

SUMMARY RESEARCH REPORT 'SECOND LEVEL DIGITAL DIVIDE IN FLANDERS'

Colophon

Contracting authority

Instituut Samenleving en Technologie

Vlaams Parlement

1011 Brussel

Project coordinator

Johan Evers

Research team

Studies over Media, Informatie and Telecommunicatie [SMIT]

Vrije Universiteit Brussel

Pleinlaan 2

1050 Brussel

Research team members

Ilse Mariën, Leo Van Audenhove, Chris Vleugels, Stijn Bannier en Jo Pierson

Period

November 2009 – September 2010

INTRODUCTION

During the last decade it has become clear that the traditional notion of the digital divide – people with access versus people without access – can no longer be applied today. Digital exclusion mechanisms come to the fore at many other levels like usage, motivation and digital skills. Merely giving access to ICT does not automatically lead to usage or a meaningful and advantageous use of ICT. Moreover, providing access alone is not enough to increase the attainment level of digital skills. Instead, many other elements influence the take-up and use of ICT. Social networks often give the necessary technical and emotional support. The context of use becomes more important because it gives information about the significance and value of usage within users' daily routines. It hereby shows whether exclusion mechanisms come into play or not. The digital divide in its' current form appears to be highly complex and multifaceted.

As a consequence different questions arise. In what way should the notion of the digital divide be reconsidered? What aspects have become more or less important? What does this imply for future research, policy and civil society? Do government and civil society undertake actions that are in line with the current complexities and changes of today's digital divide? In Flanders there is no top-down digital inclusion policy. This has resulted in a highly scattered field of approaches to the implementation of digital inclusion, both by government and civil society. At the same time, policy stakeholders are left unaware of the scope, effectiveness and sustainability of these approaches. This study was launched to 1) get a comprehensive view on the evolution of the digital divide; 2) analyze the approach of existing digital inclusion initiatives; and 3) identify current barriers and generate policy recommendations to overcome these barriers.

The literature review focuses on recent theoretical approaches to digital exclusion and examines what changes took place regarding the notion of the digital divide and why these changes occurred. It also explores which new elements should be taken into account to explain and counter digital exclusion. Special attention is given to non-traditional aspects like the importance of social networks and the role of lifestyles and life stages. Next, a meaningful inventory of existing digital inclusion initiatives was made. By way of an online questionnaire nearly 400 initiatives were mapped and analyzed according to 1) their modus operandi – e.g. number of computers, target groups, type of courses; 2) their pedagogical approach – e.g. group size, type of coaching, learning materials, demand or supply driven approach; and 3) their sustainability – e.g. financing mechanisms, embedding in other

organizations, collaboration with local authorities. Finally, a threefold brainstorm session with representatives of various organizations was organized. During the brainstorm participants worked towards 1) the identification of problems related to the implementation of digital inclusion projects; and 2) in-depth discussion about appropriate solutions and suitable policy recommendations.

DIGITAL INCLUSION: A NEW APPROACH

The literature review shows that a new approach to digital exclusion is needed. The use of the term *digital divide* is misleading. It reflects a dual subdivision between access and no access or usage and no usage. But as van Dijk (1999) states “*access and use should rather be expressed as a stretching of the whole spectrum of positions across populations.*” People are no longer either off- or online but access and use ICT in various ways. As such it would be better to replace *digital divide* by a more suited terminology. We put forward the notion of *digital inclusion*. Its positive connotation reflects the need to identify digital exclusion mechanisms and in addition, strive for social inclusion. In this regard the complexity and multidimensional character of digital exclusion and inclusion should be taken into account. This means that more traditional barriers – e.g. access, motivation, usage and skills – are to be examined in a more profound way. Future research needs to focus on examining the relation between usage differences and exclusion mechanisms. Measuring the diversity, intensity and frequency in a quantitative way should not be the only way to look at usage. The context of use, meaning the quality of access, the autonomy of use, the online experiences and interests of users and the significance of use should also be examined. Likewise, non-traditional aspects – e.g. social networks, lifestyles and life changes – need to be considered. The measurement of digital skills needs to be updated. Merely counting the number of applications people use or the number of tasks people are able to perform does not reflect the complexity of the notion of *digital skills*. *Operational, formal, informational and strategic skills* are to be taken into account. A new measurement system needs to be developed by which the effective skills level is assessed via real-life experiments.

It is expected that access, motivation and informational and strategic skills will become structural problems in the nearby future. Policy intervention is needed with regards to each issue. Material access remains problematic for underprivileged groups due to a lack of financial means in relation to the high cost of ICT. Policy should focus on implementing a social Internet rate. Though exact figures on the situation in Flanders are unavailable, it is expected that lack of motivation is a

structural problem. A vast percentage of individuals willingly reject the use of ICT, in spite of home access and elaborated digital skills. Research should examine this lack of motivation in relation to the context of use and the significance of this (non-) use within the daily routines of these non-users. Digital skills are lacking across the Flemish population as a whole. Elderly people often lack the necessary button knowledge. (Cfr. operational and formal skills) Young people, though often considered as 100% digitally skilled, have problems with finding information, critically evaluating and using this information to their benefit. (Cfr. informational and strategic skills) Operational and formal skills can easily be learned by way of *trial and error*. Informational and strategic skills imply the development of a critical attitude and the ability to apply new knowledge for one's personal benefit. These skills are more difficult to acquire and demand for intervention by (in-) formal education. Education policy needs integrate the attainment of digital skills in the curricula of all youngsters.

THE IMPLEMENTATION OF DIGITAL INCLUSION

The inventory shows that organizations have developed a well suited and well working approach to digital inclusion. The majority of the initiatives clearly act beyond access. Out of 367 initiatives 48% has implemented a public computer space accompanied by an extended offer in training opportunities and 38% focuses on the sole delivery of training opportunities. Moreover, in 91% of the public computer spaces coaches are present to assist visitors. Most training opportunities – 87% – focus on computer and Internet skills. Nearly all initiatives, namely 87%, are entirely public. In 60% additional efforts are made to reach specific target groups of which 38% focuses on disadvantaged groups. Especially with regards to disadvantaged groups and elderly people the current approach is successful. Most initiatives are embedded in existing social and other socio-cultural organizations. This means that there is no need for target groups to transcend non-familiar boundaries or make additional efforts to engage in the use of ICT or an ICT-course. This approach neutralizes issues like a lack of motivation, low self-esteem or a lack of confidence. The nearly 1 to 1 coaching creates an atmosphere of trust and confidentiality. This is confirmed by the use of a specific pedagogical approach. Most initiatives are very small, also work in small groups of no more than 5-6 people, and use a very slow learning pace and a step-by-step approach based on custom made learning materials. Special attention is given to the use of an easy-going and comprehensible language. They mainly work demand driven, meaning that visitors indicate what they wish to learn next. In this way visitors are more motivated to succeed or apply what they have learned afterwards. The two primary goals of initiatives are to create

positive learning experiences and to incite people to use ICT and improve their digital skills.

INTERMEDIARIES AND DIGITAL INCLUSION: BOTTLENECKS AND BARRIERS.

The brainstorm reveals that initiatives encounter four major difficulties: 1) Maintenance of the Computer Park; 2) Transition of participants to Follow-Up courses; 3) Availability and pedagogical support for coaches; and 4) Development of demand driven learning methods and materials. On each level policy intervention is needed to ensure the sustainability and future development of existing initiatives.

Concerning the maintenance of the Computer Park in-house IT-knowledge is lacking. Organizations do not succeed in updating and protecting their computers against viruses and spam because they do not have personnel with sufficient IT-skills. Hiring professional IT-ers is too expensive. In order to obtain some degree of control and security downloading software, music, games or other applications is forbidden in 50% of the public computer spaces. Another barrier is brought about by the constant obligation to update, upgrade or renew Operating Systems and software. Licensing, and more in particular, the transferability of licenses across the computer park is difficult. As a solution, Flemish organizations call for the foundation of an umbrella organization in order to organize a mobile and online helpdesk.

The problems regarding the transition of participants to Follow-Up courses is marked by a lack of data on 1) the knowledge level of participants; 2) the focus and availability of follow-up courses; and 3) the learning trajectory of participants. Organizations do not agree on how to address this issue. The idea of a lifelong portfolio was brought forward. But organizations working with disadvantaged groups, like people in poverty or (illegal) migrants consider mapping, measuring and analyzing the skills level of participants unfeasible and too invasive. They are convinced that it will lead to additional mechanisms of exclusion because people with limited learning capabilities will lack the necessary confidence and skills to participate and will, at the end, disengage. Also, what would need to be measured and mapped? Being able to use Facebook? Or knowing how to use a mouse? Several organisations believe that the whole spectrum of possible applications and skills is too diverse to be measured.

The barriers regarding the availability and pedagogical support at the level of coaching are more complex. Volunteers, professional teachers or the organisation's own personnel are responsible for the coaching in public computer spaces. Each of

these types has their own particular shortcomings. Professional teachers have the necessary pedagogical skills but are in most cases unaware of the real-life difficulties of impoverished groups. Also, most organizations do not have the financial means to work with professional coaches. They are obliged to work with volunteers or their own personnel. When working with volunteers, availability becomes an issue as they often disengage. Though volunteers are more close to the target groups they often lack the necessary pedagogical skills to incite these groups to learn. The employees of the organization itself, for example librarians, youth workers or social workers often show a negative attitude towards ICT and/or lack the necessary digital skills. This makes them less able to motivate and incite others to use ICT and improve their digital skills. Altogether, the study reveals that all coaches are in need of additional *Train The Trainer* courses. But none of the existing initiatives is able to provide these *Train The Trainer* courses at a large scale due to a lack of financial means. The rapid development of the Internet adds another barrier. How can coaches keep themselves up-to-date with the continuous submergence of new(er) applications and the progressive evolution of the Internet? The same applies for the development of custom made learning materials. How can these be kept up-to-date and how can the exchange of knowledge between organizations be stimulated? As a solution, organizations call for the foundation of an umbrella organization to implement these *Train The Trainer* courses and at the same time enhance the exchange of knowledge, best practices and learning materials. From a policy perspective organizations state that it is absolutely necessary to integrate the use of ICT into the existing curricula of librarians, social workers or youth workers, as they are most likely to function as an intermediary for digital inclusion policy afterwards.

TOWARDS ADDITIONAL POLICY INTERVENTIONS

The foundation of an umbrella organization is crucial for the future development and sustainability of existing initiatives. Such an organization should implement *Train The Trainer* courses at a large scale, and at the same time enhance and stimulate the exchange of best practices and learning materials. It could and should also function as the point of reference for policymakers interested in digital inclusion and for the organizations themselves. In this way communication and collaboration amongst organizations and policy stakeholders can be stimulated. This umbrella organization should also develop and implement a mobile and fixed help-desk service to assist initiatives with the technical difficulties they encounter.

Furthermore, there is a stringent need to develop an all-round approach to digital inclusion. Instead of working within one's particular field of competence, all policy stakeholders should work together on a policy approach that is in line with the current complexity and multidimensional character of digital inclusion. To ensure the quality of digital inclusion initiatives policy stakeholders should work on a clear-cut conceptualization of a public computer space and establish minimum requirements regarding modus operandi, pedagogical approach and collaboration.

From a policy perspective, it is important to consider digital inclusion policy beyond disadvantaged groups and not lose sight on difficulties experienced by advantageous groups like young people or middle class citizens. Therefore, it should be integrated in a broader and more general information society policy.