THE PORTO DIGITAL MANAGEMENT DIFFERENTIALS AND ITS CONTRIBUTIONS TO THE ECOSYSTEM

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EXECUTIVE SUMMARY

The results of a technology park management are indispensable in the process of socio-economic development of a region. It´s through the existence of a park that its companies can take advantage of the benefits offered by it through their actions and articulations and achieving a higher level of competitiveness to stand out and grow towards an innovative and increasingly tight market. The management of a technology park is a key factor in its success, but is non-trivial to be done. Porto Digital is the best Brazilian technology park and can be considered a park management case study, as well as a replicable model. This article aims to present the management differentials of the park including its models of cooperation between Academy, Government and Market, along the way it has contributed to the local innovation ecosystem, playing a key role in the socioeconomic development of the region.

Key words: Management, Technology Park, Porto Digital, Triple Helix

1. INTRODUCTION

A technology park is a typical environment for developing an innovation habitat in high tech sector. Very dynamic in the speed of its transformation from its concrete or intangible, direct or indirect features, becomes an favorable environment to contribute to the socioeconomic development of the region.

The management of a technology park is a key factor for the success of a park and manage a technology park is not trivial. It is important to understand the characteristics and needs of the region, the city, the state and the ecosystem as a whole; understand the strategic key stakeholders for its implementation and existence; understand the possibilities of funding for its existence; define the best way to structure the team, and; understand what are the legal viabilities for its formalization.

According to the definition of the International Association of Science Parks (IASP), Technological Science Park is an organization whose main objective is to increase the wealth of the community by

promoting the culture of innovation and competitiveness and knowledge-based institutions associated with him. To achieve these goals, a Science and Technology Park stimulates and manages the flow of knowledge and technology between universities, research institutions and development - R & D, companies and markets; facilitates the creation and growth of enterprises based on innovation through incubation and spin-off processes, and provides other value-added services and support high quality services1.

The Porto Digital (PD) from Recife-PE is recognized today as one of the most important Technology Parks from Brazil. The park has been increasingly subject of visits, studies and analyzes, some of these to evaluate the conditions for replication, focusing on their goals purposes, as well as on special interest in its innovative management model for public policy with positive outcomes for sustainable regional development. Therefore, the Porto Digital may be a case of reference to evaluate the implementation of technology parks in Brazil2.

Thus, Porto Digital has been consolidate and stranded out in Brazil and in the world due to the success related to its management. Thus, the PD comes through this article to share its management experience, planned before its foundation, showing its main directions, namely: (i) Application of the Triple Helix concept; (ii) management done by a Social Organization (OS); (iii) Matrix Organizational Structure, and; (iv) well-defined and certified process with a focus on quality management (continuous improvement).

2. THE ROLE OF TECHNOLOGICAL PARK MANAGEMENT IN THE SOCIO-ECONOMIC DEVELOPMENT OF A REGION

The results of a technology park are indispensable for a region socio-economic development process. It is through the existence of a park that companies can take advantage of the benefits offered by it and manage to stand out and grow towards an innovative and increasingly competitive market.

A technology park can contribute to its company's development and, consequently, to the region improvement as well, since it can provide benefits such as:

(i)   Strategic linkages with government and Academy - It may allow, among other things, public policies creation that will benefit the environment, and the academy introduction in the solutions creation process inside the companies in order to stimulate the development of more innovative technologies;

(ii)   Fundraising and development projects – They are iniciatives to benefit the park, such as projects related to the park's human capital qualification and business qualification. It also allows the infrastructure improvement, such as building competitive intelligence centers that can benefit companies with strategic information, among others. (iii) Institutional promotion – The promotion of Porto Digital's image, in the national and international market, brings about investors, partners and customers attraction.

Thus, to ensure a certain and smooth progress of a region, it is necessary for the technology park has an efficient and effective management, driving the development of innovative ICT solutions that should enable social and digital inclusion, State integration, building network, solutions and promising business. It becomes the engine of the economy and social development, the agent of

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[1] MIRANDA, Z. A. I. & NEGREIROS, R. Parque Científico e Tecnológico como mecanismo indutor de desenvolvimento sustentável. *Revista de Gestão Integrada em Saúde do Trabalho e Meio Ambiente*, São Paulo, v.2, n.4, 2007. Disponível em <http://www.interfacehs.sp.senac.br/index.php/ITF/article/viewFile/141/163> Acesso em julho de 2011.

[2] GUIMARÃES, M. Leonardo, LACERDA, N., GOUVEIA, C.,– Uma Análise do Modelo de Gestão do Porto Digital - Dificuldades Identificadas e Soluções Adotadas, Seminário Nacional de Parques Tecnológicos e Incubadoras de Empresas, Porto Alegre, RS, 2011.

innovation and changes, able to promote greater competitiveness and hence a higher socio-economic growth.

According to ANPROTEC[3], technology parks constitute a productive complex and intensive services in Information and Communication Technology (ICT) that once well-articulated and with well-planned actions will bring about innovative enterprises in a competitive manner, since such environments act as promoters of the innovation culture, competitiveness and entrepreneurial training, with the aim of increasing the production of wealth in a given region.

To achieve these goals, a Science and Technology Park stimulates and manages the flow of knowledge and technology between universities, research institutions and development - R & D, companies and markets; facilitates the creation and growth of enterprises based on innovation through incubation and spin-off processes, and provides other value-added services and support high quality services[4].

Being a technology park a relevant asset in the production of ICT, able to promote innovation and stimulate the enterprises competitiveness, this is characterized as a potential agent to contribute to the socio-economic development of a region. However, it is critical to the success of a park the existence of an actively managed, well-articulated and that can generate significant results for the environment.

3. PORTO DIGITAL

The main "hotbed" of knowledge and development of ICT applications in Pernambuco is the Porto Digital (PD). This it is a technology park located in Recife historic center. Porto Digital is the result of the innovation environment that was consolidated in Pernambuco in the last decades along with the coordinated effort of the university, the productive sector and government, with the aim of entering the Information and Communication Technology industry in the economic matrix of the State of Pernambuco. Industry growth potential, ICT is also the basis for the increased competitiveness of a region in any strategy of contemporary economic development.

Its goal is to implement public policies for economic development of the State, urban regeneration, social inclusion, strengthening the ICT hub and other clusters through the use of these technologies. In 14 years of existence, Porto Digital (PD) is a leading technology hub in the country. The park has already generated for the state 7,100 jobs, attracted 536 entrepreneurs and 240 institutions including universities, governmental agencies, research and development centers and national and international technology companies as illustrated in the Figure 01.

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[3] ANPROTEC – Disponível em: http://anprotec.org.br/site/incubadoras-e-parques/. Acesso em: 06/jun/2013

[4] MIRANDA, Z. A. I. & NEGREIROS, R. Parque Científico e Tecnológico como mecanismo indutor de desenvolvimento sustentável. *Revista de Gestão Integrada em Saúde do Trabalho e Meio Ambiente*, São Paulo, v.2, n.4, 2007. Disponível em <http://www.interfacehs.sp.senac.br/index.php/ITF/article/viewFile/141/163> Acesso em julho de 2011.

Figure 01 – Porto Digital´s environment

As a result of its actions, in 2005, the international consultancy, AT Kearney5, classified Porto Digital as the largest technology park in the country, and a national benchmark in using public policy to promote innovation and strengthen the technology sector. In 2007 and in 2011, the National Association of Organizations Promoting Innovative Enterprises (Anprotec)6 considered PD the best technology park/ habitat of innovation in the whole of Brazil.

In 2008, the International Association of Science Parks and Areas of Innovation (IASP) published the first volume in the Learning by Sharing series, in which it highlighted the case of Porto Digital, along with three other science parks in Malaga (Spain), Manchester (UK) and Hyderabad (India). Also in 2008, the Brazilian Ministry of Development, Trade, and Industry recognized Porto Digital as the Cluster of Information and Communications Technology of Pernambuco.

In 2009, a report published in the online edition of Business Week mentioned Porto Digital as one of the most innovative technology parks, listing it as one of the ten places in the world where the future is being created. More recently, McKinsey singled out Porto Digital, along with the Campinas Region, in the State of São Paulo, as the two centres for innovation with the greatest potential for generating business in the technology sector in the country.

In 2012, the park won from INPI - (National Institute of Industrial Property), the first Seal of Geographical Indication in the area of IT services. The seal certifies that the software produced in the Porto Digital has a quality certificate.

In 2013 BBC presented Porto Digital as a great tech hub away from the Rio-São Paulo axis that has a great success. In the same period, Financial Times Special Report titled "Brazil Innovation, Research & Development" highlighted Porto Digital's history and activities as a great example for the special report.

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[5] AT KEARNEY. Desenvolvimento de uma Agenda Estratégica para o Setor de "IT Off-shore Outsourcing". Brasília, 2005

[6] ASSOCIAÇÃO NACIONAL DE ENTIDADES PROMOTORAS DE EMPREENDIMENTOS INOVADORES. Panorama de Incubadora de Empresas e Parques Tecnológicos 2006. Brasília> ANPROTEC, 2005. Disponível em < http://www.anprotec.org.br/ArquivosDin/Panorama_2005_pdf_11.pdf> Acesso em 29 de junho de 2009. 15:32:57

In the same year, Porto Digital hosted the 30th IASP World Conference and the XXIII Anprotec's National Seminar. The events occurred jointly between 14th and 17th October, under the organization of Porto Digital. The event whose theme was "Science Parks Shaping New Cities" featured about 1,150 participants from 47 countries, of which 85 were speakers. In this event, the Porto Digital Incubator, C.A.I.S. do Porto, was elected by Anprotec, through the Innovative Entrepreneurship Award, as the best incubator in the country facing oriented local development companies.

In 2014, another Financial Times Special Report highlighted Porto Digital again. With the title "Latin America's Regions – Doing Business in Brazil's Northeast", the text makes reference to Porto Digital as a project not only designed to stop the city's brain drain but also to create an economic model based on information and knowledge.

In that same year, the business magazine Exame, nationwide, based on research by consultancy Urban Systems, highlights Porto Digital as one of the main factors that makes Recife one of the best cities in the country (10th ranking) to doing business, placing it among the elite in the cities of Brazil in the economy competitive and enjoyable for residents.

Months later, Porto Digital was cover story in the magazine of TusPark, a Chinese Technology Park. The article wrote abut the glorious history of PD establishment at initial stage, and development in the past two years with relevant limitations PD faced.

To manage the park, it was created in 2001 the NGPD – Porto Digital Management Unit, a social, private and nonprofit organization. This organization has a role in the success of Porto Digital. NGPD is the agent for implementation of public policies to promote the structure and Technology Park evolution , through the implementation of public and private resources.

NGPD's main objective is to increase the positive environmental factors in order to improve the innovative capacity and enterprises and cluster competitiveness as a whole. To do this, its main roles are: (i) to generate original ideas, (ii) to develop innovative projects,from original ideas, (iii) to joint operating agents, so that projects can be implemented including sponsors, government, enterprises, universities, and (iv) to attract innovative ICT-based companies.

Given the above, it is understood that PD is a valuable asset of Pernambuco state, with the potential to contribute to improve standards of production efficiency in the ICT sector and therefore to improve the level of the park business development and competitiveness.

This indicates that there is great potential to improve competitiveness through strategies from the park management and, consequently, from the technological and innovative region development.

In order to share its experience in the Technology Park management that is evolving every day more, NGPD established key points listed in Porto Digital's management, which contribute to building a favorable socio-economic development of the region's environment, providing new ventures attraction, skilled jobs creation and higher income. These points will be addressed in the next sections of this document.

4. THE DIFFERENTIALS OF PORTO DIGITAL MANAGEMENT

Porto Digital has been increasingly targeted object of visits, studies and analyses. In the last year, for example, the park had more than 100 meetings with professionals from 23 countries of all continents some of these was to evaluate the conditions for replicating Porto Digital's model, focusing on its end goals, as well as giving special interest in its innovative management model of a public policy with positive outcomes for sustainable regional development. Therefore, Porto Digital's management model can be considered a benchmark. Thus, in order to serve as a reference model, NGPD listed in this article the 4 differential management of the park, namely:

(i) **Adequacy of the Triple Helix Model:** Strong coordination and interaction among stakeholders in the practice between the actors: Academy, Government and Market in a synergy and prosperous way;

(ii) **Legal Constitution**: Open channels between universities, government and companies in the park, implementing public policies for the region, since the manager has as core a social organization focused on results.

(iii) **Structure Type**: austere, efficient and creative performance of their projects because of the internal structure of its qualified team.

(iv) **Focus on Quality**: Quality of the projects results implemented since its internal processes and procedures are well defined, certified and focused on continuous improvement.

4.1.   Adequacy of the Triple Helix Model

The Triple Helix model, proposed by Etzkowitz[7], believes that wealth creation and local development can be achieved through innovation and knowledge management, involving Academy, Business and Government. This relationship, however, as affirmed by the theoretical, generates an upward helix of regional development originated by the flow of knowledge between universities and businesses, making the last one to acquire greater competitiveness through denser product knowledge.

Still according to the theory, the interaction between these three spheres is presented as the key to innovation in the knowledge society, providing an enabling environment for the development and increased competitiveness.

For sharing this thought and additionally understanding that the role of managing a technology park is to act as great articulator and cheery an environment facilitating the flow of information between university, industry and government to facilitate innovative entrepreneurship, the Porto Digital Unit Management defined the conduct of its administration would be sustained by the Triple Helix tripod still adding the component of the territory, which is a major factor when it comes to technology parks. This understanding reflects exact the context in which the Technology Park was designed.

Although formally established in 2000, Porto Digital stems from a combination of factors that, in the mid-80s and throughout the 1990s, already pointed to the formation of a pole of knowledge production in the field of computing integrated with market initiatives.

During this period, related to the Market axis, it was identified an abundant supply of qualified professionals in the area and there were a lot of small IT projects.

Around the same time, an aspect related to the Academy axis was of fundamental importance for the establishment of the park. Occurred an increase in demand for computer professionals in Brazil and abroad, encouraging migration of human capital formed in Pernambuco to other markets. What could be interpreted as a measure of the success of the University, in recognition of its high standard level of teaching, in fact, was the indicator of a serious strategic problem for the state: the brain drain, most valuable resource in the new knowledge economy.

The reality of the Government at that time was the economic crisis that disarticulated the traditional Pernambuco economy and simultaneously generated the embryo of new opportunities for the state to reinsert itself in the national and global production circuit through a new and highly dynamic sector: ICT sector. However, for it, a sector consolidation strategy was necessary. Some initiatives were then taken in this direction. Highlights include the creation of C.E.S.A.R. – Recife Center for Advanced Studies and Systems (1995), a reference center for research, innovation and entrepreneurship created with support from the Federal University of Pernambuco and local private companies, and the foundation of the Porto Digital Technology Park (2000), a project of public policy.

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[7] ETZKOWITZ, H. Hélice Tríplice: Universidade – Insútria – Governo Inovação em Movimento. Porto Alegre: EdiPUCRS, 2009. 207 p.

Finally, the choice of location was a key factor. The area should have: (i) physical space availability, (ii) interaction between the park, the city and its rulers, and (iii) attractive for companies. All without any noticeable interaction loss with the Academy. The neighborhood of Recife Antigo, then presented as a strategic location in the city centre, with space available at low cost and that the proposed park facility would pose as the solution so decadent and marginalized environment at that time, even though symbol height of Pernambuco economy.

Figure 1 illustrates briefly how since its conception Porto Digital operates in line with the concept of the Triple Helix model.
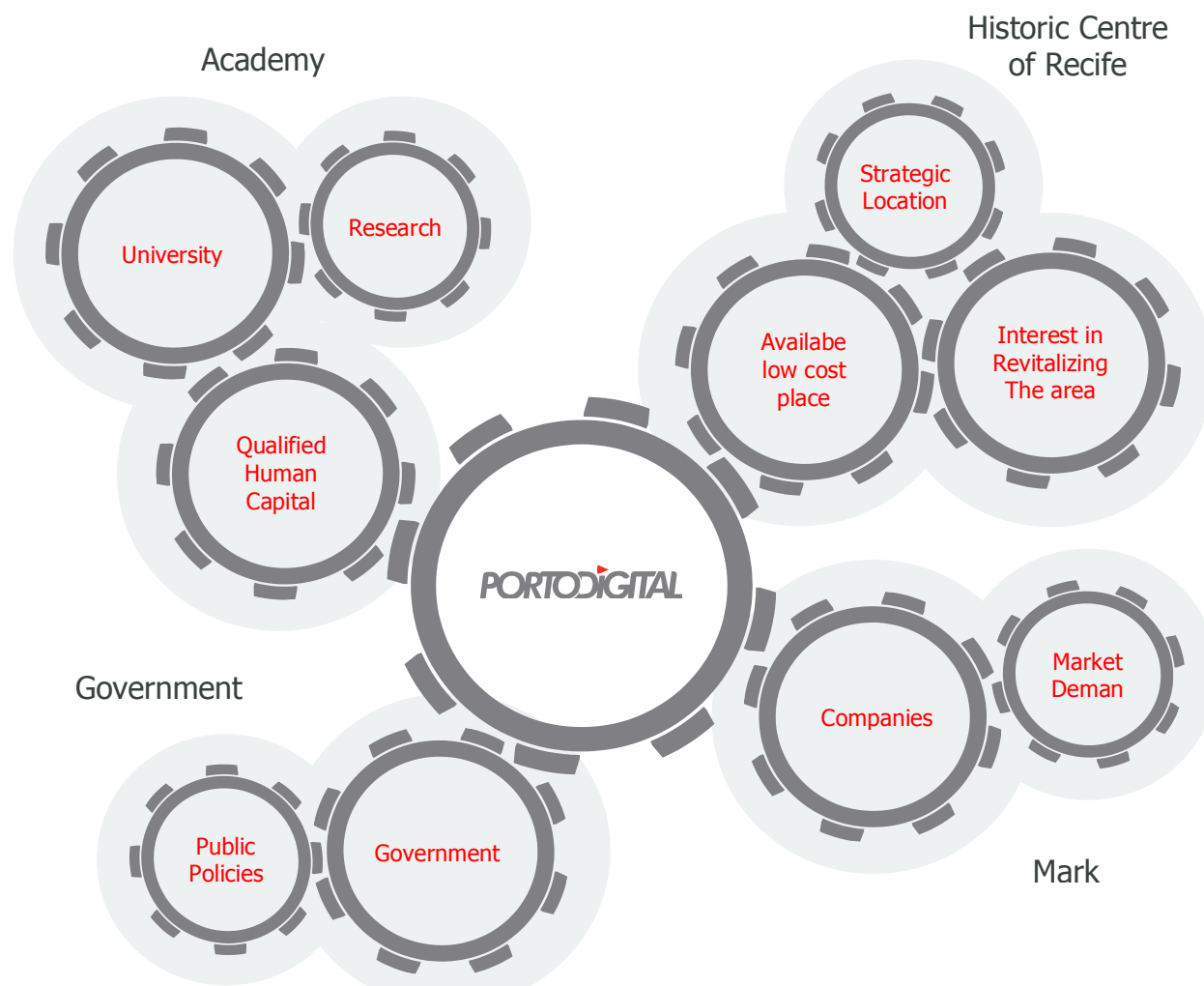

Figura 2 –Porto Digital Conception Structure

To ensure adherence to the concept over its performance as well as to enable the actions of the park governance, it was determined that Porto Digital would be managed privately but nonprofit with legal designation of Social Organization in order function as a point of articulation of several institutions devoted to the region economic and social development.

It was precisely these articulations that enabled the important deliveries of the technology park environment, such as:

(i) Infrastructure investment: The initial investment by the State Government in the order of U$ 15 million that leveraged an additional U$ 15 million more from ICT companies that have settled in the park and more other U$ 15 million of private initiative from the other active sectors in the park Neighborhood that were benefited with the raise of Porto Digital;

(ii) Ttax benefit: ISS tax reduction from 5% to 2% for companies in ICT and Creative Economy installed in Porto Digital territory;

(iii) Park sustainability: Via the Technology Park Management Agreement with the State Government, through its Department of Science and Technology;

(iv) Greater potential to attract companies: Once it is able to offer lower transaction costs since the NGPD acts as facilitator and single channel of the company in Recife, in order to simplify the relationship with the public and private sphere;

(v) Creation of innovative strategic partnership model: This model is focused on: (a) identify local vocations, (b) combine it with the knowledge generated in the Academy, and (c) offer, through the park management of the technology park, solutions to bottlenecks of the public sector, formalized among the governance of the park and the public power, through a Management Agreement. This was the case of OJE - Olympics Games and Digital Education, when the Secretary of State for Education demanded to NGPD a solution to reduce the negative indices in the schools. In this context, NGPD articulated the State demand with existing supply in the Porto Digital. In orde to attend the demand, Porto Digital's small sized companies created a consortium to generatethe required product as needed. Moreover, the NGPD introduced the Informatics Center of the Federal University of Pernambuco (CIn/ UFPE) in the project to support the pedagogical development of the games content. Such articulation earned the Porto Digital a Management Contract with the State Government, signed in April 2008 to act as an agent responsible for implementing this policy.

(vi) Preparation, approval and implementation of innovative projects: This projects are to promote the park strengthen and competitiveness in partnership with local, regional and national Government, with the Academy, (nowadays PD has partnership with eight institutions) and with the market, totaling 43 projects, that, together, accumulate more than U$ 55 million.

Therefore, it is noticed that the formal and structured implementation of the Triple Helix concept in the middle of a Technology Park has great potential to promote the development of a region in all its various aspects. Given the many actors that interact with the ecosystem of a technology park, the figure of governance becomes crucial in promoting not only the development of the technological environment, but the region as a whole. The governance of a tech park, such as the Porto Digital Management Unit (NGPD), is able to converge performances and mediate relationships of interest, contributing to the implementation of public policies for the common good.

4.2.   Legal Constitution

According to the paper presented in the XXI Anprotec's National Seminar of Technology Parks and Business Incubation,8, the figure of Social Organization was created to allow the delegation of the implementation of public policies for private nonprofits and the Porto Digital Management Unit is one of them. At the same time, the law maintains the obligation of the State to be a developer and regulator of public interest activities, allowing just sharing with civil society and the third sector management responsibility for them. In a sense, therefore, these rules require the transfer of public funds to private entities qualified as OS. Therefore, the Management Agreement was created to regulate the relationship between the OS and public agency linked to the political, allowing transfer of resources for purposes of public policy actions affecting the society, as well as for paying the management unit for its operation (direct staff, supplies, utilities, equipment, outsourced resources, among others).

In parallel, an OS has autonomy to raise funds from other public or private sources, such as covenants, provision of market services, space leasing, events and lectures, consultancies for replication, etc. The only condition, since it is a nonprofit entity, is that financial excesses should be reinvested in public policy. There are OSs in Brazil working in several areas and, therefore, each case is particularly in relation to its financial sustainability and independence of public resources.

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[8] GUIMARÃES, M. Leonardo, LACERDA, N., GOUVEIA, C.,– Uma Análise do Modelo de Gestão do Porto Digital - Dificuldades Identificadas e Soluções Adotadas, National Seminar of Technology Parks and Companies Incubator, Porto Alegre, RS, 2011.

In the case of Technology Parks, the benchmarking of similar projects shows that the state must always be present to give the first impulse to the project and its deployment phase. Public investment is essential especially in order to attract private capital in future and more mature phases of the park.

The creation of OSs aims to provide:

- • Increased partnership between state and society, focusing on results;

- • Social control on the implementation of public interest activities, through the establishment of an OS board - composed by representatives of government, the authority and civil society - as a requirement for the qualification of the management unit;

- • Efficiency: achieving better results for the target audience, at a lower cost;

- • Greater autonomy and flexibility in the execution of activities (allowing to raise funds from other sources, for example), combined with greater responsibility for leadership toward the desired goals;

- • Redefinition of the state roles, which maintains its role of funder and regulator (no more executor) of activities of public interest;

- • Strategic control of results through the Management Agreement, replacing the old way of providing process-based accounts.

With the flexibility afforded to the OS without hurting the constitutional principles, combined with contract logic driven by delivered results, it is possible to achieve greater agility combined with the quality of the execution of public policies to lower costs, resulting in efficiency. The Management Agreement itself also promotes transparency as far as the use of public resources, as to the results achieved through greater legal effectiveness billing compliance with agreed targets.

In the early days of planning for what would become Porto Digital, while a public policy, it was understood that the governance of the technology park should be as dynamic and innovative as the project itself, so that it could meet the complex demands and monitor their rapid transformations.. At that time, the Social Organizations was what was most innovative and avant-garde in the Brazilian institutional framework. According to the master thesis from the Porto Digital director Leonardo Guimarães[9], for the creators of the project (group of representatives of government, market, Academy and civil society), the choice for a Social Organization model to the Porto Digital Management Unit occurred naturally. Thus, the delegation model of public policy management in Pernambuco was put on test for the first time with Porto Digital. Its rules were legally established.

To manage a project of this size is necessary to connect different actors and interests involved - market, industry associations, Academy, government, third sector, communities, etc. - and various skills on the team - urban, managerial, administrative, financial, marketing, etc. The governance structure should have flexible management rules (as in private organizations) and allow the creation of a multidisciplinary team to deal with the level of complexity involved.

A Social Organization should move towards a greater and collective cause, act, pursue and produce something that directly or indirectly bring about positive results for society in general. The innovation in the model proposed in Porto Digital plan is also the possibility of management focused on results, agreed targets to be reached and control and evaluation based on efficiency and effectiveness.

However, there is another problem in government, as manager of public policy, the OS is responsible to solve the risks of disruption resulting from the alternation of power in government. With a horizon of implementation and consolidation of long-term, the initiative needs to be managed relatively independently in relation to the government. The OS fulfills this role by

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[9] GUIMARÃES, M. Leonardo. A OS (Organização Social) como Modelo de Inovação em Gestão de políticas públicas: Porto Digital, Resultados e Desafios, 2010.

maintaining the government's responsibility to be the financier of action. The PD must decisively be a public policy of a permanent state, not a government project that tends to be transient.

After the change of government in 2006, with the departure of Jarbas Vasconcelos (PMDB) and his team of government of Pernambuco, that was in the government when Porto Digital was founded, and early government of Eduardo Campos (PSB) that has different political positioning, the acceptance of Porto Digital policy priority was not automatic. The park was seen as innovative project and widely recognized, but strongly carried another brand policy. The first years of the new government were difficult years for the governance of Porto. The OS, in this transitional phase, have shown great capacity of resilience and of reinvent itself in order to the public policy to remain active, confirming the correctness of the management model chosen.

4.3. Structure Type

According to the PMI (Project Management Institute), the organizational structure is an enterprise environmental factor that can affect the availability of resources and influence how projects are conducted in the organization. There are 3 types of organizational structures: functional, matrix and projectized.

The functional organization is a hierarchy where each employee has one clear superior. At the top level, employees are grouped by specialty, such as production, marketing, engineering and accounting. Each department in a functional organization will do its project work independent of other departments.

In a projectized organization, team members are usually put together. Most of the organization's resources are involved in project work, and project managers have great independence and authority. Projectized organizations usually have organizational units called departments, but these groups either report directly to the project manager or provide support services to other various projects.

Finally, matrix organizations are a combination of features from functional and projectized organizations. The matrix recognizes the need for a project manager, but it does not give him full authority over the project and on its financing.

The Porto Digital Management Unit takes the matrix organization structure, which occurs from functional managers across the project managers and, through the existence of departments: finance administrative, communication and marketing and architecture. The project managers are responsible for the implementation and management of projects aligned to specific theme with support from functional managers. These themes reflect the NGPD Strategic Planning, which defines the expertise areas through its Strategic Axes.

Functional managers of the board of innovation and business competitiveness (DICE) are: (i) Information and Planning Management, (ii) Cooperation and Funding Management and (iii) Projects Implementation and Monitoring Management. These managers are responsible for supporting and directions to project coordinators in order to permeate the project life cycle: planning, executing, monitoring and controlling, and closing. This allows, in addition to strict monitoring of the projects, the sharing of lessons learned, integration of area coordinators and the efficient and effective management of the project portfolio.

The communication and marketing, administrative and financial and infrastructure departments promote the necessary support to project management through the communications services, liaison with the market, activities related to human resource management and ensure the necessary infrastructure for running end activities of the organization. The Corporate Articulation Manager gives support for the park President.

The benefits of the matrix organization stand out by delivering value projects, from implementation and project management support and coordination by functional managers. The matrix organization also allows the team development through the possibility of developing a national plan for jobs and careers and guarantees the unity and integration of running activities.

4.4.   Focus on Quality

According to Figlioli10, a technology park requires an organization to coordinate its actors to perform the technology management program, through interaction mechanisms between companies, universities and research institutes and manage their constituents elements. It is essential, however, that this organization, keep itself updated regarding the management tools, infrastructure, knowledge production and the quality of its processes in order to maintain the standard of efficiency and effectiveness and promote continuous and sustained growth of the Technology Park.

Continuous improvement in the performance of any organization activities is closely tied to the concept of quality. Quality according to ISO 9001:200811, represents the fulfillment of the client requirements, and, given that customer requirements are constantly changing, the concern with it should be permanent. This concern can bring a number of benefits to the organization. According to ABNT NBR ISO 9001:2008 12, the greatest benefits from quality are related to increased productivity, reduced rework and waste, and especially, the possibility of performing a statistical control of what it runs.

"Do not manage what is not measured, what is not measured is not defined, do not define what is not understood, there is no success in what is not manage12".

Knowing that, it was considered part of a broader development strategy of Porto Digital Technology Park, the focus on quality management, which includes the search for quality in the executed projects results, through the definition of internal processes and procedures, quality certifies and focus on continuous improvement. This action is of great importance not only for governance, but the park as a whole, because without an efficient and qualified governance, it is not possible to perform satisfactorily other actions aimed at strengthening and consolidating the Porto Digital.

In this scenario, the NGPD proposed to have a Quality Management System, with clear definitions in relation to their processes, procedures, activities, company policy and the purpose for which it proposes. A Quality Management System enables the activities process organization performed by the organization, defining roles and responsibilities, monitoring and measurement of processes, with the aim of proactively identifying opportunities for improvement, employee engagement and satisfaction of all stakeholders (customers, associates, society, etc.). However, the greatest legacy of this system is the knowledge generated within the organization in relation to itself, the production of knowledge between employees and guid of all activities undertaken by the institution.

Currently, the standard that certifies quality management systems is ISO 9001:2008 and according to the ISO Survey of Certifications - 200913, the ISO 9001 - Quality Management System certification, in the same year, first exceeded one million certificates issued, which reflects the concern of the companies ensure the quality of their management, and mainly concern present in a differential, before the increasingly competitive, demanding and global scenario, in which are

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[10] FIGLIOLI, ALINE. Perspectivas de financiamento de parques tecnológicos: um estudo comparativo, 2007.

[11] DEMING, W. EDWARDS. Qualidade: A revolução da Administração. Rio de Janeiro, M.Saraiva, 1990. 367 p

[12] ABNT NBR ISO 9001:2008, Sistema de Gestão da Qualidade – Requisitos, Rio de Janeiro, 2012.

[13] ISO Survey of Certifications – 2009 – Disponível em: http://www.apcer.com.br/index.php?option=com_content&view=article&id=289:ambiente-e-desenvolvimento-sustentavel-engo-andre-ramos&catid=33:artigos-apcer&Itemid=88. Acessado em 06 de Junho de 2013.

inserted. This differential, ensures competitive advantage and recognition by the market, employees, customers and other parties that may be involved in the business.

The ISO was developed to support organizations of all types and sizes, implementation and operation of effective quality systems and certification here referred is an international reference for the Certification of Quality Management Systems and acknowledges the effort of the organization to ensure: (i) the conformity of their products and/or services, (ii) the satisfaction of its customers and (iii) the continuous improvement of its processes.

In this context, the NGPD has decided to get the NBR ISO 9001:2008 certification, with the objective to enhance the knowledge about the own organization, show customers the quality of internal management and, at the same time, contribute more actively to the management of the park, through processes and procedures properly developed and internationally recognized for its quality procedures.

The certification process demanded effort of the organization as a whole and its greatest legacy was generated knowledge about the own organization, and the development of a culture of constant critical analysis of performance and continuous search for improvement of the services provided, by improving its processes and knowledge management. The Quality Management System of the NGPD was established in November 2012 and has scoped the "Project Management for the creation, attraction and strengthening innovative developments of Information Technology and Creative Economy in Porto Digital" meeting in their 23 procedures practices referenced by project management PMBOK ® (Project management Body of Knowledge), 4th Edition.

The SGQ (Quality Management System), as it is called by the employees, consists of 4 key processes, namely: Fundraising, Project Management, Administrative Management and Quality Management and is guided by quality policy, whose core is the development and management of development projects from Porto Digital ecosystem, given the legal and technical customer requirements and the institution, aimed at their full satisfaction and the continuous improvement of system. The organizational police vision is: "to be a reference in managed environments for entrepreneurship and innovation, responsible for making the Porto Digital vector of Recife development, a pillar of the Pernambuco economy and a global model of technological park policy" and the mission of "Promoting competitive conditions for creation, attraction and strengthening innovative developments of Information Technology and Creative Economy in Porto Digital", basing on the values of efficiency, austerity and creativity.

The NGPD Quality Management System has been certified ISO 9001:2008 in February 2013 and since then the fund manager of Porto Digital Technology Park has reaped the positive results already mentioned this certification, contributing greater effectiveness in strengthening the park, through the strengthening of its governance.

5. CONCLUSION

Porto Digital's management has given to the park a number of benefits through its power to to strategic linkages with government, academia and market. Its legal model also contributes immensely since it allows to take advantage of what is best in two areas: public and private. Another factor that contributes to the positive results generated by Porto Digital is its operating internal structure, composed of a multidisciplinary team with expertise in project design, funding and management. Finally, operational quality, with its well-defined, certified and focused processes and procedures with continuous improvement complete the list of the differences of Porto Digital's efficient, effective and innovative management.

Through its various awards, among them the title of The Best Brazilian Technology Park, Porto Digital has promoted the cluster institutional image in the national and international market, functioning as an attractive partner and customer.

With a current management agreement with the state government and over 43 projects under execution, NGPD manage about $ 50 million, which shows financial healthy. In addition, classification as OS is strategic to allow Porto Digital, raising funds from other sources, not

depending solely on government to survive to reach the goals set for the state, thus contributing to the ecosystem socioeconomic development.

Porto Digital's management also stands to make the cluster a more competitive and innovative environment, enabling connection between academia, government and market confirming, thus, the role of the technology park as a practical reference case of Henry Etzkowitz Triple Helix model[14].

As a result of political articulations, the NGPD has achieved tangible benefits for companies in the park, such as reducing taxes for its companies. Thus, the park management promotes increased business competitiveness, recognition of its quality in the world market and the ability to provide quality solutions for the development of other productive chains in the country. Thus, the park contributes strongly to the growth of the local ICT and Creative Economy sectors.

The NGPD was designed to act as a mechanism through which Porto Digital should offer their contributions to the socioeconomic development of the region and therefore of the city.

The correct definition of Porto Digital's performance management has provided the Metropolitan Region of Recife a competitive advantage compared to other places in the world. Offering companies the key input to the innovative and competitive activity Porto Digital also contributes to the city socioeconomic development.

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[14] ETZKOWITZ, H. Hélice Tríplice: Universidade – Insútria – Governo Inovação em Movimento. Porto Alegre: EdiPUCRS, 2009. 207 p.