

PRODUCT DESIGN AND ENGINEERING

Design Dissertation

Proposal

Module: PDE3000

DISCOVERING HIDDEN PLEASURES IN TECHNOLOGY-RELATED PRODUCTS.

An ethnographic study investigating 'late majorities' experiences and interactions, with technology-related products in relation to Lionel Tiger's framework of pleasure.

By: Ben Arent

Student Number: 2405419

Supervisor: -

1. INTRODUCTION

Advances in consumer product interaction don't double in usefulness every 18 months, unlike Moore's law (Moore 1965). While processing power, input devices and software advances, the view that the overall user experience is still poor (Bill Buxton, 2007). This study will investigate "late majorities" (Hudson & Bolton 1997, pg 25), the innovation group least susceptible to the 'wow' effect (Sääksjärvi M. & Lampine M. p.149) effect because they are more "concerned with attributes and not features" (Sääksjärvi M. & Lampine M. p.148).

These consumers could be classed as Technophobes, as they only embrace a technology when its 'direct and useful purpose [within] their lives' (Fisk A.D et al. 2004). My ethnographic study will investigate up to 4 consumers, observing product behavior within Lionel Tiger's framework of pleasure (Jordan P.W. 2000). Lionel's framework is a vital link to supplying key insights to the product design of consumer products as unlike current interaction design methodologies concerned with just input, output and interaction. (Buxton 2007). Tiger, L. (1992) proposes a framework which is holistic, considering physio-pleasure, social-pleasure, psycho-pleasure and Ideo-pleasure.

By linking consumer ethnographic research with all aspects of pleasure will hopefully uncover areas of product development within the domain of technology-related products.

2. INITIAL LITERATURE REVIEW

Patrick W. Jordan understands that consumers are becoming more and more sophisticated and demanding. "now that we can do anything, what will we do?" (Buxton 2007, p 418) in the creation of a product, consumers can still feel 'technophobia' (Gilber et al. 2003). Fisk et al. (2004) observed older consumers having a substantial semantic memory base but will only be willing to use technology if the benefits are clear to them.

Bill Buxton (2007) proposes that it isn't the product, but instead the overall experience of the product. While this looks at inputs and some basic human factors, his paper prototypes offer a low fidelity. This has been shown by J. Sauer et al (2008) to lack the physical connection between consumer and product. While J. Sauer accepts a greater depth to the physical fidelity of the prototype while other aspects of human interaction still aren't considered. Emotional design could add to this experience and is well documented by Jordan P.W (2006), Norman D.A (2004), Moggridge B. and McDonagh D. et al. (2004). While these all stress the importance of emotions in design Tiger. L (1992) offers a more holistic view regarding physical, social, physiological and ideo values.

It has been argued that there is no substitute for seeing people using or trying to use a product (Jordan 1998). An inherent advantage of empirical methods is that they can reveal such unexpected discoveries; (Love S. 2005) this is why this study has been kept broad to technology-related products.

The ethnographic study will be conducted within the Kansei flow 2 using Nagamachi (1997) examples to guide my study. The selection of the 'late majority' will be selected by consumers who are late adopters and selected based on their personal adoption of technology. Middlesex University offers a range of participants within very art based subjects such as Art, Dance and Drama. These participants only need to use "technology that is useful or meaning full to them" (Gilbert et al. 2003. Pg 260). Observations will be conducted with up to four participants, observing behaviour both at home and a social setting. Participants will not be paid. Jordan W (2004), Fisk D. et al.(2006) and Love S. (2005) all outline guidelines for gaining the most unbiased ethnographic observations.

Buxton (2007) states while discussing the nuisances of a juicer that "we [should] expect to get similar quality experiences from our new-world information appliances". By undertaking an ethnography study within the constraints of Lionel framework, observations into whether current consumers are getting a more pleasurable experience. This could shine light on current gaps in 'products pleasure' which are absent in the conception and creation of existing technology-related products.

Observations with ethnography constrained by Lionel Tigers framework will hopefully reveal untapped semantics or "Thoughtless Acts" (Suri F.J. 2005) that could lead to a conclusion of a completely new product genre within technology based products.

3. INITIAL REFERENCE LIST

Moore E.G. 1965. Cramming more components onto integrated circuits. *Electronics*. **38**(8).

Bohlen, Joe M. & Beal, George M. 1957, "The Diffusion Process", Special Report No. 18 (Agriculture Extension Service, Iowa State College) 1: 56-77

Tiger, L. (1992). *The Pursuit of Pleasure*. Brown & Company.

Nagamachi, M. 1997. 'Requirement identification of consumers' needs in product design', in *IEA '97 Proceedings*, Helsinki: Finnish Institute of Occupational Health, pp. 231-233

Munro A.J., Höök K. and Benyon D. (eds) 1999. *Social Navigation of Information Space*. Springer.

Jordan P. W. 2000. *Designing Pleasurable Products*. Taylor & Francis.

Design Dissertation Proposal. Ben Arent, October 2007

Gilber D., Lee-Kelley L. and Barton M. 2003. Technophobia, gender influences and consumer decision-making for technology-related products. *European Journal of Innovation Management*. **6**(4): 253-263

McDonagh D., Hekkert P., Van Erp J., and Gyi D. 2004. Design and Emotion. Taylor & Francis.

Norman D.A. 2004 Emotional Design: Why we love (or hate) everyday things. Basic Books.

Couldry N. and McCarthy A. (eds) 2004. MediaSpace: Place, Scale and Culture in a Media Age. Routledge.

Fisk A.D., Rogers W.A., Charness N., Czaja S.J and Sharit J. 2004. Designing for Older Adults. CRC Press.

Love. S. 2005. Understanding Mobile Human-Computer Interaction. Architectural Press.

Rogers E. M. (2003). Diffusion of innovations (5th ed.). New York: Free Press.

Sääksjärvi M. and Lampinen M. 2005. Consumers perceived risk in successive product generations. *European Journal of Innovation Management*. **8**(2): 145-156

Suri F.J. 2005. Thoughtless acts. Chronicle Books LLC.

Buxton W. 2005. Space-Function Integration and Ubiquitous Media. In Press.

Tohidi M., Buxton W., Baecker R. and Sellen A. 2006. User Sketches: A Quick, Inexpensive, and Effective way to Elicit More Reflective User Feedback. Paper Presented at NordiCHI 2006: Changing Roles, 14 – 18 October 2006, Oslo, Norway.

Darses F. and Wolff M. 2006. How do designers represent to themselves the users' needs? *Applied Ergonomics*. **37**(1): 757 – 764.

Thackara J. 2006. In the Bubble, Designing in a complex world. The MIT Press.

Buxton B. 2007. Sketching User Experience. Diane Cerra.

Moggridge B. 2007. Designing Interactions. The MIT Press.

Sauer J., Franke H., Ruettinger B. 2008 (accepted 5 March 2007). Designing interactive consumer products: Utility of paper prototypes and effectiveness of enhanced control labelling. *Applied Ergonomics*. **39**(1): 71-85.

Design Dissertation Proposal. Ben Arent, October 2007

Seva R.R., Been-Lirn Duh H. and Helander M.G. 2007. The marketing implications of affective product design. *Applied Ergonomics*. **38**(1): 723-731.