

***Towards a multi-stakeholders approach for digital inclusion:  
A case study of Ghent's 'Digitaal.Talent' policy program***

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**Abstract:** Over the past 10 years, the city of Ghent (Belgium) has developed and deployed an extensive digital inclusion program, called [Digitaal.Talent@Ghent](#). At European level, this program is considered to be a best practice as it consists of a strategic all-round policy approach in which sustainability and collaboration is key. However, it remains unclear which actors are to be involved to deploy a successful digital inclusion policy, and moreover, which actions fit under the responsibilities of each of the actors involved. This study entails 1) a theoretical exploration of the characteristics of a digital inclusion policy; 2) an in-depth identification and analysis of the role of the various stakeholders; and 3) an empirical analysis of Ghent's digital inclusion policy and the Digitaal.Talent program. Results show that vertical and horizontal policy integration of the main components of digital inclusion in different policy fields such as employment, citizenship, education or wellbeing is essential for success. Also, private-public partnerships are brought to the fore as crucial for the deployment of qualitative in-home and public access and content. Furthermore, grassroots organisations were identified as key partners to counter the digital and social exclusion of at-risk groups by way of providing free low barrier public access points to ICT and the Internet; and by delivering access to an extensive range of informal learning initiatives. Investing in research and pilot-projects upholds the innovative character and future-oriented nature of a digital inclusion policy program and as such, ensures that a program stays in line with the rapid evolution of the Internet and related applications and tools.

**Keywords:** digital inclusion policy, implementation, eInclusion, public computer spaces, grassroots, informal learning

## **Introduction**

Throughout the last decade, digital inequality has shown to be a highly complex and multidimensional phenomenon defined by two aspects: 1) various ICT-related barriers; and 2) mechanisms of social exclusion. Physical access, intrinsic motivation and the attainment of digital skills determine the uptake and the diversity of individual usage patterns. However, usage patterns are also highly influenced by the broader social context in which individuals are embedded (Mariën & Van Audenhove, 2011). Aspect such as socio-economic background, social and cultural capital or life styles and life stages influence the way in which individuals are capable of developing capital enhancing usage patterns (Mariën & Van Audenhove, 2012a; van Dijk, 2005). When considering usage, the so-called Matthew effect comes into play. Already advantaged groups – high educated, active job status, high income, more access, elaborated digital skills... – are more able to use ICT to their immediate social and economic advantage and as such are enabled to continuously improve their societal position. This in contrast to underprivileged groups – undereducated, unemployed, low

income, low access, low digital skills – who show a more leisure-oriented use of ICT without an immediate added value at a societal level (van Dijk, 2008).

Moreover, research shows that digital inequalities exist alongside other social inequalities and situations of deprivations (Gilbert, 2010; Livingstone & Helsper, 2007). It is stated that digital inequalities might lead to an aggravation of social inequalities or may be the cause of new mechanisms of exclusion (Gorski, 2008; Witte & Mannon, 2010). Claims are made that digital and social inequalities are characterized by a vicious circle that maintains and reinforces inequalities: *“Social exclusion leads to digital exclusion, which in turn perpetuates and exacerbates that social exclusion”* (Warren, 2007, p.379). This implies that digital exclusion mechanisms are also determined by social exclusion dynamics such as unemployment, health issues, low education levels, ethnic background or growing up and living in a socially deprived neighbourhood. These social exclusion dynamics are often intertwined and strengthen each other and as such lead to simultaneous deprivation at the level of work, education, living conditions, income, social security, daily resources or health (Daly et al., 2008; Jehoel-Gijsbers & Vrooman, 2007; Wright & Wadhwa, 2010).

This implies that digital inclusion policies should aim at lowering the immediate ICT-related barriers such as access and digital skills; and should also be aligned with social inclusion policies and focus on factors like health, education, employment and equitable participation. Hence, digital inclusion is defined as a two-folded concept that refers to 1) inclusive ICT and 2) the use of ICT to achieve broader inclusion objectives (Wright & Wadhwa, 2010). The complex character of digital and social exclusion, along with the reciprocal nature of the relation between both, implies that an all-round digital inclusion policy is needed that asks for a multi-stakeholder approach in which various actors collaborate intensively (Mariën & Van Audenhove, 2012b). However, it remains unclear which actors are to be involved to deploy a successful digital inclusion policy, and moreover, which actions fit under the responsibilities of each of the actors involved.

Therefore, this paper consists of a theoretical exploration of the characteristics of digital inclusion policies with a specific emphasis on the identification and analysis of the role of the various stakeholders to be involved. In addition, it entails an empirical analysis of Ghent’s digital inclusion policy and the Digitaal.Talent program. Over the past 10 years, the city of Ghent, Belgium, has developed and deployed an extensive digital inclusion program, called Digitaal.Talent. At European level, this program is considered as a best practice as it consists of a strategic all-round policy approach to counter digital inequality in which sustainability of initiatives and collaboration between various stakeholders is key.

## **Towards an ideal digital inclusion policy**

### *Lowering ICT-related barriers*

Too often the assumption is made that digital inclusion policies should primarily focus on increasing physical access to ICT. This is based on the idea that once people have access, they will automatically start using ICT. Research shows that a mere focus on access is insufficient (Mariën et al., 2010). First, motivational issues hamper take up, also amongst those who do have (home) access to ICT. Second, a lack of skills has a highly negative influence on the take-up and diversity of ICT-usage. Third, having access to ICT is no guarantee for the development of capital enhancing usage patterns. Moreover, differences in usage patterns occur according to the socio-economic background of users (Brotcorne et al., 2010; Livingstone & Helsper, 2007; Mossberger et al. 2003; van Dijk, 2005). Hence, digital

inclusion policies should move beyond access and simultaneously focus on 1) the delivery of qualitative access; 2) ways to increase the intrinsic motivation of non-users and novice users; and 3) the acquisition of digital skills (Mariën & Van Audenhove, 2012b).

However, additional attention needs to be given to the broader social context and the social realities that influence take-up and usage (Mehra et al., 2004). In the first place, social networks significantly influence the way in which people access and use ICT. This influence can be negative and positive (Helsper, 2008). ICT-rich environments – e.g. high levels of access, usage, and skills amongst its members – go hand in hand with various advantages. Members have more opportunities of use because usage patterns within the network tend to be frequent and diverse. Also, members are challenged to diversify their usage patterns, as they are subject to regular exchanges of information about new and interesting applications and tools (Haddon, 2006). They also tend to have sufficient ways to obtain support when they are confronted to technical problems or ICT-related questions. ICT-poor networks – e.g. low levels of access, negative attitude towards ICT, low usage, and low skills – provide fewer support resources, less stimuli and fewer opportunities for take-up and usage (Brotcorne et al., 2009; Mariën & Van Audenhove, 2010; Selwyn, 2004; van Dijk, 2005). Hence, digital inclusion policies should not only focus on individuals but also on the communities in which individuals are socially and culturally embedded.

In the second place, the learning trajectories of digital skills highly defer from one person to another. A vast number of people have the ability to develop their digital skills in a highly autonomous way via trial-and-error, where as many others cannot (van Deursen & van Dijk, 2009). Also, learning preferences appear to be highly personal and many individuals reject formal training solutions. The reasons for this are manifold: Not enough available free time, lack of motivation, negative school experiences in the past, low self-esteem or a lack of confidence (Gareis, 2006; Tyler-Smith, 2006). Individuals in high status jobs that are already high educated also receive more ICT-training opportunities at their place of employment than low educated individuals in manual labour positions. Developing suited digital inclusion policies implies that there is a need to understand why these differences in skills acquisition occur and how these can be countered (Mariën & Van Audenhove, 2011).

The previous arguments support the development of a digital inclusion framework that goes beyond the immediate ICT-related barriers. A digital inclusion framework should additionally address issues such as digital empowerment, digital opportunities, digital equity and digital excellence (Heeley & Damodaran, 2009). Claims are made that novice users should be turned into highly skilled users that are capable of making a free choice about which ICT are suited within their daily realities and as such, lead to an added and capital enhancing value (Heeley & Damodaran, 2009; Helsper, 2008). A critical remark in this regard is that most emphasis is currently put on the empowerment of end-users. However, a counter movement is also necessary at the level of content production. The availability of relevant, user-driven and user-friendly content and services is crucial to enable take-up and usage and hence, should also be one of the goals of digital inclusion policies (Communities and Local Government, 2008b; IMLS et al., 2011; Teles & Joia, 2011).

### *Focus on community capacity building*

Digital inclusion policies need to focus on the macro, meso and micro level because of the influence of the social context and social realities on ICT take-up and usage; and because of the reciprocal relationship between digital and social exclusion (Mariën & Van Audenhove, 2012b). This complexity also implies that digital inclusion policies need to focus on lowering

individual barriers; and on empowering communities as a whole (Communities and Local Government, 2008a; Sinclair & Bramley, 2010; Warren, 2007). An important question is through which approaches such community capacity building can be achieved?

A first possible approach is to build the social and cultural capital within communities by valorising the ICT-knowledge that is already present within those communities. The continuous evolution of existing and new ICT-tools makes it nearly impossible to stay up-to-date. Stimulating knowledge exchange on digital tools and skills amongst community members might be a solution to this. Also, by stimulating knowledge exchange, the awareness and availability of ICT-related social support networks will increase (Communities and Local Government, 2008a; Haché & Centeno, 2011). An excellent example is the 'Digital Champions' campaign that was launched in the UK (<http://champions.go-on.co.uk/>) and will be spread across Europe in the upcoming years. It is based on the idea that every individual within a community, within society, has some kind of ICT-knowledge and just needs to be incited to share that knowledge within his own social networks, the community or society at large. Sharing ICT-knowledge will lead to the development of the individual and community based social and cultural capital.

Secondly, claims are made that ICT-driven solutions have a positive impact on a community's collective and individual social capital (Notley & Foth, 2008). Digital tools can support broader societal goals such as access to the labour market, equitable participation in public and political life, life-long learning or independent living and active ageing (Bianchi et al., 2006). Research in the UK accords four types of benefits to ICT-driven tools and services: 1) the development of social and employment skills; 2) ways of building soft skills – e.g. confidence, self-esteem, sense of achievement; 3) a simplification of daily routines by practical solutions for shopping, job searching or leisure activities; and 4) the creation of more independence and the ability to do more things autonomously in spite of physical or other barriers (Communities and Local Government, 2008a). However, ICT-driven solutions need to be developed cautiously. Most expectations with regards to the potential added value of digital technologies for social inclusion remain largely hypothetical as figures on effective impact are currently lacking (Haché and Cullen, 2010; Ortiz, 2009). Also, too often digital inclusion policies rely on a positive attitude towards ICT and hence, chances are real that ICT-driven initiatives do not reach their objectives (Sinclair & Bramley, 2010). It is therefore necessary to ensure that the use of ICT-driven tools is framed within a well-defined pedagogical, meaningful and project-based approach (Haché & Cullen, 2010). They should be embedded and realized in existing initiatives by way of close collaboration with grassroots organizations, local public institutions and authorities (Karabanow & Naylor, 2010; Royle & Colfer, 2010; Steinkuehler et al., 2009).

Thirdly, several studies acknowledge the value of participatory approaches as a way to work towards broader inclusion goals (Bianchi et al., 2006; Sinclair & Bramley, 2010; Steyn & Johanson, 2011; Teles & Joia, 2011). Some basic principles for community involvement are the use of an iterative process; the continuous facilitation of collaboration throughout the entire process; and the integration of knowledge acquisition with an action-based approach (Olshanksy, 2008). It is stated that individuals and communities should be recognized as key actors and partners in the development of digital inclusion solutions. According value to their tacit knowledge will lead to better soft skills – e.g. more self-confidence, higher self-esteem – and will lower motivational and participatory barriers (Haché & Cullen, 2010). Community consultation and participation ensures that identified solutions are more aligned with the daily needs and wants of the community and as such, will be more easily appreciated and adopted (Warren, 2007). Moreover, it increases their sense of agency and

autonomy, and hence challenges existing social exclusion dynamics (Olshansky, 2008; Steyn & Johanson, 2011; Teles & Joia, 2011). Individuals and communities gain a sense of control over their lives, feel more enabled and empowered, and as a result, will more easily and actively participate in the community and society in general (Makinen, 2006; Van Regenmortel, 2009).

An important consequence of these community-driven approaches is that there is no one-solution-fits-all for digital inclusion. Different individuals and different communities have different needs and hence, require different solutions (Bianchi et al., 2006; Communities and Local Government, 2008b; Van Regenmortel, 2009). However, the basic principles remain the same:

- The focus of digital inclusion initiatives needs to be two-folded, without any prioritization, on lowering immediate ICT-related barriers and on striving for broader societal goals such as participation, inclusion and empowerment.
- Digital inclusion initiatives should be embedded locally by collaborating with grassroots organisations and local communities.
- Digital inclusion initiatives should be based on demand driven and participatory approaches in which the needs and demands of the community are placed at the centre.

### *Ensuring sustainability through a multi-stakeholders approach*

The complex character of digital and social exclusion, along with the reciprocal nature of the relation between both, implies that ensuring a sustainable digital inclusion policy asks for a multi-stakeholder approach (IMLS et al., 2011; Mariën & Van Audenhove, 2012b; Wright & Wadhwa, 2010): *“Digital inclusion is a multi-faceted concept. It is relevant for activities in the social, economic, health, education and technology policy domains. It engages both policy practitioners from the public sector, as well as stakeholders from the technology R&D community, the private sector and civil society. It also requires concerted efforts at all levels - international and European, as well as national, regional and local.”* (Bianchi et al., 2006, p. 61).

Policy makers are the first and most obvious actors. National (or federal), regional and local authorities are best placed to develop a strategic and future-oriented digital inclusion framework (IMLS et al., 2011). Such a framework should focus on sustainability solutions for structural issues. At the same time it should also enable social innovation by providing project-based support for innovative approaches (Mariën & Van Audenhove, 2012b). Policy actors should take on a lead role and align both top-down and bottom-up approaches (Boeltzig & Pilling, 2007; Communities and Local Government, 2008a; Heeley & Damodaran, 2009; Sinclair & Bramley, 2010). Furthermore, they should enhance and ensure collaboration and integration at different levels: 1) between the various policy levels, meaning between federal, regional and local policy departments; 2) between the various and highly diverse policy fields involved (e.g. wellbeing, employment, health, economy, education, social integration, migration...); and 3) between the variety of actors involved, meaning third sector organisations, public institutions and private sector (Bianchi et al., 2006; Communities and Local Government, 2008a; Notley & Foth, 2008).

In addition, policy actors should focus on negotiations with the private sector to achieve the development of relevant ICT-delivered services and user friendly ICT (IMLS et al., 2011). The private sector is responsible for developing and deploying new infrastructures, services and digital tools. Too often these are market driven and less in line with the specific needs and

wants of local communities. Policy actors should negotiate and stimulate a more user and/or community driven development. Also, policy actors should stimulate public-private partnerships as a way of providing support for grassroots organisations (Mariën et al., 2010).

Grassroots organisations and public institutions are other crucial actors for digital inclusion. Third sector organisations provide creative and innovative bottom-up solutions by way of public computer spaces, informal learning opportunities and all kinds of ICT-based projects to incite ICT-usage amongst novice users (Heeley & Damodaran, 2009). They have the specific ability to reach and empower at-risk groups because they are locally embedded and have developed a relationship of trust with at-risk communities. Hence, grassroots organisations are able to make these groups acquainted with the potential societal benefits of digital technologies and work towards broader societal goals (Communities and Local Government, 2008b; Emmel et al., 2007; Haché & Centeno, 2011). Public institutions have a similar focus but make use of a more formal approach in which skills acquisition is central. They use a more top-down approach and target general public (Haché & Centeno, 2011; Heeley & Damodaran, 2009). An important role for policy actors is to facilitate and enhance the transfer from informal to formal education opportunities. Currently, the distance between both appears to be too high for many newly engaged learners in grassroots organisations (Mariën et al., 2010).

A last important actor is research. Many gaps remain that hamper the realisation of a sustainable framework for digital inclusion. First, a more comprehensive view is needed on the exact nature of the relation between digital and social exclusion and inclusion. What issues are structural and need to be solved at macro level? What issues are more personal or community based and ask for bottom-up solutions (Brants & Frissen, 2003)? Second, a more detailed view on usage patterns of at-risk groups is required in order to determine what ICT-driven solutions might suit them. Research shows that at-risk groups have low access, few skills and leisure-oriented usage patterns but these data do not provide a detailed view of the variety of tools at-risk groups do possess and use (Mariën & Van Audenhove, 2012a). Third, it is necessary to make a critical analysis of participatory approaches. Moreover, on how to make these approaches more concrete in terms of work plans, implementation strategy or sustainability. But also, on what possible perverse effects participatory approaches might bring about with regards to existing power relations and role patterns. Finally, more research is needed on the actual influence or impact of digital inclusion initiatives with regards to inclusion, participation and empowerment. What is the social and economic relevance of digital inclusion? What is the percentage of individuals that transfers from informal to formal learning, or reintegrates into the labour market after an ICT-based informal training? The main question is to examine and collect empirical data on what approaches are successful with regards to broader societal goals. This in order to move towards an evidence-based approach for digital inclusion instead of the current one based on best practices and anecdotic evidence (Haché & Cullen, 2010).

## **Digital inclusion policy in practice: The Digitaal.Talent program**

### *Ghent2020: Digital inclusion policy in context*

Over the past 10 years, the city of Ghent (Belgium) has developed and deployed an extensive digital inclusion program, called Digitaal.Talent. The following paragraphs will highlight the main strengths and weaknesses of this program. It was based upon extensive desk research and a critical analysis of current policy documents of the city of Ghent.

The digital inclusion approach of the city of Ghent started in 2005 by the creation of a mobile computer class. Third sector organisations and public institutions were given the opportunity to lend and use these mobile computers within their organisations. Initially the program was build around the notion of the digital divide – e.g. solve issues of access and usage. As of 2006 a dedicated program director was appointed at Digipolis and several changes were initiated. In 2007, the program was renamed into ‘Digitaal.Talent’ and with this, the strategy and focus evolved towards a more elaborated program that was build around four strategic pillars:

*Pillar 1: Knowledge, innovation and creativity*

This pillar focuses on ICT-competences and knowledge acquisition through various actions such as informal learning opportunities in third sector organisations and public institutions, or more formal oriented approaches in collaboration with schools and adult education.

*Pillar 2: Social sustainability*

This pillar targets the installation of public computer spaces and the provision of support mechanisms for third sector organisations such as a help desk for technical issues, train-the-trainer opportunities or learning materials. The realization of awareness campaigns also fit in this pillar.

*Pillar 3: Economic sustainability*

This third pillar consists of the provision of ICT-courses for citizens who are unemployed and lack the necessary ICT-skills. Particular attention is paid to mechanisms and tools for reintegration in the labour market. A critical remark in this regard is that there currently is a low focus on social economy oriented solutions and that collaboration with employment needs to be intensified.

*Pillar 4: Communication and participation*

This pillar highlights the importance that is given to participatory projects, which allow citizens to actively participate in policymaking and the development of ICT-related tools for broader societal goals such as wellbeing and living in the city.

Building the Digitaal.Talent program around these four pillars, enabled alignment with other policy fields and programs. For example, the strategic policy framework ‘Ghent2020’ was also build around the same pillars. Hence, various action points of the Digitaal.Talent program have been integrated in policy programs related to education, diversity, employment, participation, community work and welfare. The Digitaal.Talent program is also one of the 19 programs of the Ghent2020 policy framework and as such, is considered and developed as a long-term initiative in which collaboration between different policy fields and departments is a prerequisite. Furthermore, the program is build upon intensive collaboration with grassroots organisations and public institutions such as libraries. It consists of so called *activities* and *actions*. Activities are built around central policy goals and focus on structural issues. Actions are temporary projects that focus on experimenting with new policy ideas.

A part from the four central pillars of the program, extensive effort is dedicated to expertise and knowledge acquisition. The program prescribes a constant follow-up of new research on digital inclusion. There is also a significant openness and willingness to engage in new digital inclusion related projects. Some examples are MIDIS (e.g. Measuring digital inclusion in cities – a research project in which a measurement tool for digital inclusion was developed, tested and implemented) and the newly launched Ghent Living Lab (e.g. a real-life research setting in which ICT-related tools are co-developed, tested or evaluated).

Because of this focus on expertise and knowledge acquisition, the program has a tendency to always push forward and improve. In 2009 a think-tank was created in which the most important actors are represented (e.g. welfare, libraries, poverty organisations, social economy...). As of 2009, Ghent also took on a leading role in the Knowledge Society Forum, and in particular, became head of the working group on digital inclusion in the Eurocities Network that facilitates knowledge exchange between over 140 European cities. Currently, steps are taken to align the Digitaal.Talent program to the European Digital Agenda 2020.

### *Sustainable approaches and actions*

The Digitaal.Talent program has a clear focus on sustainability and has invested significantly in the development of qualitative public computer spaces. These spaces are called 'Digitaal Talent Punten' or DTP's and deliver free public access to computer and the Internet. In each of the DTP's coaches are available on site to provide assistance when and where needed. In 2011 a quality label was developed in order to ensure that the recognized DTP's move beyond the mere provision of access to computer and the Internet. Hence, several prerequisites for the official recognition of a DTP were determined:

- It needs to be situated in a public building;
- The organisation in which the DTP is embedded is responsible for organizing the coaching and coordinating the practicalities.
- It needs to have fixed opening hours;
- There is an obligation for the DTP-managers to participate in (4) meetings with other DTP representatives.
- The organisation agrees on the use of a common communication strategy, determined and supported by the program management.

In exchange DTP's are provided with hard- and software, a free Internet connection, and technical and communication-based support. At the level of content, organisations receive support in terms of free train-the-trainer opportunities and learning materials. By 2012 the city of Ghent aims to have 100 DTP sites situated in various locations throughout the city such as elderly homes, poverty organisations, libraries or local socio-cultural organisations. An overview of the DTP sites is made available online and in paper for the public at large. A critique to the Digitaal.Talent program is that there is no overview available of the informal learning opportunities that are organised in DTP's or other places within the city. Many initiatives in this regard exist, but they are not yet made explicit online or on paper. Hence, it is difficult for people looking for a specific small-scaled course to actually find one through the Digitaal.Talent program.

The program does foresee a regular re-examination and inventory of existing initiatives. Moreover, the program is improved according to the results of this re-examination. For example, in 2007 qualitative improvements were made when the evaluation indicated that there were a sufficient number of DTP sites, but there was a need for coaching. In 2009 results showed the necessity of a service desk for technical support. Since then, a research project was commissioned to examine the feasibility of such a technical support system.

A part from public access to computer and the Internet and the delivery of informal learning opportunities, the program has expanded its' initial mobile computer class and has added a digital lending system through which the newest technologies (e.g. laptops, iPads, video cameras, photo cameras...) are made available for local organisations.



### *Stimulating social innovation: Supporting pilot projects*

The Digitaal.Talent program also has an extensive focus on innovation. By means of a project-based approach, the program regularly launches new pilot projects. Here are some examples of such social innovative projects.

A first project is Digikriebels. It was launched in 2010 and aims to make toddlers (5 to 6 years old) from a disadvantaged socio-economic background aware about how the Internet can be used in a responsible manner. Important aspect is that the project also involves the parents and the grandparents in this process, and as such, influences the ICT-attitude within the family as a whole. The project consists of a close collaboration with schools and welfare departments. It has shown to be successful and was selected for a Flemish digital inclusion award. Though the project is successful, it continues to exist through project-based funding.

A second project is SmartIP that focuses on the idea of smart citizens in smart cities. This project is based upon the participation and consultation of citizens in order to determine and develop ICT-driven solutions that might improve the life experiences of citizens living and working in Ghent. In this regard, the project 'My Digital Idea for Ghent' was implemented in 2011. Citizens of Ghent were invited to submit ICT-driven ideas about how to improve living in the city. Currently, the ideas that were gathered are under review and the aim is that at least two ideas will be developed further and implemented. The project is also linked to the idea of Ghent's Living Lab that focuses on the co-development, testing and evaluation of digital tools and ICT-driven services in a real life context.

A third pilot-project is called Recup PC. It consists of an all round digital inclusion approach aligned to the needs of families living in poverty. Initially, 25 families living in poverty were chosen in collaboration with welfare departments. Each family received 1) a free computer; 2) a free Internet connection (for a year); 3) the necessary technical support throughout the entire project; and 4) the opportunity to participate in informal ICT-courses organized in a local DTP. The project is still on going but first results show that families initially start using the Internet in a very precautious way, whereas after six months a clear intensification and diversification of usage is noticed. At the end, the project will be evaluated in order to determine what improvements can be made, and to what extent up scaling is wishful and feasible.

### **Conclusion**

Digital exclusion is a highly complex and multilevel phenomenon that is clearly linked to various characteristics of social exclusion. Multiple issues – immediate ICT-related barriers and social exclusion mechanisms – need to be tackled simultaneously. Digital inclusion therefore asks for a multi-stakeholders approach in which each of the actors has a particular role to fulfil. Policy actors should take on a lead role and develop a strategic future oriented policy program in which sufficient attention is given to structural actions and to social innovative projects. Policy actors are key for the coordination, collaboration and integration between top-down and bottom-up approaches for digital inclusion. They should negotiate and influence the transversal integration of digital inclusion goals into the various policy fields – e.g. economy, employment, welfare, integration, poverty and education. They should also enable all other actors – e.g. third sector organisations, public institutions, private sector and research – to work together and exchange knowledge and best practices. Third sector organisations and public institutions should continue their focus on the realization of public access points and informal and formal learning opportunities. The main

focus of these initiatives should be on community capacity building. Private sector should be more incited to support such initiatives in a structural way instead of a project-based funding approach. Also, the private sector should be held accountable for the creation of more community based and user driven digital tools and services.

The analysis of the Digitaal.Talent program shows that the program is highly future oriented and focuses extensively on knowledge acquisition by following up recent research on digital inclusion and by participating in innovative projects. It focuses on structural needs such as informal learning opportunities and provides the necessary support for such initiatives. Simultaneously the program accords value to social innovation and regularly launches innovative pilot projects. As such the program succeeds in building sustainable solutions and at the same time, is present at the fore-end of innovative digital inclusion approaches. This is also shown in the wish to align with the Digital Agenda 2020.

Another added value of the program is the vertical and horizontal policy integration of the main components of digital inclusion in different policy fields such as employment, citizenship, education or wellbeing. What differs Ghent from other cities or entities working on digital inclusion is the openness and willingness to collaborate and integrate goals and actions at policy level. Room for improvement is possible with regards to employment. The program should increase collaboration with the employment department and explore social economy oriented solutions.

Another positive aspect is the importance that is given to the consultation and participation of citizens for the development of ICT-driven tools and services. Many initiatives in this regard are taken: SmartIP, Ghent's Living Lab, My Digital Idea for Ghent. Each of these initiatives is in line with participatory approaches that enable the empowerment and broader societal participation and motivation of citizens. So far, the program doesn't make explicit whether these initiatives are focused on the individual or on communities as a whole. An improvement would be to increase focus on community capacity building, especially with regards to disadvantaged areas within the city of Ghent.

In summary, it can easily be stated that the city of Ghent has developed a well-defined and dynamic approach to digital inclusion.

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