Abstract:

Holidaymaker’s use of travel guides (paper and digital) while holidaying in Ireland.

Dr James Hanrahan, IT Sligo
Peter Krahenbuhl, Sustainable Travel International

Holidaymaker’s use of Smartphone technology, is growing rapidly, to the point where online use from mobile devices is expected to surpass traditional computer internet use by 2014. This has become increasingly apparent in Irelands tourism destinations. As a result many of the Irish tourism business are developing travel apps. This research forms an important baseline study to on visitor’s use of travel guides, particularly with regard to mobile devices such as “Smartphones”, as well as downloadable “apps”. The results give the Irish tourism industry an understanding on (paper and digital) travel guide use. As noted by (Hanrahan and Krahanbuhn 2011) there has been a significant rise in Irish tourism providers creating travel apps. With over a half million apps today, most people avail themselves of 30 or so, and of that 30, only about ten are used regularly. Many apps seem to reflect an approach that resembles early websites, copying hard copy versions, without taking advantage of the unique opportunities mobile applications offer. This paper was commissioned by Fáilte Ireland in order to identify and assess how domestic and international visitors use traditional travel guides with a focus on the use of mobile devices such as “Smartphones”, as well as downloadable “apps” when traveling in general and within Ireland.

This paper specially focuses on the identification of visitor travel guide use, particularly as it relates to the use of traditional traveller information sourcing vs. future growth and options for technology based application solutions (e.g. apps for mobile devices such as Smartphones). The paper argues the role of the tratitinal guide book and the applicability of smart technologies for various tourism sectors and regions, including recommendations to develop relevant programs.

Acknowledgement
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Key Words
Holidaymaker, Travel guides, Travel Apps, Guide books, Augmented reality

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Introduction

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Definitions and Abbreviations

For the purposes of this research and associated paper, 'Smartphones' are defined, based on a similar study conducted by Napier University, as "mobile phones with advanced computing and connectivity, for example, iPhones, Blackberries and those using the Android operating system."

An "App" is an abbreviation for "application" and in the smartphone and mobile device world it is the popular consumer shorthand for downloadable mobile applications in smartphones and tablets after Apple debuted the iPhone 3G in 2008, PCMag (2012).

Augmented Reality (AR) apps can be defined as a live, direct or indirect, view of a physical, real-world environment whose elements are *augmented* by computer-generated sensory input such as sound, video, graphics or GPS data. (Yovcheva, Buhalis, Gatzidis, 2012). A recent report further illustrates:

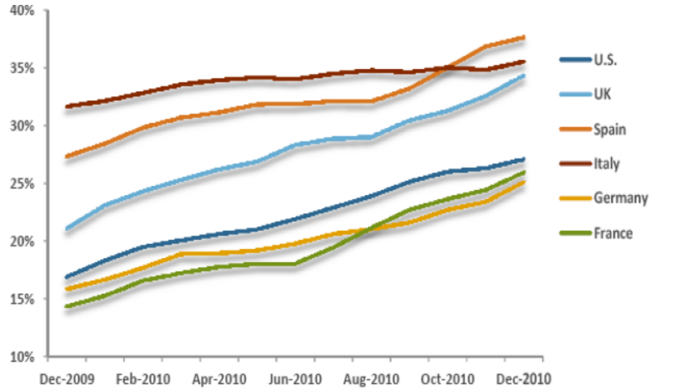
As well as a familiarisation tool, technology will be able to offer an alternative experience of a place. Augmented reality and gamebased applications could make a qualitative difference to travel. Through the camera lens of a mobile device, locations could be seen from a completely different perspective: their physical appearance could be augmented with photos, videos or sounds from the past – or from an alternative, simulated reality. (*From Chaos to Collaboration: How transformative technologies will herald a new era in travel* (Stubbings and Curry, 2012).

Finally tourists for the purpose of this study have been identified and targeted as holidaymakers, with a key focus of the study centering on major tourist attractions around the country.

Background

Currently within Ireland and internationally there is very little information and knowledge regarding smartphone use in the travel and tourism industry, particularly as it relates to visitor use of smartphones and related technology versus more traditional travel guides. In fact there has been no related published research within the Irish context. The Fáilte Ireland (2012) visitor attitude survey currently gather tourism information for choosing Ireland as a destination, however this may need to collate information on smartphone and app usage in the future. Based on the identification of this important knowledge gap the concept for this project resulted from key issues highlighted during the Fáilte Ireland 2011 Industry Education Research Forum and the discourse and outcomes from County Sligo Tourism Strategy Review Group (CSTSR) and Fáilte Ireland North West. Looking outward the Tourism Ireland report (2011) in this area highlights the growth and use of Smartphones

Fig 1 Growth in Smartphone usage



Source: (Tourism Ireland, 2011)

Italy and Spain have the highest percentage of Smartphones adopted by the market with Italy starting high and then slightly decreasing. Spain began their adoption of Smartphones quite strongly and increased rapidly. Rapid growth in smart phone usage will impact consumers in a number of ways:

- Smartphones will be the new credit card

- Consumers will grant access to make personal data
- Location based marketing will grow
- Online and offline shopping will seamlessly merge
- Mobile transactions will grow
- Consumers will pay for more mobile services
- Mobiles will be the battle ground for loyalty

Internationally, similar research projects were reviewed and integrated where appropriate in order to increase the robustness of the results, and to identify gaps and solutions. One relevant research project for example, is the following at the Napier University (2011): *An Assessment of Tourist Demand and Use for downloadable "APP"s for SMARTPHONES and Mobile Device.* However, this project, while allowing for an international perspective, is not specific to tourists within Ireland, and it was based on a smaller sample size. Other studies cited within this survey and noted in the bibliography are also relevant with regard to global trends but not locally specific.

Methodology

Based on existing team experience combined with literature review of existing relevant studies and research reports, a questionnaire was developed in order to obtain data through on-site surveying that would help address the research aims and objectives. The draft survey questions were then reviewed by IT Sligo Department of Marketing, Tourism and Sport, Fáilte Ireland head office, Fáilte Ireland North West and Sligo County Council. This linkage will also prove valuable in the dissemination of results and recommendations. Surveying occured at several major tourism attractions across the country during peak vistor times in 2012. Researchers utilised a purposive sampling technique to ensure a comprehensive cross sample of tourists. Electronic methods of data collection were avoided in order to capture possible future movements and trends from tourists who may not be currently utilising mobile devices or have access to electronic surveys. Desk research complimented on and offline surveying of domestic and international tourists across multiple sectors and demographics, with a focus on use of technology applications, as well as more traditional sources of tourism information (e.g. travel guide books). Integration and assessment of the results, followed by report development, delivery and dissemination followed.

Key Findings

The key findings of the report are discussed in context of the current theory and applied tourism practice in the field. The discussion of the findings will flow from the basic demographic of the participants to the use of hard copy traditional guides onto the use and adoption of travel apps. This is then reviewed with a reflection of the barriers associated with travel apps as identified by the tourist.

Holidaymaker Profile

The primary holidaymaker profile data gathered and used during analysis included gender,

age, nationality, what country they travelled from, length of trip and trip type. Below is a summary of the results of those surveyed:

Fig 7.1 Gender

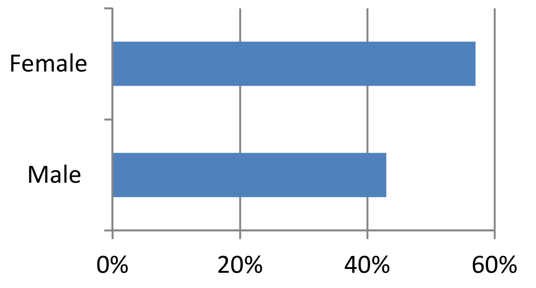


Fig 7.2 Age

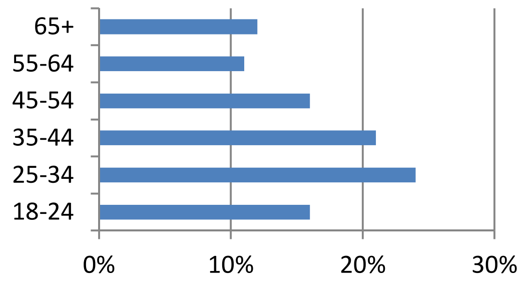


Fig 7.3 Nationality

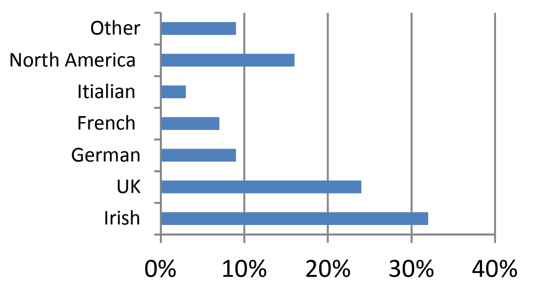


Fig 7.4 Country traveled from

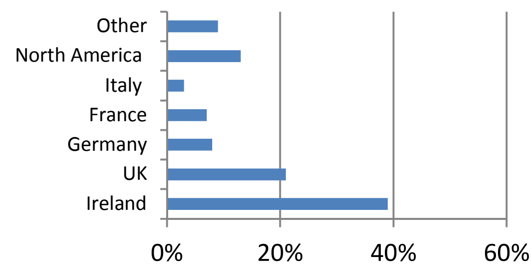


Fig 7.5 Length of Visit

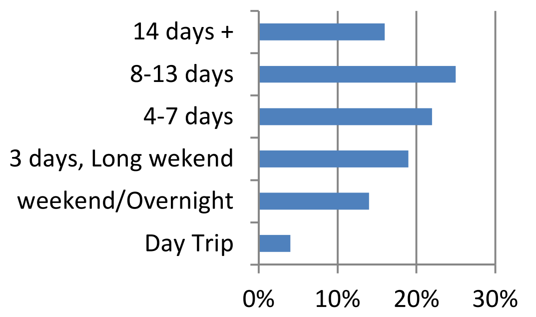
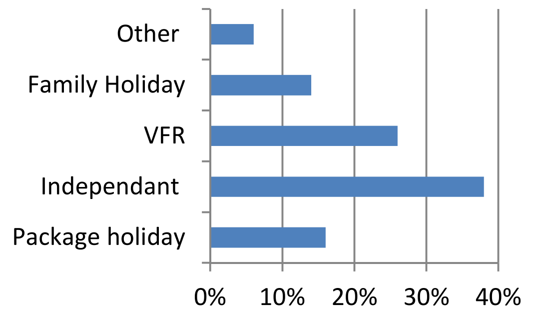


Fig 7.6 Trip Type



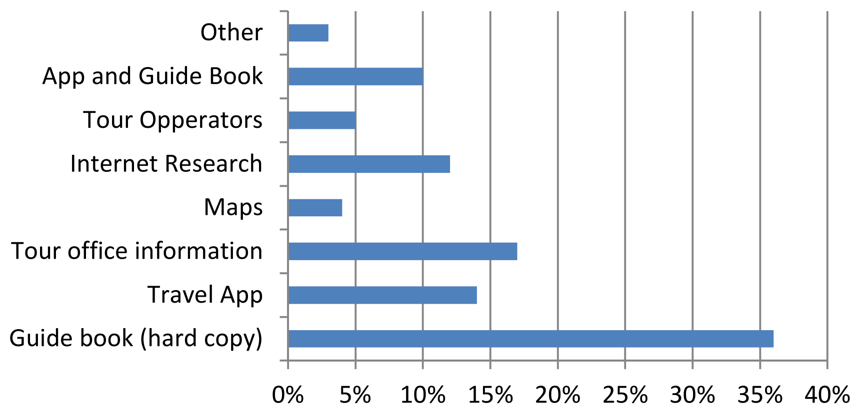
The holidaymaker demographic generally reflect the current Fáilte Ireland and Tourism Ireland visitor profiles. Domestic tourists represented the largest percentage of travelers (fig 7.3), which is significant because domestic smartphone use would typically not be subject to most of the barriers that other nationalities would face, such as roaming charges. These charges would however be encountered by the second largest group traveling from the UK. Furthermore the third largest group of visitors was from the US. These visitors tended to have the most significant barriers to entry, including extremely high overseas rates and some incompatible technology. In the middle categories were other European nationalities, who would tend to have middle of the road barriers to use. In the "other" category the top respondents were Australia, New Zealand and South Africa, who showed similar tendencies as visitors from the US. These considerations affected both the amount of use and variation in the type of use of mobile devices between domestic and foreign visitors, as explored in the *Smartphone and Mobile Device Use* section below.

Length of stay also corresponded to type of trip, with longer stays tending to be independent travelers, who represent nearly 40% of visitation within the survey sample.

The use of Travel Guides

The majority of holidaymakers said they are using a travel guide of some sort. With the most frequent type of travel guide cited being traditional guide books (37%). This highlights the importance still placed by tourists on hard copy or tangible travel guides. Perhaps this should be tracked in longitudinal research in the future to identify changes as smartphone technology becomes more common place. The second highest response category was tour office information, which was not a part of the original list of answers but was added due to the high frequency (17%) of responses that resulted while surveying. This highlights the importance of tourist offices for visitors to Ireland. The third highest category at 14% was travel apps. Initial speculation was that this would be considerably higher. However considering how new these are to the tour guide market they are making a considerable impact in a very short space of time. The use of internet research is still quite high with some tourists displaying evidence of computer printouts of travel information, again highlighting the desire for tangible travel information. The combined categorical response of "Book and app" provided the response rate of 10%. The frequency by type of travel guides used is summarised below:

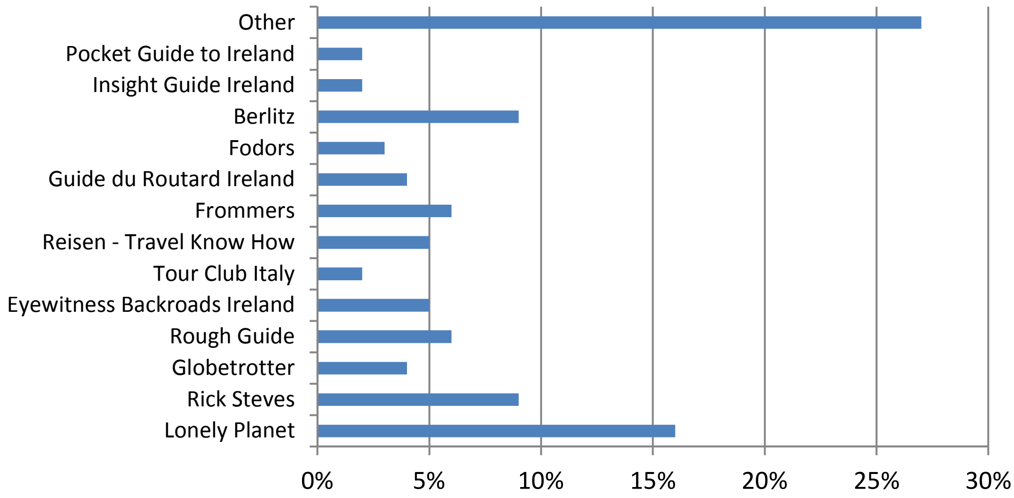
Fig 7.7 Travel guide was use typology



Travel Guide Books

The research captured a vast array of travel guide books. This is evident in Fig 7.8 below which indicates the percentages of most popular choices for travel guide books cited. Noting that, Eyewitness, Rough Guide, Guide du Routard Ireland and Frommers were popular with Lonely Planet and Rick Steves being cited as twice as common as most other guides:

Fig 7.8 Spectrum of Travel guide books



The majority of the Holidaymakers were either *very satisfied* or *satisfied* with their guide books. Almost all purchases occurred in their home country, the majority of books were published in 2011 or 2012, and nearly 50% of them were purchased at a price range of €20-29. This indicates that people who use traditional travel guide books still like to flip pages rather than tap screens and are willing to pay for high quality guidebooks. This may pose a threat to travel guides in the future or be a pricing opportunity for travel apps which are low cost or free. This is summarised in the Fig 7.9 to Fig 7.12 below.

Fig 7.9 Year Guide Book published

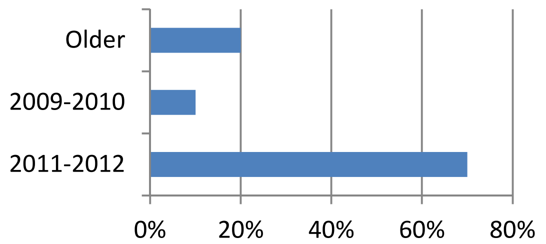


Fig 7.10 Price of Guide Book

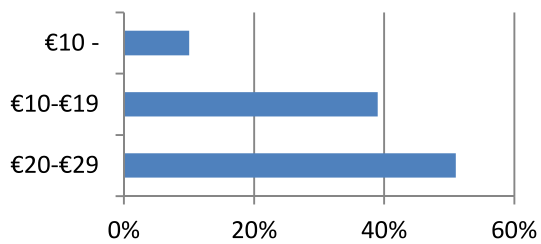


Fig 7.11 Where was the book aquired

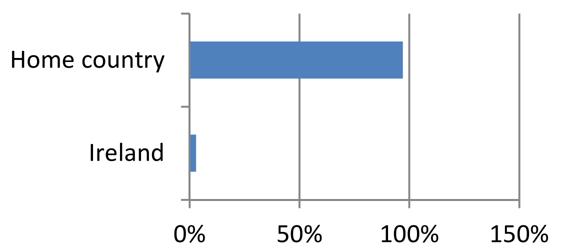
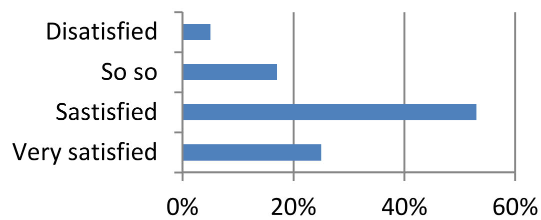
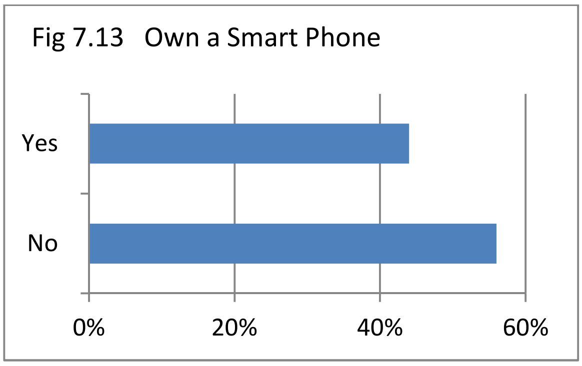


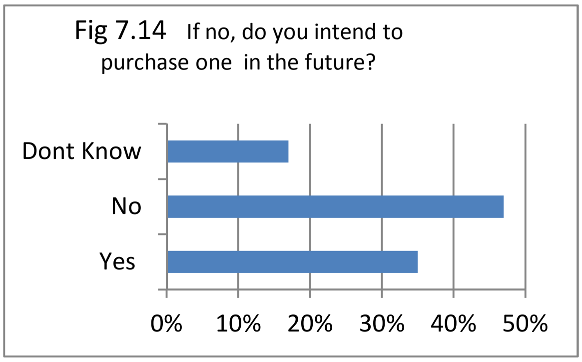
Fig 7.12 Book Satisfaction



Smartphone and Mobile Device Use

The key differentiator between Holidaymakers for the purposes of this project is related to whether or not they owned a smartphone or other relevant mobile device (e.g. IPad, ITouch, etc.). For those who answered “no” to owning a smartphone the survey ended after the travel guide questions and for those who answered “yes” the survey continued on to the end regarding additional questions related to Smartphone use. Furthermore 55% of respondents stated that they do *not* own a related mobile device. This, however, may be closely tied to age, noting that a third of respondents were in the over 50 age category, which may tend to have lower smartphone ownership and use frequency. The older the age category the less likely they were to use a smartphone. Of those who did not own a Smartphone, 34% said they intended to own one in the future and use it while traveling and 33% said they were not planning to, as highlighted in the below charts.





Visitors from the US had the highest percentage of Smartphone ownership (64%), followed by Italy and Canada (50% respectively), the UK (44%), Ireland (41%), France (32%), and Germany (29%).

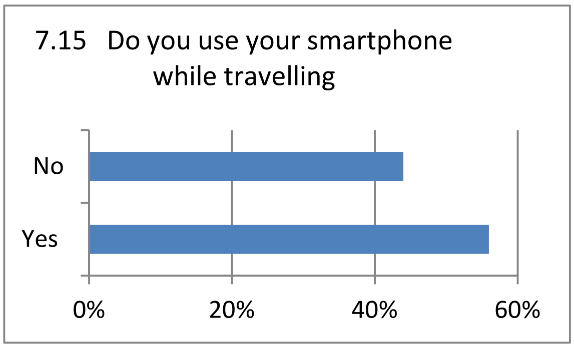
Other reports confirm these figures globally. According to the ITB World Travel Monitor:

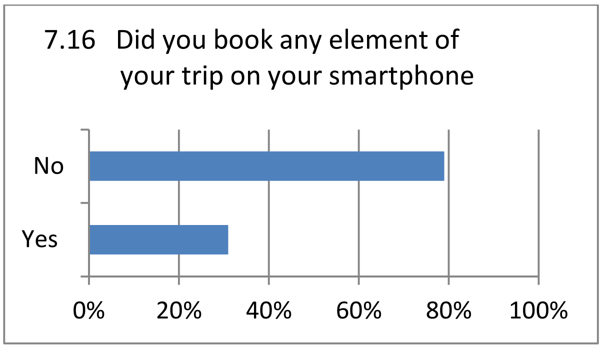
- Up to *40% of international travelers own a smartphone with internet, e-mail and other functions;*
- *57% have a conventional mobile phone;*
- *Over 40% of smartphone owners use their devices to get destination information;*
- *34% of business travelers / 26% of leisure travelers use them to make booking changes during their trip;*
- *As many as 37% of international leisure travelers say they use mobile social networks*

Targeting Innovation (2012)

Although 45% of respondents in this study *do* own a smartphone, the rapid growth of this technology means that these figures will most likely increase significantly in the coming years. All trends and related reports point toward a full smartphone/mobile device market and an eventual phase out of more traditional mobile phones in the coming years, so in the future most mobile phone purchases will include smartphone technology.

For individuals who own smartphones or other related mobile devices, close to 55% of respondents said that they use their device while travelling in Ireland, and 31.5% of the respondents said that they booked *an* element of their trip using their mobile devices.





This includes contacting travel providers directly that visitors may have discovered while researching on their mobile device. While booking travel on smartphones and related mobile devices is in its infancy - as other reports highlight consumer concerns such as personal information security - the growth in mobile bookings is rapidly on the rise. From a recent PhoCusWright report:

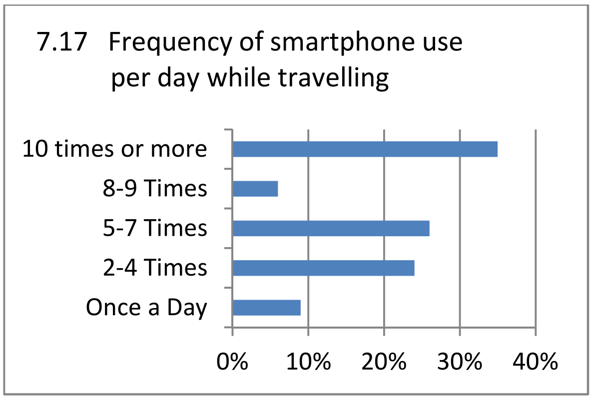
> *Growing from zero just a few years ago, U.S. mobile leisure/unmanaged business travel gross bookings reached nearly US$2.6 billion in 2011, representing 2.4% of the U.S. online travel market. By 2013, that share is projected to grow to 6.5%, when mobile bookings (excluding managed corporate bookings) will represent 2.6% of the total U.S. travel market,* PhoCusWright (*2012).*

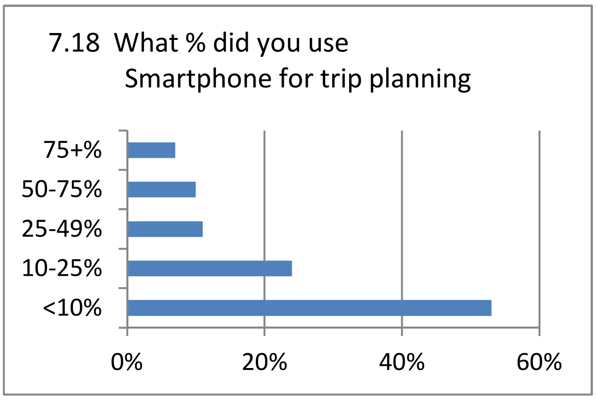
The report goes on to state that U.S. Mobile Travel Bookings are to Top $8 Billion by 2013.

InterContinental Hotel Group (IHG) exemplifies this rapidly evolving trend, having recently reported a nearly 1,000 percent increase in room night bookings from mobile devices in just over a year. The group went from under $1 million in monthly revenue to $10 million in just over a year. In the first five months of 2011, IHG had already surpassed its 2010 total number of room night bookings from mobile devices. Most guests (65%) who book through a mobile device are staying at IHG hotels the same night or within one day (Travelmole, 2012). This highlights the growing importance of short term purchasing when travelers are already in a destination.

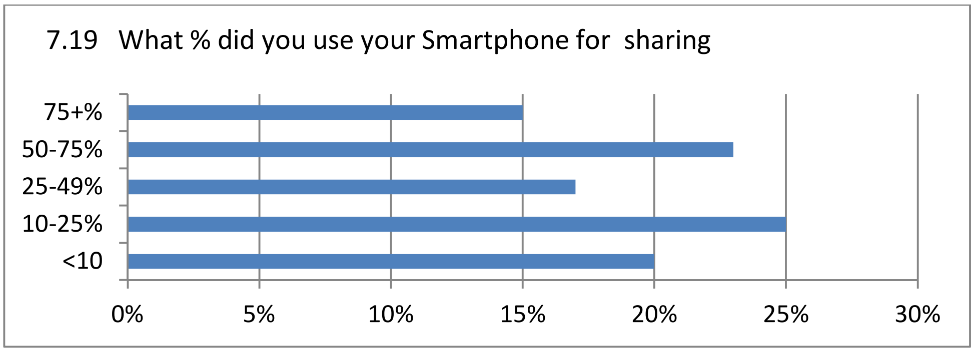
Regarding frequency of smartphone/mobile device use, the “once a day” traveler was just over 9%, with an increased representation of moderate users (2-4 times per day at 24% and 5-7 times per day at 25%), before dropping off to 5% for the 8-9 times a day users. Then the figures spiked with the greatest frequency being in the ten plus times per day category (34%). This spike in high use is related to domestic users who would naturally use their mobile phones more as there are no roaming charges, as well as business travelers who need to remain connected and whose company pays the bill.

When asked about mobile use related to trip planning (pre-trip), in holiday use (versus for example, using other more traditional sources of information such as travel guide books), and vacation sharing (for example social media that could be during or after the trip), there was a broad range of responses. With regard to trip planning, 52% of respondents used their mobile devices - including iPads - under 10% of the time, versus other trip planning activities such as traditional computer internet research, using travel agents, etc. Furthermore 24% used their devices 10-25% of the time, so the combined categories mean that 76% of all respondents used their mobile devices less than 25% of the time. This is consistent with a recent PhocusWright report: **“Empowering Inspiration: The Future of Travel Search”** that cited information sources of decision to visit the Destination websites via traditional computer included the following frequency: US - 47%, UK - 48%, Germany - 52%. However, websites or applications via mobile device were only: US - 8%, UK - 8%, Germany – 7%, (Rheem, 2012).





When tourists were asked about what percentage they would assign to using their mobile device for vacation sharing (e.g. social media), the usage figures spread out even further with a much higher indication of mobile device use for the likes of sharing their travel experience, for example taking and sharing photos on facebook, twitter and emailing.

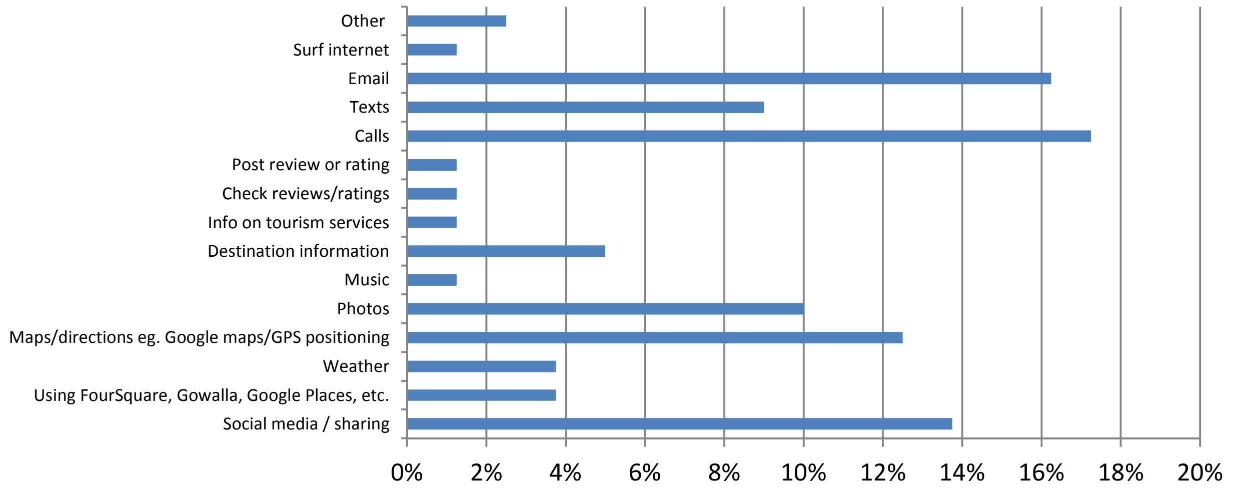


When smartphone users were asked about their top 5 reasons for using their device while on vacation, responses varied but showed some identifiable characteristics. Among the most commonly cited smartphone use activities while travelling in Ireland include:

- Social media / sharing
- Accessing maps/directions eg. Google maps/GPS positioning
- Taking photos
- Accessing travel information
- Accessing destination information
- Making calls
- Sending texts
- Checking / Sending Emails
- Surf internet
- Music

Below Fig 7.20 summarises the top fifteen responses for smartphone use while travelling in Ireland:

Fig 7.20 What are your top fifteen reasons for using your smartphone on holiday



While variation in responses can be explained by demographic differences such as age and gender, they also vary between domestic vs. other European visitors, and even more so related to tourists from further abroad such as the US and Australia. Irish holiday goers, who have few barriers to use other than perhaps Wi-Fi coverage and battery life, tended to use their smartphones across the full range of uses as they would at home, for example calls, texts and emailing. Visitors from Europe, and increasingly with tourists from further abroad, who face increasing barriers, used their smartphone devices in different and more limited ways. For example, taking photos and listening to music or playing games increases – especially with American respondents - whereas social media use or looking up directions decreased and occurred when the user found a free or low cost Wi-Fi access zone, for example in their hotel. These are important considerations as it relates to development of new smartphone and related mobile device applications and solutions. It also highlights challenges and opportunities in addressing these barriers, for example in creating or incentivising free Wi-Fi zones, which currently exists in other destinations.

These findings were consistent with other relevant reports:

> *There are significant differences in the way smartphone users use their phone when travelling in their home country and when abroad…three-quarters of those surveyed had used their smartphone when travelling abroad in the previous 12 months. When they are travelling in their own country, there was a tendency to use a broad range of functions on a frequent basis*, Napier University (2011).

Social media use had a high response rate with both domestic and foreign travelers. Supporting this, the ITB (International Tourism Board) World Travel Trends Report 2010-2011, notes that "Around the world more and more travelers are using social media. In the USA, about 52% of the 152 million adult leisure travelers – or some 79 million people - already use social media. US social media users tend to be active on Facebook, read other social sites, use the internet intensively for travel information, check out hotels on Trip Advisor and use online travel retailers such as Travelocity and Expedia. But only a low 20%

rely on social sites for leisure travel information and websites are trusted much more than social networks." (ITB**,** 2010) This was highlighted in a similar survey report by Napier University which found that "For the majority of users in this survey, the most important use of the smartphone seems to be to keep in touch with family and friends across all criteria, irrespective of type of activity or where the user is" (Smartphone Use by Tourism and Travel Consumers, Targeting Innovation Ltd. 2012). This is an important consideration for development of future solutions, particularly as social media converges with app technology in the near future.

Table 1 A visitors snapshot of travel guide use for Ireland.

The US family	
Demographics	A family- (Mother retired, father a Pharmacist, the two sons' doctors and the daughter and son in law both *Ophthalmologist*s).
Motivation	Notre Dame v Navy Game and VFR
Transport	Two hire cars.
Duration	7 days
Travel guide use	New Irish Travel guide books bought in US. Travel information printed at home prior to departure from the internet. A wide assortment of brochures and free maps from Irish travel information centers. A Sat Nav was hired with the rented cars. All but one had a smart phone or mobile device with roaming switched off. Phones used for photos and to upload and share information in free Wi-Fi areas. Many generic travel apps tripadvisor etc, 2 had downloaded Discover Ireland App before travelling. No other specific Irish travel apps downloaded. A set of walkie-talkies were in use to communicate from car to car while traveling around, these were also bought in the US. A creative way to get around roaming charges!
The Conference traveler	
Demographics	Male 45-54, from GB
Motivation	Came to Ireland for work (conference) adding 3 days to VFR in Galway
Transport	Ferry and company car
Duration	5 days
Travel guide use	No guide book Smartphone with roaming switched on (company picking up bill plus expected to be contactable on work phone) Travel Apps being used, trip advisor etc.
The Weekend Break	
Demographics	Two Female teachers 25-34 from Kerry
Motivation	Weekend getaway spa retreat and cycle greenway before going back to work.
Transport	Private car
Duration	2 days
Travel guide use	No guide book Smartphones with roaming switched on.
Many Apps in use such as Facebook only relevant Irish Travel apps was Trip advisor. However Travel apps for other destination (i.e.) Barcelona still on phones from last visit. Roaming switched off when traveling out of Ireland	

Conclusion

It is inevitable that Smartphone and mobile app technology will become the norm. Related mobile devices are already conventional, although the body of knowledge related to the broad range of how and why different types of Holidaymakers use their mobile devices is extremely limited, particularly as it relates to Ireland. Nevertheless, challenges have been identified and opportunities exist. By identifying and assessing how domestic and international Holidaymakers use travel guides - particularly traditional travel guides versus mobile devices such as smartphones and apps - when holidaying within Ireland, this project has identified usage and associated opportunities. Next generation smartphone technology is rapidly emerging and soon to be the norm, although it is a very young field and traditional guides (including tour operators and guide books) remain strong. This study found that while only about 45% of domestic and international visitors to Ireland owned Smartphone/mobile device, the percentages will continue to increase rapidly over time to the point of full market saturation. For individuals who already own smartphones or other related mobile devices, close to 55% of respondents said that they use their device while travelling in Ireland, and 31% said that they booked *an* element of their trip using their mobile devices. These numbers are expected to increase significantly in the future, identifying the need for a better understanding of how Holidaymakers use their mobile devices. For example, this study and related research also found that users are extremely cautious of high roaming charges, transferring personal / financial information via their mobile, and are frustrated by a lack of Wi-Fi access when travelling.

While this rapidly evolving field of next generation travel and tourism related technology is in its infancy and there is very limited information on user visitor trends, we do know that it is the future of tech travel, including downloadable apps, and particularly augmented reality apps. We also know that there are tens of thousands of travel related apps globally, dozens of Ireland specific apps that have been identified, yet *very* few of them were identified as being utilized by visitors within Ireland. This suggests that the development of future solutions should only occur with a thorough understanding of the market and that in order to gain improved insight, an expanded research project related to this topic should be considered. Perhaps (Rheem, 2012) summarises it best “The key to success in this early stage of mobile development is to tailor the experience with a custom fit for mobile needs – serve the right product to the right customer at the right price at the right time”.

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