

## **THE FIRJAN SYSTEM AND THE STATE OF RIO DE JANEIRO TRIPLE HELIX**

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### **ABSTRACT**

The FIRJAN System is an important partner of companies in the state of Rio de Janeiro/Brazil when looking at the search for sustainable economic and production development. The five institutions that make up the System provide solutions and services capable of multiplying productivity and promoting an improved quality of life for employees, workers and their families.

The institutions that work together at the FIRJAN System include: FIRJAN - Federation of Industries of the State of Rio de Janeiro, CIRJ - The Industrial Center of Rio de Janeiro, SESI - Industry Social Services, SENAI – National Industrial Training Service and the Euvaldo Lodi Institute – IEL. The prime objective of these organizations is to guarantee that the industrial segment of the State of Rio de Janeiro occupies a privileged position in the political, social and economic spheres in Brazil.

FIRJAN develops and coordinates specific studies, surveys and projects to orient actions and activities designed to promote the industrial segment in the states and attract new investments to Rio de Janeiro. The thematic Business Councils and sectorial Business Forums were created to discuss trends and create guidelines and action plans to assist and support companies. Today, FIRJAN Business Associations represent companies located all around the state of Rio de Janeiro.

CIRJ associate company members are guaranteed personalized attention and easier access to the services offered by the five institutions that make up the FIRJAN System. This is a fast access gateway for your company, regardless of the size of your operations or the segment in

which you are inserted – every associate is guaranteed access to FIRJAN System products and services.

SENAI-RJ promotes corporate and technological qualification improvements through technical and technology assistance programs as well as professional job training courses and technical job skills training programs on all levels. SENAI maintains a network of Operational Units including regional and national Technology Centers and Mobile Units.

SESI-RJ develops programs and activities for industrial workers and the communities in which they live, actions to improve health, education, sport, recreation and cultural activities. The Institution also plays a role in the development of occupational health, job safety and environmental protection programs and campaigns at the Operational Units in the state.

IEL-RJ promotes actions focused on developing industry in the state through business qualification programs and support provided for research and technological innovation programs. This is the institution that acts as an interface between industry and universities and research entities in the state.

The FIRJAN System develops specific actions to support companies in their innovation efforts. In the last decade, the number of shares held by the various areas of the system has increased considerably, and in 2007, the Department of Innovation and Environment was created, responsible for the actions to support innovation. Featuring the actions, listed in this article, organized by Caravan Technology; Innovation Workshops; Monitoring and Dissemination Policies and Instruments to Stimulate Innovation and Innovation Design Edict.

The Caravan Technology, held in the eight Regional Offices FIRJAN, in conjunction with CIRJ and IEL-RJ, aim to spread regionally for Rio de Janeiro companies the government funding sources available for innovation and examples in fundraising. The event features the testimony of an entrepreneur about his experience in developing an innovation project with universities and obtaining support, beyond the presentation of Edicts and Financing Lines by technical analysts and development agencies such as the Studies and Projects Finance Organization (FINEP), the Carlos Chagas Filho Foundation for Research Support of the State of Rio de

Janeiro (FAPERJ), all directly involved with programs that foster technological innovation in enterprises.

Complementing the action of the Caravan Technology, FIRJAN offers business training to Promote Innovation Technology. The course is conducted in two stages of project design and aims to empower entrepreneurs to stimulate the use of tally sheets for technological innovation by companies of Rio de Janeiro.

The FIRJAN System monitors the key factors that influence corporate technological developments on all levels including federal, state and municipal dimensions and also formulates proposals to improve technology policies and the pertinent legislation governing these issues in order to increase the competitiveness of companies operating in the state.

Mention must be made of the performance of the FIRJAN System Business Council on Technology consisting of representatives from the business, academic and governmental circles known for their high level of expertise.

The FIRJAN System, through actions taken by SENAI-RJ, maintain a well structured network of technology services acknowledged by the market for the experience and qualification of the technical experts responsible for elaborating solutions and for the modern equipment and instruments used by this team.

SENAI-RJ Technology Centers are known for the high-quality of the technological services they provide in two main areas; professional education and technology solutions. The focus of the work done by the Centers is to increase productivity and improve the technological development of industrial segment by offering consultancy services to companies as well as the latest technology information and professional qualification and updating courses and programs.

The FIRJAN System has promoted positive change in the state of Rio de Janeiro Triple Helix to incorporate the results of Innovation edicts increasing participation of companies in the state, guided by its Department of Innovation and Environment, and to carry out projects in partnership with the Technology Centers SENAI-RJ of Rio de Janeiro.

Positive example of this action is the Design Innovation Edict, FIRJAN System pioneering initiative, in partnership with FAPERJ. The institutional partnership arose from the realization on the part of FIRJAN, that there was no specific announcement to support innovative projects with a focus on product design and that this was a major bottleneck for companies in Rio de Janeiro. Joining the efforts, the partners have provided a resource total of R \$ 2.7 million, non-refundable, to support design projects. In 2011, 21 companies have been approved and awarded the support for the development of their projects. The Notice therefore represents a great opportunity for businesses to incorporate the design as a strategy for its competitiveness and sustainability, adding value to industrial products.

The Rio de Janeiro is in the spotlight as a major hub of public and private investment, with estimates of more than \$ 4 million invested per sq km between 2011 and 2013, as calculated from Decision Rio publication of FIRJAN. Even benefiting from a good phase generated by a favorable environment, innovation is the essential ingredient for capture opportunities more permanent. Do not just increase productivity: scale and speed are essential to meet the demand, but not are sufficient.

The FIRJAN System is proactively making changes necessary to meet industries in a new competitive environment. Innovation is on the staff of FIRJAN a function of integrated performance SENAI, SESI, IEL and CIRJ and is perceptible significant developments over the last ten years in the technological innovation field.

This article presents the important role that The FIRJAN System, an important partner of companies State of Rio de Janeiro, has promoted in favor of the stimulus and strengthening Triple Helix of the State.

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