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|  | **SUMMARY SHEET** Project July 2011-July 2012  Version: 27.09.11 |

# **Exploring the use of gaming to encourage families to cycle**

### **Background**

Mission:Explore seeks to ‘help young people and families explore and experience the world in new ways through making new kinds of journeys’. It provides young people (of varying age ranges, with different approaches for different ages) with missions to complete – activities to discover and undertake with points or tangible rewards available to incentivise. The Geovation funding is targeted at encouraging use of the National Cycle Network and seeks to understand how the ‘gaming layer’ can be used to help tackle habits and make cycling more desirable. The intention is to pilot along one cycle route in 2011 and further in 2012.

Previous research suggests behavioural change works best when individuals receive real-time immediate feedback on their own choices and they are able to compare their choices with other individuals (see Chatterton et al., 2009; De Young, 1996). Hence, success in behavioural change is linked to real-time personalised information, which makes invisible consumption visible, and allows participants to expose their behaviour to conscious scrutiny (e.g. Nye & Burgess, 2008). In addition, the social comparison aspect important to behavioural change involves the making of plans in front of others has a pledge component which is seen as psychologically meaningful (e.g. Nye & Burgess 2008), allowing participants is to “measure themselves and debate” through an opportunity for reflection and self-learning (Hobson, 2001). However, in traditional behavioural change the motivation to engage in the change is often lacking. Adding a gaming layer can alter this motivation and position it within a series of smaller challenges that make-up an overarching goal.

The proposed supporting research aims to investigate what currently happens when families play games in different scenarios, and how elements of game-playing create behavioural change amongst the family group. A series of interviews with a whole family unit will investigate how families play games (electronic and otherwise), including motivation and outcomes. How game-playing is used by families to explicitly create behaviour change and how it might unintentionally change behaviour will be examined. In addition, a smaller number of focus groups with families who cycle together will examine the motivation for cycling as a family including an examination of how barriers might be overcome and outcomes from the activity. Ethnographic research following one or two of the family groups will take place to observe behaviour on the family cycle trips. Finally, two groups of senior school children from years 7 and 10 will take place to see how far such game-playing may occur beyond the family group. Year 7 is taken as cycling rates increase dramatically amongst this age group as children become independent for the first time and year 10 to contrast the younger children ,as peer groups are cemented and social norms about socialising are strong.



### **Aims and Objectives**

The aim of this work package is to better explore how and why families play games with particular focus on behavioural change in a variety of settings. It will focus on what motivates families to play games, how different members engage, when these games take place and what happens as they take place, with a focus on the overall behavioural effects of taking part in the game for the individuals and the family. The findings may be utilised by the innovator to fine tune the game designs in the future and could enable development of game theory and behavioural change.

### **Proposed methodology**

- Carry out literature review on behaviour change and game-play, especially with regards to transport behaviour change and family game-play

- Identify and approach around 10 family groups through deliberately selecting a diverse range of families based on life-stages (including ages of children#0, socio-economic background, transport mode choice (an exact recruitment strategy will be identified following an initial literature review)

- The selected families will take part in a family interview. A semi-structured topic guide will examine their motivations for game-play, when they engage in game-play, who takes part and how it affects their behaviour (with specific regard for changes in travel behaviour). Their cycling behaviour will also be discussed, focussing on the motivations for cycling as a family and how and when this happens and what they do when it takes place.

- In addition with the help of a local senior school run focus groups with 2 groups of children based on age (again identified through the literature but likely to be year 7, as children become independent, and year 10 to contrast the younger group with an older group). This will examine how likely children are to play the games on their own.

- A further five families representing experienced cycling families will be selected for a focus group and will take part in an ethnographic observation of their behaviour. Ethnographic work utilising a travel ethnography approach will be adopted to observe travel behaviour in its own context (Bærenholdt, 2004; Watts and Urry, 2008). Co-present immersion will take place whereby the researcher will travel with the cycling families so as to inform sustained engagement within their worldview.

- Recommendations will be formed as to what works well in terms of gaming and behaviour change, specifically relating findings to behaviour change in a transport setting.

- Finally, the findings from research will be presented to the innovator and a final interview will take place.

### **Contact Details**

The study is planned to run from July 2011 for 12 months. For further details please contact the CTS project investigator:

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