Technological Park for the Entertainment Industry in Brazil: A proposal for Rio de Janeiro

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Abstract

Nowadays, when the competitive environment is base on knowledge and this aspect defines consumption patterns, establish values and symbols that create a lifestyle, we need to keep efforts to develop scientific research and support the existence of a consistent entertainment industry to protect local cultural and the national identity. The proposal of this work is study the creation of a Technological Park for the entertainment /creativity industry, to increment and consolidate this service sector that has intensive work-force, as well as strength national enterprises of the field.

Keywords: entertainment industry, technological parks, cultural industry, creativity industry, technology management.

1. INTRODUCTION

The objective of this work is to propose the installation of a technological park at the metropolitan region of Rio de Janeiro, and call the attention of public and private sectors to its implementation due to the opportunities of employment creation of high technology content and the local disposability based on a vocational sector of the region, which is expressed in economical terms, called the Entertainment Engineering, demanded by the cultural and audiovisual industry of great importance in our country. These industries are the foundation of the technological park, as well as all the spectral of the creativity industry.

The innovation of the proposal is that we would have real entertainment activities such as museums, theaters, thematic units of focused entertainment, support centers of stimulation to the creativity industry, experimental radio-diffusion and television, electronic gaming and virtual reality units, and educative programs. Three synergetic functions are required: prototype and experimentation places for the technological developments of the park, the usage of entertainment for technological education, and financial resources maintenance of research and activities.

2. CONSIDERATIONS ABOUT THE DECISON ENVIRONMENT

Today, information and decision are even more concentrated on fewer hands, as mentioned by De Masi (2002). This tendency is evident when we look at the control of the scientific research and also mass communication media. In the second half of the XIX century, the developed countries left the industrial focus based on mass production of material goods and shifted to a post-industrial focus, based on services, symbols, values, aesthetics, and, specially, the information, that is the raw material of any knowledge.

In this new context, the production of ideas and content, patents, information, arts, science, entertainment, scientific research at universities and technological centers, television, movies, music, newspapers, culture diffusion in general, and all tangible and especially intangible resources that creates new cultures and lifestyle models, determined by the consumption models, are <u>strategic</u> for the economic stability and maintenance of the national identity.

The existence of an expertise in cultural and entertainment production can lead us to manage the values, symbols and desires that are the base of our local culture, and then, manage our adherent consumption structure. Our television industry is expressive and recognized worldwide, as a thoughtful production, consumed internally and externally, with the Brazilian culture background. This is also true in our music production, of uncontestable value, with a wide diversity of rhythms. We have to recognize the competence of creating sophisticated audiovisual musicals, and realize the importance of this competence in the new world context of competition, as well as maintain efforts to keep this significant intangible and economic asset: our creativity industry.

The proposal of the creation of a Technological Park aims to consolidate and expand the Brazilian entertainment/creativity industry, based on our artistic creativity and applicable technologies concerning mass communication and content distribution, not only for the large amount of money involved in the business, but also for its capacity of creating employment of intensive work force, and at last, for our own national affirmation.

3. TECHNOLOGICAL PARKS

The definition of technological parks from IASP (International Association of Science Parks), observed in Gonçalves and De Paula (2003), establish that these ventures are "organizations administered by specialized professionals that has as objective offer the community the promotion of innovation culture and competitiveness of its enterprises and research institutions. To reach this objectives, a park must stimulate e manage the knowledge flow and technology between universities, R&D centers, enterprises and their market, facilitating the creation and consolidation of technology-based enterprises."

A park must not be characterized as a "merely real state venture", because it is necessary to consider the synergy generation among the parts involved, identify local and regional vocations from various aspects, in a way that the economical and technological aspects become feasible. It is important to mention that the critical factors of success are not only the physical area, but also the government support and the integration of private agents and the scientific community. Ventures like this have a long time of maturity, and need a solid and sustainable body.

In this context, we can affirm that the creation of technological parks is an important strategy to incentive technology and scientific development. They can accelerate the concept of products, processes and service where the technology has an important role.

From the point of view of public policies, technological parks can change the socialeconomic profile of a region. To the research and education institutions, the park can be a laboratory for the programs developed in their areas of specialization. By the other side, the private sector has the opportunity to create and consolidate new products and services. So, the advantages and profits can be reached in the integrated work, bringing great results to all agents.

The structure of a pole is related to the level of formalization that unites the participants. The technological park is an example in which the level of formalization is very well defined, and the partners discuss executive actions since strategic planning to operational activities.

The creation of a technological park is not a short-run politic decision. It is necessary articulation between the partners that will evaluate infra-structure conditions, available work-force quality and existence of applied research to the development of products. It is also important to have an entrepreneur environment, capable to incentive the creation of new enterprises, with the local community support. If these conditions exist, the chances of success will increase.

The results for the government are the stimulation to creation and consolidation of technology-based enterprises, new job positions, greater taxation, and other benefits. In the specific case of the entertainment industry, besides the technological contribution, it could develop regulation for the sector, create mechanisms of technical and social-economic monitoring, sector statistics and information, and contribute to the elaboration of strategies policies for the sector.

4. CONSIDERATIONS ABOUT THE ENTERTAINMENT INDUSTRY

4.1 Introduction

Considerations about entertainment must face two aspects: philosophical/ sociological and economical. In the post-industrial society, leisure gains new outlines by increasing the entertainment choices and also the available time. From an economic point of view, this is reflected by the extraordinary growing of the entertainment activities, one of the most growing sectors in the world. From the philosophical/sociological view, remains a preoccupation that this industry contributes for an active leisure, participative and not alienated, and diffuse content that effectively reach the society, informing, educating and creating new behavior models.

The creation of the technological park aims at the valorization of local culture, compromise with values and improvement of the competitive capacity of national enterprises, but always in accordance with the compromise of the context of our artistic creativity with the ideals, needs and interests of a fair and sovereign society.

4.2 Concepts of Leisure and Entertainment

Leisure history

Aranha and Martins (1993) define leisure as a creation of the industrial civilization that appears as a mass phenomenon with special characteristics that never existed before the XX century. Before it, leisure was a privilege of nobles that, in parties and games, intensified their activity, predominantly lounger. Later, the enriched bourgeoisie could also enjoy their free time.

The artisans and farmers that lived before Industrial Revolution used to follow the four natural seasons, once the seeds need time for the harvest. They used to stop working at nightfall, because of the illumination. At holidays, generally imposed by the church, they practiced religion and compulsory rituals. The religious commemorations at the end of the seasons were group activities and gained importance in their social life.

The Industrial Era changed this scenery. With the watch introduction, the work rhythm was not dictated by the nature anymore. The reduction of the work time created the free time, but that can not be confused with the leisure time, once the first is wasted in transportation, feeding, sleeping, family and domestic tasks, and others.

So, what is leisure? It is considered leisure time that remaining time after the realization of all functions that are "obligations" or work or not, that consumes part of the free time. Dumazedier (1972) says that "leisure is a set of occupation to which the individual can dedicate his/her at free will, for resting, entertaining, recreation, developing disinterested formation or information, participating in voluntary actions or using free creative capacity, after getting rid of professional, family and social obligations."

Therefore, there are three functions in leisure:

- Resting, therefore, eliminates fatigue;
- Entertaining and recreation, therefore, it is a complementation that gives psychological balance to our lives, compensating the effort we dispend at work. Leisure offers evasion by the change of place, ambient, rhythm, in trips, games and sports, and all other activity that involves fiction, such as cinema, theater, romance, and require our exaltation to imagination.
- Social Participation, promoting our personal development through voluntary learning and sensitivity stimulation, which favors upcoming innovative behavior.

From this all, it becomes clear that the authentic leisure is active, i.e., the human being is not a passive animal that lets the free time "pass away", but is able to choose something that gives pleasure and modify him/her as a person.

It is not recommended to reduce the creative leisure only to programs with clear didactic functions. We can actively watch to any kind of program when we are good observers, and by assuming a selective attitude, we are sensitive to the stimulations received and try to comprehend what we see and appreciate.

The alienated leisure

In a world that production and consumption are alienated, it is difficult to avoid that leisure is not alienated either. The passivity and degradation of those activities impact the free time. It is known that people who are submitted to repetitive work on a daily basis have their free tine threatened by psychological fatigue rather than physical, becoming unable to entertain themselves. Or, it may be the opposite: they look for compensations that recover their senses.

Advertisement guide choices and fashions and manipulate tastes, determining the programs. Until this point, we have mentioned a social class that has access to leisure time. It is convenient to remember that many cities do not have infrastructure that assures everybody

free time occupation, like places to hear music, public squares for walks, soccer fields, popular clubs, places for spontaneous social integration. This fact reduces drastically the possibility of non-alienated leisure, which is potentially intensified if we consider the man exposition to mass communication means.

It was mentioned that the active leisure is characterized by the integral participation of man as being capable of choosing and criticizing. So, the active leisure allows the reformulation of the experience, what is not true about the passive leisure, in which we do not reorganize the information or action, so that nothing new is add – but reinforces mechanized behaviors.

We may infer from the leisure history the presence of a huge contrast between availability and access to cultural equipments for various social classes, as well as content aspects, e above all things, understand that a consolidated entertainment industry and the development of new cultural equipments can collaborate and change this framework.

4.3 Entertainment definition and economical considerations

At a fundamental level, anything that stimulates or generate a condition of pleasurable entertainment can be called entertainment. Vogel (2001) says that maybe the French world "divertissement" express better this essence. Entertainment can be more that a pure diversion. It is something so universal, so interesting that, when it is efficient, it touches you emotionally.

This entertainment definition comes from its result: a satisfied emotional and psychological state. Anyway, it does not matter if the result is achieved through active of passive means. Playing a song or listening to music are forms of achieving it. Actually, entertainment means so many things for different persons that require a deep analysis about a possible delimitation. These boundaries are here established as to classify entertainment activities in industrial segments – organizations or enterprises of significant size that have a similar technology structure and produce goods or services.

Vogel (2001) cites that a classification that may help is the distinction between software entertainment, in which we can talk about movies, recorders and video-games, for example, and the hardware entertainment, that covers the physical equipment in which the software entertainment is executed. This classification allows us to easily determine the effects of technological development. In fact, we have been so used to keep progressing in entertainment hardware and software performance, that we face problems to remember the beginning of the XX century. The movies and the music were amazing developments, the radio was a miracle of the modern days, and the television came from a laboratory curiosity. Simple transmitters and laser were about to be invented and electronic computers and communication satellites were still science fiction.

The yields of technology application have been creating new forms of art and perspectives of human expression, bringing millions of people from all over the world to a sudden virtual change, with a variety and entertainment mix quality ever imagined.

In Brasil, it is hard to evaluate the economy of the entertainment and estimate the industry size, due to lack of consolidation of the pertinent activities. However, in the United States, with legal forms of entertainment, the American consumed about 60 billion hours,

equivalent to U\$ 60 billion in 1994. In 1998, Vogel (2001) estimated 120 billion of hours spent with entertainment activities and a consumption of U\$ 200 billion. It has doubled the amount of hours consumed and tripled the income. It is a growing and even more rentable market in the American economy, and can this can be seen as a worldwide trend.

It is now clear that an industry information center is essential, and it is part of the Technological Park scope. We could follow the example of the American census conceptualization (Kamel, 2003), that reported in the Economic Census of 1997, a group of economic activities called "Sector 71 – Arts, Entertainment, and Recreation". These activities are: phonographic and spectacles industry, theater, cinema and television, graphic and editorial industry, sports, tourism, opera, cable TV, museums, dance companies, enterprises involved in production and promotion of historic, cultural and educational events, artists and independent writers, artist syndicate, and other.

In Brazil, the last census from FIBGE-2000, mentioned by Kamel (2003), classify most of the entertainment activities in the item "Telecommunications" and other part in the item "Miscellaneous". The activities of entertainment are, thus, diffused in the economic activities classification. The cultural activities are not listed in the National Classification of Economic Activities. Prestes (2002), in his book "Economia da Cultura" ("Economy of Culture"), says that, based on ICMS (a Brazilian state taxation over sales) tax revenues, he could disaggregate data concerning the cultural industry. His first approximation was sufficient to reveal that, considering only the National Office for Copyright Collection (ECAD in Portuguese) collect and distribute to authors and interpreters over US\$ 30 million annually, what overcomes the tax revenues of the ICMS for traditional industrial sectors as textile, mechanics, plastic and clothing.

Prestes (2002) shows that the first efforts to measure the cultural economy at Rio de Janeiro State reveal surprising values: the participation of the cultural sector in the state's Gross Domestic Product is 3,8%, against only 1% of the national. In 1999, Rio's cultural industry produced US\$ 2,1 billion and paid US\$ 180 million of ICMS, as much as the beverages industry. It has created a lot of job positions directly and indirectly, contributing to the informal economy. These data are very far from those published by our economic census, concerning the entertainment industry.

Professor Carlos Lessa mentioned in his article, published in the same book "Economy of Culture" that "the concept of culture economy overthrow pre-concepts because it deals with the free time, generally understood as a non-working time, but what is consumed in this time generate jobs and income".

As from the considerations above, we can see clearly that the Brazilian Entertainment Industry needs a structural formalization, so that its real dimension can be understood and policies can be made to the segment. It is important to remember that the segment uses intensive work-force, and can be inserted strategically in the social-economical process of the country, as being part of an employment policy. The cultural product can also be exported, as in the case of Great Britain, in which the cultural industry is part of the major three export items.

5. PROPOSAL OF A TECHNOLOGICAL PARK

The concept

The central idea is to unite the knowledge production and its experimentation environment at the same place, in a continuous process of experience change and prototyping, so this synergy can create suitable solutions for the industry. In this model, the technological park shall have two major conceptual areas: the Technological Development zone, where will be based enterprises incubators, R&D centers and administration of the complex, and the Entertainment and Experimentation zone, to which the public will have access.

Geographic Localization

The metropolitan area of Rio de Janeiro has a privileged location not only in the software aspect, but also in hardware. To exemplify Rio´s vocation for software development, we can cite some entertainment world-class events such as Rock in Rio, Reveillon, Carnival, Globo Network Center of Production, Rio-Cine Pole, the presence of almost all agents of the industry such as recorders companies, theater chain, film producers and the upcoming Pan-American Games of 2007. For the hardware development, Rio´s complex of major universities and research centers such as UFRJ / FGV / IMPA / CENPES, and others, opens a wide range of technological expertise for the industry.

Logical and spatial organization

The Technological Development zone can have three sub-areas:

1. Hardware Technologies:

This area will be dedicated to development of equipments and solutions used in the industry, technology-based starting enterprises, and centers of applied research, such as new media, electronics, audiovisual technologies and others.

2. Software Technologies:

This area will be dedicated to development of aspects concerning information and local culture, and centers of applied research such as Patents & Intellectual Property, economic studies and statistics, work-force development, and others.

3. Administration:

This area concerns administrative functions of the complex, training and conferences center, sector articulation and national entertainment management head office.

The Entertainment and Experimentation zone will be opened to the public and will show the research advances of the two areas above, through: museum of sound and image, games & virtual reality experimentation, movie theaters, arenas for music shows and sports, expositions and conferences, and other related activities.

6. FINAL CONSIDERATIONS AND CONCLUSION

We still have many questions that shall be answered with the development of the research project, such as:

- Who are the main producers of the industry?
- How intense is the competition between them and the influence of production factors?
- How many clusters are there in the industry, are they concentrated and interactive?
- How dense is the organization of the industry supply chain? Who are the agents involved with distribution and promotion?
- Who are the main suppliers of capital and what are the most common financing methods used?
- Who are the main installation and equipment suppliers for this production, especially for the independent producers?
- Who are the main suppliers of work-force and their formation?
- Who are the main suppliers of technology and knowledge that allows the development of the industry keeping the national identity and democratization?
- How does the industry interact economically with other segments?
- What is the real economic impact of this activity?
- How can we export our industry products?
- At what level are private and public agents aware of the industry dimension?

This research project intends to be an alert for the community involved with the Entertainment and Creativity industries, for the need of executive actions that have to be taken in order to progress with an organized development of this sector, of major and strategic importance for the Brazilian society.

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