

Review Of Interactive Digital Television Pilot

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The Scottish Executive launched a six month pilot of interactive Digital Television (iDTV) in September 2004, in collaboration with five partner organisations - Dumfries and Galloway Council, NHS Scotland (Health Education Board), StartHere, West Lothian Council and Young Scot. The aim of this pilot was to test the feasibility of delivering electronic public services and information via digital television. The pilot service provided information on a range of public services, including information about health, youth and local and community services. Evaluation of the pilot involved analysis of usage data, interviews with representatives of the pilot partners and iDTV viewers.

Main Findings

- The UK has the highest level of take up of digital TV (DTV) in the world: 44% of the UK population (over 10 million households) have access to some form of DTV. In Scotland, around 41% of Scottish households have access to Sky, Freeview or cable.
- UK households which are less likely to own a computer or be computer literate are more likely to have access to a TV, including digital TV. Interactive digital television (iDTV) therefore has the potential to reach communities and households which are currently information poor.
- A Scottish pilot to test the potential of iDTV as a medium for providing public sector information and delivering public services was launched on 7th September 2004. The pilot ran for 6 months and involved collaboration between the Scottish Executive and five partner organisations: West Lothian Council, Dumfries and Galloway Council, Young Scot, NHS Scotland (Health Education Board), and StartHere.
- The evaluation of the pilot was designed to assess the effectiveness of iDTV as a medium for improving access to information and services, and identify wider lessons on its potential. The evaluation comprised analysis of service usage data, and interviews with service providers and iDTV users.
- Analysis of usage data found that, although all sections of the pilot were viewed or used, use of the service was very limited. This may be attributable to several factors, including: difficulty in accessing the service, the slow speed of the service, the cost of accessing the service, the scope of the content, and the limited extent of service user recruitment.
- The pilot project partners found their involvement a rewarding and valuable experience, which provided significant learning about a relatively immature technology. Project partners agreed that the realisation of a 'live' iDTV service had demonstrated the feasibility of delivering public services via iDTV. However, all agreed that this achievement was tempered by the lack of service use and the inability to integrate the service with their existing content management systems.
- Due to the low level of service use, recruitment of viewers to analyse perceptions and experiences proved difficult. Semi-structured interviews with two service users were completed; these concluded that the users in question found the service to be interesting, useful and easy to use and potentially an important addition to the provision of electronic services. However, they also reported that the service content had a narrow scope, when compared to the Internet.
- The study concluded that there is evidence from the wider literature that iDTV is likely to become an important complimentary platform for delivering electronic public services in the future, and that citizens and service users are interested in accessing information and making transactions over the iDTV platform. However, the provision of public services via iDTV is still in its infancy and is not yet sufficiently advanced to support widespread provision and use.

Background

Digital television (DTV) refers to the digital broadcast and reception of digital television signals, as opposed to traditional analogue signals. Interactive digital television (iDTV) involves both digital transmission and interaction with 'viewers' through the existence of a 'return path', and two-way signal transmission. 98% of British homes contain a television set, and the UK is considered to be the world leader in the diffusion of DTV. In just over five years since the launch of the technology, over 50% of all UK homes are using DTV services. Recent Ofcom data estimates that by the end of March 2005, 61.9% of households, or 15.4 million households, were accessing DTV. Households in the UK which are less likely to own a computer or be computer literate are more likely to have access to a TV. DTV therefore has the potential to reach communities and households which are currently information poor, and offers a possible means to improve access to public information and services.

The Scottish iDTV pilot service was intended to test the feasibility of delivering public services and information through iDTV technology. The pilot was led by the Scottish Executive in collaboration with Dumfries and Galloway Council, NHS Scotland (Health Education Board) StartHere, West Lothian Council and Young Scot. The pilot was available on the Sky Digital platform and ran for six months after being officially launched on 7 September 2004.

Research Aims and Objectives

This report presents the results from an evaluation of the Scottish iDTV pilot commissioned by the Scottish Executive Finance and Central Services Department e-Government and Take Up Team. The evaluation was undertaken by Dr. Colin Smith (School of Computing, Napier University) and Dr. William Webster (Department of Management and Organization, University of Stirling). The overarching aim of the research was to study the experiences and views of both service providers and iDTV users in order to assess the effectiveness of the Scottish iDTV pilot, and to identify lessons on the potential of iDTV as a medium for improving access to information and services.

Research Methods

Multiple methods of research were used to capture data from project stakeholders, including: a review and analysis of project and policy documentation, a review and analysis of usage data, interviews with representatives of the main project partners, and interviews with service users. Fieldwork was undertaken between June - July 2005.

iDTV in the UK

A number of factors point to iDTV being an important complimentary medium for the future delivery of electronic government and public services. These include: the increased take up of DTV, the forthcoming digital switchover, the development of government policy and services in this area, and the emerging evidence base from a number of iDTV initiatives. The literature and evidence base emerging around existing iDTV initiatives suggests that citizens and service users are interested in using iDTV to access e-government services, in particular, when there is a clear reason, or purpose, for using iDTV, and where content is relevant and up to date. This evidence base also suggests that the most popular iDTV content is local and community information and the ability to undertake certain transactions, particularly, making appointments, submitting applications, requesting information, making payments and voting.

Characteristics of the Scottish iDTV Pilot

The main features of the Scottish iDTV pilot were: an iDTV service available via the Sky Digital platform, a range of informational and interactive content from each the main project partners, a service officially available for six months from 7 September 2004, and a partnership approach to project management.

Range and Patterns of Use

Data on the range and patterns of use of the pilot from service reports demonstrated that, although all sections of the pilot were viewed or used, there was actually very limited use of the service. This lack of service use may be explained by a number of factors, including: difficulty in accessing the service, the slow speed of the service, the cost of accessing the service, the scope of content and the limited extent of service user recruitment. The lack of service use makes discerning reliable trends in use difficult, however, it is apparent that service use was highest in the late morning and early evening and that service use declined over time.

Project Partners' Views

Semi-structured interviews were undertaken with nine representatives from the five project partner organisations. These found that, in general, project partners found being involved with the pilot a rewarding and valuable experience, which provided significant learning about a relatively immature technology. Project partners agreed that the realisation of a 'live' iDTV service had been a considerable

achievement, demonstrating the feasibility of delivering public services via iDTV. However, all agreed that this achievement was tempered by the lack of service use and the inability to integrate the service with their existing content management systems.

Service Users' Views

Initially the intention was to conduct a number of focus groups with a representative sample of service users. However, the unavailability of sufficient numbers of service users led the research team to undertake semi-structured interviews with two service users. These found that these service users were already familiar with iDTV and considered the service to be interesting, useful and easy to use. These respondents also reported that the service had a narrow scope, when compared to the Internet, but that it was potentially an important addition to the provision of electronic services.

Conclusions

In general, it appears that iDTV is likely to become an important complimentary platform for delivering electronic public services, and that the evidence base suggests citizens and service users are interested in accessing information and making transactions over the iDTV platform. However, the provision of public services via iDTV is still in its

infancy and is not yet sufficiently advanced to support widespread provision and use. More specifically, the main achievement of the Scottish pilot was designing and delivering a 'live' iDTV service, at a time when relatively little was known about the technology and how it could be used for delivering public services. Consequently, the pilot involved extensive organisational and individual learning amongst the project partners.

Recommendations

The two key recommendations presented in the report are, firstly, that the Scottish Executive develops a position on the future provision of public iDTV services in Scotland; secondly, that the Scottish Executive captures, for future reference, the key learning experiences and outcomes from the iDTV pilot. Furthermore, now the Scottish pilot has finished it is important that the Scottish Executive makes reasoned decisions about the immediate provision of iDTV services in Scotland. Possible options include, reinstating the pilot service, developing an enhanced service, developing a portal presence and rolling out the service to other service providers on a cost-recovery basis, establishing a presence on DigiTV, or withdrawing from the iDTV area altogether. A thorough review of these options should take place and should inform the development of iDTV provision in Scotland.

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The report, "Review of Interactive Television Pilot", which is summarised in this research findings is a web only document and is available on the publications pages of the Scottish Executive website at <http://www.scotland.gov.uk/Publications/Recent>

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