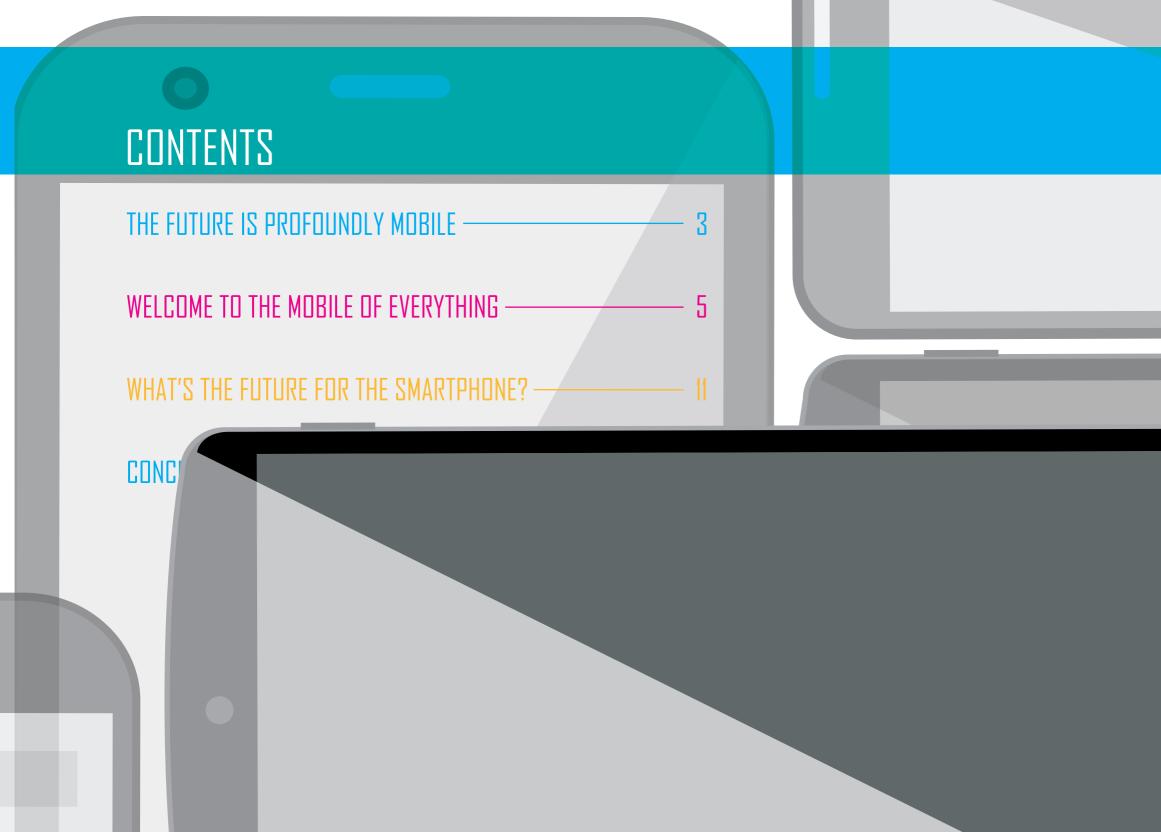
# THE MOBILE OF EVERYTHING

WHAT DOES A HYPER-CONNECTED WORLD MEAN FOR THE SMARTPHONE?

Performics ZenithOptimedia
The ROI Agency





### THE FUTURE IS PROFOUNDLY MOBILE

At this year's Consumer Electronics Show, many of the major tech companies were falling over themselves to demonstrate their credentials in the Internet of Everything space. Smart homes, connected devices, and sensor technology were on display in abundance. Many delegates would have been left thinking that an intelligent, programmable world, where all objects and devices are connected, cannot be too far away.

ZenithOptimedia identified the Internet of Everything as one of six key trends for the next 25 years in its 2038 futures programme. In this world, where everything is connected, the consumer - or rather people - take centre stage, with sensors detecting their every movement, and all types of services and experiences customised for them throughout the day.

What becomes clear when you look at the engagement opportunities in this new hyper-connected world is that the term the Internet of Everything does not go far enough. More precisely, we are looking at the Mobile of Everything.

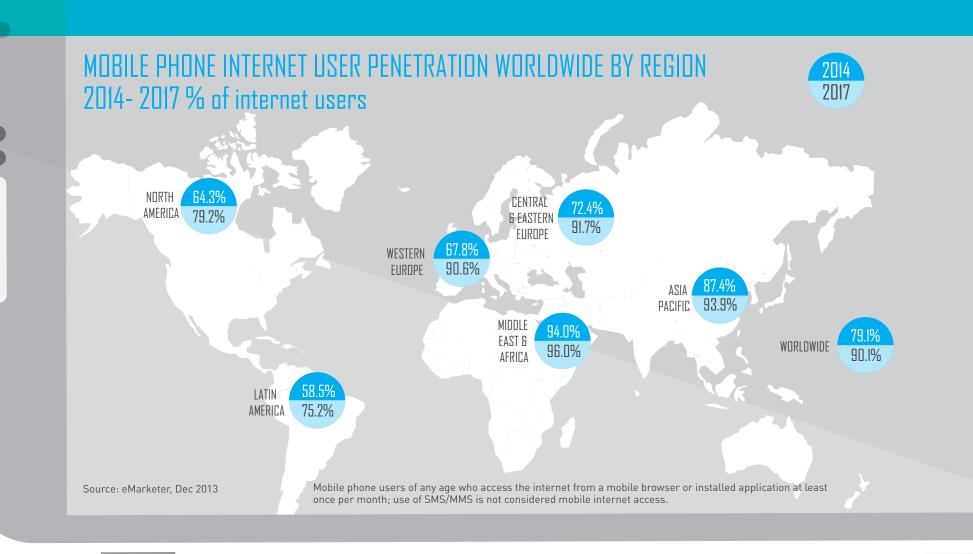
This new hyper-connected world is profoundly mobile. This world is already taking shape with the rapid growth in mobile devices, the uptake of mobile internet access and our increasing reliance on mobile apps. Wearable devices is the next chapter in our journey into the Mobile of Everything.

Wearable devices promise a future of self-knowledge, sensors and superpowers. Wearable devices offer us a new intimacy with mobile technology. Fuelled by personal data, wearable devices will know our behaviour and will enable brands to offers us what we want, exactly when we want it.

So, with ever smarter handsets being produced, analysts predicting the rapid take-up of wearable devices, and the Mobile of Everything on the horizon, mobile has a very secure future. However, what we understand by the concept of mobile will fundamentally change.

'Mobile' will transcend the handset to focus of the mobility of people and the multitude of devices and connection points through which we will connect online. In this world, the smartphone will evolve into a multitude of different devices: handsets in our pockets, devices we will wear, devices integrated into bags and clothing, and connection points embedded into a myriad of objects around us.

In this report, we set out the case for an exciting and determinedly mobile future. However, it is a future that just a year or two ago, few would have predicted. It's a future where consumers are in control, where personalisation is taken to completely new levels, and where the rules of mobile marketing as we currently know them will no longer apply.

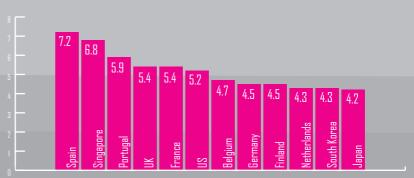


### WELCOME TO THE MOBILE OF EVERYTHING

From the word that describes the multifunctional device in your hand, 'mobile' will become a term that encapsulates a super-computing landscape that powers the Internet of Everything, or rather the Mobile of Everything.

As we enter the era of the Mobile of Everything, we will come to expect and rely on mobile devices to program and be the control point for all aspects of our daily work, communication, shopping, comfort and convenience. To understand how this new world of The Mobile of Everything will evolve, we have identified five key developments:





Source: Deloitte Global Mobile Consumer Survey, Developed markets, May-July 2013

### AVERAGE NUMBER OF PORTABLE DEVICES OWNED PER RESPONDENT, BY COUNTRY (DEVELOPING MARKETS).



Source: Deloitte Global Mobile Consumer Survey, Developed markets, May-July 2013

## <u>OUR CONNECTED MOBILE DEVICES SPEAK THE SAME LANGUAGE</u>

The relationship we have with our mobile devices has changed significantly with the development of smartphones and tablets. They have become deeply rooted in our lives and we now rely on them to organise, curate and control our daily activities. The more we reveal ourselves to our devices, the higher expectation we have of them to know us as a person - to know our needs and wants and to lead us to quick, relevant and personalised results. We also expect the way we communicate on the various interfaces to be intuitive and spontaneous. With the growth in the number of things connected to our mobile devices, there are more and more opportunities for consumers to receive personalised content and services. By 2017, there will be five devices/connections for every internet user (source: Cisco).

The leap in big-data processing also means our mobile devices can now monitor the world around us in real time. They can get the right data to the right devices at the right time in order for us to be able to make the right decisions. As we approach the Mobile of Everything, our data-fuelled mobiles will nearly always be a step ahead. Our devices will be prompting us with suggestions of content and services we may not have even thought of.

#### WHAT THIS MEANS FOR MARKETERS:

Marketers that want to develop a personal relationship with consumers, must create a personal voice. In this way, people will feel that brands know them on a personal level. In order to truly adopt the mindset of the consumer, brands need to truly live with the consumer, supporting them with suggestions of relevant things they should know about. Marketers will need to rethink how best to leverage consumer data in order to personalise services and offers. Of course, there is a fine line between adding value and invading consumers' privacy, so companies will need to tread carefully. Reassuringly, 80% of consumers are willing to share their data if they know how it is going to be used. Consumers want to feel in control, but 73% are quite willing to share data in return for benefits (source: PwC), which paves the way for a market of data commoditisation.

## OUR CONNECTED MOBILE DEVICES KNOW OUR TRUE FEELINGS

We believe another game changer in human-machine interaction is biometric technology. It is estimated that biometric sensors which includes work-time-management and security entry consoles - will total at least 500 million 'Internet of Everything' connections by 2018 (source: Biometric Research Group). Biometric technology can sense even the subtlest nuances of our body language, with sensitivity we only expect from another human. Facial recognition, voice activation, eye tracking and sensors to measure consumers' real-time emotional and physiological responses will be deployed to gauge consumers' emotional involvement. The expanded range of feedback mechanisms can make the experiences more immersive. For example, BioBeats creates a world where our apps and devices understand and adapt to the way we feel. It uses your iOS device to detect your heart rate, then generates custom music in any genre you choose. With smartphones able to interpret our emotions, consumers' moods and behaviours can be matched with relevant content, just right for that moment.

#### WHAT THIS MEANS FOR MARKETERS:

In order to influence consumer decision-making, brands will need to know and understand consumers' moods, behaviours and their characteristics. Brands will also need to design real-time response mechanisms to deliver content in accordance with consumers' moods and behaviour. Marketers will be able to leverage biometric technology to establish a standardised and secure platform for consumers to identify themselves.

# 3 OUR CONNECTED MOBILE DEVICES ARE READY TO SERVE

Mobiles are increasingly becoming lifestyle organisers, and as we move into the era of the Mobile of Everything, this will extend to mobiles becoming the device with which we understand and control the connected world around us. In recent months, there has been a huge surge in the creation of apps that are fully capable of anticipating our daily needs, from weather predictions to updating our schedules according to delays on public transport. Google Now and apps such as the Sherpa personal assistant have gone a step further, taking into account customers' past behaviour to predict their next move. The AutoPebble app, for the Pebble wrist device, can help you perform a multitude of daily tasks, for example, controlling the TV, and it can display different screens throughout the day to help your perform a range of key tasks. Brands will need to consider their role in creating online, concierge services for their consumers.

### MESSAGING & SOCIAL APP USE TRIPLES IN 2013 YEAR-ON-YEAR GROWTH OF APP USAGE, BY CATEGORY



#### WHAT THIS MEANS FOR MARKETERS:

Brands should see apps as their 'just a click away' customer service tools. However, any brand-created or supported app must truly add value for consumers, providing them with a tool to make their life easier or information to empower them. The data generated through such apps will help brands to improve functionality, to anticipate other app requirements and to deliver on the value exchange. Brands can encourage repeat usage and get the most from interaction with apps by really focusing on the user-experience.

## 4 OUR CONNECTED MOBILE DEVICES MASTER THE ART OF SHOPPING

With the arrival of the Mobile of Everything, our mobile devices will become central to our shopping experience and will be used to make most, if not all, of our purchases. Imagine entering a store, and being recognised via your mobile handset, which through automatic check-in features enables you to receive bonus points and special promotions. iBeacons offers smartphone users the opportunity to receive discounts, rewards or contextual suggestions even when their phones are locked. Apple just installed iBeacons in all their US stores. 'Retailtainment' will be the new norm as in-store mobile technology enables customers to explore and discover brand stories. For example, some Burberry stores are equipped with Near Field Communication (NFC) technology - when scanned, the tags direct the customers to videos showing the creation of the products.

#### WHAT THIS MEANS FOR MARKETERS:

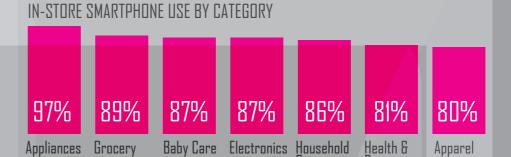
With the onset of the Mobile of Everything, we are promised a whole new personalised shopping experience via our mobiles. Powered by a wealth of data, sophisticated predictive models will enable brands to customise our shopping experiences throughout the retail journey...and to curate content in accordance with our needs and interests. Brands will need to invest in the latest mobile technologies in order to offer customers multi-sensory experiences and to explore and interact with their products.

#### HOW IN-STORE SHOPPERS ARE USING MOBILE DEVICES



79% OF SMARTPHONE OWNERS ARE 'SMARTPHONE SHOPPERS'

84% OF THESE SHOPPERS USE THEIR PHONE TO HELP SHOP WHILE IN STORE



Source: Google Shopper Marketing Agency Council and M/A/R/C Research

# OUR CONNECTED DEVICES ARE CAREFUL NAVIGATORS

For delegates at CES this year, it was clear that cars are becoming mobile content environments in their own right. The development of auto technology is turning cars into intelligent hubs for mobile computing, accessing information and general entertainment. The car of the future will become a mobile computer. It will become an environment for social communication and the various technologies will be able to help us organise our lives. By 2015, it is estimated that 50% of all cars will be internet connected. In fact the connected car is the third fastest growing technology device after phones and tablets (Source: Intel). And more driverless cars are being developed. At the heart of the driverless car is the GPS system which allows the computer to locate its position to within a few inches. The car has radars in its fenders so that it can sense obstacles.

#### CARS EMERGE AS TOP TEN CONNECTED APPS IN 2020

APPLICATION	VALUE (\$USbn)
Connected Car	600
Clinical Remote Monitoring	350
Assisted Living	270
Home and Building Security	250
Pay-As-You-Drive Car Insurance	245
New Business Models for Cars Usage	225
Smart Meters	105
Traffic Management	100
Electric Vehicle Charging	75
Building Automation	40

#### WHAT THIS MEANS FOR MARKETERS:

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Marketers looking to engage consumers in-car are set to benefit from increased lengths of engagement time, bigger and better screens and a more "quality" environment. The car could become a key control and engagement point within the Mobile of Everything, and marketers are set to enjoy new content, engagement and retail opportunities in the new in-car environment. The immediate impact of enhanced in-car technology will be better location-based services, but as in-car technology moves further into entertainment and general information, brands will be able to tailor content for both drivers and passengers.

### WHAT'S THE FUTURE FOR THE SMARTPHONE?

The exciting world of hyper-connectivity will see sensors tracking our every movement, and people able to get online through a myriad of new connection points. In this world, having one device you carry around with you - a smartphone - will no longer be the norm. The evidence of a mobile world the transcends smartphones and handsets is out there now. Google's recent sale of Motorola to Lenovo indicates that the company is envisaging mobile opportunities beyond the smartphone . And even Google's \$3.2bn purchase of Nest points to business opportunities that transcend handsets. Nest's Learning Thermostat and Protect smoke and carbon monoxide alarm are both designed to connect to one receiver: the Nest app on a smartphone. But the value here isn't the smartphone itself, but in peripherals - the software and hardware that run Nest.

#### TECHNOLOGY CYCLES HAVE TENDED TO LAST TEN YEARS



Source: KPCB

## FROM SMARTPHONES TO SMARTCITIES

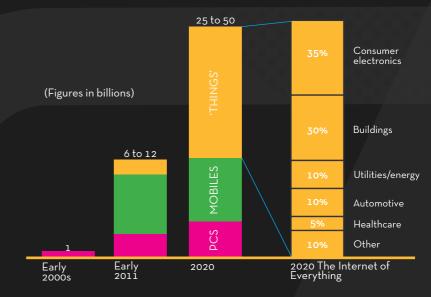
As we approach the era of The Mobile of Everything, mobile connectivity will become all important. Wherever we are and whatever the time of day, we will need an entry point to the Mobile of Everything so we can tap into the connected world. But as technology advances, our connection is unlikely to be just through a smartphone. The smartphone as we know it simply won't have the same purpose as it does now. Smartphones are set to set to evolve into a multitude of smaller devices, screens and connection points everywhere we go.

With technological advancements all around us, the smartphone will take second place to the evolving 'smartcity'. The World Health Organisation predicts that by 2050, 70% of the world's population will be living in cities. Many of these cities will embrace wireless sensor networks that will deliver appropriate data to people, companies and authorities in order to facilitate efficient management of most aspects for city life. For example, people will be able to monitor pollution levels in their street and authorities will be able to optimise an array of functions and services, such lighting levels, and irrigation in parks and green areas.

In this world, there will be no more marketing discussions about first, second and third screens. Screens will simply be everywhere. In windows on wall screens, on retail counters, tables in bars and restaurants, in our cars...the list will be endless.

The destiny of mobile computing is to merge into the world around us. Computers and screens will get ever smaller and will be seamlessly embedded into the world around us. In this world of The Mobile of Everything, mobile will no longer refer to handsets, it will be the term by which we describe a multitude of sensors and chips communicating intelligently with each other.

### HOW THE NUMBER OF OF 'THINGS' CONNECTED IS PREDICTED TO GROW



Source: GSM Association

#### WHAT THIS MEANS FOR MARKETERS:

In a world of hyper-connectivity and immediate access to data and information, providing the right content to consumers will become even more important. And finding the right ways to provide that content will be critical. With organisations and businesses all connected in smartcities, assessing common goals and setting up partnerships will be key. Consumers will have a mass of content at their fingertips, so finding ways to cut through will be of paramount importance.

# THE SENSOR REVOLUTION

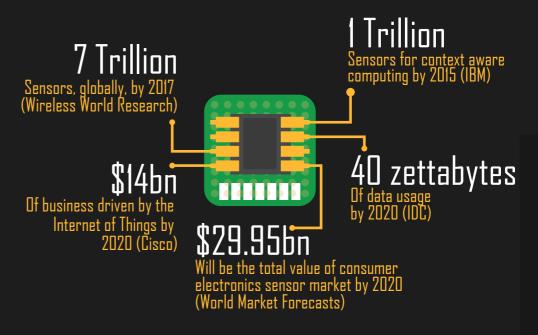
Sensors will be everywhere. As stated earlier, by 2020 there will be 50 billion objects connected to the internet (Cisco). By then, a variety of new interaction technologies will emerge, with no more need for an in-hand screen.

We will be surrounded by sensors, wherever we go: at home, while driving, in shops, on public transport and at work. Sensors will connect us with each other and they will capture data about how we live and what we do.

Visualisation will be done on ubiquitous proxy screens - no device will be necessary for data storage as that will most certainly all be in the Cloud. Objects will start predicting desires based on movements and history. This is already happening with the likes of Netflix knowing what films we might like and Spotify understanding what music we want to listen to.

And, potentially, sensors could get smaller and smaller as technology advances. Back in 1990, Kris Peter (a Berkley Researcher) predicted that sensors would not just be embedded in products, but would literally be everywhere; in the air as "Smart Dust" particles. Acting like electronic nerve endings for the planet and fitted with computer processors, these sensors would monitor everything and power interactive, smart systems. While this may seem like science fiction, sensors are already very much rooted in science reality.

#### THE POWER OF SENSORS



#### WHAT THIS MEANS FOR MARKETERS:

Marketers are already sitting on a wealth of data, and in the future the amount of available data will only increase. Making full use of this data to truly understand consumers and personalise services and content for them will be the secret to successful marketing. However, with so much available data and the ever increasing need to personalise, brands will need to work hard to surprise and delight their consumers. Hyper-personalisation could lead to consumers only ever receiving the predictable and the expected.

# THE END OF MEDIA CHANNELS?

The impending changes for the smartphone, coupled with the rising power and dominance of the sensor, heralds a significant shift in our concept of media channels. In the era of the Mobile of Everything, content will be customised and distributed to consumers wherever they are, and on whatever screen they choose to access.

In this new world, the focus will be on the consumer and the content that is being curated and customised for them. Media owners will move from organising content according to channels and media brands, to horizontal content that is distributed to consumers according to behavioural analytics.

Consumers are already using online search to find the content they need, wherever they are, rather than going directly to specific media brands. In a truly mobile, hyper-connected world, what will matter will be the consumer and the content, not the device or the channel.

For the media and advertising industry, this fundamental shift will mean that many skills and capabilities that were mainstay of success in the past will need outright replacement. Going forward, it will no longer be necessary or efficient to have dedicated planning and trading platforms for each channel.

#### WHAT THIS MEANS FOR MARKETERS:

The shift away from media channels will mean that marketers will need to equally shift away from their screen-centric focus. The focus will need to be on consumers and how they live their lives. More than ever, marketers will need to understand what they want, how they want it and when they want it. But with the move to immediate digital delivery of content and messaging to consumers, it will be important for marketers to remember the value of creating physical and sensory experiences for consumers.

### CONCLUSION

As we march towards the Mobile of Everything, there are really exciting opportunities ahead for marketers. The future will be profoundly mobile, and we must prepare for what this means in terms of the new ways that we will connect online and consume content. The smartphone is set change dramatically over the coming years, and the technology and the new devices that will emerge will inevitably better suit the ways in which we will live our lives in the future.

With a move to hyper-personalisation, mass marketing campaigns could well become very hard to execute. Marketers - and the industry that supports marketers - will need to work out ways to communicate and engage on personal level, but to very large numbers of people. Marketers will need to also be careful to ensure that the content and experiences they are creating for consumers are 'authentic'. A world where everything is highly automated and programmed, leaves little left to personal discovery. For many people, personal discovery and recommendation is critical to an authentic experience.

And, the ongoing issue of privacy will remain ever present. The marketing and communications industry will need to be mindful of issues of privacy at all times in a data-fueled world of hyper-personalisation.





### ABOUT PERFORMICS

Headquartered in Chicago with offices in 32 countries and regional hubs in London and Singapore, Performics is the performance marketing arm of ZenithOptimedia, and part of Publicis Groupe. Founded in 1998 in Chicago, Performics has a track record of innovation, and was awarded Best Agency at the European Search Awards. We were also named a leader among search marketing agencies by US company Forrester Research. Performics' team of certified experts in paid search, SEO, affiliate marketing, paid social, real-time bidding, and display advertising develop holistic strategies to drive enhanced performance for every one of our clients' digital marketing campaigns. Data is at the heart of our strategy and we know the importance of fully understanding consumers' motivations and media habits. We do this by investing heavily in market-leading tools and technology to ensure clients benefit from the maximum return on their investments. Performics has a broad list of international clients, including RBS, O2, HP, Bacardi, Clarins, Hertz, H&M, IKEA, Novartis, Nestle, and Travelodge.

### ABOUT ZENITHOPTIMEDIA

ZenithOptimedia - www.zenithoptimedia.com - is a leading global media services network with 250 offices in 74 countries. We are part of Publicis Groupe, the world's third largest communications group, and the world's second largest media counsel and buying group. As the first agency to apply a rigorous and objective approach to improving the effectiveness of marketing spend, ZenithOptimedia delivers to clients the best possible return on their communications investment. This philosophy is supported by a unique approach to strategy development and implementation across the full spectrum of paid, owned and earned contact points - the Live ROI planning process. The ZenithOptimedia Group of companies equips our clients with a full range of integrated skills across communications planning, value optimisation, performance media and content creation. Our key clients include Armani Group, ASUS, Aviva, BBC Worldwide, Bacardi-Martini, Electrolux, General Mills, Lactalis, LVMH, Nestlé, News Corporation, L'Oréal, Oracle, Puma, Qantas, Reckitt Benckiser, Richemont Group, Royal Bank of Scotland, Sanofi, SCA, Telefónica O2, Toyota/Lexus, Verizon and Whirlpool.

