In the majority of large Brazilian cities, approximately 20% of the population live in precarious housing conditions. Large clusters of poor communities, particularly in Rio de Janeiro, are called favelas, or urban shantytowns. While each favela is markedly different from others, the basic common denominator among them is that they originate in the invasion of urban lands, and develop without the benefit of infrastructure, services or other logistical support from the state. This phenomenon is expressed at the legal level (neither the established system of property ownership nor construction in these communities follow the legal norms established by public administration), as well as in the precarious state of public and urban services available (limited access to running water, sanitation, electricity, health services, police, justice, telephone and cable lines). Each of these factors is aggravated and dramatized over the last two decades by the occupation of many of these favelas by drug traffickers.

In essence, favelas are concentrations of the poorest residents of large cities, characterized by high numbers of emigrants from rural areas and low levels of formal education. The favela, then, represents an exemplary case of the two-tiered social stratification typical of Brazil: with regard to the market, this stratification is expressed in the unequal distribution of economic resources, and with regard to the state, by the differentiated access to public services.

The challenges

The expansion of the use of computers and the internet in Brazil has been exceptional, considering the social and regional heterogeneity of the country. According to Pyramidresearch, in May of 2001, there were a total of 10.5 million people using computer
users in Brazil. According to the same source, that number is expected to grow to 16 million by the end of 2001, 23.6 million by 2002, and reach 46 million by 2005. This represents nearly one-third of the total number of users in Latin America. In what is known as B2B, Brazil represents more than half the total of business for Latin America.

Internet users are concentrated in big cities (68% of all internet users are located in just three cities—Rio de Janeiro, São Paulo and Curitiba—according to the company Jupiter Media Metrize), and at the same time, the vast majority of these users are associated with higher income groups (A and B). The future growth of the number of internet users will surely mean the inclusion of a growing number from less privileged groups, but the great majority of these will continue at the margins of the internet.

The unequal distribution of and access to computers and computer technology bring us to the classic theme of the “digital divide”. To expand internet communications among the poorest groups of the population, three main challenges must be addressed:

1) material access to computers, including units for publics or private use, and internet services;
2) basic skills training in computers use and internet technology; and,
3) development of content and products or services specifically for these communities.

**NGOs and the diffusion of the internet**

Various NGOs in Brazil, especially in the cities of São Paulo and Rio de Janeiro, have developed programs to democratize access to the internet. The objective of these programs is to make computers available in neighborhoods where the poorest populations are located and offer training courses. In São Paulo the three principal NGOs in this area are: Sampa.org, Telecentros and the Committee for Internet Democratization (Comité para a Democratização da Internet-São Paulo, CDI-SP). CDI also has operations in Rio de Janeiro, and has an agreement with Microsoft to have free access to software.

The specific experience of Viva Rio’s project, centered around the Viva Favela website [www.vivafavela.com.br](http://www.vivafavela.com.br) is to search for an integrated solution to all the problems raised by
the diffusion of the internet among popular groups, from lack of material infrastructure to training and the production of specific content.

**Viva Favela**

Viva Rio took its first steps in the area of improving internet access in poor communities with the creation of computer classrooms (*telesalas*) and computer information and training centers (*club de informática*). As a second step, at the beginning of the year 2000, Viva Rio decided that it would be important to create a site, with information and services oriented towards the *favela* populations.

With the initial support of Globo.com, a portal linked to the powerhouse media conglomerate *Globo*, Viva Favela was created. The decision to use the word *favela* in the title of the project was polemical—the word has negative connotations for the majority of the population, something akin to the use of the word “slum”. This was a conscious decision oriented to a semantic re-valorization of the word. The way in which this decision would prove itself a good one became evident as time went on.

In the first year of Viva Favela, those involved in the project gathered information for the technical and design basis for the site, and began producing information. Initially, the first product that was systematically developed was in the area of journalism, with information on activities in the *favela* and news on job opportunities, entertainment, sports, health and education, as well as pieces on people and events in the *favelas*. The work was based on a team of journalists who support the work of correspondents, amateur journalists and photographers from the *favela* communities themselves. Within the site there is a session called “Northeast Here” (*nordeste aqui*), with information for the population of northeastern origin, generally one of the most poor in the *favelas*, with strong associative tendencies.

In the first semester of 2001, Viva Rio got support from the Interamerican Development Bank and the European Commission for training and advancement programs for small businesses that could be developed in partnership with Viva Favela. More recently, Viva Rio got support from the World Bank to create twelve Future Stations (*estação do futuro*), centers for computer training and use in *favelas*. 
The following are some of the main products and services offered by Viva Favela, conceived as solutions to the three challenges associated with increasing computer and internet use among the poor:

1) Access to computers and to the internet: The first problem associated with access to the internet is the lack of cables in the favelas, whether simple telephone lines or more advanced fiber optic systems. This problem was resolved with the collaboration of a Brazilian representative (Taho) of an Israeli technology company that works with wireless technology. A small antenna installed on computers provides internet access, permitting faster communications than with traditional telephone wires. The technology was made available in favelas, and on the first day, more than 200 people subscribed to the service. The monthly cost for internet access, with an unlimited hourly access, is cheaper than with the majority of servers currently available in the market and does not involve extra costs associated with the installation of telephone wires. Viva Cred, a Viva Rio project, offers credit for the purchase of the antenna. Currently, Viva Rio is also working with a company called Star One, who provide access to wireless technology via satellite.

To expand access to computers, Viva Rio has developed two solutions: centers equipped with computers for common use (telecentros), and the sale of second-hand computers.

Future Stations (Estações do Futuro) are computer centers located in the favelas, with 25 computers in each center, where the visitor pays a nominal fee to use the internet, computers and printers. Courses in a range of computer programs and internet use are offered. Twenty-one centers will be opened by the end of the year. The success of the Future Stations surpassed all expectations: they are consistently full (hours of operation are from 7:00 am to 12:00 pm), for computer use as well as for courses, and are economically self-sustaining. It is also important to point out that the majority of the staff are residents of the favelas.

Information Clubs (Clube de Informática) and Community Libraries (Bibliotecas Comunitárias) operate in community centers or churches. Information Clubs offer courses in computer and internet use; currently there are 53 such centers in operation.
Community Libraries, with the support of public resources, provides computer and internet access in libraries in community centers. There are 500 such centers currently in operation.

Computer centers, however, do not resolve the problem of access to individual computers. To allow poorer populations to buy computers at a reduced price, Viva Rio, with the support of business associations, will receive used computers and send them for repairs and updates to get them in working order (including installing software for internet access and word processing). Functional computers will then be sold to favela residents for a cost of about US$120.00. Those who wish to buy the computers will also have access to credit provided by Viva Cred.

2) Training for technical support and users: In addition to the Future Stations and Information Clubs, Viva Rio has also developed a partnership with Cisco to create Cisco Networking Academies in Rio de Janeiro. These academies will train technical specialists in planning, construction and management of computer networks. Half the participants in the training courses will pay normal cost to receive the course accreditation, and the other half will be selected from among the best students in the courses in the favela computer centers to receive the training free or at drastically reduced costs.

3) Content—new services and products: It is important to remember that in a country like Brazil—that is, a country of extreme inequalities—where the production of sites comes almost exclusively from middle and upper class social sectors, it is natural that the supply of products reflect the world of these social groups. Herein lies the crux of the problem of the digital divide. The development of products and services appropriate for the low income populations is the key to transforming someone who is interconnected into someone who is interactive.

The production of positive journalistic pieces about favelas was a first step in this direction (normally the media covers favelas only in relation to crime or disasters). Viva Favela has come to serve as a reference for journalists from the larger, traditional
news services, including newspaper, web and radio mediums, thus multiplying the positive effect these news stories can have.

A second step was taken with the introduction of business-to-business (B2B) commerce in the favelas. Viva Rio identified that the salespeople in favelas could obtain cheaper prices if they could make purchases in larger blocks.

By associating with one of the main Brazilian B2B portals, Viva Rio created a community of buyers, composed of four sectors: civil construction, clothing, food and health products. A study carried out by Viva Rio showed that the cost of these products would be reduced by about 10-15% by purchasing in larger quantities. Initially, diverse purchase orders will be centralized and consolidated on Viva Favela and sent to the B2B portal. Viva Cred offers credit services to buyers. This service is of exceptional value to favela residents, who because of the small scale of their commercial enterprises and logistical difficulties in delivering goods to the favelas, these populations generally pay higher prices for the same products than the middle class.

As a final point, it is worth noting that the publicity campaign for Viva Favela emphasizes the internet as a meeting point among various sectors of society in which the middle class may “enter” the favela (a place that middle classes are, in general, afraid of and reluctant to go near) and “participate” in community activities. The slogan “the favela community in the internet community” (a comunidade da favela na comunidade da Internet) seeks to articulate the concept of the internet as a social mediator between the middle class and the favelas.

**The impact of Viva Favela on Viva Rio**

One of the unexpected results of introducing internet work in Viva Rio’s extremely diverse portfolio of activities has been the impact of this work on the institution itself. Internet has changed the internal image of the institution, as well as its mode of functioning. Today, nearly all Viva Rio projects use the internet to seek ways to increase the reach of their work. In turn, the internet brings a constantly updated vision of the different activities developed by the institution, activities that had formerly been developed in relative isolation from each
other. One foreseeable consequence of this transformation—if it is replicated by other NGOs in Brazil—is the demand on NGOs to be capable of exploiting the language and possibilities of the internet.

**Returning to the digital divide**

Social sciences main dominant approaches can be divided into two tendencies. One tendency emphasizes the reproduction of the social structures, in particular the mechanisms of domination and recycling of dominant groups that assure the persistence of inequalities in spite of technological and economical changes. Those who adhere to these theories denounce the impact of new information technology in widening the gap between the richest and poorest sectors of society. The second tendency holds that the subject plays an active role in constructing history, and has the power to transform his or her reality through new social movements. These ideas are underrepresented in theory on the digital divide, but implicit in the policies of international organisms and experiences of NGOs that indicate how the new economy can act as a mechanism for social mobility and social equality.

In reality, these two visions of societal change are not mutually exclusive. While dominant groups have shown an enormous capacity to develop policy ideas and technologies that maintain their power over less privileged groups, initiatives such as Viva Favela show that steps can be taken to reduce social inequalities, and that the destiny of technological change is not predetermined. The project reveals that it is even possible to mobilize interests and resources of the dominant social groups to benefit even those groups most affected by the problems of social, economic and technological exclusion.