An exploration of technologies for engagement and promotion of social inclusion with young offenders

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ABSTRACT
Social inclusion and engagement of marginalized youth remains a key policy challenge. Increasingly there is growing interest in the role of social capital development in addressing this challenge. This paper therefore proposes that the identification and development of technologies that can help develop social capital presents significant benefits. Using a framework adapted from a large UK digital landscape study the paper proposes two groupings of technologies that have the potential to create positive engagement with young offenders and outlines a development method that has at its heart co-design principles that further ensures engagement with young people.

Keywords
Social Capital, Social Computing, Virtual Worlds

INTRODUCTION
This paper focuses on the contribution that digital technologies can potentially make towards the promotion of social inclusion and engagement of youth at risk – particularly young people involved in criminal activity. We suggest that the role of social capital development through the use of technology is critical and will form the basis of future discussion.

For our target group of young people technology based social capital development can be considered in several dimensions:

- We know little about how social capital can be built using technologies
- We need greater clarity on what technologies are appropriate and best suited for this particular section of the community.
- Young offenders present a unique challenge in how we might evaluate the efficacy of technology in developing social capital. Thus there is need for emergent and innovative approaches to design systems that will enable the inclusion of young offenders in the design of systems that incorporate their expressed needs.

Thus the agenda for UK and EU policy and research needs to be better refined to allow the collection of evidence to check the validity of the use of technology.

Within this broad context, our principal contribution in this paper is the following: A mechanism for identifying the key areas where ICT can offer support; two potential technological approaches for consideration and a methodology that provides a vehicle for inclusion of young people as first order participants in the design of systems for their use.

The remainder of the paper is structured as follows: Section one introduces the case for social capital building with young offenders. Section two suggests a framework for contextualizing the role of ICT in addressing social inclusion. Using this structure a discussion of two groupings of technologies that have potential is outlined together with a methodological approach based on principles of co-design - something that we see as critical to the success of any system.

THE CASE FOR SOCIAL CAPITAL BUILDING WITH YOUNG OFFENDERS
Current research evidence suggests that engagement with young offenders to help towards desistance, prevent recidivism and promote social inclusion remains a key challenge for public policy and youth justice service providers [1]. Other indications include poor levels of engagement in education, training or employment and high rates of recidivism among young people leaving custody and on community orders [2]. Moreover, young people caught up in the youth justice system are likely to demonstrate weak family, community and neighbourhood networks and are particularly susceptible to becoming part of the so-called ‘NEET Generation’ – not in education, employment and training [3].

There is considerable and growing interest both nationally and internationally in social capital and young people. Social capital is broadly conceptualised as ‘the values that people hold and the resources that they can access, which both result in and are the result of collective and socially negotiated ties and relationships’ [4]. Some writers have emphasised reciprocity, trust and cooperation [5, 6], whilst
others have expressed concern about social injustice and inequality [7]. The functionality of social capital through relationships ensures the effectiveness of the sharing of information and knowledge, and the ways in which self-efficacy and social networks can be enhanced for the purposes of support, social belongingness, and social and cultural identity.

Government policy in the UK is particularly concerned about building social capital to promote youth transitions to adult life, and to prevent social exclusion. However, there are key challenges around youth engagement, and the building and maintenance of social capital and interventions that give serious attention to ‘lifestyle’ issues [8]. Increasingly, technology has been seen as an important mechanism for building social capital and recent advances in internet technology are particularly significant. For example the use of social network sites such as Facebook or MySpace has been viewed through the social capital lens [9]. No work exists on the exploration of the use of such sites by young offenders in social capital building. In particular, the technologies proposed in this study for social capital building and therefore engagement have had relatively little field research.

TECHNOLOGY OPTIONS AND SOCIAL INCLUSION
Successful identification of appropriate technology is crucial to achieving the transformational impact being sought. This section summarizes the possible technology options that we consider best fit our key challenge. To do this we propose a framework adapted from the UK Digital Landscape Report[12] where it is argued that ICT can contribute in four key areas:

• Transforming government services to better suit the needs of marginalized youth. Here the main concern is infrastructure and the key aim is to improve access to relevant and timely information; better sharing of information between service providers and providing facilities to offer front-line staff dealing directly with marginalized youth.

• Support policy targeted at addressing social exclusion: The use of multi-disciplinary approaches to design policies that make appropriate use of technologies - for example – healthy eating managed on-line or via the phone.

• Preventing young people from becoming more disadvantaged as technology becomes more prevalent.

• Helping young people to address their priority needs. ICT that will help young people improve their attitudes, skills, knowledge and inter-personal abilities so that they are able to become self-sufficient.

It is possible to observe activity in each of these broad separate areas even though there is significant overlap between them.

Within the youth justice system the use of technology has largely focused on surveillance, and supporting organizational structures and processes [10]. Firstly, technology has been applied in managing recidivism by “tagging” and the use of location-aware GPS technology for tracking young offenders. Secondly it is being used in managing and optimizing information needs of various stakeholders by the development of a range of information systems (IS) for sharing and integrating data about young people. Neither of these uses is directly aimed at using technology for addressing the needs of excluded groups and neither is focused on a positive engagement with young offenders. For example, the IS systems are designed for youth justice workers, to hold information about young offenders; the information on the systems is not routinely shared with the young people themselves [11].

In 2007, the Digital Inclusion Team published a report describing current policies and projects about digital inclusion activity [12]. It reported that activities mostly focused on larger population segments such as the disabled and older people. The authors also note that whilst niche segments (for example, young offenders) potentially impact fewer people the impact could be greater – “...the people within them could disproportionately benefit more from initiatives to improve their situations than many in the larger groups...” (page 32 [12])

The role of technology in the context of re-offending has been reported by the Alliance for Digital Inclusion. However, the focus here was not on young offenders [13]. Other projects aimed at the wider socially excluded groups include: the use of technologies such as texting to send revision tips and provide wakeup calls to pupils who are persistently late for school [14].

Given this context, this paper’s key hypothesis rests with the notion that social inclusion can be addressed by providing technology-based solutions that will enhance and develop social capital for and with young offenders. Two technology strategies for addressing digital inclusion are relevant: firstly the use of virtual worlds (including forms of ‘serious games’), and, secondly, the conjunction of mobile technologies, CRM and social software. The next two sub-sections present an overview of the state of the art these technologies in relation to digital inclusion.

Social Computing
Social computing – the empowerment of users is seen to be crucial factor for growth of the digital economy [21]. The role of social software applications (and so social computing) is seen as an important element in the development of social capital for excluded groups. Once basic digital inclusion is achieved (i.e. basic access) then Social Computing can itself contribute to enhancing users’ social capital through the use of social networks [23]. However there is limited evidence about the use of Social Computing by socially excluded people and, even more so, about its effects [24].

When social software and mobile technologies are combined with Customer Relationship Management
(CRM) systems a significant and powerful technology ecology emerges. Customer Relationship Management (CRM) are the set of processes and technology that an organization uses to track, organize and manage information about its contacts with prospective and current customers. Such information can be used to improve service offerings to customers and for targeted campaigns for product and services marketing [25].

**Virtual Worlds**

Virtual worlds are becoming increasingly popular and have been applied in diverse disciplines including Sociology. Virtual Worlds such as Second Life [15] are labeled as multi-user virtual environments (MUVES) and in 2008 supported almost 12 million unique accounts. Such environments offer anonymity, safe scenarios, opportunities for learning and the development of key social skills. When virtual worlds are combined with serious games platforms then these technologies offer immediate accessibility to our target socially excluded group of young offenders.

It is useful to postulate how technologies outlined above measure up to the four dimensions of possible avenues of ICT contribution. Figure 1 below proposes the nature of contribution for both the social computing and virtual worlds approach. Social computing directly addresses needs by providing immediate and useful information to young offenders via the phone, for example: court dates. The social software platform also enables the development and management of relationships. Virtual worlds on the other hand allow the construction of scenarios that young people can engage with that directly support the development of morals and decision making in a safe environment. Both approaches do not place a great emphasis on infrastructure needs which has been the focus of most ICT initiatives as discussed earlier.

![Figure 1: Selected technologies and their main contribution areas](image)

**Co-design**

Regardless of the technology, any successful deployment of technology with such a marginal and challenging group must have at its heart – notions of co-design - a systems process that deploys a creative mix of methodological techniques to construct a shared understanding of the problem domain by assigning user groups as first-class members of a multidisciplinary design team. A variety of elicitation techniques such as questionnaires, persona development, “show and tell”, and modelling techniques could be used to identify systems and software that will be implemented. Evaluation techniques from both the social sciences and the usability domain such as think-aloud, and cognitive task analysis could also be deployed. Such a co-design approach is further vindicated by the recent studies that have explored the use of technology for social exclusion. For example:

“Co-production and co-design of services is another route to delivering more effective policy outcomes…” (page 55, Digital Inclusion Report)

“The latter (vulnerable customers) however are hardly ever part of the design process, where they could give input regarding performance, scalability and easiness to adapt the solutions to their daily needs” (page 105, EU report) (Eubanks and Campbell 2004).

**CONCLUSION**

Addressing social inclusion of young offenders by supporting social capital building through technologies is challenging - both in the identification of the appropriate technology and also in the approach to its use. We have proposed that two groupings of technologies have the potential to support such activity: Social software and its integration with mobile devices and CRM; and secondly the use of virtual worlds. For both types of technologies we suggest that empirical evaluation in their use for social capital building is an important research agenda. Critically though, we argue that such technological deployments and evaluations can only be achieved through the use of appropriate design methods and we propose a research agenda that also considers the development and refinement of research methodologies that adopt co-design principles.

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