Project networks and the reputation network in a community destination. Proof of the missing link

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Abstract

The study analyses the influence of project networks (salient actors involved in the creation of innovative products) on the reputation network (salient actors able to lead the destination in the future) in a community destination. The research builds on a meaningful case study conducted in a leading Alpine destination. Key stakeholders involved in the local tourism offer were interviewed using snowball sampling. A quali-quantitative approach and social network analysis were applied to a) identify the destination’s most innovative products, b) identify the key players behind each innovative product and reconstruct its project network, c) reconstruct the reputation network, d) assess the influence of the project networks on the reputation network. The analysis was carried out using a Multiple Regression Quadratic Assignment Procedure (MR-QAP). It shows the influence of each project network on the reputation network and highlights both the fact that the latter is a consequence of the former and the effectiveness of collaborative innovation. Each project, based on shared goals, contributes significantly to the reputation network. The research contributes to deepen the current debate on the influence of project networks on the reputation network in a community destination, and it is to be hoped that the establishment of this link can draw together two - currently parallel - research streams on tourism (one on innovation, the other on stakeholder salience and reputation in community destinations).

Keywords
product innovation; project network; reputation network; collaborative innovation; stakeholder salience; social network analysis; community destination
1. Introduction

The search for innovation within tourism destinations is currently a popular and challenging theme in tourism management (Gomezelj, 2016; Hjalager, 2010; Rodríguez et al., 2014). In the face of growing competition (Mariani et al., 2014) and the establishment of megatrends (Dwyer et al., 2009), destinations have no choice but to innovate in order to renew, diversify and strengthen their tourism offer. Innovation, in fact, has become an essential condition for the maintenance and increase of a destination’s competitive advantage (Del Chiappa & Baggio, 2015; Hall & Williams, 2008).

To understand how innovation in tourism destinations occurs, we must examine the specific reality of each territory, in order to identify both the actors in innovative projects and the possible drivers of such development. Community type destinations are particularly difficult to analyse, since they are multi-stakeholder systems in which numerous public and private actors, with distinct roles and degrees of power, are involved in the management of resources and activities, and each actor can only control and manage a part of the wider destination offer (Beeton, 2006; Bieger, 1996; Murphy, 1985; Murphy & Murphy, 2004; Kaspar, 1995). Community destinations have also been described as networks of actors and relationships in which collaboration is very difficult (Beritelli, 2011; Fyall et al., 2012). Numerous studies have been done on the webs of relationships which characterize these destinations, identifying and analysing the key players and the relationships within the network (see Beritelli et al., 2016; Byrd, 2001; Lemmetyinen and Go, 2009; Zehrer & Hallmann, 2015). Particular attention has also been paid to the theme of innovation, investigating, for example, tourism innovation policy (Rodríguez et al., 2014), types of innovation (Hjalager, 2010), and the networks involved in tourism innovation (Gomezelj, 2016; Novelli et al., 2006). We do not yet know, however, what connection - if any - exists between the project network, i.e. the network of actors involved in the innovative products, and the reputation network, i.e. the network of actors identified as salient actors for the destination’s future development.

Our paper approaches the subject of networks, innovation and reputation in community destinations from an original perspective. We investigate empirically the influence of the project networks on the reputation network. The establishment of such a link represents a significant and original contribution to the current academic debate on collaborative innovation, a currently under-investigated topic.

The paper is divided into four main sections. In the literature review the most important topics in the study of both innovation and reputation in tourism destinations are highlighted, and the lack of any combined analysis of the two structures is revealed. In the next section we describe our research
design, data collection method and analysis tools. The results section presents the three most innovative products developed in the last five years in the Valle di Fassa (Dolomites, Italy), and the networks of actors involved. These products are all the result of collaborative innovation between public and private actors. In the paper we describe and model the most important networks: a) those of the salient actors involved in each of the three projects; b) that of the salient actors identified as able to lead the future development of the destination as a whole. Our research establishes a connection between the project networks and the reputation network which links the various actors operating in the community destination. The last section of the paper contains a discussion of the results and the conclusion.

2. Literature review

2.1. Innovation in tourism destination communities is systemic

Academics working in the field of tourism management agree that innovation is key to the increasing of a destination’s attractiveness: tourism destinations must offer experiences that are not available elsewhere (Hjalager, 2010; Neuhofer et al., 2012; Stamboulis & Skayannis, 2003) and the process of innovation must be continuous, since competitors can copy successful ideas and reduce the competitive advantage gained by the first movers (Gomezelj, 2016; Novelli et al., 2006). Innovation in tourism needs to be analysed from a systemic perspective, as resulting from the actions of diverse, independent actors (Hall & Williams, 2008; Hjalager, 2002; Milwood & Roehl, 2014; Peters & Pikkemaat, 2006). Innovative tourism destinations, in fact, are innovation systems: the incorporation of single actors into business chains and networks is a pre-requisite for the processes of knowledge creation and knowledge transfer. Tourism destinations can be seen as repositories of - sometimes inimitable - competences and knowledge, essential for the development of new products and services. Moreover, the generation and use of knowledge to feed innovative developments in the tourism products/services strengthens not just the competitiveness of tourism enterprises, but of the destination as a whole. Such innovation requires an open, decentralized environment, where actors conceive knowledge as a resource to be shared, a vision exemplified by, for example, the knowledge management approach (Cooper, 2006; Shaw & Williams, 2009). An ability and willingness to collaborate are highlighted in the literature as crucial for the development of a destination, and the lack of coordination and cohesion within the highly fragmented tourism industry is an all too familiar problem faced by destination planners and
managers (Beritelli, 2011; Fyall et al., 2012; Jamal & Getz, 1995; March & Wilkinson, 2009; Wang & Krakover, 2008; Wang & Xiang, 2007). Bramwell and Sharman (1999) identified the main potential benefits of consensus-based collaboration: a) decrease/avoidance of conflict between stakeholders and consequent costs of conflict resolution; b) legitimation of collective actions when stakeholders are involved in the decision-making processes that affect their activities; and c) better coordination of policies and related activities due to a willingness to collaborate. These considerations are particularly true and challenging in community destinations, that is, areas where the destination offer is the result of collaboration and coordination between many stakeholders. The literature has focused particularly upon the study of relationships and networks within these destinations. Beritelli (2011) highlighted the relevance of cooperation within community-type destinations from a theoretical and empirical point of view. A variety of theories have been further elaborated and field research in the European Alps has been carried out, analysing relationships and interactions among prominent actors within the chosen destination. Zehrer et al. (2014) dealt with cooperation issues in community destinations, examining leadership networks in Alpine destinations. The study encompassed DMOs, private actors and public bodies. Zehrer & Hallmann (2015) investigated relationships between different stakeholder groups (hoteliers, DMOs, transportation companies, retailers, sport activity suppliers, etc.) in Alpine destinations in order to analyse policy issues connected to the ‘destination competitiveness model’ defined by Ritchie & Crouch (2003). They discussed aspects related to interaction and collaboration within the (competitive) destination. Beritelli et al. (2016) considered networks of different stakeholders (public agents, private enterprises and the local DMO) within community destinations and investigated the logics of salient actors affiliated to more than one stakeholder group. Martini & Buffa (2017) mapped public and private stakeholders involved in European rural areas and discussed a new model of governance that combines the needs of local territories with general principles for good governance (Eagles et al., 2013; Graham et al. 2003; Lockwood, 2010;). All the above studies described and analysed important aspects of relationships and networks within community destinations, but neither discussed networks of actors involved in specific projects, nor considered possible links between project networks and the reputation network.

2.2. Reputation and networks emerging from collaborative action

Tourism destinations appear as complex adaptive systems made up of various companies, associations and organizations whose mutual relationships are typically dynamic and nonlinear (Baggio et al., 2010). They can also be described as networks of interactive service providers, in
which the coordination of cooperative activities adds value to the relationships between the actors (Lemmetyinen & Go, 2009), and the behaviour of one conditions the behaviour of others (Presenza & Cipollina, 2010).

Recent research into the texture of relationships within a destination confirms that tourism is a relational phenomenon that must be approached from a systemic perspective, focusing on the reticular structure of the relationships between stakeholders (Merinero-Rodriguez & Pulido-Fernandez, 2016), as value is created and delivered to tourists by a complex network of interacting and interdependent actors (Sheenan et al., 2016). In many destinations, it has become increasingly common for local governments to support local economic development through tourism policies, focusing on marketing and promotion, and including the creation of private-public partnerships (Beaumont & Dredge, 2010). Where responsibility for policy-making involves both the public and the private sector, interest in networks as an organizing concept for promoting joint action is increased (Dredge, 2006; Vernon et al., 2005). Such collaboration thus leads to effective governance and enhances the competitiveness and innovation of a destination (Beritelli et al., 2007; Svensson et al., 2005). If cooperation - both within the two sectors and between them - is one of the conditions for a tourist region to achieve competitive advantage (Czernek, 2013), stakeholder management (i.e. the leadership, direction, coordination and management of a destination’s value proposition across stakeholders) becomes key both to strategic destination management (Line & Runyan, 2014; Zehrer & Hallmann, 2015) and to the effective running of destination management organizations (DMOs) (Beritelli et al., 2016; Bornhorst et al., 2010; Pike & Page, 2014; Reinhold et al., 2015; Volger & Pechlaner, 2014). The identification of salient stakeholders is therefore a crucial phase for the development of destinations (Cooper et al., 2009; Sheehan & Ritchie, 2005). This phase is particularly challenging because the roles and the power of actors vary across destinations, and network configurations are not stable in time (Saito & Ruhanen, 2017). These criticalities are exacerbated by many of the features of community destinations. Previous studies have shown that salient stakeholders can be identified by analysing their importance for the development of the destination, that is, investigating their reputations among other local actors (Beritelli et al., 2016).

Reputation is defined by the Cambridge dictionary as ‘the opinion that people in general have about someone or something, or how much respect or admiration someone or something receives, based on past behaviour or character’. Beritelli and Laesser (2011) underlined the current interest in this topic among scholars and practitioners, and investigate how specific dimensions of power influence the reputation of stakeholders in Alpine tourist destinations. Strobl and Peters (2013) discuss the concept of reputation and analyse entrepreneurial reputations in relation to destination governance.
in the Alps. In this study, too, the relevance of the topic is underlined, as is the scarcity of empirical research exploring the role of reputation in destination networks.

The complex nature of collaboration and coordination within a community destination makes the study of the relationships and networks formed by the actors involved in innovative projects particularly challenging. Within these destinations, innovation is influenced by context-specific characteristics, such as an area’s economic, cultural and social dimensions (the ‘social glue’, see Decelle, 2006; Nordin, 2003). Innovation, knowledge creation and learning are generated by interactive processes in which actors with different types of knowledge and competences collaborate and exchange information in order to solve a range of problems - technical, organizational, commercial, intellectual, etc. (Bathelt et al., 2004). Knowledge transfer is a key element in the innovation process, involving a variety of flows within firms, between producers and consumers, and between private actors and public organizations (Hudson, 2005). The role of spatial clustering and proximity in increasing knowledge transfer and innovation in tourism has been investigated in the literature (Bathelt et al., 2004; Del Chiappa & Baggio, 2015; Novelli et al., 2006) and the notion of destinations as clusters has been analysed (Jackson & Murphy, 2006; Novelli et al., 2006); whether or not tacit knowledge transfer is facilitated by conditions of spatial proximity or product similarity is still an open question (Weidenfeld et al., 2010).

2.3. Linking project networks with reputation networks in community destinations

In recent years, aspects of innovation networks have been investigated with increasing interest in the light of the opportunities opened up by Information and Communications Technologies (ICTs). ICTs have enabled tourism destinations to become smart, applying smart city principles to support mobility, resource availability and allocation, sustainability and quality of life/visits (Boes et al., 2015; Buhalis & Amaranggana, 2014; Gretzel et al., 2015). ICTs thus become a driver for destination innovation and competitiveness. Destination stakeholders can exploit the dynamic interconnections possible on technological platforms to collect, create and exchange information that can be used to enrich tourism experiences in real time (Xiang et al., 2015).

Baggio & Cooper (2010, pp. 2-3) assert that ‘tourism, more than most economic sectors, involves the development of formal and informal collaboration, partnerships and networks to deliver the product. […] Information and knowledge flows in a destination network are relevant mechanisms for the general behaviour of the system. Productivity, innovation and economic growth are strongly influenced by these processes, and the way in which the spread occurs can determine the speed with which individual actors perform and plan their future actions at the destination; in other words, the
structure of the network will be influential in determining the efficiency of the destination’s attempts to share knowledge and innovate, and so remain competitive’.

The objective of our research is to make a novel contribution to the debate on networks through an analysis of the influence of project networks on the reputation network. The research hypothesis, methods and results are described in the sections below.

3. Definitions, hypothesis and research design

Our research focuses on networks in community destinations. It analyses the networks connected to the creation of innovative products and the network linked to the salient actors within the destination in order to understand the effects of the former on the latter. We use the following definitions of terms:

- **Product innovation**: as defined by Hjalager (2010, p. 2) ‘product or service innovations refer to changes directly observed by the customer and regarded as new; either in the sense of never seen before, or new to the particular enterprise or destination. Product or service innovations are perceptible to tourists to such an extent that they may well become a factor in the purchase decision’.

- **Project network**: composed of the salient actors (nodes) linked to the creation (i.e. phases of definition, development and/or promotion) of an innovative product. In the project network the tie is defined by the presence of the actor in the project. The research steps taken in order to reconstruct the project networks are described in section 4.

- **Reputation network**: composed of the salient actors (nodes) linked to the future development of the tourism destination as a whole. In the reputation network the tie is defined by the perceived importance of an actor as a potential destination development leader. This importance is based on interviewee responses with regard to the local actors recognized as capable of leading the destination in the future. The research steps taken in order to reconstruct the reputation network are described in section 4.

As these definitions demonstrate, some actors involved in a particular project network may also be involved in another, and/or in the local reputation network. Project networks and the reputation network may share some nodes, but, equally, they may not, since the networks are based on different features. We have examined both innovative products (in the project networks), and the destination as a whole (in the reputation network). The latter does not consist of the relationships connected to the phases of a decision-making process finalized to the creation of a product, but
composed of the most influential local actors (salient actors), i.e. those whom it is felt might be able to lead the destination in the future (see Table 1).

Previous studies and research on community destinations and the social capital features of these territories (see section 2.1), have stressed the importance of the connections between actors involved in the same area, but explain neither the features of such connections, nor what drivers encourage actors to interact and collaborate. The hypothesis of our study is that this crucial factor is a shared project and that each project network influences (contributes to shaping) the reputation network. If this holds true, it provides evidence that shared goals (i.e. projects for product innovation) support the reputation network of a community destination, thus providing a basis for effective collaboration to lead destination development.

Starting from these considerations, the research analyses and verifies empirically the effect of project networks on the reputation network in a community destination. The research uses a significant case study conducted in a leading destination in the Alps: the Val di Fassa (Dolomites, Italy). This valley is a typical community destination and is considered a leading Alpine destination, largely thanks to the boom in its ski resorts that began in the 1970s. Over the years, the Valle di Fassa has continued to attract domestic and international demand, developing not only winter season but also summer offers (www.fassa.com). Like most Alpine community destinations (Kuščer et al., 2016; Pechlaner et al., 2005; Strobl & Peters, 2013), Valle di Fassa is in the mature phase of its life cycle and therefore provides an interesting context within which to investigate the innovative processes that are crucial to its gaining of competitive advantage.

4. Research method: data collection and steps of analysis

During the field research face to face interviews with the main stakeholders involved in the tourism offer were conducted using a semi-structured questionnaire. Each interview lasted about one hour. We organised the interviews in parallel and separated phases. We started a first round of individual interviews with three key players involved in the local tourism offer: the DMO director, the president of the consortium of the cableway companies (this consortium represents the 15 cableway
companies operating in the destination) and the president of the local government body. These actors were chosen because previous studies carried out by the authors had already revealed the importance of the DMO and the ski offer for the area’s tourism development. We also considered it important to include the local government body as we wanted to analyse public-private relationships in this typical community-type destination. Another reason for starting with only three actors was because we wanted to ‘listen to the destination’ without a pre-defined list.

In the first step of the interview we asked the three key players to indicate:
- the most three innovative products developed within the destination over the last five years;
- the salient actors (public and private) involved in each of these product innovation projects;
- the drivers of these innovations.

We collected and discussed the information with the interviewees and then drew up:
- an initial list of the innovation projects developed in the last five years (project characteristics and objectives, the sectors principally involved, the factors that have facilitated the realization of projects and the criticalities encountered);
- an initial list of the salient actors involved in the innovation projects (list 1).

At the end of the interview we asked questions about the future development of the destination, and requested the three key players to nominate a maximum of five actors whom they considered important for the future development of the destination as a whole; we then drew up an initial list of the salient actors thus identified (list 2).

In the second round of the research we contacted the actors on lists 1 and 2. Using the snowball sampling method, we added other actors, who had been identified as salient for innovation projects, or important for the destination’s development.

We concluded the field research when all the salient actors involved in the three main innovation projects, and more than half of the actors nominated as ‘important’, had been interviewed. Although our sample size was small, we collected enough observations to capture the opinions of the most salient actors (Burt, 1981; Costenbader & Valente, 2003). A total of 16 stakeholders were identified: 11 stakeholders were interviewed; 5 did not participate.

The interviewees were members of the DMO, of local public bodies and sectorial associations; representatives of the main economic sectors involved in the tourism offer (cableway operators, hoteliers, other hospitality owners, professionals from the outdoor activity sector).

A quali-quantitative analysis approach was applied in the research. The software for social network analysis UCINET 6 (Borgatti et al., 2002) was used for the quantitative analysis, and NetDraw (Borgatti, 2002) for the visualization of the network.

The following steps were followed (see Figure 2):
1. **The identification and analysis of the most important product innovations**: the product innovations are described qualitatively, identifying their main features, the actors involved (and their roles), and the factors which supported the innovation process.

2. **The reconstruction of the project networks**: the networks of actors involved in each project (of product innovations) are described. Each actor is identified by their role (i.e. actor A as the director of the DMO; actor B as the president of the local government body; actor C as the president of the hoteliers’ association, etc.). Each project network is represented by one-mode network, undirected and with binary data. In these square matrices the direction of the links is no longer essential because the actors involved in an innovative product (e.g. product ‘X’) have relationships with all the other actors involved in the same project. In respect to the data, we gave value 1 if an actor participated in project ‘X’; we gave value 0 if an actor did not participate in project ‘X’.
   A diagram was drawn for each project network.

3. **The reconstruction of the reputation network**: this network is made up of the actors identified by the interviewees as of importance to the destination’s development. Each interviewee was allowed to list a maximum of five actors and to assign to each actor his/her importance using a graduated scale from ‘important’ to ‘absolutely indispensable’. The reputation network, therefore, is represented by a valued and directed matrix. In order to carry out the regression analysis (see next step) we thought it appropriate to represent the networks in the same way and we therefore symmetrized and dichotomized the values. We gave value 1 if the actor/organization was named as being important, and 0 if they were not.
   A diagram of the reputation network has been provided.

4. **The verification of the influence of each project network on the reputation network**: a regression analysis was carried out to verify the causality between networks from a statistical point of view. Multiple Regression Quadratic Assignment Procedure (MR-QAP) allows for regression analyses using matrices. A MR-QAP between the three matrices of the project networks and the matrix of the reputation network was used to test the research hypothesis.

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5. Results

5.1 Product innovations

The most important innovative tourism products introduced in the Valle di Fassa are ‘Product Bike’, ‘Product Family’ and ‘Product Trekking’, all of which have been either launched, or dramatically redesigned, in the last five years, as collaborative efforts involving a large number of stakeholders. These stakeholders - whose participation, of course, varies in both degree and nature - are: hotelkeepers and owners/managers of other enterprises involved in the hospitality sector; owners/managers of the ski resort infrastructure; trekking guides; the DMO; local government bodies. An innovative element of the tourism offer has been the creation of a company which focuses on the organization and commercialization of outdoor activities and services, in cooperation with professional local guides and instructors. This company, founded five years ago as a start-up with funding from the DMO, still plays a key role in the organization of outdoor activities, and is, in fact, involved in all three of the innovative projects identified in the Valle di Fassa.

The aims and characteristics of the three innovative products are summarized below:

- **Product Bike**: targeted at both road and mountain bikers. The territory has invested heavily in cycling infrastructure: bike paths, mountain trails, downhill slopes and bike parks. A number of hotels have decided to target cyclists, turning themselves into ‘bike hotels’, and providing the appropriate services. An association of operators in the outdoor activity sector, including mountain-bike instructors, has been formed. Ski lifts are now used to transport mountain bikes and bikers into the higher mountains, bikes are more widely available for hire, and shuttle services which also carry bicycles have been further developed.

  Both local municipalities and the local government body - whose functions are the regulation and administration of the territory - have been involved in the planning and realization of ‘Product Bike’. They have also supported the development of bike-sharing services, as have twenty hotels; the company which specializes in the outdoor activity offer; owners of ski infrastructure and the DMO. The DMO coordinates the bike project, promotes it, and cooperates with the mountain bike instructors to ensure that the bike hotels are operating according to the standards agreed in the guidelines.

- **Product Family**: designed for families with children. Diversifying beyond the traditional entertainment (events and shows) offered within the territory, the product’s innovation lies in a) the development of family hotels, whose offer is designed specifically to attract families (through the creation of a product club), and b) the range of outdoor activities and services
offered by highly qualified mountain guides and other experts. Like the ‘bike hotels’, the ‘Product Family’ also involves twenty hotels adhering to a set of guidelines agreed with the DMO, which obliges them to guarantee the provision of services and facilities designed to give families the best possible holiday experience. As well as the hotels, mountain guides and outdoor sports associations are also involved in the planning and realization of ‘Product Family’, organizing a range of activities, such as opportunities to try out various sports, or to discover the traditions and customs of mountain life through specially themed excursions. The DMO helps to coordinate ‘Product Family’ and is responsible for its promotion.

- **Product Trekking** has been designed for trekkers and climbers who want to spend their holiday up in the mountains; it aims to innovate the trekking offer by extending the high altitude itineraries and increasing the number of available beds in mountain refuges. The project draws together a range of actors: the DMO, which coordinates, markets and commercializes the offer (as a tourist package); representatives of the non-hotel hospitality sector; cableway operators; mountain guides and other experts involved in the organization of outdoor activities. To date, this product has mainly been marketed abroad.

5.2 **Project networks**

Our qualitative analysis of the three innovative products revealed that numerous stakeholders are involved in the definition, development and/or promotion of the product. This is the sense in which it is possible to apply the term ‘project’: the innovative tourism product is the result of the participation of several public and private actors in different phases of the main decision-making process finalized to the creation of the product. Starting from this qualitative analysis, it was possible to identify the salient actors (single actors and/or organizations) involved in each project, in order to model the project networks:

- **Project Bike**: representatives of the local government body, the municipal mayor, the president of the hoteliers’ association, the recently formed outdoor activity company, the president of the consortium of cableway companies, the DMO director.

- **Project Family**: the president of the hoteliers’ association, the recently formed outdoor activity company, the head of the mountain guides’ association, the DMO director.

- **Project Trekking**: a representative of the non-hotel hospitality sector, the head of the mountain guides’ association, the recently formed outdoor activity company, the president of the consortium of cableway companies, the DMO director.
Our elaborations, carried out using UCINET and NetDraw to analyse the data matrices and to visualize the networks, have enabled us to obtain the output for each project network, as illustrated in Figure 2.

5.3 Reputation network

The reputation network is made up of the actors, both public and private, whom the interviewees identified as important to the future development of the tourism destination. 16 actors were mentioned: the DMO director, the DMO president, the president of the consortium of cableway companies (which represents the 15 cableway companies operating in the area), the head of the mountain guides’ association, the members of the new outdoor activity company, the president of the hoteliers’ association, the representative of the non-hotel hospitality sector (the president and the representative of the hospitality sector were nominated not only as representatives of the hotel and non-hotel sector in the valley, but also because they are considered to be significant actors in the development of the territory), the president of a group of local hotels, the mayor, the president of the local government body, a member of the provincial council, the president of a local environmental association involved in conservation and sustainable mobility, the president of the local spa, a representative of the valley’s events committee, and a local blogger.

The reputation network revealed by our research is made up of 16 stakeholders, who are the nodes in the network illustrated in Figure 2.

The reputation network is bigger than the project networks, that is, it includes more actors than the single project networks. Actors involved in the projects are not necessarily the same as those included in the reputation network.

5.4 Testing the hypothesis

Our research analysed the influence of the three project networks (three independent matrices) on the reputation network (one dependent matrix) by means of a multiple regression quadratic assignment procedure (MR-QAP). QAP considers the value of the whole matrix as input (Borgatti et al., 2002; Kilduff & Krackhardt, 1994; Krackhardt, 1988; Pastor et al., 2002), and not only the linear relationships between two variables, as in Rumsey (2011). As underlined by Borgatti and Feld (1994, p. 46), ‘The QAP procedure works by permuting the rows and columns (together) of one of the input matrices, and then correlating the permuted matrix with the other data matrix. This
process is repeated hundreds of times to build up a distribution of correlations under the null hypothesis [of no relationship between the matrices].

Our analysis applies a MR-QAP via Double Dekker Semi-Partialling (Dekker et al., 2007). The results confirm the influence of each project network on the reputation network. Results are shown in Table 2. Previous literature, as presented above, shows that coefficients, albeit small, are still significant when SNA is deployed. The research hypothesis is thus supported.

In Figure 2 the results of the research are summarized and in the next section they are discussed.

6. Discussion

The influence of each project network on the reputation network in Val di Fassa shows how effectively collaboration can lead destination development. In our case study, collaboration between the actors is stimulated by participation in a shared project, that of creating innovative products. The significance of the data from the quantitative analysis of the networks is further enhanced by the information gathered from local stakeholders in the individual interviews.

Our research found that the sharing of a project (to develop innovative products) strengthened relationships among actors. On the one hand, private actors generate ideas and proposals which they then put to the DMO; on the other, the DMO gets positive feedback and offers of participation from local actors when it promotes new initiatives and proposes projects.

In the three project networks some actors are reference points (salient actors) in more than one network (the director of the DMO, and the member of the new outdoor activity company, for example); in some networks most of the actors are private (i.e. product network ‘Trekking’); in another the involvement of public actors is crucial (in order to guarantee product innovation in the product network ‘Bike’ the public authority has to give permits and concessions for the creation of downhill slopes, bike parks, etc.).
Our qualitative analysis shows that the interactions among actors involved in a shared project influence relationships within the community. That is, innovative projects influence collaboration within the destination. Our analysis of the data seems to validate these observations: the results show the influence of each project network on the reputation network. The reputation network is bigger than the project networks, that is, it contains more salient actors than the single project networks. Actors involved in the projects are not necessarily the same as those included in the reputation network.

In the last few years there has been a marked increase in participation in collaborative projects. While spatial proximity (Weidenfeld et al., 2010), local knowledge (whether direct or indirect) and skills, and a socio-economic context which produces ‘social glue’ (Decelle, 2006; Nordin, 2003) undoubtedly facilitate (formal and informal) relationships between actors, the element which stands out as the main driver of innovation is a shared goal. Those involved recognize that working alone - as individuals with different objective functions - they can never innovate the destination’s offer. In managerial terms, the capacity to plan and to mediate between actors becomes a key skill: the innovation of products and the creation of project networks depend on the capacity of stakeholders to direct the objective functions of the various actors towards a shared objective function.

Participation in a common project allows those involved to create new products and to innovate the destination’s offer in the knowledge that the realization of a shared project also benefits the individual participants.

The very real problems of collaboration that arise in community contexts (Beritelli, 2011; Fyall et al., 2012) are lessened when the actors share an objective - as is the case in product innovation projects - and are incentivized to innovate and share knowledge and skills (knowledge transfer). Operating within a project network, actors learn the benefits of collective action, improved coordination and an increased willingness to collaborate, as Bramwell and Sherman (1999) have demonstrated. We can state that the involvement of actors in innovative projects supports and fosters collaborative relationships within this community destination.

Our reconstruction of the reputation network highlights the extent to which public and private actors are working together to develop the destination. The conditions for the development of innovative products could not have been created without public involvement. Nevertheless, the private sector is also strongly represented; indeed, the reputation network draws together most of the economic actors in the destination’s tourism chain. The director and president of the DMO play an important role in the development of the destination, and the DMO has been given responsibility for the promotion of the territory. However, a bottom-up approach to the forming and strengthening of collaborative relationships is considered essential. The development of new ideas and projects, in
which as many stakeholders as possible are involved, is seen as key to the destination’s defence of its competitive advantage.

7. Conclusion

Our research presents an original approach to the debate on tourism innovation - with a specific focus on collaborative innovation. The paper examines the topic of innovation and salience in community destinations, and provides a detailed analysis of the project and reputation networks. It also shows the influence of the project networks on the reputation network and considers the factors driving the processes of innovation and knowledge transfer within the destination. The research demonstrates the influence of project networks on the reputation network in a community destination.

The analysis is focused on a single case study, but the results are nonetheless significant as they show that innovative projects support the reputation network of a community destination. A new sense of community really does arise from collaboration on shared goals: criticalities and limitations related to each actor’s individual aims are thus overcome. Finding strategies to cope with such difficulties is crucial for the survival of the community, and that of the tourism destination. Working together on innovative projects proved a powerful tool to strengthen the community itself. From a theoretical point of view, the establishment of this link can draw together two - currently parallel - research streams on tourism, one on innovation and the other on stakeholder salience and reputation in community destinations. This field of analysis is still understudied and our research contributes in an original way to the research debate on networks in community destinations.

Interesting as the results from this study are, we are aware of the explorative nature and limitations of our research, primarily the fact that it involves just one case. Although our study examines a leading Alpine destination, and a typical community destination, this narrowness is inescapable. Our intention is to extend the analysis of causality to other destinations in order to investigate and compare research results, and to study other cases of product innovation.

Moreover, our research so far has only assessed the influence of the project networks related to the main product innovations developed by the destination in the last five years: if all the innovative projects were taken into account, the analysis of the causal link between project networks and the reputation network would probably be even stronger. Finally, a longitudinal analysis in the same
destination might strengthen our results, allowing us to observe whether (and how) old and new project networks influence the reputation network.

A comparison of the results obtained in such a study would enable us to highlight any best practices discovered, in relation to product innovation, and/or to reveal the key drivers of collaborative innovation.
This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.
References


Figures and Tables

Figure 1. Steps of analysis.

Step 1: Identifying product innovations

Step 2: Reconstructing project networks

Step 3: Reconstructing the reputation network

Step 4: Testing the hypothesis

REPUTATION NETWORK

Project network ‘x’

Project network ‘y’

Project network ‘z’

Product innovation ‘x’

Product innovation ‘y’

Product innovation ‘z’
Figure 2. Product innovations, project networks and the reputation network in Valle di Fassa.

The reputation network

The three project networks

REPUTATION NETWORK

Each project network influences the reputation network

The three main product innovations

Product innovation ‘Bike’

Product innovation ‘Family’

Product innovation ‘Trekking’
<table>
<thead>
<tr>
<th>FOCUS OF THE RESEARCH</th>
<th>NETWORK TYPE</th>
<th>NODE and LINK TYPE</th>
<th>NETWORK AIMS</th>
<th>RESEARCH QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Networks in community destinations</td>
<td>Project networks</td>
<td>Salient actors linked to the creation of innovative products</td>
<td>To create innovative products</td>
<td>What is the effect/influence of project networks on the reputation network?</td>
</tr>
<tr>
<td>Reputation network</td>
<td>Salient actors linked to the development of the destination as a whole</td>
<td>To lead the destination in the future</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2. MR-QAP via Double Dekker Semi-Partiallying Results.

<table>
<thead>
<tr>
<th></th>
<th>Beta</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Bike</td>
<td>0.13286*</td>
<td>0.10409</td>
</tr>
<tr>
<td>Project Family</td>
<td>0.14999*</td>
<td>0.17764</td>
</tr>
<tr>
<td>Project Trekking</td>
<td>0.21550</td>
<td>0.15779</td>
</tr>
</tbody>
</table>

Coefficients significant at $p < 0.05$ and *significant at $p < 0.1$

R-square (model fit): 0.122, Adj R-square: 0.111, Obs: 240