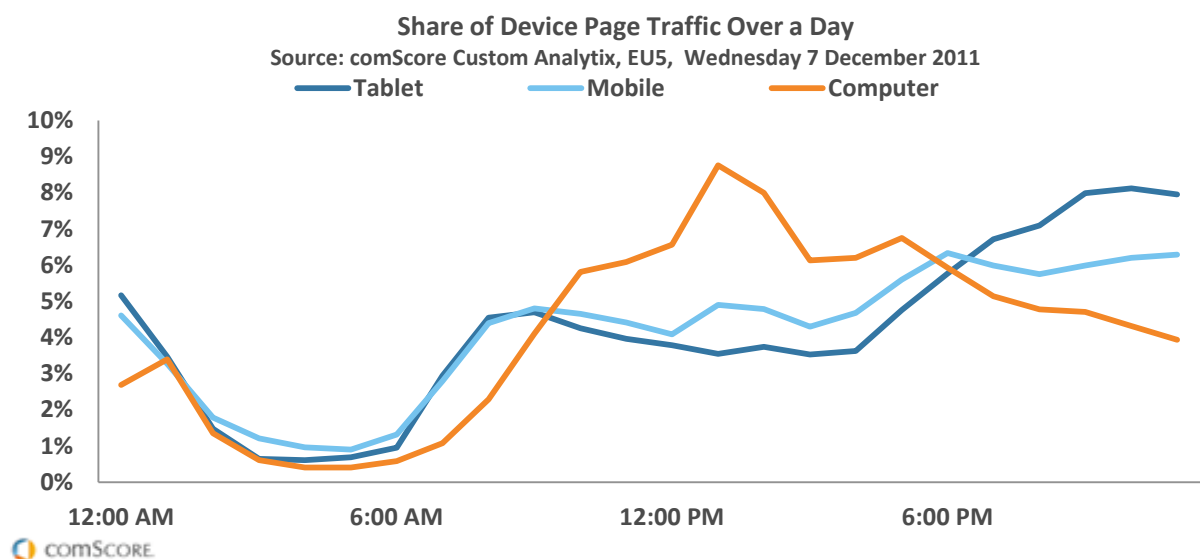


*Based on categories in which a majority of the sites have adapted our UDM Methodology, which utilises census-level information from tagged web page content.

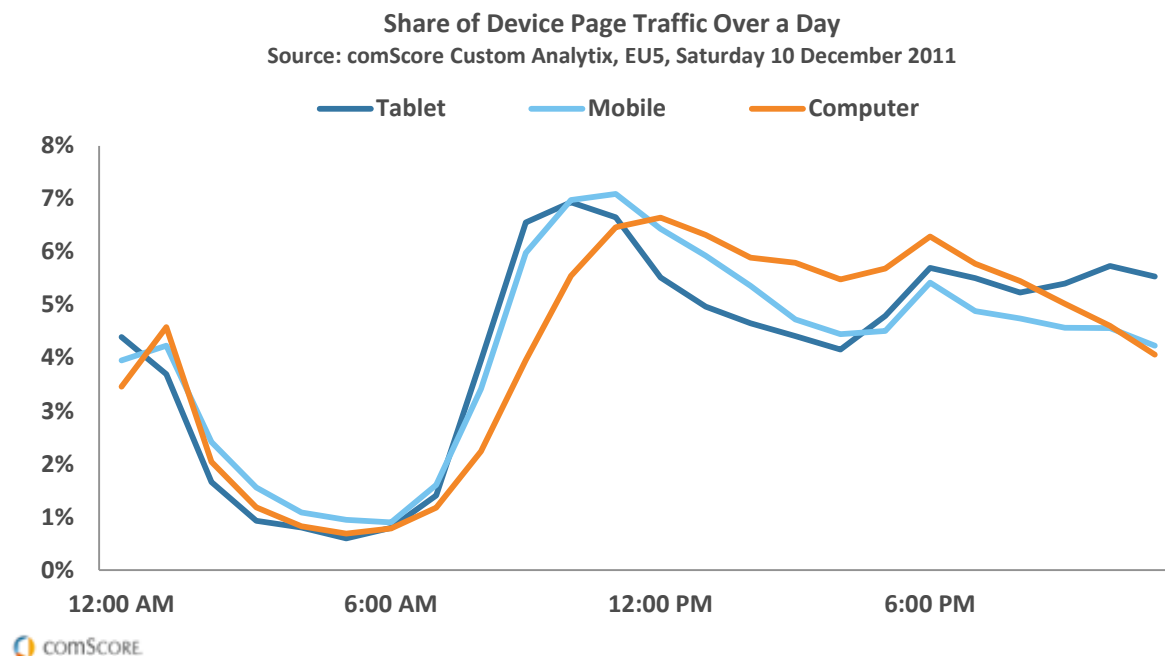
Behaviour of European Smartphone and Tablet Owners

Day Part Analysis

An important aspect to understanding today's connected consumer is observing how behavioural patterns shift by device throughout the day. The charts below, depicting a 24-hour period on a typical Wednesday, illustrates the share of each device's traffic by hour as a percentage of overall traffic from that device. Interestingly, we observed that during an average weekday, tablet usage experienced the highest relative percentage of its activity in the late evening between 9-11pm. Otherwise, mobile and tablet consumption patterns were quite similar with mobile traffic showing peaks during typical commuter travel hours (around 9am and 6pm). Computer-based traffic had its highest relative consumption during typical office hours, spiking around lunchtime.

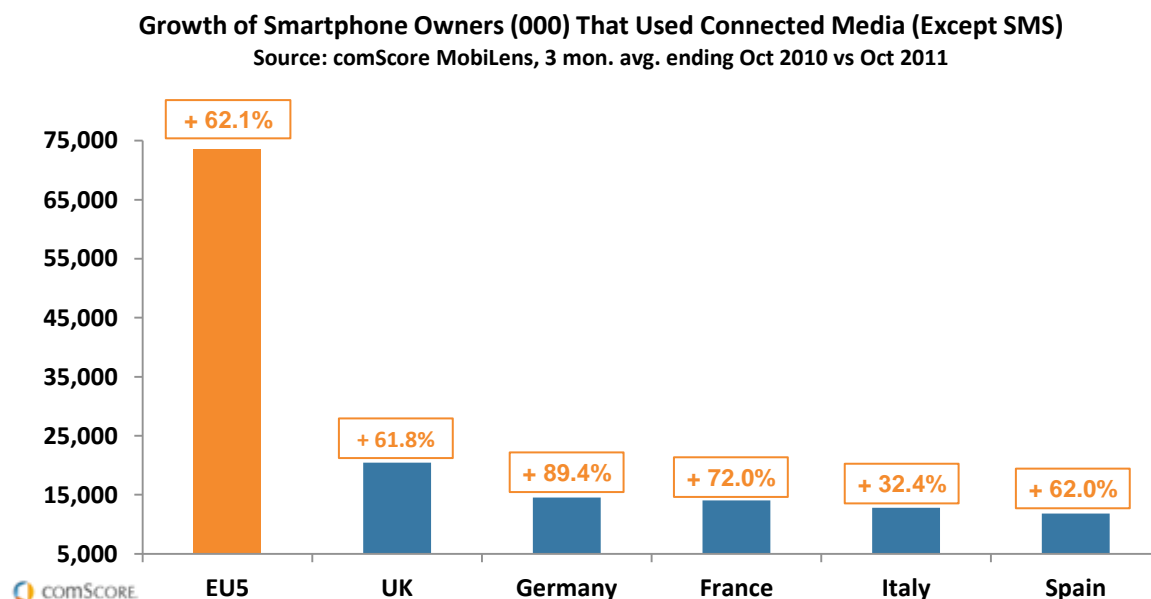


Device usage dynamics look different on weekends, with usage patterns of all three devices aligning more closely with one another. Two spikes occurred throughout the Saturday analysed, with the first peak around 11am, followed by another uptick in usage around 6pm.



Mobile Media Usage

In October 2011, 76 percent of smartphone owners in the EU5 were mobile media users, meaning that they browsed the mobile web, accessed applications, or downloaded content. The impressive 62 percent growth in the total number of mobile media users in the past year is largely attributable to the acceleration in smartphone adoption, 3G/4G network quality, and the increasing ubiquity of aggressively priced data plans, all of which facilitate the consumption of mobile media. Amongst the five European countries analysed, Germany stands out with the fastest growth rate of 89 percent while the UK had the largest audience with 20.4 million mobile media users via smartphones.

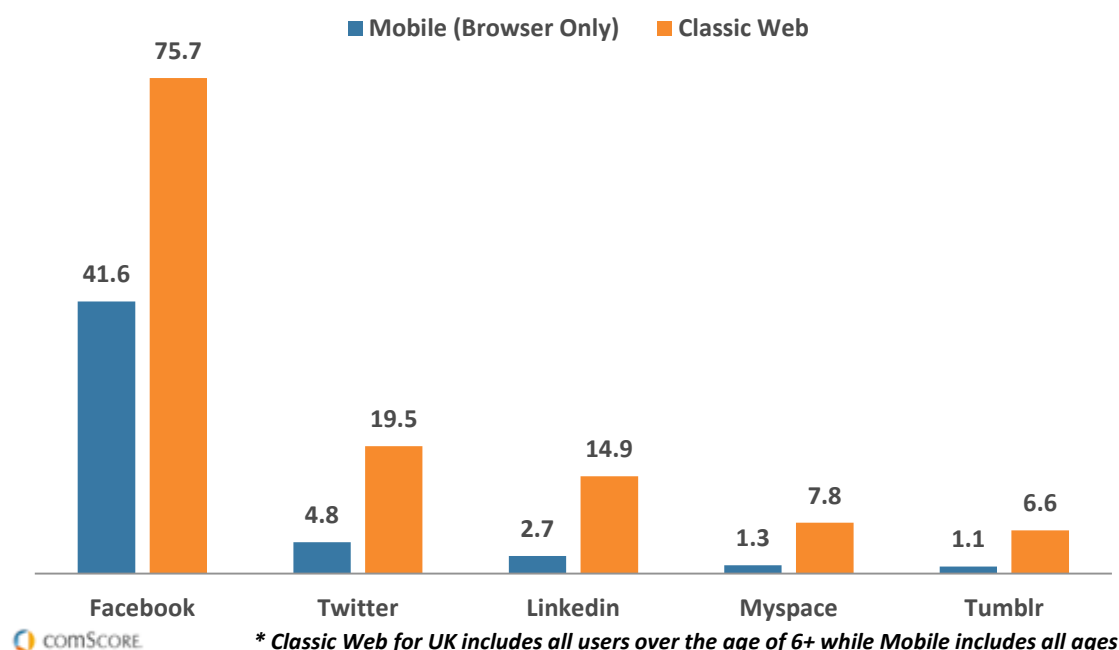


Some of the most popular activities of mobile media users included checking emails, accessing weather information, keeping up-to-date on news, and visiting retail sites. Worth a mention is also the considerable growth of mobile video. In EU5, 14.3 million people watched a video on their smartphone in October 2011, an increase of 61 percent since last year.

Social Networking On-the-Go

Another very popular activity amongst smartphone users is social networking. The number of monthly mobile social networking users has grown 46 percent in the past year, to reach 57.4 million users in October 2011. Interestingly, the 69 percent growth in daily social networking use outpaces that of mobile social networking growth as a whole, indicating that the mobile platform is conducive to frequent social networking use. The following chart, based on GSMA MMM⁵ data shows the most popular social networks amongst UK consumers who use their browser to access the mobile internet in comparison to the reach of these sites amongst classic web users. The mobile audience for social networking is still considerably smaller than the audience accessing social networks via a classic web interface through a fixed-line internet connection; however, Facebook reached more than 4 in 10 UK mobile browser users in October 2010.

Top 5 Social Networking Sites on Mobile* vs Classic Web by % Reach
 Source: GSMA MMM and comScore Media Metrix, UK, Oct 2011

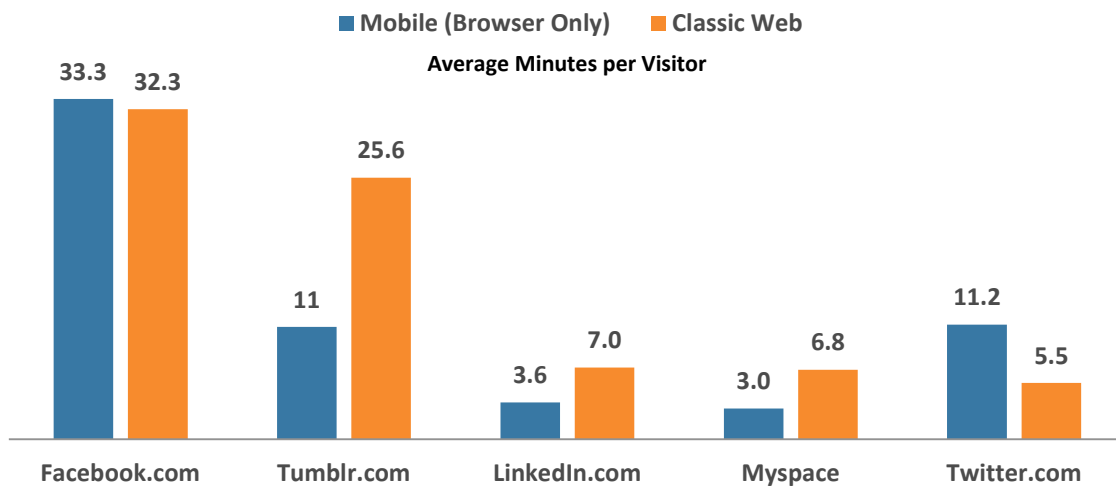


Interestingly, the comparison of engagement levels between classic web and mobile browser users reveals consumers spent more time on Facebook's and Twitter's mobile site than they spent on their web presence in October 2011. Every UK visitor spent an average of 33.3 minutes browsing on Facebook.com via their mobile device and 11.2 minutes on Twitter during the month.

⁵ GSMA Mobile Media Metrix reports on the total universe of UK mobile media users. Please see the methodology description at the end of this paper for further information.

Top 5 Social Networking Sites by Engagement on Mobile* vs Classic Web

Source: GSMA MMM and comScore Media Metrix, UK, Oct 2011

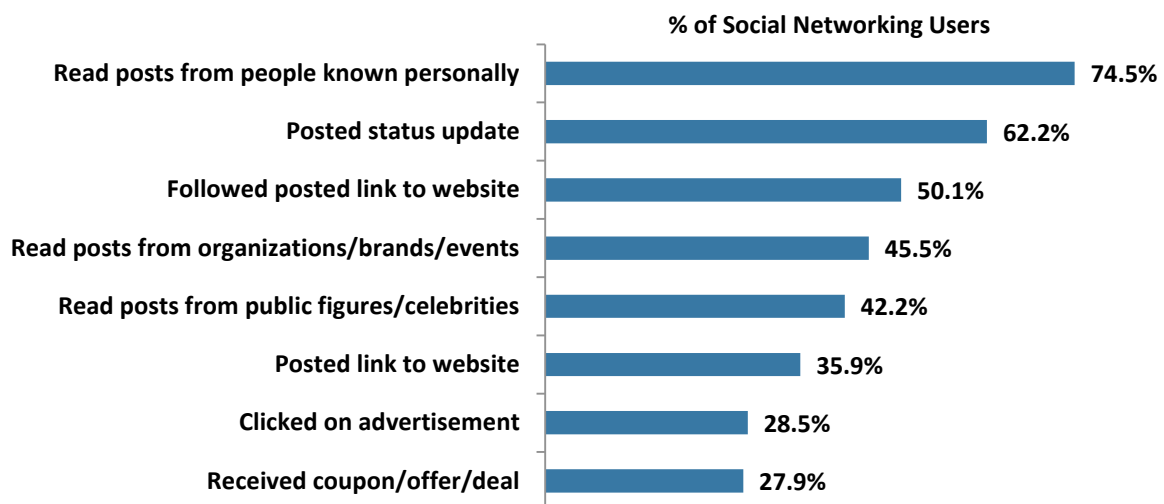


* Classic Web for UK includes all users over the age of 6+ while Mobile includes all ages

Especially relevant for marketers is what activities users pursue while using social media. In Europe, 74.5 percent of people who used social networks on their mobile phone during the month, read posts from people they knew personally. Other popular activities were posting of status updates and following posted links to websites.

Social Networking Activities

Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct. 2011

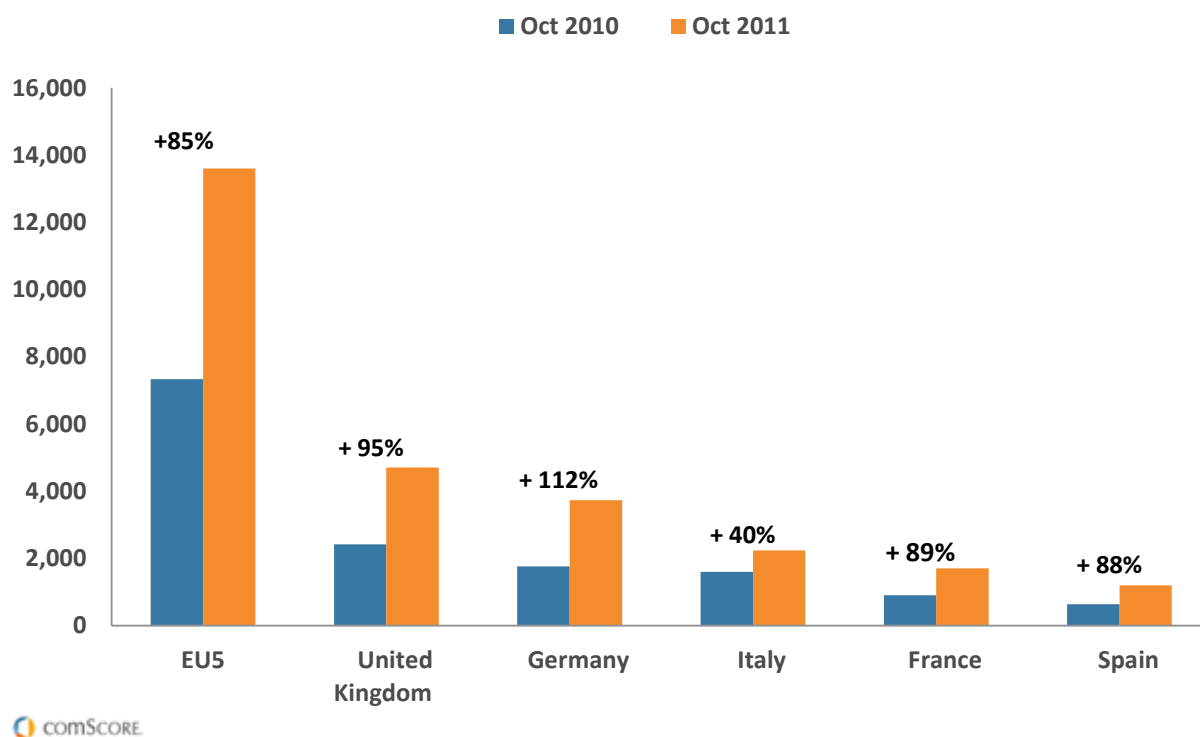


Mobile Retail and Marketing

Mobile retail is one of the fastest growing phenomena amongst smartphone users, with more than 13.6 million EU5 smartphone owners accessing a retail site in October 2011. Similar to the trends observed for mobile media users, the UK had the largest audience with 4.7 million people, but Germany accounted for the largest increase in users with a 112 percent growth year-over-year. The double or triple-digit growth rates across Europe represent an excellent opportunity for retailers to make their goods readily accessible to today's connected consumers.

Growth of Mobile Retail Users (000)

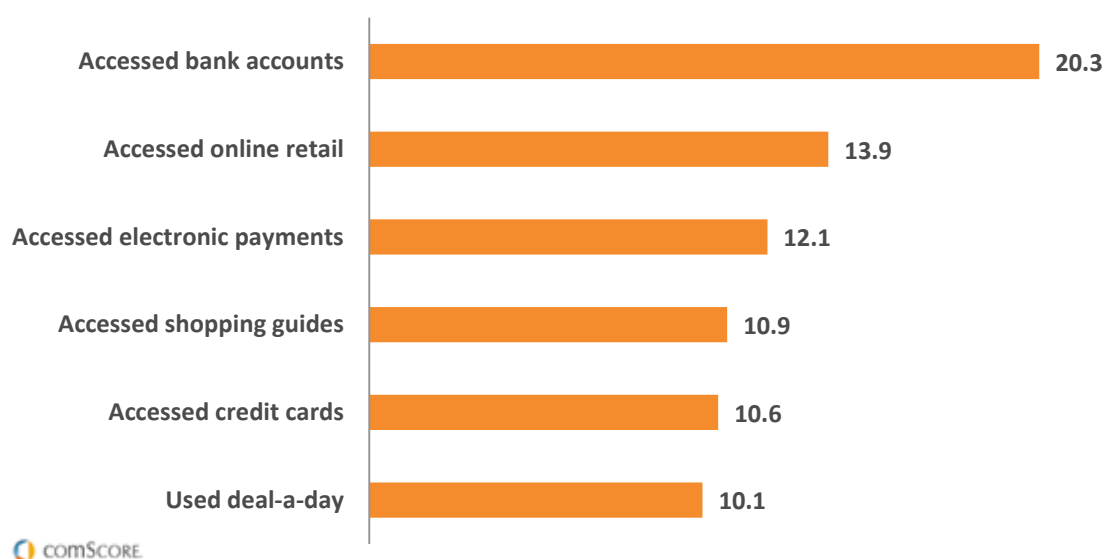
Source: comScore MobiLens, 3 mon. avg. ending Oct 2010 vs Oct 2011



In the EU5, people do not only visit retail sites, but a large share of smartphone owners managed their bank account from their device (20.3 percent), used electronic payment services to purchase goods (12.1 percent), or searched through shopping guides for the best products (10.9 percent).

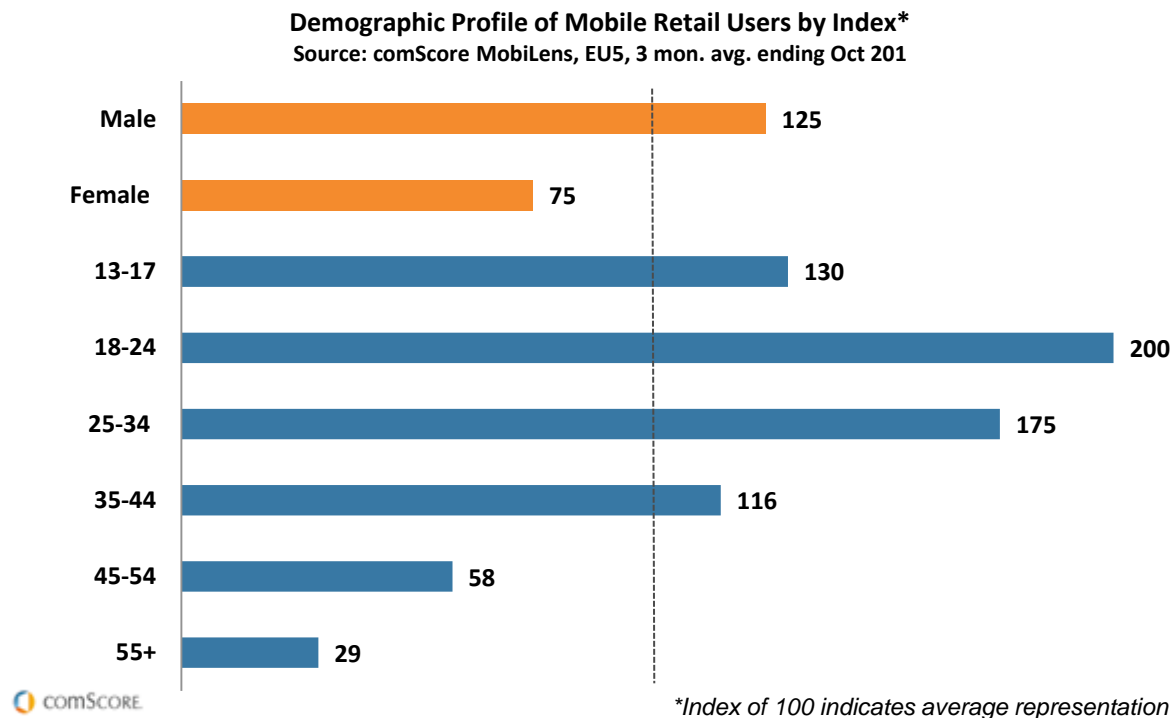
E-commerce and Related Services Accessed by % of Smartphone Users

Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011



A demographic analysis of mobile retail users reveals that in Europe, men were 25 percent more likely than the average mobile owner to access mobile retail sites. Furthermore, mobile users between 18-

24 years of age were twice as likely to visit a mobile retail site as the average mobile consumer, while those age 25-34 were nearly 75 percent more likely.



Alongside the emergence of mobile commerce, we have more recently noticed another important shift in consumer behaviour with the use of smartphones in physical retail locations. Smartphones open up a whole new world for consumers, giving them the ability to search for the store closest to them or even compare prices of specific products while in-store. Bricks-and-mortar retail locations were once a bubble for consumers, who became a captive audience once inside the doors, but with the advent of smartphones, consumers can pull information, compare prices or solicit opinions from beyond the store walls. In October 2011, nearly 22 percent of EU5 mobile users took a picture of the product while in a retail store, making it the most popular e-commerce related activity. A significant percentage of smartphone users in retail stores also texted or called friends or family about a product (14.9 percent). New technologies also gained traction with European smartphone users with 6 percent scanning a QR code in-store.

Top Activities Performed in a Retail Store by % of Smartphone Users

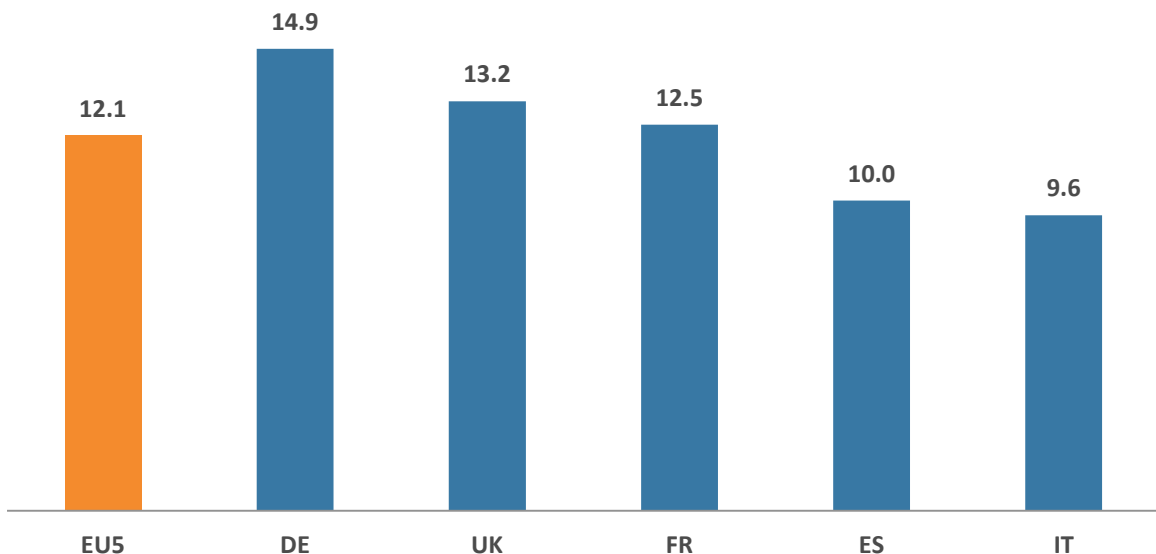
Source: comScore MobiLens, EU5, 3 mon. avg. ending Oct 2011



The overall European audience for QR or bar codes was considerably larger than for in-store, as codes can not only be scanned while in a retail store but also at home, at work, on public transport or even while dining in a restaurant. The highest penetration of QR code users was in Germany, with nearly 15 percent making use of this emerging technology in October 2011.

% of Smartphone Users Scanning QR/Bar Code

Source: comScore MobiLens, 3 mon. avg. ending Oct 2011



Conclusion & Market Implications

For most of the past fifteen years, the “digital consumer” has been shorthand for users of personal computers connecting to the internet. The rise of smartphones has created an audience that is often “on-the-go”, using mobile operator networks and increasingly, WiFi connections to access content when and where it wants. Now, with the rapid rise of tablets, consumers have even more choices for how, when, and where they can connect to the network, to communicate with friends, families and colleagues, access relevant information, and engage in commerce. As illustrated throughout this report, digital consumption in Europe is changing:

- **Smartphones and Tablets are gaining on computers.** The mix of digital consumption away from desktops and laptops is real and growing. It wasn't long ago in digital history that 100 percent of traffic came from desktops or laptops; now nearly 5 percent of all browser traffic in the EU5 is generated by mobile phones and other connected devices. In the UK market, nearly 8 percent of traffic is sourced outside the computer and this trend is growing monthly driven by increased adoption of these devices movement away from desktop and laptop computers usage. Smartphones and tablets will continue to gain against the PC in an era where mobile computing will be the norm.
- **Mobile Media is booming.** Smartphones are the catalyst for this shift to mobile media consumption: Three out of every four European smartphone owners access mobile media. What was once the province of high tech early adopters is now a mainstream, commonplace activity. The rise in smartphone ownership and particularly the popularity of touch screen devices has the additional effect of preparing consumers to embrace the multi-touch category of tablets. Advertisers need to move quickly to develop a mobile presence (apps, mobile optimized sites) while publishers must expect demands for content on the go to continue to grow.
- **The EU5 market is fragmented across ecosystems.** Consumers are increasingly technology savvy and aware that they are choosing an ecosystem: The high ranking of “operating system” and “selection of apps” among smartphone purchasers, a finding we expect would be replicated amongst tablet purchasers, demonstrates that consumers understand that their choice of device is also the choice of a content ecosystem. As more and more consumers purchase connected devices and cloud based media content tied to a specific platform, major players like Apple, Google, and Microsoft will fight even harder to gain ecosystem share. One can expect three major ecosystems to emerge with Apple and Google leading the way and the new partnership of Microsoft/Nokia, providing another option to consumers; RIM will continue to remain attractive to Enterprise segments, but will continue to struggle to maintain relevancy.
- **Apple's halo continues to expand with the iPad.** Apple continues to maintain a first mover advantage; however, other tablets are ramping up quickly and driving consumption. While the tablet audience remains small relative to smartphones and computers, it is growing very rapidly and having an outsized impact on media consumption. The fact that the iPad, a device that has been available to consumers for only two years, is now responsible for as much traffic in Europe as the iPhone, helps explain the rush that media publishers and advertisers are in to engage with this audience. Apple's halo will continue to pull in iPad users especially with sticky ties like iTunes and iCloud services; Amazon's Kindle Fire will provide content consumers with a new option, when fully distributed to Europe.

- **Mobile commerce is taking off and reshaping expectations for the retail industry.**
Consumers will continue to expect mobile commerce as a fact of life and will only accelerate their usage of mobile devices to conduct commerce transactions. Retailers and advertisers need to embrace the mobile commerce use case and develop compelling consumer solutions built across the leading mobile ecosystems.

With more devices entering the market, 4G network deployments, dropping costs of processing power, increasing smartphone and tablet adoption rates, the industry must prepare for significant disruption to the digital media environment. For marketers, advertisers, and media companies trying to reach a target audience, the consumer has never before been such a moving target. This represents an enormous opportunity for companies that can understand and leverage this shift in consumer behaviour to their advantage; those who do not work to understand this emerging reality risk being left behind.

Methodology and Definitions

The report utilises data from products within the comScore mobile suite of services, including MobiLens, Device Essentials, and Total Universe.

comScore MobiLens

MobiLens provides market-wide insight into mobile digital media consumption, brand-level audience metrics, and details of device ownership and technology penetration. Using proprietary data collection methods, we survey nationally representative samples of mobile subscribers age 13+ in the U.S., UK, France, Germany, Spain, Italy, Canada, and Japan. The MobiLens survey solely focuses on the mobile users' primary handset and does not report on activity for other handsets a user may own. The MobiLens' sampling and survey methods undergo extensive analysis and market validation including comparisons to known network operator market shares, leading handset model shares, downloading activity, and other usage metrics. For 2011, the following represent the estimated monthly survey completes by market utilised for this report:

- UK and Germany: 5,000 mobile phone owners
- France, Spain and Italy: 4,000 mobile phone owners

For more information, please visit:

http://www.comscore.com/Products_Services/Product_Index/MobiLens

comScore GSMA Mobile Media Metrix (MMM)

GSMA Mobile Media Metrics (MMM) is a partnership between the GSM Association (GSMA), comScore, and the UK's 4 mobile operators: O2, Vodafone, EverythingEverywhere and 3UK. MMM provides a census-level solution for mobile media reporting, taking irreversibly anonymised mobile internet usage data from 3 of the 4 UK mobile operators. The census data collected from the operators is ascribed with demographic data collected from a permission-based sample of mobile users. MMM delivers key market-level mobile web visitation and engagement metrics, as well as usage figures for connected apps.

For more information, please visit:

http://www.comscore.com/Products_Services/Product_Index/GSMA_Mobile_Media_Metrics_MMM

comScore Device Essentials

comScore Device Essentials provides insight into digital traffic share across all devices worldwide, offering detail into device characteristics, connection type, and category consumption. The product is based on the comScore Unified Digital Measurement (UDM) approach, measuring browser-based page views coming from computers, mobile, and other connected devices to more than one million domains tagging with comScore. Device Essentials also utilises the comScore Client Focus Dictionary to segment connected device usage into content categories.

For more information, please visit:

http://www.comscore.com/Products_Services/Product_Index/Device_Essentials

About Telefónica Germany

Telefónica Germany GmbH & Co. OHG belongs with its commercial brand O₂ to Telefónica Europe and is part of the Spanish telecommunication group Telefónica S.A. The company offers its German private and business customers postpaid and prepaid mobile telecom products as well as innovative mobile data services based on the GPRS and UMTS technologies. In addition, the integrated communications provider also offers DSL fixed network telephony and high-speed internet. "Kundenmonitor Deutschland 2011" honoured Telefónica Germany as the network operator with the most satisfied mobile phone customers in the German market for the fifth time in a row. Telefónica Europe has more than 58 million mobile and fixed network customers in Great Britain, Ireland, the Czech Republic, Slovakia and Germany.

About comScore, Inc.

comScore, Inc. (NASDAQ: SCOR) is a global leader in measuring the digital world and preferred source of digital business analytics. comScore helps its clients better understand, leverage and profit from the rapidly evolving digital marketing landscape by providing data, analytics and on-demand software solutions for the measurement of online ads and audiences, media planning, website analytics, advertising effectiveness, copy-testing, social media, search, video, mobile, cross-media, e-commerce, and a broad variety of emerging forms of digital consumer behaviour. comScore services, which now include the product suites of recent acquisitions AdXpose, Nedstat, Nexius XPlore, ARSGroup and Certifica, are used by more than 1,800 clients around the world, including global leaders such as AOL, Baidu, BBC, Best Buy, Carat, Deutsche Bank, ESPN, France Telecom, Financial Times, Fox, Microsoft, MediaCorp, Nestle, Starcom, Terra Networks, Universal McCann, Verizon Services Group, ViaMichelin and Yahoo!. For more information, please visit:

www.comscore.com



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