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Information and Communication Technology Use in Public Libraries in Brazil



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STUDY ON INFORMATION AND COMMUNICATION TECHNOLOGY USE IN PUBLIC LIBRARIES IN BRAZIL

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1. INTRODUCTION

The *Fundação Pensamento Digital* was sought by the Bill and Melinda Gates Foundation to develop this study in order to identify needs and opportunities for the Brazilian public libraries, with particular interest in expanding the relevance of public libraries to their communities. The research involved a representative from the National Public Library System (SNBP) and a representative from the Bill and Melinda Gates Foundation in defining their strategies, and it was detailed and implemented by the researcher Marta Voelcker¹ from the *Fundação Pensamento Digital*.

Nowadays, the opportunities for education, professional development and social participation depend on the Internet access. Therefore, the lack of access means the lack of opportunities.² In Brazil, only half of the population is using the Internet. Analyzing the population of lower purchasing power, it is concluded that only 14% of Brazilians who belong to D and E social classes³ are Internet users. Among the users in this group, 69% of them access Internet in Technology Access Public Centers (CGI.BR, 2011). The main reason that prevents most people from accessing the Internet is the high cost of equipment and network connection.

The public access information centers, such as Internet cafes, telecenters, and libraries are presented in this study as the potential way to extend network access to half of the Brazilian population that is still "disconnected".

Considering the fact that providing access does not guarantee that the population use technology to identify and take advantage for educational opportunities, professional development or social participation, the study has searched for practices that encourage the use of the network to the socio-economic development or improvement of the quality of life of beneficiaries. The systematization of these practices constitutes a second challenge in the Brazilian scenario, because in 2011 most of the users of public ICT access centers, were using the network for entertainment.

Public libraries, though with little quantitative expression between the public centers to access to technology, can be considered potential organizations for building up Internet strategies in order to foster socio-economic development in Brazil.

The research methodology prioritized to identify what makes a public library to be relevant, with or without technology; as well as to understand how it works identifying what people want from the library as well as perceptions of challenges and motivations of their teams and users. After that, the possibilities of technology integration were examined. The main research questions were thus identified: "what

¹ Currículo disponível em: <http://lattes.cnpq.br/8913343188986072>

² Programa Global Libraries – Gates Foundation: <http://www.gatesfoundation.org/What-We-Do/Global-Development/Global-Libraries>

³ Classes Sociais segundo IBGE: <http://www.datosmarketing.com.br/listas-detalhes-classes-sociais.asp>

makes a public library be relevant to your community?"; "How technology can be used to support or enhance the elements that make a library relevant?".

In order to operationalize the research problem, in addition to the two issues described before, six research areas or factors of relevance and four development areas were included. These elements guided the research activities, which included observations of libraries, questionnaires for users and interviews with library coordinators and local government representatives from four Brazilian states: Acre, Bahia, Rio Grande do Sul, and São Paulo.

The research data is presented in several sections using different approaches. The scenario analysis (4.1) describes the context where Brazilian libraries are immersed, this section is based on the secondary data analysis and meetings with SNBP representatives and experts. Such analysis happened during the first phase of the study, before the definition of the research instruments. The Section 4.2, named Most Prominent Functions, reports a brief overview of the library functions that appeared most frequently on the data and presents examples that show such reports. In section 4.3 the data is presented by factors of relevance or research areas defined in the methodology of this survey (services, team, physical design, management, and library collection).

The most important information for the objectives of this study received specific sections (4.4 to 4.9) where the data is not only reported, but also analyzed according to other factors that are part of the national scene.

The reading promotion, especially for children, is the library function that receives most attention from the public policies and greater commitment of energy from the part of libraries' staff. The library space use for studying was featured high among the young adult users. The provision of access to technology attracts many users, however, these users are a separate part among the actions of the library. Actions for the culture promotion (in addition to the literature) are very significant in the libraries from Bahia and are present in large libraries of other States. Keeping the local memory alive and having actions to encourage writers were identified in medium-size and large libraries, but they are seen less frequently compared the previously mentioned functions.

The technology supports the management of medium-size and large libraries through computerized cataloging management system. The vast majority of visited libraries use blogs and social networks to promote their program and the new collection copies.

The Brazilian libraries do not develop systematic actions to identify and meet the information needs of local communities. The public libraries' activities are

generally stronger in promoting culture and less significant when providing and encouraging the use of information.

Most library coordinators and Government representatives interviewed pointed out the infrastructure (building improvement) as a priority to investment needs, placing in second places, the improvement of the collection and computerized cataloging.

Regarding the priority of the use of technology, in case of having more resources, most of the coordinators interviewed stated considering important the integration of technology and the promotion of innovations. However, they ignored the ways to use technology for these purposes. The people interviewed were unanimous in stating the need for library staff professional development to integrate technology in their actions.

Three potential investment areas to enhance the integration of technology in Brazilian libraries were identified: staff training for integration of technology in reading promotion activities; computerized collection cataloging; building up new practices where the use of technology encourages access to information in order to improve life quality. The recommendations consider the development of a technology integration plan based on content production by the libraries involved in order to systematize and disseminate good practices of technology integration.

2. TECHNOLOGY AND DEVELOPMENT

We live in a time where the opportunities for education, professional development and social participation depend on Internet access; Therefore, the lack of access means the lack of opportunities. In 2011, given the growing importance of socio-economic development opportunities offered through the Internet, the United Nations determined, in the Human Rights Council report, that Internet access should be considered a fundamental resource for human rights promotion. Equal opportunities in the digital age require that all people, especially the poorest, have access to the information available online as well as develop minimum skills to surf on the Internet and make use of the available information.⁴

The term "information and Communication Technologies for development", summarizes the convergence of various areas of knowledge used in research and public policy that study and outline guidelines for the use of computers, Internet and

⁴ Programa Global Libraries – Gates Foundation: <http://www.gatesfoundation.org/What-We-Do/Global-Development/Global-Libraries>

other digital technologies in promoting socio-economic development and human rights. The term is not widely known among Brazilians, if compared with the movement and the volume of publications about the topic outside of Brazil. It is known as ICT4D among researchers and international activists, because of the initials of the same expression in English Information and Communication Technology for Development.

The theory that justifies research and public policies in this area states that the greater the quantity and quality of information and communication, the better the development of a society will be. In addition to the obvious relationship with technology, the theme "technology for development" involves other fields of study. Each letter of the original acronym ICT4D relates to one or more areas of knowledge. The letter "I" relates to the information sciences and librarianship; "C" in the area of communication studies; T with information systems; and "D" with the study of the development that aims to equalize access to technology and apply it as a resource for the social and economic development. Developing countries lead the implementation of programs in the area, they seek to prevent that the exclusion of access to technology will increase the social differences. They also try to establish strategies for digital technologies use to reduce poverty (HEEKS & MOLLA, 2009).

At the beginning of 2000s, when the "Millennium Development Goals"⁵ were launched, combined with the growing use of Internet in the richest countries, made developing nations to invest in technology and infrastructure programs that promote the use of technology to improve the quality of life of their populations. The most common application was the creation of telecenters aiming to disseminate information on issues such as health, education, agriculture and e-government services in poor communities. Telecenters are popularly known in various countries as centers that offer computers and the Internet access to anyone, free of charge or at prices that are compatible with the possibilities of the local population. In Brazil, the concept of telecenter means free of charge technology access.

In recent decades the "technology for development" field has consolidated itself as an interdisciplinary research area with an increasing number of international conferences⁶, workshops and publications; actions arising from the need for scientific guidelines and results validation that can evaluate the effectiveness of ongoing projects in several countries. Recent research (GOMEZ, 2011; SEY et al, 2013) shows that the telecenters, in several countries, are one option among three types of public centers. The other places where people look for computers and Internet access are the Internet cafes and public libraries. One of the challenges faced by these public access

⁵ Iniciativa da ONU que traçou objetivos de desenvolvimento para todas as nações
<http://www.objetivosdomilenio.org.br/>

⁶ WSIS: <http://www.itu.int/wsis/>; ICTDC: <http://ictdconference.org/>

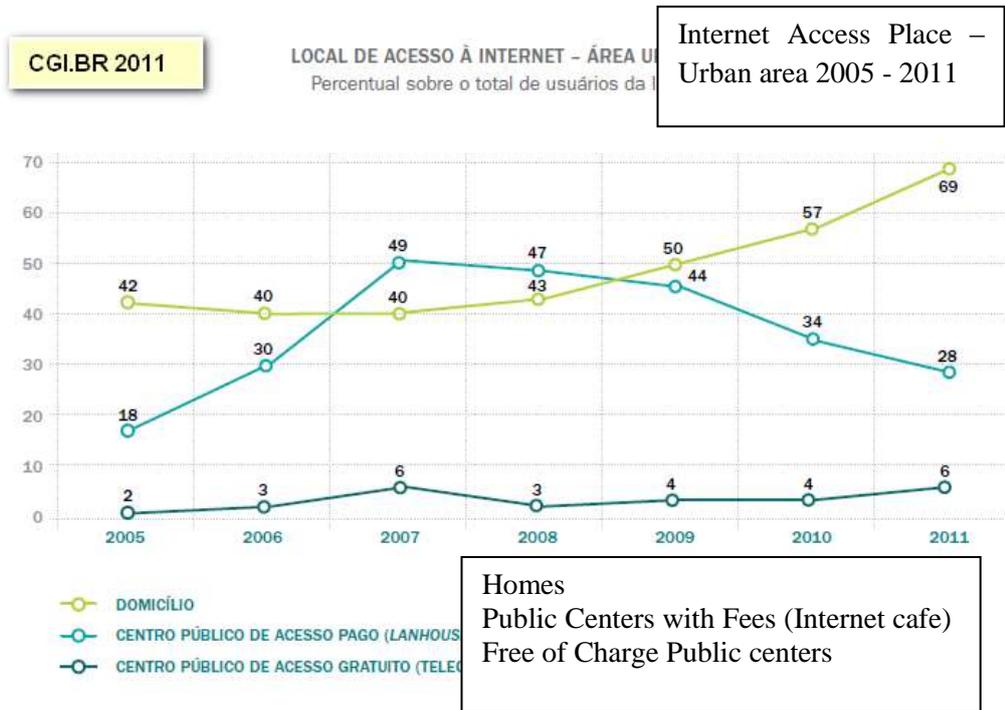
centers is the staff and users skills development in order for them to benefit from the technology and information available on the network for the promotion of development and improvement of the life quality.

In Brazil, less than half of the population can access the Internet using their own resources. The Internet is present in only 38% of Brazilian homes (CGI.BR, 2011, p. 154). Therefore, it can be inferred that more than 60% of the population depends on public access points when they want to use the Internet without asking to borrow from friends, neighbors and relatives.

The computers and access distribution in Brazilian homes is proportional to the families' income. According to the CGI.BR (2011) 93% of the households with income above 10 minimum wages have computers at home, while just 10% of the households with income equal to or less than a minimum wage have it. Moreover, the Internet connection is in 91% of the households with income over 10 minimum wages and only in 6% of the households with income equal to or less than one minimum wage (CGI.BR, 2011).

The analysis of the amount of Internet users, regardless of the availability of home access, shows that 53% of the Brazilian population has already accessed the Internet, and 45% of Brazilians accessed the network at least once in the last 3 months. This data demonstrates that policies to promote access to information and communication technologies in Brazil have not yet managed to reach half of the Brazilian population.

Among Brazilians Internet users, the number of people who access the network from their homes is increasing while the number of people who access public centers with fees (cybercafés or Internet cafes) is decreasing. Public free access centers have less quantitative expression. Only 6% of the Brazilian users often access the Internet from those centers. The chart made by CGI.BR (2011. P. 161) shows the evolution of computers and Internet use in recent years. The chart displays only urban areas because the research did not include the rural area in its early editions.



At first sight, the data above may show that public access points are losing importance regarding Brazilian Internet access. However, it is important to note that the chart monitors only the places where half of the Brazilian population access the Internet, this means where the ones who are Internet user often access it. The chart does not display the other half of the Brazilian population. While 69% from users from urban areas access Internet at home, it is important to remember that only 38% of Brazilian households have Internet access.

In order to identify opportunities for strengthening the theme "Technology for Development" in Brazil, two questions emerge from this scenario:

- ✓ Why half of the Brazilian population does not access the Internet?
- ✓ Where do users who are poorer access the Internet?

By analyzing the CGI.BR Report (2011), with data collected from November 2011 to January 2012 in 25,000 Brazilian homes, we can identify that the main reason for not having computer at home is the high cost of the equipment. This reason was pointed out by 70% of the interviewed people. Among households that have

computer, but do not have Internet access, the most frequent reason for not having Internet in a house is also the high cost of connection (48%), followed by the lack of availability of the Internet in the area (25%), possibility of access in another location (18), lack of interest (14%) and lack of computer skills (10%). In rural areas, where 90% of the households do not have Internet connection, non-availability of technology in the area is what prevails as an argument (54%), followed by the high cost (33%). This shows an inverse relationship when compared to the proportions of urban areas, where the cost has greater importance (50%) compared to the lack of availability (21%).

Among the households of families with lower purchasing power, considered to be classes D and E, 95% of them do not have Internet access. The information is consistent with the answers given by the interviewed people who pointed out the high cost of equipment and Internet connection as the primary reason not to take advantage of technology at home.

Inequality is also reflected in the network use when we analyze the population regardless having or not access at home. Among Brazilians who are 10 years old or older, 55% are not Internet users. They are people who did not use the resource in the last three months prior to the time of the interview. The percentage of users goes up to 86% among the poorest (Classes E and D) and 82% among residents in rural areas (CGI 2011-BR, Local Internet access Table p. 452).

➤ **Only 14% of the Brazilian population from social classes D & E are Internet users.**

Among Brazilians considered internet users, the most common place for accessing the network is the home (67%), followed by the workplace (29%), someone else's house and paid access centers both with 28%, school (16%), cell phone at any location (15%), and free access centers (6%). Based on this data, we can infer that 34% of Brazilian users access the Internet at public access centers, whether they are paid (cybercafés or Internet cafes) or free (telecenters, libraries).

Regarding only the less favored population, **D & E social classes**, the scenario changes completely: **69 % access Internet in public access centers (60% paid centers and 9% in free of charge centers)**, 33% at somebody else's house, 21% at home, 19% at school, 13% cell phones and only 9% at work.

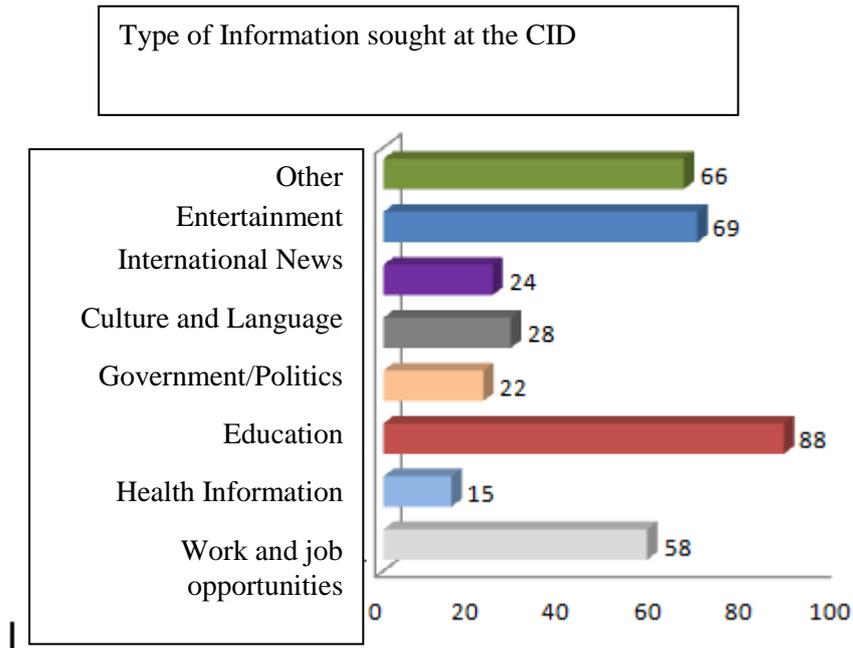
- **69%** of the Internet users from D & E social classes go to public centers to access information and communication technologies.

Analysis demonstrates that the Public Access Points to information and communication technologies are very significant when providing to less favored population. In addition to that, it also shows that the country still has a **big challenge ahead in order to enhance access to 86% of the less favored population (D and E classes)**

- ✓ **How to extend access to the less fortunate?**
- ✓ **Would it be the solution to replicate the public access points?**
- ✓ **Or would it require changes in the existing public access points models?**

The scenario of public access points to information and communication technologies was the target of the "Global Impact Study". A study was coordinated by the University of Washington and implemented in several countries in order to identify the impact of public access to information and communication technologies. (SEY et al, 2013). The *Fundação Pensamento Digital* was responsible for leading the Global Research Impact Study (GIS) in Brazil, conducting questionnaires with 966 users of 242 public access centers distributed in 5 large geographical regions. Among users interviewed by GIS in Brazil, 31.2% of them hold a monthly household income of two to three minimum wages and 22% fall into the income range between one and two minimum wages. When the users were asked about what the most significant **impact** that technology access centers has in their lives (GIS Brasil), most of them pointed out **entertainment** as the first one, **communication** came in second place followed by **learning** as the third theme most impacted by the use of public access centers (ALVES & VOELCKER, 2013).

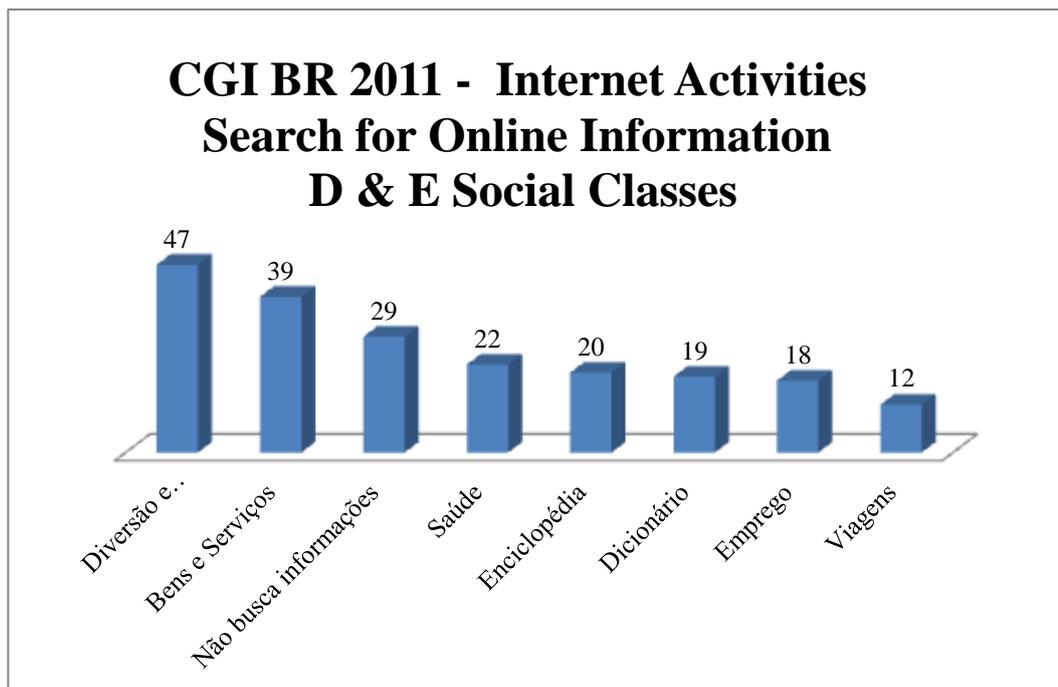
The GIS research in Brazil also investigated if users search for online information at the center. Among those interviewed, only 24% answered that usually goes to the center to access information. Among them, 88% aid that the objective of the search is related to education, 69% related to entertainment and 58% related to work or job opportunity.



Busca de informações, GIS Brasil, 2012 (ALVES & VOELCKER, 2013)

Internet usage was also investigated by CGI.BR (2011), by filtering CGI BR data and selecting only D and E classes, there are similarities with the activities of users of public access centers shown by GIS Brazil.

The research data from *CGI 2011* that analyzed Internet usage in the country (no restriction of place) show that 47% of the users from D and E social classes declared that, the activities they most do on the Internet, are those related to search for information on **fun and entertainment**, secondly, pointed out by 39% of the users, regards information on goods and services. The CGI data BR 2011 reported that 29% of the Internet users from D and E social classes told they do not look for information on the Internet.



The use of the Internet to search for health information is common to 22% users from social classes D & E, well below the 67% percent from class A users who use the Internet for this purpose. A similar situation happens with searching for information on virtual encyclopedias site, an activity pointed out by 20% users from social classes D and E, while 65 % users mentioned it from social class A (CGI.BR, 2011).

Most of the Internet users from social classes D and E (69%) use the network in public access points. We conducted some **analyses that involve both interviewed groups**: public access centers' users from Brazil GIS data collected in 2010 and 2011 and the social classes D and E users that use Internet anywhere from CGI.BR (2011) .

It is observed that the Internet use in public points to access information as well as the use of the Internet (anywhere) by the less-favored social classes (D of E) features the predominance of activities that involve **fun or entertainment**.

Education is a significant difference between the two groups. Users of public access venues indicated education as the third area in which the access center impacts more significantly on their lives and as the main theme of information searching (though only 24% of the users in public access venues search for information). The analysis of users from social classes D and E shows that a much larger group (71%) uses the internet to search for information, but they indicate other issues as priorities in their searches. In addition to entertainment (47%) searches, this group's searches also focus on goods and services (39%). Therefore, education or learning (searches in encyclopedias) is mentioned by only 20% of them. One

hypothesis to explain this difference is the age of the users of public access venues. The GIS Brazil found out that 62% of them are under 24 years old, being most likely their involvement with educational activities. Health appears as the interest of a few users of both groups, mentioned by 3.6% of the users of access centers (15% out of the 24% of users searching information) and in 15% of the users of the social classes D and E (22% among the 71% searching information). Again the age group can be the explanation, because older users tend to have more interest in health issues.

As for other development-related themes, users of both groups showed that technology is significant in their lives regarding search for employment. However, they did not indicate clear goals related to social and development issues, such as income generation, e-Government, citizen participation, minority issues, and community, home, family, and education improvement.

The Brazil GIS report indicates that 74% of the clerks or operators from the visited public access venues did not receive any professional development when they started to work. It is assumed that the lack of information of the staff of these venues contribute to the low rates of internet use there for issues regarding the socio economic development.

Knowing that the spontaneous use of internet in less favored classes of Brazilian population does not involve or involves few motivations related to socio-economic development, it is assumed that the public access venues need to develop strategies that involve, motivate and guide their users to take advantage of the information to improve their life quality.

The libraries take up only a small segment of the analyzed in sample Brazil GIS research. They are not significant in quantitative terms in regard to technologies for development national scene. National public policies for internet access in relation to digital technologies or digital inclusion distribute computers and internet connection for NGOs, community centers, community associations, social service centers, other government offices and libraries.

Although outnumbered among the public access points to information, public libraries are organizations that rely on larger teams, composed of professionals with more training and lower turnover compared to Internet cafés (small private business generally short-lived) and telecenters whose staff, usually young students with scholarships sponsored by digital inclusion programs of short duration. Public libraries are integrated with government public policy organizations with missions that include access to information, among other objectives. In spite of Brazilian libraries having the main focus in cultural area and in reading promotion, assumedly they are potential centers for developing forms of technology use that provide development or improvement of life quality of underprivileged populations in particular in Brazil.

This research starts from the hypothesis that public libraries, public access venues to information and communication technologies, may be the best option for developing a pilot using technology for development in Brazil. However, they are in small number.

It is assumed that using information for development concept can be strengthened in Brazilian public libraries' ecosystem. It is believed that libraries are the most appropriate environment to pilot and develop programs that encourage the circulation of relevant information in order to improve life quality and poverty reduction of communities' users. It is not only building a culture led by libraries, but also spreading it naturally through other public venues that access technology and information such as telecenters, cybercafés and population with home access.

3. METHODOLOGY

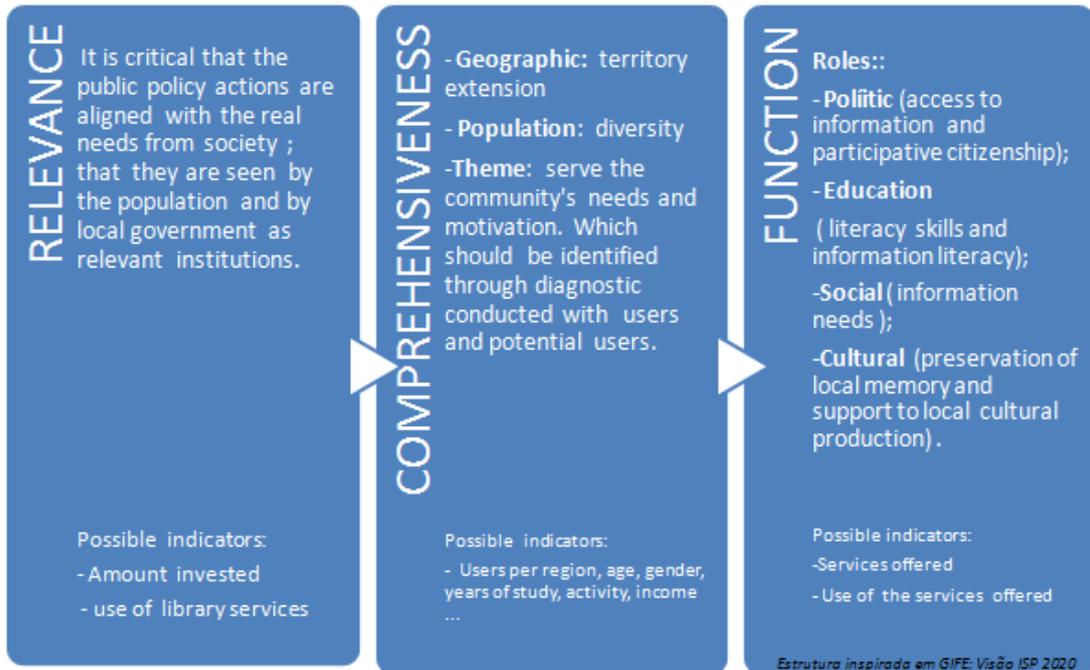
This study was developed as an exploratory research having the methodology built by a researcher from Fundação Pensamento Digital along with National System of Public Libraries (SNBP) coordinators and a representative from Bill and Melinda Gates Foundation.

3.1 SCENARIO ANALYSIS

The research initial steps , in August and September 2012, concentrated on the analysis of publications about public library in Brazil, as well as meetings with the National System of Public Libraries (SNBP) coordination , researchers and leaders in the field of librarianship. The analysis of Brazilian specialists (SUAIDEN; OLYNTHUS; MIRANDA; TARGINO) and official government documents containing descriptions of recent public policy, along with meetings with experts from the government or academic field, substantiated the proposal of three areas for analyzing public library in Brazil: relevance, scope and functions.

Areas to analyze Public Library in Brazil

PL analysis in Brazil:



Initially, it was explored the possibility to build a research strategy to identify best practices in using technology for the promotion of socio-economic development, or use of technology regarding the missions of the library described in the IFLA and UNESCO⁷ Public Library Manifesto (ANNEX I). The sample was composed by libraries that highlight the integration of technology in functions such as the reading promotion, the local memory preservation, the dissemination of culture, the dissemination of information to improve the quality of life in the served community, etc. The field work would allow the researcher to learn thoroughly these practices and recommend investment in systematization and dissemination of a pilot group of public libraries.

However, the difficulty in finding examples of technology integration in actions related to several library functions, made the initial strategy impossible. We did not identify libraries that encourage participants to use technology in activities that aimed at promotion reading, or in actions to assess or meet the information needs of the local community. We also could not locate (prior to fieldwork) actions that use the technology in promoting literary or cultural production (among others).

The researcher's participation in the XVIII Public Libraries System National Meeting helped the building of this vision, and contributed for a new reflection that resulted in the strategy definition used in field research.

⁷ <http://www.ifla.org/publications/iflaunesco-public-library-manifesto-1994>

3.2 IMMERSION AT THE XVIII NATIONAL MEETING OF THE PUBLIC LIBRARIES SYSTEM

In a second stage, the researcher made an immersion between State leaders and representatives of the main federal government programs that interact with libraries. During five days, in September of 2012, she observed and attended the XVIII National Meeting of the Public Libraries System⁸ having the opportunity to watch and interview leaders and decision-makers of public policies that influence the public library in Brazil. The Conference was held at the headquarters of the National Library Foundation in the city of Rio de Janeiro. Amongst the participants, besides the state coordinators, there were coordinators and interns from SNBP, researchers and specialists in public libraries, representatives of the Ministry of Culture and the National Library Foundation, coordinators of federal programs related to libraries (book distribution, promotion of reading) and coordinators of the telecenter programs under management of the Ministry of Communications. The conference also counted with a representative from the Gates Foundation who attended the opening of the Conference and led a section on the last day in along with this study's researcher.

The presentations were distributed in the course of the week alternated with workshops that promoted exchanges between state coordinators and a visit to the newly opened Rocinha⁹ Park Library. On the last day, the representative of the Gates Foundation presented about the use of technology in libraries in other countries. In the sequence, a workshop given by this researcher asked participants (representatives of the State systems) to report the activities related to the use of technology for the development in the libraries of their States. The participants formed groups according to the five Brazilian geographic regions and each group was given a laptop with an Excel spreadsheet prepared to receive the requested data.

By observing this meeting and from data reported by the State coordinators, we can see that the integration of technology to public libraries services in Brazil is still limited and also that technology for development (ICT for development) is not very known or explored amongst the protagonists of public policies related to public libraries in Brazil.

The use of technology in these organizations is normally limited to offering access to internet, computerizing library systems (large libraries or networks of large cities) and use of social networks and blogs to advertise the Library activities.

⁸ <http://snbp.bn.br/?s=GATES&x=0&y=0>

⁹ Bairro popular caracterizado como favela, localizado na zona sul da cidade do Rio de Janeiro.

At this stage of the study, the researcher hadn't found the use of technology to motivate or guide information search to improve the people's life quality yet, or the use of technology integrated with cultural activities so frequent in the best Brazilian libraries. The use of technology seemed to be apart from the library functions, limited to administrative support and to provide internet access to a user who is disconnected from the other actions or functions of the library.

The vision and the previously defined issues were revisited. We found that if we kept the strategy to seek for the best practices in using technology, knowing them in detail, systematizing and then disseminating them, we would have problems with the lack of practice in the use of technology for development and the lack of understanding of its concept, as well as the lack of familiarity with the services related to this concept and already developed by libraries abroad.

Such strategy began to prioritize knowing what makes a public library be relevant, even without the use of technology. Understanding how it works, what people seek in it, challenges' perceptions and motivations of their teams and users and then examine the possibilities of integrating technology.

3.3 STRATEGIES FOR FIELD RESEARCH

In order to operate with the research problem, we developed two research questions, six areas of inquiry, or relevance factors, and four development domains outlined below. These elements guide the research activities, which include Libraries' observation, users and staff surveys and interviews with local government representatives.

3.3.1 Research Questions

The "Study on ICT Use in Public Libraries in Brazil" examines two questions related to Public Libraries relevance in Brazil:

- What makes a Public Library relevant to its community?

- How can ICT be used to support or improve the elements that were mentioned in the answer to the question above?

3.3.2 Relevance factors - areas of inquiry

The survey assumes that the six factors listed below are related one to another and the level of relevance of a public library for the residents of its community and the local government. It is believed that either together or independently, these factors contribute to attract users and make the library an organization which is present in their lives.

- i. **Services** — What are the different services offered to the community? (checking out books, ICT access, cultural events...) Is there an agenda of activities and events? What is the frequency and usage of each service? Who provides financial support for each service? How is ICT used on the provision of each service? How could ICT be used to improve those services and create new ones? How does each service contribute to the relevance of the library for the community and local government?
- ii. **Staff** — How is the Library coordination organized? How many librarians work there and what is the role of each one? Is there a multidisciplinary team of professionals? What is the staff necessary for each service offered? What is the education degree of the staff? Is there a professional development plan for the staff? How is the staff education related to the services offered? Has the staff received specific PD for ICT integration?
- iii. **Physical Design, Location and infrastructure** — How do physical design, architecture, location and infrastructure (electricity, Internet, building maintenance, furniture) of a Library contribute to attract users? What is the ICT infrastructure available? How do these factors affect long-term sustainability and libraries relevance for their communities?
- iv. **Management** — How is the collection managed? Is there ICT use in the collection management? How is the planning process for collection acquisition? How are the library's activities communicated and registered? Is there a marketing plan to let the community know about the library's activities, services and collection? How does the library communicate with users, local government, SNBP and other libraries? Which indicators are used in the library's report?
- v. **Collection** — How does the size and quality of graphic material collection affect the library's relevance for its community? What are the indicators of collection use? Does the collection meet the specific motivations of local community providing information such as touristic activities, fishing, agriculture, art craft, house and neighborhood improvement especially on poor urban areas and shantytown?
- vi. **ICT access for users** — Does the library offer ICT access to users? How does the access to ICT, or the lack of it, contribute to increase, or decrease, library's relevance? What do users use ICT for? Do users prefer other public places to use ICT? If so, why? From the services offered nowadays, which one depends on the use of ICT? Would a greater availability of ICT (quantity/quality) increase library relevance? How is the maintenance of the existing ICT?

3.3.3 Development Domains

The domains of development characterize the different roles that public libraries can play in society. The “Study on ICT Use in Public Libraries in Brazil” focuses its efforts on the four domains described below. While these four areas are central in the investigation of Public Libraries relevance, the study allows for discoveries beyond these domains.

- i. **Political:** universal access to information and citizen participation.
- ii. **Cultural:** Does the library play the role of shelter for the local culture? Does it stimulate local culture? Do people use the library to share cultural information, both traditional and popular? Some people might do this by organizing or attending events, others may create websites or blogs. Is technology used in public libraries to help users maintain or express their cultural identity, support cultural practices or other experiences?
- iii. **Education:** How does the library contribute to develop reading skills and help people make a good use of information? Which services are related to these goals?

Through computers and Internet availability, people can gain access to information and tools that support learning. Students can use software to complete homework and improve their performance at school. Adolescents and adults might seek out admissions or financial aid information for new educational opportunities or to participate in online workshops. Such uses can support positive educational outcomes that may lead to a range of development goals, from economic impacts to enhancing quality of life (GIS, 2011).

- iv. **Social :** How is the library serving the local population regarding their needs for information? Do the collection and the offered activities meet the needs of local population? Would local business benefit from specific information (fishing, art craft, agriculture, commercial and management techniques)? What about social conditions that would benefit from specific information (household improvement, plumbing, paving, gender or minority issues)? Is the library providing specific information about these conditions? Is ICT used? Are there webinars or videos developed for these purposes, or any other ICT based material? How is the local population using and benefiting from these materials? Can people use ICTs in PLs to find jobs, prepare CVs, or improve their skills to enhance employability? Are there users seen as Entrepreneurs that use the Internet to sell products and services or expand customer bases? Are they allowed to do that in the library? Do users use online information to support their work, whether through pricing decisions, discovering new production techniques, or exploring new ways to generate income?

3.4 SAMPLE DEFINITION

The parties involved in the planning of this study have converged on the understanding that the sample to be used in this survey is not intended to statistically represent the whole population of public libraries in the country. The study aims to identify the best practices, document and analyze them in order to answer the research questions. In this sense, the sample was constructed from information provided by the State Public Library Systems and suggestions of SNBP based on its knowhow of the services offered in the main libraries of the country, as well as features of the State networks.

It has been defined that the sample should have at least four out of the five major geographic regions of Brazil. The State Library of each region should be visited, as well as medium and small libraries involving at least a second town, besides the State Capital City, and preferably a library in the rural area or in a small town. For each library we visited, we intended to apply the questionnaire to at least three users, but it was not always possible, sometimes due to the absence of users in the library and other times because of time constraints. In some States, the Coordinator of the State System, or another representative of the local government, accompanied the researcher on visits to other libraries, as well as to other cities around it. In some situations, the visiting schedule did not allow enough time in the libraries to interview the number of users we had planned.

The researcher preferred the interviews and opportunities for discussions with the government representatives to interviewing a greater number of library users. In each library we visited, at least one coordinator was interviewed, sometimes in the presence of other library staff members allowing a small debate on the topics discussed.

In some regions, like Southeast, the researcher pre scheduled visits by phone, different from the agenda for the North and Northeast that was detailed along with the coordinators of the State System of Public Library during the first day of work in that region. The criteria to include a public library in the sample were: offering internet access, good practice desirable even with a few resources, including at least one sample outside the capital; sample should be able of capturing local specificities and respect budget limit to trips to other towns.

3. 4.1 Sample Composition

REGION	LOCAL GOVERNMENT	LIBRARY	CITY	USERS
NORTHEAST BA	State Network Coordinator	Bahia State	Salvador	3
		Juracy Magalhães Jr – Itaparica	Itaparica	4
		Monteiro Lobato – Salvador	Salvador	0
		Thales de Azevedo – Salvador	Salvador	4
		Juracy Magalhães – Salvador	Salvador	0
SOUTH – RS	State Network Coordinator	Manoelito de Ornelas – Tramandaí	Tramandaí	1
		Josué Guimarães - Porto Alegre	Porto Alegre	4
		Restinga - Porto Alegre –rural área	Porto Alegre	0
SOUTHEAST SP	Coordinators of the Municipal Library System	B. Monteiro Lobato - Central de Guarulhos	Guarulhos	2
		Guarulhos B. Presidente Dutra	Guarulhos	1
		Guarulhos B. Adamastor	Guarulhos	0
	Municipal Network Coordinator- Maria Zenita	Municipal Monteiro Lobato, Municipal Mario Schenberg – São Paulo	São Paulo	2
	Coordinator (substitute)	PUBLIC LIBRARY of the State of São Paulo – São Paulo	São Paulo	4
Municipal Network Coordinator- Rosane Orion	Municipal PUBLIC LIBRARY –Piracicaba	Piracicaba	4	
ACRE - NO	State Network Coordinator – Helena Carloni; – <i>Da Floresta</i> Telecenters coordinator program: Paulo; - State Secretary of Culture: Francisca	Xapuri	Xapuri	2
		Da Floresta – Rio Branco	Rio Branco	2
		State of Acre - Rio Branco	Rio Branco	6
		Porto Acre	Porto Acre	0
		Epitaciolandia	Epitaciolandia	4

The *Manguinhos* Library, in Rio de Janeiro, was visited in the early stages of this research, before defining the instruments. Some findings from this visit are presented in the course of the research report to illustrate observations and conclusions of this study. However, it is important to note that the Public Library of *Manguinhos* is not part of the quantitative analysis prepared on the interviews and conducted in libraries that make up the sample of this study. Also, the fact that this library is not mentioned in many qualitative analyses is due to the non-application of

research instruments to its coordinators and users. Anyway, the Manguinhos Library does not take part in the data sample collection of the second phase of this study.

3.4.2 Regions and States of Brazil

The Brazilian regions have striking features being the South and Southeast richer, and Northeast and North quite poor. The Midwest region has strongly influenced indicators by the Federal District where the capital city of Brasilia is located.

IBGE, 2010¹⁰:

Region	GDP Per capita in R\$ (2010)
South East Region	25.987
West Central Region	24.952
South Region	22.722
North Region	12.701
North East Region	9.561

The indicators related to education are proportional to income indicators of the regions. The level of education presented in the table below means the highest level of education completed by the individual, where the preschool level includes those who attended but did not complete elementary school.

Percentage of the total population at the age of 25 or over

level of education	North	Northeast	Southeast	South	Midwest
Preschool	38	44	34	37	35
Elementary	10	9	12	12	11
High school	17	16	21	19	19
University	5	5	11	9	10

Source: Census (IBGE) 2010

Bahia is the state representing the northeastern region in this study. The northeastern region is the country's poorest one. Although Bahia presents the highest GDP of the region, when compared to the rest of the country, its GDP per capita of 11 thousand reais a year is in the 19th position amongst the other 27 Brazilian states. Bahia is the largest state in the northeastern region, it occupies an area slightly larger than France (567 000 km²) with a population of 14 million people. It is a state rich in culture and the one which attracts the most tourists in the Northeast. It has the

¹⁰ The Brazilian Institute of Geography and Statistics: www.ibge.gov.br

longest coastline of the country and its people are known for their cheerful and festive features. Bahia is highly influenced by the African culture in music, cuisine and religion.

The state of Acre is located in the northern region of the country and has its borders with Bolivia and Peru in addition with the states of Amazonas and Rondônia. It has the majority of its territory (164,000 km²) covered by the Amazon Rainforest. Its population is of 733,000 inhabitants with a GDP per capita of 11.000 *reais* a year, being the 18th within the country. The social identity of the people in Acre is linked to the preservation of the Amazon Rainforest. The Portuguese term "forest people" is used to denote those who inhabit the forest and survive out of it like Indians, rubber tappers and riverine populations, groups that came together to halt the deforestation process under the leadership of Chico Mendes in the 1970s and 1980s.

The Rio Grande do Sul State is located in southernmost region of Brazil, bordering Argentina, Uruguay and the State of Santa Catarina. It has the 4th largest GDP in the country, and the 5th GDP (R\$ 23,606,00). Its population of 10.6 million people inhabits a territory with an area of 281mil km². The main economic activities are agriculture and industry.

São Paulo is the richest state of the country; its socioeconomic indicators are second only to the Federal District. The GDP per capita is R\$ 30,243,00 and the population is of 41 million people in an area of 248,000 km².

3.5 RESEARCH INSTRUMENTS

The Study on the use of Information and Communication Technologies (ICTs) in Brazilian Public Libraries aims to identify needs and opportunities for the use of ICTs in these spaces. With a particular interest in the opportunity to use ICT as a resource that increases the relevance of public libraries in their communities.

The planning of this research was developed in cooperation between the Fundação Pensamento Digital (Digital Thinking Foundation), the National System of Public Libraries (SNBP) and the Gates Foundation and counts on the use of three instruments built from the relevant factors and development domains: a questionnaire for public library users and two interview scripts intended for coordinators of state or local libraries systems. The structured interview scripts were compiled within spreadsheets using the Excel software and predicting that the interviews are conducted with the aid of a laptop allowing the researcher to type subjective answers and mark multiple choice answers during the interview. The questionnaire for users is provided with a print out on paper and a pen for marking answers.

The instruments try to investigate the vision of the subjects involved with the Brazilian Public Libraries regarding the importance of libraries in the communities where they are inserted and to local governments, the need for ICTs in libraries, and the opportunities that ICTs can bring to libraries in terms of qualifying services already offered, as well as enable new services.

The three instruments were tested during the initial phase of the field research in order to verify if they meet the desired role, or if they manage to capture the vision of the respondents to the above themes. During the testing, the following issues were observed: the clarity of the questions, the understanding of the users, the length of the interviews and the tolerance of respondents to the time given to answer them (if a user responds up to the end, or becomes distracted or upset due to the length of time); if the alternatives for the answers to the multiple-choice questions were appropriate, if the questions lead the respondents to an analysis of the desired topics, and the type of response tab (simple choice, multiple choice, levels of intensity or frequency, priority levels, or open field).

In addition to the instruments themselves, the testing process also served to experience research procedures such as scheduling visits, local transportation, circulation within the libraries, and support of library staff to approach the users, the receptivity of the three groups to answer the questions and accept the terms of consent.

The testing was conducted in two stages. The first one in Rio Grande do Sul and the second one in São Paulo. The initial phase in Rio Grande do Sul involved interviews with the coordinator of the State Library System, interviews with managers of Municipal Libraries in the cities of Tramandaí and Porto Alegre, and resulted in improvements in instruments for the System Manager and the Library Coordinator. Due to the limited use of technology in these places and the small number of users present in the libraries during summer vacation, it was necessary to extend the testing to field work in the Southeast region.

In São Paulo the fieldwork was conducted in three cities with visits to seven libraries. In this region, the researcher had the opportunity to interview two coordinators of Municipal Systems. Applying the questionnaire to users was more significant in this region, but still shorter than the ideal number due to time constraints. These applications were enough to experiment the questionnaire, to get to know the respondents reaction and to make improvements and additions to the instrument.

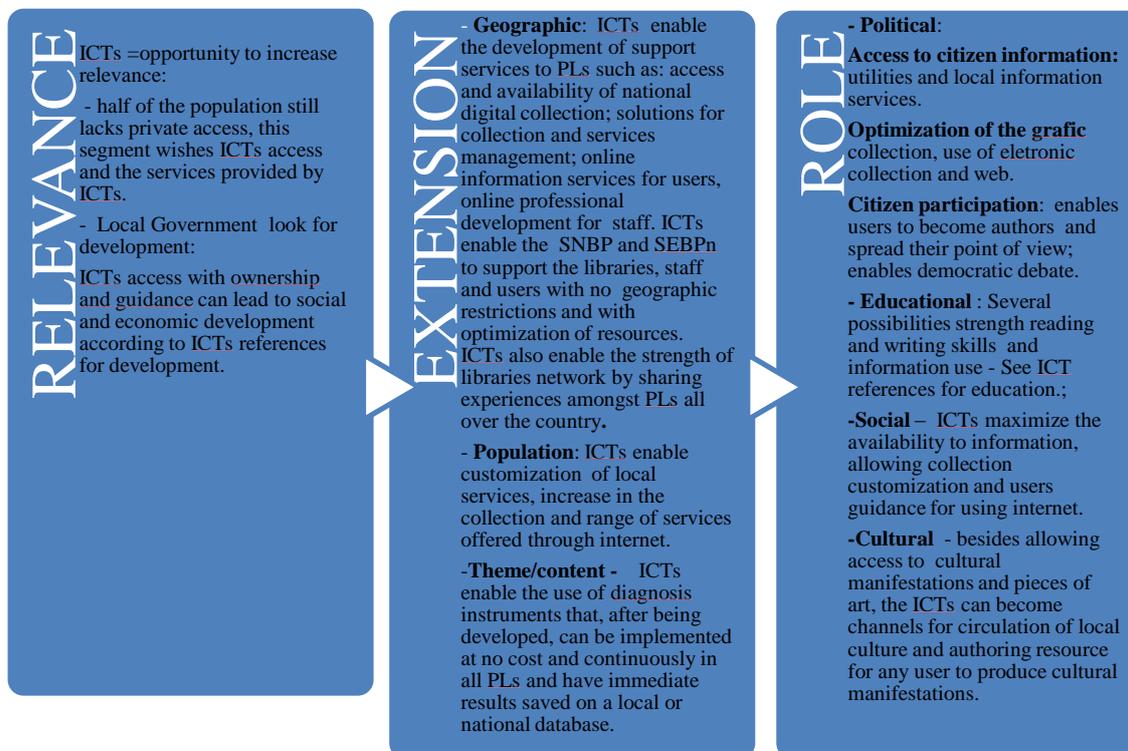
4. DATA ANALYSIS

4.1 ANALYSIS OF THE SCENARIO

The analysis of secondary data and information obtained from government representatives during the initial phase of this research demonstrates that the Brazilian Public Library is a subordinated organization supported by State or Municipal Governments. The National System of Public Libraries (SNBP), an organ of the National Foundation Libraries (FBN) and the Ministry of Culture, aims to support existing public libraries and promote the expansion of new libraries in the country. The SNBP operates in conjunction with the State System of Public Libraries which foster the creation of Municipal Systems and Local Networks of Libraries.

By analysing secondary data, we highlighted the possibility of integrating technology in libraries in three parts:

Possibilities for ICT integration



The analysis of strengths, weaknesses, opportunities and threats was held still in the early stages of the research. From this analysis, we understand that the strengths of the Brazilian Public Libraries are the programs that promote books and reading.

Considering the scenario where they are located, the transition from industrial society to information and knowledge society further extends the importance of institutions that organize and provide appropriate information to the demands of its users.

The need for improvement in the infrastructure of most Brazilian Libraries and the recognition of its current low relevance for the Brazilian society in general were considered weaknesses. Issues regarding the education of professionals who have been prepared, as a matter of priority, to deal with materials, but with little training to assist, stimulate and guide the public, were also emphasized.

Amongst the threats to integrate technology in the libraries, the most obvious would be the reduction of ICT use to simply offer free internet access for users without considering the use of technology to offer new services or enhance existing library services related to the various missions of public libraries.

SWOT analysis of PL in Brazil in the 21st Century

STRENGTH	WEAKNESS
<p>National Program to promote and disseminate books (PNL). - PLs have an important role for society for being an institution that organizes and makes information available for the population in the information era.</p>	<p>In general, the PL is poor and has few equipment; it is not present in the life of Brazilians and has no relevance to local governments. The staff is trained to work with the graphic material, but not with the public. The use of ICTs to deliver information and culture is either limited or absent.</p>
OPPORTUNITIES	THREATS
<p>Increasing the PL relevance through the use of ICTs to diagnose and meet people's need for information, offer new services, develop abilities and strengthen local culture in a global world.</p>	<p>Limiting the use of ICTs to the distribution of access kit (repeating the mistake of focusing too much on material as it has been done before). Limiting the use of ICTs to internet access, without thinking about new products & services, as well as new ways of management and interaction.</p>

The analysis of articles from researchers and national experts (OLINTO; SUAIDEN; MIRANDA; TARGINO) revealed that they wish libraries were nice, attractive and dynamic places. It is also a desire that they lead the population to an informational, multicolor, accessible, understandable, interesting, useful and pleasant world through graphs and digital means. Some of the common beliefs found among

Brazilian experts are: that the book and the Internet are complementary as cultural resources; ICTs are good and contribute to increase social capital, civic engagement, group empowerment and circulation of local culture; information disseminated in multimedia is very important to the populations with limited reading skills.

The Brazilian authors (OLINTO; SUAIDEN; MIRANDA; TARGINO) emphasize the following problems in the National Public Libraries' scenario:

- i. – There are policies with excessive focus on preservation of library materials lacking identification of motivations and needs of the community to define content, services and applications that are relevant to the various local publics.
- ii. - Librarians do not receive training to work as agent and social mediator, their training is totally focused on the organization and preservation of the material. A new professional attitude is necessary.
- iii. - Lack of infrastructure: bad-looking libraries that need renovation of their buildings and furniture, old books composing an environment which does not attract users.
- iv. - The public library is not integrated into the routine of the Brazilian people, it is invisible.
- v. - Cultural services and activities are limited.

4.2 THE MOST PROMINENT ROLES - SUMMARY OF EVIDENCES

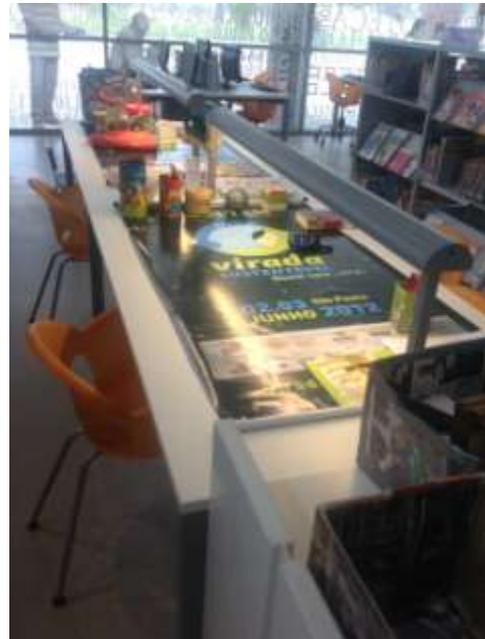
The field research consisted of interviews with government officials, coordinators of public libraries, users and environmental observation, allow us to conclude that the libraries included in the sample are, in many ways, important for the communities where they are located. The activities aimed to promote reading is the service that is mostly sought by children. The use of the reading space and internet Wi-Fi zone attract young audiences who are getting prepared for civil service examinations or studying for college. The reading of periodicals and the local access to other materials meet the preference of adult users. The computers available in the library are highly used for internet purposes, but these users constitute a distinct group and usually do not take advantage of other services offered by the library. Actions for preservation of memory and encouraging writers also stand as highlights in the services provided by some of the visited libraries.

4.2.1 Promoting Reading for Children

Children are benefited through a series of activities which encourage and promote reading. These activities are offered to school groups visiting the public library during class period, but also for individual visitors. This is the case of Piracicaba

Library (SP), which develops a great work in promoting literature and culture. Amongst the available services, we highlight the collage workshops, storytelling and plays that take place daily in the morning and afternoon, often with more than one school group per shift. The Monteiro Lobato Children and Youth Library in Salvador (BA) offers storytelling and various workshops for both school visits and the community children who go to the public library specifically to attend these events. Activities such as character building, graffiti and drama are offered in this library and they are always linked to literature and reading encouragement.

Park Libraries such as the State Library of São Paulo, Acre and Manguinhos (RJ), as well as the State Library of Bahia, have pleasant and attractive areas specific for children, and an active program to engage the little ones with topics and characters mentioned in the books. The State Library of São Paulo is an example, it owns a large and very pretty structure, it has a wide and well-qualified staff and has job offers based on inclusion. It is a national reference park library: the children spaces are located on the ground floor, while the services for youth and adults are all on the second floor. Amongst the attractions you have books arranged in an easy-to-find way, e-books available for local use alongside of comfortable armchairs, videotapes exposed together with the books which tell the same story to encourage reading. This whole scenario functions with a rich calendar of activities for children with the purpose of stimulating reading.



However, in Epitaciolândia, a small town of 15,000 inhabitants in the countryside of Acre, located on the border with Bolivia, the public library has an old collection and its facilities are far less inviting if compared to a library park. Nevertheless, the vocation and mobilization of the local team around the dramatization of book stories compensate for the physical limitations of the library.

The drama group created by the library staff got resources for scenery and equipment from a project called the Law of Culture¹¹ and now they visit schools and attract young readers with drama performances at the library

The Epitaciolândia library is a model of how the initiative and creativity of the library staff can compensate the limitations of physical structure and collection.

Public Library in Epitaciolandia (AC):



Although recreational and cultural activities to promote reading to children are amongst the most relevant services of Brazilian Public Libraries, the number of visits to libraries with the purpose of consulting the collection for school work has fallen sharply in recent years. According to the Municipal Public Library System's coordinator of Guarulhos (SP), nowadays, users have internet access from home or other places for this purpose. In this context, the frequency of teenagers who attend Middle School, or the early years of High School in the PLs has considerably decreased. This fact contributed to a drastic reduction of visits to libraries in Guarulhos (SP) where the number of users per month has dropped from 1,200 to 500.

The "promotion of reading" as a role of the public library in Brazil is more broadly presented and analyzed in section 4.7 of this document.

4.2.2 Learning environment for youngsters

Libraries have seen a growing number of young adults formed by high school students and new users who started bringing their laptops to use in the library either

¹¹ Lei de incentivo fiscal que permite abater do imposto de renda doações para projetos culturais.

with or without internet signal (also in public libraries without Wi-Fi, users take their laptops to take advantage of the space and the collection). According to the managers, the number of young people who come to the public library to study for civil public exams has increased Guarulhos and São Paulo (São Paulo), Epitaciolândia and Rio Branco (Acre), Itaparica and Salvador (Bahia) and Porto Alegre (Rio Grande do Sul). Other readers also remain in the library so that they can be in a safe place to read.



Both libraries in Rio Branco (AC) receive a large number of people who go there to study and take their own books and laptops. They study in groups or by themselves. The physical infrastructure and the State Library architectural design in Acre, and Floresta Library are quite favorable since both impress by their beauty and comfort. In addition, they have air conditioning working perfectly in a humid equatorial climate. The State Library in Acre is wide with a glass area at the entrance and a staircase creating an ambience with double height ceiling. The floor is beautiful, the chairs are all new in light green color, there are large tables, two places where you can use computers, 5 computers near the entrance where there is double height ceiling, for research use only. The others, more than 25 computers, are located next to the broad area of study in a very pleasant integrated environment. Besides the chairs near the study tables and computers, there are armchairs for reading and stools/ottomans which can be used for sitting or supporting users' books and materials.



Although there is no internet reception In Itaparica Island, Bahia, the interviewed users choose the study area of the library to prepare for civil public

exams or tests. They stated that the collection is small and outdated, but they like the quietness of the environment to study.

The State Library of Bahia has two rooms on the ground floor with study tables and workstations for using private computers with internet Wi-Fi signal. The rooms were really full when we visited. This space at the Bahia State Library is not integrated with the library collection or the telecenter space that allows the use of library computers.

Local research and the use of library space for studying with personal material is also common in the City Hall Library Josué Guimarães in Porto Alegre.

4.2.3 Checking out library books

Checking out library books was mentioned by the majority of the system coordinators and library managers as one of the most important services of the library. However, this does not receive the same emphasis from the users who were interviewed. For many small libraries which do not provide access to technology as in Tramandaí (RS) and Porto Acre (AC), checking out books was identified as the most important service offered by the public library.

The fact that the interviewed users did not indicate this as a relevant service in other libraries can be justified by the approach of the interview. Assuming that users who point out the loan of books as the most important library service do not remain in the library for local access or to use computers, the researcher's probability to find those users during the visits was much smaller if compared to her probability to approach respondents who enjoy services inside the library (local research, study space with wi-fi internet, computer use). There were several testimonies, especially in smaller libraries, highlighting the need to update the collection.

4.2.4 Access to internet

For all libraries which offer internet access, whether through library computers or from users' laptops in the Wi-Fi zone, the use of the internet is always considered one of the most important services offered for users.

Internet access is a service that is considered even more relevant in small towns with less opportunity to internet access, which is the case of Epitaciolândia, a region bordering Bolivia and Xapuri city, land of Chico Mendes, historic site of resistance to the deforestation of the rubber-trees through the

“empates” (which are protests in which people stand in front of the chainsaws blocking bulldozers): both libraries are used for internet access. In Eptaciolândia many users in the reading area used the Wi-Fi signal on their laptops, most of them were studying and only one was accessing a social network. In Eptaciolândia, for half of the users, the library is the only option for internet access. Among users who have another place to use internet, they opted to go to the library because they like the environment. However, all users have complained about the slowness of the Internet connection.



Regarding the use of the network it was identified that libraries are not integrating technology in most of its activities or functions. Access to computers and internet is usually done independently by users, without contributing to workshops, practices or functions of libraries that go beyond providing access. People interviewed while using computers or just standing in the area next to the computers did not use to access other library services.

Section 4.4 of this document addresses more broadly the use of technology in Brazilian Public Libraries and discusses the segmentation between the public library and the national policy to promote access to information technology and communication.

4.2.5 Preservation of memory

Actions aimed at preserving local memory were prominently found in libraries in Piracicaba (SP) and in the libraries visited in the state of Bahia (Bahia State Library, Thales de Azevedo Library in Salvador and Juracy Magalhães Jr Library in Itaparica), as well as in Floresta Library in Rio Branco (AC).



In Piracicaba (SP) the local literature is valued and preserved by the library through a program which honors one author from Piracicaba per year (out of a group of 12 local authors previously chosen). They are authors who write about the local culture. To prevent these authors from falling into oblivion, the library had the initiative to promote an annual event in which 20 banners are drawn up and exhibitions are carried out in city venues such as theaters, cultural center and public library.

In Itaparica (BA), a historic city located in the island of Itaparica, near Salvador, the Juracy Magalhães Jr. Library serves the city residents, but it is also visited by tourists during the high season. The main activities of the library are focused on hosting events with local authors like João Ubaldo, in the celebration of important dates and cultural attractions (exhibitions, music performances and local theater groups). The most popular feature of the library is related to the dissemination and preservation of local memory, as well as local cultural production related to soirees, cordel literature and support to local associations.

The State Library of Bahia, located in the capital city of Salvador, is the oldest library in Brazil, founded in 1810 starting from the collection brought from Portugal by D. João VI. It is very strong in preserving the memory and it has a historical collection with several rare papers, newspapers and periodicals collections. The library has rooms for specific cultural memory of Bahia, collections of local writers, audio visual room, a room with an art collection, rare books and collections of magazines and newspapers.

4.2.6 Promoting Culture

The cultural actions are confused with the initiatives for the promotion of memory and with the activities offered for children to awaken a taste for reading. Some libraries, like the one in the State of Bahia, stand out with an independent cultural program for these activities. The "Live Library" ("Biblioteca Viva") consists of an interdisciplinary team that is responsible for planning and implementing an agenda for shows, exhibitions, actions such as "Washing up the Library" ("A Lavagem da Biblioteca") and many other actions that are part of the program held in the library auditoriums.



The dissemination of culture through activities that go beyond promotion of literature and mediation of reading is an important role for some Brazilian libraries. In several libraries, it is through cultural activities that the practice of reading is stimulated to children and young people. But, in addition to the practices listed in the item "**Stimulus to reading**", some libraries stand for the preservation and dissemination of local or national culture through presentations or music concerts, theatre and cinema. In general the large libraries are the ones that offer space and staff to develop such activities. The organization of exhibitions in the library or in other spaces conducive to cultural dissemination are also frequent activities in the large libraries that were visited (Piracicaba, São Paulo State Library, State Library of Acre, State Library of Salvador).

The Forest Library, in Acre, is a model in preserving and disseminating the local culture. It is a reference of the culture and information about the forest people (they live from extractivism and bring together indigenous people, rubber tappers and

riverine populations). This library is disseminating and guardian of local culture and knowledge. In addition to having a rich collection, the library space resembles a museum with a forest setting and a simulation of the rubber tappers houses. The Wi-Fi internet signal attracts many students who end up taking advantage of the exhibitions in the library. Cultural programs are intense and the library still hosts meetings of study groups in various areas of knowledge, such as Philosophy, History, Cinema, Photography, Graffiti, and others.

The State library of Acre, also located in Rio Branco, has a cultural program called “Cinema in the Library”. Several people often go to the library to watch movies in a pleasant movie room located on the ground floor of the library.

The library of Itaparica, in the state of Bahia, although it is mid-sized, its cultural events are the most prominent of the programming. In addition to honoring local writers like João Ubaldo, the library staff promotes activities in accordance with the timetable of celebrations in the city. Itaparica is a city located in the island of Itaparica, near Salvador. Although it is a small place, it attracts many tourists in summer. The library serves the city residents, but it is also visited by tourists during the high season. The main actions are focused on hosting events with local authors like John Ubaldo, in the celebration of important dates and cultural attractions (exhibitions, music performances and local theater groups). The most obvious feature of the library is related to the dissemination and preservation of local memory, as well as local cultural production related to soirees, cordel literature and support to local associations. Many art exhibitions are also promoted there.

The State Library of Bahia is a big-sized one and has many auditoriums and a beautiful indoors space with a garden which is covered by a very appealing architectural design that is perfect for shows or small presentations. This library has a department which is composed by a team of professionals from various fields of knowledge who are responsible for designing and implementing the cultural agenda of the library. The high point of this agenda is the “Lavagem da Biblioteca” (washing up the library), an allusion to the traditional ceremony of “Lavagem da Igreja do Bom Fim” (washing the Church called Igreja do Bom Fim) in the same city.

Some mid-sized libraries, as the Library Josué Guimarães in Porto Alegre (RS), and the Library of Adamastor in Guarujá (SP), are located within Municipal Government Cultural Centers and integrate with external cultural program to their management.

4.2.7 Fostering new writers

Encouraging new writers is another important role of in some visited libraries. For example, in Piracicaba (SP), the festival of short stories is a major attraction of the library. The Central Library of Guarulhos (SP) has a writer's space to authors and poets. To foster new writers, Guarulhos Library promotes a literary contest called *Palavra em Prisma*. In addition, most of the visited libraries host release of new books written by local authors.

4.3 DATA ANALYSIS ACCORDING TO RELEVANCE FACTORS

4.3.1 Services

Among the main services provided in the visited libraries are the actions aimed to promote reading in children and youth; the use of library space as a place to study with WiFi internet access for young students and other users who are preparing for civil service examination; reading journals and local consultation with other materials (adult users). The use of the internet from library computers is popular; however, those users are part of a distinct group that usually does not take advantage of the other services offered by the library. Book loans were mentioned by several library coordinators as one of the most important services, but the interviewed users gave less importance to the loan.

The activities and events schedule is an important feature among the visited libraries. Most of those actions are intended to motivate reading for children who come to the library in school visits or along with their the parents during the weekends to story-telling, role plays and participate in cultural workshops involving the reconstruction of characters and parts of stories. Local authors book releases, author visits and cultural events such as music or theatre performances make up the activities for adults, which happens less often than the children's activities. The assistants' team of the libraries is responsible for most of the services offered by the public library; the remuneration of these professionals is the responsibility of the local government, i.e. the city hall, except the State libraries whose employees are hired by the State Government. Cultural events take place with the participation of artists invited or hired with resources from the Ministry of Culture. Meetings with writers when they visit public libraries do not happen often. However, they are of great importance in promoting reading for different audiences.

The technology is not integrated with the services offered by libraries. The computer and the internet access is an isolated service from others. The technology is used in managing the library collection in the medium-size and large libraries and in

some cases, small libraries. The WiFi Internet signal attracts a lot of young adult students who attend college or prepare for civil service examinations. There is the use of WiFi internet signal to perform paid activities (work), but in much lower amount compared to students. Only one user interviewed was doing some paid activity and the activity was not highlighted by library coordinators or by Government representatives.

4.3.1 Staff

The staff of libraries is generally hired by the City Hall Department of Culture, being the State Department of Culture, the employers in large libraries. However, the State of Acre is the employer in cities where the city hall has not been in charge of the local Public Library. Motivated by the national policy to reset the number of cities without libraries, some State systems such as the system of the State of Acre, have set up libraries in cities and began to implement them with goal to transfer its management to the city halls in the short or medium term. The staff has diversified background and often does not count with librarian(s).

Amongst the libraries of this study sample, the small ones typically do not rely on librarians (exception to São Paulo and Guarulhos). Among the medium-size and large libraries, it is common to have a librarian. The State of Bahia Library, with strong performance in memory preservation has a large number of librarians, at least one for each section. They work with organization and preservation of printed material. In this same library, there is a core group responsible for cultural library activities. The team does not have only librarians, but cultural producers, journalists, historians, as well as students of these areas. In the State of Acre libraries, we did not identify any librarian working in the system or in the libraries visited. In this state, the library staff has professionals with diverse backgrounds. State of Acre libraries are strong in promoting activities and integration with the public but weak in organizing the collection of small libraries. Even the large, modern and active Library of the State of Acre has not available its computerized collection on the Internet. The absence of librarians seems to influence also the non use of the Federal Government Notices to update the library collection. On the other hand, libraries coordinated by multidisciplinary teams of professionals offer a richer agenda of activities for the population.

The professional development for the staff members who work in city hall libraries are offered many times by the State systems. The most common courses are those that address the basics of library organization and management to employees who are not trained in Library Science. The turnover of libraries' staff was a problem that was mentioned frequently by who represents local government and coordination of libraries. The professional development offered for technology integration in the actions of the library is restricted to training for use of digital collection management

software. We did not identify the training in order to make the teams integrate technology in other areas of the libraries. The staff responsible for the supervision of use of library computers receives training with a focus on technical areas, without guidance for technology use in cultural activities involving users' expression and authoring.

4.3.2 Physical Project – infrastructure

The research found out that one of the main reasons that make users go to libraries is their nice atmosphere to study or to carry out other activities. From the visits, it was possible to observe how the large and medium-sized libraries that offer pleasant atmosphere to the population attract a considerable number of users.

Among the smaller and poorer libraries, often the fact the library offer WiFi internet signal compensates for the bad conditions of the building with a less visual and attractive environment. This is the case of Epitaciolândia, a small town in the State of Acre located on the border with Bolivia, used as dormitory town to several Brazilians studying in the neighboring country. The building has some infiltration, the furniture is very simple and the library collection is small and needs update. However, there WiFi Internet signal and the telecenter are responsible for attracting many users, mostly college students, but also teenagers checking updates on social networks.

4.3.3. Library Management

Collection management occurs in different ways varying according to size and level, as well as library technology integration. Greater libraries use software solution for bibliographic catalog management: Alexandria, Sophia, Pergamum, and Bib Livre. Those libraries using proprietary software solutions (Alexandria, Pergamum and Sophia – (São Paulo, Piracicaba (SP) and Bahia) make their catalog available on the Internet, but those using Bib Live allows you to search on a digital catalog through libraries' computers only. Collection purchase is planned through an analysis of existing collection turnover and users' feedback, as many libraries have a suggestion box. Most of visited libraries use Facebook¹², twitter¹³ and blogs for promoting activities schedule and new items in the collection and for keeping connected to users. At some states, municipal libraries send reports to Regional Library System Coordination. Indicators used by libraries usually revolve around the number of loans by time period, number of PC users and number of school visits.

A broader analysis of the technology use in libraries management and the opportunities to have a greater integration of technology in this area are explored in section 4.5 of this document.

¹² Social network

¹³ Micro blogging

4.3.4 Collection

Brazilian libraries' collection is mainly composed by Literature books. The task of providing information to people is accomplished specially through journals. We could not find libraries developing systematic processes to identify specific needs of information for local development. Some coordinators representing government have stated that this task is performed informally. Experiencing and interacting with users, libraries teams can know their needs and then plan activities and purchase a collection corresponding to local demands. Libraries have not shown a proactive behavior to encourage the use of information in specific issues that could result in a better life quality for local population (health, housing, revenue generation, children education, sexuality, cooperative work or protagonism...)

The ways of acquiring collections are quite varied among the libraries that were visited. In Guarulhos (SP), the acquisition of collection for the Municipal System of Libraries is done through partnerships or Public Notice informed by the SNBP, but also through donations from USP¹⁴, donations from the state system of Libraries of the State of Sao Paulo and donations from the local population. The coordinator reported that the system receives very good donations from all these sources, and books that are not used and are sent for donation in boxes of books in health centers, supermarkets and other exchange centers.

For the libraries affiliated to the Guarulhos (SP) network, the updating of collections is a challenge. Library coordinators report that collections are not being used and journal subscriptions have been discontinued (BM Adamastor). The lack of new books resulted in the library losing users to libraries of Sao Paulo, the capital, which possess more updated collections which offer books like Harry Potter, Twilight and other modern best-sellers.

The Sao Paulo city system works autonomously, without the use of federal funds. The entire composition of collections, infrastructure and payment of staff comes from the municipality.

The state system of public libraries in Acre does not often take advantage of partnerships with the SNBP and uses local resources for the composition of collections. Among the users that were interviewed in the areas of reading and studying, especially those that were in the library to study, many complained of how limited and outdated were the collections of reference and textbooks.

Partnerships with the SNBP and the utilization of federal programs for the support of libraries are more frequent among staff with one or more librarians.

¹⁴ Universidade de São Paulo

4.4 ACCESS TO TECHNOLOGY FOR USERS

During a visit to Manguinhos Public Library in Rio de Janeiro city, in August 2012, was observed for the first time something that would be verified frequently at the richer libraries visited during researches – at a lovely, pleasant and broad place, teenagers and children were using computers to play and access social networks, while books collection were standing there, not calling their attention. Several libraries coordinators recognize they are facing the challenge of how to involve these young users, who already are in the library, with activities that develop their reading and writing skills or with activities related to other library goals.

Data collected through Regional Library System coordinators, during the National Public Libraries System Assembly in September 2012, indicate that at most of the states technology usage is associated to free access to Internet, and technology is not integrated to other services offered by Public Libraries.

In general, Brazilian Public Libraries offering access to computers and Internet have equipment provided by Science and Technology Department from local government or by municipal or state public data processing companies. Employees who supervise and facilitate the equipment usage are trained (and sometimes paid) by these government departments. At many cities, the room equipped with PCs is isolated from other library spaces and it is called telecenter. This is what happens in Piracicaba (SP), Porto Alegre – Restinga (RS), Epitaciolândia (AC), Porto Acre (AC) and at other libraries in Bahia state.

We understand the disconnection between library actions and the usage of computers installed, as a result from the sum of different public policies. The Brazilian programs for digital inclusion are managed, on federal level, by Ministry of Communications and Ministry of Planning, such is the case of Telecentros BR program¹⁵. At state and municipal levels, Departments of Science and Technology or Government Administrative Departments coordinate programs, like ACESSA São Paulo¹⁶ and Floresta Digital¹⁷ (AC).

Besides providing equipment kit and connection, these government departments are accountable for offering training to employees that control and promote the use of equipments. Those trainings are technical and aim to power employees for a better control of equipments and help users with almost no knowledge of computing.

¹⁵ <http://www.governoeletronico.gov.br/acoes-e-projetos/inclusao-digital/telecentros-br>

¹⁶ <http://www.acesasp.sp.gov.br/>

¹⁷ <http://www.florestadigital.acre.gov.br/wps/portal/florestadigital/florestadigital/inclusao-digital>

Employees accountable for supervision of PC usage work regardless of library staff; they usually do not know daily library actions to promote reading, local memory, culture, among others.

In Piracicaba (SP), for example, the library offers access to computers and to Internet through *Acessa São Paulo* program, the operators are library's employees or trainees, but they are trained and supervised by the *Acessa São Paulo* program. We could not notice, nor identify during interviews or questionnaires, any evidence that these operators work encouraging reading or information search. The actions developed by library staff neither use the space, nor telecenter's equipment, although the telecenter is already embedded in the heart of the library. There is no integration; children that attend workshops do not research, nor create using technology.

At São Paulo State Library, equipment is integrated into the library space and there is a trained team to host users within the concept of "library park", and even so computers are used with no association to library program. The staff offers several activities for children and teenagers, like drawing workshop and craftwork, rebuilding characters and other activities related to Literature. Like this, guidance on how to use computers is restricted to proposing some educational games, with no linkage to the books studied. As well as at other visited libraries there are no workshops for authoring or creating through digital technologies.

As for São Paulo City Hall Library System, among the 57 libraries subordinated to Libraries Office, 29 have telecenters installed by other municipal department. City Hall system coordinator said that these telecenters actions are not coordinated by libraries, and are not related to Libraries Office, they operate independently and include among their activities some basic computing workshops.

The possibility to access via Internet the São Paulo city collection catalog is a factor that, according to system coordinators, extended the number of loans and collection flow in general.

Also, in Acre, computers and access to Internet are provided by State Department separately. Training and support of those employees who operate equipment are responsibility of Department of Technology or Government Administration and do not contribute to technology integration in public libraries' actions.

Bahia State Library has a telecenter in a room located in the Library building, but with an external entrance operating with an employee paid by the library, but trained and supervised by the department in charge of the telecenter. In the area of loan to the readers, it's not allowed transiting among bookshelves, not even using computers assigned to search on collection. Five PCs are located behind the balcony and can be accessed only by library staff. User can search at home or at another point with access to Internet the desired book in the scanned catalog available online, but when at the library loan area, the user needs to ask an employee to search for the book on a computer or walk to the telecenter (located on the opposite side of the building) and require access to a computer and search on the catalog available online.

In Porto Alegre, the Library Josué Guimarães has chosen to deploy in the branch library, located at Restinga neighborhood, the received telecenter. This telecenter works on an independent way from the library. The library manager has reported that the telecenter is not opened for free-use; equipments are totally assigned to workshops arranged by municipal government technology company, while the library is known for its actions aimed at encouraging reading among children and teenagers.

At Acre State Library, when moving toward technology usage spaces and watching machines screens in use, the researcher noticed that little over half of users was connected to social networks, all other were using it in different ways, ranging from searches on content website to activities such text editing, and a small group of young users were connected to gaming websites.

A final conversation took place on the end of the interviews with library coordinators and government representatives when the possibilities of technology integration to current activities in the library was discussed. Among others, the researcher introduced the possibility that children and others taking part into workshops for reading promotion would use computers to represent characters from the books, create comics, animations, collaborative texts, record audio, develop works with images, etc. Library coordinators and government representatives appreciated the possibility, but they highlighted the need of their staffs receiving specific training to such technology usages.

This specific professional development is a great challenge for Brazilian libraries to make the leap to digital age. This problem happens because government department that is currently accountable for telecenters assistants training is not aware of the possibilities to use information and communication technology to develop cultural activities on the library. Such government departments have limited knowledge related to the several public library missions. Also among library environment leaders in Brazil There is still limited awareness of the possibilities to integrate ICT in Public libraries activities

Considering that the use of computers and Wi-Fi in public libraries usually is not related to library services and schedule, we have conducted questionnaires to better understand users' habits. Visited libraries have clearly shown two users' profile. One of them goes to library to use computers and access Internet; the other visits library to lend books, search locally or use the reading area for studying with their own material. While testing research instruments, we could note that both groups have different habits; like this, we have chosen to create three categories for making easier an analysis of research data, including:

- 1 – users approached at computers usage area.

2 – users approached at the reading area,

3 – users approached when in transit,

4.4.1 Users approached at computers area

Among the 15 interviewed users approached at PC usage area, while using or waiting to use computers, all said they used technology every time they went to the library (they go there with this goal); only four said they check out books always or almost every time they visit the library. Among the 15 users from this group, only one stated that uses the library reading area for searching locally or studying; two usually attend to journals section and one uses the services at the section of children's books in a way that their children can stay there while they use the PC and access the Internet. Most of those who are part of this group (7) are less than 19 years old and haven't completed secondary school (10).

10 out of the 15 users approached at PC area have stated that they come to the library for using technology because that was the nearest place where they could access computers or Internet. 11 out of 15 users highlighted the free Internet and "safety and comfort" as being very important factors for choosing that place. This group uses Internet as the main way for information access, being TV, friends, parents and newspapers the information sources used most frequently in descending order.

When asked if they look for information in the library, 11 out of the 15 respondents of the group answered they did. Among the 11, all of them use Internet, four use newspapers and magazines, and three use books as information source.

Half of this users group do not have a PC or tablet, nor Smartphone. Among the seven users with digital devices, five have desktops, five have laptops, and four have smart phones. Among the seven with their own devices, five access broadband Internet from home, one uses 3G connection, and four use public places to access wifi.

When asked what is the main reason for them to go to public access venues, the majority of users from this group (8) stated they had no other place to access internet, followed by 5 that answered they didn't have where to access computers.

For this group, when computer is used, it is to browse the web, see their friends' pictures, connect to social networks, chats and watch videos (descending frequency). Most common reasons which motivate this users group to use PCs (both in the library and out there) are maintaining communication between friends and parents and developing leisure activity and hobbies. Data matches the results of Global Impact

Study (2013) results driven in 2010 in Brazil among users of public places with access to ICT.

4.4.2 Users approached at the reading area

Thirteen users were interviewed at the reading area while studying with their own material, using library collection, or using their own laptop. Eleven users of this group stated that the most used service in the library were the wifi and the studying/reading area. This group's answer about the use of books loan is amazing - only two out of 13 users answered that when they go to the library, they often loan a book, one user does it sometimes and 9 never check out books.

Nine users, approached at the reading area, use the library technology and four do not. The reason why they chose the library to access technology on the day of the interview was, for 8 of them, the fact that this place is safe and comfortable, 7 stated that it was important that this was a free service and 6 said it was near home or nearby the place they were when decided to access Internet.

As for information search in general, the users approached on this area usually look for information on the Internet, with TV rated in second place. Among the 13 users in this group, 11 said they search for information in the library, eight of them via Internet, six in books and only one in newspapers and magazines.

All users from this group have computers, 11 of them have laptops, nine have smart phones, five have desktops, and two have tablets. Among these, 10 have broadband Internet at their homes, four use 3G connection and 10 usually go to public places with wifi (libraries, telecenters, cyber coffee or lanhouses).

When using PCs (anywhere) these users usually browse the web, connect to social networks, send email and write or edit texts (descending order by frequency). Most common reasons which motivate these users to use PCs (both in the library and out there) are taking actions related to education (everybody), maintaining communication between friends and parents (11) and developing required skills to get a job and develop professionally (10). It is essential to note how environment and Wi-Fi are, for this group, much more important than the collection offered by the library.

Most of those who are part of this group (9) are between 20 and 34 years old. Five users in the group have already graduated and other 7 completed high school, with only one of 13 in this users' group having completed only middle school.

4.4.3 Users approached transiting though the library

Eleven users were interviewed while transiting through the library. For this group, the most used service in the library is book loans, followed by PC and Internet access and by library team guidance asking. Among them, seven use technology at the library and e four do not.

For these seven users, the reasons for choosing to use technology on interview day were: proper opening hours, near home or nearby where they were at the moment they needed or wanted to use technology and because the place is safe and comfort.

As for information search in general, the users search mainly on TV and Internet, followed by books and newspapers. Inside the public library, these users search for information mostly on the Internet or in books (8) followed by magazines, documents, encyclopedias and newspapers.

Nine among eleven users of this group have computers, with six having laptops, five having desktops, four having smart phones and two having tablets. Among these 11 users, only two have broadband Internet at their homes, three use 3G connection and four usually go to public places with Wi-Fi (libraries, telecenters or cybercafés).

When this group uses computers (anywhere) they usually develop activities related to education, develop skills for getting jobs or develop professionally, followed by develop leisure activities or hobbies.

This users' group includes different ages, with six users being between 25 and 49 years old and four being younger than 25 years old. Two of them have already graduated and other 6 completed high school.

4.5 TECHNOLOGY USE IN LIBRARY MANAGEMENT

The use of technology in the management of public libraries was one of the focuses in the interviews with local system coordinators, as well as in the interviews with library managers. The computerization of the collection catalog of libraries and the use of social networks and blogs to publicize their agenda were identified as the most frequent and most significant “uses of technology” in the researched public libraries. Few libraries in Brazil have the privilege of publishing the computerized catalog on the internet, and making it possible for users to consult a book’s availability from their homes or any other internet access point. Among the libraries that integrate this study’ sample, only the libraries from Sao Paulo city system, the Guarulhos System, the Piracicaba Library and the Bahia State Library offer this service. Apart from these, the Manguinhos Library, visited in the initial phase of the research, also offers this service. The computerization of the library collection is seen by library managers

and library coordinators as a fundamental factor to intensify the circulation of collections. The State of Acre Library, Floresta Library (Rio Branco, AC), and the municipal libraries of Porto Alegre (RS) and Tramandai (RS) have computerized collections, but they aren't available online. These four libraries use the Biblivre software, which is free and recommended by the SNBP. Among small libraries, it is still common to have either the catalog record in cards or the absence of a catalog of the collection. In three small libraries, located in small cities, it was observed that the loan records are handwritten in notebooks, since there is no card system. Another small library uses Excel spreadsheets to control and record collections.

Among the libraries and systems that have computerized catalogs available online, all of them use proprietary software for such service. The types of used software are: Alexandria, Sophia and Pergamum.

The process of computerizing the catalog, at the beginning of the use of software for collection management and library services, represents a challenge for libraries because it takes up a lot of time from the available workers. The library system of the city of Sao Paulo promoted a public notice to hire a company for this task. Another challenge mentioned by coordinators of the system from São Paulo (capital) is how slow the internet signal is in libraries and how it hinders the tasks of employees to access collections and make records of loans and returns.

The use of the internet to advertise the library program or new collection acquisitions was observed in almost all the libraries that were visited, except for a few small libraries in rural areas with little access to technology (less than 10% of the sample). This disclosure is made by library employees that feed blogs and social networks like Facebook and Twitter.

Most libraries visited, including some of the big libraries, do not have autonomy to create and manage their own web site. Often, Culture Departments from local governments directly manage the websites that advertise these libraries. These departments manage the disclosure of library information through websites and other vehicles used by local governments, but wind up limiting the autonomy of library staff for the interaction with the communities served. Some exceptions are made for the Sao Paulo State Library, Piracicaba Library (SP) and Floresta Library in Rio Branco (AC), which all possess their own websites.

From the interviews and visits, followed by analyses of library social networks, it was found that there is a limited use of social networks for joint networks or debates on information found to be interesting by the local community. The analysis of library pages on Facebook shows few comments on the library's original posts, indicating the use of this resource as an informative vehicle without exploring its potential to facilitate interaction and participation from the local community.

The use of technology among professionals that work with library coordination or local public library systems is less frequent or happen with less intensity if compared to professionals from other areas of knowledge in Brazil. The interviews with state system coordinators and representatives from the SNBP reveal that the communication between the SNBP and the state coordination and between these and local libraries could be optimized if it was made a bigger and better use of information and communication technology. This communication has been improving but is still a challenge due to the lack of connection equipment, but mainly for the lack of habit of the use of technology by professionals involved.

In 2012, the SNBP began using an interactive environment on the internet to strengthen the communication among coordinators from state systems and from the SNBP. Before, the communication was limited to telephone calls and e-mails. The speed and frequency of e-mail replies was a problem both between the SNBP and some local systems as well as between local systems and libraries.

The observation of the National Meeting of the Public Library System is another source that allows us to see how the use of technology among leaders on the libraries environment is not something as frequent and intense as with professionals in other areas. In one-week event, few participants (less than 10%) had laptops or tablets with them. The auditorium did not have Wi-Fi and it did not seem to be a concern for most participants. This would be very different in conferences of professionals from other areas in Brazil in 2012, in which it is common to see participants verify the communication with their bases during breaks, or even using digital devices during presentations to make records (written or multimedia) or access extra information about the topic in question.

The Public Library of the State of Bahia has many librarians, at least one for each department or room, with the exception of the *Biblioteca Viva* department, which is responsible for the cultural animation of the library and hosting events, where cultural producers, historians, journalists and communication professional all work together. It is in this section that the most intense use of technology takes place. The remaining departments display several other opportunities to intensify the use of technology.

The activity of cutting newspapers to organize news in folders is an example where the librarian could use technology to optimize his time and improve the service of providing information to the population. The librarian responsible for such service, in the department of newspapers of the Bahia State Library, uses scissors to cut articles from printed newspapers, glues them to fix the articles to white sheets of paper, then files the papers in folders that are stored in drawers with hanging folders.

The loaning section of the Bahia State Library could also benefit from providing the public with computers to browse the collection. In this library, the circulation of users between shelves of the collection is not permitted, which increases the users' needs to access the computerized library collection. At the time of the visit, the section had five computers located behind the loaning counters, all with restricted availability to employees of the department.

4.6 PARTNERSHIPS

The development of partnerships with organizations external to the libraries is seen as an opportunity to strengthen the actions of libraries. In this sense, the interviews seek to identify whether the services offered counted with the participation of partners.

The most common partnerships among the visited public libraries were with other departments from the government. All the libraries that provide access to computers and internet were partners with the department of science and technology or another department of technology from the local government as technicians responsible for the equipment and several other times responsible for the training of the attendants that mediate the use of computers in libraries. In some cases, these departments that are external to the libraries and culture departments are responsible for paying the technicians that work with the mediation of the use of technology.

In the past decade, the Ministry of Communication and the Ministry of Culture established several partnerships in order to equip public libraries with telecenters. These partnerships intended to meet the needs of public library updates to the Brazilian public policies of digital inclusion that distributed computer, furniture and internet connection kits to several types of public or private organizations, always with the objective of providing free, public access to information and communication technologies.

Regarding digital inclusion policies developed by ministries, state or municipality departments outside the culture area, public libraries are seen as receivers of internet public access points. When these policies offer training for staff members that mediate the use of computers, they offer training that is disconnected to the missions of the public library. Consequently, telecenters installed in public libraries, due to partnerships with government departments in the technology or communication area, work as access islands inside the libraries without contributing to the remaining services offered by the library staff.

Aside from the public policy of access being born and getting to the user in a manner that is disconnected from the policy and strategies of public libraries, the partnership between the Ministry of Communications and Ministry of Culture faced several setbacks in the delivery of equipment, furniture and connection, which resulted in a limited number of public libraries that were benefited by this partnership. According to information provided by most coordinators from the visited libraries, the computers installed there came from state or municipal resources.

Partnerships between the libraries and departments of education are also common and contribute to take children to libraries where they have activities that are cultural and foster reading. The city system of public libraries of Guarulhos (SP) has some libraries and reading centers that receive resources also from the department of education.

Some coordinators of state systems have functions in the state board that are responsible for the local execution of programs that promote reading, which do not directly involve libraries, but are relevant to populations that are less favored or residing in areas that are far from urban centers.

Local departments of culture establish partnerships with the Ministry of Culture for the development of programs that promote reading that go beyond libraries. These programs are described in “*4.7 Activities that Promote Reading*”.

State departments of culture also establish partnerships with other ministries, as informed by the representative of the government of the state of Acre. She highlighted the importance of the “Ark of Letters”, a program of the Ministry of Agrarian Development which makes possible the use of arks, or little mobile shelves with a capacity for 200 books in rural areas for the use of families of farmers, agrarian reform settlers, fishermen, maroons, natives and riverside populations.

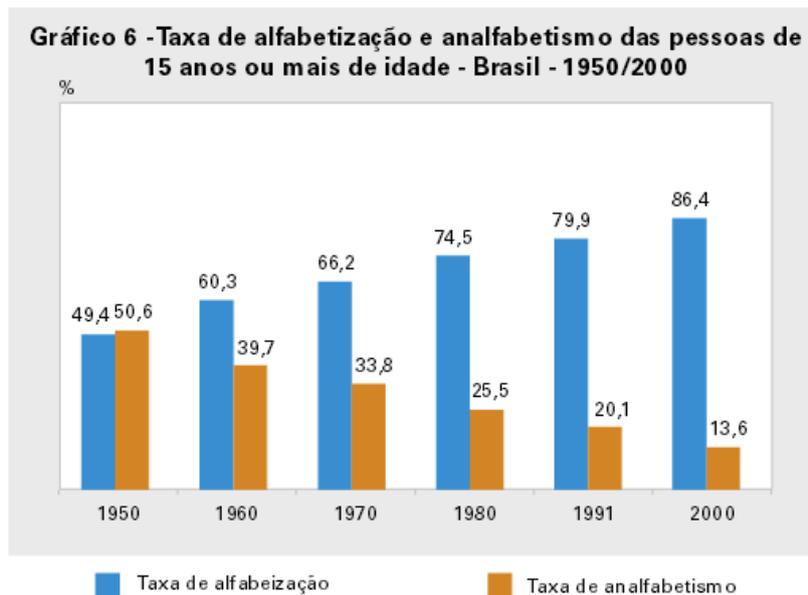
Partnerships between libraries and organizations that are not related to the government are less frequent. The Monteiro Lobato Youth Library of Sao Paulo works with intense communication with a local organization network. The offices and courses are advertised through this network. The Guarulhos library network makes a good use of partnerships for the acquisition of collection. They receive donations from universities, the local community and seek public notices from the federal government.

Library *Da Floresta* in Rio Branco (AC), which is a reference for culture and information about people of the forest, disseminator and guardian of local culture and knowledge, has a partnership with several study groups that use installations from the library to discuss topics related to several areas like philosophy, history, cinema, photography, and graffiti, among others. They also have partnerships with schools that bring children for theater presentations.

4.7 ACTIVITIES THAT PROMOTE READING

The analysis of the data collected in this research understands the promotion of reading as the main mission of the Brazilian public library; public programs and national policies are built around it. These programs contribute to the formation and improvement of collections and, allied to the initiatives planned and developed by local staff, contribute to the activation of the collection through dramatized reading, story-telling followed by debates and art workshops with reconstructions of characters and facts, plays performed by the library staff or external groups, still counting with a theater office in some libraries. Meetings with writers, book fairs and expositions also integrate the set of actions promoted by libraries with the objective of stimulating reading among children and young kids.

The priority given to this area can be justified by the history of low literacy rates in the country. The following graph illustrates literacy rates of the population of ages 15 and above between the years of 1950 and 2000 (MINISTRY OF PLANNING, 2004). The growth in literacy rates has been steady, starting from 49% in 1950 to 86% in 2000.



MINISTRY OF PLANNING –IBGE, 2004 p.33

Taking into consideration that reading and the use of information are important skills for socioeconomic development; indicators were sought for the analysis of

literacy rates of the Brazilian population. Since 2001 the Paulo Montenegro Institute points to the National Indicator of Functional Literacy, the INAF Brasil¹⁸. The results in the past 10 years show improvements in the population's literacy rate, but these improvements aren't happening as quickly as wished. The Brazilian population showed progress in the transition of absolute illiteracy or rudimentary literacy to a basic level of skill in reading and mathematics. On the other hand, during the 10 years monitored, little more than ¼ of the population hit a full level of abilities, or the level expected in order to complete elementary school.

The table below, extracted from the INAF¹⁹ website, illustrates the evolution of literacy levels (illiterate, rudimentary level, basic and full) and also a synthetic classification that compares functional illiteracy (absolute illiterate and rudimentary literacy) and functional literacy (basic level and full array of skills)

Tabela I Evolução do Indicador de Alfabetismo Funcional População de 15 a 64 anos (em %)							
	2001-2002	2002-2003	2003-2004	2004-2005	2007	2009	2011-2012
Analfabeto	12	13	12	11	9	7	6
Rudimentar	27	26	26	26	25	21	21
Básico	34	36	37	38	38	47	47
Pleno	26	25	25	26	28	25	26
Analfabetos funcionais (Analfabeto e Rudimentar)	39	39	38	37	34	27	27
Alfabetizados funcionalmente (Básico e Pleno)	61	61	62	63	66	73	73

INAF's concepts are based on UNESCO's vision which suggested the adoption of literacy and functional literacy concepts. A person is considered to be functionally literate if this person is capable of using reading and writing skills as well as mathematical skills to deal with demands in his/her social context and using them to continue learning and developing all throughout his/her life. According to INAF, functional literacy levels are the following:

- **Illiterate** – Corresponds to the condition of those who cannot perform simple tasks that involve reading words and sentences even though some can read familiar numbers (telephone numbers, prices, etc.);
- **Rudimentary** – Corresponds to the capacity of locating explicit information in short and familiar texts (like an advertisement or short letter), reading and writing usual numbers and realizing simple tasks, like handling money for the payment of small sums or measuring length using metric tape;

¹⁸ http://www.ipm.org.br/ipmb_pagina.php?mpg=4.02.00.00.00&ver=por

¹⁹ http://www.ipm.org.br/ipmb_pagina.php?mpg=4.02.01.00.00&ver=por

- **Basic** – People classified in this level can be considered to be functionally literate, for they read and comprehend texts of middle length, locate information even if doing so requires small inferences, read numbers in the millions, solve problems involving a simple sequence of operations and have a grasp of proportionality. They do, however, show limitation when the required operations involve a larger number of elements, stages, or relations; and
- **Full** – People classified in this level are those whose abilities do not set restrictions when it comes to comprehending and interpreting texts in normal situations. They read longer texts, analyzing and relating its parts, comparing and evaluating information, distinguish fact from opinion, make inferences and syntheses. Regarding math, they solve problems that require bigger planning and control, involving percentages, proportions and calculations of area, besides interpreting double entry tables, maps and graphs.

The development of reading capacity is seen as important not only for its educational role, but also for its cultural function. The *Coordination of Libraries of São Paulo* understands that the cultural programming of the library seeks to improve human relations through reading.

Important changes happened in the 90's regarding the scenario of Brazilian public libraries. The school survey, the main reason for visiting libraries at the time, was reduced by the distribution of books (Ministry of Education), strengthening School Libraries and the use Internet, which has been increasingly penetrating the lives of Brazilian people. The public library was challenged to reinvent itself. New proposals point to the transformation of libraries into a pleasant place for reading where users of various ages feel welcome and can use it for leisure, studying or working as well as participating in cultural programs that incentivize the taste for reading (MONTEIRO, 2013).

Developing the ability to read is a fundamental step to guarantee the access to information and knowledge, art and leisure as elements to improve life quality. Maria Zenita Monteiro²⁰, coordinator of the municipal library system of Sao Paulo states that in this sense there is no opposition between information and reading, for literature triggers new ways of thinking and reinventing one's existence. Literary reading is fundamental to make people stop to criticize and rethink one's means and processes, and as such is very important to trigger actions of citizenship and entrepreneurship. By discovering new worlds, characters, societies and life situations, the reader thinks of new possibilities for his/her existence.

“it is increasingly clear that one can't think of a Society of Information without a Reading Society and that reading is precisely the cultural practice that allows citizens to transform information into knowledge, the key to this new society.”²¹

HERNANDES, 2005 apud MONTEIRO, 2013

²⁰ Maria Zenita Monteiro is a librarian, with a degree in Social Sciences from the *Pontifícia Universidade Católica de São Paulo* – PUC-SP and specialized in Cultural Action at ECA-USP. She entered the municipal secretary of culture – SMC in 1977 and, since 2005, coordinates the Municipal Library System of Sao Paulo

²¹ HERNÁNDEZ, Hilário. La lectura y información en las bibliotecas públicas. Fundación Germán Sánchez Ruipérez. Lecture given at the international conference commemorating the bicentennial of Evora Public Library, oct.. 2005.

The Ministry of Culture develops programs that stimulate reading which go beyond public libraries. The National Program of Incentive of Reading (PROLER)²² is a project of social valuing of reading and writing, linked to the National Library Foundation and the Ministry of Culture. Through its committees, organized in Brazilian cities, it has been establishing itself as an active political presence, committed to the democratization of access to reading.

The National Plan of the Book and Reading (PNLL)²³ defines the public policy guidelines directed towards reading and books in Brazil, and seeks to form a reading society, as a condition to promote the social inclusion of millions of Brazilians regarding goods, services, and culture. The PNLL consists of projects and programs that integrate 18 Action Lines grouped into four areas with the objective of guiding policies, programs, projects and continued actions developed by the ministries of culture and education, within the states and municipalities, state and municipal governments, public and private companies, society organizations and volunteers in general:

²² <http://www.bn.br/proler/>

²³ <http://www.pnll.gov.br/conteudo/c00005/Introducao.aspx>

1. Equity on Access
 - 1.1. Implementation of new libraries
 - 1.2. Strength existing library network
 - 1.3. Achieve new reading spaces
 - 1.4. Distribution of free books
 - 1.5. Improve the Access to books and other means of reading
 - 1.6. Embrace the use of ICT
2. Foster reading and the development of facilitators
 - 2.1. Capacitate reading facilitators
 - 2.2. Social projects for reading
 - 2.3. Foster research on reading and book knowledge area
 - 2.4. Information Systems on libraries bibliography and editorial market
 - 2.5. Prizes and awards for the actions that support and foster social practices for reading
3. Increase the institutional and symbolic value of reading
 - 3.1. Actions to convert foster reading practices into a public policy.
 - 3.2. Actions to build awareness on the social value of the book and the reading process.
 - 3.3. Printed publish and other medias dedicated to value the book and the reading process
4. The Development of a Book Economy
 - 4.1. Development of the book productive chain
 - 4.2. Foster the distribution, circulation and consume of goods related to written culture.
 - 4.3. Support to the creative chain of the book.
 - 4.4. Increase presence abroad for national production related to literature, science and edited culture.

Among the actions taken by the federal government to support public libraries, the ones that stand out are programs that distribute kits to expand and update collections; actions for the acquisition of low cost books and programs for the modernization of libraries (collections, computers and furniture).

As part of the initiative to eliminate the existence of municipalities without libraries, the Ministry of Culture restricted any investment from this ministry in municipalities that don't possess at least one public library. State Governments support free training for library staff in municipalities, as well as projects that enable specific actions such as the visit of authors to libraries. In some cases, the state government operates libraries from municipalities that are unable to sustain them with autonomy.

The vast majority of services offered in libraries are planned, and implemented by staff from libraries. At the Piracicaba (SP) Library, for example, when the collections and exhibitions are presented to children, the children's section offers monitored visits by groups of students from schools, which also go to the theater, go through story time or watch a play. At the Piracicaba library, school visits take place every day during morning and afternoon shifts, sometimes two or three classes visiting the library at once.

The Thales de Azevedo Public Library, Salvador (BA) develops literary workshops to encourage reading, through storytelling followed by an activity where the child must interpret the story heard and creates a painting (paints the characters from the story) or makes the character with clay, or uses finger puppets. There are monthly or seasonal themes like the Native Indian, the discovery of Brazil and others which vary according to the calendar. This example of the Thales de Azevedo Library characterizes the set of activities found most frequently in the libraries visited.

At the Monteiro Lobato Children and Youth Library, in Salvador, theater workshops are the highlight of the activities that promote reading. The library has two employees trained in acting. One works with children and the other with teenagers. They coordinate theater courses certified by the library. In this library the workshop that is most popular among teenagers is the graffiti workshop, or graffiti training; the office works on the critical view of the participants and involves a whole process of reading books and knowing art in order that these young kids understand certain painters and why you shouldn't make graffiti without authorization. There are also other activities, like poetry reciting and Puppet Theater. In the Floresta Library, located in Rio Branco (AC), reading is promoted through activities that host meetings of study groups and practices in several areas like philosophy, history, cinema, photography, graffiti, among others.

Other evidence of activities that promote reading is described in section 4.2.1 of this document.

4.8 ACTIONS TO IDENTIFY AND SUPPLEMENT USERS' INFORMATION NEEDS

Practically nonexistent is the offer of services that encourage the population to access information about topics related to improving quality of life. The data collected during the workshop conducted with coordinators of state systems, in September of 2012, show only one statement in this regard: informing about civil service examination opportunities (related to job search).

Some libraries have "suggestion boxes" to receive indications for the acquisition of collections. In the city of Sao Paulo, the bus library tends to be demanded informative books (nonfiction) and textbooks.

The coordinator of the Itaparica Library, who feels the need to organize information about the local community, would like to have an information desk in the library. In 2001, a local guide publication was organized, which needed to be updated. The library coordinator would like to reissue a printed guide; she did not mention the

use of technology to publish information online. In none of the visited libraries was there evidence of a systematic process to identify and meet users' information needs.

4.9 THE VISION OF LIBRARY COORDINATORS

According to the coordinators of the libraries that were visited, the service that was most sought by users is book loaning, followed by the use of the internet, whether it is with library computers or the use of wi-fi through laptops and tablets belonging to the users themselves.

When asked about how they would prioritize a hypothetical investment in the library, most pointed to actions related to improving the building and physical facilities in the library. Improving collections (printed) was in second place, tied with investing on the computerization of the catalog.

The interview with library managers also asked, in the case of a fictitious situation where they had unrestricted technology, how managers would use technology to improve, or expand existing activities today. The answers were quite diverse, three people responded pointing out to educational actions (classroom or distance workshops), three others gave priority to culture with actions such as the construction of a Studio or the acquisition of laptops to support the theater group, or making slides to illustrate story telling.

Also in a fictitious context of unlimited technology availability we questioned the managers how they would use technology to promote library innovations. Most of the respondents revealed that they consider technology to be important to attract the young and adult crowds to update the library, but don't know the best ways to use technology to promote innovations or new library services. The answers regarding new services pointed to the exhibitions with slide projection; video room, meetings with writers through video conferences, use of ICT in cultural actions and use of technology to extend the accessibility of users.

5. OPPORTUNITIES FOR TECHNOLOGY INTEGRATION

5.1 STAFF PROFESSIONAL DEVELOPMENT FOR TECHNOLOGY INTEGRATION IN THE EXISTING ACTIVITIES

The results from the research show that the use of ICT for free access in libraries is unrelated to many actions that promote the missions of the public library. Several libraries are quite active in offering workshops to promote reading through cultural activities. However these actions happen without the use of computers and internet. Library staff members who plan and conduct these cultural workshops do not know the potential of information and communication technologies to enrich or expand their activities. None of the interviewed library coordinators was considering the use of technology by users to strengthen these activities.

The idea of providing professional development for libraries staff members, to support people on the use of technology for authorship and other activities, was always seen as a better possibility than teaching social or cultural themes to technicians from telecenters.

The library coordinators were emphatic in stating the need for a new professional development for librarians and library assistants. This training should include the use of technology in cultural activities and some encouragement and orientation for the use and production of information in digital media. The coordinators explain that today, the people who receive training in technology are only the monitors from telecenters (set of equipment installed in libraries) and these do not work together with the library, they only serve computer users, who do not usually use printed collections nor attend cultural activities offered by the library.

Defining the content and implementing such professional development is a challenge for those involved with Brazilian public libraries. Computers and internet access in libraries are supplied by culture departments and the training of employees that operate equipment is made by the department of technology or the administrative sector of the government. However, the members of the technical area of governments, responsible for the training of monitors for telecenters, do not know the actions that are most relevant to libraries, such as the possible cultural application of technology. The construction of this formation seems to be the greatest challenge for the integration of technology in services that are currently the most relevant in the libraries visited.

5.2 TECHNOLOGY INTEGRATION IN LIBRARY MANAGEMENT

Regarding the management of libraries, the use of ICT is present among large and medium libraries and takes place in the management of collections, and the publicizing of activities of the programming/schedule of libraries through blogs and social networks.

It is common for library management to claim more autonomy to create and maintain the library website. Often library websites are managed by the local government, which restricts the opportunity of using the digital medium for the interaction between the library staff and those who benefit from it.

Among the libraries that do not have a computerized catalog of the collections (in general the small libraries), this process is seen as a priority to increase the relevance of libraries for the local population.

5.3 DIAGNOSING AND MEETING THE USERS' INFORMATION NEEDS

This function is practically dormant in Brazilian public libraries. Although “supplying information to the population” is present in the mission declarations of libraries, it is absent in federal public policy just as much as at the local level of library operating. The state and federal programs for the support of public libraries are intended to supply books and stimulate reading. Initiatives related to technology restrict themselves to supplying equipment and internet connection, and when there is training for employees, it isn't related to the library's mission, only with basic computer skills.

This area needs investment, but there is no motivation to do so. During the study government representatives, library coordinators and library users have never pointed out, or complaint that the library lacks actions to identify and supply information needs for the local population.

6. RECOMMENDATIONS

It is recommended that initial interventions happen aligned with the motivations of those involved with public libraries in the country. It would be of little

use to invest in public equipment, connection and training library staff if the Brazilian Public Library does not wish to take new paths. It is important that the innovation process grows within the library, that it is caused by the presentation of new possibilities, that it awakens motivations and then finds opportunities and paths to take to develop new services. It is necessary that public libraries comprehend the role of technology and establish goals so that a long term policy manages to sustain a qualified use of technology that takes it to a new level of interaction with its public and society in general. The sustainability of a continuous project is necessary for the acquisition of equipment (which quickly depreciates) as well as for the continued training of staff.

During the fieldwork, at the end of interviews with managers of public libraries, conversations took place between the researcher and the interviewees about the integration of technology in cultural activities, which could exemplify interesting opportunities. While a motivation appeared to follow such path, there were also complaints about the need of training library staff, need for better internet connection and sometimes the need for better equipment. In these conversations, many managers criticized their staff's professional development both in librarianship schools as well as in short duration courses for the training of library attendants (training often promoted by state or municipal systems).

In one of the libraries visited, when addressing the issue of a shared policy for digital inclusion, and access to technology being isolated from library programs, the researcher traced the hypothesis that certain groups such as that of ladies that request knitting and cooking workshops (existing group in such library) would not start using technology to research and publish on these themes with motivation if there wasn't a leadership and support from library staff in this sense. Then the interviewed users (members of the library coordination) understood, appreciated and expressed the understanding of an evolution that could happen:

The library attracts people to workshops, then promotes reading about the topic, and then these people could consult about such topic on the internet and then discuss about it in a social network group (public or closed) and still construct more relevant content for local users, exerting authorship on the internet.

- ✓ *But how to introduce this new concept of using technology in libraries?*
- ✓ *Would a professional development session arouse the interest of library staff?*
- ✓ *How to communicate these new possibilities and how to define this professional development?*

- ✓ *How will these new actions be monitored?*
- ✓ *Which indicators of the use of technology should be used?*

Faced with these issues, the recommendation of this research differs from training and the suggestion of specific indicators, and proposes stimulating the commitment to a plan to integrate technology. Instead of recommending courses and indicators, it proposes steps for a **technology integration plan**.

It is suggested here that resources should be invested in a guidance service for libraries for the integration of technology which would work at the same time as the accreditation of these libraries for the continuity and expansion in the transfer of government resources. Although in a very generic way, here are some steps for an integration plan. The objective of this outline is to facilitate the comprehension of the proposed process. It is not intended here to propose the specified definition of each step, for it is believed that the involvement of national subjects is necessary for the construction of the stages of this integration plan.

It is proposed that libraries are motivated to engage in a technology integration plan. This proposal would occur in a pilot project with some Brazilian libraries that would receive orientation, but also some financial support to take care of complementary actions demanded to go through the stages of the plan. It is suggested that a team leads the project on a national level and establishes definitions and acts on the orientation and animation of the participating libraries through the following steps.

6.1 A TECHNOLOGY INTEGRATION PLAN

1. **GOAL SETTING** for the use of technology, for example: attracting more public, serving the public better, developing new services that include missions or functions that were not included by the library (or were included in a limited way). Defining a list to facilitate that libraries choose some among the suggested goals.
2. Using a **LIST of POSSIBLE SERVICES** with the use of technology in public libraries worldwide. This list would be initiated in a pilot project but fed continuously by its users and managed by the SNBP or an organization that would implement a pilot project. A form with a simplified structure would allow the participation of library staff who would feed this list with suggestions that would be evaluated and revised by the SNBP (or the team leading the project) and then incorporate the collection (list) of services with technology for public libraries. In this descriptive structure should appear a suggestion of an indicator of use of these services and means of verification, and if possible, the estimated cost to start and maintain these services. This cost does not need to appear in numbers but can be described

as such: *a professional with training in communication with 30 weekly hours of dedication. Equipment with such characteristics, space with such characteristics.*

3. A WEBPAGE FOR EACH OF THE MOST POPULAR SERVICES among the public libraries involved would communicate the characteristics of the services, examples and links to each group discussion (social network) from the libraries that practice or are interested in practicing this service. This webpage would highlight the indicators used to evaluate the service and communicate the results from participating libraries, not only cases of success (as are most usual) but with previously determined indicators. The webpage would count with the participation of representatives from libraries that develop the service with links available in this page, challenges and achievements related to this service from the public library. Having an animation managed by the project (pilot project team leader) with a priority focus on service indicators, as well as the dissemination of new services. The page would have small videos where public representatives from the protagonist public libraries share how they develop the service in their organizations. Simple videos recorded with a laptop's webcam and edited on Movie Maker (or similar) with photo addition from the service in public libraries. Always highlighting objectives, indicators and results, for technology costs money and budgets need proposals with clear objectives and consistent reports to enable the renewal of resources over the years. Technology needs constant investment not only to maintain the internet, but to renew the equipment and make learning or professional involvement from the teams involved possible.

6.2 PRODUCING LIBRARIES

The pilot would have online spaces with a focus on “How we integrate Technology in our public libraries.” For each service highlighted, under the leadership of the team that leads the pilot project, the protagonist public libraries would receive support to produce materials and content for the initial supply of this network. The support would happen with training in technology but if possible by passing values to the engaged public libraries.

The productions of public libraries on certain services should highlight the goal, indicator and result, but also with the illustration of the process that will captivate and motivate other public libraries and develop such service. In this context, distance training would emerge on demand for those public libraries interested and active in specific services. Some services would be established by the program coordination to launch this process. The researcher's suggestion would be:

1. INTEGRATION OF TECHNOLOGY IN CULTURAL ACTIVITIES conducted with children and young people with the objective of stimulating reading. Use of software for design, animation, comics, building e-books (with templates for children) and websites for representing characters, facts of literature crafted by library staff for story telling or theater plays. Use of the internet also for research about the history in focus, characters and facts and environments.
 - Objective of stimulating reading through technology.

- Developing the skill of using technology.
- Creativity, collaboration, communication, digital citizenship, skills to research about information and critical thinking (NETS²⁴).

Besides the interaction in existing workshops, one new service could happen: free software courses specifically for cultural production (children and adults). These courses would initially be offered by the pilot project then organized in Webinars and mediated or animated by local instructors, or by a distance instructor in another public library which would appear on the screen projected in the environment of the participating public libraries.

2. **COMPUTERIZATION OF THE LIBRARY COLLECTION**– a group with an administrative profile would work to share processes, costs and time needs.
 - Minimize the reworking the registration of titles
 - Improve the technical knowledge for the use of software
 - Explore solutions for libraries of various sizes and in different situations, from those without cataloging of the collection; those that use paper notebooks or catalog cards to register book loans; those that use Excel spreadsheets to manage the collections; those that began the computerization process but it happens so slowly and seems endless; and finally those that have an operating computerized catalog system but it runs only inside the library, the catalog is not posted on the internet. The group responsible for this service would make available indicators to inform costs as well as to indicators related to the increase of circulation of collections from computerization, among others.
3. **THE USE OF TECHNOLOGY TO STIMULATE THE ACCESS TO INFORMATION** would be worked on a second moment of the project. Even considering that to foster the use of information and communication for development is the main goal of this project, it is important to note that this is not a relevant function or role among the Brazilian public libraries today (June 2013). In this context it is suggested that the investment meets first the built of fluency in the use of technology, and along with it, the comprehension of possibilities brought by technology as well as the attraction of a new crowd for the new services and then finally build the concept and the services that take more objectively the integration of technology to improve the life quality of the local population.

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ANNEX I

MISSIONS OF THE PUBLIC LIBRARY IFLA-UNESCO 1994 MANIFESTO:

<http://archive.ifla.org/VII/s8/unesco/port.htm>

The following key missions which relate to information, literacy, education and culture should be at the core of public library services:

1. creating and strengthening reading habits in children at an early age;
2. supporting both individual and self conducted education as well as formal education at all levels;
3. providing opportunities for personal creative development;
4. stimulating the imagination and creativity of children and young people;
5. promoting awareness of cultural heritage, appreciation of the arts, scientific achievements and innovations;
6. providing access to cultural expressions of all performing arts;
7. fostering inter-cultural dialogue and favouring cultural diversity;
8. supporting the oral tradition;
9. ensuring access for citizens to all sorts of community information;
10. providing adequate information services to local enterprises, associations and interest groups;
11. facilitating the development of information and computer literacy skills;
12. supporting and participating in literacy activities and programmes for all age groups, and initiating such activities if necessary