CONSUMERLAB



INTERNET GOES MOBILE

A study of ICT usage trends in urban Maghreb

An Ericsson Consumer Insight Summary Report February 2015

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METHODOLOGY

This study of ICT usage represents 23 million consumers living in urban areas in Maghreb.

The research survey was conducted in cities within Algeria, Morocco and Tunisia using random sampling. A total of 2,425 face-to-face interviews were carried out using quantitative methods within the fieldwork period of July to August 2014. The respondents were consumers aged 15–59 across all socioeconomic classes, living in urban regions.

Overall, the findings represent 33 percent of the total population of Maghreb.



THE VOICE OF THE CONSUMER

Ericsson ConsumerLab has 20 years' experience of studying people's behaviors and values, including the way they act and think about ICT products and services. Ericsson ConsumerLab provides unique insights on market and consumer trends.

Ericsson ConsumerLab gains its knowledge through a global consumer research program based on interviews with 100,000 individuals each year, in more than 40 countries and 15 megacities – statistically representing the views of 1.1 billion people.

Both quantitative and qualitative methods are used, and hundreds of hours are spent with consumers from different cultures.

To be close to the market and consumers, Ericsson ConsumerLab has analysts in all regions where Ericsson is present, which gives a thorough global understanding of the ICT market and business models.

All ConsumerLab reports can be found at: www.ericsson.com/consumerlab

MAGHREB: MARKET OVERVIEW

Consumers are keen to harness the

BENEFITS OF TECHNOLOGY



Urban Maghreb is home to consumers who are becoming accustomed to using technology in every area of their lives, be it education, business, healthcare or entertainment.

These urban consumers will lead the technology transformation that will eventually influence the region as a whole.

Knowledge, flexibility and networking

60 percent of consumers living in urban Maghreb want to stay up-to-date with the latest information, and more than half think that technology can help them to increase their knowledge. 50 percent also feel that the internet will provide more flexibility in their work and personal lives. Most people who have started using the internet think that building and maintaining an online identity can provide them with employment or networking opportunities.

There is a lot of emphasis on familial bonds in the region, with 40 percent of people living in extended families. This translates into closer ties between family members and a greater need to stay informed and connected.

A sense of belonging

People show a high willingness to leverage the benefits of online entertainment services, such as TV, video and social networking. Many feel that being connected brings them a sense of belonging in modern society. Consumers in urban Maghreb also want the government to come up with affordable online learning and e-healthcare services.

Growing smartphone ownership

Ownership of personal ICT devices is on the rise in the region. Mobile phones, with a 96 percent penetration in urban areas, stand as the primary communication device. More than one third of all mobile phones are smartphones, and according to global trends, smartphone ownership looks set to keep growing. When it comes to larger screens, we see that nearly half of consumers use laptops, only slightly outnumbering desktops. Tablets have started to make an appearance in the region, with a penetration slightly above 10 percent.



KEY FINDINGS

Maghreb is part of the connected world

> Device ownership and internet usage will continue to increase

Consumers have positive attitudes and expectations towards technology

> They are accustomed to using technology frequently in all areas of their lives, and are interested in harnessing the benefits to improve their knowledge and education

Mobile data usage is set to double in the next 12 months

> Use of mobile data is catching up with that of Wi-Fi and fixed access, allowing consumers to access the web from anywhere, at any time

Smartphone adoption drives app usage

> More consumers are beginning to favor smartphones above traditional devices, allowing them to browse the internet and consume media on the go

Network quality and performance are key to satisfaction and adoption

> Internet connection speed and the extent of network coverage are key criteria for 70 percent of mobile internet users when selecting an operator service. Network performance is the top criterion for satisfaction with mobile operators

Other sectors will experience the benefits of being connected

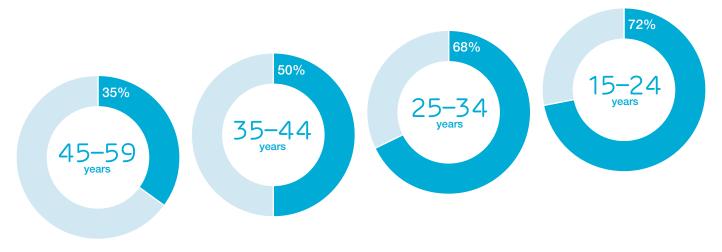
> People expect that over time, more sectors that play a key role in society will become connected. This includes the potential for mobile commerce and e-government services

INTERNET ON THE RISE

A positive mindset towards technology and having access to a range of devices has made it easier for people to start using the internet. Overall, internet penetration in urban Maghreb stands at 60 percent, with Morocco having the highest penetration at 75 percent. Of those who are yet to use the internet

in urban Maghreb, more than half claim to understand the importance and advantages of staying connected, and feel that they need to explore the opportunities. Internet consumption is driven by the young, with over 70 percent of consumers in the 15–24 age bracket using the internet frequently, as shown in Figure 1.

Figure 1: Internet adoption by age group



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: All users

On a level with Western countries

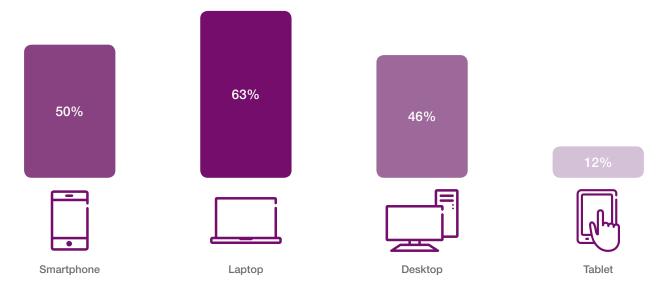
The urban youth has an avid interest in social networking, instant messaging, emailing, and making video calls using services such as Skype and Google Talk, thereby driving up average internet usage.

A key insight gained from the study was that when it comes to internet usage, the 15–24 year olds of urban Maghreb are on a level with their counterparts in Western countries such as the UK and the US. In fact, weekly usage of internet services and apps by the online youth shows a consistent pattern across these countries.



GETTING CONNECTED

Figure 2: Internet usage on different devices



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: Internet users

People are certainly opening up to the idea of using the internet more, and are comfortable accessing it through different devices. The spread of internet usage across these different device types is shown in Figure 2.

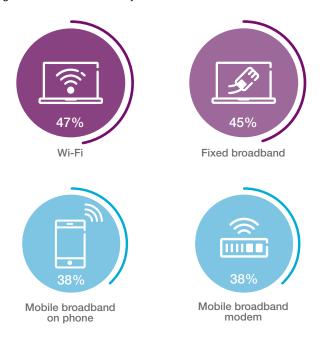
We can observe that although laptops are the most commonly used device for connecting to the internet, half of internet users are also connecting through their smartphones. This percentage is set to grow as consumers express significant interest in purchasing a smartphone in the future. One in five consumers expressed an intention to buy a new smartphone within one year. This group comprises a diverse mixture of people, including those who already use a smartphone and want to upgrade, and those who want to start using a smartphone for the first time. Low-cost smartphones have the potential to further boost smartphone uptake in Maghreb, where price is the biggest purchase barrier.

Fixed versus mobile access

We can observe from Figure 3 that people use a rich mix of connectivity options to get online. Fixed access is used regularly by almost half of the online population, while over one third access the web via a phone or mobile broadband modem. The move towards wireless access is made further evident by the widespread use of Wi-Fi connectivity – in conjunction with fixed access or a mobile broadband modem. However, this distribution is not uniform across countries. Algeria, having only recently launched 3G services, shows a

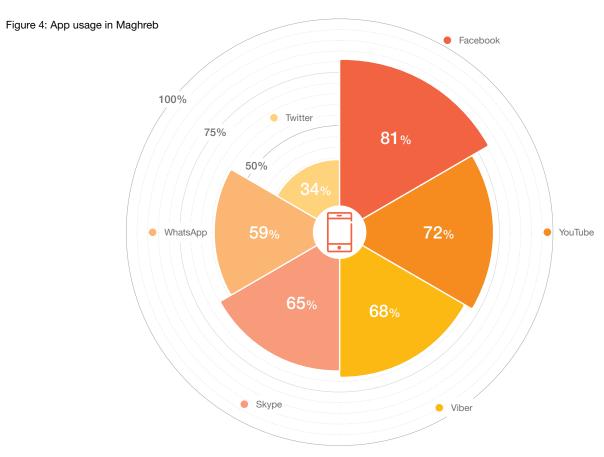
pronounced penchant for fixed broadband and Wi-Fi, which constitute the primary sources of internet access. Morocco is more reliant on mobile cellular access, while Tunisia has a balanced distribution between fixed and mobile access.

Figure 3: Internet connectivity choices



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: Internet users

THE SMARTPHONE EFFECT



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: Smartphone users



Increasing smartphone adoption has brought about certain behavioral changes among consumers. In terms of internet usage, smartphones are competing with traditional devices such as desktops and laptops. More than half of internet users say that being able to access the web from any location is of high importance to them.

The study highlights how smartphones are driving adoption of internet services, with 87 percent of smartphone users accessing the internet on their phones. Browsing, social networking and entertainment services such as video, music and gaming are among the top data services used by consumers.

Appetite for apps

People can see the advantage of using various apps on their smartphones. In fact, app usage is common with 9 out of 10 smartphone owners in urban Maghreb.

Facebook, YouTube and Viber are the most used apps, with WhatsApp following close behind. The popularity of web chat services and social networking sites indicates the growing expectations of consumers to stay connected and updated.

One third of smartphone users in urban Maghreb use paid apps. More than 40 percent of smartphone owners regularly use Skype, Viber or FaceTime to make voice calls, and 54 percent use services such as WhatsApp or Facebook Messenger for instant messaging.

More than half of smartphone owners cite the availability of the latest and most up-to-date internet services as the main reason to have a smartphone. This is subsequently driving smartphone uptake among non-smartphone owners.

PERFORMANCE IS CRUCIAL

Need for speed

As Maghreb's urban population quickly adopts the internet and its services, connection quality becomes a key focus point. 70 percent of internet users stated that internet connection speed and the extent of network coverage were key criteria when selecting an internet service provider. Data privacy and a stable and secure connection emerged as further key factors.

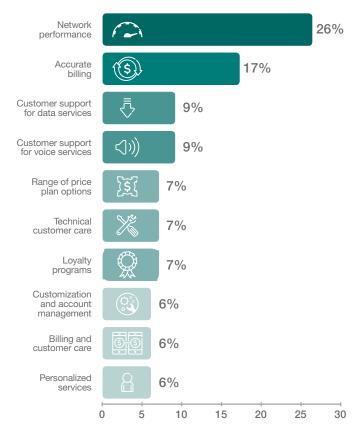
What makes mobile users happy

The significance of network performance as a key driver of satisfaction is particularly relevant for mobile operators, as we can see in Figure 5.

Quality and reliability of mobile voice and data services are the most important drivers of satisfaction with mobile operators. As mobile data usage increases, we can expect this trend to continue. Billing aspects are considered important, as well as flexible pricing models attached to data services. We can see continuous demand for high quality customer care – for voice services as well as the growing range of data services and mobile applications.



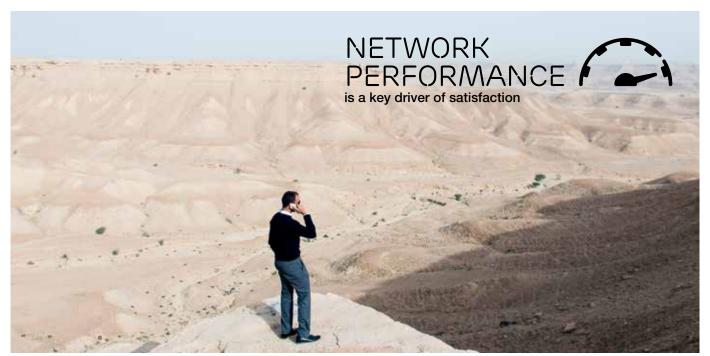
Figure 5: Drivers of satisfaction with mobile operators



Source: Ericsson ConsumerLab Analytical Platform 2015,

Internet goes mobile, Maghreb

Base: Mobile users



LOOKING AHEAD



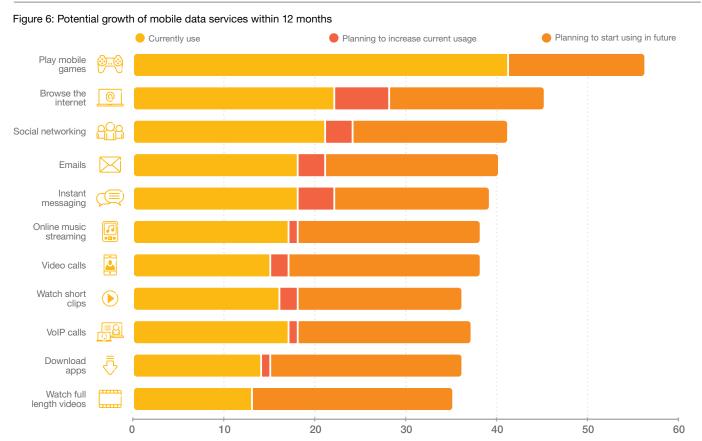
Growing appetite for mobile data services

When looking at projected figures for one year ahead, we see a strong momentum towards increasing usage of mobile data services, as well as the take-up of new services.

The availability of fast and capable networks, high-quality supporting services, richer terminals

and applications will fuel accelerated penetration of mobile data services among Maghreb's urban users, as reported in Figure 6. Over the next 12 months, adoption of mobile data services is expected to double, leading to a progressive societal transformation into the mobile always-on paradigm.

For example, mobile browsing and access to social networks are set to pass 40 percent, while penetration of mobile video calling and online music streaming is expected to more than double. Mobile emailing will also increase, extending productivity gains into users' personal and business activities.



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: Mobile phone users

A connected TV experience

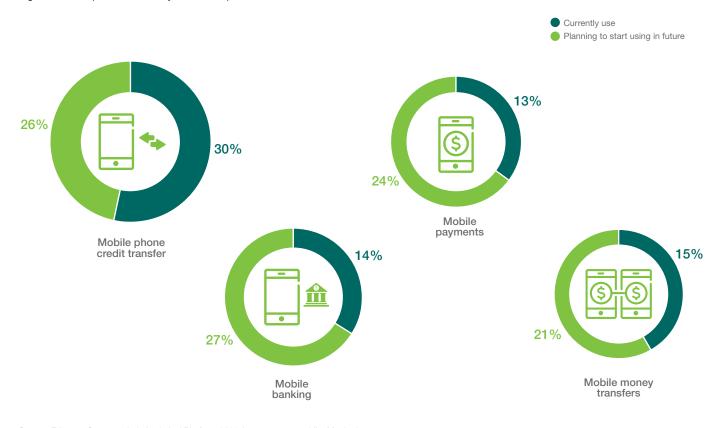
ICT transformation is not limited to mobile phone or internet services. People expect more and more sectors that play a key role in society to be connected. For example, there are high expectations for the internet in terms of meeting people's evolving TV and video consumption needs. Among the population of urban Maghreb, laptops or desktops and the internet

have become a core part of their TV and video consumption habits. The internet enables people to catch up on missed episodes of their favorite TV shows at a later date, at their convenience.

Maghreb is in line with the global trend of multi-device video viewing. Within a year, over 30 percent of mobile phone users are expected to start consuming short video clips and longer TV programs on their phones.

MONEY N THE GO

Figure 7: Smartphones as catalysts to the uptake of mobile financial services



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: Smartphone users

More control over personal finances

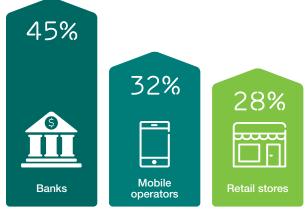
People see great potential in mobile and internet technologies when it comes to facilitating the way they handle their money and personal finances. Convenience, safety and efficiency are the perceived top benefits of mobile commerce (m-commerce) services. Not having to carry cash around, and the convenience that this provides, makes m-commerce services attractive to the urban population.

Maghreb has tremendous potential for m-commerce services like mobile money transfers and mobile banking and payment. Smartphones are expected to act as a catalyst for uptake of mobile commerce services, as depicted in Figure 7.

When it comes to the preferred provider of mobile financial services, the top 3 provider types are banks at 45 percent, mobile operators at 32 percent and large retail stores at 28 percent.

However, in order to fully realize the benefits of an evolution towards mobile financial services, there are still some perceived obstacles that must be overcome, such as limited security, trust and complexity of use.

Figure 8: Preferred providers of mobile financial services



Source: Ericsson ConsumerLab Analytical Platform 2015,

Internet goes mobile, Maghreb

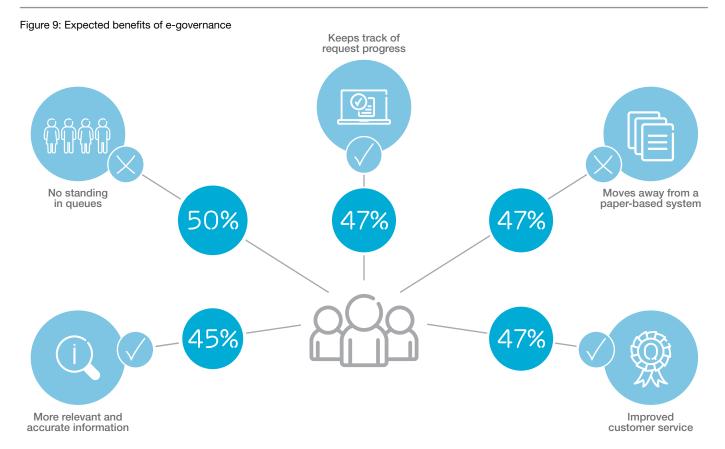
Base: All users

MAKING WAY FOR E-GOVERNANCE

The digitalization of public services, such as online learning and e-healthcare, is greatly anticipated, and people are eager to try them. Having more time for themselves thanks to shorter queues, and being able to keep track of certificate and document flows, are the key expected benefits. Nearly half of urban Maghreb wants to do away with time-consuming, paper-based filing systems, and would welcome a government move to an

online system. They believe that this would have a positive impact on the quality of customer service.

However, consumers are also skeptical about security failings and the misuse of personal information when using these services. One third of consumers feel that these services are complex to use. These present perceptions must change if people are to embrace e-governance and m-commerce on a large scale.



Source: Ericsson ConsumerLab Analytical Platform 2015, Internet goes mobile, Maghreb Base: All respondents



A CONNECTED SOCIETY

The population of urban Maghreb is increasingly using various internet services such as video. audio/video calls and instant messaging to stay updated and accessible on their smartphones. As smartphone penetration increases, overtaking traditional devices such as laptops and desktops, this presents a huge opportunity for the growth of mobile data services. Network quality will be considered very important by those looking to satisfy their demand for internet

anywhere services. The appetite for m-commerce and e-government services is also likely to grow, due to convenience and efficiency factors. Maghreb looks set to develop into a networked and connected society, where people's ability to communicate and access information is not restricted by location, and the digitalization of public services and payment systems drives more inclusion, freeing up resources for personal leisure and higher professional productivity.

Maghreb is set to develop into a networked and connected society



Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, businesses and societies to fulfil their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With more than 110,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.

Founded in 1876, Ericsson has its headquarters in Stockholm, Sweden. Net sales in 2013 were SEK 227.8 billion (USD 34.9 billion). Ericsson is listed on NASDAQ OMX stock exchange in Stockholm and the NASDAQ in New York.

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