

## ELEMENTS OF WELL OPERATING WINE CLUSTERS

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### **Abstract**

Today's economic map of the world is dominated by different clusters, so economists have to turn their attention to this type of widespread cooperation between producers, suppliers and political or educational institutes, etc. The aim of recent paper is to draw the element of well operating wine clusters, to survey the advantages of this phenomenon and to give samples of existing clusters from the wine industry. My method was to systematise the literature. In this way we can get a whole picture about clusters and it can also be used when a Hungarian wine cluster will be created in the future.

### **Keywords**

cluster, wine industry

### **Introduction**

Today clusters are very common in each industry everywhere in the world. May be the best known cluster is in Hollywood (entertainment) but there are clusters in Italy (leather fashion), in Silicon Valley (microelectronic), in California (wine), etc. Clusters are not unique, however; they are highly typical-and therein lies a paradox: the enduring competitive advantages in a global economy lie increasingly in local things -knowledge, relationships, motivation- that distant rivals cannot match. Essentially surveying the operation of clusters because even it is important what happens inside companies but our dynamically developing world has a vital role of the inter companies connections in a business environment. In the common life even in the literature is some confusion regarding to the definition of network and cluster so I try to draw in this paper the determinant features of these forms. One of the best examples of well operating cluster in the world is the Napa/Sonoma/Mendocino Wine Cluster in California. Through this example you can recognise the members of a well operating cluster and can examine some Hungarian characteristics that could be the basis of a possible wine cluster in our country.

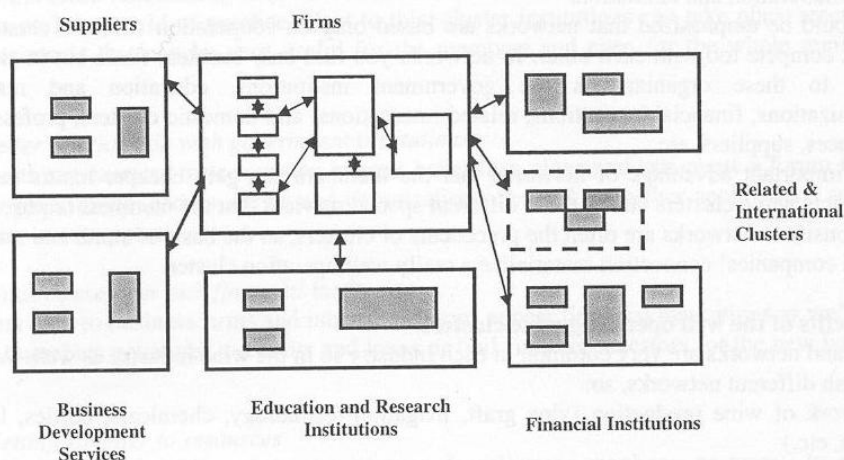
### **Describing clusters**

#### *What is cluster?*

Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure. Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs. Finally, many clusters include governmental and other institutions - such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations - that provide specialized training, education, information, research, and technical support<sup>18</sup> (see the clusters' key actors and relationship in 1. figure).

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<sup>18</sup> Michael E. Porter: Clusters and the new economics of competition

Figure 1: Clusters key actors and relationships<sup>19</sup>

### *The differences between cluster and network*

There is often confusion in the literature what is the difference between network and cluster. Frequently is used the word cluster to the phenomenon of network or support network initiations are indicated as cluster development actions. Next to the conceptional inaccuracy it could be noted some common statements:

- There are some well separable features that detach network and cluster (see 1. table). Of course it take place in the real business world some organization, which can bear with common characteristics as well.

Table 1: The main differences between network and cluster<sup>20</sup>

	<b>Networks</b>	<b>Clusters</b>
<b>Membership</b>	Defined (closed membership)	Open organization
<b>Basis of cooperation</b>	Contracted connections	Social values, reciprocity
<b>Feature of cooperation</b>	Based on cooperation	Based on cooperation and emulation
<b>Cohesion</b>	Common business purposes	Collective vision
<b>Participants</b>	Firms	Firms, institutions, professional alliances etc.
<b>Competitive advantage</b>	Opportunity to gain inputs (services) cheaper	Opportunity to attract the producers of required special inputs
<b>Position</b>	Relatively stable	Flexible changing

- Networks are always closed so you could define each participant and between these are contracted connections. In clusters it is difficult to specify each member and are more important the informal and confidential relationship. At this situation can be some organization that don't make anything for interest of the cluster but enjoy its positive effects (stowaway problem).

<sup>19</sup> Gabriela Alvarez: Discussion paper

<sup>20</sup> Grosz András: A klaszter orientált fejlesztési politika külföldi tapasztalatai

- In networks there are a lot of formal contract but in clusters the cooperation is based rather on collaboration and emulation.
- It should be emphasized that networks are based only on cooperation while in cluster the firms compete too with each other. In networks you find only business firms but in clusters next to these organizations are government institutions, education and research organizations, financial institutions, related international and domestic clusters, professional alliances, suppliers, etc.
- One important advantage of networks that the members can gain cheaper inputs through contracts while clusters attract those different special services that the members require.
- The business networks are often the precedents of clusters, so the basis of small and medium sized companies' connection materialize a really well operation cluster.

#### **The benefits of the well operating wine clusters<sup>21</sup>**

Clusters and networks are very common in each industry so in the wine industry as well. We can distinguish different networks, so:

- Network of wine production (vine graft, irrigation technology, chemicals, bottles, labels, corks, etc.)
- Network of retail shops and distributors
- Network of different professional associations (between grape growers, wineries and winemakers).

These mentioned networks often are in connection with wine clusters especially in the "new world" wine production countries (such as Chile, USA, Canada, Australia, etc.). Perhaps there are cultural reasons while these countries recognized so early the importance of the cooperation between different organizations (firms, government, research, education, etc.) and now they can enjoy the advantages of their well operation clusters. In the last few days these clusters carry on very aggressive marketing activities with the state support and they emphasize the importance of common interest and cooperation.

The benefits of a wine cluster are the followings:

##### *1. Advantages of common supplies*

The cluster firms – that are in different size (small, medium, big)- can purchase together all required materials, tools and equipment for vine growing and wine production and this way they can reach lower price at vinestocks, bottles, corks, caps, equipments, materials, barrels, tanks, etc. (You can see these elements in chapter 4.)

##### *2. Advantages of common market appearance*

It is almost unimaginable for the small and medium sized wineries to popularize their wine at international markets. The participants of a wine cluster can divide the marketing expenses and appear together in magazines (Wine Spectator, Decanter, etc.) or in other media. The emphasis should be not on the separated firms but on the whole region or product (for example Hungarian wines, Tokaj wines, etc.). Today there is almost at each weekend a wine festival in connection with wine. It is very expensive to attend each festival and it is more difficult to go abroad. Cluster's participants can have common stand, can share costs and they can enhance the quality of each other's wines. The origin protection is very determinant in the old wine producing countries, while they can't compete with the third world's low cost so the only chance to be successful coming out with very valuable wines at very high quality level and emphasizing the specialty. Clusters can configure a well and proper regulation system for origin protection based on local experience and requirements.

<sup>21</sup> Árvay A. Networks in the wine industry

*3. Thick connection with universities, academies and high schools*

Through the close relationship with education institutions can bring up the world of theoretical education and the world of practice. Next to this, cluster institutions can take place researches and experiments that can be very useful for the members and even for the whole region (or country).

*4. Better relationship with government institutions*

Participants can exercise their common interest better than alone and can create a forum for the business-government discuss. Firms and organizations can make together applications and can gain easier state supports.

*5. Thick connection with financial institutions*

In clusters next to business firms and other institutions appear financial institutions as well. This way can members get easier to credits and loans or find simpler investors for the new business ideas.

*6. Getting simpler to resources*

Participants can get easier to human resources (employees, suppliers, partners), to market information (marketing, technology, product, etc), to public- and institution goods and to the above-mentioned financial resources.

*7. Common knowledge share*

Cluster members share knowledge so the best practice can spread rapidly and not only the big companies can achieve new technologies or methodologies but the small and medium sized companies as well.

*8. Increasing trust between wineries*

Trust is one of the most important factors which is very difficult to obtain and even harder to maintain but clusters usually increase trust between partners. On the basis of trust can wineries create long-term cooperation.

As we saw the wine clusters have a lot of advantages and if this organizational solution operates well can contribute to the increase of competitiveness of the participants, the region and the country. Another important feature of the cluster that it attracts business services to the region.

**Well operating clusters in the world with regarding to the members of a possible Hungarian wine cluster**

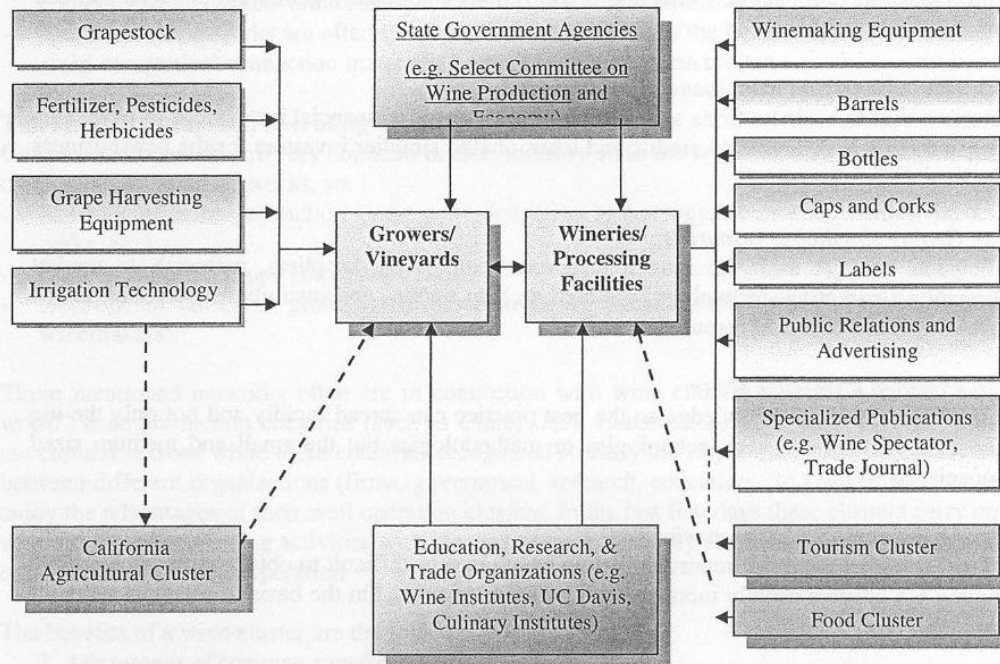
Michael E. Porter who is one of the most famous experts of clusters very often mentions the California Wine Cluster as the example of a well operation cluster (see 2. figure). In this paper I present the elements of this wine cluster and I demonstrate that in Hungary what participants could appear.

***Grape Growers/Vineyards and Wineries/Processing Facilities***

California Wine Cluster includes 680 commercial wineries as well as several thousand independent wine grape growers. There are members who grow only grape and don't deal with the wine making process. The wineries make wine, bottle and label it, sell it and often offer other services (e.g. wine tasting tours). Of course the firms can make each action at the same time and this way can control better the quality of fruit. In Hungary earlier was big tradition producing grape and selling to the State Winery. For years it was assured that the company buys the fruits so it was more important the quantity than the quality. Today it has changed so grape

growers are much more interested in the high sugar content and of the fruit<sup>22</sup>. The wineries – when they purchase the grape from outside – often make requirements and sign contracts. Nowadays lot of Hungarian wineries have equipments (tractor, pump, bottling and labelling, etc.) and in a cluster they could help for the small- and medium sized firms to treat their wines or to bottle and label them. This way a lot of member can have bigger opportunities to enter to the market with wines at higher quality level than before the cluster.

Figure 2: The California Wine Cluster<sup>5</sup>



### Network for growers

Regarding the definition of wine, it should be made absolutely from grape. Grape is determinant while the primer aromas of wines come from the fruit. Grape growers in California need grape stocks, fertilizer, pesticides, herbicides, cultivator, grape harvesting equipment, irrigation technology, etc. There are a lot of producing and distributor, where often you can buy almost everything in one place. In Hungary there are vine nurseries where grape growers can buy Hungarian (e.g. Furmint) and international (Cabernet Sauvignon) vine stocks as well. Fertilizer, pesticides and other chemicals, equipments often can be purchased from one firm (e.g. Interker Wein Company). It should be mentioned that in this region there is not common using grape harvesting equipments while in Hungary the wine mountains are very steep and the row spaces are narrow<sup>23</sup>. In California the construction of vine plantation is more uniform and the slopes are more moderate. Irrigation technology is not used in Hungary too, because of the European legislation that doesn't allow irrigation (only for experimental purposes or for new plantation). In the "new world wine producing" countries the wine legislation is much more liberal and permissive.

<sup>1</sup> It is common that grape growers make green harvest during summer to improve quality.

<sup>5</sup> Michel Porter: Clusters and regional competitiveness: Recent learnings

<sup>2</sup> On the other part these equipments are often very expensive.

### Network for wineries

The secondary aromas of wines come from the fermentation and from the maturing. So it is very important whether the winemaker ferments in oak barrel (different type, size, shape) or in stainless steel tanks. In California and in Hungary need similar vessels, winemaking equipments and chemicals. Wineries can purchase it direct from the producer (e.g. Trust Hungary Cooperage) or from the distributor (e.g. Interker Wein Company). In Hungary there is tradition of coopers they produce barrels by hand and rather in small quantity (e.g. the center of coopers in Tokaj is in Erdőbénye). The wines should be glassed in bottles and wrapped. Wineries need bottle (different size, colour, shape), on the bottle front and back label, cork (conventional or synthetic), caps (different material, colour). In Hungary wineries can buy the bottle from glass house or distributor (e.g. EMCSÚ- Glasshouse of Orosháza, Schott Glas Export GmbH.), the cork from distributor of an international firm (e.g. Hungarokork-Amorim), the labels are printed in letter-press (e.g. M-real Petőfi Címke Kft.) and created by designers. The bottles are taken usually in cardboard boxes or sometimes in wood or paper fancy-box (usually smaller firms produce them). The public relation and advertising firm can publicize the product and make the marketing strategy for the whole cluster and for each firm. The act of different newspapers and magazines is very important while in them appear often the advertisement of the wineries and in the professional newspapers and magazines are very often wine assessments and wine descriptions that are very important in the promotion of the wines. In the United States is one of the most important magazines Wine Spectator. In Hungary in the last few years took form a lot of wine journals some are for the professional and trade audiences (e.g. Bor és Piac- Wine and Market) and some are for the customers (Decanter/Decanter, Borigó/Hungary Uncorked)

### State Government Agencies

The government lay down the wine laws so very important that the law-makers in a wine cluster are closer to the firms in the wine industry and the grape growers and wineries have influence on legislation. In the California Wine Cluster are members the Wine Institute, and special committees of the California senate and assembly. In Hungary could participate AMC (The Hungarian Community Agricultural Marketing Centre) or Hungarian Wine Community (Hegyközségek Nemzeti Tanácsa).

### Education, Research & Trade Organizations

In a wine cluster are thick connections between education, research and trade organizations so the firms can obtain very important information directly from these and they can work together. Wineries and grape growers cooperate with universities, academies and high schools, the students can learn the details of wine making in practice and the wineries can later engage the proper employees. The research and development are very determinant in each industry; in a wine cluster research institutes cooperate with wineries and grape growers. In California Wine Cluster are host of local institutions involved with wine, such as the world-renowned viticulture and oenology program at the University of California at Davis, Culinary Institutes, etc. In Hungary there are more universities that teach oenology or agriculture (e.g. Budapest Corvinus University/ Károly Róbert University).

### Related and international clusters

Very important the cooperation with other clusters, in California with the California Agricultural Cluster, with the tourism and food cluster. In Hungary now there are 22 clusters, the wine cluster could be connected with tourism cluster (e.g. Pannon Thermal Cluster).

### Summary

Clusters are modern form of the widespread cooperation in each industry, so in the wine industry, as well. Wine clusters are mostly in the "new world wine producing" countries, such

Chile, Australia, Canada, USA. The California Wine Cluster is one of the best operation clusters of the world. The cluster contains grape growers; wineries; firms which serve out the grape growers and wineries, state government agencies, education, research and trade institutions, related and international clusters. In the future perhaps in Hungary could be created or formed a wine cluster which could increase the competitive advantage of wineries, grape growers, of the region or of Hungary.

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