

CAPACITY BUILDING IN SOCIAL PROJECTS

PRAGUE CZECH REPUBLIC

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INTRODUCTION

Universidad Distrital, is a Public University in Bogota Colombia, founded in 1948, since then one of the pillars is to help poor people to improve their lives, 20 years ago we started a Technology Faculty that is located in one of the poorest zone in Bogota, *area of about one million inhabitants mostly have unmet basic needs.*

8 years ago was born GIDENUTAS (Researcher and Development Group in New Technologies for Social Application's technology) research group that the principal matter is how the technology could help to improve lives for poor people, developing capacity building, social projects, forums, integrating sector for social projects, among others. We have been participating in "Ciudad Bolivar Localidad Digital"

The social purpose of Digital Locality Bolivar City Project is to promote the use, management and ownership of ICT as a tactic in reducing Digital Divide. In this context the lines of work are:

- ★
- ★ Overcrowding of e-learning through interactive portals.
- ★ Developing digital of literacy programs.
- ★ Application of ICT in social organizations as different neighborhoods.
- ★ Development alternative Community communication networks.
- ★ Support the consolidation of e-governance.
- ★ Development Software using ICT for access to public health system.
- ★ Development of social integration programs and leadership.
- ★ Identifying community needs.

Methodology

- 1) Knowing social needs, measuring Digital Divide (Analysis of and technological needs).
- 2) Appropriating and applying “Global Expert Knowledge” (ICT forum - CoEs)
- 3) Building Communications infrastructure (Mesh Network)
- 4) Building Applications for identified needs. (CDATICS)
- 5) Teaching community. (Communitarian Interactive Centres).
- 6) Participating in Global Initiatives (Kaleidoscope), ITU Academy
- 7) Specialized capacitation for the Americas Region.
- 8) Next steps
- 9) Prague participation answers.

1 Knowing social needs, measuring Digital Divide

Measure Survey of homes basics needs and Digital Divide:

This type of survey is related to people that live in the sector to be measure, and know how is the real situation in their environment and checking what kind of technology they use also to know the most important needs for this people and what could be developed as a student projects.

Measure Survey of TIC in business Sector:

This survey is directed to know how is the situation and technology use in Business Sector so that what kind of applications needs they have to be developed and implemented by CDATICS.

Needs Assessment Survey in the environment for the pollster:

This type of survey with the help of people in the sector look for the needs that it could bring benefits for the community in general, like highway, buildings, capacity centers, medical centers among other so that it look for improve the quality of live for this people.

Ciudad Bolivar (Locality 19)



- Total surface 12.999 hectares.
- Population. 713.764 *people*.
- Topography. It is a zone mountainous 90 % and the 72% of locality is considered rural.

Analysis of Social and Technological Environment

About 84% of the main streets of the neighborhoods are paved and 48.3% of secondary streets are uncovered.

The predominant materials constructed sites are block, brick, stone and polished wood. Only 3% is recycled material.

The 61.24% of the neighborhoods have homes located in areas of high natural risk, such as landslides and floods.

20% of the districts have no schools; while 32% have more than two schools.

75% of the districts has one or more community halls.

71% of the districts has at least a soup kitchen.

62% of the districts do not have a medical center.

79% of the districts have more than one Internet café.

81% of neighborhoods not having an industrial area; while 57% are shopping areas.

Only 4.6% of the neighborhoods there are training centers for work.

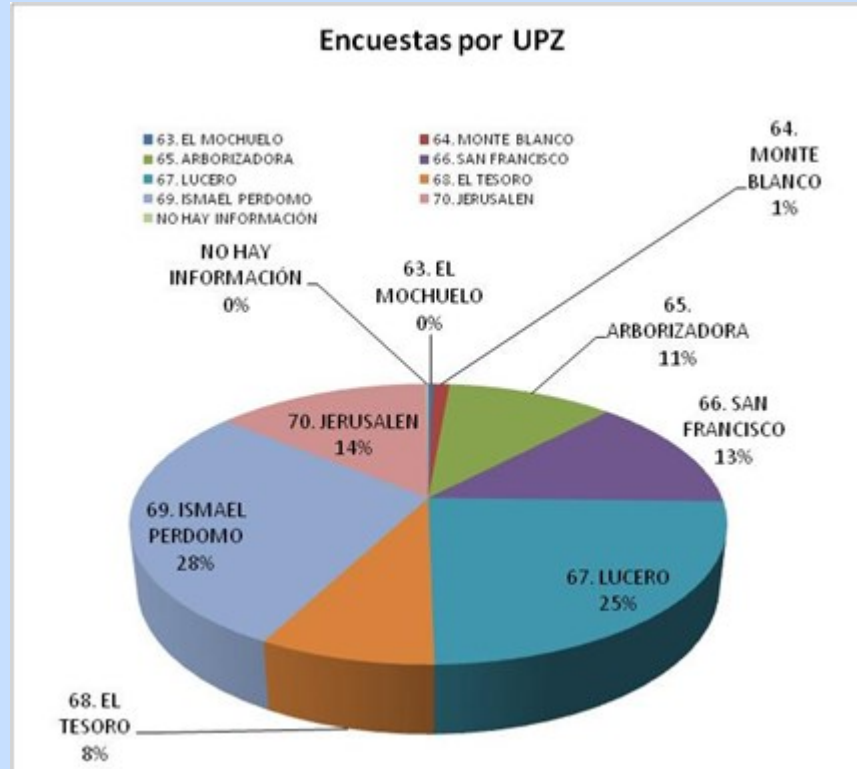
In 80% of the districts the cost of time for Internet access is less than or equal to USD0

Digital Divide Survey Results

UPZ	Población	% Población	% Extensión	Nº Barrios	Encuestas	Encuestas sector productivo	Encuestas Entorno
63. El Mochuelo	1466	0.24 %	9.3	5	24	2.4	7
64. Monte blanco	5179	0.84 %	22.9	6	84	8.4	9
65. Arborizadora	60752	9.86 %	9.5	17	985.5	98.55	25
66. San Francisco	76213	5.30 %	5.3	18	1236.3	123.63	27
67. Lucero	162669	16.80 %	16.8	69	2638.8	263.88	77
68. El Tesoro	47624	6.40 %	6.4	45	772.5	77.25	50
69. Ismael Perdomo	163692	16.10 %	16.1	65	2655.4	265.54	70
70. Jerusalén	98693	13.40 %	13.4	27	1601.0	160.1	35
CIUDAD BOLIVAR	167	9.60 %	100 %		2.7		
TOTAL	616455	100 %	100 %		10000	999.75	300

Tabla 1. División de UPZ general

Digital Divide Survey Results



- Surveys done by UPZ

Background

- In Ciudad Bolívar 22% of adolescents are mothers and 3.5% are pregnant according to statistics presented by the mayor of Bogotá.
- For purposes of this paper will be the following age groups are taking the law and other related provisions on the status of young adults and seniors.
 - First Children 0 to 5 years
 - Children 6 to 12 years
 - Adolescents 13 to 17 years
 - Youth 18 to 24
 - Adults 25 to 59 years
 - Old 60 and over

2, Appropriating and applying “Global Expert Knowledge”

Forum “Future of ICT in Americas Region”

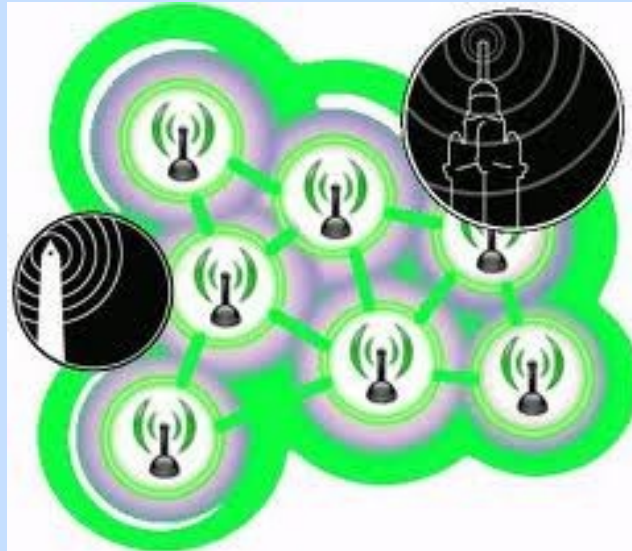
This forum will allow the ICT community in the Americas Region share its experience in the ICT development

Based on this development and the new opportunities on ICT this forum will show us the potential in our region

The global experiences could show us how to develop the ICT sector and how the social investment will increase the opportunities in our society

3, Building communication infrastructure

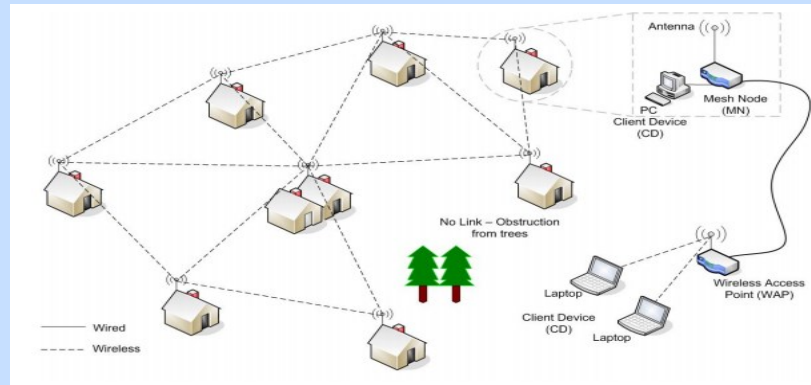
Mesh Networks built by students, used by disadvantaged communities in the city.



Building communication infrastructure “Redes inalámbricas comunitaria “Mesh Networks”

A wireless mesh network (WMN) consists of mesh nodes that form the backbone of the network. The nodes are able to configure automatically and re-configure dynamically to maintain the mesh connectivity. This gives the mesh its “self-forming” and “self-healing” characteristics. This self-sufficient relationship between the mesh nodes removes the need for centralized management.

This network have been developing with the community led by students using recycled elements like milk cans, PVC pipes, reused copper. Community could access to services allowed in local servers.



Building Access for communities

A key point in reducing the digital divide is to bring connectivity access network and terminals in the affected communities and adapted to the same content.

The mass of the Access Network aims to increase public access to ICT in Ciudad Bolívar by:

- ★ Conducting a pilot public access to ICTs in the locality of Ciudad Bolívar through the provision of community wireless networks.
- ★ Installation of 12 new interactive portals that essentially is a telecentre.
- ★ Creating the ICT - Social Development Application Center - CDATICS (by its initials in Spanish) in Technology Faculty of the University located at Bolívar City.

4. ICT - Social Development Application Center - CDATICS

CDATICS, is a center of technological development, who takes the results of Surveys of Digital Divide, develop and implement solutions in accordance with the environment.



Agro and Environment



Mobility



Health



Computing and software



Infrastructure



Worthy Housing



**Leadership
Social integration**



**Gobernabilidad
e-government**



**Land Registry
Update**



**Educación
e-learning**



Accessibility



**Bussiness
Competitiveness**



**Culture and audio-
visuals applications**



**Communications
and disaster
management**



**Comunity
safe**



5. Teaching Communities

Building Technology appropriation for communities Digital literacy for adults and children that provides the opportunity for people with low economic income to access technology for free, so that be reduced the social gap and digital divide.



5. Digital Locality

Ciudad Bolívar's Digital City, is a joint project of ICT Ministry, Bogota's Mayor, District University and Bogota Telecommunications Company, and basically, want to improve the quality of life of people who live and work in Ciudad Bolivar by the use of Information Technology and Communication (ICT).

Through this project this community can use Interactive Portals (telecentre) where they could enjoy the benefits like learn and share, play with friends, learn basic of Internet, share photos, pay bills and use e-applications like government, learning, entertainment, finding jobs, etc....

6. Participating in Regional and global initiatives

CITEL (Telecommunication Interamerican Commission - Organization American States)

- Capacitation Node in telecommunications matter
- Students Intershships
- Fraud Control Rappourter for Americas Region.
- Participation in telecommunications research in the region.





- CoEs
- Kaleidoscope
- WTPF (World telecommunication policy forum)
- Green cities
- FSB car



7. Specialized capacitation for Americas Region

As Node of Excellence Centre Distrital University have been participating developing training for professional in the region in differents matters like Fraud Control, Risk Management, Wireless Networks, for more than 300 profesionals from 15 countries.

8. Next Steps

- Develop ICT apps centres around the world that share knowledge and construct capacity building in social ICTs.
- Boost social projects in Developing countries making the technology a tool for improve lives.
- We found that technology is not enough, some people need real help starting from their own houses.

Transforming 1000 houses for Improve Quality life in Ciudad Bolivar



Improving Housing,
Improve lives!



This transformation can be achieved with the community work.
Each person can contribute their knowledge.

9 ANSWERS PRAGA

Prof Mancilla, you have been working on a multistakeholder initiative on the future of ICTs in the Americas Region under the banner of the CoEs. This initiative involves appropriate knowledge from the experts in social projects. Would you like to share with us how various stakeholders have been drawn in this project and what can be learned from this experience in terms of building capacity?

First at all I want to thank the ITU Academy staff for the invitation to share this initiative that we have been developing under ITU umbrella and GIDENUTAS researcher group. Regarding the event Future of ICTs in the Americas Region we have given a 360 degrees visibility looking vision of different sector actors as multilateral agencies, authorities sector policy and regulators, technology developers, Telco's operators, researchers and academy where them show and share their visibility about social ICT's where our students have been taken first level knowledge and experience from the real actors in the sector.

In terms of capacity building in my personal opinion this project has allowed the Region to have a dedicated Forum in Social ICT where all sector of the region and Nodes of CoEs have been participating thinking how the technology could change and improve lives for poor inhabitants in our region, especially because some of the expert knowledge is applied in real life in projects like “Digital Bolivar City” (area of about one million inhabitants mostly have unmet basic needs where District University has Technology Faculty). For the University District specifically has allowed that our professionals believe social conscience, see other possible applications of their careers, develop their final projects performing real projects for disadvantaged people in projects like Ciudad Bolívar Digital locality, participation in project management, end to end understanding sector, among others.

Next Steps.

Additionally we have a social ICTs applications development centre where people of the Region can develop social projects for their countries.

Most social projects in Developing countries making the technology a tool for improve lives.

1)

Do you think ITU Academy programmes such as Spectrum Management Training Programme and Quality of Service Training Programme could be included in the universities programme and how?

Yes I think that it could be possible, we can share our capacity like places, rooms, teachers, etc..., and include courses in our curriculum materials with such content, previously we should be trained by ITU Academy in organization, contents, applications, methodology, hours, language, technical skills among others

2) What features should a good training programme have that could be interesting for the private and public sector?

- Applicability
- Real cases
- Global knowledge
- Global participants
- Analysis of its real situations.
- Share real situations.
- Have capacitation levels for participants and experts.
- Expert teachers who know the real sector.
- Show different points of view 360 degrees (policies, regulators, users, vendors, operators, academy, etc...).
- Use e-tools but teacher sharing in real time with the students.
- Use of e-laboratories.

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