

# Poster Submission: Digital Upheavals: Ethnographic studies on digital-DIY activity

Philip Ely<sup>1,2,3</sup>

<sup>1</sup>Home Interaction Research Cluster  
University for the Creative Arts  
Falkner Rd, Farnham GU9 7DS UK  
pely@ucreative.ac.uk  
+44 (0)1252 892954

David Frohlich<sup>2</sup>

Nicola Green<sup>3</sup>  
<sup>2</sup>Digital World Research Centre/<sup>3</sup>Dept.of  
Sociology  
University of Surrey, Stag Hill, Guildford  
GU2 7XH UK  
Firstinitial.surname@surrey.ac.uk  
+44 (0)1483 300800

## ABSTRACT

This poster describes current work-in-progress on a digital-DIY research project, exploring how people experiencing life-change configure and re-configure their domestic entertainment, information and communication technologies. The project draws upon a number of theoretical concepts from human-computer interaction, the social construction of technology, material culture and design studies to understand the digital-DIY phenomenon and is methodologically rooted in the ethnographic tradition. This poster describes early pilot-study work utilizing Blythe et al's (2002) 'Technology Biographies' method applied to (amongst other pilot studies) the author's own autoethnographic study of moving home and concludes with a summary of themes and concepts emerging from this early data. The poster presents proposals for future empirical studies of people experiencing life-change.

## Author Keywords

Digital-DIY, life-change, ethnography, autoethnography, domestic, entertainment, ICT.

## ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## INTRODUCTION

When moving home or improving (or adapting) the home we already live in, many of us engage in 'do-it-yourself' (DIY) activity. With varying degrees of expertise (and success) we construct, glue, paint, install, knock-down and build-up our homes until, perhaps, we feel comfortable to

live wherein we dwell. One form of DIY is less evident and goes largely unreported – that of 'digital-DIY'. 'Digital-DIY' is a term here that I apply to the *configuring or reconfiguring of domestic entertainment, information and communication technologies* (EICTs) and is to be seen as a, conceptual device or analytical tool for further investigation of phenomenon; what Blumer (1969) might call a 'sensitizing concept'.

Predicted and unpredicted life changes, for example through birth, marriage, death or divorce often bring about material changes in the home. Individuals, affected by changes in income, status and health are often forced to re-evaluate their domestic environment and the material objects therein and entertainment and communication technologies are just two types of material object in the domestic ecology that inhabitants consider as they re-evaluate which artifacts are important to their everyday life. As Shklovski & Mainwaring (2005) have already suggested, these disruptions of everyday life are ideal occasions for new technologies to support this change in circumstance.

Whilst Shklovski & Mainwaring's interest lies in the possibilities of new ICTs to support life change (in this case during long-distance residential move), this research project is concerned with the way that inhabitants both (re)configure old, defunct, or pre-existing technologies and how they introduce new digital entertainment and information & communication technologies (EICT's) into their homes - how they 'handle' EICTs during life-change; how they 'd-DIY'. In a user-centred world, people experience 'trials' (Lehtonen, 2003) or 'broken expectations' (Bly et al, 2006) with their technologies as they struggle to set up, position or use them.

## PILOT STUDIES

This research project began with an ethnographic study of how users innovate, in a wider sense, with digital technologies such as computers, digital cameras, home entertainment systems with the intention of identifying the social groups that people inhabit when 'doing' digital-DIY. This initial study began with an exploration of how users

innovate based on Haddon's previous work exploring the stages of user innovation (see Haddon, 2005). During the time of this pilot study, however, I experienced my own life-change – separation from my (then) wife and son and relocation to a new home. This disruption raised questions about just how I was able to engage in digital-DIY activity during a significant change in life circumstance. What would happen to a previously mundane use of technologies when life change was imminent?

## METHODS

I adapted the 'Technology Biography' method to both the study of the expert user group and the autoethnography, using a combination of interviews, photographs and field notes. The 'Technology Biography' method allows the researcher to paint a rich picture of people's attitudes and usage of technologies from the historical past, the contemporary present and an anticipated future.

In a technology biography, users are encouraged to reflect on their previous engagement with home technologies, (including, in these studies, radios, televisions, music systems, and record players) and invited to consider a 'wish-list' of future technologies that they would like to use and see in their home. Current technologies (and their *place* or position in the home) were photographed at location and respondents were asked to reflect on moments of tension, conflict or humour during the life of their home technologies.

In the autoethnographic study, the Technology Biography method was adapted to cover a shorter time-scale; compressing the 'past, present and future' stages into a 'pre-move, move/post-move and 'future' framework. Throughout the move, I took made notes on moments of tension, conflict or humour that I experienced and took photographs of both hi- and lo- technologies (fig.1) that brought about some of these moments.

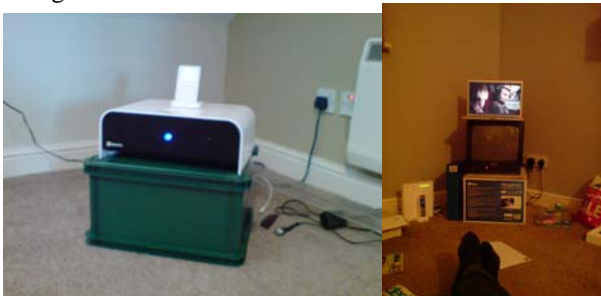


Figure 1: Artefacts remain unsettled over a long period and find temporary locations throughout the home

## ANALYSIS

Snapshot analysis reveals that, in my experience, significant life-change (and 'moving home' in particular) is, in everyday life, full of problems. It is compounded not only by the emotional upheaval involved but also by the ongoing challenges presented by the 'siting' of EICT artefacts (alongside those artefacts of a less technologically complex nature), the evaluation and re-evaluation of their

use/usefulness and the material challenges presented by connecting or rewiring. And it isn't just artefacts themselves enrolled in the digital-DIY activity. 'Non-users' like neighbours may have a role to play in the use and position of them too; during the writing-up of this pilot work, I could hear the *thump thump* of a bass speaker connected to a television in the flat below me, ironically recalling my own concerns over the use and position of my own iPod base-station. Friends and family may also be enrolled - in the advice they give, the material support they offer and their views on the aesthetics, economics and even the morality of EICT, these people may be part of the digital-DIY activity whether they recognise it or not.

During life-change, relatively mundane use of technology becomes temporarily disrupted, creating a new period when users re-evaluate their use and location within the home. This rationalization of the domestic space focuses inhabitants on previously taken-for-granted EICTs, requiring re-wiring, re-positioning, re-use or even disposal. The final poster will feature photographs from the pilot studies showing key aspects of life-change and d-DIY.

## FUTURE RESEARCH

Pilot studies raised important questions about how (for instance) family members, co-habitants and neighbours become enrolled in d-DIY activity; and how people cope with d-DIY when experiencing life-change brought about by residential move, by redecoration or rebuilding, change in economic status of the inhabitants (unemployment or significant promotion/windfall) and change brought about by disability, birth, marriage or death. Through ethnographic study, the research project will compare and contrast d-DIY activity during life-change.

## REFERENCES

1. Blythe, M., A. Monk & Park, J. Technology Biographies: Field Study Techniques For Home Use Product Development. *SIGCHI conference on Human factors in computing systems: Changing our world, changing ourselves*. ACM Press (2002).
2. Blumer, H. *Symbolic interactionism; perspective and method*. Englewood Cliffs, N.J., Prentice-Hall (1969).
3. Shklovski, I. and S. Mainwaring Exploring Technology Adoption and Use Through the Lens of Residential Mobility. *CHI 2005 Proceedings*, Portland, Oregon, USA, ACM (2005).
4. Lehtonen, T.-K.. "The Domestication of New Technologies as a Set of Trials." *Journal of Consumer Culture* (3): 363. (2003)
5. Bly, S., B. Schilit, et al. Broken Expectations in the Digital Home. *CHI 2006 Proceedings*, Montreal, Quebec, Canada, ACM (2006)
6. Haddon, L. The Innovatory Use of ICTs. *Everyday Innovators: Researching the role of users in shaping ICTs* L. Haddon, E. Mante, B. Sapiro et al. Netherlands, Springer. (2005).