Using Technology to Reveal the Politics of the Built Environment

Abstract
In the UK the majority of people do not vote in local elections. However electoral participation is vital to a democratic society. This paper suggests that technology could be used to embed political information into the built environment so that people can easily see how resources are being used in their area and bring political discussion into cities, towns and villages.

Author Keywords
Ubiquitous computing; embedded systems; politics; voter apathy.

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction
In the UK the majority of people do not vote in local elections and participation is still declining. For example in the English local elections in 2012 only 31.0% of people eligible voted compared to 35.1% in 2008. As the electoral commission have pointed out “this decline is worrying for anyone who cares about our democracy.” [1, page 11]. The decisions of local government impact upon the everyday lives of UK citizens; whether libraries remain open, the existence and upkeep of communal parks, how often rubbish is
collected. Why, then, do people in the UK not engage with the process of electing their representatives at a local level? Voters need to be given a “reason to vote” [1], this may simply be “information about the candidates and their policies,” but at a more fundamental level people need to see how local political decisions affect their everyday lives.

**Situated political discussion**

Much of the built environment around us is the product of political decisions. Hidden in the bricks of the local library are the decisions that led to its creation, its ongoing running costs, and the arguments for and against a change to a volunteer run service. Technologies which can embed information into the built environment present an opportunity to reveal the politics behind the everyday objects in our cities, towns and villages. This can situate a person’s understanding of political decisions in the place where the consequences are felt. Moreover it could present an opportunity for them to respond to the situation and express their opinion in a way that is linked to that context. The following scenario presents one way this could be done.

**Scenario**

Jenny walks down the street to her library - it is shut - it regularly shuts on Mondays. On the sign by the opening times is a 2D barcode, Jenny scans it with her smartphone and it takes her to a page which tells her the current opening hours and that they changed last year when the library changed to volunteer staff. It also tells her the cost of that library to run as a proportion of the council budget and the saving that the changes have made. In another section are the details of who is responsible for libraries policy in their local area and a comment from the current incumbent justifying their decisions. Below that is a comment from an opposing politician saying they plan to increase spending on libraries and this might result in Monday opening. In the final section Jenny has the opportunity to make a comment on a forum about the library. She posts:

“Just walked to library – forgot was shut on Mondays 😞 Would rather pay more and get a regular service!”

On her way home she notices another barcode positioned on a street light – she scans this one and gets sent to a page which gives her details of the costing for street-lighting in the area. In the political comment section the opposition propose switching off these lights to save energy. Jenny posts:

“I walk this way every day, often at night. The street lights make me feel safe. Please think twice before switching them off!”

**Conclusion**

This is one way which embedded technology could be used to bring political discussion into the city; taking information that local councils are already required to publish and situating it in the environment where it makes sense to the public. Such a system would pose many challenges, in particular getting local councils and opposing groups onboard while keeping the balance of information impartial. However, the potential benefit of engaging more people in the democratic process makes tackling such challenges worthwhile.

**References**