GLOBAL mHEALTH & WEARABLES REPORT 2015

MEASURING AWARENESS OF WEARABLE DEVICES AND THE EMERGENCE OF mHEALTH AND WELLBEING
Introduction

The mobile device is rapidly becoming the primary touch point in consumers digital lives. The average user picks up his or her device 1,500 times in a week and spends more than three hours a day interacting with it.

A nascent sector which takes advantage of mobile technology is complementary devices that allow us to access digital content or services but without distracting us from the physical world that a handheld device inevitably does.

Wearables - currently the most popular area for this growing sector - act as an extension of the wearer’s body and brain. For that reason, the user experience has to be completely remodeled from that of smartphones (in the same way smartphone interfaces were reengineered from the PC/laptop experience before them).

The opportunity for device manufacturers and developers supporting this technology are potentially significant. CCS Insight predicts shipments of wearable devices will grow from 9.7 million in 2013 to 135 million in 2018 with wrist-worn devices such as Apple Watch predicted to account for 87% of the market.

The adoption of wearable devices is being driven in part by the success of mobile apps and services designed to monitor and improve users’ health and wellbeing. The number of apps in this category available on Google and iOS has doubled in the last two years to over 100,000 with Google announcing at the end of 2014 that this was the fastest growing category on its app store.

The global health and fitness app market is currently worth $4 billion now, and predicted to be worth $26 billion by 2017.

It’s not just consumers who will incorporate wearable tech into their lives. Professionals will use a new generation of devices to make their work safer, easier and more productive and it’s the healthcare sector which has seen the most advances to date with potentially life-changing services coming online, particularly in mobile-first markets.

Analysts project that by 2016 wireless medical device sales will hit 100 million units. The market will exceed $2.9 billion that year, significantly accounting for at least half of all wearable technology sales.
mHealth

From headsets that measure brainwaves to clothes that sense blood flow and respiratory rates, devices that monitor personal health are likely to form a vital part of the healthcare market. A growing number of medical devices are becoming wearable, including glucose monitors, ECG monitors, pulse oximeters and blood pressure monitors.

MEF has carried out a survey of 15,000 users in 15 countries to better understand the growth of this new sector and measure consumers understanding and attitudes towards both mHealth and wearables.

Globally, **almost half** (44%) of those polled said they had seen a medical professional using a mobile device during treatment or diagnosis. However, this varies significantly around the world.
mHealth continued

A remarkable pattern is emerging within the Middle East. In Qatar and Saudi Arabia 55% and 54% respectively have seen mHealth in action and UAE almost two-thirds (62%) have seen a medical professional use a mobile device.

Asia is only just behind the Middle East in the development of mHealth. Here, Indonesia leads the charge (56%) with China (51%) and India (48%) close behind.

By contrast, in the developed Western economies mHealth is not yet experienced as the norm by those studied. Only 31% of German and UK consumers have seen mobile devices in use in a medical environment. In France it is 34% and USA 37%.

Mobile-first markets are clearly driving the accelerated adoption of mHealth implementing new technologies from the ground up to establish an infrastructure and level of healthcare not previously available.

As a snapshot of the different ways mobile technology can be implemented, look at the two nations where mHealth is seen most widely. In Indonesia, authorities are clearly investing in treatment (22% of consumers have seen a device used in this context), whereas in UAE the majority have seen mobile employed for diagnosis (23%).
Health & Fitness Apps

Today’s smartphones employ an array of sophisticated sensors such as barometer, accelerometer and gyroscope that measure everything from distance travelled to altitude climbed. Developers have harnessed this technical power to create apps that help users improve their health and fitness through detailed measurement and planning algorithms.

The survey shows health and fitness apps have grown year on year by more than a third (11-15%), and medical apps by a fifth (8-10%). Women are the most enthusiastic users. They are 50% more likely to use health and fitness apps (19% vs. 13% of men) and a third more likely to use medical apps (12% vs. 9%).

South Africans are most likely to use mobile technology to improve health and fitness (22% vs. the global average of 15%), while growth in this sector is strongest in Nigeria (7-17%). Nigerian mobile media users are also most likely to use medical apps. Here, use has more than doubled in a year from 6-15%.
Wellbeing Apps

Psychological wellbeing is also a growing sector as people seek support to improve mindfulness, health or manage their emotions as well as alleviate mental and physical conditions.

The immediacy and personal features of the mobile platform makes it ideal for this area of mHealth apps and services. The report reveals that more than half of mobile users (57%) use apps to relax or train their mind. A fifth (21%) use apps to help them manage their weight.

Unsurprisingly, smartphone users are more likely to use an app to improve their fitness (33% vs. 25% of feature phone owners). Meanwhile, women are more likely than men to use an app to manage their weight (25% vs. 18% of men).

Of the countries studied, mobile media users in Qatar have embraced the power of apps to improve their wellbeing: they are most likely to use apps to improve fitness (41% vs. the average of 31%) and manage an illness (23% vs. the 16% average), with 78% of Kenyans use apps to relax or train their mind.

Do you use apps to...
- Help improve your fitness
- Manage an illness/condition
- Manage your weight
- Relax or train your mind
Wearables - awareness

Wearable devices can provide short-form access to our digital databank, delivering upcoming appointments, weather and travel information in bite-size chunks. Notifications can be received via a vibration against the skin.

The much-hyped wearables market has the potential to deliver the same kind of growth as smartphones in recent years. But does this translate into consumer awareness?

The study revealed that half of respondents (50%) have never heard of the term 'wearables'. Men are more likely to have heard of wearables (53% vs. 45% of women), as unsurprisingly are young people (52% vs. 46% of those over 35). What is perhaps more revealing that globally feature phone users are more likely to be aware of them than smartphone owners (54% vs. 49%).

Chinese and Indonesian mobile media users are most aware of wearables (68%). This shouldn’t surprise us - Indonesians are most interested in keeping up to date with the latest developments in mobile technology in general (79% vs. the global average of 54%).

However some of the world’s leading economies - France and Germany (both 43%) have the least awareness for this nascent technology and the UK (44%). This is arguably a surprise given the marketing investments focused on developed markets.

Even more surprising is that USA (42%). North America currently leads the way in terms of adoption: 5.2 million wearables were sold in North America in 2013, and over 40% of all wearable devices currently in use are there. But with low overall awareness in North America suggests in 2015 this market remains one of early adopters.
Wearables – awareness continued

Marketers are inviting us to imagine a world where we can buy items of clothing simply by looking at them or get instant travel updates by glancing at a logo on the transport authority’s poster. Professionals such as surgeons and pilots are beginning to use Google Glass-like devices to access information without taking their eyes off what they are doing. ABI Research projects that by 2016, sports and fitness-related monitoring devices will sell 80 million device units.

Where do consumers identify with the use of wearables?

Of the 50 per cent who are familiar with wearables category, the most (33% globally) associate these devices with health (e.g. monitoring your heartbeat or blood pressure) and lifestyle (e.g. exercise trackers). This is especially true in China (56%).

21% link the idea of wearables to ‘taking photos and video’ – perhaps the result of press coverage around beta testing of Google Glass. This is especially the case in Indonesia (41%).

A further 12% see wearables as notifying them of real-time events and providing access to key information. Again most prevalent in Indonesia (21%).

Finally, 8% think wearables are about augmenting reality, for example by overlaying digital information via a head-up display. Kenyans (14%) are keenest on this particular application.
Women lead the way on health and medical apps

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Sample 2012</th>
<th>Total Sample 2013</th>
<th>Total Sample 2014</th>
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<tbody>
<tr>
<td>Games</td>
<td>59%</td>
<td>55%</td>
<td>55%</td>
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<tr>
<td>Social Networking</td>
<td>46%</td>
<td>49%</td>
<td>49%</td>
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<tr>
<td>Music</td>
<td>48%</td>
<td>48%</td>
<td>47%</td>
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<tr>
<td>Photo &amp; video</td>
<td>41%</td>
<td>42%</td>
<td>41%</td>
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<tr>
<td>News</td>
<td>37%</td>
<td>39%</td>
<td>31%</td>
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<tr>
<td>Lifestyle &amp; Entertainment</td>
<td>31%</td>
<td>27%</td>
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<tr>
<td>Weather</td>
<td>22%</td>
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<td>Sports</td>
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<td>Education</td>
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<td>Navigation &amp; travel</td>
<td>19%</td>
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<td>Books</td>
<td>14%</td>
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<tr>
<td>Utilities</td>
<td>11%</td>
<td>15%</td>
<td>11%</td>
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<tr>
<td>Health &amp; Fitness</td>
<td>13%</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Medical</td>
<td>12%</td>
<td>19%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Total Sample 2012: 59%  | Total Sample 2013: 55%  | Total Sample 2014: 55%
Nigeria show strongest growth in this category

Health & Fitness

- Brazil: 15% (2013), 20% (2014)
- China: 12% (2013), 15% (2014)
- India: 18% (2013), 13% (2014)
- Indonesia: 14% (2013), 11% (2014)
- Mexico: 10% (2013), 12% (2014)
- Nigeria: 17% (2013), 15% (2014)
- Qatar: 17% (2013), 15% (2014)
- KSA: 14% (2013), 15% (2014)
- RSA: 22% (2013), 15% (2014)
- UAE: 16% (2013), 17% (2014)
- UK: 15% (2013), 15% (2014)
- USA: 15% (2013), 20% (2014)
- France: 11% (2013), 11% (2014)
- Germany: 11% (2013), 14% (2014)

Medical

- Brazil: 8% (2013), 3% (2014)
- China: 6% (2013), 6% (2014)
- India: 12% (2013), 6% (2014)
- Indonesia: 9% (2013), 8% (2014)
- Kenya: 9% (2013), 7% (2014)
- Mexico: 12% (2013), 6% (2014)
- Nigeria: 15% (2013), 6% (2014)
- Qatar: 15% (2013), 9% (2014)
- KSA: 11% (2013), 9% (2014)
- RSA: 13% (2013), 8% (2014)
- UAE: 11% (2013), 10% (2014)
- UK: 8% (2013), 10% (2014)
- USA: 17% (2013), 10% (2014)
- France: 10% (2013), 7% (2014)
- Germany: 8% (2013), 8% (2014)
78% of Kenyans use apps to relax and train their mind.
Most associate wearables with health and lifestyle activities

- **Total Sample 2014**
  - 50% NET Aware
  - 50% Not Aware

- **Context in which aware**
  - Taking photos and video: 21%
  - Health (e.g. monitor your heartbeat or blood pressure): 17%
  - Lifestyle (e.g. exercise trackers): 16%
  - Notifications and immediate access to key information: 12%
  - Augmented reality (overlaying digital information): 8%
Chinese and Indonesian consumers most aware of wearables

- Male: 53%
- Female: 45%
- <35: 52%
- >35: 46%
- Featurephone: 54%
- Smartphone: 49%

NET Yes, I've heard of wearables

- Brazil: 46%
- China: 58%
- India: 68%
- Indonesia: 68%
- Kenya: 47%
- Mexico: 40%
- Nigeria: 47%
- Qatar: 53%
- KSA: 52%
- RSA: 44%
- UAE: 60%
- UK: 44%
- USA: 42%
- France: 43%
- Germany: 43%
Indonesians also most interested in latest developments in general…Germans also the least
Indonesians see wearables as a ‘photo’ phenomenon... for the Chinese it’s all about health
The emergence of mobile health in mobile-first nations

Have you seen a medical professional using a mobile device during treatment or diagnosis?

- Yes, during treatment: 15%
- Yes, during diagnosis: 14%
- Yes, during both: 14%

Where seen?

- Male: 46%
- Female: 41%
- <35: 46%
- >35: 38%

seen a mobile device used for healthcare
In Indonesia, mobile tech is used in treatment...in UAE it’s more for diagnosis
ABOUT THE SURVEY

Global Consumer Survey
Commissioned by MEF, the survey was carried out by On Device Research in Q3 2014, which questioned almost 15,000 mobile media users in 15 countries, namely: US, UK, France, Germany, China, South Africa, Nigeria, Kenya, Indonesia, India, Brazil, Mexico, UAE, Qatar and Kingdom of Saudi Arabia.

The study digs deep into consumer trends and attitudes, providing insight and analysis on their wider industry impact. The report delivers insight that can help both mobile specialists and those who are new to mobile to develop targeted mobile strategies and fully exploit the rich opportunities that mobile provides.

Methodology & Sampling
Mobile panellists are sent an SMS invite to take part in the survey via their mobiles.

The survey is automatically scaled to device type to enable the best survey experience for respondents.

To ensure that results are robust and reflective, a sample frame was created for each market using key demographic and device information: Age, gender and device type.

The framework served as the quotas for survey respondent for each market to ensure each of these above quota groups was designed to be representative of Mobile Media Users in each local market.

Sources consulted to construct this sample frame include, but were not limited to: On Device Research panel demographics, network partners, MEF members and previous MEF research.
THANKS TO OUR PARTNERS

About AVG Technologies (NYSE: AVG)
AVG is the online security company providing leading software and services to secure devices, data and people. AVG has over 188 million active users, as of September 30 2014, using AVG’s products and services including Internet security, performance optimization, and personal privacy and identity protection. By choosing AVG’s products, users become part of a trusted global community that engages directly with AVG to provide feedback and offer mutual support to other customers.

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About On Device Research
On Device Research is a research company that gathers responses on mobile devices - so far we've sent over 2.3 million surveys across 53 countries.

By conducting research on mobile phones and tablet computers we can reach consumers wherever they are, at any time and in any location.

Mobile research also brings fresh, instant responses that accurately capture consumers’ feelings, thoughts and opinions.

For more information visit www.ondeviceresearch.com
QUESTIONNAIRE

Q31 What types of Mobile Apps do you use?
Books
Reference
Business & Finance
Education
Games
Music
Health & Fitness
Medical
Lifestyle & Entertainment
Navigation & travel
News
Photo & video
Social Networking
Productivity
Weather
Sports
Utilities
None of these

Q32 How do you find new apps?
Advertising/marketing
App store - Featured section
App store - Bestseller lists
App store - random browsing
Recommendations - friends
Recommendations - media/blogs
Appfinder’ website (identifies the best new apps and sometimes offers discounts)
Appfinder’ app

Q33 How do you prefer to pay for apps?
A one-off payment before I download it.
It must then be ad-free and I don't want to be asked to make in-app purchases.
A one-off payment before I download it.
I'm relaxed about whether it then contains advertising and invites me to make in-app purchases.
I want it free at the point-of-sale. I understand this means there may be adverts or I may be invited to make in-app purchases.
I want it free at the point-of-sale. I do not want to see adverts or be invited to make in-app purchases.

Q34 Why do you or would you make one-off payments within an app?
Additional content
Buy something which has been previewed on screen
To avoid advertising
Shortcuts (e.g. reaching the end of a level, buying more lives)
Other - please specify

Q35 How often do you use all the apps that you currently have on your device? Which ONE of the following do you agree with most strongly.
I never use any of them
I use them all every day
I never use any of them except for one or two which I seldom use.
I use all of them every day except for one or two which I never use.
I use a few favourites every day, the rest I use once a week.
I use a few favourites every day, the rest I use once a month.
I use a few favourites every day, the rest I use once or twice and then never again.

Q38 Are you aware of ‘wearables’ (a second electronic device that attaches to you or your clothes and communicates to your phone/tablet)?
If so, in what context?
I've never come across the term ‘wearables’
Taking photos and video
Health (e.g. monitor your heartbeat or blood pressure)
Lifestyle (e.g. exercise trackers)
Augmented reality (overlaying digital information)
Notifications and immediate access to key information

Q39 Do you use an app(s) to…
Help improve your fitness
Manage an illness/condition
Relax or train your mind

Q40 Have you seen a medical professional using a mobile device during treatment or diagnosis?
Yes, during treatment
Yes, during diagnosis
Yes, during both No.