Medellin

Title of the Initiative	Medellin Digital
Initiative Duration	2007 -
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Comments by the Jury	Medellin has been recognized for the broad-based and rapid transformation the city has undergone in the last decade in confronting and overcoming extremely serious security and social inclusion challenges. The Medellin Digital project is based on the current Mayor's vision to transform Medellin into the city with the highest level of education in Colombia. It was initiated in 2007 in partnership created to bring the new tools of communication and information to all the neighborhoods within the city, including those in the outskirts and in low-income settlements. Medellin Digital is a partnership between the City of Medellin and UNE-EPN Telecom (a local service provider) that aims to make ICT a common tool for development and social change among its citizens. Due to this initiative, close to 50% of Medellin population are regular Internet users which is 15% higher than the national average. Some 1.5 million people have benefitted from Medellin Digital to date through installations in 247 public schools, 8 local business development centres, 5 libraries, 45 government offices and 21 public places. By 2020 the expectation is that over 75% of the city's population will become regular users of the Internet, greatly facilitating networking and the flow

of the flow of information and knowledge. During its first five years (2007 - 2011) Medellin Digital focused on four areas: education, culture, entrepreneurship and governance. Beginning in the second semester of 2012 Medellin Digital incorporated new areas in sustainability, health and social innovation.

The National Ministry for ICT has taken the Medellin Digital strategy as a model to build the technology policy for the rest of the country. Also many other municipalities have come to Medellin in gain first-hand knowledge of the Medellin Digital approach to bridging the digital divide and fostering a knowledge society.

Medellin has a population of 2,393,011 people and covers a land area of 380.64 sq km.

Medellin Digital

Background Information

The Medellín Digital project was developed to face the problems of Internet access and connectivity that Medellin was facing at the beginning of the XXI century. The main aim of the Mayor's office at the time was to transform Medellin into the city with the highest level of education in Colombia. Medellín Digital was created, according to that key objective, for bringing the new tools of communication and information to all the neighborhoods within the city, even those in the outskirts.

This digital connection allows new possibilities for citizen participation since the city is efficiently connected to the world. Medellín Digital seeks the consolidation of a society where the use of ICT and the connectivity through social networks help improve the quality of life among the whole community.

Close to 1.5 million people have benefited through Medellin Digital. We are in 247 public schools, 8 Local Business Development Centers, 5 Library Parks, 45 Government places and 21 public places. They have free Internet connection and all the equipments required to navigate, play and learn.

Goals of the Initiative

Medellin Digital aims to make ICT a common tool for development and social change among the citizens of Medellin. This is a many steps goal that is being achieved gradually and that has it dead line set for 2020. By that date we expect that over 75% of the city's population will be a regular user of Internet, this will only be the background for a vibrant interurban core in which knowledge will flow and communities will be able to change their realities with technology as a main instrument.

Parties and Partners to the Initiative and Resources Used for Implementation

Municipality of Medellín (public): Is the main responsible for the creation of the programme, is one of the partners that each year contribute with budget to the upkeep of Medellin Digital.

UNE – EPM Telecommunications (Public): Is the main investor of the initiative and the technologic allied and provider of the equipment and of the required wiring to connect all the access points that Medellin Digital has. UNE EPM Telecommunications is the public telecommunications company of Medellin.

Medellin City Council: Was the instance that approved and ordered to have the programme created by request of the Mayor's office.

The resources used for implementing the initiative include:

The project is being sustained by two partners: First, Medellín City Municipality which through its areas of Education, Entrepreneurship, Culture, City Planning and a few others, provides part of the budget in order to keep the programme functioning and to widen it to other strategies. The other partner is UNE

EPM Telecommunications, a local-public telecommunication company that has business in broadband internet, mobile technology and provide full IT support to both corporate and residential clients. They provide a big part of the budget of Medellín Digital, and at the same time are the technology allied which provides the infrastructure needed in the interventions made by the programme.

Innovation for the Initiative

Evolutionary would imply that innovation evolved over time based on lessons learned from experience and that the changes or outcomes are cumulative. Revolutionary would imply something quite new or something that has been borrowed from elsewhere but never been tried before in the sector or context in question and therefore bears a certain degree of risk.

The initiative has been proved as a revolutionary experience considering the local context, in which the National Ministry of ICT has taken the Medellin Digital strategy as a model to build the technology policy for the rest of the country. Also many other municipalities have travelled to Medellin in order to know first-hand the achievements of Medellin Digital.

What allegedly has been revolutionary about this programme is that it puts appropriation as a set goal focus, recognizing the need for top equipment and working technology but always putting the human factor first.

During the first five years of Medellin Digital (2007 - 2011) emphasis has been made in four areas which are: education, culture, entrepreneurship and governance. Beginning in the second semester of 2012 Medellin Digital is incorporating new areas of work such as sustainability, health, social innovation among some others.

Medellin Digital had its roots in other strategies that were initiated in Medellin, mostly relating education and ICT, such as 'Click Aprende Mejor' which differed from other initiatives in the region because it set its focus in appropriation.

Medellin Digital is an aggregate to the Science, Technology and Innovation ecosystem and as such it has benefited many parties within the city. Most

of them are related to regional government but also entrepreneurs, independent initiatives and cultural organizations have taken advantage of the social change proposed by this initiative.

Obstacles and Solutions to the Innovation

Mainly the initiative has been very well received in all the spheres that it has approached. Historically there has been some resistance among a few teachers in public school who believe that ICT and Medellin Digital as an extension will change dramatically –and sometimes for worse- their teaching methodologies.

With them we have attempted to make their very own appropriation process. Sometimes it is effective and they slowly adopt ICT in their work, some other times is not possible. In those cases, we focus our attention in other leading teachers within the same school that are willing to work with us.

Outcomes and Assessments

Outcomes achieved are as follows:

This initiative alone has brought to the city great achievements in the field of Internet connectivity. Over 20 public open spaces in the city have now free wi-fi access i.e. the Botanical Garden, the Olympic Sport Complex and many parks and public squares in which people can now be connected, work and play thanks to the effort of Medellin Digital and its allies.

Also many improvements have been made in the way education has transformed in public schools. Eight years ago Medellin's public school students were way below the average in national tests that measure quality of education. Today Medellin Digital has intervened in over 240 public schools around the city and last year figures show that now the city's students are somewhat above the national average, an important improvement that cannot be put solely as a merit of Medellin Digital but in which the use of ICT in the classrooms has surely played a very important role.

According to our records, over 350.000 basic and medium education stu-

dents have been one way or another have benefited of the many strategies Medellin Digital undertakes.

We also calculate that over 20.000 entrepreneurs have assisted to our talks and workshops on technology and have thus learned to use tools that will enhance their business ideas, such as websites, emails, e-marketing strategies and taxpaying online among some others skills.

One figure that we like to point out to show the success of Medellin ICT strategies is that according to the National Ministry of ICT, close to 50% of Medellin population use internet on a regular basis. That is more than 15% higher than the national average and close to 10% of the average of countries like Mexico.

Medellin has been recognized internationally for all the urban and social transformation in the last 8 years. Medellin Digital was part of the plan made for the Mayor's office. In that sense, our initiative shows a new sphere in the relation between communities and ICT. They began to understand how these tools can change their quality of life facing the social problems offering joint solutions.

Our extended net has benefited the different communities in aspects like entrepreneurship, culture, employ and recreation. In that sense, the citizens are example of the transformation because they have the knowledge and the instruments to improve their own life and the progress of the city.

Medellin currently serves as a model throughout the country in the construction of digital cities. Led by Digital Medellín, the city has established an empowered citizenry, with development potential, making it a benchmark in terms of social and technological innovation, participation and sustainability.

Assessments are as follows:

One of the main metrics we are using right now is the percentage of the population who has used Internet during the last 12 months. That measure was being done by the National Ministry of ICT and now by Metroinformación, the local statistic and figures public agency.

Another measure we use through Google Analytics, is the usage of our website network, which is leader in the city and features topics such as Culture, Education, Libraries, Entrepreneurship and Innovation among others. Due to the

strong local-driven content these sites produce we can understand that the most this network is used, the best informed through ICT the citizens of Medellín are.

Finally we are also preparing for 2013 our own protocol to measure some of the figures that we are most interested on and among which are: people with an e-mail address, small companies with web presence and the amount of open data that we bring to the citizens through the web.

Methods Applied

Some of the methods we have deployed in order to make our work more effective have to do with our permanent follow up of every intervention we perform. That way we ensure that the technology that we install in some places is used and doesn't get stolen or damaged just for a lack of interest of the surrounding communities. At the same time, something that makes this later work easier is that we try to minimize moral judgements on what people do when they sit to use one of our computers. Sometimes they spend 1 hour on Facebook, and that's OK, we take that as an opportunity to invite them and bring them closer to the strategies we are working on for them and we know that it helps that they feel comfortable and free when they are working on our sites.

Another thing that we have done in order to maximize the effect that classrooms with computers have brought to the public school in the outskirts of the city, is that they do not only serve the school itself, but also the communities around it, the teachers, and the parents of the children that study there. This is a model called 'Aulas Abiertas', Spanish for Open Classrooms. When a public school with an Open Classroom finish the day with its students, the Open Classroom remains active with workshops, conferences or just free use of Internet for the people not so directly related to that school.

Benefit to Other Cities

One of Medellín Digital's key aims is to provide the tools for helping people to create interactive collaborative groups. In order to achieve such an objective, we are not just providing free connection to Internet in different places

within the city but we are developing projects as "Aulas Abiertas" (open classrooms) in schools .

"Aulas Abiertas" are spaces within the schools where students learn, through virtual lessons, how to use the modern technological applications. In such places, teachers trained by Medellín Digital can apply and teach what they have learnt through the training on appropriation and use of ICT. They can develop alternative ways of teaching in such spaces as well. After the school day, the 'Aulas Abiertas' become spaces for community learning. People from the local community are invited to come for using the computers and joining the learning activities carried on in this place.

The program ´Aulas Abiertas´ is been developed in all the 247 educational institutions Medellín Digital is working with. Each of these institutions has 21 computers, through which people can access to information and resources in a server. Medellín digital is nowadays developing a complementary project within 79 of these institutions. The project, called ´Colegios en la Nube´, supplies not regular computers but screens to the schools. These screens can be connected directly to the server, reducing cost and enabling the extension of such a program among more institutions.

Under such programs, students and local communities have access to technological resources for working in common projects on art, culture, entrepreneurship, education and recreation. Other strategies are been carried on for complementing the programs described above. The ´Telecentros´ (telecenters) and the "Punto Común¨ (common point) are strategic meeting places where people from the most vulnerable areas of the city have access to the ICT. Finally, through the supplying of technological tools to public libraries, government offices and public spaces for constructing a connection network, Medellín Digital is contributing to become Medellín a city where the community transformation is a common project.