



TO WHAT EXTENT CAN SOCIAL NETWORK PLATFORMS INFLUENCE RESIDENTS' TRAVEL BEHAVIOUR?

Joely Hill
BA (Hons) MSc CMILT MCIHT
Transport Planner

dha transport

TPS Bursary Paper
December 2016
Theme: Technology in Transport

TransportPlanningSociety

Acknowledgments

I would like to offer my thanks to all of those who have enabled me to complete my research, including all of those people I surveyed and who have supported me during the completion of my research project; however, I would like to make a special mention to the following people.

I would firstly like to thank Martin Wedderburn from TPS for encouraging me to apply for the bursary. Secondly, I would also like to thank my employer DHA for supporting me over the last few months.

I am also very appreciative to all the professionals who have helped me; Steven Guterrez for sparing the time to provide me with an update on Transport for London's work; James Gleave for taking his time out to provide me with a mentoring session and an insight into Transport Systems Catapult (TSC); Charlie Sundt (TfL), Colin Jackson (Southern Leighton Buzzard Residents Association) and Martin Ohrland (Stuart Michaels Associates) for talking to me in my original research project.

I owe my deepest gratitude to my TPS mentor Tiffany Lynch, who has provided advice, suggestions and questioned my thinking over the last three months. Her guidance and mentoring has made me think about my research recommendations and conclusions in different light, for which I am very grateful.

Finally, I would like to thank TPS for giving me the opportunity to undertake this latest research. This project has taught me a number of lessons, provided me with some new opportunities and introduced me to a number of new contacts within the industry.

Executive Summary

The world of social media is an ever growing internet phenomenon and is changing the way we communicate; it has huge potential to change the way people interact and how they are influenced.

Last year, as part of the MSc in Transportation Planning and Engineering I undertook at the University of Southampton, I decided to try and understand the power of social networking sites and the impact they could have on residents' travel behaviour as part of my dissertation project. My research also set out to establish whether social media could be used successfully to promote and implement travel plan measures.

The research project found that social media has provided new and previously unknown opportunities to create connections between people by enabling new forms of virtual connectivity. I used a combination of research methods; travel surveys and telephone interviews at two new residential developments and interviews with two bus operators. It also found that 36% of respondents believed that travel information on social media influences their travel choice and that 67% of respondents would be interested in using social media to get travel related information.

This latest research project used focus group discussions to build upon the previous research obtained. It sets out to establish what would make a successful social media site; whether people make the same travel choices for work trips as they do for leisure trips; and if residentially-based social media sites would have the same dynamics as other development-based 'communities' such as work places and sports groups.

The research found that social media is a useful travel plan tool not only for residential developments, but the way in which it is used can be different. Different models are needed for different types of development: there is no single, one size fits all approach. Social media sites for residential developments target people's behaviour at the trip origin by focussing on the individuals who create the trips before they make them; this allows for a more personalised approach, which is what customers are demanding according to TfL.

Social media also provides a forum for residents to discuss information relating to their development, including (but not solely) transport-related information. They therefore allow the site users and Travel Plan Coordinators / transport operators to have a two-way conversation, as well as allowing other users to see and contribute to discussions. This is one of the potential opportunities that social media can offer to the transport industry, and it is expected that this will only continue to grow in this age of rapid technological change that we're all experiencing.

This latest research has found that:

- There are a number of secondary benefits from social media sites for residential developments such as enhanced community cohesion, changes in travel behaviour;
- These could ultimately lead to reduction in carbon emissions; and
- The above would therefore benefit the wider population.

As such it is recommended that social media sites should be a requirement for new residential developments, through national and local travel plan policies.

Contents

1. FOREWORD	1
2. INTRODUCTION	3
Research Questions	4
3. BACKGROUND RESEARCH	5
Social Media within the Transport Industry.....	5
Behaviour Change Theory.....	6
Social Media within Residential Developments.....	7
Previous Research	8
4. RESEARCH	9
Methodology.....	9
Research Findings.....	9
<i>Focus Groups</i>	9
Insights.....	12
5. CONCLUSIONS AND RECOMMENDATIONS	13
Conclusion.....	13
Recommendations.....	14
6. BIBLIOGRAPHY	16

Keywords

Behavioural Change Methods, Changing Behaviour, Planning for the Future, Visions for Future Transport

Word count: 4,987 (excluding headings and figures)

Contact details:

Joely Hill BA (Hons) MSc CMILT MCIHT
Transport Planner

Email: joely.hill@dhatransport.co.uk

dha - planning transport urban design environment

Eclipse House, Eclipse Park, Sittingbourne Road, Maidstone, Kent ME14 3EN

Tel: 01622 776226 Fax: 01622 776227

Website: www.dha-group.co.uk Twitter: www.twitter.com/dhagroup

1. Foreword

So why did I chose this topic and what is the purpose of this research?

As a Travel Plan Coordinator at two new residential developments in London (one in Hackney and the other in Southwark), I wanted to improve the communication and relationships with the residents. Being a social media user myself (for both social reasons and for national/local news, travel, events, competitions and hobbies), I put myself in the shoes of a resident and thought there was a gap in the market.

I tried to think about how our children and grandchildren will be obtaining travel information in the future. We can't predict what technology will be around, but we need to keep up with what is available now, as well as trying to find new and innovative ways to keep up with technology. If we don't, the travel planning industry will lag behind, despite the fact that reducing carbon emissions is higher on the government agenda than ever before.

With social media being free, widely available and easy to use, it provides us with new and previously undiscovered opportunities, through creating connections between people and enabling new forms of virtual connectivity. Furthermore, the shift of social networking from desktop computers to mobile phones has provided a global platform that is transforming the availability of travel information and has the potential to encourage use of more sustainable forms of travel; I believe social media has the potential to revolutionise the way travel plans are implemented and monitored.

I wanted to find out the answers to the following three questions:

1. How influential are social networking sites?
2. How can they influence travel behaviour?
3. Can these findings be used positively in the future to contribute towards travel plan measures for residential developments and eventually shape green policies in the future?

I started off this journey thinking that social media could be used to change people's travel behaviour alone, from following the likes of Transport for London (TfL) and Oxford Bus Company on Facebook and Twitter. However, my first research project made me realise that social media is not enough on its own, but it is effective and a key part of behaviour change; it is one piece of the puzzle, one of the tools in the travel planner's toolkit.

Therefore, the aim of this latest research project was to build on the research I had previously undertaken by organising focus group discussions and liaising with Transport for London again. I wanted to do this to answer the following questions:

1. Have opinions changed?
2. Has the market changed in terms of social media impact on travel behaviour?
3. Have the conclusions of my research changed as a result?

This latest research has taken me on an interesting journey and has made me realise that the potential of social media is far greater than I ever thought; the psychological triggers behind changes in travel behaviour are fascinating and, as transport planners, we should use social media as an effective tool to influence people's behaviour.

2. Introduction

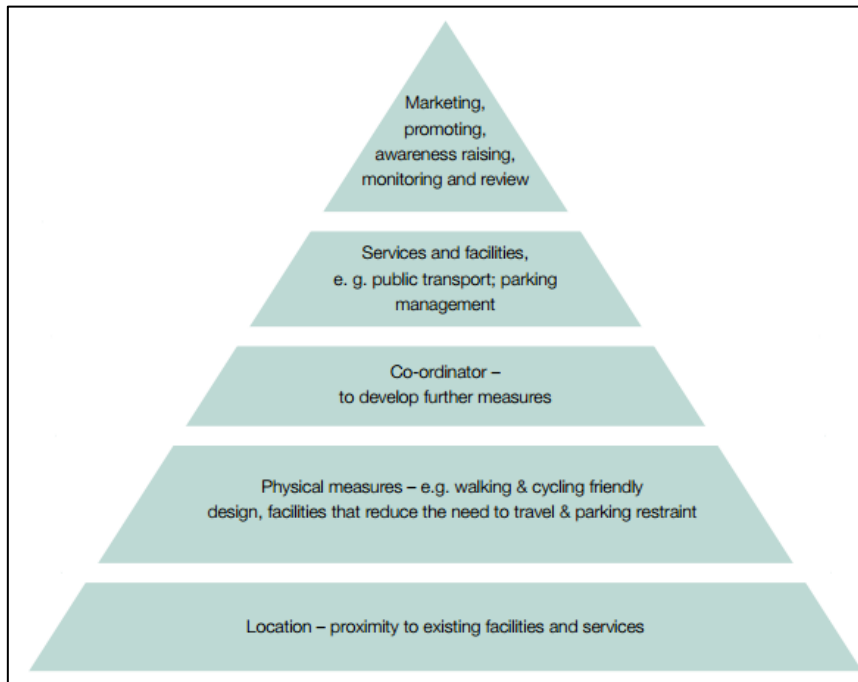
Travel planning has on the government agenda for around 30 years or more, however, in this time priorities have evolved and lessons have been learnt; issues, trends and priorities have changed remarkably over this time.

Travel planning is a key part of reducing carbon emissions; reducing the amount of traffic on our network to improve the lives of future generations. By understanding how working age people currently use technology and online social networking (including the advantages that these technologies offer), we can understand how these could be used smartly to encourage alternative modes of travel. Most importantly, we can understand how these could eventually be incorporated into future green transport policies to ultimately reduce carbon emissions; a key aim of today's Government.

Social media are 'websites and applications that enable users to create and share content or to participate in social networking', according to Oxford University Press (2015). They depend on web-based technologies to create highly interactive platforms through which individuals and communities share and discuss. They are free, widely available and easy to use, allowing people to create and maintain contact with others. What's more, people can join online communities enabling them to connect with people who have similar interests. Social media platforms have evolved enormously in the last 10 years from becoming a basic site to connect people, to providing a platform for businesses, services and information gathering.

With the rise in popularity of social networking sites, new and previously unknown opportunities have arisen to create connections between people, places and things as well as enabling new forms of virtual connectivity where people share a common interest; it provides a platform to communicate quickly and efficiently to a wide audience. The further shift of social networking from desktop computers to mobile devices in recent years (particularly amongst young people) has provided a global platform that is *inter alia* transforming travel practice and has the potential to be coupled with transport to encourage more sustainable travel (Dickinson et al., 2013).

Social media can link to travel planning by forming part of, and addressing the role of the marketing and communication section of the travel pyramid, which is shown in Figure 1 below. Social media can do this by supplementing a community travel website/online notice board, promoting travel events and act as a travel forum by allowing information to be disseminated immediately. The activity and discussions on a social media account could alter resident's behaviour, and therefore could fundamentally alter the way we plan and execute their trips in the future.



*Figure 1: Travel Plan Pyramid
Source: Transport for London (2008)*

Social media has the potential revolutionise the way travel plans are implemented and monitored over time. It can do this by acting as a communication, marketing and promotional tool by and raising awareness of the measures from a site specific travel plan. It can therefore benefit both the developers, local highway authorities and transport consultants who are interested in implementing successful travel plans. Social media can do this by bridging the gap between these stakeholders and residents, by providing site users (in this case residents) with real-time travel information and improving relationships.

Research Questions

This section sets out the questions to be answered at the end of this latest research project, which will lead to answering the overall title of this project. They have been developed to provide a structure for the research of this project.

However, in order to answer this, a number of questions will be addressed.

1. How has the role of technology changed in recent years?
2. What impact has this had on the power of social networking sites?
3. How will the role of technology continue to change how people are influenced by social networks?
4. What potential does social media have to influence residents travel behaviour?
5. Can social media could be used to successfully promote and implement Travel Plan measures?

3. Background Research

Review of existing research found that the popularity and use of social media has steadily increased in the last ten years. According to eMarketer (2016) 33.2 million users of Facebook will log in at least once a month (50.5% of the UK population, a staggering amount when taking into account people who do not have access to these sites such as the very young and very old). In addition, over half of these Facebook users are mobile phone users, which demonstrate the growing trend of access on the move. Twitter, on the other hand, has 14.3 million UK users logging on regularly in 2016 (25.5% of the UK population).

In terms of how this has impacted travel behaviour on planned events such as moving house or changing job, a previous British Household Panel Survey found that over a 9 year period, 50% of commuters changed their mode at least once and, of those who moved house and changed employer, 45% also changed mode (Dargay and Hanley, 2003). However, this research found that people's choices of activities were dependent not just on their own preferences, but the actions of employers, schools, the Government as well as family and friends. Furthermore, a research paper undertaken by Chatterjee and Lyons found that unplanned events (as opposed to the planned events discussed above), such as floods can 'not only reveal insight in behaviour but can trigger change' (Chatterjee and Lyons, 2002).

Additionally, the theory of crowdsourcing (the process of engaging a crowd of people, usually online, to collectively contribute towards the success of something) through social media was explored in the context of changing travel behaviour. This is an important theory in social networking as it is a very powerful tool that enables virtual communities and relationships between people who share a common interest (Fraser, 2015). It therefore has the potential to unlock a number of potential opportunities when it comes to trying to change people's travel behaviour. Social networking platforms have also provided a free and easy to use capability that allows businesses to have a two-way conversation with their customers (TfL, 2014; Spiegel 2011).

Social Media within the Transport Industry

The popularity of smart phones coupled with social media provides a new resource for public transport operators according to Dickinson et al (2013). As such, social media is being increasingly used by public transport users to obtain travel information, as it has introduced a new form of communication between transport operators and their customers. It has enabled a live two-way conversation that can immediately be shared by others within the social network, which has proven to be a valuable way to increase awareness and engagement amongst users.

Bobby Harris (CEO of BlueGrace Logistics) (2016) believes that within the transport industry social media and the transport sector depend on mobile technology to function, and therefore, social media should be used as an additional marketing tool. He believes it can provide an opportunity to engage with core audiences, with the key being to creating a relationship with the audience and engaging with them regularly.

Transport for London (TfL) is seen to be one of the UK market leaders in using social media to communicate with their customers. They first set up their social media account in 2009 with the aim of improving customer satisfaction, by showing they have a more human and personalised service. They quickly grew a strong following and this in turn enabled them to become a trusted source of travel information; they now have a total of 23 Twitter feeds and two Facebook pages, which are managed 24 hours a day.

Social media became an integral form of communication for TfL during the London 2012 Olympics. Following this event, as many as 1 in 10 have changed their permanent travel behaviour as a result of finding a better option (Mather, n.d.), demonstrating that mass travel behaviour change can be achieved (Springett, 2012), with the help of social media platforms. National Rail and London Overground became more popular during the games and this has further increased since the Games.

The majority of the behaviour change witnessed during the Olympics was to avoid delays, congestion, overcrowding and disruption across the network. This demonstrated that individuals who are reluctant to change their behaviour, do have the ability to change in times of need (or unplanned events). This can partly be down to the friendly and personable approach (on social media), which TfL adopted during this time.

Behaviour Change Theory

Another theory that is often cited in travel behaviour change policies is the *Theory of Planned Behaviour* (Ajzen, 1991), which states that the attitude toward behaviour, subjective norms and perceived behaviour control collectively shape an individual's behavioural intentions and behaviours. The key variables are shown in Figure 2 and explained further below.

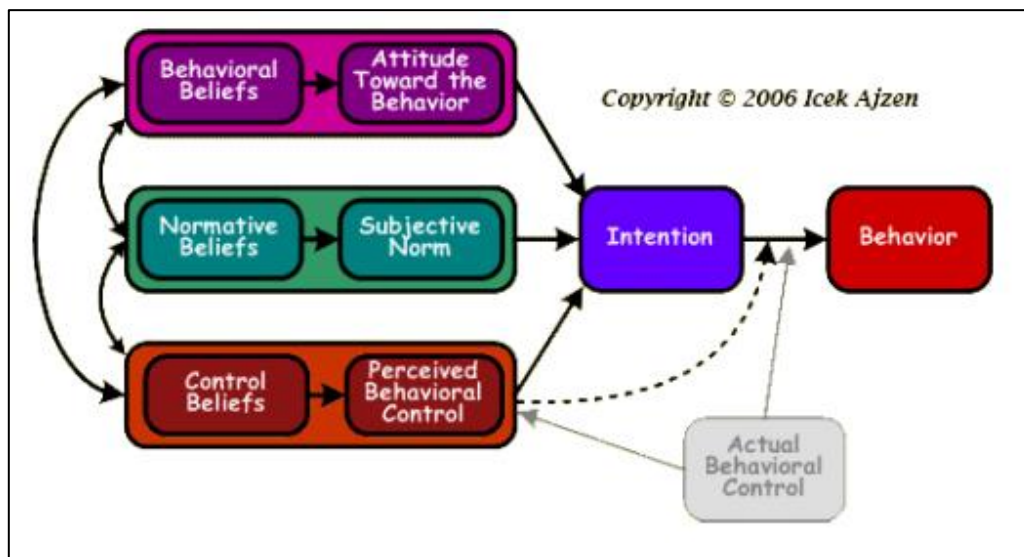


Figure 2: The Theory of Planned Behaviour
Source: Ajzen (1991)

Firstly, behavioural beliefs is an individual's belief about consequences of particular behaviours and attitude toward behaviour is an individual's positive (or negative) evaluation of self-performance of the particular behaviour.

Secondly, normative beliefs is an individual's perception of social normative pressures or relevant others beliefs that they should (or should not) perform such behaviour. Subjective norm is an individual's perception about the particular behaviour, which is influenced by the judgement of significant others.

Thirdly, perceived behavioural control is perceived ease (or difficulty) of performing a particular behaviour; control beliefs are an individual's beliefs about the presence of factors that may help (or hinder) performance of the behaviour.

Azjen believes that behaviour is determined by a combination of intentions and perceptions and that favourable intention produces the behaviour only when the perceived behavioural control is strong.

In terms of travel behaviour, the process which leads to positive intention can be considered in the following stages:

1. Firstly positive behaviour attitudes and subjective norms are formed;
2. Then once these are established, residents can consider whether they have the capabilities to make these changes (for example whether they need to purchase a bike if they wish to start cycling to work); and
3. Subsequently a positive intention will then form and the resident can make the change in mode of travel.

One of the challenges of behaviour change is therefore to give the individuals the information they require to believe they will personally benefit from making a change, to make them think it is the norm to make the change (ie everyone else is doing it) and to give them the tools they need to make the change (eg provide safe and secure cycle parking at both the origin and destination). Once they have at least one of these elements, this can lead to the 'intention to change' behaviour followed by a change in behaviour.

Social media platforms provide the perfect opportunity to achieve this.

Social Media within Residential Developments

Southern Leighton Buzzard (SLB), a sustainable development for Leighton Buzzard, was consented for development of 1,330 residential dwellings in December 2007. The aim of the travel plan for the development, which is coordinated by Martin Ohrland from Stuart Michael Associates, is to 'promote a range of sustainable travel measures throughout Southern Leighton Buzzard'.

The Southern Estates Residents Group (SRG) was set up in March 2011 to provide a communication platform for the residents and to act as a voice to speak out for residents to local councils and developers. A successful website and Facebook page were set up and managed by Colin Johnson, a member of the residents association. Colin says: 'the page is always our first choice to communicate with residents and we use it in conjunction with regular meetings and an email mailing list'. A Twitter page was created by the Travel Plan Coordinator (Martin Ohrland of Stuart Michaels Associates) to promote the bus service and other sustainable modes of travel.

Martin believes that, due to the content of the Facebook page, it can change people's travel behaviour: 'yes, I'm sure this can influence some residents travel behaviours', and 'this is why we continually promote the bus service to try and pick up new passengers'.

Previous Research

Prior to this project, research had been undertaken to establish the potential impact on social media to change. Two research methods were undertaken; firstly travel surveys at two new residential developments in London. The residential travel surveys found that 60% used mobile application, 33% used a website and 4% used social media to obtain travel information. Furthermore, the results showed that 85% of residents would like more travel related information and of those, 62% of respondents would be interested in using social media to get travel related information.

Secondly, telephone interviews were undertaken with individuals which found that many residents currently use some sort of online tool such as a website or mobile application on their smart phone (e.g. Citymapper or Google maps) to obtain travel information. The surveys also found that many residents would be keen to be part of a social media community for their development, albeit more as a passive user rather than an active participant.

A female resident interviewed had recently moved into a development of over 100 dwellings that already has a successful Facebook page. She said how it had enabled her to develop relationships with her neighbours. She also went on to say how the site was initially set up and managed by a management company; however the site has now become self-managed by the residents.

This latest research project concluded that social media platforms don't have the capability to change residents' travel behaviour on their own, however they are very powerful tools. They do however, have the potential to change people's travel behaviour when used in conjunction with other communication methods, such as mobile apps, websites and other sources of travel information.

4. Research

Methodology

The purpose of this latest research is to undertake some additional qualitative research in the form of focus group discussions, to provide a broader range of perceptions, opinions, beliefs and attitudes towards social media in a transport planning context.

The focus groups gave the opportunity to engage with 18-44 year old residents across the south east of England to generate open discussions. I organised and conducted two focus groups of five people (men and women of a variety of ages) on 4th and 5th October 2016, respectively. The aim of this was to start out as a question and answer session, which led to discussions between participants.

In addition, I met with James Gleave from Transport System Catapult (TSC) on 20th October to discuss the past and current work TSC are undertaking in this area of research. The role of technology within the industry is of particular interest to TSC as they are trying to understand the potential social media has on the industry and where it can be used to make the most difference in behaviour change.

Following this, I interviewed TfL, as a result of the recent release of their travel tweet alert service (June 2016). This allows customers to be automatically alerted of severe delays on key London Underground and TfL rail services as soon as they occur, helping them to avoid disruption.

Research Findings

Focus Groups

A summary of the key messages from the focus group discussions are provided in Figure 3 below.



Figure 3: Focus Group Findings

As shown in Figure 3 above, a number of points were discussed during the focus group including the benefits of social media, the use of social media for other trips other than work trips and the use for a number of different land uses. A number of inter-relationships were covered between the main points raised, also shown in Figure 3.

Transport for London

Steve Gutierrez (Lead Social Media and Content Editor, TfL) was interviewed regarding the pilot scheme that TfL are currently trialling on their social media pages. He said that the aim of TfL's social media accounts is to share news and travel information; on Twitter the updates are often in real time, whereas Facebook tends to be more news stories. They want this to lead to fewer people complaining about not being informed by providing a service that does the job well.

The travel tweet alert service aims to address customer needs for instant travel information using open data and Twitter's developer platform. In partnership with Twitter, they have created a service that hadn't been done before on the platform, to build on the existing service they provide on Twitter to make it more personalised.

The service allows anyone who follows any combination of four existing TfL Twitter feeds (London Overground, TfL Rail, Central line and District line) to be able to opt-in to receive instant notifications about severe disruption. The scheme is currently being piloted, to, for the first time, allow notifications to be sent straight to customers mobile device or direct to their computer, free of charge as a direct message. Customers can also tailor their notification by selecting the time periods that they would like to receive alerts. In future they may add further personalisation options and integrate with other services to make it even more useful.

The pilot scheme is running for a few months; at the end of the pilot scheme, they will decide how to continue; they plan to evolve the service and look at the opportunities they can and should capitalise on. They are expecting an increase in followers caused by the new users of the service.

The feedback TfL have received on the scheme so far has been positive and they are working closely with Twitter to develop new services. Customers have given their feedback and said:

1. More specific information for some modes of transport – more relevance to them;
2. Signup process needs to be easier; and
3. Notifications around planned closures are too frequent.

TfL believe that travel alert services will be more useful during special days where public transport may run differently or be disrupted by extreme weather; TfL believe this service will help everyone get around more efficiently when there is unplanned disruption.

TfL believe that social media is a convenient way for customers to get information and communicate with them; their accounts are set up with a focus on getting as much useful information out the public. They believe that making the right information available through social media, they can help Londoners get around more easily.

Insights

The two pieces of research discussed above demonstrate that keeping people informed through a reliable, relevant, easy to understand and up to date is what people want; whether this be one for a residential development or a transport operator. Social media as a tool is relevant to a wide range of users and communities.

However, what this has shown is that there are different characteristics and requirements from the two uses of social media page that have been explored above. TfL aim to provide information about their service through a more formal approach with the aim of improving customer service (they are supplying the service). However, a residential development will require a more informal approach because for a travel plan driven site, the end users (in this case the residents) are more in control of the conversations and context on a social media site.

Notwithstanding this, a lot of lessons can be shared with social media pages for other uses, such as TfL, who have been and continue to be a very successful user of social media platforms to communicate with their customers.

Social media is an opportunity for changing the travel behaviours of future generations by unlocking behaviours and is a new way to address travel plan objectives.

This research has provided a number of interesting findings, which will be able to assist transport planners using social media in the future to impacting and influence people's travel behaviour. The questions set out earlier in this report (page 4) have now been answered and, to bring together the conclusions, a summary of the research findings is provided below:

1. The role of technology has changed enormously in recent years; social media is evolving and is being used more and more within the transport industry, as demonstrated by TfL;
2. Social media sites can be and have been extremely successful in communicating to a wide range of people quickly and efficiently, providing up to date and relevant information to a group of people;
3. Technology is changing all the time and as an industry, we need to keep up with the ways in which young people and future generations communicate to ensure we are targeting the right people in the right places. This will enable to industry to make a positive difference to the way people travel in the future;
4. Social media has the potential to influence people's travel behaviour by providing an open platform which encourages discussions through people who have a similar interest, whether that be living on the same residential development, working at the same office or using a transport operators service; and
5. Social media definitely has the potential to bring a travel plan to life and can be used to educate and inform people (as shown in the Travel Plan pyramid on page 4), with the secondary benefits of changing people's behaviour. The focus group research has found that improved community connections (a benefit of a social networking page for a group of people with a similar interest, particularly in the case of residential developments) will help induce certain characteristics from the users which will lead to changes in behaviour, as demonstrated in Figure 2 on page 6.

5. Conclusions and Recommendations

Conclusion

This latest research has found that social media is a powerful tool that transport operators have used to communicate with their customers. Therefore, technology and the use of social media can play a key role in transport planning.

For transport operators, such as TfL who were interviewed as part of this research, Twitter is seen to be the most popular of social media platforms and the key aims are to improve customer service and to share news and travel information. TfL discussed their new pilot scheme, which aims to provide a personalised service to meet with the demands from their customers who want to be kept informed particularly about major disruptions. They do this using existing staff using Open Data and Twitter's developer platform, therefore fully utilising the technology available. However, from a residents perspective, it is thought that Facebook would be the most effective and engaging social networking platform.

The use of social media would lead to a number of benefits to the users, as found out in the focus group discussions. This would include encouraging local community relationships and interactions, which would lead to secondary benefits from a travel behaviour perspective. For example, the development of virtual or face to face relationships (or both), by providing an online forum for a variety of discussions regarding the development to be discussed.

This research focusses on social media in the context of residential developments; as the leading social networking platform, Facebook can provide a forum for residents to discuss information relating to their development, including transport-related information. They provide the facility for the site users and Travel Plan Coordinators / transport operators to have a two-way, or even a group discussion, as well as allowing other users to see and contribute to discussions.

Social media should be used as an additional tool of communication to the residents within their developments. **It is important, however that the information provided on the social media site is direct, relevant, informative and real-time to continue to engage residents,** as found out within the focus group discussions.

As outlined in section 1, the three research questions have now been answered;

1. My opinions have not changed since undertaking this research, however it has highlighted that social media needs to be used differently for different circumstances to ensure it is as effective as possible in changing travel behaviours;
2. Further developments have been made towards providing a more personalised travel planning service, particularly through TfL's travel tweet alert service; and
3. My conclusions have remained the same as before, however this research project has provided more depth into the psychology of changing behaviours and how this can be applied to changing people's travel behaviours through social media.

In summary, this latest research doesn't aim to add to guidance but provides a new insight into future opportunities to unlock different behaviours, particularly travel behaviours. The purpose of having a social media site for a residential development would lead to enhanced community connections, which could lead to changes in travel behaviour and ultimately reducing carbon emissions, therefore benefitting the wider population. Social media therefore provides a new way

to address travel plan objectives by bringing a travel plan to life by providing them with up to date information and in turn give users more responsibility for their actions and behaviours.

Recommendations

In terms of the future, this latest research has proven that a social media site for a development would be an additional effective soft measure for a residential travel plan; a summary of the benefits are outlined in Figure 4 below.

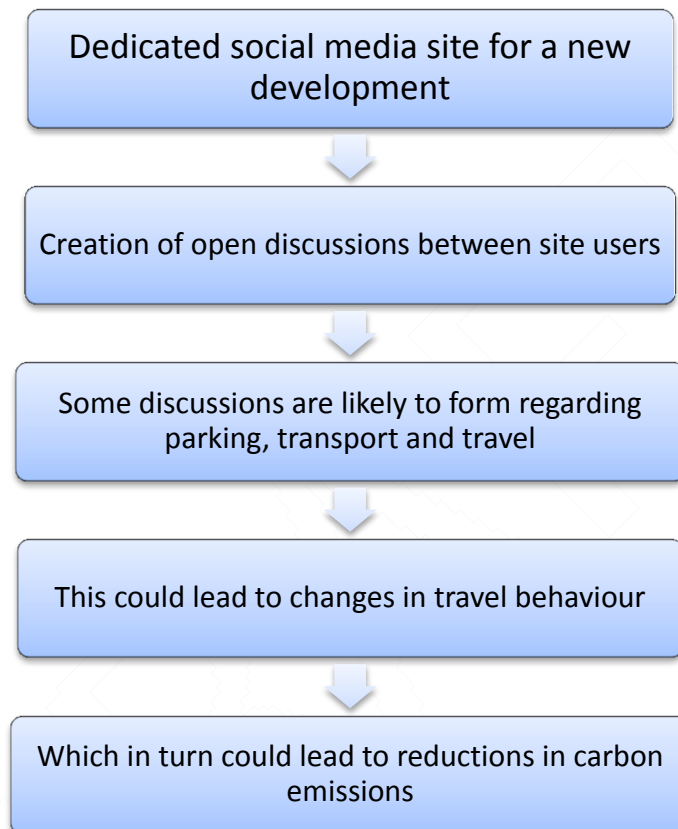


Figure 4: The benefits of social media in a transport planning context

The potential opportunities that social media can offer to the transport industry are far-reaching, and will only continue to grow in this age of rapid technological change that we’re all experiencing.

The original research focussed on the application of a social media site in a residential development; however, this latest research (particularly through the focus group discussions) tried to explore other uses. This updated research has found that social media is a useful tool for all types of development, but the way in which is it used will be different. For example, office developments are easier to target as they are trip destinations (which are more straightforward for travel plans to have an effect). However, residential developments are targeting people’s behaviour at the trip origin; as you are looking at individuals who create the trips before they make them. This allows for a more personalised approach (which is what TfL are trying to achieve with their pilot scheme).

Therefore, it is recommended that local authorities should have a policy that requires the use of a dedicated social media site for new developments that require travel plans, not just residential developments; however as mentioned above, there is not a 'one size fits all' approach. Social media provides additional tool to help communicate with groups of people with similar interests (whether this be people who live on the same housing development, work at an office or any other type of development that is either an origin or destination) and helps form a community as well as provide a platform for travel plan measures to be communicated effectively.

How can this be applied to TSC? Well, this latest research has shown that there is huge potential in the use of social media to bring people together, keep people informed and ultimately change in travel behaviours, particularly for new residential developments. Social media has the potential to make a travel plan come alive, by providing a new way to communicate with users of a new development.

As such, stakeholders aiming to change people's travel behaviour (such as TSC, transport operators Travel Plan Coordinators, Transport Planning Society etc.) must utilise the benefits and opportunities social media has by promoting it as a requirement for new residential travel plans (and other types of development); **particularly given the fact social media is free, widely available and easy to use.** The primary aim of a social media account would be to bring people together and enhancing communities with the secondary benefit of promoting and encouraging sustainable travel behaviours.

This latest research has found that by targeting and educating people at the source (the origin), there is huge potential to unlock psychological behaviours amongst residents by educating them before they commence travel. Using new forms of technology, data and a personalised service, such as notifying someone through their mobile phone of a disruption without the need for them to scroll through their social media newsfeed, may well be the future of personalised travel planning; something that I'm sure will be of great interest to transport planners and particularly TSC.

6. BIBLIOGRAPHY

Ajzen, I. (1991) *The Theory of Planned Behaviour*. Organisational Behaviour and Human Decision Processes. Volume 50, Issue 2, Pages 179-211.

Chatterjee, K. and Lyons, G. (2002) *Travel behaviour of car users during the UK fuel crisis and insights into car dependence*. Available from: <http://eprints.uwe.ac.uk/8566/1/8566.pdf>

Dargay, J. and Hanly, M. (2007) *Volatility of car ownership, commuting mode and time in the UK*. Available from: http://discovery.ucl.ac.uk/1235/1/2004_13.pdf

Department for Transport (2004) *Smarter*

Dickinson, J. Hibbert, J., Winstanley, C. Davies, N. Cherrett, T. Norgate, S., Speed, T. (2013) *Sixth Sense Transport: Social Media as a Collaborative Travel Tool*. Available from: <http://abstracts.aetransport.org/paper/download/id/63>

eMarketer (2016) Available from: <https://www.emarketer.com/Article/More-Than-Half-of-UK-Population-Will-Log-on-Facebook-This-Year/1013627>

Fraser, J. (2015) *What Happens When Crowdsourcing and Social Media Merge*. Available from: <http://dailycrowdsource.com/content/crowdsourcing/1420-what-happens-when-crowdsourcing-and-social-media-merge>

Mather, C. (n.d) *Behaviour change at Transport for London*.

Oxford University Press (2015) *Social Media*. Available from: <http://www.oxforddictionaries.com/definition/english/social-media>

Passenger Transport (2012) *This is just the beginning*. Available from: <http://www.passengertransport.co.uk/2012/11/this-is-just-the-beginning/>

Spiegel, R. (2011) *3 Ways to Benefit From Social Media Crowdsourcing*. Available from: <http://www.socialmediaexaminer.com/3-ways-to-do-social-media-crowdsourcing/>

Springett, C. (2012) *London 2012 Travel Demand Management*.

Sundt, C. (2014) *Twitter for Real-Time Traffic News: A Success Story*. Transport for London paper presented at Social Media In Transport hosted by ITS Org UK. 25 March 2015, Milton Keynes.

Transport for London (2008) *Guidance for residential travel planning in London*. Available from: <http://content.tfl.gov.uk/guidance-residential-travel-planning-2008.pdf>

Transport for London (2014) *Digital and Social Media Monitoring Report April 2014*.



Joely Hill
BA (Hons) MSc CMILT MCIHT
Transport Planner

dha transport

TPS Bursary Paper
December 2016
Theme: Technology in Transport

TransportPlanningSociety