DMOs bridging structural holes in destination networks – A perspective based on actor’s networks

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Methodological approach: Quantitative study

ABSTRACT

One of the main functions of Destination Management Organizations (DMO) in community-type of tourist destinations is to coordinate the supply network and therefore to serve as bridging organization in a fragmented and complex system of organizations, institutions and stakeholder groups. Traditional research on the roles of DMOs, including the coordinating function, builds on descriptive case studies and on the discussion of the cases at organizational/destination level. We propose to change the perspective by analyzing the actor's level with the help of structural hole analysis of local elite networks. Thus, instead of describing the organizational role of coordination, we effectively measure the bridging value of the actors affiliated to the DMO in the network of the destination. The results of six selected destinations show that among the top four/five bridging individuals in networks of between 13 to 42 actors, there are always not only the DMO directors but also at least one board member of the DMO. The paper concludes with further research in DMO board composition and evolution.

Key words: destination management organization (DMO), social network analysis, structural holes, elite, community
INTRODUCTION AND RESEARCH AIM

Destination Management Organizations (DMO) play an important coordinating role for destination planning and development and for destination marketing (Bieger, 2008; Heath & Wall, 1992; Inskeep, 1991; Ritchie & Crouch, 2003). While the role of DMOs has been analyzed and discussed in previous research, particularly pointing out the coordinating function (Beritelli, Bieger, & Laesser, 2009; Bieger, 1998; Getz, Anderson, & Sheehan, 1998; Presenza, Sheehan, & Ritchie, 2005), there is little empirical evidence of the effective position of the institution in the destination's network. We may ask: How important are DMO's really? How well do they coordinate the other actors and institutions? Is there any empirical approach that captures the overall coordinating importance of the DMO?

This paper looks at the position of DMOs in the organizational and institutional network of five tourist destinations (five alpine destinations in Switzerland and Austria, and as control destination an Italian city). Previous research traditionally looks at the organizational level and at qualitative studies with descriptive analyses. Many contributions have enriched the list of case studies (Beritelli, et al., 2009; Bornhorst, Brent Ritchie, & Sheehan, 2010; Gartrell, 1996; Getz, et al., 1998; Sheehan, Ritchie, & Hudson, 2007; Wang & Fesenmaier, 2007) and increased the validity of the results, i.e. that DMOs may play an important role when it comes to coordinate the institutional network.

Alternatively, we propose a change in perspective and therefore a different approach with two novelties that increase reliability of research, i.e. that we really measure the coordinating importance of DMOs:

1. We analyze the importance of the DMO not with regard to the organization itself, but by looking at the individuals that represent it.
2. We estimate the importance of the actors by looking at their coordinating value to the whole network and therefore at how they really affect the institutional network.

LITERATURE AND MAIN CONCEPTS

Two concepts with according literature streams have guided us in developing the research design for the study at hand: (1) local actor's networks, forming strategic elites in the tourist destination, (2) structural holes in networks, pointing to the connecting importance of single actors.

In tourist destinations, such as in any other community or region or country, we must assume that there is a ruling class, i.e. elite, which holds most power, independent from democratic election processes, and that there is a class that is ruled (Mosca, 1896). The elite has the capability to organize itself and make it possible to run social and political systems through few individuals, even in democratic and therefore pluralistic systems (Michels, 1911). Hence, elites of individuals have the structural and functional role of making complex systems such as tourist destination communities work. These 'strategic elites' are able to reach consensus in crucial issues affecting their community (Parsons, 1963). The analysis of elites and their power finds its major scientific application in the tradition of community power studies (Hunter, 1953). The structural-functional perspective applied in community power studies (Drewe, 1967; Hunter, 1953; Knoke, 1983; Laumann, Marsden, & Galaskiewicz, 1977; Laumann & Pappi, 1976; Mills, 1963) allows to analyze the mechanisms of action based on relationships between influential individuals. Thus, if we want to understand the coordinating power of one institution in a system of multiple relationships, we must break down the picture.
into relationships between salient individuals and the resulting role of these individuals in the elite.

An appropriate approach to gain the abovementioned perspective is the analysis of structural hole values in influence reputation networks. The concept of structural holes was coined by Burt (1982) who argued that networks consist of groups of individuals with differing degrees of cohesion and that holes in the social structure of networks, i.e. gaps between groups, occur (Burt, 1995). Individuals who can bridge the holes could increase their competitive advantage or simply their value by brokering the flow of information between the groups and therefore control initiatives projects, processes, etc. (Burt, 2001). Empirical evidence of this phenomenon has been also shown in inter-organizational networks (Ahuja, 2000; Bala & Goyal, 2000; Goyal & Vega-Redondo, 2007; Zaheer & Bell, 2005), just like community structured tourist destinations in which organizations and institutions interact. By calculating the structural hole values of the individuals in the elite networks of destinations we can estimate the bridging and therefore the general coordinating role of the DMOs through its main representatives.

Hence, we can pose the following grounded theory question: Do representatives of DMOs (e.g. CEOs, presidents, board members) display high structural hole values in reputational networks of tourist destination elites?

METHODOLOGY

Sample destinations: For the study, we have chosen four traditionally delimited destinations namely (1) Saas-Fee, in the canton Valais (CH), (2) Toggenburg, in the canton of St. Gallen (CH), (3) Lenzerheide, in the canton of Grisons (CH), and (4) Montafon, a valley in the region of Vorarlberg (A). The destination (5) Appenzell, represents a wider area and covers the whole territory of the canton of Appenzell (CH). However, the area is so contained and the community is so closed that it could be regarded as one social system. Finally (6) the city of Lucca (I), represents an urban destination surrounded by a rural region, in the heart of Tuscany. We have included cases (5), and particularly case (6), in order to verify the validity of the results with the help of polar cases (Pettigrew, 1990), i.e. closed and circumscribed communities in holiday destinations vs. open communities in urban areas, differing institutional and legal settings (CH vs. A vs. I).

Participant selection: For each destination we have identified the most salient actors of the destinations which represent the most important institutions and organizations. We employed a snowball sampling technique (Scott, 2000) by starting with a group of around 8 to 12 individuals who were known to be important and knowledgeable persons and, in the course of an in-depth interview, we asked them to name up to five other persons whom they reckoned to be important as well. The network was completed when the last interviewed person named other individuals who had been already interviewed. By doing so, the strategic elite (Parsons, 1963) of the destination could be identified. The numbers of members per destination network vary between 13 and 42 individuals. For centrality measures (including structural holes), it is advised to record a minimum sample of 50% of the population (Costenbader & Valente, 2003). With the exception of Montafon (95%) and Lucca (95%), all the identified actors could be interviewed, thus providing a very high internal validity for the cases.

Analysis: For every destination and every actor, structural hole values were calculated by looking at the ego networks of the individuals. An ego network is the network of actors directly connected to the individual (ego). The connected ego networks produce the whole
network. Two measures are of particular interest: (1) effective size, measuring the number of alters (other actors) minus the average degree of alters within the ego network, (2) efficiency, calculated as effective size divided by the number of alters in ego’s network (Borgatti, Everett, & Freeman, 2002). While the first one counts the absolute bridging value provided by the node, the second one puts the value in relation to his proximate surrounding. If the actor is connected strongly with his immediate alters, his bridging value overall decreases because other alters could fulfill his role as well. Thus, the efficiency of his bridging role decreases.

Both measures were computed using the whole network model perspective which includes alter ties outside of ego-net and therefore extends the view to the whole network. The measures were calculated with the UCINET 6 package (Borgatti, et al., 2002). The values of the actors are compared with each other. The four individuals with the highest values as well as an additional ones (fifth) for larger networks and with still considerably high values were identified.

Limitations: The methodology holds some limitations. First, it doesn't include a longitudinal approach that may show changes in the structural hole values, e.g. due to changes in organizational affiliations and roles of the actors. Second, structural hole values allow the discussion of only one dimension, i.e. the bridging/ coordinating function. Further statistics may provide a more comprehensive but also more complex analysis.

RESULTS

The results present at the left the visualized elite networks of the six destinations. Note that the larger nodes represent the individuals with the highest structural hole values. At the right, the calculated values for these individuals with their main institutional and organizational affiliations are displayed.

<table>
<thead>
<tr>
<th>rank</th>
<th>affiliations</th>
<th>effective size</th>
<th>efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>hotel director, DMO president of the board, board member ski area company, municipal counselor Saas-Fee</td>
<td>7.01</td>
<td>.70</td>
</tr>
<tr>
<td>2</td>
<td>DMO director</td>
<td>6.46</td>
<td>.72</td>
</tr>
<tr>
<td>3</td>
<td>CEO of ski area company</td>
<td>5.28</td>
<td>.66</td>
</tr>
<tr>
<td>4</td>
<td>hotel director, president local hotel association, DMO board member</td>
<td>4.55</td>
<td>.65</td>
</tr>
</tbody>
</table>

figure 1: network of Saas-Fee (n =13), table 1: top four scorers

Note: The destination has one DMO, one ski area company and four municipalities, of which the most important one is Saas-Fee.
figure 2: network of Toggenburg (n =19),
top four scorers
Note: The destination has one DMO, three ski area companies and three municipalities.

<table>
<thead>
<tr>
<th>rank</th>
<th>affiliations</th>
<th>effective size</th>
<th>efficiency (min .48, max .72)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>hotel director, DMO board member, board member of the two ski area companies in destination</td>
<td>12.19</td>
<td>.72</td>
</tr>
<tr>
<td>2</td>
<td>mayor of largest municipality in the destination</td>
<td>11.56</td>
<td>.72</td>
</tr>
<tr>
<td>3</td>
<td>DMO director</td>
<td>11.13</td>
<td>.70</td>
</tr>
<tr>
<td>4</td>
<td>CEO of major ski area company</td>
<td>7.86</td>
<td>.66</td>
</tr>
</tbody>
</table>

table 2: top four scorers

Figure 3: Network of Lenzerheide (n = 21),
top four scorers
Note: The destination has one DMO, one ski area company and one municipality.

<table>
<thead>
<tr>
<th>rank</th>
<th>affiliations</th>
<th>effective size</th>
<th>efficiency (min .53, max 1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DMO director</td>
<td>11.25</td>
<td>.80</td>
</tr>
<tr>
<td>2</td>
<td>mayor, DMO board member, board member of ski area company</td>
<td>11.22</td>
<td>.75</td>
</tr>
<tr>
<td>3</td>
<td>hotel director, president cantonal hotel association, board member cantonal industry chamber</td>
<td>8.99</td>
<td>.82</td>
</tr>
<tr>
<td>4</td>
<td>president of the board of ski area company</td>
<td>8.96</td>
<td>.81</td>
</tr>
</tbody>
</table>

table 3: top four scorers
Figure 4: Network of Montafon (n = 42),
top five scorers

Note: The destination has one DMO, two ski area companies structured as holdings, ten municipalities, one municipal association, and four local visitor bureaus.

<table>
<thead>
<tr>
<th>rank</th>
<th>affiliations</th>
<th>effective size</th>
<th>efficiency (min .52, max 1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DMO director (destination)</td>
<td>22.41</td>
<td>.86</td>
</tr>
<tr>
<td>2</td>
<td>CEO of major ski area company</td>
<td>19.86</td>
<td>.86</td>
</tr>
<tr>
<td>3</td>
<td>mayor of major municipality, president of municipal association, DMO board member</td>
<td>17.94</td>
<td>.85</td>
</tr>
<tr>
<td>4</td>
<td>director of major local visitor bureau</td>
<td>10.64</td>
<td>.82</td>
</tr>
<tr>
<td>5</td>
<td>cultural officer at the municipal corporation, president of two local museums and of various cultural associations</td>
<td>10.01</td>
<td>.91</td>
</tr>
</tbody>
</table>

Figure 5: Network of Appenzell (n = 26),
top five scorers

Note: The canton consists of two half-cantons, Appenzell Innerrhoden (AI) and Appenzell Ausserrhoden (AR), representing two distinct ‘states’. Accordingly, the destination has two DMOs.

<table>
<thead>
<tr>
<th>rank</th>
<th>affiliations</th>
<th>effective size</th>
<th>efficiency (min .54, max 1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DMO director (AI)</td>
<td>15.59</td>
<td>.82</td>
</tr>
<tr>
<td>2</td>
<td>minister for economic affairs (AI), DMO board member (AI)</td>
<td>14.04</td>
<td>.78</td>
</tr>
<tr>
<td>3</td>
<td>DMO director (AR)</td>
<td>12.75</td>
<td>.80</td>
</tr>
<tr>
<td>4</td>
<td>DMO president of the board (AI)</td>
<td>10.73</td>
<td>.83</td>
</tr>
<tr>
<td>5</td>
<td>hotel director</td>
<td>10.70</td>
<td>.76</td>
</tr>
</tbody>
</table>
Figure 6: Network of Lucca (n=42),

top five scorers

Note: The analysis took place during the period of transition between an old and new DMO director. The DMO is part of the municipal administration. Hence, the mayor and the municipal counselors may be regarded as the DMOs board.

**DISCUSSION AND CONCLUSION**

There are three major insights that relate to the research question.

First, among the top four/five scorers there is always the DMO director. Even directors of potentially competing or substituting DMOs, like in Appenzell are identified as salient individuals with a bridging/coordinating role. The role of the DMO director is strongly attributed to the institution. This is also shown in the case of Lucca, where both, the old and the new director, score high values, even if the new director couldn't really prove his bridging/coordinating abilities when the analysis took place.

Second, DMO board members are also important bridging individuals and are represented in every destination. In three destinations (Saas-Fee, Appenzell, Lucca), it's the president himself who is among the top scorers. Thus, we may conclude that DMO boards are constituted of actors who increase the coordinating capabilities of the DMO and therefore potentially increase the connections in the whole elite network.

Third, and generally speaking, individuals who display high structural hole values are salient actors with strong bridging capabilities. The more these top scorers are affiliated to the DMO, the higher the coordinating function of the DMO can be attributed to this organization. As a matter of fact, most of the top scorers are affiliated to the DMO, either as managers/directors or as board members (Saas-Fee 3 of 4, Toggenburg 2 of 4, Lenzerheide 2 of 4, Montafon 3 of 5, Appenzell 4 of 5, Lucca 4 of 5).

The results of this study show that by looking at the individuals who are affiliated to the DMO in the elite network there are clear indications that the DMO plays an important coordinating function, not only by institutional attribution but also by individual capabilities and the resulting relationships. Further research may address

1. the differentiation and enrichment of these results by looking at further dimensions of the relationships between the actors, beyond the simple influence reputation,
2. the extension of the research approach in regions, in which DMOs are either not existing or have clearly different roles, such as Destination Management Companies, for example in Northern America,

3. a longitudinal analysis relating to the affiliation of salient actors of the DMO, analyzing if board members are top scorers for structural hole values because they are DMO board members or if they become board members of the DMO because they are good coordinators in the elite network.


