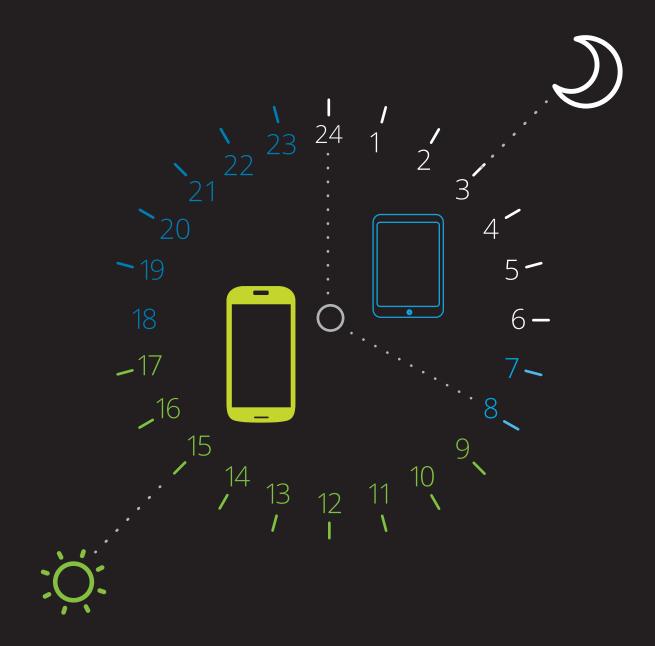
Deloitte.



Global Mobile Consumer Survey: Ireland 2016

There's no place like phone

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Foreword

Welcome to the 2016 edition of Deloitte's mobile consumer survey. It's 2016 and there's no place like phone. This is Ireland's first year participating in Deloitte's global study, which features some exciting insights about our relationships with mobile devices. A representative sample of Irish mobile consumers were asked about a range of topics relevant to customers, manufacturers, operators, and service providers who support the ecosystem. The topics covered include: device ownership, future purchase intent, mobile operators, Internet of Things (IoT), privacy and security to name a few. This report highlights 10 key findings about the Irish market however, it only scratches the surface of the wealth of information gathered.

As demonstrated in the report's infographics, smartphone usage occurs at all hours of the day and night. While younger generations use smartphones more enthusiastically, the device has established a strong position at the centre of our lives, regardless of age. Smartphones are the primary mobile device for Irish consumers and 40% of owners have the device in their hands within 5 minutes of waking. Nearly half of the population of smartphone users experience interrupted sleep due to checking their smartphones in the middle of the night.

The smartphone has become our primary access point to the digital world, making our lives easier and at the same time introducing new challenges. We have imagined and brought the mobile consumer to life through personas based on generational traits in order to demonstrate the complex relationship Irish people have with their mobile devices.

The preeminence of smartphones has overshadowed the adoption of other devices, including laptop computers and tablets. 80% of adults in Ireland now have access to a laptop computer and 60% have access to a tablet. The adoption of a wide range of IoT connected devices (e.g. fitness bands, smart home appliances) is still nascent as consumers figure out how to incorporate IoT into their everyday lives.

Privacy, security, and fraud are top of mind for businesses and consumers with mobile devices being a target for the spread of malware. As more companies collect, store, and utilise information from consumers, there is a need to increasingly focus on cybersecurity and compliance with new European Commission rules on data protection. With mobile devices being used in the workplace by employees, businesses need to ensure the proper security measures are in place to prevent the loss of sensitive information.

We hope you find this report useful in your work. We look forward to engaging with you around the findings and to help you understand the implications for your business.

Cormac Hughes, Partner
Deloitte Consulting

Richard Howard, Partner

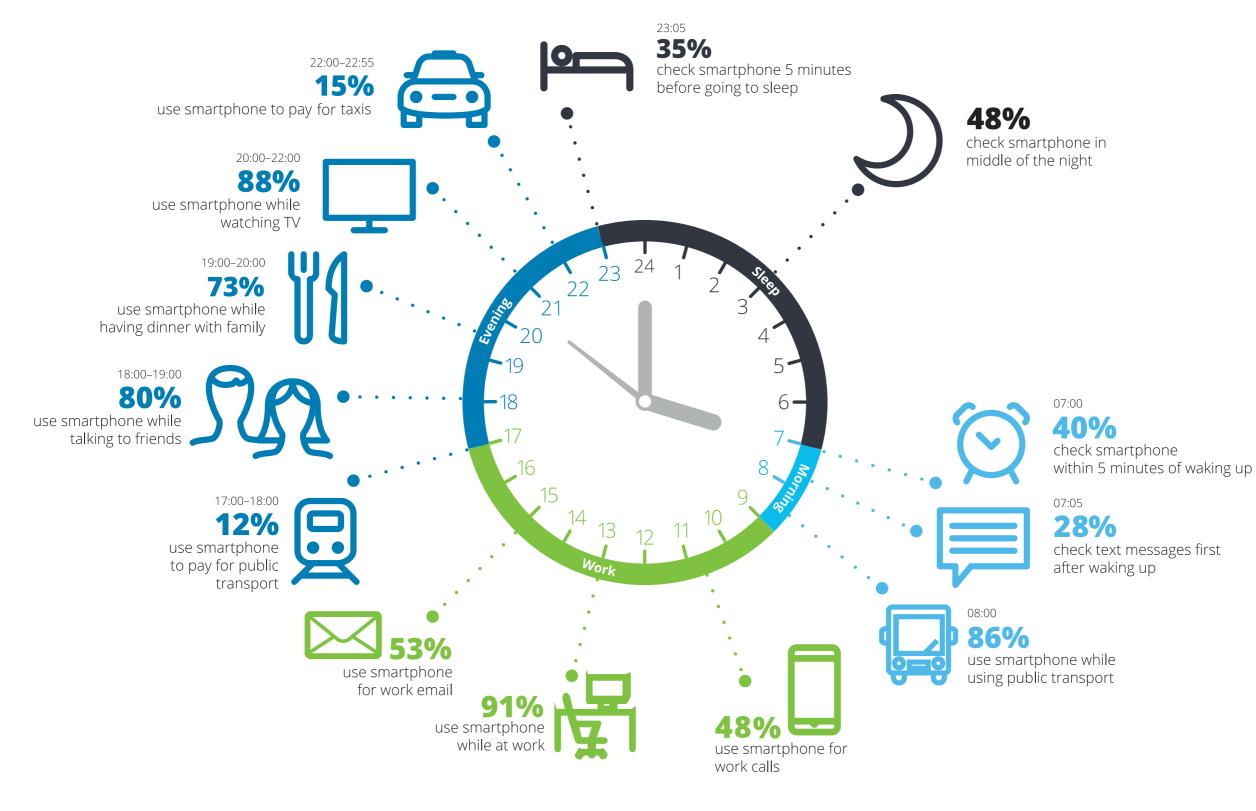
National TMT Leader, Deloitte

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The smartphone has become our primary access point to the digital world, making our lives easier and at the same time introducing new challenges.

GMCS 2016 Ireland | There's no place like phone

Always on: A day in the life of a smartphone



Snapshot of the Irish mobile consumer

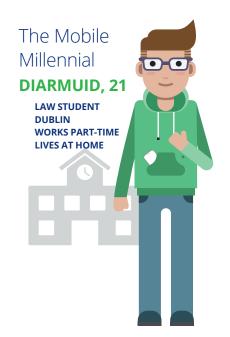
Mobile devices have become a staple of our everyday lives, influencing the way we communicate, work, exercise, shop, and entertain ourselves. As mobile devices become more pervasive and embedded into our day, it is important to understand what challenges and opportunities exist in this increasingly mobile world. From the survey results, we have created four generational personas of Irish consumers that reveal mobile device usage patterns and preferences.

Note: Respondents for which a particular activity does not apply have been excluded from this analysis (e.g. respondents who do not work have not been asked if they use their phone at work) Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016
Base: Smartphone owners, Ireland, 2016: 940

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04

Snapshot of the Irish mobile consumer

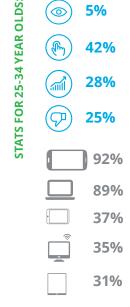


Diarmuid is a 21 year old law student in Dublin who works part-time and lives at home with his parents. Diarmuid often checks his smartphone in the middle of the night for messages and in the morning he has his smartphone in his hand almost immediately. On his way to class, he checks social media apps (e.g. Instagram, Snapchat) to view his friends' latest updates and posts. During his afternoon lecture, Diarmuid uses his laptop to take notes and he occasionally gets distracted by checking his email and social media sites. He makes weekend plans with his friends either through social networks (e.g. Facebook) or an instant messaging app (e.g. WhatsApp). In the next year, Diarmuid is considering purchasing the latest version of the iPhone because he's interested in its new features and he's due for an upgrade with his mobile provider.

(OLDS:		5%
YEAR (19%
18-24		19%
STATS FOR 18-24 YEAR		26%
STAI		90%
		86%
	+ ::	40%
	Ф ф оф	37%
	8	28%
		27%



Dee is a 29 year old who works full-time as a Marketing Manager for a technology company in Cork. She lives with her partner, David and they occasionally get into disagreements about how often she's on her smartphone. However, he seems to have a similar problem unplugging at times. Dee often starts her morning by checking her smartphone within 15 minutes of waking, reading her text messages and then skimming the news headlines via browser. If she has time before work, she'll go on a morning run and she uses her phone to stream her favourite playlist. At the office, Dee is constantly connected to her laptop and carries it with her to several meetings throughout the day. During her lunch break, she'll check her smartphone messages and pay her bills through her banking app. After eating dinner with David, they spend some time watching their favourite Netflix show on their Smart TV, while Dee simultaneously scans her Facebook newsfeed for her friends' latest posts.



TECHNOLOGY ATTITUDES:

(a) EARLY ADOPTERS - BUY THE LATEST AS SOON AS THEY ENTER THE MARKET

EARLY CONSIDERERS - PURCHASE THE LATEST DEVICE IF THEY REALLY LIKE IT

TREND FOLLOWERS - PURCHASE DEVICES WELL AFTER RELEASE DATE

NECESSITY BUYERS - REPLACE DEVICES WHEN THEY GO WRONG/BROKEN

DEVICE OWNERSHIP:

SMARTPHONE GAMES **GAMES** ~~°

WIRELESS CONSOLE SPEAKERS

LARGE **SMALL**









Daniel is 45 years old, lives with his family outside of Dublin and works in the Financial Services sector in the city. Daniel checks his smartphone for messages and emails before eating breakfast each morning. While on the DART on his way to work, he uses his smartphone to catch up on the latest news and sports. Daniel primarily uses his laptop at work however, he uses his smartphone to send and check emails, make standard business calls and on occasion Skype calls to international clients. Daniel likes to keep in regular contact with his wife and two daughters and enjoys chatting with them throughout the day in the family WhatsApp group. 15 minutes before going to bed Daniel often checks his schedule for the next day and sets his alarm for the morning. In the next year, Daniel is considering purchasing a smartwatch because a few of his co-workers recommend the device.

3% STATS FOR 35-54 YEAR OLDS: 33% 30% 30% 86% 77% 37% 32%

29%

24%



Daphne is a 65 year old grandmother who is recently retired from her career as a nurse. She enjoys golfing and often checks her smartphone in the morning to read the time and weather before hitting the golf course. Daphne has had the same smartphone for several years and will likely only purchase a new device if it breaks or if she has an issue. She often uses her smartphone for voice calls to keep in touch with her daughter and young grandchildren that live in the UK. Daphne and her husband share a laptop computer and she logs on a few times each week to check her email, book her tee times online, and get tips from YouTube videos to improve her swing. Daphne was given an e-Reader for her last birthday however, she uses it only on occasion as she prefers to read physical books before going to sleep.



TECHNOLOGY ATTITUDES:

EARLY ADOPTERS - BUY THE LATEST AS SOON AS THEY ENTER THE MARKET

(A) EARLY CONSIDERERS - PURCHASE THE LATEST DEVICE IF THEY REALLY LIKE IT

TREND FOLLOWERS - PURCHASE DEVICES WELL AFTER RELEASE DATE

NECESSITY BUYERS - REPLACE DEVICES WHEN THEY GO WRONG/BROKEN

DEVICE OWNERSHIP:

SMARTPHONE LAPTOP **GAMES PLAYER** GAMES **→** of

SMART

WIRELESS CONSOLE SPEAKERS

LARGE **SMALL** TABLET









Market trends

1. Smartphone sensation

Irish consumers are using handsets as their primary mobile device. An overwhelming majority own or have access to a smartphone (86%), a laptop computer (80%), and a tablet (60%) (Figure 1). Smartphone and laptop computer device penetration is higher in Ireland compared to the UK, supporting the notion that Ireland is generally a tech-savvy country and its people have a desire to stay connected. Half of Irish consumers intend to purchase a smartphone in the next year, supported by the post-paid subscription model of mobile operators. According to the Commission for Communications Regulation, the number of smartphones purchased on twelve, eighteen or twentyfour month contracts in Ireland has increased in recent years.¹ In part, this is driven by high demand of expensive smartphones, which are more difficult to afford with the pre-pay model. Deloitte Global predicts that in 2016,

26% of smartphone users in developed markets will not make any traditional phone calls in a given week.² Our survey reveals in the past 12 months, most forms of data communication have become more widespread with consumers reporting more frequent usage of channels such as instant messaging, social networks, and Voice over Internet Protocol (VoIP) (Figure 2). As smartphone usage patterns become data-intensive, consumer demands for mobile carriers and smartphone vendors are changing. For Network Operators, this means data-rich monthly plans and improved data networks. For smartphone vendors, this means larger screens, faster connectivity, powerful processors, and high-quality cameras.

An overwhelming majority own or have access to a smartphone (86%)...

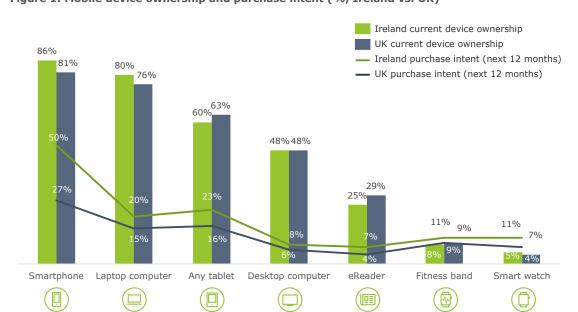


Figure 1: Mobile device ownership and purchase intent (%, Ireland vs. UK)

Source: UK & Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: All respondents, UK, 2016: 4003. All respondents, Ireland, 2016: 1002

¹Commission for Communications Regulation, Irish Communications Market, Quarterly Key Data Report, Q2 2016, https://www.comreg.ie/media/dlm_uploads/2016/09/ComReg-1676r.pdf

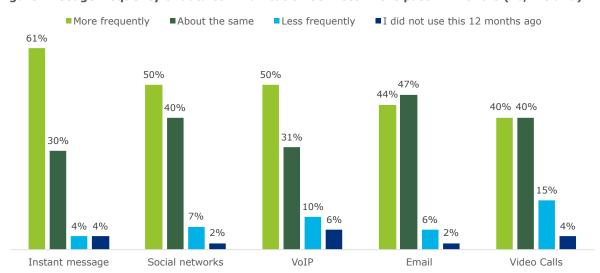


Figure 2: Usage frequency of data communication services in the past 12 months (%, Ireland)

Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016
Base: All adults 18-75 who used each method to communicate with others in the last 7 days. Email: 659, IM: 586, Social Networks: 572, Video Calls: 218, VoIP: 288

2. Constantly connected

Ireland's smartphone users are checking their phones faster in the morning compared to the UK consumer (Figure 3). 14% of Irish smartphone owners check their devices immediately after waking (UK, 10%). 40% of smartphone owners reach for their phones within five minutes of waking, and 61% within a quarter of an hour. Typically, users access text messages (28%), social networks (18%),

personal emails (16%), and the news (9%) on their smartphones first thing every day (Figure 4). Mobile devices have introduced an exceptional level of mobile involvement that has implications for how we start our days, communicate, and process information.

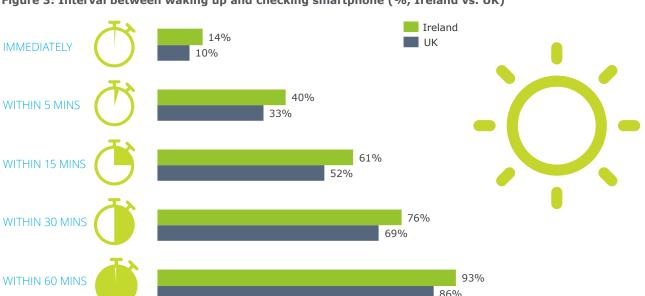


Figure 3: Interval between waking up and checking smartphone (%, Ireland vs. UK)

Source: UK & Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, UK, 2016: 3251. Smartphone owners, Ireland, 2016: 940

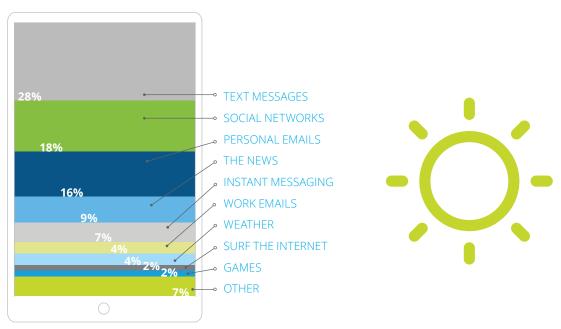


Figure 4: Activities checked on smartphone first thing in the morning (%, Ireland)

Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, Ireland, 2016: 940

3. Side-tracked society

Smartphone usage occurs in almost every aspect of our day—on public transport, at work, while watching TV, and even while crossing the road (Figure 5). During the day, 18-24 year olds are the most frequent multi-tasking smartphone users. 86% use their devices 'always' or 'very often' when using public transport, meeting friends, shopping or watching television. 25% of 18-24 year olds use their phones 'always' or 'very often' when eating at home, or eating out. Smartphones can enhance our work and social lives, but overuse can become a distraction from the world around us and at times can be perceived as anti-social behaviour, leading to disagreements. The 25-44 year old demographic most frequently have disagreements with their partner due to their mobile phone usage (Figure 6).

As consumers are using their smartphones for a broader range of activities during all hours of the day, it has become one of the main engagement channels for businesses to communicate with the public. With the increasing number of available communication opportunities throughout the day, customers are demanding more sophisticated methods of engagement from companies which are more personalised, contextual, and tailored for each individual and situation. Engagement models need to be more digitally driven to meet the new needs and as consumers become more accustomed to messaging and self-serve channels.

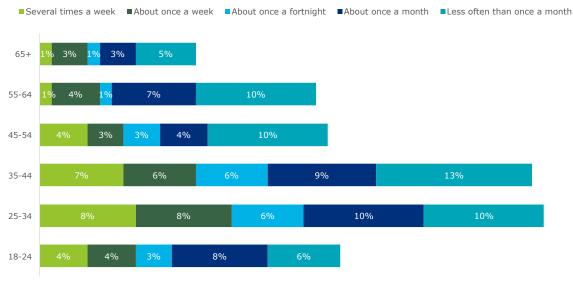
The 25-44 year old demographic most frequently have disagreements with their partner due to their mobile phone usage.

High 70% At work Using public transport 60% While out shopping 50% Meeting friends on a night Intensity of Usage out 40% Walking Watching TV / a film 30% Spending time with family/friends Eating in a restaurant with family/friends 20% Talking to family/friends Eating at home with Crossing the Road family & friends 10% — Driving In a business meeting 0% 2 3 4 5 0 1 6 Low Low Intrusiveness High

Figure 5: Usage of smartphones while doing other activities (%, Ireland)

Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016
Base: Smartphone owners, Ireland, 2016: 940
Note: The "Intensity of usage" axis and size of the bubbles represent a weighted average for the indexed frequency with those that "always" do that activity rated 1 and those that "never" do the activity rated 0. The "Intrusiveness" axis shows how intrusive the phone is for each activity

Figure 6: Percentage of people who have disagreements with their partner due to their mobile phone usage, by age (% by age group, Ireland)



Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, Ireland, 2016: 940

4. Nocturnal norms

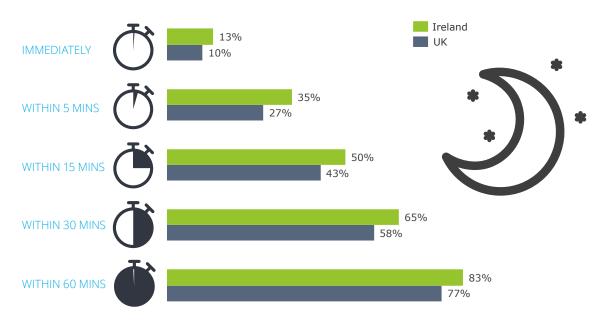
Mobile devices have made their way into our beds, which can impact the quality of our sleep, influencing our overall physical and mental wellbeing. The impulse to check our smartphones at all hours is becoming commonplace. Approximately one third of Irish people check their smartphone within 5 minutes of preparing for sleep (Figure 7). Nearly half of all Irish smartphone owners check their phones in the middle of the night, which is notably higher than UK smartphone owners (34%). Checking the time (34%), instant messages (19%), and social media notifications (16%) are the leading activities for night-time glances (Figure 8). Nocturnal smartphone usage is concentrated among younger age groups, with 72% of Irish 18-24 year olds

reaching for their smartphones during sleeping hours. Nearly two fifths of 18-24 year olds check instant messages or social media notifications and one fifth reply to instant messages during the night (Figure 9).

There is a compulsion for Irish people to check their phones during sleeping hours, which raises the question—are mobile devices encroaching on our need for rest? Setting limits for yourself, using night-time settings on your device and placing the phone outside your bedroom at night could be a good place to start. There are apps available to help monitor and curtail smartphone usage. For example, the app, Moment allows you to set daily limits and you'll be notified when you exceed iPhone

or iPad usage within a 24 hour period.³ There is a trend of organisations promoting wellbeing and work-life balance initiatives to help combat the urge for employees to be "plugged-in" at all hours. The main drivers of these programmes have the objective of improving work-life balance, motivation, productivity and morale. Organisations can discourage the behaviour of sending emails outside of normal working hours by creating a policy of no email or disabling the email servers during designated timeframes.





7 out of 10 of 18-24 year olds check their phones in the middle of the night.

^{3.} Moment Company Website, https://inthemoment.io/

TIME **CHECK TEXT MESSAGES SOCIAL NETWORKS** 16% **RESPOND TO TEXT MESSAGES** 13% THE NEWS **GAMES CHECK OTHER APPS RESPOND TO PERSONAL EMAILS**

Figure 8: Activities checked on smartphone in the middle of the night (%, Ireland)

Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, Ireland, 2016: 940 Note: Chart based on 48% of smartphone owners that check their device in the middle of the night

OTHER

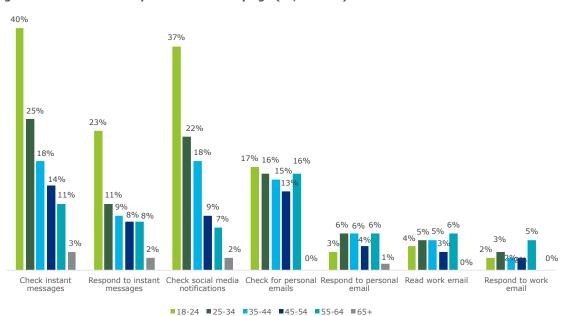


Figure 9: Nocturnal smartphone activities by age (%, Ireland)

Source: UK & Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, UK, 2016: 3251. Smartphone owners, Ireland, 2016: 940 Note: Chart based on 48% of smartphone owners that check their device in the middle of the night

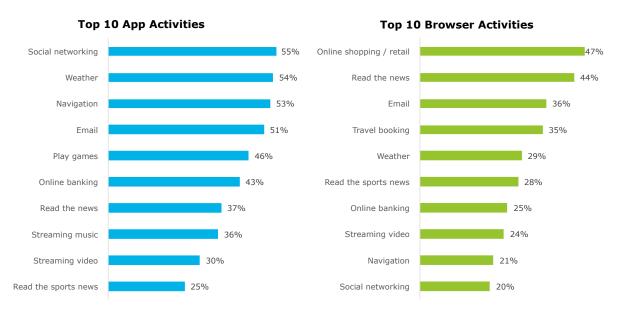
5. App happy

One of the main drivers of the "smartphone sensation" is the breadth and utility of the apps available to consumers. Apps allow consumers to easily conduct activities on their smartphone such as checking the weather, social networking, email messaging and navigating (Figure 10). However, there are instances where the browser is preferred, such as online shopping or reading the news. Apps are used in preference to browsers when the content is uniform, or accessed daily. Excluding pre-installed apps, 20% of all Irish smartphone users have installed 11-20 apps on their smartphones, with the 18-24 age cohort having installed the most (Figure 11). When looking at messaging apps, the use of personal

email, Facebook, and WhatsApp are widespread among age groups (Figure 12). Snapchat and Instagram are most popular with the 18-24 demographic. The trend for a limited number of apps installed and maintained by mobile device owners, contains a challenge for new app developers. To have an app installed and monetised over time in what is a competitive landscape for a finite share of the valuable real estate on the mobile device desktop. Access to the digital world through smartphone apps has created fragmentation in many countries. Aggregation of smartphone activities is the next frontier for media companies and there are few successful attempts to date. One effective example of this

aggregation can be found in China with the app WeChat, which has 800 million users.⁴ The app, operated by Tencent, is a portal of web services that allows users to conduct a number of activities such as sending instant messages, posting life events, hailing rides, shopping online, sending payments, as well as a series of business focused activities. Offering customers a sole interface for everything they do on their smartphone may be the route to owning the mobile consumer of the future.

Figure 10: Top ten activities accessed using an app or a browser (%, Ireland)

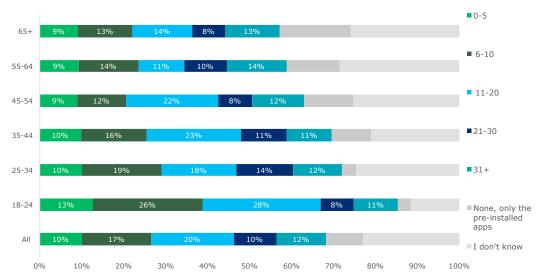


Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: All smartphone owners 940

Offering customers a sole interface for everything they do on their smartphone may be the route to owning the mobile consumer of the future.

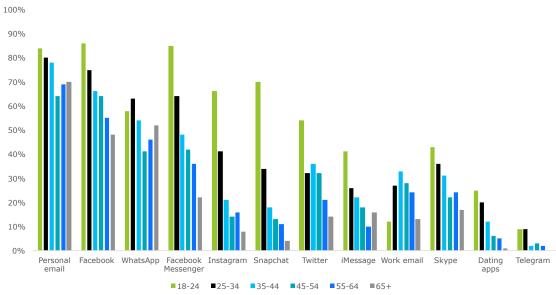
 $^{^4.} For bes, Tencent's 'Super App' We Chat Is Quietly Taking Over Workplaces In China, August 2016, http://www.forbes.com/sites/ywang/2016/08/19/tencents-super-app-wechat-is-quietly-taking-over-workplaces-in-china/#95d60e1c620f. Application of the complex of$

Figure 11: Excluding any pre-installed apps, approximate number of apps are currently installed onto your phone (% by age group, Ireland)



Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: All smartphone owners age group: All: 857, 18-24: 103, 25-34: 207, 35-44: 204, 45-54: 146, 55-64: 119, 65+: 77

Figure 12: User demographics of communications apps (%, Ireland)



Source: Irish cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: All phone owners who use IM, social networks or emails 831, 18-24: 101, 25-34: 205, 35-44: 199, 45-54: 143, 55-64: 110, 65+: 73

6. Content creation

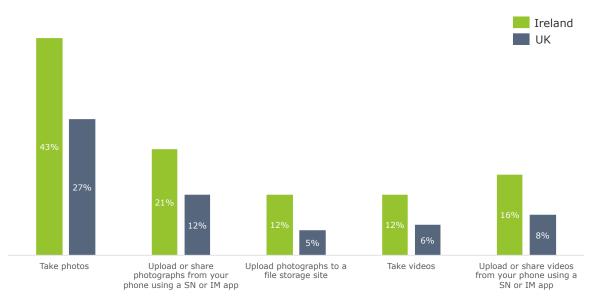
When it comes to content creation and sharing, Irish smartphone owners surpass their UK counterparts (Figure 13). 43% of all Irish smartphone owners take photos daily as opposed to 27% in the UK. 21% of smartphone owners upload or share photos from their phone using an app. These high content creation figures also translate into content sharing; a higher percentage of Irish people upload and share photographs and videos than UK smartphone owners.

Video viewing on smartphone devices is very popular in Ireland with over half (57%) of smartphone owners regularly using their devices to watch short videos

and almost half (42%) watching autoplay videos on social networks. These percentages of users are higher than those seen in the UK (Figure 14). Our survey shows that video viewing declines as the length of video increases; the shorter (up to 10 minutes), the more popular to watch on a smartphone. Digital photos, video recording and content sharing on smartphones are supported by the increase of 4G customers and offers in the market as well as the growing popularity of social media apps based around content creation and sharing.

43% of all Irish smartphone owners take photos daily.





Source: UK & Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, UK, 2016: 3251. Smartphone owners, Ireland, 2016: 940

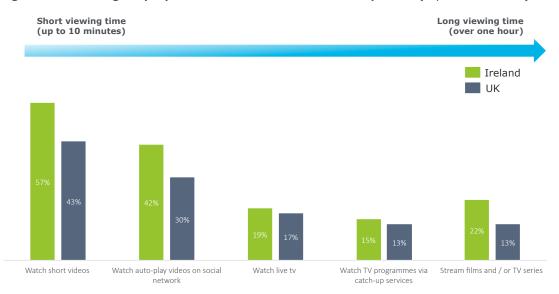


Figure 14: Percentage of people who watch videos on their smartphones (%, Ireland vs. UK)

Source: UK & Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, UK, 2016: 3251. Smartphone owners, Ireland, 2016: 940

7. 4G forecast

Network operators have invested significantly in 4G over the past 3-4 years with the first services becoming available in 2013 and now widely available across the country. Investment was made to take advantage of the consumer trend of increased media consumption and social network sharing. We have witnessed the Irish consumer using more data intensive services more frequently. However, the survey shows that adoption of 4G is lower in Ireland (41%) versus the UK (54%) (Figure 15). The survey shows that the 4G network differentiation and improved quality of service is either not understood or valued by the consumer since almost 60% of Irish consumers have not adopted 4G or don't know whether they are on 4G. Only 32% of those not already on 4G are fairly likely

or very likely to adopt 4G in the coming year. Just 30% of Irish consumers use mobile data most often, in spite of the fact that we as a nation are heavier users of smartphones and content rich services than the UK. It appears that consumers' adoption of 4G is being led by handset manufacturers rather than the superior network technology offered by 4G. Network differentiation and monetisation clearly remains a challenge for operators as they look to 5G technology and further investment. Wi-Fi is a popular channel for off-loading data-rich content (e.g. video) and to serve as a coverage alternative. 67% of smartphone users report using Wi-Fi to connect to the internet most often (versus 2G/3G/4G) (Figure 16).

> ...almost 60% of Irish consumers have not adopted 4G or don't know whether they are on 4G.

Figure 15: 4G / LTE Adoption in Ireland (%, Ireland)

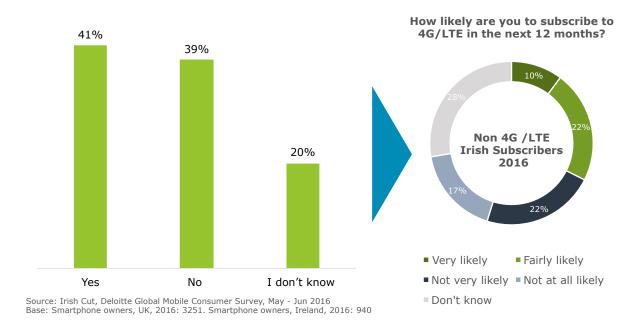
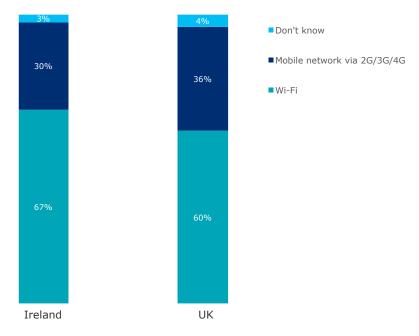


Figure 16: Type of internet connectivity used most often (%, Ireland vs. UK)



Source: Irish & UK Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: All smartphone users who connect their devices to both WiFi and Mobile networks

8. Mobile money

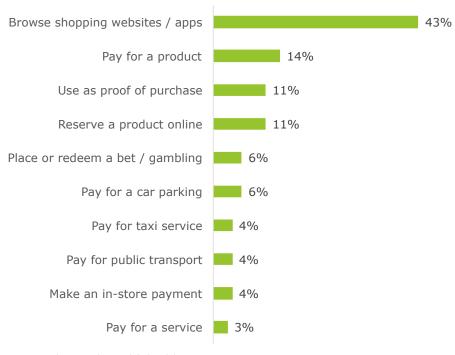
Irish smartphone owners enjoy online shopping with 43% viewing shopping websites or apps at least once a week and 14% having paid for products online using their smartphone (Figure 17). These are similar figures to those seen in the UK (40%). As fingerprint readers have become available to provide security they are being used for in-store and in-app payments. A surprising figure related to mobile commerce was that only 12% of Irish people have used their smartphone to pay in-store for products despite the investment in device technology and payment infrastructure. Outside of online shopping, mobile payments have not yet taken hold with Irish smartphone owners. The low adoption can perhaps

be explained by Figure 18, which highlights how respondents view mobile payments as not secure enough (26%) as well as questioning the benefits of using smartphones for in-store payments (25%). The figures are similar for Irish and UK smartphone holders when it comes to paying for taxis (both 9%) and public transport (6% Ireland, 9% UK) using a smartphone.

Security of devices (e.g. fingerprint authentication) and the removal of card charges and agreed standards with banking institutions are making the way new merchant services better protected and cheaper than card based schemes. They also enable frictionless customer experience at check-out. In 2018, we expect to see a lot of changes

in payments with the Revised Payment Services Directive (PSD2). There will be an opportunity for businesses outside of traditional banking to gain access to customer account information and provide payment initiation and balance services. The changes to the payments value-chain will enable customers to manage their finances and more easily make mobile and online payments.

Figure 17: Frequency of mobile payment activities, at least once a week (%, Ireland)



Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016

Base: All smartphone owners 940

Have you used your phone for an in-store payment?

I don't know
I don't think they are secure enough
I don't see any benefits from using this
I don't have the necessary feature/app on my phone
I was not aware that you can do this
I don't know any stores that allow this
I don't really understand all the different options
The screen is too small
It's too complicated to set up/use
This is not available in my country
I get rewards if I use my credit card instead

I don't know

11%

26%

19%

19%

19%

....respondents view mobile
payments as not secure

Figure 18: Main reasons why smartphones are not used to make payments in-store (%, Ireland)

I look like I'm showing off

I tried it but it didn't work

1%

Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: All smartphone owners 940

9. Privacy

The rise of fingerprint reader usage in mobile devices is clear with 22% of respondents recognising that their device has the option for fingerprint authorisation (Figure 19). Other privacy options such as the use of PINs or passwords are most popular when unlocking phones or authorising mobile payments (Figure 20). There appears to be a heightened awareness in the 18-24 year old demographic regarding the information consumers share with organisations online. 70% of the 18-34 demographic believe that they share their name, and 32% think that they provide companies access to their browsing activity (Figure 21).

While customers have high expectations of businesses privacy and security procedures, our survey suggests a large number don't fully understand their privacy settings or what information they are providing to organisations. Businesses should act early to understand and implement changes to the European Commission data protection regulations. Failure to do so can result in significant financial penalties and erosion of consumer trust; a key currency for business in the Digital economy.

...the use of PINs or passwords are most popular when unlocking phones or authorising mobile payments.

enough (26%) and question

in-store payments (25%).

the benefits of using

smartphones for

18%

None of these

3%

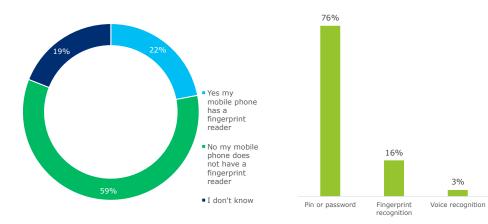
Don't know

3%

Facial recognition

Figure 19: Mobile device with fingerprint reader (%, Ireland)

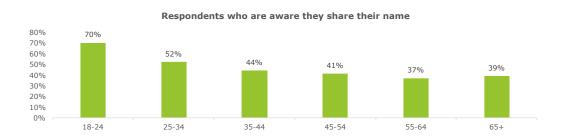
Figure 20: Methods used when unlocking phone and authorising mobile payments or other transactions (%, Ireland)

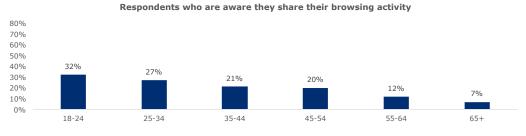


Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners: 857

Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners: $857\,$

Figure 21: Information shared with at least one organisation online (%, Ireland)





Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners in age groups 18-24 103, 25-34: 207, 35-44: 204, 45-54: 146, 55-64: 119, 65+: 77

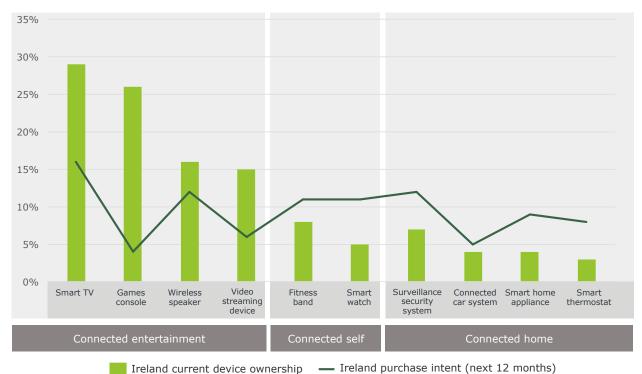
10. IoT infancy

Demand for Internet of Things (IoT) devices appears to be in its infancy with Irish consumers and has yet to gain traction in the UK. IoT devices such as smart thermostats, smart watches, and smart TVs can connect to the Internet or to each other, allowing users to consume less energy, check their email on their watch, and stream their favourite movies on their TV. IoT devices are expected to be the next movement in the communications revolution, providing consumers further connectivity in their world. The "connected entertainment" category is the clear leader in IoT device ownership, with 29% and 26% of Irish consumers owning smart TVs and games consoles, respectively (Figure 22). In the next year, consumers

intend to purchase smart TVs (16%), wireless speakers (12%) and connected surveillance / security systems (12%); however, device penetration is expected to remain low until cost and ease of use align with consumer expectations. IoT devices may change the way we live at home; however, the future holds several opportunities for IoT to transform our world on a larger scale (e.g. Smart cities, manufacturing, transportation systems, healthcare, etc.). In cities, IoT sensors and devices can be used to help alleviate transportation congestion, improve driver and pedestrian safety, and reduce energy and water consumption.⁵ In healthcare, internet connected devices in hospitals can be used by healthcare professionals

to more efficiently monitor the health of their patients and improve quality of care.⁶ IoT must be a top business focus for IT strategies across industries. We're seeing increased investment in this space with IoT expected to be valued at trillions of dollars by 2020.⁷ As this IoT revolution progresses, we can expect to see continued investment in infrastructure and the need for more end-to-end security and privacy driven by both regulation and industry standards.





Source: Irish Cut, Deloitte Global Mobile Consumer Survey, May - Jun 2016 Base: Smartphone owners, Ireland, 2016: 940

Information Week, 6 IoT Innovations Making Cities Smarter, September 2016 http://www.informationweek.com/government/6-iot-innovations-making-cities-smarter/d/d-id/1326791

 $^{^{6.} \} ComputerworldUK, Internet of Things in healthcare: What's next for IoT technology in the health sector, July 2016, http://www.computerworlduk.com/iot/iot-centred-healthcare-system-3643726/$

^{7.} Business Insider, These are the top IoT companies to watch and stocks to invest in, September 2016, http://uk.businessinsider.com/top-internet-of-things-companies-to-watch-invest-2016-87r=US&IR=T

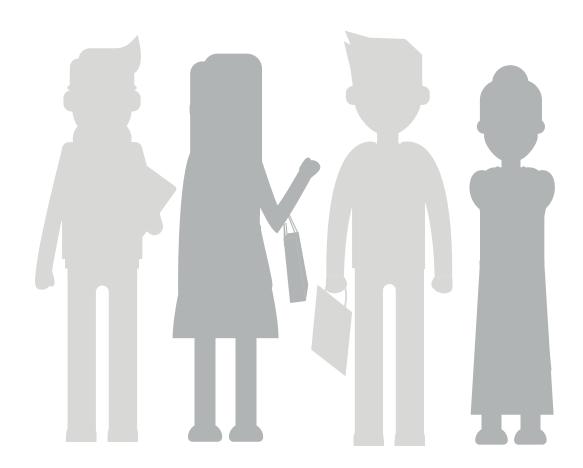
About the research

The Ireland data set is part of Deloitte's annual Global Mobile Consumer Survey, a multi-country online study of mobile phone users across the world. The 2016 study is comprised of 5 continents, 31 countries, and 53,000 respondents. Data cited in this report are based on a nationally representative sample of 1,000+ Irish consumers aged 18-75. The sample follows a country specific quota on age, gender, region, work and socio-economic status. Fieldwork took place between May and June 2016 and was carried out by Ipsos MORI, an independent research firm, based on a question set provided by Deloitte. This summary report provides a snapshot of some of the key trends and segment insights the survey has revealed. Additional analysis as well as

results from other countries is available on request.

This brief report provides a snapshot of some of the insights that the survey has revealed. Additional analysis such as: 4G adoption and usage, smartphone preferences, smartphone purchase channel, reasons for joining leaving mobile operators, attitudes towards triple/quad play, usage of tablets, and usage of communication services such as instant messaging, SMS and social networks are available upon request.

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Relevant thought leadership

Mobile Consumer Survey 2016: The UK cut There's no place like phone

Deloitte annually prepares a comprehensive and robust survey of mobile usage around the globe. The Global Mobile Consumer Survey provides a unique insight into the mobile consumer behaviour of 50,000+ respondents across 30 countries. The UK firm's sixth annual edition of the UK Mobile Consumer survey analyses the current trends in the mobile industry and highlights the impact of smartphone penetration.

Technology, Media & Telecommunications (TMT) Predictions 2016

Each year, Deloitte's Global Media Sector leaders, co-author of Predictions discuss what can be expected from the media sector. These predictions reveal perspectives gained from hundreds of conversations with industry leaders and thousands of consumer interviews across the globe. This year's report highlights virtual reality, mobile games, mobile ad-blockers, box-office revenues, TV market erosion, European football market, and eSports.

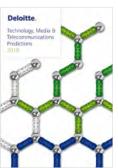
Digital Democracy Survey 2016

For nearly a decade, Deloitte has compared and contrasted consumer attitudes and behaviours across generations related to entertainment devices, advertising, media consumption, social networking sites, and the Internet. This year's survey puts a spotlight on the binge-watching culture, increased interest in streaming, social media's influence on purchasing preferences, and more.

Media Metrics: The State of UK Media and Entertainment 2016

Deloitte's 2016 report identifies and ranks 100 largest media and entertainment organisations in UK and examines their financial performance and strategies. Media Metrics provides a new and comprehensive view on the size and shape of the media and entertainment market today and the role of the UK as a home for the creative sector.









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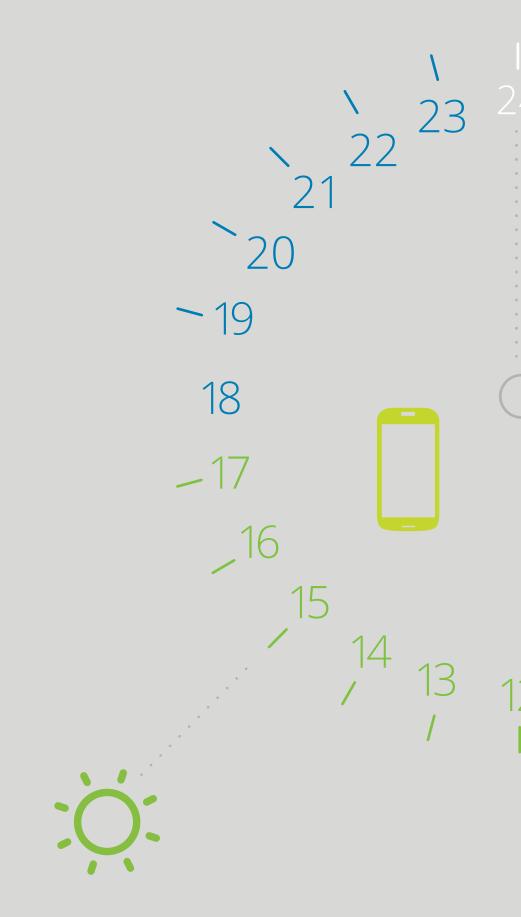


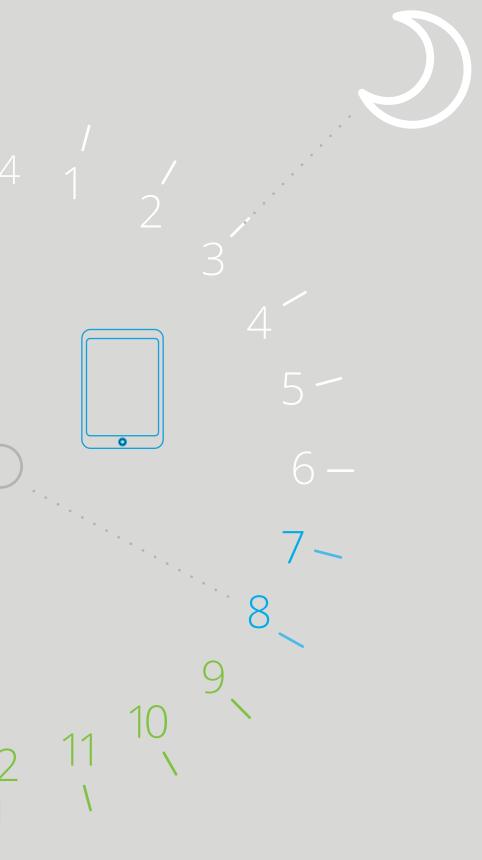












The 2016 study is comprised of 5 continents, 31 countries, and 53,000 respondents.

Data cited in this report are based on a nationally representative sample of 1,000+ Irish consumers aged 18-75.

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