

PAPER FOR THE 2007 IASP WORLD CONFERENCE – BARCELONA

Title of the Paper: Benchmarking analysis for Creativity Understanding and Fostering in Conventional and New Technology Firms.

Session for which the Steering Committee has selected the abstract submitted prior to this paper: PLE1: Understanding, Fostering and Managing "Creativity"

Author: C. N. Antonopoulos

Co-authors' Names: V.G. Papadakis Ch.D. Stylios, M.P. Efstathiou, P.P. Groumpos

Author's E-mail: antonopoulos@psp.org.gr, vgp@psp.org.gr,

Organisation: Patras Science Park S.A.

Address: Stadiou Str. Platani Patras, 26504, Greece

Phone: +30 2610 911 550

Fax: +30 2610 911 570

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Date 28/02/2007

Signature V.G. Papadakis

XXIV IASP CONFERENCE ON SCIENCE AND TECHNOLOGY PARKS, 2007
“Creative Jobs and Creative Companies – Key Factors for Growth and Competitiveness”.
2-4 July 2007. Barcelona - Spain

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Authors:

C. N. Antonopoulos
MSc in Local Economic Development, Research Assistant, Patras Science Park (PSP) S.A. Greece, E-mail: antonopoulos@psp.org.gr

V.G. Papadakis
Dr Chemical Engineer, R & D Consultant, PSP S.A., Greece, E-mail: vgp@psp.org.gr

Ch.D. Stylios
Associate Professor TEI of Epirus., R&D Consultant, PSP S.A., Greece

M. P. Efstathiou
MSc in Business Administration, Research Assistant, PSP S.A., Greece

P.P. Groumpos
Prof. Department of Electrical Engineers and Computer Technology, Univ. of Patras CEO and Managing Director of Patras Science Park S.A., Greece

Keywords: *creativity, drinks and new technology sector, benchmarking, Western Greece*

EXECUTIVE SUMMARY: This paper asks the question if a benchmarking exercise of local firms can also adequately support creativity understanding and fostering for the purpose of regional economic policy making. The area of reference is Western Greece, one of the Less Favoured Regions in the European South. A 2006 survey by the Patras Science Park (PSP) on Benchmarking for local Conventional and New Technology firms, located in the region, is reviewed under the light of theoretical ideas on creativity in firms and regions. Conclusions are discussed in view of the role of the PSP as a facilitator for economic and innovative development in Western Greece. The discussion touches aspects of measuring creativity, and the ongoing debates on the importance of retaining talent in urban and regional economies as well as the need for fostering creativity in the workplace and through raising employment in creative businesses in general.

1 INTRODUCTION

Patras Science Park (PSP) was established 15 years ago with the aim to establish an Innovative Business Area in the Region of Western Greece. As part of its objectives PSP, in association with the Centre for Business and Technological Development of Western Greece created a “Benchmarking club”, with the aim to aide and support its members in issues of evaluation and competitiveness. The PSP is located in the suburbs of Patras, a small metropolitan area 200km west of Athens. The population of the wider region is 733.816 (7% of the total population in Greece) and the main urban centre, Patras, is a conurbation of a quarter of a million inhabitants. The local economy benefits from good access to the foreign markets through its frequent ferry connection to Italy. The main specialization is in the service sector (51% of the regional GDP), the manufacturing and food processing sector (22%GDP) and in the agricultural sector (27%GDP).¹

There is increasing enterprise activity around commerce and services, the higher education institutions and the regional hospital on the one side, and a long and continuing industrial tradition especially in food processing and the wine and beverages sector, on the other side. The latter were the focus of the benchmarking exercise of July 2005 – December 2006. Based on this study, combined with studies and reports on regional innovation the paper attempts to develop insights on the issues related to creativity in local firms.

The issues figuring more prominently in the effort to assess and assist the competitiveness of local firms have been treated specifically in the benchmarking exercise. But when it comes to creativity, given the vagueness of the concept, it is unclear how to work out an operational definition that could be relevant and applicable to the regional entrepreneurial context. The paper attempts to build an opinion for judging whether benchmarking is a good tool for understanding and fostering local creativity, and if not suggest alternative courses of action to this aim, informed by analyses of the local socio-economic conditions and theoretical ideas on creativity understanding and measurement in regional contexts.

The paper is organized in four parts. Part 1 presents the business profile of Western Greece. Part 2 surveys ideas of the literature that are relevant for understanding creativity in regional contexts like Western Greece. Part 3 asks the question whether creativity is a clearly defined objective for local firms and the regional economy in general. Part 3 investigates whether the ongoing benchmarking exercise can be extended *mutatis mutandis* to work as a tool for creativity understanding and fostering in the examined firms. Part 4 concludes and links the discussion with the general demand for supporting and strengthening the competitiveness and innovative profile of the local economy.

2 RELEVANT IDEAS ON CREATIVITY FROM THE WIDER LITERATURE

This essay asks the central question whether the existing tools for measuring and assisting the competitiveness of local firms (especially the typical benchmarking exercise) are adequate, or new tools should be created better suited to deal with—the increasing importance of—creativity.

It can be widely accepted that there exists a multitude of approaches concerning the issue of creativity. There is a well-developed research area in a long list of disparate fields ranging from the studies of learning and education, to human resource management and organizational studies, to social geography and modern urban theory, and the studies of economic development. It seems there are four interrelated but relatively independent levels of analysis for creativity: the individual, the organizational-firm, the local urban and regional, and the national and international. Of course all levels are essentially connected in a scheme of overlapping social milieux. A—creative—individual interacts with its own network of ties which extends to his workplace and beyond. Similarly the firm is not an isolated actor but an active player of the local economic life, and increasingly a nodal point in a global network of production and transactions. In turn cities and regions, as functional spatial units, are the geographical areas where most economically important activities are spatially clustered.

It is beyond the scope of this essay to do a synthesis of theoretical and empirical studies on the issue. Such an effort is far from being realized and in fact the vagueness of the concept and the diversity of approaches make it a highly complex undertaking. But since one of the aims of the paper is to develop an opinion on the assessment of creativity (for the benefit of local firms), the discussion, despite simplicity, will benefit from the introduction of some definition points.

First, measuring and conceptualising creativity is by no means an accomplished business; Venable (1994) in a review of the literature of testing and measuring individual creativity notes the following:

I am reminded of a metaphor in which several blind-folded people are situated around an elephant, each touching some aspect of the animal. The ensuing individual definitions of 'elephant' from divergent vantage points only shed light on a small part of a large whole. In the case of creativity testing, researchers have developed such a plethora of methods that there exists a glut of complex results and conclusions, many inconclusive, rendering this animal called creativity educationally impotent.

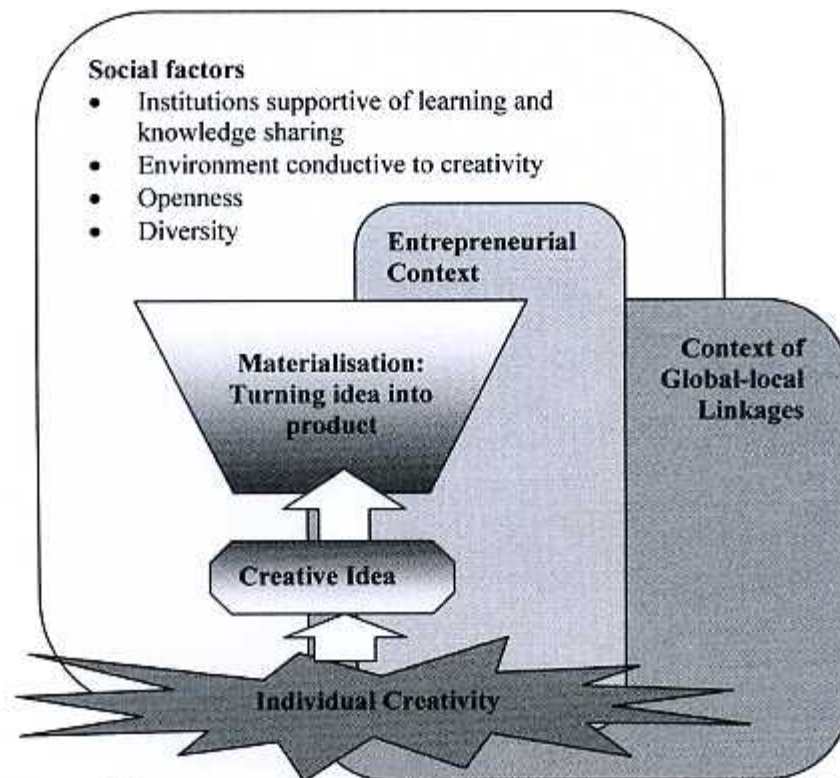


Figure 1 The process and context of creativity (author's own elaboration)

Second, it is no need to argue how central to the analysis of economic growth is technological change. In turn key for technological change is how knowledge and innovation is actually "created" in an economy. This was emphasized by Adam Smith and more recently in substantial literature devoted to this "from Schumpeter, to Schmookler to David and Rosendberg" (North, 1990). Neoclassical economics, however, do not provide any adequate explanation to maximisation other than the price mechanism. (Williamson)

Third, initially the critical (Knight, Coase) and later on institutional approaches (Williamson, North) offer more elaborate explanations of the formation and role of the firm; of the latter, North's approach to neo-institutional economics "integrates the maximising objectives of the organisation, which have been conditioned by the institutional framework, with the development of the stock of knowledge":

In fact, the real tasks of management are to devise and discover markets, to evaluate products and product techniques and to manage actively the actions of employees; these are the tasks in which there is *uncertainty* and in which investment in information must be acquired.

Furthermore,

[these tasks] do not occur in a vacuum. They entail the development of *tacit knowledge* to unravel the complexities associated with problems of measurement and enforcement. The kinds of information and knowledge required by the entrepreneur are in a good part a consequence of a particular *institutional context*. That context will not only shape the internal organisation and determine the extent of vertical integration and governance structure, but also determine the pliable margins that offer the greatest promise in maximising the organization's objectives. (North, 1990: 77, emphasis added)

Fourth, the above points do not preclude that firms and institutions are in fact localised. The argument is focused not on if regional settings are conducive to economic growth but on the question which regional setting is the best incubator of technological change and economic growth. (Despochers). On

the one side some authors (Feldman and Audretsch 1999, Glaeser et al 1992, Harrison et al 1996 qtd in Desprochers, Duranton and Puga 2005) talk about “geographically localised dynamic knowledge externalities or ‘Jacobs externalities’, as the spatial concentration of diverse individuals increases personal interaction across economic sectors, which in turn generates new ideas, products and processes”. On the other side, “other scholars argue that while localized diversity might be important in certain cases, local specialisation allows a better allocation of resources and/or increased competition and is therefore more conducive to innovation and growth” (Desprochers).

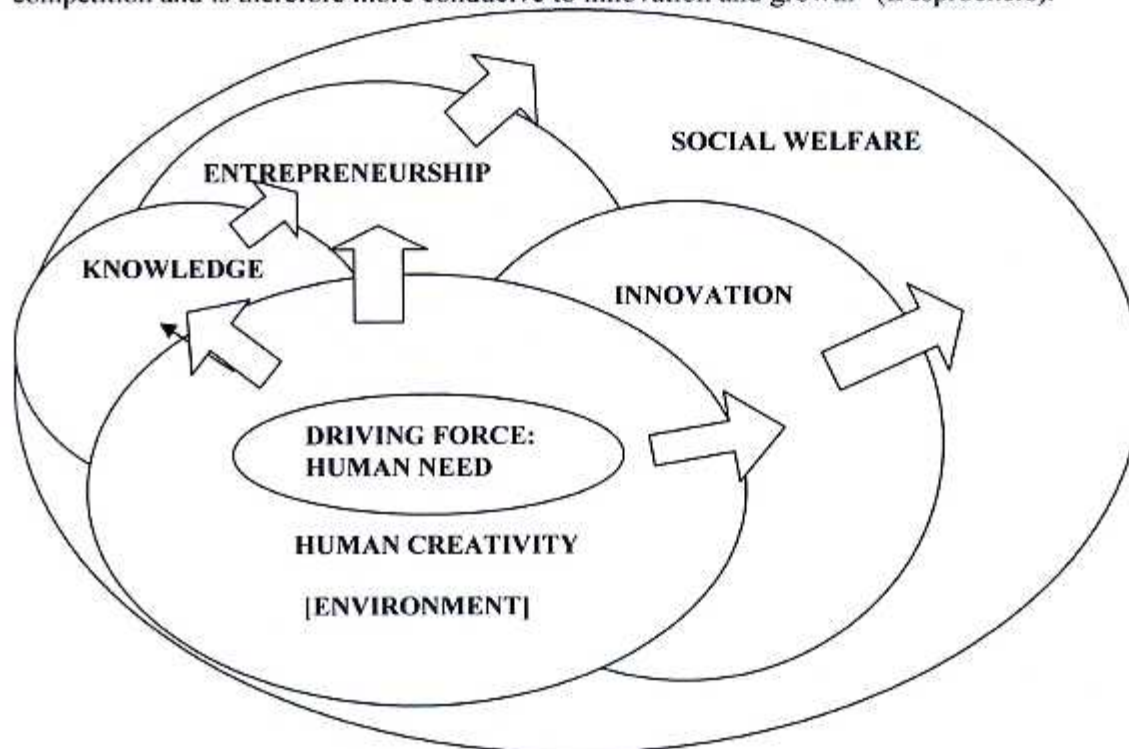


Figure 2 The expanding circles of Human Creativity, Innovation and entrepreneurship and their social utility (V.G.Papadakis)

Fifth, knowledge spillovers stemming from diversity have been a central focus of mainstream urban research in recent years. Creativity and idea generation are not unconnected to innovation and growth. As Glaeser notes, Adam Smith emphasized the importance of knowledge creation. Sam Youl Lee et al, trace “the initial attention to the role of cities in concentrating and spurring human creativity” to Park et al (1925), and Jacobs who “explained how cities function as ‘open systems’ to attract talented people from various backgrounds. In his bestselling work *Florida*, summarized and underlined these older points (Glaeser a), saying that “It’s all about creativity”. In Sam Youl Lee et al “Creativity and diversity are [seen as] more fundamental than critical resources for entrepreneurship such as tax rate, human capital, venture capital or entrepreneurial zone. It can be regarded as social habitat”. In that respect they view lower “entry barriers” as important in “making it easier for human capital with various backgrounds to enter the region and stay with it”¹¹ Moreover they see the relation between creativity and entrepreneurship as existing by definition based first, on the definition of creativity by Sternberg (1999 in Youl Lee) as “the ability to produce work that is both novel (i.e. original, unexpected) and appropriate (i.e. useful, adaptive concerning task constraints)”, then on Sternberg and Lubart’s definition of entrepreneurship as “a form of creativity that can be labeled as business or entrepreneurial creativity because often new businesses are original and useful” and finally on Catell and Butcher’s argument that “creativity is perhaps best acquired by association with creativity”.

In examining the effects of creativity Youl Lee et al employ Florida’s existing Creativity Index (2002) which “is measured by using the Bohemian Index—a measure of the proportion of ‘bohemians’ and other artistically creative people in a region” as indicative for the openness of a region to creativity of the sort not directly associated to technological and business related innovations. On the other side

diversity is measured based on the measure of the Melting Pot Index for the percentage of immigrants in the population and the so-called Diversity index used to capture the broader openness of a region.

Sixth, taking a deeper look into Jacob's theory, Desprochers, notes that it's firmly rooted in the study of human creativity, a process which can be summarized with the formula "Adding new kinds of work with other kinds of older work" (Jacobs 1970: 51). He rightly argues however that her work carries a broader perspective, which encompasses entrepreneurship and agglomeration economies.

In short, an idea for a new marketable device is but the genesis of the lengthy process towards producing a successful commercial product. Much work, most of it entrepreneurial in nature, still remains to be done and it might be that urbanisation economies are more important at this point. (Desprochers: 372).

He then exemplifies this point by viewing how "individuals possessing very different expertise collaborate with one another, whether by working with other individuals in a firm, by collaborating with individuals working on different things for other employees or by moving among establishments producing different final goods and services"(379).

Seventh, summarizing the management literature on organisational creativity, we can borrow from Andriopoulos schema of the "five major organisational factors that enhance creativity in a work environment, namely:

1. Organisational Climate
2. Leadership style
3. Organisational Culture
4. Resources and Skills; and
5. The Structure and systems of an organisation

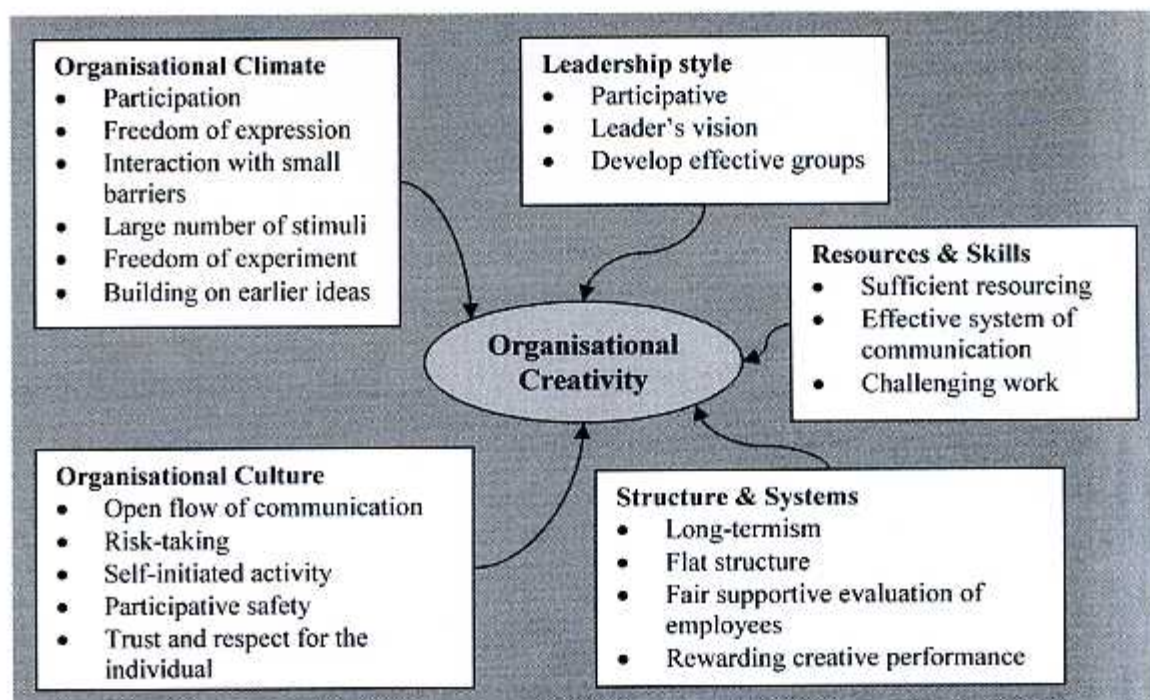


Figure 3 Factors affecting organisational creativity (from Andriopoulos, 2001:835)

3 IS CREATIVITY A CLEARLY DEFINED OBJECTIVE FOR LOCAL FIRMS AND THE REGIONAL ECONOMY IN GENERAL?

Generally there is a lack of studies focusing on creativity issues for local firms. Since creativity has entered the business discourse only recently and enterprise support structures have so far emphasized on harder aspects of performance, it is reasonable that there has reasonably been little interest in that. Nevertheless, newer national and local studies have focused on the innovative profile of firms (Showcasing innovative Greece, Benchmarking studies, ICAP on Western Greece) mainly based on assessments of employee's skills and R&D activities. Those studies draw their sample mainly from the new technology sector and well-established firms of the conventional manufacturing sector.ⁱⁱⁱ

While safe conclusions on the value of creativity for local firms cannot be reached based on the existing data, there is evidence to suggest there is a relatively high level of innovation with regard to services. However developments in the innovative section of the services sector are not effectively matched by other sectors such as agriculture and the retailing and manufacturing sector. One should possibly seek explanation on this in the structural problems, which the other sectors are facing, i.e. low productivity, deindustrialization, traditional small scale agriculture. The innovative services sector has emerged quite recently (mid 1990s) drawing mainly from the pool of skills and knowledge of the University of Patras and its connected research and technological institutions.

Most of these innovative services are spatially concentrated around the urban centre of Patras, which does not occur for other cities in the region. Patras is far larger in population and as market for skills. However proximity to the urban agglomeration of Athens, and the city's relatively weakened role in the urban system of Greece hinder the attraction of skills and innovative enterprises vis á vis Athens and other locations (Burgel). Geography and location have been very strong forces in shaping economic outcomes for Western Greece. The region's peripheral location, with bad transport links both intraregional and with the capital, has prevented functional integration of activities. In turn the increasing concentration of government, commerce, industry and services in Athens, has left regional economies unequally developed. Old industrial areas like Patras entered a period of crisis and decline in the 1980s-mid 1990s of which they have gradually restructured. This situation created further imbalances in the local labour markets, since labour with industrial expertise was made redundant and was gradually absorbed by low productivity services (mainly public sector services).

In other words the local economic system cannot be characterized as having high degrees of creativity, except presumably in the small innovative services sector. In the next section we will attempt to draw inferences on the creativity of local firms based on the benchmarking exercise in firms of the wine and drinks and the new technology sector in Western Greece.

4 CAN THE EXISTING BENCHMARKING EXERCISE BE USED FOR BENCHMARKING CREATIVITY?

We assume the new technology firms to be representative of the "innovative services sector" referred to above, while the wines and drinks sector to be representative of the "traditional process (manufacturing) sector."

Benchmarking refers to comparison of processes and methodologies applied by an organisation in relation to best practices. Initially, it is required to determine the processes of the firm on which it will be applied. Then optimal results should be sought, to function as the basis for benchmarking particular processes. Of great importance is also the evaluation and further exploitation of the results of benchmarking, in the sense that it is not sufficient to present the firm in relation to best practices but also to suggest actions for further improvement.

From June to September 2005, benchmarking questionnaires were filled during on site visits by specialised partners of the PSP. The data were then collected in Individual Reports for every firm. This

