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This Pervasive Day: Creative, Interactive Methods for Encouraging Public Engagement with FET Research

Ingi Helgason*, Jay Bradley, Callum Egan, Ben Paechter, Emma Hart

Edinburgh Napier University, 10 Colinton Road, Edinburgh EH10 5DT, UK

Abstract

This paper describes a case study of a programme of interactive public engagement activities presented by the PerAda Co-ordination Action project (FET Proactive Initiative on Pervasive Adaptation) [1] in 2011. The intention behind these events was to inform an interested public audience about the technology and design of pervasive and adaptive computing systems in general, and PerAda research in particular. Additional explicit aims were to widen debate about the socio-technical implications of this research, and to assess public attitudes to its potential applications in an accessible, engaging and creative manner.

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1. Introduction

The PerAda Co-ordination Action (CA) deals with research into pervasive adaptation in computing, a complex subject for the lay person, but one that has far reaching implications for society and individuals. The work of the PerAda research partners provides a rich source of material for the creation of public outreach resources, including filmed documentaries, published materials, and interactive exhibits. However, while the PerAda CA project team aims to increase public knowledge and understanding of this domain, it is equally important for scientists and researchers to be aware of public attitudes towards the potential applications of their research.

There has been a move in recent years towards greater dialogue in science communication work rather than adopting a “top down”, science-led and factual approach [2] [3]. In order to address this “feedback loop” aspect of public engagement, the PerAda team designed and developed an activity-based interactive exhibition as part of the Edinburgh International Science Festival, alongside an online interactive documentary. Integrated into these projects were creative and entertaining methods of eliciting audience reactions to pervasive technologies and their potential impacts.

2. This Pervasive Day

This outreach project investigated the science and technology of pervasive adaptation from a human-centred perspective, and considers social, ethical and legal issues. These activities were designed to support a popular science book, an output of the PerAda project: “This Pervasive Day, the Perils and Pitfalls of Pervasive Computing”, edited by Jeremy Pitt, published in 2011 by Imperial College Press. In order to appeal to a broad spectrum of the public,

* Corresponding author. Tel.: +44 131 455 2790.

E-mail address: i.helgason@napier.ac.uk (I. Helgason).



Fig. 1. Exhibition at Edinburgh International Science Festival.

primarily those with an interest in general technological and societal issues, The PerAda team devised these activities as a cluster of events, with the website (www.thispervasiveday.com) as the hub for the activities. The activities fall into three categories; the book, the events - which include the exhibition and also public talks and debates, and finally the interactive documentary which can be experienced both on the website, and as an installation within the exhibition.

3. User Heaven Or Techno Hell

Both the book and the associated events used a theme of Heaven and Hell as way of presenting potential future scenarios of pervasive technologies. This provided a simple device to elicit reactions from audiences, and a thematic framework for the exhibition and events. The exhibition (Fig. 1) featured a combination of interactive displays, physical exhibits and multimedia projections. The interactive exhibits were all designed to address particular application areas and themes of pervasive computing. It was also very important that the exhibits provided quick and rewarding feedback to the visitor in order that they were engaged in the subject matter. The interactive documentary was the core of the dissemination plan, and as well as being presented as an activity in the exhibition it was also accessible online. Interview footage from research projects was incorporated into a scenario-based video documentary that was interspersed with questions inviting viewers to input their opinions and reactions to what the content of the video. This information was incorporated into a database and a visual overview of aggregated opinions was projected onto a large screen.

4. Applications Of This Approach

It is accepted that the outreach work of CAs within FET-Proactive adds great value to the work of research projects by reaching out to the scientific community and beyond to a wider section of public society in order to; build multi-disciplinary, collaborative communities, promote technological developments, and debate new future directions for research focus [4]. The PerAda outreach team believes that the approaches to public dissemination work that are discussed here can be further developed in future research projects in ways that will complement and strengthen the impact of Framework Programme initiatives.

References

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