

SMES, E-COMMERCE AND TERRITORIAL DEVELOPMENT: THE EXPERIENCE OF  
A “WEB DISTRICT”

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**ABSTRACT**

This paper analyses the effects of the creation of an e-commerce common platform among small and medium-sized enterprises (SMEs) in the Italian region Valtellina on the territorial social capital and the integration among producers. After a description of the process of aggregation and the functioning of the web district, an analysis of the data on cross-selling is carried out to evaluate the potential of the project in terms of integration. Secondly, using information from in depth interviews, the dimension of social capital is taken into account, on the one hand to understand how social capital has favoured the development of the project, and, on the other, to discover if the project has contributed to strengthen the territorial social capital. As a result, territorial networks have emerged as an effective way for SMEs to overcome the entry barriers for the access to the e-commerce, while the establishment of a territorial web district allows the creation of “consumption linkages” given by the possibility of sharing clients. Furthermore, the paper shows how this project has generated a process of local development, driven both by local and non local actors, playing different roles. A major outcome has been the strengthening of bonding and bridging social capital and the creation of new external linkages potentially able to generate spillovers.

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## 1 Introduction

Over the past decade e-commerce has stood out over the other distribution channels as the commercial solution of the future. Although Italy, and Europe in general, suffer the consequences of a delay in the supply of e-commerce services with respect to other international markets, both from the side of the consumer and of the supply, also in these areas e-commerce is gaining importance over traditional channels.

According to Forrester Research (2009)<sup>2</sup> the value of European Business to Consumer (B2C) e-commerce in 2009 is estimated in 128.6 million euros, with a growth of 11% with respect to 2008. In Germany the 2009 value is 31.3 million euros (+14% with respect to 2008), in France 17 (+15%), while in Italy is only 6.6 with a growth rate of a mere 1%. From 2002 to 2007, though, B2C e-commerce in Italy had grown at a double-digit rate<sup>3</sup>.

Of the total transactions, about 51% regards tourism services, 10% ICT and electronics, 8% insurance, 6% clothing, 3% music and publishing, 1% grocery<sup>4</sup>. The export rate is restricted to clothing, tourism and niche markets such as eno-gastronomic and typical products.

These figures give an idea of the unexploited potential of growth of the e-commerce in Italy. A structural reason for the slower adoption of the e-commerce solution in this country may be the strong presence of small and medium-sized enterprises (SMEs), accounting for 99% of the total entrepreneurial system. When trying to access the global markets, SMEs have to face with some costs - such as training for its personnel, contracts with service providers and telecommunications providers (Fariselli et al. 1999) - which act as entry barriers because more demanding for a small than for a large corporation (OECD 1995). Furthermore, their being just a drop in the sea of the World Wide Web, can result in a problem of visibility, which imposes –sometimes prohibitive - promotion efforts to emerge.

The growing importance of e-commerce as a distribution channel compels also SMEs to find ways to overcome the technological gap. Several benefits can be obtained for small businesses using ICTs (De Berranger and Meldrum 2000):

- The possibility of accessing global markets (Fariselli et al. 1999);
- The ability to manage one-to-one customer relationships at low cost (Webb and Sayer 1998) and improve external communication flows, increasing interaction with users and suppliers (Lèbre La Rovere 1998);
- The ability to bypass the requirements for setting up elaborate distribution channels and establishing brand names (Webb and Sayer 1998);

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<sup>2</sup> cited in Rapporto ASSINFORM sull'Informatica, le telecomunicazione e I contenuti Multimediali 2010, Ch. 14 "Il mercato dell'Ecommerce B2c".

<sup>3</sup> Netcomm-School of Management, Politecnico di Milano, cited in Rapporto ASSINFORM sull'Informatica, le telecomunicazione e I contenuti Multimediali 2010, Ch. 14 "Il mercato dell'Ecommerce B2c".

<sup>4</sup> *ibidem*

- The possibility of carrying out sales promotion to global consumers (Hamill and Gregory 1997) and reducing distribution costs (Hoffman et al. 1995).

One way to overcome the entry barriers is for smaller firms to seek access together as a network (Fariselli et al. 1999). Which criteria can be used for its establishment? Usually a sectoral criterion is used, for instance tourism services or fashion and design firms gather together in a same web site. In this paper, we analyze the experience of a network based on a territorial criterion, and propose the experience of a web district created on the footsteps of a real regional district<sup>5</sup>.

The paper aims at showing how e-commerce, besides bringing benefits to the single firms, can be a way to foster regional development and revitalize territories, strengthening networks of relationships and social capital, thanks to the establishment of a territorial network.

Networks may act as mechanisms for knowledge to spill over and diffuse from one firm to the other, due to relational capital (Boshma and Weltevrede 2008). The literature on industrial clusters has emphasized their capacity as loci for knowledge diffusion and generation (Giuliani and Bell 2005) and localized inter-organizational linkages have been proven to increase the innovativeness of firms, especially if belonging to the same sector (Knoben 2009). Geographical proximity affects the adoption of new routines in two ways: on the one hand, colocation may induce spillovers and imitation; on the other, local competition may put pressure to adopt the latest technology. In regional studies networks are usually analyzed as a way to overcome the limits of the firm size by activating linkages on the production sphere and joint initiatives in Research & Development. The example provided in this paper focuses on the distribution phase, showing how networking facilitates innovation also in the distribution chain. Furthermore, networking allows the creation of “consumption linkages”<sup>6</sup> given by the possibility of sharing clients and joint opportunities of promotion and this consolidates innovation and social capital.

In the following sections, using the case of the “web district” Store Valtellina, we show how e-commerce can become a toll for regional development, fostering social capital and integration among producers and facilitating the external access to territorial resources.

## **2 The “web district” Store Valtellina**

Valtellina is a mountain area in the Lombardy Region, whose local production system is based on the presence of SMEs producing eno-gastronomic typical products such as bresaola,

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<sup>5</sup> In this context the term district is used not to define a particular type of organisation of production, i.e. the industrial district, but rather to indicate an area characterised by shared history and identity, where regional productions form a composite local production system.

<sup>6</sup> Here the term consumption linkage is used in order to define the complementary purchase of products with the same geographical origin and the fact that one product can become the driver of purchase for the others and vice versa

pizzoccheri, wine and Bitto cheese, but also winter tourism services and spas. In 2010 some local producers, supported by the University of Pavia (hereafter University), the Bank Credito Valtellinese (here after bank), a logistic company and other territorial agents, have promoted a project of e-commerce of the territorial products.

The peculiarity of this portal is in that it can be considered as a “web district”. In fact, it gathers about 40 producers belonging to the Valtellina area that have become partners in the e-commerce experience with the idea of proposing in an integrated manner the differentiated supply of quality products and services of the area, ranging from eno-gastronomic products, to handicrafts, to tourism services<sup>7</sup>.

Several advantages can emerge from strengthening the links among producers and service providers and creating a shared online “showroom” for the territorial supply. On the supply side, we can distinguish between advantages generated by the e-commerce and those additionally generated by a web district.

Among the first ones, the increase in the unit margin made possible by e-commerce is estimated in 60% with respect to traditional channels<sup>8</sup>. Moreover, in case of low density of the market, a larger proportion of the customers can be reached from a central location without building a widespread retail channel (Santarelli and D’Altri 2003) or hiring importing agents worldwide.

Among the second ones, a territorial partnerships allows

- the sharing of the fixed costs deriving from the establishment and maintenance of the e-commerce system;
- economies of scales with respect to the access to logistics and bank services and personnel training;
- an increase in the opportunities of cross-selling;
- the achievement of a critical mass and a strengthened reputation both of the individual product or service and of the territory as a whole, owing to the virtuous circle generated by the reciprocal link.

The expansion of the classical distribution channels can also increase the consumer’s loyalty and repeated consumption of typical products by tourists, who can decide to expand their consumption also in the places of residence. Targeting the loyal consumers is also a means to overcome the problem of experience goods, whose quality is discovered only after direct observation or consumption (Nelson 1970), which can constitute an obstacle to e-commerce of eno-gastronomic products.

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<sup>7</sup> Although links to other tourism web site promoting Valtellina are present in the Store, so far the only tourism services sold in the webportal are ski passes and train tickets. Thus the analysis is restricted to these two products.

<sup>8</sup> Observateur Cetelem 2007, Internet World Statics 2009, cited in Rapporto ASSINFORM sull’Informatica, le telecomunicazione e I contenuti Multimediali 2010, Ch. 14 “Il mercato dell’Ecommerce B2c”.

A further positive impact of the initiative is the strengthening of the relationships among the local actors and the increased social capital it can generate.

On the consumers' side, a first advantage is in transaction costs reduction (Santarelli and D'Altri 2003). This is especially true for typical products whose market is mainly regional and thus are hardly findable outside the area of production. Finally, searching for products and comparing prices on the Internet is less costly than visiting retail stores (Santarelli and D'Altri 2003).

### **3 Research objectives and Methodology**

In this paper we present a first attempt to evaluate the Store Valtellina project from the perspective of territorial development. The research question we aim to give answer is if the web district can strengthen integration and social capital and be a tool for regional development.

The paper is organised as follows. Firstly, we describe the process of aggregation and the functioning of the web district, to understand which are the success factors and the critical points of the project for its replication. Secondly, an analysis of the data on cross selling is carried out to evaluate the potential of the project in terms of integration, but also to infer if there are some leading products or brands, if the web portal brings advantages to some categories of products with respect to others and if regional products are amenable to be e-commercialised.

Thirdly, using data from in depth interviews, the dimension of social capital is taken into account, on the one hand to understand how social capital has favoured the success of the project, and conversely, on the other, to discover if the project has contributed to strengthen the territorial social capital.

The data on accesses and transactions have been provided by the company managing the website. Besides the quantitative data, in depth interviews have been carried out involving the manager of the Store, one of the pilot entrepreneurs and a representative of the bank. The implication of the authors as scientific partners for the project has helped to gain knowledge about the mechanism functioning and give an evaluation of the project.

### **4 The process of aggregation**

In this section the phases bringing to the birth of the web district are presented and the processes behind the model reconstructed.

The project comes out from the idea of a group of entrepreneurs and researchers that web districts could be a strategic solution to help SMEs in increasing their competitiveness, reaching new markets and filling in the technological gap. The first phase, thus, has been the

formulation of a clear model. The project deliverable was a service platform able to manage the whole e-marketing and e-commerce activities of the partners, integrating the physical and virtual channels, optimizing the logistic aspects, and taking in charge the whole set of back up services.

Valtellina has been chosen as pilot case thanks to the consolidated relationships of the University, partner of the project, with the bank and a number of representative companies of the region.

In the past, two similar initiatives had been proposed in Valtellina but they had failed since the logistic model was not convincing for the firms. Once the companies have understood that the model proposed by the logistic company had the capacity to work, some of them have adhered and have become the “pilot enterprises”. Pilot enterprises are characterised by vision and prospective, have to be recognised as local leaders and are embedded in a network of local contacts, including the political ones. They also have the role of declining the project on the territory, providing criteria or proposing minimum quality standards. Two elements are crucial for the success of the process on this phase: the interest and involvement of the territorial producers as well as of local authorities - that accept to sustain the project in order to obtain a return in terms of visibility – and of the Chambers of Commerce and Industrial Associations which facilitate the spread of information about the project and informally certify it by acting as guarantors. Once obtained the political support, formal agreements and commercial and operational contracts can be stipulated with the service providers, such as the express couriers, the bank, the package providers etc.

After this long work of identification of the pilot actors, the following step has been the search of the consensus inside the territory. At this point it is necessary to close the first round of adhesions, contacting the other territorial producers, starting from those linked by relationships of various nature to the pilots. Once reached a reasonable number of producers (about 10-15), the system can start and be run in, limiting the promotion to the local scale.

After the start up, the system enters in the phase where the territorial producers have to be contacted to propose the project. In few months 75 enterprises have been contacted with a result of about 40 adherents. The local bank has had a role both in this phase and in the previous ones (above all in gaining the support of the politicians). The adhesion of the bank, acting as a broker, confers a sense of trust to the initiative. In this phase the project is ready for an intense activity of external promotion. The presence of a University among the promoters has contributed to create trust in the initiative and facilitated the firms' interest.

Once identified the strategic model and the process of aggregation, an interesting point is understanding why some of the enterprises have joined the partnership while others have not.

The adherents mainly belong to the eno-gastronomic sector, with the exception of some firms which had already invested in an e-commerce initiative or linked to specialised dealers by sole rights agreements.

Regarding the handcraft enterprises, some of them have adhered while others have not. This could be due to the nature of the product they sell which is usually commissioned and it is not easily foreseeable if it could have a market in the web district.

Social relationships have played a role in the choice. Valtellina, as many other regions, is characterised by clustered networks of relations. The pilot enterprises have easily gained the participation of the entrepreneurs linked to them by friendship or familiar linkages, while others have rejected the proposal for the presence of conflict relations with some of the pilot enterprises.

Although it is reasonable that who already owes an e-commerce site try to develop its own, a web district can provide additional advantages since it has the potential of allowing the cross selling among products, as will be shown in section 6.

## **5 The market of Store Valtellina**

Before entering in the core of the analysis, a descriptive overview of the data generated by the accesses and transactions to the web site can provide some interesting insights.

A first indication regards the geographic origin of the Store's users. Table 1 presents a summary of the main markets of Store Valtellina and those of the eno-gastronomic typical products of the area<sup>9</sup>. Although the Store Valtellina contains also other categories of products, a comparison seems useful in order to understand whether the Store helps the producers to reach new markets. Let us first note that while 8.0% of the produce is sold inside the Province, the web district has a market which is essentially extra-provincial. Most of the eno-gastronomic produce is sold inside the Region of provenance and the export base is only 9.1% (a small export base compared with benchmark areas). Store Valtellina, as well, has its main market in Lombardy Region, followed by the other Italian regions. The export sales, though, in only 6 months of activity has reached 7.3% the total. It is worth noting that a share of the regional sales is due to the ski passes and train tickets which have exclusively a regional market. If the data could be depurated from those sales, we would discover a higher vocation of the store for the markets outside the region. These data confirm the opportunity given by Store Valtellina to increase the visibility of the regional products outside the traditional markets.

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<sup>9</sup> Data have been kindly provided by the Multiconsorzio Valtellina Che Gusto and consider only the typical part of the eno-gastronomic produce which accounts for 54% of the total.

*Table 1 – Store Valtellina markets compared with the markets of typical eno-gastronomic produce*

	Store Valtellina	Eno-gastronomic products
Province of Sondrio	0,0%	8,0%
Rest of Lombardy Region	51,0%	38,9%
Rest of Italy	41,7%	44,0%
Export	7,3%	9,1%

Let us now consider which the most bought products of the Store are. The 30,4% of the sales have interested Christmas packages, 19.2% and 12.1% train tickets and ski passes, 15.9% gastronomic products, 11.3% wines, 8.9% skis, 2.2% handicrafts. The eno-gastronomic sale accounts thus for the 57.6% of the total.

Table 2 shows that although new visitors are 86.5% of the total, loyal visitors account for 62.2% of the sales and 57.7% of transactions.

*Table 2 – Percentage of accesses and transactions for new and returning visitors*

	Accesses	Sales	No. of transactions
New Visitor	86,48%	37,76%	42,32%
Returning Visitor	13,52%	62,24%	57,68%

Finally, an analysis of the sources of access reveals that more of 40% of the visitors are returning visitors accessing the website directly or through Google. Google is as well the origin of another 15% of new visitors. The other two main sources are Trenitalia (the Italian railway company) and Facebook. The analysis of the access key words shows that most of the accesses from search engines happen from key words regarding Valtellina or Store Valtellina. On the one hand, this means that efforts are needed to increase the visibility of the Store in the search engines so that customers looking for the products are redirected to the web district. On the other hand, firms should consider that customers looking for Valtellina easily reach the Store and thus it can be convenient for them to have a window in the portal.

In the following section we analyse the experience of Store Valtellina from two points of view: the extent of integration and cross-selling and the dimension of social capital.

## **6 Integration among products and producers**

In order to understand the degree of integration of the web supply, multiple methodologies have been employed. First of all, an analysis of the association rules amongst products, product categories and producers has been performed.



## 6.1 Association rules

Association rules (Giudici and Figini 2009) are used in applications such as market basket analysis to measure the association between products purchased by a particular consumer.

An association rule is a statement between two item sets that can be written in the form  $A \rightarrow B$ .

The main association rules are: support, confidence and lift.

The support indicates the proportion of transactions in which the rule is observed and is obtained by dividing the number of transactions which satisfy the rule by the total number of transactions  $N$ :

$$\text{support}\{A \rightarrow B\} = \frac{N_{A \rightarrow B}}{N}$$

The confidence of the rule indicates the proportion of times that if a rule contains  $A$ , it will contain also  $B$ :

$$\text{confidence}\{A \rightarrow B\} = \frac{N_{A \rightarrow B}}{N_A} = \frac{\text{support}\{A \rightarrow B\}}{\text{support}\{A\}}$$

Confidence is a measure of the strength of the relationship between the two items.

The lift relates the confidence of a rule to the support of the rule's head:

$$\text{lift}\{A \rightarrow B\} = \frac{\text{confidence}\{A \rightarrow B\}}{\text{support}\{B\}} = \frac{\text{support}\{A \rightarrow B\}}{\text{support}\{A\}\text{support}\{B\}}$$

A lift value greater than 1 indicates a positive association while a value less than 1 a negative association.

Association rules have been calculated both for products and for producers. The results concerning the products show strong association among eno-gastronomic products on the one hand and train tickets and skipass on the other. The analysis on the producers gives similar results.

*Table 3 – Rules giving higher association for pairs or groups of three producers*

Rules	Support	Confidence	Lift
$\{28\_cheese\} \Rightarrow \{20\_pasta\}$	0,05	0,65	5,52
$\{2\_gastr\} \Rightarrow \{13\_wine\}$	0,04	0,8	8,3
$\{2\_gastr\} \Rightarrow \{10\_gastr\}$	0,04	0,73	6,84
$\{2\_gastr\} \Rightarrow \{32\_gastr\}$	0,04	0,73	7,9
$\{7\_cheese\} \Rightarrow \{20\_pasta\}$	0,04	0,83	7,07
$\{13\_wine, 32\_gastr\} \Rightarrow \{2\_gastr\}$	0,04	0,71	13,33
$\{2\_gastr, 13\_wine\} \Rightarrow \{32\_gastr\}$	0,04	0,83	8,97
$\{2\_gastr, 32\_gastr\} \Rightarrow \{13\_wine\}$	0,04	0,91	9,43

Table 3 reports the association rules among 2 or 3 producers<sup>10</sup> with a support equal or above 4% and shows that the most associated producers are the pilot ones which are also the ones selling the typical products of the area. Two possible interpretation of this result are that (i) the pilot enterprises are those who suppose that their products can be easily sold complementarily with others; (ii) the pilots are also the more active in the project and have already strong relationships exploitable also in the web site.

## 6.2 Odds ratios

Secondly the odds ratios among pairs of product categories and producers have been calculated. Considering many 2x2 contingency tables each reporting the joint distribution of a couple of products (X and Y), the odds ratio is a measure of association given by

$$\theta = \frac{odds_1}{odds_0} = \frac{\pi_{11} / \pi_{01}}{\pi_{10} / \pi_{00}}$$

Where the odds are defined as

$$odds_1 = \frac{\pi_{11}}{\pi_{01}} = \frac{P(Y=1 | X=1)}{P(Y=0 | X=1)}$$

and

$$odds_0 = \frac{\pi_{10}}{\pi_{00}} = \frac{P(Y=1 | X=0)}{P(Y=0 | X=0)}$$

The odds ratio is a non-negative number which is greater the higher is the association. When  $\theta > 1$  there is a positive association, while for  $0 < \theta < 1$  there is a negative association. When the purchase of the two products or producers X and Y are independent, the two odds are equal and thus the odds ratio is equal to 1.

It is also possible to derive a confidence interval for  $\theta$  to determine the significance of the association.

The odds ratios have been calculated for product categories. The significant odds ratios are reported in Table 4.

*Table 4 – Significant odds ratios for product category*

Variable 1	Variable 2	Odds Ratio	Lower C.I.	Upper C.I.
Cheese	Pasta and bakery	46,14	15,73	135,32
Jam and other	Honey	19,00	6,12	58,98
Honey	Wine	18,33	6,29	53,41
Cheese	Honey	16,58	5,73	47,98
Honey	Pasta and bakery	16,32	5,29	50,37
Bresaola	Honey	14,53	5,00	42,24

<sup>10</sup> Each firm is identified by a number followed by the indication of the main product it commercialises. *Gastr* stands for gastronomic products different from the typical ones.

Pasta and bakery	Wine	12,89	5,76	28,83
Cheese	Wine	10,63	4,48	25,21
Jam and other	Pasta and bakery	8,97	4,51	17,86
Bresaola	Cheese	8,78	3,52	21,92
Bresaola	Wine	8,76	3,59	21,34
Jam and other	Wine	7,93	3,64	17,29
Jam and other	Cheese	7,66	3,39	17,30
Bresaola	Pasta and bakery	7,05	3,03	16,41
Bresaola	Jam and other	5,62	2,41	13,08

The same analysis has been conducted for producers and the results reveal the presence of significant odds ratios for 218 pairs of them. A problem of this measure is that it does not consider that cross-selling can occur just in a few number of transactions, equal to 1 or 2. For this reason we have combined the odds ratios with the number of transactions, in order to give a more significant measure of the associations. Furthermore, social network analysis tools – with the application of the social network program Pajek (de Nooy et al. 2005) – have been used to provide a useful graphical representation of the network behind the web district.

### *6.3 Social network analysis and odds ratios*

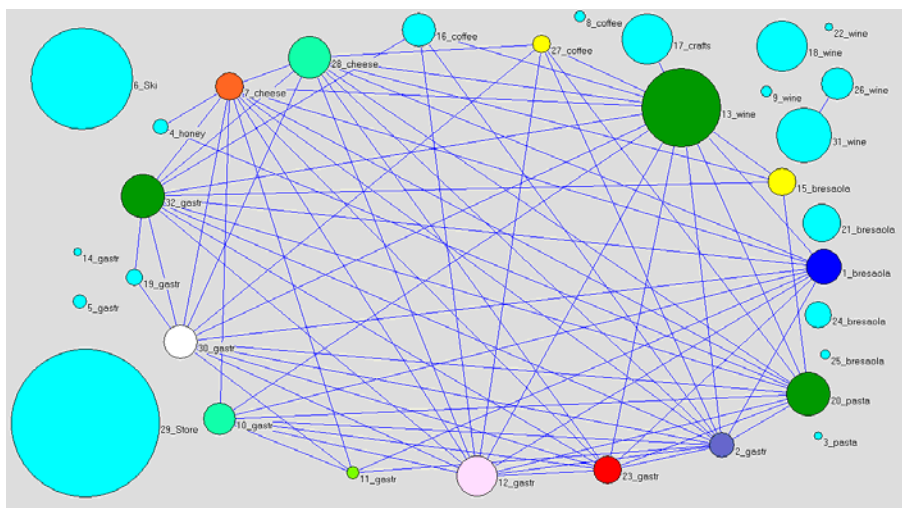
The social network perspective is usually applied to study relationships of social nature or the transfer or flows of resources between one actor and the others. In this work we rely on this method applying a partially different perspective, since cross-selling is neither a social relation nor a voluntary transfer from one actor to another. The odds ratios and social network methods have been combined in a graphical model which allows identifying the most significant and strong linkages in the network, the density of the network and the degree of integration, as shown in Figure 1.

Each vertex corresponds to a producer, identified by a number followed by the product category it belongs to. The presence of a line between a pair of vertices indicates the presence of at least 3 cross-sellings and a significant odds ratio for that pair. This limit has been chosen because identified as a good threshold for dividing the group of the less connected from that of the more connected. The vertex size is proportional to the volumes of sale on the Store and the vertex colour depends on the degree of association.

The main results can be summarised as follows:

- There is high association between eno-gastronomic products, but not all producers participate in the denser network (only about half of the producers)
- Regarding wine producers, only the one with the highest sales volume is strictly associated to the other interconnected vertices

- Only 2 out of 5 producers of bresaola participate in the denser network. Furthermore, the small size of the vertices shows that - despite this product represents the 90% of the sales of Valtellina’s typical produce and it is well represented in the Store - its sales volume is a minimum part of the whole
- The other gastronomic producers (although with some differences both in terms of volumes and linkages) are generally highly connected but so far have small sales volumes.
- The handcraft producer is only associated with the leading wine producer. Considering that both of them sell high quality goods, this link can be interpreted as the signal of an association between quality productions.
- The two more relevant actors in terms of sales volumes (a skis producer and Store Valtellina, which sells the train tickets and ski passes for skiers and special Christmas eno-gastronomic packages) have not significant association with other producers, probably because of their offer referring to different markets with respect to eno-gastronomic products.



*Figure 1: Graph of the associations among producers*

As a result of the analysis, the web district seems a powerful tool to increase the “consumption linkages” and the complementary purchase of regional products. In the first period of activity many producers – especially those who have invested more energy in the project – have benefited of the cross-selling. This means that in the absence of search costs the consumer tends to purchase products from multiple producers, at least for the eno-gastronomic part of the supply. This confirms the opportunities of a network of e-commerce for producers of regional products.

A further important point has to be underlined: the Christmas packages have not been considered in the analysis, because their composition has been conditioned by the choice of the Store managers who have made the packs. However, they have been the more profitable product of the Store and the main example of integration and cross selling, since they are

composed of several products (pasta, coffee, chocolate, bresaola, wine, cheese, jams) of different producers.

## **7 Social capital**

An important result of the project in terms of territorial development is the increase in social capital. Social capital is both an input and an output of the project.

Social capital (Granovetter 1973; Grootaert and van Bastelaer 2001; Putnam 1993) is the stock of resources of trust and cooperation shared by a certain group. It favours the local development in many ways. By stimulating the exchange and diffusion of knowledge and trust inside the firm and among firms, it facilitates the development of tacit knowledge as a competitive resource; through the creation of networks between local public governments and intermediate institutions, it favours the improvement of the infrastructural and services endowment and the flows of capitals and investments; the presence of social capital and external economies is a source of attraction for firms in search of localisation advantages (Trigilia 2001).

Bagnasco (2006) distinguishes between the *bonding* social capital, which strengthens the boundaries of a network, and *bridging* social capital, which allows connections outside the territorial network.

Valtellina is a region characterised by strong internal social capital. Rather than a dense network, though, a picture of the linkages would show several sub-groups. Among them, ties of familiar nature, friendship and trust could be retrieved, but the map would also contain linkages of conflicts due to rivalry and personal divergences between subgroups. This picture would fit also in many other territorial areas of Italy and determines the way many project partnerships are defined. The presence of social capital helps to explain why some producers have joined the partnership while others have not. In the case of the web district, in fact, the crucial factor for the design of the pool of firms has been the presence of ties between the pilot firms and the firms of their subgroup of reference, which have been invited and have usually adhered. The brokerage of the associations of producers and of the Chamber of Commerce has played a role as well. The companies that have not joined the projects are in general those belonging to subgroups not linked to those of the partners and those which have identified the web portal as a possible competitor of already started activities.

If on the one hand social capital has been a fundamental driver for the success of the project, on the other the project has helped to increase it, both in the bonding and in the bridging dimension.

Starting from the bridging dimension, the project has obtained two kinds of results. First of all, new relationships have been created with external actors such as a University and the logistic company in charge of the project, which can potentially generate spillovers for the

whole area. Secondly, given the core business of the project, commercial ties will spread outside the regional area which so far is the main market for the products. The development of the project on the Business to Business (B2B) side will further enhance this aspect.

Regarding the bonding social capital, the project has strengthened the linkages among the partners, both firms and associations. The outcomes of this are two initiatives come out after the web district. The first is the Quality Agrifood District, a project financed by the Lombardy Region in order to strengthen the competitiveness of the local agrifood system. The second is the “Club of the exporters”, a project promoted by the Chamber of Commerce with the aim of organising a training program to expand the entrepreneurs’ export capability. All the interested producers of the Store have participated in both projects. The Store, in fact, has strengthened the sense of cohesion and identity of the partners, that now conceive themselves as a group of innovators, gaining in enthusiasm for the development of their firms and their territory.

## **8 Conclusions**

This paper analyses the effects of the creation of a web district on the territorial development of a region.

The contribution of this paper can be summarized in the following points.

It has confirmed the hypothesis that geographical proximity and social capital favor the creation of networks where knowledge spillovers and innovation are facilitated, also in the commercial and distribution phases.

The case of Store Valtellina has shown that territorial networks are an effective way to overcome the entry barriers for the access to the e-commerce, which allows the creation of “consumption linkages” given by the possibility of sharing clients. This is particularly true for regional products, where the geographical origin is one of the attributes determining the value of the product. When this attribute is shared by several products it is easier that the consumer purchases also the other proposed products, more than ever if they have low unit value and search costs and higher transaction costs have not to be afforded.

Turning to the point of the strengthening of territorial development, the paper shows how this project has generated a process of local development, driven both by local and non local actors, playing different roles. A major outcome has been the strengthening of bonding and bridging social capital and the creation of new external linkages potentially able to generate spillovers.

The comprehension of the associations the consumers makes can open opportunities for joint promotion and be a further source of social capital.

Finally the paper provides evidence about the critical success factors for the replicability of the model.

A future development of the project could include the integration of cultural and touristic aspects in the supply of the web portal, as well as the development of the platform to cover the B2B market where the opportunities of development for the local firms selling regional products are even bigger than in the B2C.

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## References

- Bagnasco A. (2006), Imprenditorialità e capitale sociale: il tema dello sviluppo locale. *Stato e mercato*, 78 : 403-425.
- Berranger de P., Meldrum M.C.R. (2000), The Development of Intelligent Local Clusters to Increase Global Competitiveness and Local Cohesion: the Case of Small Businesses in the Creative Industries. *Urban Studies*, 37, 10 : 1827-1835.
- Boshma R.A., Weltevreden J.W.J. (2008), An Evolutionary Perspective on Internet Adoption by Retailers in the Netherlands. *Environment and Planning A*, 40 : 2222-2237.
- Fariselli P., Oughton C., Picory C., Sugden R. (1999), Electronic Commerce and the Future of SMEs in the Global Market-place: Networking and Public Policies. *Small Business Economics*, 12 : 261-275.
- Giudici P., Figini S. (2009), *Applied Data Mining for Business and Industry*. Wiley
- Giuliani E., Bell M. (2005), The Micro-Determinants of Meso-Level Learning and Innovation: Evidence from a Chilean Wine Cluster. *Research Policy*, 34 : 47-68.
- Granovetter M. (1973), The Strength of Weak Ties. *American Journal of Sociology*, 78, 6 : 1360-1380.
- Grootaert C., van Bastelaer T. (2001), Understanding and Measuring Social Capital: A Synthesis of Findings and Recommendations from The Social Capital Initiative. Social Capital Initiative, *World Bank Working Papers* n. 24.
- Hamill J., Gregory K. (1997), Internet Marketing in the Internationalization of UK SMEs. *Journal of Marketing Management*, 13 : 9-28.
- Hoffman D.L., Novak T.P., Chatterjee P. (1995), Commercial Scenarios for the Web: Opportunities and Challenges. *Journal of Computer Mediated Communication*, 1, 3.
- Knoben J. (2009), Localised Inter-organisational Linkages, Agglomeration Effects, and the Innovative Performance of Firms. *Annals of Regional Science*, 43 : 757-779.
- Lèbre La Rovere R. (1998). Small and Medium-sized Enterprises and IT Diffusion Policies in Europe. *Small Business Economics*, 11 : 1-9.
- Nelson Ph. (1970), Information and Consumer Behaviour. *The Journal of Political Economy*, 78 : 311-329.
- Nooy de W., Mrvar A., Batagelj V. (2005), *Exploratory Social Network Analysis Using Pajek*. Cambridge: Cambridge University Press.

- OECD (1995), Information Technology (IT), Diffusion Policies for Small and Medium-sized Enterprises. OCDE/GD (95) 76 (available at: [www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=OCDE/GD\(95\)76&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=OCDE/GD(95)76&docLanguage=En))
- Putnam R. (1993), *La tradizione civica nelle regioni italiane*. Milano: Arnoldo Mondadori Editore.
- Santarelli E., D'Altri S. (2003), The diffusion of e-Commerce Among SMEs: Theoretical Implications and Empirical Evidence. *Small Business Economics*, 21 : 273-283.
- Triglia C. (2001), Capitale sociale e sviluppo locale. In: Bagnasco A., Piselli F., Pizzorno A., Trigilia C. (eds.), *Il capitale sociale, istruzioni per l'uso*. Bologna: Il Mulino. 105-131.
- Webb B., Sayer R. (1998), Benchmarking Small Companies on the Internet. *Long Range Planning*, 31 : 815-827.



## ABSTRACT

This paper analyses the effects of the creation of an e-commerce common platform among small and medium-sized enterprises (SMEs) in the Italian region Valtellina on the territorial social capital and the integration among producers. After a description of the process of aggregation and the functioning of the web district, an analysis of the data on cross-selling is carried out to evaluate the potential of the project in terms of integration. Secondly, using information from in depth interviews, the dimension of social capital is taken into account, on the one hand to understand how social capital has favoured the development of the project, and, on the other, to discover if the project has contributed to strengthen the territorial social capital. As a result, territorial networks have emerged as an effective way for SMEs to overcome the entry barriers for the access to the e-commerce, while the establishment of a territorial web district allows the creation of “consumption linkages” given by the possibility of sharing clients. Furthermore, the paper shows how this project has generated a process of local development, driven both by local and non local actors, playing different roles. A major outcome has been the strengthening of bonding and bridging social capital and the creation of new external linkages potentially able to generate spillovers.