

BRANDING KNOWLEDGE-INTENSIVE REGIONS. A COMPARATIVE STUDY OF
PISA AND OULU HIGH TECH BRANDS

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ABSTRACT

Place marketing and branding have received much attention both in literature and in practice especially in the 1990s and 2000s. However, the research literature of place branding related to the dynamic evolution of knowledge-intensive regions is limited. This paper aims at providing an analysis of place branding processes in knowledge-intensive regions in relation to the evolution of their high tech clusters, in an attempt to identify the relation between brand development and cluster performance from a longitudinal perspective. The paper discusses the results of a multiple case study including Pisa, Italy and Oulu, Finland. The findings suggest that, in these two cases, branding has consisted more of labeling an existing economic phenomenon rather than of fostering or having a bet on it in a visionary way. This is related to the political nature of branding which may provoke a mismatch between the timing of the high tech cluster dynamics and the timing of branding initiatives, a mismatch which is likely to affect branding effectiveness and which should be considered when evaluating branding impacts.

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1. Introduction

Despite of much scepticism, place branding has been a growing practice all over the world. The Eurocities Questionnaire in 2005 showed that the average annual expenditure on place branding in Europe was £ 400.000 per city with total amounts spanning from £ 130,000 to £ 10 million per year (Seisdedos, 2006 cited in Lucarelli and Berg, 2011). Rising attention to branding was also paid by scholars, as an exponential growth in the number of academic articles published in this field from 1988 on proves (Lucarelli and Berg, 2011).

Current facts impose us to rethink of branding in a more focused and effective way. Firstly, current crisis and public budget cuts along with the credit crunch impacting private sectors urge cities and regions on to retake into consideration their actions and policies. As a matter of fact, “maintaining or increasing the level of place branding is not politically easy in a recession” (Burghard, 2009). Also, it is argued that under current conditions place branding has no longer a mission, so far having been developing in parallel with a property boom fuelled by credit availability, which reshaped the urban profile of many cities and led to regional infrastructural improvements (Eisenschitz, 2010). Certainly, over the last decade public investments provided regions with assets and “novelties” to be promoted on a branding perspective. In lack of investment capacity enhancing the regional material advantage (i.e. “doing”), any “labelling” can result simply pointless and lack legitimization.

Secondly (and related to the first point), the awareness of a significant gap is rooting within the academic community of place branding, that is a lack of evidence-based evaluation of the impacts of place branding seems to be no longer acceptable in the field. There is a need for efforts in the analysis of effectiveness (McCann, 2009) which is increasingly pointed as one of the main weaknesses in this field. In literature what has been demonstrated is the likely negative impact of those branding initiatives that end with negative reactions from those audiences which are willing to counterbalance the hegemonic narrative represented by the brand (Greenberg, 2008). Concerning branding impacts, a huge part of literature inspired by psychological studies in corporate and product branding have been “measuring” image and the change in perceptions. Many techniques have been shown especially in the field of destination branding which is naturally closer to product branding. Accordingly, the effects of campaigns “selling” a destination can be isolated and somehow measured on the basis of a well-defined target, i.e. visitors. In terms of image measurement, many consultancies have been delivering their city and county brand indexes, e.g. Future Brand Country Brand Index, Saffron European City Brand Barometer and Anholt-GfK Roper City and Nation Brand Index.

However, these approaches to evaluation are not exhaustive. While being a robust base for screening the place image in order to design a brand strategy, the analysis of perceptions is

not necessarily a definitive way to assess branding impacts. A change in place image is a long-term process which is not likely to provide any evidence of branding effectiveness on a short term basis. Moreover, a shift in image can be caused by many factors which are not necessarily connected to branding. This is a matter of causality which cannot be easily solved when we come to deal with such an intangible dimension.

For place branding assessment there is a need to make a step back and, first of all, we have to understand the intrinsic nature of branding in order to be able to identify suitable evaluation criteria. What we propose as a first step towards a branding assessment is a definition of the branding rationale, that is an understanding of the way in which branding enters the policy agenda of public authorities. From our viewpoint, we have first to establish the extent to which branding is conceived as policy fashion, as political propaganda or, rather, as a managerial approach to sustain economic development policies. By means of an understanding of the branding nature we can establish an evaluative framework.

This paper deals with these issues by focusing on knowledge-intensive regions that make an attempt to brand their high tech clusters, i.e. geographical concentrations of high technology firms, usually around scientific research centres and universities. Concerning this field of branding there is an evident gap in literature, although many international experiences witness the widespread use of branding for knowledge-intensive regions. We look for a relation between the pattern of brand development and the evolution of the cluster from a longitudinal perspective. Particularly, we make the timing of branding emerge in two cases i.e. Pisa (Italy) and Oulu (Finland), thus interpreting the process of branding in light of the pattern of cluster performance and visibility. Although this contribution is not capable of assessing the causal relation between branding, cluster development and visibility, the analysis of their intertwining casts light on the nature of branding, thus opening the way to its evaluation.

2. Place Brands and Branding

There is a lack of agreement on the definition of place branding. This is witnessed by Anholt (2005) who affirms a confusion not only about what branding is, but also about the objects of branding actions. A literature review allows us to summarise different perspectives on branding into one single definition which highlights aims, theoretical background and operative framework. Accordingly, place branding can be defined as a process that aims at establishing a fair reputation (Anholt, 2005) and building brand equity (Govers and Go, 2009) within the frame of place management (Ashworth and Kavaratzis, 2010). Place branding is a process that, in need to deal with place images (Gertner and Kotler, 2004) and place identity (Hall, 2002), is carried out by means of strategic approaches and techniques that, though coming from corporate and product branding, require additional theoretical development

(Pryor and Grossbart, 2007) in light of other disciplines, e.g. politics, cultural studies, sociology, information, communication technologies, etc. (Lebendenko, 2004).

However, this definition does not capture the essence of branding geographies since it does not help to analytically explain its overall rationale. That is, this definition does not refer to the assumptions underlying branding geographies. The mainstream literature emphasises global competition among geographies which has pushed towards a more entrepreneurial approach to place management. “Marketization” became a sort of slogan symbolizing modernization of public management so that a “special cultivation of the institution of competition” occurred (Czarniawska, 2002:83). In order to win global competition, geographies are in need to make their competitive advantage visible.

Visibility is, indeed, a prerequisite for improving place reputation. As Hospers (2004) states, spatial cognition studies demonstrate that the extent to which a region is known, and thus visible, positively influences the place image, simply because of the human attitude of not trusting and not liking the unknown. Visibility is related to a core concept in place branding, i.e. the place image. The image, which is often used as synonymous of reputation (Anholt, 2002; 2007; 2010; Iversen and Hem, 2008; Hospers, 2004; 2006; Hankinson, 2007; Trueman et al., 2007a; Reynolds, 1965 cited in Govers and Go, 2009, is regarded as “the perception of the brand that exists in the mind of the consumers or audience” (Anholt, 2007:5). That is, “brands are made in the mind” (Greenberg, 2008:33), being a “perceptual entity” (Hankinson, 2004) made of objects, symbols, values and other non-tangible phenomena which determine how a certain audience refers to the brand. The opinions emerging from place perceptions can be positive or negative, but scholars demonstrated that the less a place is known, the worse its image. Also for this reason, place branding is said to be a way to make places famous (Anholt, 2010). Accordingly, branding is deemed a viable way to reach visibility or renew the visibility leading to an increase in place reputation.

The assumption concerning a market of geographies competing one against the others (also with the help of branding techniques) does not exhaustively entangle the nature of place branding. Eisenschitz defines branding as a “form of pragmatism that must be contrasted with political ideology” (2010:82) but such definition does overlook the political content of place branding. In fact, what seems relevant in order to clarify the nature of place branding and, thus, to make progresses in the evaluation of its impacts, is an exploration of the extent to which place branding can be a political process intrinsically rather than being a mere pragmatic approach to place management.

Literature has scarcely tackled this point. It was affirmed that place images are often used by politicians to shape policy agendas by means of a control on the representation of the place, its past as well as its present and future (Bellini et al., 2010). Political aspects in branding

strategies are said to be related to the ‘political’ selective process underlying branding initiatives (Bellini, 2004; Bellini et al., 2010; Jensen, 2007; Ooi, 2004; Hospers, 2006), often creating conflicts among place stakeholders who may protest against those campaigns that are perceived as excluding part of local community (Philo and Kearns, 1993; Ward, 2000; Therkelsen and Halkier, 2004; Greenberg, 2008). Also Govers and Go (2009) underline that the brand identity is constructed through political processes, especially at local level, thus echoing local power struggles.

In addition, from an institutionalist perspective, it is said that branding strategies can be constrained by lock-ins which are reflected by policy-makers reinforcing the *status quo* (Bellini et al., 2010). Consequently, a system of beliefs and cultural assumptions “embodied in existing institutional and community approach” to development leads to “outdated, inappropriate and unsustainable” place branding strategies (Singleton and McKenzie, 2008). Inevitably, the role of government and of elected local politicians is central in place branding since they are in charge of defining the policy agenda (Therkelsen et al., 2010).

In light of this still feeble debate we argue that the process of branding requires a more in-depth research as a prerequisite to proceed to a definition of the criteria for branding assessment. From a theoretical perspective, we aim at providing brand analysts with a frame for an exploration of the brand development process in order to unfold the intrinsic nature of branding. With a specific focus on knowledge intensive regions, we propose the framework presented in the following section .

3. Analyzing Brand Development in light of High Tech Cluster Dynamics

This paper focuses on branding initiatives related to high tech clusters. We want to analyze brand and branding in relation to the dynamic evolution of high tech cluster, i.e. the branded object. In doing so, we first introduce the Hype Cycle model by the Market Analyst company Gartner, as a proposed pattern of human response to technology (Linden, 2002; Fenn and Linden, 2005). According to the Hype Cycle model, technologies generally follow a certain pattern of hype and time, when attempting to enter the market place. The pattern stages include enthusiasm at product launch or other events that generate significant interest until a “peak of inflated expectations”, i.e. over-enthusiasm and unrealistic expectations; disillusionment when technologies fail to meet expectations and quickly become unfashionable so that the press abandons the topic and the technology; and, finally, a gradual improvement in the technology leading to maturity. In this case some businesses continue and experience the benefits and practical applications of the technology. Only if a “plateau of productivity” stage is reached, the benefits of a technology become widely demonstrated and accepted (see Figure 1).

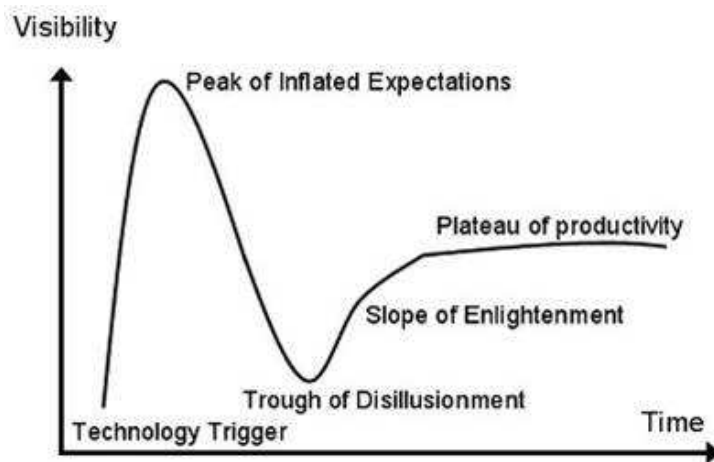


Figure 1 - The Hype Cycle

According to Bellini (2002), attitudes and expectations of the regional actors may change over time, resulting in a pressure to modify and mutually adjust the perceptions and expectations concerning the proposed policy action. As an example, e-business solutions and broadband penetration developed again after the hype and the dot-com crash experienced in the late 1990s and early 2000s (Henten & Skouby, 2004).

Does this hyping trend represent innovation brands and their evolutionary path of visibility? Accordingly, we want to assess the capacity of high tech clusters to reach visibility which is considered as a necessary step towards reputation improvement. The Hype Cycle model considers the development of the technology at stake i.e. its life cycle, running from its launch to maturity. In the same vein, we want to link cluster visibility to high tech cluster development and branding.

We use three variables related to this model, i.e. cluster development, branding initiatives and brand visibility. Firstly, cluster development will be tracked according to the stages in cluster life cycle. The cluster life cycle is often represented as a cyclical process usually containing four stages: embryonic, established, mature, and declining (DTI, 2004). The number of high tech jobs is the most common variable in assessing the stage of the cluster life cycle. In addition, from a political economy perspective on branding, we also have to stress the importance of the high tech jobs in regard to policy makers' decisions which are informed by a need for creating more and better jobs. Accordingly, we will refer to the development of high tech jobs in the local industry.

Secondly, branding initiatives will be reported by means of a description of the intensity of public and private actors' engagement in branding the cluster. Thirdly, visibility will be assessed by means of the brand image i.e. "the perception of the brand that exists in the mind

of consumers and audience” (Anholt, 2007:5). It is worth specifying that the brand image will help to assess both intensity and content of perceptions about the cluster. Three issues emerge concerning brand image: a) we can test cluster perceptions of local actors, to be here intended as public and private actors somehow involved in the high tech cluster e.g. public authorities, companies, research institutes and universities; b) there is an issue of general visibility related to the perceptions of those who are not actively involved but might be aware of it e.g. residents and students; c) a brand may be perceived from outside the region so that the external visibility, i.e. national and international, can be relevant. In our empirical research we will test the image which is in the minds of those local actors belonging to the high tech cluster.

Comparing the trends of these three variables (cluster life cycle stage, branding intensity, brand image/visibility) we will analyze their intertwining. This allows us to reach an insight into the evolution of innovation brands, thus casting light on the nature of the branding process.

4. Empirical Research: A comparative study of Pisa and Oulu high tech brands

4.1. Overview of the case study regions

The empirical part of this paper focuses on two knowledge-intensive concentrations of research and industries: Pisa in Tuscany, Italy and Oulu, Northern Finland. Accordingly, the paper not only tackles a field of branding which has been overlooked by scholars, i.e. innovation brands, but also responds to a lack of comparative studies in branding literature where single case studies are overrepresented (Lucarelli and Berg, 2011).

Pisa and Oulu regions have *a priori* similarities such as e.g. a population of less than 500,000 inhabitants, regionally and even nationally important universities, and an industrial structure combining traditional industries and high-tech industries. Clearly, there are also *a priori* differences between them, including e.g. cultural differences.

The city of Pisa is a medium-sized university city which has been known for its research and education resources throughout the 20th century. Pisa’s regional economy has been based on tourism and traditional manufacturing sectors e.g. leather, shoes, the light motorcycle industry (around the Piaggio Company), wood and furniture, etc. (DiMinin et al., 2006). The local economy has generated a new high technology based industry in the fields of ICTs and pharmaceuticals. The city of Oulu is located on the shores of the Gulf of Bothnia in Northern Finland. Oulu has the sixth largest population amongst Finnish cities. The Oulu region experienced in the 1980s and 1990s the Oulu Phenomenon, a rapid conversion from a

traditional industrial region into an internationally-known centre of advanced technologies and world-class companies.

4.2. Research data

The empirical research relies on multiple sources of data, i.e. official documents, websites, blogs, newspapers, and primary data gathered through in-depth semi-structured interviews. A snowball sampling method was selected to identify the relevant interviewees. For the two cases, two sets of interviews were carried out, the one in 2008 concerning the branding experience at the beginning of 2000s and the other in 2010-2011 concerning recent branding activities. Table 1 summarizes the interviews. This research provides an insight according to two analytical dimensions. On one hand, each case will be investigated from a longitudinal perspective. On the other hand, a cross-case analysis will cross-analyze the findings of the two longitudinal case studies.

Table 1- Place marketing interviews, Pisa and Oulu

Interviews	Research	Government	Financial	Companies	IFC	Total
Oulu2008	2	3	1	1	4	11
Oulu2010-2011	2	2	1	2	3	10
Pisa2008	2	4	0	1	2	9
Pisa2010	3	1	0	6	2	11

4.3. High tech cluster development in Pisa and Oulu

In terms of size, the high tech industry in Pisa Province had 226 companies and 7,046 jobs in 2006 (Osservatorio, 2007) and, of all high tech companies in Pisa Province, 75% employ less than 30 people. In Pisa, the high tech cluster grew relatively slowly until the late 1990s, followed by a period of more aggressive growth between 1996–2002, after which the number of high tech jobs has largely remained at the same level performing a stagnation of the (until then) promising growth of the cluster (see Teräs, 2008).

The Oulu high tech cluster has been propelled by the Nokia-driven ICTs sector and the ‘Oulu Spirit’, i.e. a solidarity and co-operative willingness across the cluster actors (Teräs, 2008). The starting point towards a city of high technology was the establishment of the University of Oulu in 1958. A significant boost came in 1972 when Nokia decided to build on its cable-making activities in Oulu and moved into telecommunications firstly through manufacturing mobile phone base stations and then through research into telecommunications. The Oulu

high-tech cluster experienced “The Oulu Phenomenon”, an internationally recognized success story of rapid and continuous growth in the 1980s and 1990s that, then, turned into stagnation in the 2000s. The Oulu high tech cluster employed 18,400 people in the Oulu region in 2005 (Oulu Growth Agreement Programme, 2006), while Nokia employed 4,500 people in Oulu region in 2007 (Kaleva, 2007). Currently, the Oulu high tech cluster is experiencing a period of decline of high tech jobs due to the job cuts by large companies, especially by Nokia.

The stages of the clusters development according to high tech jobs in Pisa and Oulu are summarised in Table 2.

Table 2 - Stages of the high tech cluster development according to high tech jobs

	1990s	2000-2005	2006-2010
Pisa	Growth	Growth / Stagnation	Stagnation
Oulu	Rapid Growth	Growth/Stagnation	Decline

4.4. High tech brand development in Pisa and Oulu: An assessment of branding intensity

In Pisa, despite of a lack of systematic high tech branding initiatives, increasing attention was paid to high tech since the 1990s. Many positive experiences e.g. Olivetti and IBM investing in Pisa during 1970s and Hewlett Packard opening a research centre in 1990, had suggested a promising high tech potential in Pisa. The first proper attempt to branding the innovative milieu was the “Arnovalley” referring to the concentration of high tech companies alongside the river Arno between Pisa and Florence. In the end of the 1990s, public and private actors labelled the dale between Pisa and Florence as Arnovalley, thus recalling the success of the Silicon Valley. After a rapid spread of this label across local and national newspapers, in 2002 Florence and Pisa Councils agreed to make a coalition for supporting high tech and this reached regional funding. A website Arnovalleycommunity.com (AVC.com) was dedicated to the whole innovative community and it was in charge of communication and information in order to develop a common and shared identity. Despite of the formal coalition, Florence and Pisa arranged separate initiatives and governance to pursue their own goals. In Pisa in 2003 the Council put in charge two local universities of designing strategic actions to enhance Arnovalley credibility (Marenco, 2003). The establishment of an organization working as an aggregation *animateur* was advised in order to favour both proximity and virtual ties under the name of the “Arnovalley Association”. Although the Arnovalley Association was expected to be established and the imminent shift towards the institutionalization of the community was regarded as desirable by local authorities, at the end of 2003 Arnovalley was abandoned completely.

A second branding wave started in 2007 when the Province of Pisa decided to elaborate a marketing plan for the area within the administrative borders of the Province. The plan “Pisa Facing the Future” aims at attracting FDIs, as the mission clearly states. Potential newcomers are deemed able to develop the still unexpressed high tech potential of Pisa city-region. Although the plan focuses on the knowledge-intensive cluster, there is no connection between this initiative and Arnovalley. According to the Province of Pisa promoting this initiative, the marketing plan slowed down because the global crisis put in place the urgency of supporting local firms to survive (P16³).

Concerning Arnovalley branding intensity, our primary research provided conflicting evidence. While some interviewees affirmed that AVC.com was improving companies’ knowledge about the Arnovalley, some others affirmed that among private actors there was no recognition of a proper project behind the label Arnovalley which, differently, was considered a set of initiatives aimed at gathering media attention. Differently, in regard to Pisa Facing the Future, interviewees reported a lack of awareness about the content of the initiative which is generally said to be limited to the event publicly launching the plan in 2008. According to interviews, we can state that the intensity of this initiative is perceived as low.

As some interviewees reported:

“Arnovalley is a fascinating and inspiring allegory which evidently had some appeal” (P2) but, at the same time, “it is only an evocative image, while now it is time to speak about concrete initiatives for an effective high tech district” (P2).

“It would be important to update and re-launch Pisa Facing the Future plan in order to reinvigorate its impact and focus more attention on it” (P18).

The major Pisa high-tech branding initiatives are summarized as follows (see Table 3).

³ The text refers to informants using codes (e.g. “P” for Pisa and “O” for Oulu) based on the chronological order of the interviews. Particularly, concerning Pisa, P1-P9 refer to interviews that were carried out in 2008, while P10-P21 refer to interviews that were carried out in 2010. Concerning Oulu, O1-O11 refer to interviews that were carried out in 2008, while O12-O21 in 2010-11.

Table 3 - Summarizing Pisa high tech brand development

High-tech brand initiative	Vision and goals	Concrete measures	Key words and slogans, key themes
Arnovalley	Nurturing regional high tech community	Website AVC.com for identity-building Research project for the assesement of viability of an <i>animateur</i> organization	The Silicon Valley of Tuscany
Pisa Facing the Future	Mainly attracting FDIs in high tech industries	Definition of the marketing plan Websites for promoting investment opportunities in Pisa area	A cutting edge ICT hub Together, to achieve sizeable projects

The first high-tech branding initiative in the Oulu region took place in the early 1980s in relation to the Oulu Technology Park planning. In the year 1982, a decision was made to establish a high technology park in Oulu with a public-private-partnership programme between the City Of Oulu and key high technology companies in the region. In 1984, the City of Oulu initiated the “Technology City Oulu” campaign. The campaign was strongly attached to promote the technology city image of Oulu and to create and develop the Technology City Oulu image (Äikäs, 2004). The City of Oulu promoted actively the Technology City Oulu and the Oulu Phenomenon slogans in 1980s and 1990s. The Oulu region took an active role in the National Centre of Expertise programme and the related high tech promotion, thus making it a positive example of public-private-partnership in high-tech industries.

After the rapid upturn period of high tech development in the 1980s and 1990s, The Oulu Growth Agreement 2002-2006 programme was launched in 2002 with a marketing campaign focusing on selected high tech clusters information technology, environmental sector, biotechnology, wellness technology, content production and media (Oulu Growth Agreement Programme, 2002). The Oulu Growth Agreement was followed by “Oulu Inspires Innovation Strategy 2007-2013” programme and marketing campaign (Oulu Inspires, 2006).

The Oulu Growth Agreement programme 2002-2006 was supported by a marketing campaign including e.g. the launch of the “Oulu Quantum Leap” slogan. However, the intensity of the Oulu high-tech region branding initiatives decreased in the 2000s, despite of the Oulu Growth Agreement and Oulu Inspires programmes. One reason for the decrease was the changed role of Technopolis, the technology park, in place marketing. Before, Technopolis had been

focused on promoting the Oulu high tech region but, then, the national broadening of Technopolis activities, including e.g. the acquisitions of the major technology parks in other parts of Finland, decreased the relative intensity of Oulu high tech region significantly.

In 2010, the City of Oulu launched a project to create a new brand to promote the Oulu region. The new Oulu brand “OULU – SMARTER THAN EVER” was released in the end of 2010. In Finnish, the slogan “Uusi Oulu”, i.e. “New Oulu”, is parallel to the “Oulu- smarter than ever” slogan. The city of Oulu “re-started” its branding activities in a larger scale in 2010 by means of a project aiming at creating a new brand for the promotion of the Oulu region. An external place marketing company, Place Marketing Oy in Turku, Finland, was selected to be in charge of brand development. The brand development included public hearings, discussion events and utilized e.g. internet discussion sites to collect the opinions of not only decision-makers but also citizens of Oulu and, generally, people interested in the Oulu brand discussion. In late 2010, the Oulu Brand Committee released the revised version of “Oulu – smarter than ever” brand. The promotion budget of the new brand is 2,5 million euros in 2011, out of which companies are expected to invest 35%.

Based on the interviews in 2010-2011, it can be stated that the high branding intensity of the Oulu high tech activities in the 1980s and 1990s has stabilized and even reduced in the 2000s. Accordingly, the relative importance of innovation branding within the overall Oulu place branding strategy has reduced in the last few years. As some interviewees put it:

“Regarding high tech brand intensity one can say that during the Technology City Oulu phases in the 1980s and 1990s there was a strong high tech brand intensity. But then came the “quantum leap” phase in the early 2000s, I think we did not succeed in the quantum leap but fell back to our initial footprints, partly even backwards. Currently, the new brand development attempts to find a direction. In my opinion, people could anticipate the downturn trend of the high tech in Oulu, this has played a role in the high tech brand activity” (O14).

“The Technology City phase was an era of strong high tech brand intensity in Oulu. Today, we have a mixed brand message: at times we are high tech city, at times not” (O16).

The major Oulu high tech branding initiatives are summarized as follows (see Table 4).

Table 4 - Summarizing Oulu high tech brand development

High-tech brand initiative	Vision and goals	Concrete measures	Key words and slogans, key themes
Technology City Oulu (1980s)	Reaching national awareness	Establishment of Technology Park, Technology City Oulu Marketing Campaign	Structural change from traditional industry to high-tech, new active economic policy
Oulu Phenomenon (1990s)	Strengthening the national high tech image, Establishing the International Oulu High tech image	National Center of Expertise Programme	Intensive use of slogans "Oulu Miracle", "Oulu Phenomenon" in the media
Oulu Growth Agreement (2002-2006)	Sustaining the high-tech image, diversifying into selected new high-tech branches, From high-tech image only to broader image	Focused forums in selected high-tech branches, "launching"	"Quantum leap", emphasizing the role of the City in local and regional development
Oulu Inspires (2006-2008)	Emphasizing the "human enthusiasm" as a source of innovation Vague definitions of quantitative key targets	Lack of selected key high tech branches	"Oulu inspires"
Oulu Brand Committee (2010)		Action plan to meet the "Brand Promises"	"Oulu- Smarter than ever"

4.5. Fragments of high tech brand image in Pisa and in Oulu: An assessment of Visibility

This sub-section discusses high tech brand image, i.e. the perceptions of the innovative milieu, by following the evolution of the brand over time. As stated above, this refers to the degree of visibility reached by the cluster and the related brand.

In regard to Pisa, although our focus is on internal visibility, it is worth reporting some information on external visibility. Whereas national and international magazines and newspapers have paid some attention to Pisa high tech (Ferraris, 2005), there is an evident paradox characterising the international visibility of the city. In fact, while Pisa is known globally thanks to the Leaning Tower, which is a powerful landmark (Warnaby and Medway, 2010), its high tech cluster does not have a comparable visibility. Rather it is quite unknown or known only by niche audiences.

As sustained above, according to some, Arnovalley was simply a set of initiatives aimed at gathering media attention. In fact, visibility was granted by a significant media coverage regarding Arnovalley. Particularly in 2000, "weekly media used to speak about Arnovalley"

(P7) making the regional high tech gain in popularity. That is, interviewees reported that Arnovalley was visible but its reputation was not sustainably improving.

Reputation was not even favoured by an early end of Arnovalley initiatives. This occurred along with negative episodes related to the cluster, nesting in people's minds. For example, the bankruptcy of high tech businesses in Pisa area provoked reactions against the Arnovalley and it was claimed that "for months everybody [had over spoken] about Arnovalley like newspapers, TVs, politicians and economists, naming it the 'cradle' of the new economy... if Arnovalley [was] not a bluff [that was] the time to prove it" (Brancoli, 2004). Scepticism arose for the emerging economy made of "fake promises" and "fake easy gain"⁴ and the whole system was deemed victim of "excessive enthusiasm" and excessively focused on "virtual realities" rather than on Tuscan actual high tech industry (Brancoli, 2004).

In addition, in 2003 an empirical research on city image reported data witnessing that Arnovalley weakly impacted on Pisa brand (SSSUP and Università di Pisa, 2003). This report highlighted "the 4 faces of Pisa", that are "Pisa, city of tourism", "Pisa, city-student campus", "Pisa, high tech city" and "Pisa, city of health services", which represented the multiple vocations of the city. The first image was said the strongest, while the "high tech city" was not perceived, and both quality of research and local business were not visible. In 2003, survey respondents were not aware of the high tech cluster existence. Pisa was not perceived as a city for business and, as a matter of fact, most students interviewed claimed not to see any chance of remaining in Pisa after graduation.

About the second brand wave, i.e. "Pisa Facing the Future", the visibility has been low. Although the sample of interviewees was small, it is worth reporting that none of the companies interviewed knew the new Pisa brand or simply had heard of it. However, the marketing plan was challenged by 2008 crisis. It was witnessed that:

"Pisa Facing the Future plan was launched at the time of the international crisis which halted all the initiatives included in the plan because of the hard time that the economic system has been getting through, compelling to defining urgent actions to support companies" (P16).

Beside this initiative, we collected data concerning the image of Pisa high tech cluster among local actors. Interviewees referred that the image of Pisa high tech has not changed significantly during the last 10-15 years. In addition, empirical evidence suggested that Pisa high tech cluster is actually perceived as a 'non-cluster':

⁴ <http://forum.teamplay.it/lofiversion/index.php/t7168.html>; Accessed: June 2008.

“There is no efforts for developing and supporting the high tech in Pisa, evidently the system does not work properly” (P10)

“There is no capacity of aggregation on common goals” (P13)

Another element which emerged when asking about the high tech image of Pisa was the reference to the rooted research tradition whose excellence comes from the past. However, while the lack of managerial skills is widely stressed, the research capacity of companies is deemed decreasing:

“Pisa is a pool of research skills which are also known abroad” (P12)

“It is hard to keep innovating and being creative because, differently from the past, firms’ small size limits the capacity to invest on R&D” (P11)

Answering to the question concerning visibility of the high tech cluster in Pisa, most interviewees reported single local actors’ visibility rather than cluster’s visibility as a whole. Many respondents said that companies exploit the visibility of the University of Pisa, Scuola Normale, Scuola Sant’Anna, CNR, being spin offs, research projects partners or, rather, simply being in Pisa. These local actors are said to provide visibility and a guarantee of quality. Image fragmentation is also witnessed by local technology park which is building its own brand:

“The Technology Park is earning its own visibility and reputation increasingly. At the same time its brand has to get rid of any links to Pisa and has to be perceived as a brand per se” (P12).

In Oulu, the high tech brands have enjoyed high visibility not only locally (internal visibility) but also nationally and even internationally (external visibility). Regarding local visibility, the first significant steps were taken already in the 1980s during the Technology Park Oulu and Technology City Oulu campaign. The City of Oulu promoted actively the Technology City Oulu and the Oulu Phenomenon slogans in 1980s and 1990s, increasing especially local and national visibility. The leading local newspaper played an important role in providing information about the upturn of the Oulu high tech development.

In the 2000s, The Oulu Growth Agreement 2002-2006 programme increased the local and national visibility of the Oulu high tech region – at least during the initial period. The Oulu Growth Agreement was followed by “Oulu Inspires Innovation Strategy 2007-2013” (Oulu Inspires, 2006) with a relatively high local visibility – especially in the beginning of the project. The overall national visibility of the Oulu high tech brand decreased, however, after the first years of the 2000s. In 2010 the City of Oulu Brand Committee aimed at creating a new brand to promote the Oulu region including an intensive use of new media, internet,

social networks, etc. The new Oulu brand “OULU – SMARTER THAN EVER” was released with high local publicity yet not intensive national one.

The international visibility of Oulu as a high tech region reached a peak in the beginning of the 2000s, as articles in leading newspapers and magazines prove (e.g. Business Week, 1995; Wired 1998). In addition, the Oulu Phenomenon has not been left unnoticed by regional development scholars, one example being Hospers (2005) lifting the Oulu Phenomenon (focusing on high tech clusters) to the category of well-known best practice in raising regional competitiveness.

4.6. A comparative approach to the discussion of findings

This section provides a comparison of results between the two case studies, i.e. Pisa and Oulu. Accordingly, the extent to which high tech cluster development and innovation branding are related is discussed on the basis of three main variables, i.e. cluster evolution (mainly the evolution of high technology jobs), branding intensity and visibility.

Over the period 2000-2010, the intensity of high tech branding initiative registers different paths in Pisa and in Oulu. In Pisa, high tech branding has never been a systematic, continuous effort. With the exception of the registered enthusiasm of Pisa high tech branding in early 2000s, from a long-term perspective we can affirm that a “critical branding intensity” has never been achieved in Pisa. In the Oulu case branding was systematic, but in the beginning of the 2000s, the branding efforts decreased, and finally the Oulu branding initiatives re-appeared in 2010, though with much wider scope.

In regard to high tech brand visibility, Oulu experienced a positive upward trend until the early 2000s. The case study supports the existence of a strong national and relatively strong international high tech brand until today, while such brand seems to be internally diluting. In Pisa, a (small) hype in visibility was reached in early 2000s but, afterwards, it became quite low.

In regard to cluster development, while in Oulu there is a trend of decreasing amount of high tech jobs after the year 2005, accelerated by the global economic crisis in 2008-2010, in Pisa high tech job index is steady although it is evident that the cluster stopped growing (Osservatorio and Unioncamere, 2010).

Table 5 visualizes the evolution of Pisa and Oulu high tech clusters according to the selected three variables i.e. stages of cluster development, branding intensity, and visibility.

Table 5 - The evolution of Pisa and Oulu clusters

High tech Cluster	Variables	1990s	2000-2005	2006-2010
Pisa	Stage of high tech cluster development	Growth	Growth/ Stagnation	Stagnation
	Branding intensity		Arnovalley	Pisa facing the future
	Visibility	(Weak) Local	(Weak) Local - small peak in 2002	(Weak) Local
Oulu	Stage of high tech cluster development	Rapid Growth	Growth/Stagnation	Decline
	Branding intensity	Technology City Oulu (started back in 1980s)	Oulu Growth Agr. 2002-2006	Oulu Inspires 2007-2008, Brand Committee 2010-2011
	Visibility	Local (increasing), even some national and international	Decrease of visibility – small peak around 2007	Decrease of high tech visibility, new initiatives fading high tech visibility

In order to fully understand the relation of cluster dynamics and brand innovation development, we try to entangle this issue further, by describing the intertwining of the three variables described above.

Branding initiative and the dynamic evolution of the high tech cluster: in both Pisa and Oulu cases we see that around 2000 branding initiatives followed the largely self-enforcing, positive life cycle development of the Pisa and Oulu high tech clusters, showing an increase of jobs. The rapid growth of jobs made the high tech cluster attractive in the eyes of decision-makers and much attention was focused on this sectors. As a matter of fact, political attention arose so that both regional and local authorities became interested in supporting and promoting the clusters. At this point, in both cases branding entered local policy agenda. On the other hand, an additional branding initiative took place in both cases in late 2000s when both high tech clusters were already in the process of downturn or stagnation. This might suggest a will of reinvigorating these sectors. However, in this second branding wave Pisa high tech industry has largely lost its specific appeal and has become one sector “among the others” according to the marketing plan. In Oulu, the high tech jobs stagnation/downturn was rapidly followed by diminishing high tech branding efforts.

In relation to the Hype Cycle model, both empirical cases of Pisa and Oulu confirm the triggering stage is followed by a rapid increase in visibility and enthusiasm for the innovation brand. However, these steps are followed by at least a partial disillusionment for the unrealistic expectations fostered by the promise of a new “Silicon Valley”. After the stage of

disillusionment, the two clusters have not been capable of reaching a new, powerful step of visibility improvement and maturity. Rather the halt of the branding initiatives along with the weakening performance of the cluster after 2000 prevented the innovation brands from reaching a phase of rooted stability (the so called ‘plateau of productivity’ in the Hype Cycle model).

Visibility and Branding initiative: while in Oulu branding initiatives systematically promoted the high tech cluster visibility, in Pisa the first initiative took place when cluster visibility was already high, thus following the achievement of visibility and the expansion of the cluster (see Figure 2). Differently, the sudden end of the initiative seemed to contribute to a complete loss of visibility of the high tech brand which was, in fact, immediately forgotten. While in Pisa the second branding initiative seemed not to be related to visibility, in Oulu the 2007 initiative seems to provide a shift in visibility at the beginning, but the weakness of the brand initiative (Oulu inspires), including a lack of brand distinctiveness, made such shift unsustainable and short-term.

Visibility and High tech Jobs: in both cases a peak of visibility was reached consequently to a rapid growth of high tech jobs which evidently created a buzz featured by much enthusiasm for such novelty. Behind the branding initiative, visibility seems to decrease when the cluster growth slows down.

Figure 2 represents the three variables, thus allowing the reader to see the relative timing of cluster development, branding initiative and visibility trends. The lines represent visibility in the two cases and the tags refer to the stages of cluster development. A comparison with Figure 1 makes similarities and differences evident. That is, the analyzed innovation brands seem to experience the peak of inflated expectations, while reaching a ‘plateau of productivity’ (i.e. a new increased and stable visibility) is fairly challenging.

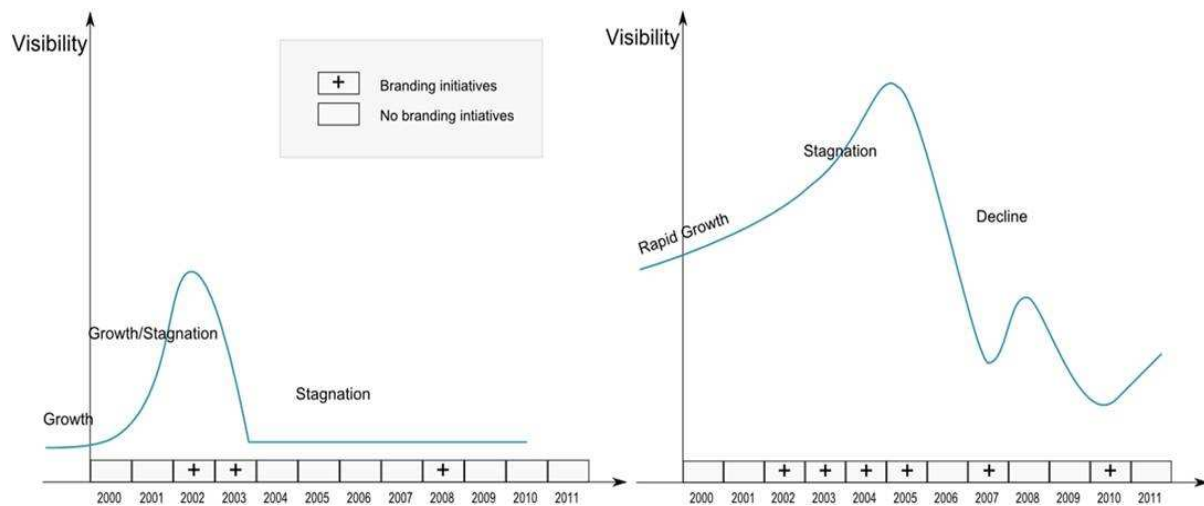


Figure 2 - Cluster development, Branding intensity and Visibility: Focus on the relative timing

5. Conclusion

Our paper attempts to widen the understanding of knowledge-intensive regions branding. We unfolded the branding process and its relation with high tech cluster dynamics from a longitudinal perspective. Accordingly, three variables were utilized, i.e. cluster development stage, branding intensity, brand visibility. Their correlation was under empirical scrutiny in two European non-metropolitan high technology concentrations, i.e. Pisa (Italy) and Oulu (Finland).

It seems that visibility is generated by high rates of jobs growth in the cluster, rather than by branding efforts which tend to come after a peak of cluster visibility (Pisa) or after cluster rapid growth (Oulu). At the same time branding initiatives weakly increased the visibility during cluster downturn. Arguably, the downturn in itself is likely to provoke a dramatic decrease in enthusiasm and, thus, attention. .

We have also to stress the emergence of branding initiatives especially in the critical moments of cluster evolution. Certainly, during a fast expansion there is much interest in high tech cluster which seems a promising economic reality. Accordingly, at this point branding initiatives are likely to be undertaken, being encouraged by the fast growth. In addition, once the growth potential seems to diminish, branding initiatives are undertaken in an attempt to re-start the growing cycle. However, branding discontinuity during the stages of low growth or stagnation does not contribute to enhance or reinforce visibility.

The analysis of the branding process and its timeliness provides us with a chance to contribute to the debate on the intrinsic nature of place branding. That is, the results of the longitudinal

analysis allowed us to hypothesize a prevailing political nature of innovation branding process. As said, branding efforts tend to follow promising performances of the high tech industry, thus being activated once the cluster has already achieved much visibility. That is, branding initiatives seem to consist more in labelling ‘economic phenomenon’ than in fostering its emergence. This trend can be explained according to the political process underlying branding activities. Accordingly, local authorities can be willing to support those industries whose success and effective jobs creation both justify public authorities’ branding actions and public money expenditure, and guarantee widespread political consensus. This can be amplified by the different calendars characterising politicians and, on the other hand, high tech clusters and its companies. While the formers have to achieve results by the end of their mandate which usually lasts about five years, high tech clusters take at least ten years to develop and mature (Porter, 1998).

In light of these arguments, we should reflect on the aims of branding and critically understand whether it is a tool for consensus building or, rather, a set of practices, strategies and techniques to contribute to local development. This understanding is crucial to designing a suitable framework for the assessment of branding impacts. How can we choose appropriate criteria for an evaluation if we do not understand what place branding is really about in a specific regional or local context?

This research presents limitations. We presented an analysis of correlation between branding and the cluster evolution but we did not explain the causality relation between the two. That is, we did not measure the impact of branding on cluster development. Generally, we think this is not viable because of the intangible nature of brands and the impossibility to isolate brand and branding effects. Instead, we offered an alternative insight in the branding process in an attempt to understand its nature and open further research for designing appropriate methods for brand and branding evaluation, a field in which there is an urgent need for analysis.

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