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# Mobile technology trends 2016

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After the fierce mobile price war globally in 2014, smartphones have undoubtedly shifted to a new stage of competition in 2015 and will continue throughout 2016. Today smartphones feature progressive technology and innovative functions that are more personalised and user-friendly.



Locally, smartphone penetration has increased significantly. World Wide Worx MD Arthur Goldstuck noted last year that there were around 16.3 million smartphones in use in South Africa at the end of 2013. While this was originally forecast to grow to about 18.1 million by the end of 2014, growth acceleration could now exceed the 20 million mark - that's a penetration increase from 30% to 40% in just one year.

As the world's 4th largest smartphone manufacturer we witness the most progressive technologies around the world and believe that moving forward, the world's mobile phones will evolve in the following areas:

# Industrial design

In 2016, 2.5D and 3D curved glass will be widely used - the smartphone market is gearing up for even more curved displays and would you believe it, flexible batteries! Improved edge protection technologies will also significantly change the cell phone's appearance. Smartphones have had a rectangular shape for many years. Thanks to new technologies, in future they will be drastically different in form. Smooth curves will be a key element of cell phone design in 2016.

# New trend of hardware configurations

In 2015 alone we've seen 64-bit processors being more widely used with fingerprint and retina scanning. These features will soon become the standard expectation on high-end phones. New generation cell phones will also have dual rear cameras with optical image stabilisation becoming more and more popular.

# **Fingerless interaction**

Both of the latest leading operating systems Android 5.0 and iOS 8 are designed for touchscreens. With the popularisation of flexible screens and wearable devices, the major forms of mobile interaction in future will be voice, eye control, motion

capture and even telepathic control. We expect these international technologies to gradually infuse into South Africa.

#### **Smart accessories**

Smart bracelets were the most popular cell phone accessories in 2014. In 2015, wearable accessories have increasingly become fast-moving consumer goods. Don't be surprised when in the near future you will be able to wear a pair of smart socks produced by a phone manufacturer or a T-shirt with a built-in monitoring system!

# Self-healing body

Liquid metals make phone cases lighter and slimmer. They are also highly scratch-resistant, less likely to shatter if dropped and can even automatically restore their shape after deformation. Let's imagine how "strong" a cell phone would be if its front is made of sapphire and its back made of self-healing liquid metal?

# **Built-in security module**

Fingerprint recognition is already becoming standard on high-end smartphones. As the number of smart devices increases with the Internet of Things, cellphones can be used for user identification of computers, access control, and mobile payment. Therefore, cell phones will have a separate security module to physically isolate passwords and personal information. This will help counter hacking challenges. Fingerprint recognition and physically isolated security modules will become standard on high-end cell phones.

# Larger memory and the popularity of 2K screens

In 2015, most smartphones have no less than 2GB RAM, with more popular flagship models having 3-4GB. 1080p full HD displays will become the norm and flagship models will widely use 2K (2,000 pixels) screens that provide a higher pixel density than that of retina displays. The mobile industry is moving to 64-bit processors, allowing apps to run more smoothly. 4GB RAM will become standard on leading brand flagship models.

# Selfie trend and front cameras

Front cameras are used more frequently now with the growing trend of taking selfies. To accommodate this trend, mobile manufacturers will move towards front cameras with larger apertures, broader viewing angles and higher pixel count. Some manufacturers may even provide front cameras with more than 10 megapixels and optical image stabilisation. In addition, more rotating cameras will appear.

# User interfaces designed for flexible and foldable screens

There is no doubt that user interfaces will be more flexible in future, with a layout that can be adjusted automatically to adapt to a bendable or foldable screen. Some manufacturers have been trying to develop separate UIs based on a dual edge curved display. The two curved edges feature app shortcuts, status updates and data feeds all on their own.

#### ABOUT THE AUTHOR

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