



Ideas in Transit

Introduction

The study 'Case Study of Already Established Innovations' Technology, innovation and travel; understanding the user' aims to better understand the problems *established* user innovations may solve, as well as the barriers and enablers to their use. Such an understanding could be used to further establish the circumstances in which a user innovation may be successful.

Exploratory research was carried out with four user innovations with established user bases – BristolStreets, CycleStreets, Liftshare and Walkit, as detailed below. This report then presents a brief summary of the methodology used, followed by the key research findings.

The innovations

www.bristolstreets.co.uk : Launched in 2007 by Toby Lewis, this site is an online interactive map that allows users to explore transport options in the city of Bristol, UK, viewed over a Google Maps base. It provides information about bus timetables and bus stops; cycle routes, cycle parking and cycle shops; train stop routes and national rail information; ferries timetables and routes; walking route; taxi ranks; and car club parking.

www.cyclestreets.net : Launched in 2006 by Simon Nuttall and Martin Lucas-Smith, this site is a UK based cycle journey planner system, where users can plan routes from A to B by bike and in doing so chose the fastest, quietest or shortest route in a number of cities including Cambridge, Bristol, London and Edinburgh. It also allows users to upload cycling-related photos and videos and these can be used to visualise a route or to point out problems or obstacles and/or examples of good practice.

www.liftshare.com : Launched in 1998 by Ali Clabburn, this site is an online service that facilitates journey sharing between individual users, as well as providing separate services for businesses, organisations and events.

www.walkit.com : Launched in 2006 by Jamie Wallace, this site aims to encourage people to walk as a form of transport and provide point-to-point walking routes in a number of UK cities using a drawlive map base (www.drawlive.co.uk). It also provides walking directions, journey times, the option of a direct or indirect route, routes that

avoid busy roads, as well as calories burned and CO₂ emissions avoided on your journey. It is available in over 25 cities and towns and continues to add new locations.

Methodology

The research took an exploratory approach:

An initial semi-structured interview was carried out with each of the four innovations based on the key aims/themes the research wished to explore.

Following this, the innovators advised and/or assisted in contacting five of their users, by emailing or using Twitter to notify users of the research. Individuals then contacted the CTS research team directly and the first five were then invited to be interviewed. Again, a semi-structured approach (lasting 35 to 60 minutes) was used and here the questioning related to the participants' motivations and experiences of the innovation, and the ease or difficulties of using them.

Both sets of interviews were analysed and the findings were then presented to the innovators and discussed in a follow up interview. The innovators were also asked whether they could share any additional data with the research team and Jamie was able to provide the findings from a survey of Walkit users conducted across May 2010.

The sample of both innovators and users was purposive. As stated above, the innovations were chosen on the basis that they were initiated by 'user' innovators and that they had an established user base. The users were chosen on the basis that they had used the innovations in some capacity and were able to reflect on their motivations and experiences of using them. The sample did not intend to be representative of user innovations, nor users – this is instead the purpose of future research by CTS for IiT (i.e. WP 40).

Key Findings

Impact on travel behaviour: The majority of BristolStreets, CycleStreets and Walkit users stated or suggested that the schemes have complemented, or enhanced, their already established travel behaviours.

Do the innovators understand their users?: According to the innovators, the main purpose of the innovations was to more effectively provide

(particular transport) information to users than was currently unavailable or ineffectual (rather than promote, or sell, a gadget or other physical product). From the perspective of the users, in all cases, it was information that they had required and retrieved from the sites.

When discussing user experiences, Toby believed that, despite experiencing small problems, most Bristolstreets users have had a positive experience when using the site. Similarly, Martin and Simon, and Jamie assumed that around half of their users had experienced small problems with their sites, but around half had had positive experiences that they had been willing to provide feedback on. Mirroring these assumptions, participants across the study were generally positive about the usability and simplicity of the sites, but all had experienced 'niggly' problems with reliability of data, slowness to load, information that was out of date etc. They did not indicate that this had put them off using the sites however.

What limits the innovators' understanding of their users?: The innovators were perhaps restricted in their understanding of users in part due to the limitations of their engagement with them – although the level of engagement differed across the group, both in terms of the extent to which they had sought feedback from their users, but more importantly the extent to which they had wanted or had been able to seek feedback.

All of the innovators talked about their concern at 'hassling' users for feedback. However, the majority of the participants could see the benefit of more, particularly if it included requests for feedback, as long as it was not 'too often' (i.e. more than once a month). Further, only a few of the users had given feedback to the innovators - either because they did not feel it their place to do so; they thought it would be ignored; or they intended to, but simply forgot or 'never got round to it'.

In response, Toby pointed to his plan to develop and more strongly promote the social side of Bristolstreets as he believed it would provide a way for him to communicate with users and for users to communicate with each other. Martin suggested developing a monthly (or even weekly) CycleStreets newsletter, as he felt the site had not had enough of a "*push mechanism*" for engaging with their users. Ali was interested to hear that Liftshare users would be happy to be contacted more often and felt this could be an opportunity to further promote the site.

Promotion and fundraising: Participants across the study displayed uncertainty about where they had first heard about the innovations and the majority of the participants did not recall seeing promotion of the innovations beyond their initial encounter which was usually via Google

searches, word of mouth promotion by friends, family or colleagues, UWE promotion (in the case of Liftshare) or written publication. In this sense, it would appear that promotion of the sites could be improved.

Although the innovators did not dwell on the issue of revenue during their interviews, with the exception of Liftshare, the idea of raising money from advertising was discussed and the majority of users suggested that targeted advertising (for example, pointing to local cycle shops, nice cafes along a walking route, or walking holidays) would have been acceptable on the sites. However, Toby remained unconvinced that small scale advertising was a viable option, and like Jamie he believed that local small businesses "*don't want to be bothered by yet another person trying to sell them advertising*", although he felt that sponsorship of the site by one company could be far more successful. Martin and Simon described the idea of using advertising on their site as "*lazy*" and voiced their concern that it would have changed the tone of the site and raised issues of trust.

Use of mobile technology/smart phones: In the relatively recent past, and certainly since the Ideas in Transit Project began (in September 2007), there has been an explosion in the development and use of smart phones (all-in-one devices providing mobile access to voice, video, data, and image communications and smart phone apps. According to Ofcom (2011) over a quarter of adults (27 % per cent) and almost half of teenagers (47%) now own a smart phone. In this research, half of the users owned smart phones, more than the average, but only a few had accessed the site on their device – instead relying on their PCs.

In explanation, participants referred to the small screen size of mobile phones (and the difficulties of viewing web pages on such devices as a result), the cost and the lack of desire to be 'permanently connected' as reasons why they did not own smart phones. Those that owned smart phones referred to their desire to discover/explore, their preference for viewing the innovation(s) on a desk top computer and the cost of connecting to the internet on a mobile phone as reasons why they had not accessed the innovations on their mobile devices.

Despite the lack of enthusiasm amongst the users interviewed in this study, Martin and Simon confirmed that they had launched an Android app for CycleStreets and had received positive reviews from users. Martin believed there is a particular user need for information 'on the move' and it is for this reason that he believed they needed to develop mobile app versions of CycleStreets. Jamie was also enthusiastic about the need to develop the site with these devices in mind; drawing on the Walkit survey which found

that 40.5% of 797 respondents said they would be very likely to use a version of walkit.com that was optimized for viewing on a handheld device. Consequently, after the initial interview and interviews with users, Walkit launched an iPhone app for Walkit and Jamie felt strongly that they needed to develop a generic mobile site, or an Android specific App.

In contrast, Toby was less enthusiastic. He believed that the uptake of smart phones remained at around 10-15% of the population and even if there was an increase in uptake, the soon to be introduced 4G¹ mobile technologies meant that there was more value in developing a mobile site, rather than apps as mobile phones will be as 'capable' as PCs. Toby also questioned the suitability of accessing Bristolstreets on a mobile device in general. Similarly, Ali believed that the capability of smart phones would negate the purpose of, and market for, apps and it was for this reason that they "skipped over" developing app versions of the site and instead developed a mobile website.

Implications for user innovation: In terms of lessons for other user innovators, overall the majority of issues and plans for development were specific to the context of each innovation. However, by combining efforts and experience/skills in improving their sites they could save on resources, as well as reduce the chance of mistakes. Certainly in the interviews with innovators, comments were made to suggest that they were willing (or had already) sought advice from other user innovators and have enjoyed this process.

It can also be suggested that the innovators should be more concerned about their 'market share' (as a top down/producer innovator would), yet it is clear that they are more driven by the desire to change transport behaviours and it is perhaps unsurprising that the innovators are not willing to compromise the image of their sites by using more aggressive methods of raising revenue through selling advertising for example. Further, it can be argued that the innovations are niche enough to maintain their unique selling point and are thus secure in maintaining the market share they already have.

References:

Ofcom (2011). *A Nation Addicted to Smartphones*. www.ofcom.org.uk. Available at: <http://media.ofcom.org.uk/2011/08/04/a-nation-addicted-to-smartphones/> [accessed 12 August, 2011].

¹ i.e. fourth generation high speed mobile technologies.

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