CITY MARKETING STRATEGIES OF PORTO DIGITAL

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Abstract

Porto Digital was a policy implemented in 2000, and managed by a social organization (SO) with the initial objectives of inserting Pernambuco into the technology scenario and contributing to the revitalization of the district in the city of Recife known as Bairro do Recife. Over the past two decades, this SO has established itself as a central actor in urban planning, by associating state-of-the-art concepts into the debate on innovation. The aim of this paper is to demonstrate how these narratives have been used as city marketing. This was an explanatory research on the construction, evolution and main impacts of Porto Digital, enabled through the collection of bibliographic, documentary, interview and observational data. It may be perceived that a gentrification process has taken place with identity manipulation, an exodus of part of the population and the valorization of real estate chiefly for the consumption of companies. It may be understood that the instrumentalization of this innovation debate as city marketing has both boosted businesses and served as a smokescreen for social problems.

Keywords

City Marketing; Gentrification; Agglomeration Economy; Creative Economy; Maker Production; Bairro do Recife.

AS ESTRATÉGIAS DE *MARKETING* URBANO DO PORTO DIGITAL

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Resumo

Porto Digital é uma política implantada no ano de 2000 e gerida por uma Organização Social (OS) que tinha como objetivos iniciais inserir Pernambuco no cenário tecnológico e contribuir com a revitalização do Bairro do Recife. Ao longo dessas duas décadas, essa OS se consolidou como um importante ator no planejamento urbano, ao associar conceitos em moda no debate sobre inovação. O objetivo deste trabalho é demonstrar como essas narrativas são instrumentalizadas como marketing urbano. Trata-se de uma pesquisa explicativa sobre a construção, a evolução e os principais impactos do Porto Digital, graças à coleta de dados bibliográficos, documentais, entrevistas e observação. Percebe-se, assim, um processo de gentrificação com manipulação da identidade, êxodo de parte da população e valorização de imóveis a serem consumidos sobretudo por empresas. Entende-se que a instrumentalização desse debate inovativo como marketing urbano permite tanto impulsionar negócios quanto servir como cortina de fumaça para os problemas sociais.

Palavras-chave

Marketing Urbano; Gentrificação; Economia de Aglomeração; Economia Criativa; Produção Maker; Bairro do Recife.

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Introduction

Porto Digital is a public policy created by the State Government of Pernambuco (Northeast Brazil) in 2000, with the initial objectives of inserting the state into the "technology and innovation scenario" and of specifically contributing to the economic and urban revitalization of the district in Recife, the state capital, known as the "Bairro do Recife". At this time, a gentrification process unfolded, aimed at entertainment and tourism, and resulting in the exodus of part of the local population (LEITE, 2006; MORIM DE MELO, 2003). However, there was a certain difficulty regarding the admission of a new population that would consume and renovate the historic buildings of the district. Hence, the idea of a technology park was then linked to the revitalization process of this historic site, with a greater likelihood that the arriving companies, rather than the resident population, would be prepared to fund the recuperation of properties, particularly considering that a square meter of office space is generally more expensive than residential. In 2001, the Porto Digital Management Unit was instated as a social organization (SO) responsible for implementing the governance model, promoting infrastructure and installing business incubators in the Bairro do Recife. Since then, this governance has proved to be extremely dynamic due to a number of factors: i) being able to survive different political administrations and economic moments; ii) taking on new responsibilities in real estate and urban planning; and iii) constantly renewing its strategies based on current concepts related to the innovation debate over the past two decades. However, this context has contributed to the gentrification process in the

Bairro do Recife resulting from the identity manipulation, the valorization of real estate, the exodus of part of the low-income population and the admission of a new population, especially private companies, which have become installed there. The said plan mentions the intention to create a policy aimed at receiving investments for intermediary cities, for attracting migrants and for keeping the population at the place of birth, by generating jobs in inland cities with a certain infrastructure. Thus, France expanded its urban network through a system of intermediary cities that began to play a fundamental role in the reorganization of space and in the complementarity of functions with the metropolises (LAJUGIE; DELFAUD; LACOUR, 1979) based on a more balanced distribution of both wealth and population.

Thus, the aim of this article is to demonstrate how these narratives have been used as city marketing. In order to conduct this case study on Porto Digital, below we present the theoretical framework that cross-references the issues of city marketing and gentrification and the state-of-the-art concepts that have appeared in the innovation debate since the end of the twentieth century.

1. Innovation as city marketing

After the 1970s crisis, with the scarcity of employment and income generation and of federal resources, during the conservative administration of President Ronald Reagan (1981-89), some US cities adopted fiscal, urban and marketing incentives aimed at increasing their competitiveness in attracting investors to form public-private partnerships (PPP) in urban and economic revitalization projects in depressed investment neighborhoods. This fragmented "model" of urban policy was "exported" to the UK, then to the rest of Europe and then on to other parts of the world, thereby encouraging city marketing as a new local economic agenda aimed at building a "brand image" to attract investors, tourists and consumers (COMPANS, 2005). For Delgado (2010, p. 40), the objective of city marketing "is none other than (the sale) of the city itself, a commodity that requires an appropriate combination of theorizing appearances and a duly truffled vocabulary of invocations towards abstract values of politically correct thinking".1 According to Vainer (2013), this strategic planning model was inspired by the business planning concepts and techniques of the Harvard Business School, and, according to its creators or followers, cities would then be subjected to the same conditions and challenges as private companies. Lima Junior (2010) indicated that public administration, previously seen as bureaucratic, took on a management, strategy, structure and promotion stance similar to that of business administration (mainly global) and began

^{1.} This and all non-English citations hereafter have been translated by the authors.

to offer externalities and greater publicity to attract the preference of capital flows. Within this technical-scientific-informational medium, Santos (2006, p. 160) affirmed that "spaces thus requalified attend, above all, the interests of the hegemonic actors of the economy, culture and politics and are fully incorporated into the new world currents". Arantes (2013, p. 16) highlighted the instrumentalization of monumental public buildings or cultural anchor-ventures that have become instruments of power in the world of business and global cities, pioneering "a new frontier of the accumulation of power and money - the business of images".

As a result, in urban operations in depressed investment neighborhoods, new infrastructures, events, collective equipment and quality in public spaces are implemented and presented as "success" factors in terms of improving the quality of life. However, part of these improvements is restricted to those citizens with purchasing power. On the other hand, the low-income population begins to experience processes of gentrification. This concept was constructed by the sociologist Ruth Glass, when describing, in her book *London: aspects of change*, in 1964, the phenomenon of housing renovation in the London district of Islington, with the exodus of its working-class population (OMM, 2015).

For Smith (2015), since the 1950s-60s, gentrification has ceased to be a local phenomenon of the housing market and has become widespread, in the 1990s, as a neoliberal urban strategy for global circuits of capital and cultural circulation. Smith drew an important analogy between gentrification processes and the advance of the colonization frontier in the North American West in the eighteenth and nineteenth centuries. Although it has not been an absolute geographical advance, Smith considered that as the "gentrification frontier [is] advanced"² it has constituted the reconquest of depressed investment territories by banks, property developers, distribution chains, the State, etc. And that this "recolonization" is usually undertaken by the white middle class over the non-white low-income population (SMITH, 2012).

More comprehensively, gentrification is understood as a process that converts a devalorized neighborhood – the housing and work option for the low-income population - into a valorized commodity to be consumed by the middle class, by companies and tourists, thus expanding the reproduction of capital in the city into tourism, entertainment and/or real estate businesses. In general, this phenomenon is stimulated by public and/or private initiatives and is associated with the exodus



^{2.} N.B. - For direct citations, the English version was used of Smith, N. *The New Urban Frontier*. Taylor & Francis e-Library, 2005 p. xvii. Available at: http://rohcavamaintenant.free.fr/USB%20KEY%20 Fahriye/k%C4%B1tap%20Neil%20Smith_The_New_Urban_Frontier_Gentrification_and_the_Revanchist_City.pdf. Viewed on: November 11, 2020.

of a large part of the low-income population, either in a "silent" manner, due to an increase in the cost of living, particularly rents, or more incisively, through the removal and demolition of old tenements, squats, settlements and entire buildings by the government and/or the real estate market for the construction of new enterprises (SIMAS, 2018).

In order to diversify this manner of treating the city as a business, city marketing strategies have incorporated increasingly sophisticated discourses to "dispute" through a certain originality and for the creation of a "brand". This marketing has increased the quotient of symbolic capital and distinctive features that, according to Harvey (2014), better justify the claims of uniqueness, authenticity, particularity and specificity and translate into monopoly income.

The expansion of the lucrative global consulting market should also be mentioned, which fuels the "optimism" in planning, which, in turn, signifies "not mentioning the problems" of the city (MARICATO, 2013, p. 172). Amongst so many strategies, this article highlights the instrumentalization of state-of-the-art concepts such as city marketing in the innovation debate that have been related to the case of Porto Digital in three moments: the agglomeration economy at the end of the twentieth century; the creative economy during the 2000s; and maker culture during the 2010s.

At the end of the twentieth century, many concepts on **agglomeration economies** came under discussion. Even old references were rekindled, such as *industrial districts*, by the economist Alfred Marshall at the end of the nineteenth century, constructed based on observing the organizational pattern of small companies manufacturing specific products, geographically concentrated, and which potentiated an industrial atmosphere and generated externalities (BISCEGLIA, 2014; LASTRES; CASSIOLATO, 2003). Thus, in contrast to the fragmentation of the production chain on a global scale, it was argued that grouped, specialized companies could create an industrial atmosphere and obtain certain advantages (CROCCO *et al.*, 2006). This had an impact on the multiplication of new references.

Inspired by Third Italy, certain human values and relationships of trust were romanticized through the *Italian industrial district*, defined by Becattini (1989 apud BISCEGLIA, 2014) as a socio-territorial entity characterized by the coexisting action of the community of people and industrial companies that share the conduct of values, expectations and common languages. Along this *Marshallian* line, and considering the human being as an economic actor, Michael Porter (1999), in the 1990s, popularized his concept of cluster, understood as a geographical concentration of companies, distributors, suppliers, institutions and associations within the same chain that, through cooperative and competitive relationships, achieves economic advantages. In Brazil, one concept that underpinned the construction of national public policy was the *local productive arrangement* (LPA), the vision of which is more systemic, where the relationships between a diversity of actors, whether concentrated or not, are considered in order to reduce the asymmetries of knowledge and to promote socioeconomic development (LASTRES; CASSIOLATO, 2003). However, in practice, the construction of LPA policies in Brazil has followed a line that is closer to *cluster* with a focus on a single geographically concentrated productive segment (CASSIOLATO; MATOS, 2012). In the case of Porto Digital, its theoretical construction was based on positioning the university and research groups almost as companies for generating scientific and technologic development with a focus on private initiative, through the *triple helix* concept (THERG-BRAZIL, 2016).

However, in the academic debate, there is no consensus on the economic and innovation advantages in the process of building an agglomeration economy. There are those who totally reject the proposals, others who defend them with greater caution and even those who provide consultancy. According to Moreira (2014), this popularization of the cluster concept, for example, is due to a *cluster label* or *brand*.

Consequently, several experiences of proposals for urban revitalization also appeared, and were associated with productive-innovative development. Some examples are: *Programa Bicocca*, a science and technology park with housing and commerce in urban voids in the city of Milan; *Mission Bay*, a biotechnology cluster in an old port and industrial area in the city of San Francisco; *22@Barcelona*, an urban operation in the Catalan neighborhood of Poblenou, built using the concepts of the City of Knowledge and the Italian industrial district; *Greater Philadelphia Innovation Cluster* (GPIChub), a "green" technology park on a decommissioned naval base in Philadelphia; and *Cité du Multimédia*, a cluster of Information and Communication Technologies (ICT) in an old railway yard in Montreal.

At the beginning of the twenty-first century, the **creative economy** or the "mantra for creativity" began to be "hailed" as a potential for creating wealth and employment aimed at the creative class (SELDIN, 2015). This was because, in an increasingly globalized world, in which originality is maintained in a shorter period of time, creativity, culture and innovation have assumed greater importance as significant resources in the generation of economic value and differentiation (GIGLIO; WECHSLER; BRAGOTTO, 2009; SCOTT, 2008). Thus, Storper and Venables (2005) believe that agglomeration theories were more focused on immaterial transactions and information, knowledge and ideas.

As a rebuttal to urban planning, the concept of the *creative city* began to be idealized, which, in order to attract talented people, needed to promote, in addition to a compact city, respect for gender, color and nationality diversity, technological

innovation and a rich cultural life (FLORIDA, 2010). In the search for investors and talents, urban interventions emphasized creativity and culture in run down areas, seeking to enliven public spaces and businesses (GLAESER, 2000).

However, Rausell (2009) emphasized that the *creative city* is more of a *city marketing slogan* than in fact the realization of a real major transformation. According to Peck (2015), this "creative" optimism in Florida is a consultancy business in order to reposition client cities in "creative health" rankings, and to attract or "pamper" the "homo creativus" consumer, i.e., the middle-class consumer. For Slater (2015), this creative city fever has turned gentrification into an economically healthy sign due to its image being linked to the latest fashion, bohemia, something cool, with groups of artists who occupy cafes and galleries in abandoned neighborhoods, but "lacking in creativity".

Currently, with the fourth technological revolution, **maker culture** or the do-it-yourself (DIY) are also being promoted as new possibilities for a more horizontal, collaborative, distributive and personalized production system. In the fields of architecture and urbanism, their impact is observed in new participatory proposals via applications, in *Fab Labs* and in tactical urbanism (LYDON *et al.*, 2012), whose proposals may trigger gentrification processes, brought about by so-called *citymakers*. There is a certain similarity with the *smart cities* proposal, which optimistically presents the idea that technology, in addition to "providing urban services more efficiently", would enable an "improvement in the quality of people's lives and a transformation in the relationship between local entities, companies and citizens providing a new way of living in the city" (CUNHA *et al.*, 2016, p. 28).

In general terms, this is a new wave of "optimistic" and "meritocratic" discourses, as if there were no restricted, privileged information or coercive competition laws and, in order to develop it, it is simply enough to be creative and "make it". Nogueira and Portinari (2016) stressed that the result of the collective work of the maker movement may not necessarily be for everyone, but is most likely aimed at the creative class that has time for it. By preaching independence and autonomy in relation to the State, the movement reduced the demanding engagement regarding claims for improvements and solutions for the city's problems, which is extremely convenient for neoliberalism.

Thus, Cano (2012) criticized the emphasis on the "theory of local power", which precisely consists of a strategy of neoliberalism, and of in-depth attacks on the role of the State, since municipal power has been unable to replace it in "formulating development policies that transcend this restricted space and that have links with the national objectives of a development policy", such as interest rate, exchange rate, credit and necessary fiscal considerations. Harvey (2014, p. 71) affirms that neoliberal policies channel resources to "[...] dynamic 'entrepreneurial' growth poles" with discourses in which the "[...] trickledown effect would then, in the proverbial long run (which never comes), take care of all those pesky regional, spatial, and urban inequalities."³ For Brandão (2012), this new imperialism of "sharing the elected places" creates a "unique localist thinking" with no discussion on the real issues of development. In this localist literature, the solutions for workers would be qualifications or entrepreneurship and, for the cities, the best selling point, with the "trivialization" of concepts.

2. Methodology

This explanatory research addresses the instrumentalization of innovation narratives as a strategy for city marketing in the case of Porto Digital. Data was collected through bibliographic and documentary research, on-site observation and semi-structured interviews with individuals aged over 18 years. The following criteria were adopted: i) residents and workers; ii) technicians involved with the projects; iii) researchers who had conducted some type of investigation into the case; and iv) resistance movements. Since this research involved human beings, the project was approved by the Research Ethics Committee of the Hospital Universitário Clementino Fraga Filho at the Universidade Federal de Rio de Janeiro, through Plataforma Brasil. The field trip was undertaken between October and November 2017. Lastly, information was cross-referenced on that Porto Digital strategies that involved productive-innovative development, real estate management, urban planning for the city of Recife and its main impacts.

3. Porto Digital

The analysis on Porto Digital is presented below in sections 3.1 (Productive--innovative development), on the construction of the policy and its strategies over two decades; 3.2 (Real estate management), on its facet of income generation originating from the rent paid by "on-board" companies; 3.3 (Urban planning), on its responsibility in the urban planning of the city of Recife; and 3.4 (Main impacts on the Expanded Center), specifically in the Bairro do Recife.

3.1 Productive-innovative development

The first ideas of an **agglomeration economy** in ICT activities emerged at the Informatics Center (CIn) at the Universidade Federal de Pernambuco (UFPE),

^{3.} N.B. - For direct citations, the English version was used of HARVEY, D. *Rebel Cities:* From the Right to the City to the Urban Revolution. London: Verso, 2012, p. 29.

based on the *triple helix* concept. The expectation was to attract companies, create opportunities for technological development and generate jobs in order to retain its graduates. The initial idea was to implant it on the university campus itself, but the proposal evolved towards the Bairro do Recife. There, where the largest port in the Americas was located in the seventeenth century, the new Porto Digital technology park was implemented in 2000 (interviews held on October 8 and 20, 2017, with a technician from Porto Digital, and October 9 and 23, with a technician from the Porto Novo Recife Project).

The proposal was very well accepted amongst academics, private and public actors and, above all, by the State Governor Jarbas Vasconcelos (1999-2006), one of those responsible for implementing the Recife Revitalization Plan during his term as city mayor (1993-1996). In 2000, the Porto Digital state policy was created with the objectives of "inserting Pernambuco into the global technology and innovation scenario" and contributing to the economic and urban revitalization of the neighborhood, through employment and income generation, and the occupation and restoration of properties of historic value through anchor institutions and ICT companies and the distribution of opportunities, considering the Pilar Community, which is a favela located within the neighborhood.

In 2001, the Porto Digital Management Unit was qualified as a social organization (OS) responsible for implementing the governance model, promoting infrastructure and for installing a business incubator in the Bairro do Recife. In order to attract companies to Porto Digital, the City Hall put together a number of strategies until the creation of Municipal Law No. 17,244/2006, which enabled a 60% reduction in the rate of service tax (ISS), from 5% to 2%, for companies located in the Porto Digital area, in the Bairro do Recife (RECIFE, 2006b).

In 2008, the Ministry of Development, Industry and Foreign Trade classified Porto Digital as an LPA. In 2011, creative economy activities were incorporated into the park; in 2015, it was the turn of distance learning and, in 2016, makerspace services, through the Laboratory of Connected Urban Objects.

As a result, Porto Digital was able to establish a network of 290 companies, government and development agencies, as well as nine thousand jobs and 80 thousand m² of occupation (interviews held on October 8 and 20, 2017, with a technician from Porto Digital). Its governance has become recognized through citations in newspapers and journals, events and awards, particularly the Rodrigo Melo Franco de Andrade Award, in 2017, promoted by the National Institute of Historic and Artistic Heritage (Iphan) in the new category of "initiatives of excellence in the shared management of cultural heritage".

3.2 Real estate management

During its early years, the Porto Digital SO explored a new aspect of real estate management. This occurred in 2006, during the final year of the state administration of Jarbas Vasconcelos and his vice, José Mendonça Filho, when the former headquarters of the Bank of the State of Pernambuco (Bandepe) was given over to the SO in order to generate income from letting a large part of the 11,700 m² to "onboard" companies and, thus, guarantee their survival during periods of political change (RECIFE, 2006a; interviews held on October 9 and 23, 2017, with a technician from the Porto Novo Recife Project). Subsequently, new properties were granted or acquired by the SO (Figure 1), for which remuneration reached 58.2% of its source of funds in 2011 (PD, 2011). In total, the SO is managing properties that amount to approximately 33,685 m² (24,037 m² of them in state concessions and the remaining 9,648 m² within its property) (ALBUQUERQUE; LACERDA, 2017).



Main building linked to the technology park

..... Boundaries

(1) The Bandepe building (2) Rua da Moeda, 50; (3) Rua Dona Maria César, 68; (4) Wharehouse 13; (5) Warehouse 12; (6) Information Technology Business Center (ITBC) Softex; (7) The Cais do Porto Building; (8) Rua do Apolo, 213 and 215; (9) Cais do Apolo, 181; (10) Centro de Estudos Avançados do Recife (CESAR); (11) Secretaria de Ciência, Tecnologia e Meio Ambiente (SECTMA); and (12) Warehouse 9.

Figure 1. Properties acquired, granted or related to Porto Digital in the Bairro do Recife Souce: Produce by de the authors (2018).

The Porto Digital portfolio of spaces to let is also presented at national and international events in the technology segment (LACERDA; FERNANDES, 2015). For some interviewees, Porto Digital has become a "luxury broker for ICT activities", a "real estate agent" or a "large real estate" (interviews held on October 16 and 25, 2017, with a resident of Bairro do Recife, and on October 21 and 30, 2017, with a City Hall technician). This last interviewee stated that: "I joke a lot with the people from Porto Digital, which is no longer Porto Digital, it's the **Digital Monopoly**. Because they're buying everything, spreading out ... they're already in Santo Amaro".



Figure 2. Pensão Convento in the 1980s Source: PCR, 1989, p. 22



Figure 3. The Apolo 235 building, opened in 2017 Source: PD, 2017.

REVISTA BRASILEIRA DE ESTUDOS URBANOS E REGIONAIS, V.22, E202037en, 2020 https://doi.org/10.22296/2317-1529.rbeur.202037en



One of its most recent occupations, the Apolo 235 building, to a certain extent, symbolizes the transformation of the Bairro do Recife. In 2016, Porto Digital inaugurated the makerspace called the Laboratory of Connected Urban Objects, and although this was not an incisive action, in the 1980s, this building had been the Pensão Convent, which used to house some of the "retirees from the 'battle' of life in this historic site" (PCR, 1989, p. 23), as presented in Figures 2 and 3. The testimony of one of the older local residents, Francisca Lopes Gomes, is representative of the gentrification process that was yet to come: "And a 'Convent' such as this [,] could be so beautiful, with all the old ladies, with all these tired old people living there in their own little corner, decently [...] I wonder if, even though I was born here, just when the neighborhood is going to turn into something so beautiful, there won't be a little corner in it for me?" (MONTENEGRO *et al.*, 1989, p. 42).

3.3 Urban Planning

In relation to urban planning, the Porto Digital SO gained significant responsibility. In 2006, the Porto Digital was one of the "captains" of the Recife-Olinda Urbanistic Project, a partnership between the prefectures of the two cities, the state government and the Portuguese public company Parque Expo (interviews held October 20 and 27, 2017, with the author of the Revitalization Plan). The proposal treated the port waterfront (mostly public land) as a large business, designing it broadly, such as tabula rasa, into a new mixed-use densified neighborhood, with new connections (bridges) and a new maritime terminal. Although the proposal did not leave the page, many ideas unfolded in controversial projects, the ensemble of which may be observed in Figure 4.

In 2007, the Porto Novo Recife Project was prepared to make a bid for the candidature as the host city of the 2014 World Cup, which resulted in consolidating the waterfront port in the Bairro do Recife as a space for entertainment and tourism, as well as the expulsion in 2008, of the 54 families from the Silveira Fishing Community at the Santa Rita Wharf. In 2008, the City Hall created, with Law No. 17,489, the Special Zones of the Main Center, thereby marking out sectors, with the greatest urban incentives (the utilization and occupancy rate coefficient) in the Santa Rita Wharf and in the Santo amaro "Quadrilateral". In 2011, the Porto Digital expanded its tax benefits to this "Quadrilateral" and, in 2015, extended them to the Santa Rita Wharf, to part of the Santo Antônio neighborhood and to neighboring plots on Avenida Conde de Boa Vista. In 2012, at the José Estelita Wharf, the Novo Recife Project was presented, which has since roused countless movements and expressions of resistance. In 2017, the Naval Villa received a proposal for urban operation that has also impacted on a new wave of resistance.



Figure 4. Mapping of the main interventions in the Expanded Center of Recife Source: Produced by the authors (2020).

Moreover, in 2014, the Recife 500-Year Plan began, "through the Recife City Hall and the Porto Digital Management Unit", which signed a management contract with a new SO: the Recife Agency for Innovation and Strategy (ARIES), "responsible for managing and running the implementation of the actions defined for the development of Recife" (PCR, 2015, p. 12), until 2037, the city's five hundredth anniversary, regardless of political management. The discourse highlights the challenge of the state and regional repositioning of Recife as one of the oldest capitals, ignoring, however, that it is the most unequal Brazilian capital city. In other words, fetishism and romanticism have become reconciled between its past and its future and the new digital tools of collective construction and hashtags, while pretending not to notice the social problems of the present.

3.4 Main impacts on the expanded center

During the 1990s, the Bairro do Recife (which is in fact an island) underwent a revitalization process in the southern part of the district, more specifically at Marco Zero and at the Bom Jesus and Alfândega hubs. Hence, at the turn of the twenty-first century, there was an effervescence of entertainment and tourism on the island, at the same time that there were valorized, underused spaces, due to the exodus of former residents from the southern part of the island and the predominantly ground-floor occupation by bars and restaurants (LEITE, 2006; MORIM DE MELO, 2003). In order to consolidate the PPPs, it was necessary to attract investors who could afford to renovate the buildings and occupy them. Considering that a square meter of office space is generally more expensive than that of housing, Porto Digital's ICT activities were at the forefront of this frontier advance, with the advantage of not generating atmospheric pollution, and not conflicting with the urban nucleus, the entertainment and tourism activities and the architectural typology.

However, despite the business incubators, one of the first impacts of implementing the Porto Digital and the tax benefits was the transfer of companies from one part of the city to another (interviews held on October 20 and 27, 2017, with the author of the Revitalization Plan). For the city, this reproduced a model with less territorial diversity, a greater concentration of centralized workspaces and more commuting, much of which was undertaken with the use a car due to the financial condition of its workers and customers. For the Bairro do Recife, this transfer of companies also meant a transfer of wealth.

Furthermore, Albuquerque and Lacerda (2017) questioned the fact that this incentive did not require a counterpart in the revitalization process and impacts on discouraging the diversification of land use and occupation, since one specific economic sector became privileged over the others.

With so many transformations, the Bairro do Recife experienced a higher valorization than the surrounding neighborhoods, with many transactions, in the southern part of the island, of properties for commercial use, to the detriment of residential, as presented in Figure 5 and Tables 1 and 2. Santo Amaro presented a similar proportion to that of the Bairro de Recife, although with higher absolute numbers. Boa Vista demonstrated a higher number of transactions of which there was a higher proportion of residential properties over commercial, however the numbers decreased during this period. In São José, the numbers of this relationship were more balanced and residential property transactions increased during the analyzed period.



Figure 5. Locations of sold real estate (ITBI)⁴ **between 2008 e 2013** Source: Lacerda and Fernandes (2015, p. 346)

	Boa Vista		Recife		Santo Antonio		São José	
	Com.	Res.	Com.	Res.	Com.	Res.	Com.	Res.
2008	1,077,31	1,028,85	1,041,44	_	795,15	589,40*	1,359,37	840,49
2009	1,293,20	1,066,49	1,747,37	-	927,16	989,77	2,416,77	608,99
2010	1,329,57	1,160,89	1,965,09	-	1,041,69	811,22	1,488,25	567,78
2011	1,327,40	1,423,78	1,506,60	2,425,60	1,215,62	895,58	2,191,73	601,09
2012	1,645,50	1871,16	1,770,53	-	1,503,05	2,450,53(*)	2,081,83	1,511,01
2013	1,711,67	2,101,60	2,413,79	-	1,137,50	-	1,921,19	1,044,94
Var. (%)	58.88	104,27	131,77	-	43.05	-	41.33	24.33

Table 1. The evolution of mean annual prices per square meter in the center of Recife

Notes: The data presented refer to real estate with regularized ITBI between January 2008 and October 2013, with values updated by the IGP-M/FGV monetary correction index, in March 2014. (*) Price corresponding to one individual real estate transaction.

Source: Fonte: Lacerda and Anjos (2015, p. 477).

In Santo Antônio, a large part of the 482 properties traded between 2008 and 2013 (out of a possible stock of 1,470) were occupied by higher education establishments that were later graced with the expansion of Porto Digital. It is believed

^{4.} Real Estate Transfer Tax.

that the predominance of commercial rentals and services in the historic center of Recife (CHR) - 60.12% of a sample of 168 addresses - is linked to the stimulus destined for the technology park. "It should also be noted that, since the 2010s, the neighborhoods surrounding the CHR have aroused the interest of the real estate sector in new housing units" (LACERDA, 2018, p. 125).

	Boa Vista		Recife		Santo Antonio		São José	
	Com.	Res.	Com.	Res.	Com.	Res.	Com.	Res.
2008	81	96	8	_	72	1	12	5
2009	67	85	9	_	65	4	16	5
2010	84	90	5	-	84	2	18	9
2011	58	90	13	1	71	5	24	15
2012	71	90	13	-	74	1	19	40
2013	55	57	7	-	103	0	12	22
Total	1.041	508	55	1	469	13	101	96

Table 2. Real estate traded through purchase and sale per year

Notes: The data presented refer to real estate with regularized ITBI between January 2008 and October 2013.

Source: Lacerda and Anjos (2015, p. 477).

Contemporary to so many incentives, the Porto Digital SO has become increasingly distant from social commitments, delegating this responsibility to the "on-board" companies, one of the requirements for the concession of the Porto Digital company seal (interviews held on October 8 and 20, 2017, with a Porto Digital technician).

Between the demographic censuses of 2000 and 2010, the population decreased from 925 to 602 and from 288 to 198 households in the Bairro do Recife (ADHR, 2005; PCR, 2016). An expressive part of this population was living in the Pilar Community with contrasting characteristics to those of the working population from the "on-board" companies in the Porto Digital. In relation to education, there was a disparity between 66.9% of workers with a university degree and 18.3% of illiterate residents. With regard to income, 78.3% of the workers at Porto Digital are legally employed under the consolidation of labor laws (CLT) act, against only 25.82% of the heads of household in Pilar in formal employment. In relation to sex, the majority of Porto Digital workers are male (66.4%), while in the Pilar community the majority of heads of household are female (59.72%). With age, while it is common for professionals from the creative class to have completed graduation by the age of 25, the children and grandchildren of families in the Pilar community take on the responsibility at a young age of bringing in an income. Although no data is available related to the color of those who work at Porto Digital workers, there is not a predominance of black and brown-skinned workers, as there is in the Pilar Community (PD, 2012; PCR, 2012, 2016). Table 3 also reveals the predominantly male structure of this group of companies, in which the male professionals are the most highly paid.

Area	Female	Male	Male/Fem Ratio (%)	
Telemarketing operator	661,60	817,56	123%	
Intern	765,35	781,29	102%	
Administration	1,721,32	1,366,57	79%	
Sales	2,816,67	3,195,71	113%	
Technical	2,519,14	2,551,94	101%	
Management	4,763,04	5,772,82	121%	

Table 3. Mean salary per sex and per area of workers in the Porto DigitalSource: PD, 2012, p. 55.

4. Discussion

The "optimistic" discourse on agglomeration economics, creative economics and maker culture enables us to observe that Porto Digital has not only influenced the productive-innovative sphere of Recife, but also those of the social and urban spheres. Fiscal incentives have had a direct influence over the activities of the affected neighborhoods, distorting the market in favor of their segments. This strategy, even for cluster consultant Michael Porter (1999), of establishing policies for the benefit of certain companies, goes on to distort the market and uses government resources inefficiently. Furthermore, initially, there was a migration of companies towards the Bairro do Recife. For Recife, this has signified a more sectorized, dispersed city with a greater number of commuters. For the purpose of gentrification, this transfer of companies implies the transfer of wealth.

Subsequently, the Porto Digital SO received public real estate concessions and acquired others with the aim of restoring and letting them to "on-board" companies. It is important to recognize the responsibility of Porto Digital in preserving the built-up heritage of Bairro do Recife, for which they have received an award from Iphan. This has clearly also contributed to the identity and marketing of this business. This is the additional "charm" that, according to Lacerda and Fernandes (2015), technology parks could acquire in a historic site. However, such properties become emptied of other social functions because there is no quota in this management for other uses, such as social housing. Thus, monofunctionality and real estate interests prevail. For these authors (LACERDA; FERNANDES, 2015, p. 350): [...] the face of the coin represented by the supporting rentier effects – considerably seductive - probably produces a brighter twinkle in the eyes of the park's management and operation sectors than the face of the increase in the innovation skills of the companies that decide to settle there.

In addition to these issues that directly influence urban development, the Porto Digital SO assumes a greater role in urban planning, with a prominent emphasis on several real estate business opportunities on public lands, such as the waterfront in the Bairro do Recife, the José Estelita Wharf, the Naval Villa, the Santo Amaro "Quadrilateral" and the Santa Rita Wharf. Although several actors have become involved, this set of gentrification processes has appeared to behave, as conceptualized by Smith (2012), with advances in "the gentrification frontier"⁵. Gradually, the depressed investment territories have been "regained", in this specific case, by real estate developers, companies, the "creative class" and the Porto Digital SO itself, which consists of a large property manager/owner and urban planning agent.

It is a contradictory fact that, with so much responsibility in urban planning and having so many public resources, SO delegates its social commitments to the "on-board' companies in the search for a seal of responsibility. In this regard, Fransen (2012) warns that cluster policies in peripheral countries tend to strengthen asymmetries in the face of unequal conditions of income, education and international business. Thus, the cutting-edge facilities of Porto Digital provide the creative class with greater, fascinating opportunities for entrepreneurship and promise to solve the general problems relevant to that class. However, few efforts are made to offer similar opportunities to the population of the communities, especially black women, who are the heads of their households; to avoid the ongoing gentrification problems caused by the various actors operating at the expanded center; to solve the open sewage in the Pilar community; or even to discuss other uses in the real estate stock managed by the SO.

Currently, with the Recife 500-Years, a new SO has, for the next few decades, taken over the role of city planning, which should be undertaken by the government. With so much evidence on the priority given to the real estate business to the detriment of reducing inequalities in the city, the destiny of the most unequal capital city in Brazil becomes a concern.

^{5.} N.B. - For direct citations, the English version was used of Smith (2005, p. xvii)

Final considerations

Over two decades, Porto Digital has proved to be extremely dynamic. By moving away from some of its initial aims, it has gained greater autonomy from public authorities and renewed its strategies and discourses on innovation. Countless incentives and opportunities have been offered to businesses. Despite the productive-innovative development, which incorporates telemarketing as a "creative" activity, its innovation campaigns have become an urban marketing device to gain symbolic capital in the urban operation and to promote business optimism at the expense of overcoming inequalities in the city. In the affected neighborhoods, it is possible to observed identity manipulation, real estate valorization, the exodus of low-income populations and the admission of a new population from the "on-board" companies. In other words, these are gentrification processes that are gradually regaining previously investment depressed territories in the expanded center of Recife. The permanence of the less well-off within these territories is undesirable, as has been observed with the expulsion from the Silveira fishing community or in the reduction of the resident population in the Bairro do Recife. With this, either by the agglomeration economy, or by the creative economy and/or maker culture, the seduction potential is observed for the discourse of innovation, instrumentalized as city marketing to maintain its "optimism" in relation to business and to create a "smoke screen" for the sharp inequalities.

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Submitted: June 5, 2020.

Approved: September 16, 2020.

Como citar: SIMAS, T. B.; OLIVEIRA, S. L. C. de; CARVALHO, C. M. The City Marketing Strategies of Porto Digital. *Revista brasileira de estudos urbanos e regionais*. v. 22, E202037en, 2020. DOI 10.22296/2317-1529.rbeur.202037en.

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