Social Inclusion of Young Marginalised People through Online Mobile Communities

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ABSTRACT  
Youth exclusion is widespread and increasing across Europe. Information and communication technology (ICT) has the potential to serve as a gateway to social inclusion. However, computer and internet access of marginalised young people are limited. Alternative methods to approach them through ICT are needed. The interdisciplinary project ComeIn (Online Mobile Communities to facilitate the Social Inclusion of Young Marginalised People – EU FP7) studies and utilises mobile networks as a means for social inclusion. This approach combines the benefits of the online community concept with an inclusive approach, realised through the most abundant device used by marginalised youth in Europe – mobile phones.

Categories and Subject Descriptors  
A. General Literature. A 1. Introductory and Survey

General Terms  
Documentation, Design, Experimentation,

Keywords  
Marginalised youth, mobile phones, social networks, online communities.

1. INTRODUCTION  
Life for young people in contemporary society is both challenging and uncertain; their individual life courses are less predictable and more individually framed than before [4]. At the same time the youth face a “decline in the stability of social structures such as family, work and social security and a loosening of the ties between structures such as education and employment” [8] as well as an increased diversity in household and family life, a processes of individualisation are growing and mechanisms of responsibilisation force individuals to reach suitable decisions. Because of this, risk is individualised and thus, it places the responsibility for an “effective management”, self-regulation towards the present norms of society on the young people. Those who fail will be “excluded, marginalised and demonized” [4]. Approaching young marginalised people is challenging – their exclusion from society and societal resources has created a feeling of rejection which leads to a lack of trust and unwillingness to take part in the framework of normative organisations. There is therefore an urgent need to seek for new innovative methods for approaching young marginalised people and for fostering their reintegration into societal circles. Communication technologies provide a new method of implicit belonging as they may potentially serve as an inclusion tool for marginalised youth refraining from explicitly belonging to a specific organisation. However, marginalised young people often experience difficulties, in this regard, associated with limited internet access. These difficulties limit their ability to enjoy the social and professional benefits offered by quickly evolving information technologies and thus, they further contribute to their exclusion. Moreover, such limited ICT accessibility also limits the authorities’ ability to offer marginalised youth an inclusive solution leveraging from media. Mobile networks and telephones could serve as the main infrastructure for social inclusion.

2. CONCEPTUAL FRAMEWORK  
2.1 Definition of Marginalised Youth  
No congruent terminology referring to marginalisation or being at risk of social exclusion exists. Terms differ according to contexts and perspectives and also in their connotations. Some terms used are no longer considered as adequate because they contribute to further stigmatisation. For the ComeIn project the consortium agreed on the following definition for marginalised youth as “young people with fewer opportunities”. This term is used to define the broad target group of the social inclusion efforts of the European Commission’s YOUTH Programme. Forms and dimensions of marginalisation differ and a range of causal or risk factors contribute to cumulating disadvantaged situations of vulnerable youth. Disadvantage is interrelated, clustered and reproduced [7]. Multi-disadvantaged young people are therefore forced to contend with a plurality of obstacles but, at the same time, have relatively few resources to do so. Only when a youth “has a weak position in a number of arenas simultaneously can we talk of marginalisation. Such positions limit their access to economic, social and political resources” [3].
2.1.1 Comeln target group
The Comeln project focuses on marginalised young people aged between 14 and 21 years across Europe, affected by two broad but specific categories: Education and Economy – young people with educational and income determined barriers. Therefore the target group is defined as youth
• of compulsory school age but outside formal education
• post-compulsory school age and not in education, employment or training {NEETs} [2].

2.2 Statistics on marginalised youth use of mobile phone
The mobile phone is central to the lives of young people of various social, economic, educational and cultural groups. In the UK, for example, 97% of female and 92% of male 11-21 year olds have access to a mobile phone [6]. A report published by Nestle's Social Research Programme utilised qualitative and quantitative measurements to explore the usage of mobile phones across youth. The study discovered that mobile phones are a vital tool for young people’s social lives. Enhancing this social attribute of mobile phones by introducing online mobile communities, as it is intended to do by using the Comeln platform, is expected to further serve the need of youth to belong to a community, both explicitly and implicitly.

Secondly, youth describe their phone as a part of their person and identity. More than four fifths of females, and seven out of ten males, ‘could not bear to be without’ their mobile phone.

Thirdly, managing mobile phone communication is partly perceived as a matter of performing a task but it is also a matter of expressing one’s identity and style. The highly visible action of using the phone, and the ever-present need to be part of the virtual community and to have access to it, are more than just an effective use of a tool.

Finally, the mobile phone was found to give young people independence and privacy; it enables them to function in a world which is in their control. When thinking about MYP who face obstacles and are challenged day by day, such feelings of independence, privacy and control are expected to be valued by youths and empowering to the individual. The Comeln project expects that by delivering inclusive content and a sense of belonging via the mobile platform, Comeln will bestow these feelings upon marginalised young people.

3. METHODOLOGY
3.1 Socio-scientific analysis of marginalised youth
A conceptual and analytical framework for analysing marginalised young people lays the ground for future work in the Comeln project. Firstly desk-top research builds a reflection and compilation of the state-of-the-art of research in this field. It starts with an analysis of different terms of marginalisation and of marginalised young people that are commonly used in academic literature. It also contains an assessment of access to and use of technology of marginalised young people. Particular attention is paid to the use of the internet in terms of the Digital divide affecting underprivileged young people and to the use of mobile phones.

Secondly empirical results out of expert interviews and focus groups are used to identify particular problems related to marginalisation in its interplay with ICT. The pool of experts for the interviews is composed by both practitioners who are currently working with affected youth and academics who are involved in related research activities, either marginalised youth and/or the use of ICT. The results of focus group discussions with representatives of the Comeln target group namely the marginalised youth themselves compliment and evaluate the theoretical results. Valuable conclusions drawn from the investigated topics help to specify requirements that should be met by the mobile platform of the Comeln project.

3.2 Exploratory research of online communities
The analysis focuses on defining those aspects of online communities for marginalised youth which can be transferred to a mobile context. A review of the published literature identifies the common characteristics of successful online communities to assist the Comeln project to attain its overall aim of designing and implanting a mobile platform for marginalised young people. The desk research identifies common characteristics in successful online communities which build the basis of group discussions later on.

The research also examines online communities which exist specifically for the 14 to 21 years age group and focuses on the existing use of online communities by young marginalised people. A round table of practitioners will discuss the identified characteristics that will be expanded in the light of their opinions and experiences. The group consists of facilitators, technical developers, researchers and users. The discussion particularly emphasises on the transferability to mobile devices.

Focus group discussions with target group members who are active users of online communities ask for their perception of the uses and the limitations of results gathered before. Outputs are guidelines for a mobile online community including needs, requirements and priorities of users.

3.3 Content design
An essential of today’s online communities are multimedia additions to content which at times become the sole content of the community. In order to import the concept of lively online communities to the mobile dimension, a mobile networked media platform with a number of key technological elements needs to be developed. These elements include improved video streaming capabilities via mobile phones, adaptation of content to the mobile domain, management of- and access to- video files of multiple sources and the user interface. In order to attract the target group and allow them to feel “at home” in the environment of a mobile community, the opportunity to include and integrate video content is essential.

The added value of an online community to marginalised young people is focused on the use of a daily way of communication amongst marginalised young people. Users do not have to get
used to a new platform, software, or protocol, so that we can work on their context, but from a different view and complementary objectives.

According to the focus of the ComeIn project and its target group of young marginalised people with educational and income determined barriers the project works on two exemplary contents: First concerning learning skills and second concerning self-entrepreneurship. The project applies two different content packages suitable for the use on mobile devices as part of an inclusive online community. The project works on the characteristics of the interface of the online mobile community and the characteristics of the interface of the content packages. Based on the exploratory research and literature reviews in previous project phases, an in depth analysis is carried out. Quantitative and qualitative methods are used to capture the user requirement and develop a needs analysis. Survey methods are specifically tailored to potential constraints of the target group. The survey takes place in the two participating project countries UK and Austria. Results of this survey will be discussed in additional focus groups that are organised in each of the participating project countries (see project participant’s description below). A pedagogical framework, alongside the research guides the specification for the content of packages, and is iteratively refined by feedback from potential user groups.

An additional expert group discusses the possibility of adaptation of the content packages for use with marginalised groups in other European countries. Work is resulting in a final content specification which is the basis for the set up of two pilot content plots which are carried out by professional creative producers who are specialised on mobile contents.

### 3.4 Online inclusive communities for marginalised youth

The growth of free ubiquitous ICT supported by multinational corporations in retail outlets offers new opportunities for free internet access. In addition the expansion of web 2.0 services and the growth of internet sites like “YouTube” mean that the majority of under 30s are used to both viewing and contributing to new media. This is not simply a passive delivery market but a participative model. Despite this, some groups continue to be marginalised, and these young people are affected by an educational, cultural and digital divide. With the focus on NEETs in all European countries there is a need to develop vocationally guided, tools and enterprise services to satisfy the needs of marginalised young people who fall outside of the normal established systems existing within educational and other institutions. Cellular technologies offer new opportunities to provide information and services to young people, specifically to those who are on the edge of society. New pedagogies are developing with digital technologies which reflect collaboration, internalised thinking, reflection and iteration, but access to marginalised groups through cellular technology to date has not been part of these developments.

The ComeIn project maps the creativity and ingenuity that these young people daily demonstrate onto citizenship, parenthood and employment through the development of dynamic content accessible through cellular technology and online community.

Web based educational content proliferates, often providing distance learning which is little more than a delivery model offering a digital version of what can be achieved from the study of traditional texts with little flexibility, less portability and often at greater expense. Whilst "content push" models are the norm, interaction is often confused with participation and learning opportunities reduced to multiple choice questions or a small range of community tools which fail to recognise the changing culture of learning in the digital age. Internet literacy permits the user to become an active producer as well as receiver of content enabling interaction and participation online. The challenge for educators is to define emerging pedagogies in terms of 21st century skills where the ability to use new technologies and to shape social communication and interaction using a range of multimedia tools will define success in the future.

Research findings from the 4500 young people participating in Notschool.net has demonstrated that the most effective learning occurs where the learners’ interests are aroused and their pathway meets their needs. In some ways the notion of delivery and community are in juxtaposition, since the social exchange in community supports discussions and dialogues leading to active participation in content related tasks. Learners benefit from community membership where they are involved in dialogue, exchange and collaboration.

Within a learning community, the learners gain more self-confidence and control. The community provides them with the sense of a learning space with its shared experience of goals, cooperation and support. That sense of community serves to define a range of user-led and peer generated content with common characteristics. This in turn provides the scaffolding for the learning space. For this reason, generic and specific content packages will be developed which involve and reflect the needs of learners from the various marginalised groups identified.

### 3.5 User interface and user modelling

Based on the socio-scientific studies, ComeIn develops a user interface research that will be integrated in the architecture of the online community. User models will be defined for each participating country and categorised to get the best match between the communities and user groups and the facilities provided in ComeIn.

Specific user requirements for the user interface to the online cellular community will be taken from worked out results concerning content and infrastructure needs. Then those requirements will be combined with widely accepted guidelines for development of mobile services user interfaces. As a result, different user interfaces will be specified and prototyped for mobile devices and will build the basis for new services discovery for the architecture.

The main target is to define functional specifications that model the user profile by describing the user preferences, needs and interests. In order to implement the features of the user modelling, the user data model that supports the information storage in the system will be defined. Knowledge-based techniques will be applied so as to build an intelligent module which inputs are the user tracking and context-awareness components. Ontologies for the user profile description (like AccLip) will be used to develop the module. These actions aim to personalise the system...
according to each user. Finally user modelling will be implemented according to the module definition and technologies presented.

Another main goal is the specification, design and implementation of a user modelling architecture that provides personalisation capabilities to the system depending on the user. By defining a user data model the system is able to store information about users and allows them to configure a customised environment according to their preferences and needs. The user profile will allow the evaluation team (Centre for Social Innovation - ZSI) to assess and evaluate the system.

3.6 Outcomes and Impact
As described above the ComeIn project follows several aims that will in combination lead to further insights in the field of marginalised youth and their use of ICT. The mobile online community set up by the project will evaluate at least two specific content packages and the new adopted high technology which allows for real-time video streaming for tens of thousands of users at the same time.

In June 2009 – at project half-time – many of the expected results will already be available: The socio-scientific analysis concerning marginalisation, digital divide and virtual communities as well as the first technical test results including Distributed File System and Video on Demand content. Also the specifications for the development of the two content packages and the user modelling definition and user data model will be at hand. The main characteristics of the interface design, system specialities and features and the state of the art of user interface will be available.

Successively, the ComeIn project will assess, analyse and provide recommendations for future research in the field of mobile communities for the social inclusion of marginalised young people. It will identify and demonstrate items of RTD performed in ICT industries that require co-development with users and experts in social science (in processes of “open innovation”).

The project will also contribute to an increase of competencies of experts in social science (in processes of “open innovation”). The user profile will allow the evaluation team (Centre for Social Innovation - ZSI) to assess and evaluate the system.

4. COMEIN PROJECT PARTICIPANTS
Atos Origin as coordinator is the Spanish branch of a major international IT services company, Atos Origin plc. It focuses on projects combining research & development and the economic exploitation of investigation’s results.

VideoCells (Israel) is a market leader in the field of telecom video applications. The company has developed a range of unique and affordable products to fulfil the needs of telecom operators and service providers.

Inclusion Trust (UK) is an educational charity aiming to advance learning opportunities for people that are excluded, or disengaged, from traditional education systems. Through its flagship programme, Notschool.net Inclusion Trust provides re-engagement in learning for those 13–16 year olds who have no opportunities for learning through traditional routes.

DramaWorks Development Services (Germany) is an advisor for authors and producers, particularly in questions concerned with developing, revising and presenting TV and motion picture projects with a relevant experience in the area of ‘Mobile Content’.

The Centre for Social Innovation – ZSI – (Austria) is a private, not-for-profit research institute. It offers analyses and concepts for trend-setting social innovation. Topical research issues are the conditions of emerging technologies, the diffusion of technology and the results on society from such technology. Special emphasis is directed towards the inclusion of technology users.

The Styrian Association for Education and Economics (Austria) is a legal accredited institution for excellence in the fields of social research, cultural heritage promotion and higher training while maintaining its former vocation to support high skilled young people to improve their natural skills and get better access to the job market.

5. ACKNOWLEDGMENTS
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6. REFERENCES