

Technology poles and leather clusters

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Cluster networking refers to a way of coordinating or, better still, synergistically integrating the activities of different players involved in a value chain. Technology poles, more accurately, Competitiveness and Technology Poles (CTP), are determined by the needs expressed by the stakeholders in a local cluster, with the support of associations, public authorities and institutions that will be needed to bring real added value to users.

Suppliers in today's footwear market are often SMEs facing the twin challenges of improving their technological capability and lowering production costs in order to compete. Globalisation has increased the pressure by strangling many companies producing under their own brand. Outsourcing to various levels of suppliers now being the rule, the competitiveness of the whole leather industry is increasingly affected by those suppliers' competitiveness and the ongoing pressure on production costs which forces producers, unable to achieve an acceptable quality standard for the international market, to close their businesses.

Hence the important role of technology poles in facilitating access to resources such as technology,

training, market research and support services, that can free manufacturers from the bondage of contract manufacturing and enable them to find their own market niches. However, implementation of cluster development strategies varies considerably from one region to another. In those where the developed world's best practices are applied, there are significant differences as regards the cluster, its organisation and the business support services offered within the framework of its technology poles to those where it is not.

Technology poles have a long history. In the beginning there were agencies of technology linked to vocational training, while institutes of technology and polytechnics have been in existence since at least the 18th century. The world's first was founded in Hungary in 1735 to train specialists in precious metal and copper mining to meet the requirements of the new industrial revolution. The earliest leather institute was the Italian 'Stazione Sperimentale Industria delle Pelli' (SSIP) founded in 1885. It is now a centre for research and technical assistance to the tanning industry. After that, similar institutions were created throughout Europe with the

role of stimulating technical progress in the industry through research and technological development.

TECHNOLOGY CENTRES

True technology centres for the footwear and related industries only really started during the early 1940s when raw materials countries in South America had the opportunity for fast industrialisation due to the dramatic destruction and shortage of goods in Europe during World War II. These technology centres were specifically designed to assist the introduction of new know-how. After that, the example spread across the world and became increasingly popular after the war with the expansion of engineering and applied science education to meet new needs created by industrial reconstruction.

In newly developing countries, they were established post-decolonisation in order to support a political drive for 'import substitution'. The mission was one of transferring know-how from developed countries in order to set up some industries within a protected market area. The second step was to promote exports that increased the added value of local natural resources.

Typical examples can be found in North Africa with the CNCC (Centre National du Cuir et de la Chaussure), created in 1969 to promote and develop the Tunisian leather and shoe industry. Likewise the CMTC (Centre Marocain Des Techniques Du Cuir) and the ENEDIM (Entreprise Nationale de Développement des Industries Manufacturières) in Algeria, then reformed with the name of CNTC (centre national Textile et Cuir) Spa in 1998 and now known as the Centre National des Technologies et du Consulting.

In the 1970s the use of technology poles became an important topic for UN agencies. The concept lost its importance however in the late 1980s when new market-oriented economic trends were leading to open market investment: Foreign direct investment and a de-localisation of production resulted in centralised services losing ground in the confrontation with pure private driven activities.

ITALIAN DISTRICTS

The leading model became the Italian Districts of medium and (mainly) small companies. Distinctive characteristics of these districts were specialisation in a manufacturing sector, division of work between companies, high entrepreneurial levels and close ties between social and economic life. They were defined by law as 'local territorial industrial districts characterised by a large concentration of small enterprises, with special emphasis on the relation between the presence of enterprises and resident population, as well as on the specialisation of enterprise production as a whole'.

They are based on formal or informal arrangements which promote interest in the cluster among the stakeholders involved. The enterprises within the district are 'clustered' by taking advantage of the benefits that derive from staying close even from a physical point of view. Spatial proximity allows the codified or tacit transmission of knowledge and, thereby, the development of individual enterprises as well as of the entire system.

In the 1980s, the popular slogan was "piccolo è bello" (small is good), promoted thorough the Districts' stakeholders. Then the global sector changed further and in a manner

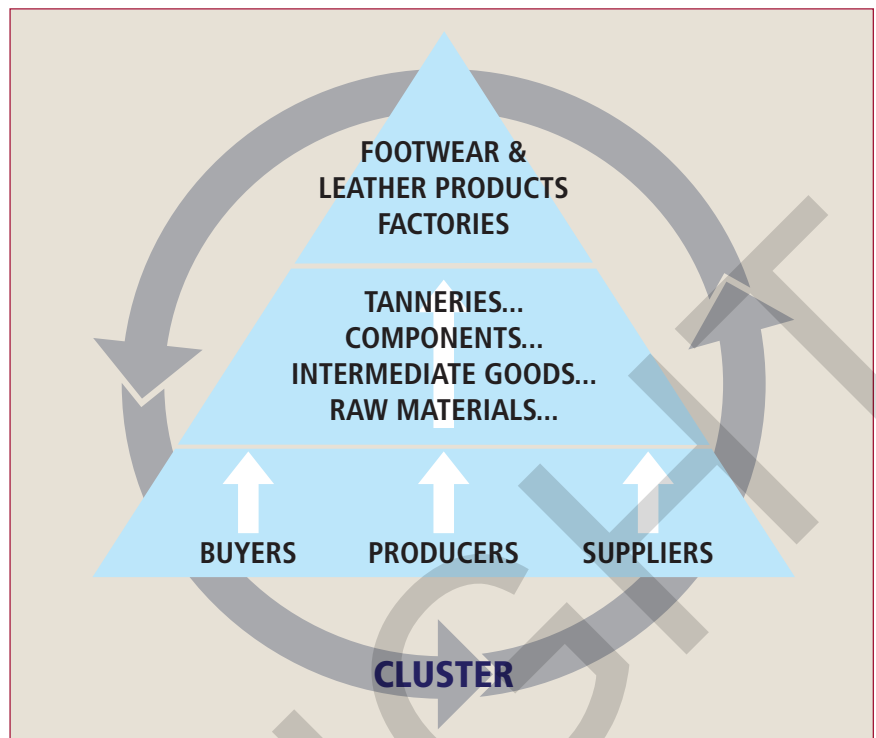


Figure 1 – A typical cluster showing potential stakeholders.

redolent of the theory of 'creative destruction' developed from Marxist thinking by the Austrian American economist Joseph Schumpeter: "A process of industrial mutation that incessantly revolutionises the economic structure from within, incessantly creating a new one." The new industrial actors are the 'big companies' which can invest in R&D, build technical departments and exploit marketing techniques and specialist manager activity.

In this context the idea of some technology poles to propel cooperation between companies at both local and international levels is being revitalised. This has come about due to the counter effects of globalisation such as that of the 'fall down' effects caused by the concentration of the footwear and leather goods market in a limited number of international brands, the large use of OEM producers, design concentrated in the hands of large retailers and the destruction of medium and small integrated clusters.

The general opinion is that, in the ocean of the free market, technology centres could help the small and medium enterprises to stabilise their quality and productivity in order to be better able to approach the global market either within the brands' value chain or by means of alternative niche

markets. The goal is to network small- and medium- enterprises and upgrade their skills and technologies to a certain consistency and basic uniformity. A good starting point is to approach the changes demanded by the global market.

Figure 1 depicts a typical cluster where buyers, producers and suppliers are part of a complete business environment that also contains producers of finished products and intermediate goods or are just a segment of it, such as only tanners or only shoemakers. It is important to define the limits of the cluster because if the technology centre produces only a few services and not enough to meet the real needs of the cluster, then the activity is wasted as demonstrated by the many institutions of this type that are now marginalised.

INDIAN EXAMPLE

A small but extremely successful example is FREYA, a unit of the ILPA Infrastructure Development Foundation in India. The foundation was formed by the leather goods manufacturers and exporters of West Bengal and has set up a design studio at its leather goods park at Bantala, Kolkata, to provide technical expertise to the leather goods industry on product development, design and fashion trends. It has received



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assistance from the Government of India under its Indian Leather Development Programme (ILDLP).

It was made possible by means of a PPP (public and private partnership) that included leather goods producers, UNIDO's Consolidated Project for SME Development, the Central Leather Research Institute (CLRI), Council for Leather Exports (CLE), Indian Finished Leather Manufacturers and Exporters Association (IFLMEA) and Assomac, the Italian association of footwear and leather goods machinery manufacturers.

It is also a not-for-profit centre operating successfully with a wide inclusive management scheme and without government funding. Within this economically sustainable scheme, FREYA provides a broad spectrum of services to micro, small and medium scale leather goods manufacturers. It is a fully-fledged design shop that caters to the demands of both domestic and international markets and yet is not just a retailer of services in the sense of 'anything that works is welcomed'. It is certainly an example of how to organise advanced services tailored to a cluster's stakeholders. Institutional organs and coordinators have been created in order to avoid market competition between stakeholders and foster common interests.

From this venture we may learn that competitiveness can only be achieved by means of networking among enterprises and institutions, and the important part that a PPP scheme can play. Historically, PPP is a scheme normally associated with large infrastructures of important social interest such as railways or roads that also includes private contributions to achieve the targeted budget and a certain 'private' style of management for reasons of efficiency. This is quite common place, for example, in Europe. In newly developing countries, many examples show it is now also very common to use this model for industrial investments. For example, utilities and commodities connected to an industrial zone or, as in the case of FREYA, for technology poles.

PUBLIC FUNDING

The initial pattern of industrialisation, often found in relatively small industries, frequently fails to produce enough capital to implement such

long term common investments. Besides that, there is also a cultural problem. Small industries are sometimes very flexible and reactive but not very proactive due to limited market experience and a lack of long term vision; this is something that must be created by networking the cluster.

The general philosophy of this new 'Zeitgeist' of leather clusters is that the establishment of a technology pole is in the general interest of the stakeholders and a benefit to all concerned. Consequently, initial expenses for the setting up of technology centres or similar agencies are sponsored at least partially by a third party representing the collective or public interest: either the associations representing the collectivity of the enterprises concerned or the public sector. As regards the latter, however, it is important to avoid the risk of setting up something in the nature of a Public Authority along the lines of the 'Gossnab' committee of the former Soviet Union; centralised design, purchasing and production is something that belongs to the past and, in any case, did not produce much in the way of development.

The involvement of the public sector is a delicate matter and one to be treated carefully. Indeed, it may well be advisable to have the public sector on board only for a certain period in order to avoid such technology poles based on PPP as being seen as a remedy for those whose business model is no longer practical. This may include selling particular goods or services to meet a demand that is disappearing, production in the wrong place geographically, use of production techniques that are no longer suitable methods to maximise net revenues or skills and experience that are no longer able to attract buyers in the labour market. There are countless other reasons besides where people or companies might like to use the power of the state in order to exclude valid competition.

Enemies of the open market therefore demand public bailouts, subsidies, tax breaks and the most varied forms of welfare for companies and individuals to alleviate the blows imparted by global competition. It's

true, this will alleviate the suffering caused by these blows. At the same time, it will also slow the process by which wealth is created and introduce measures that are ruinous—especially if imposed by the state—that can develop strong roots in the political-economic system and serve as channels for the waste of resources and eternal shackles to progress itself. ❗

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