

ESZTER MADARÁSZ
THE NETWORK OF ACTORS
IN A TOURISM DESTINATION
BASED ON VESZPRÉM TOURISM ASSOCIATION

Since the end of the 20th century and the start of the 21st century networks related to various aspects of human life have been present and more intensively brought to the focus of scientific research or even in interpreting problems and phenomena of everyday life. This approach provides tourism with plenty of new information, since previous research methodologies did not allow an objective and structured description of tourism, learning relations among actors, and introducing their impact on the entire system. It is especially important for tourism destinations, since an appropriate network of actors and tourism suppliers on the supply side is not only a precondition to marketability but also one of the key tools in. At present, networking has certainly attracted the attention of Hungarian tourism researchers, but no specific network has been analysed yet. The first paper in this very topic was published in 2013 in Hungarian Geographical Bulletin, whereas this paper aims to present further possibilities provided by this approach. This empirical research presents the analysis of the members' connections takes place in case of the Veszprém Tourism Association with the help of network analysis. By analysing the density, indegree and outdegree centrality, and prestige of the members of the association it can be concluded that the management of the Veszprém Tourism Association is in harmony with the power positions taken within the networks, and the actors with highest level of local recognition, prestige, and power control and manage the life of the association. Additionally, this method made the management aware of the actors in peripheral position.

Keywords: social network analysis, DMO organisation, destination management, tourism destination

Introduction

The main drive to make this research was to map the new and quickly-spreading opportunities, which social network analyses provide in tourism. The paper splits into two main parts: in the first half national and international sources of literature are used to present the basis of network building and its aspects for tourism, whereas the second part presents an empiric research of relations of members of Veszprém Tourism Association (Veszprémi Turisztikai Egyesület, VTA).

The purpose of introducing the literature is to provide a complex background for the implementation of the research. The empirical part aims at promoting and facilitating the spread of this novel and scientific approach of studying destinations in the Hungarian literature. A further goal is to use the case of Veszprém Tourism Association as an example to create a measurement tool that makes the cooperation among actors at tourism destinations measurable and help discover the structure and power relations of a destination.

As tourism has developed, has become more available to masses of people, and as become more and more complex, the number of definitions has grown remarkably too; nowadays definitions belong to two main categories (Formádi – Mayer, 2002):

- definitions of economic-statistical purpose: the most widely accepted definition of tourism was phrased by WTO-OMT¹ (now UNWTO) in 1989 and published in The Hague Declaration.

‘It encompasses all free movements of persons away from their places of residence and work, as well as the service industries created to satisfy the needs resulting from these movements.’ (Formádi – Mayer, 2002; Puczko – Rátz, 1998; WTO-OMT, 1989)

- complex definitions: apart from economic processes, those definitions contain natural, cultural, and social aspects that are difficult to quantify, which sheds a light on the complex relation of the surrounding environments and actors in tourism. The following English definition endeavours a shift to complexity:

‘Tourism may be defined as the processes, activities, and outcomes arising from the relationships and the interactions among tourists, tourism suppliers, host governments, host communities, and surrounding environments that are involved in the attracting and hosting of visitors.’ (Goeldner – Ritchie, 2012)

From the above definitions we can clearly conclude that a systematic approach to tourism is essential (Michalkó, 2012), since various actors of tourism are in continuous interaction in order to meet visitors’ demands, on which the environment surrounding the actors have significant impact too; moreover, as this relation applies vice versa as well, tourism functions as an open system. It is important to discover those relations, since there are numerous (yet invisible at the first glance) factors in the background that can have substantial impact on the success of a tourism destination (Michalkó, 2012).

¹ WTO-OMT – World Tourism Organisation, the intergovernmental organisation for tourism, presently called UNWTO and functions as a UN-organisation responsible for tourism.

A methodology with a new aspect – social network analysis

Social network analysis (hereinafter as: SNA) has been brought into the mainstream of economic researchers' scientific interest over the past few decades as the role of economic actors' network in business and competition has raised. Although social network analysis is a new approach applied for a few decades in economic researches, the methodology itself looks back upon a remarkably history (Gerő, 2006). Nowadays the primary goal of network analysis is to investigate how the networks surrounding us can be described, explained, managed, and to what extent their behaviour may be predicted (Kovács, 2010; Scott et al., 2008a; Gerő, 2006).

Basically, social network analysis differs from conventional research in three main aspects (Letenyei, 2005): it collects new data types, phrases new analysis questions, and uses new analysis methods.

Social network analysis in tourism

Lately tourism networks have earned a role of growing importance in (regional) economic development (Presenza – Cipollina, 2009; Lengyel, 2010) either in terms of network of clusters or destinations (Rátz – Kátay, 2009, p. 82). One of the reasons behind is that tourism, as a resource-dependent sector, is a sector whose output cannot be removed from the region, but revenue streams through consumers to economic actors and is therefore capable of expanding its market (Lengyel, 2010). In addition, for many reasons it is the nature of network of tourism suppliers that determines the success of tourism and the attractiveness of a destination. For tourists, the network creates information, transportation, and service environment, in which trust, human factor, and quality are represented in interaction as well as separately. As far as supply is concerned, networking is able to compensate the fragmented nature of tourism (Scott et al., 2008a). Besides cooperation is essential since tourism uses many shared resources, on which stakeholders in tourism can only pass a joint decision (Scott et al., 2008b).

It was not until SNA entered tourism when the first theoretical description came to life on the organization, relations, and structural characteristics of tourism destination, as existing destination models are mostly related to competitiveness and describe the related influencing factors, processes, and activities. They do not throw light on actors and their networks implementing the elements, processes (Baggio, 2008a), although many papers have concluded that the more frequent interactions actors witness at both formal and informal level, the more successful the destination will become (Michael, 2003; Baggio, 2008b).

Tourism destinations as networks

Many researchers have attempted to define and delimit tourism destination (e.g. Leiper, 1995; Hall, 2000; Buhalis, 2000), yet have not reached consensus. It is the individual researcher's approach to select the definition applicable to the case (Jancsik, 2007). The World Tourism Organisation (UNWTO) comes to stage as a synthesis of tourism destination-delimitation definitions:

'A local tourism destination is a physical space in which a visitor spends at least one overnight. It includes tourism products such as support services and attractions, and tourism resources within one day's return travel time. It has physical and administrative boundaries defining its management, images and perceptions defining its market competitiveness. Local tourism destinations incorporate various stakeholders often including a host community, and can nest and network to form larger destinations.' (Papp, 2012; UNWTO 2007, 1)

Based on the above definition, tourism destination is virtually a complex social system, which can also be defined as a fundamental unit of touristic competition. According to Amaral and Ottino (2004) (quoted by Baggio et al., 2008b) the following toolkit can be used to examine complex systems: non-linear dynamics, statistical physics and network analysis (Baggio et al., 2008b). This research applies the latter method to study tourism destinations.

The importance of bottom-up approach in tourism development is widely accepted in both the Hungarian as well as the international literature (e.g. Michalkó, 2012; Vanhove, 2010). An efficient implementation and holding on in competition require tourism destination to be managed and coordinated by an elected organisation or actor, since in this case it is a particular tourism supplier with divisions/departments more or less independent from one another, but do cooperate to fulfil the shared vision. As a conclusion, the fundamental units of the research introduced in this paper are tourism suppliers belonging to such an organisation, and the empirical chapters discuss and map the business network of the members of Veszprém Tourism Association.

Empirical research – Methodology

The purpose of my research is to improve the transparency and further develop the cooperations of actors in national tourism destinations with the help of a questionnaire I have prepared and interviewed with. As a result, in awareness of interrelations and their properties, an opportunity may open up to explore the structure of network of tourism destinations and describe interactions. Based on the

achievements, I further aim to make propositions for Veszprém Tourism Association on building connections among actors in order to enable the tourism destination to enhance competitiveness with an advanced and more complex supply portfolio. To achieve my goals, I have selected Veszprém Tourism Association, because

- Veszprém Tourism Association was one of the first TDM (tourism destination management) organisations founded,
- unlike many other destination organisations, it was indeed a self-initiated and bottom-up organisation at the beginning of creating the Hungarian destination management system,
- thanks to early formation and later the foundation of Veszprémi Turisztikai Közhasznú Nonprofit Kft., the organisation has been expanding with an upgrading tendency, and
- naturally, its closeness as well as my local professional connections furthered and simplified the collection of data on cooperation there than in other local tourism destination organisations, since confidence is a key aspect in gaining answers to my questions in the research.

To analyse the data gained from the questionnaires I used quantitative network analysis methods with NodeXL and Ucinet 6 software. The questionnaire, consisting four parts, was interviewed in personal interviews, although a structured questionnaire was used (with closed questions sometimes converted to open questions wherever required), but personal visits were preferred due to the subject being discussed, to avoid misunderstanding, and achieve the highest possible/maximum response rate (Babbie, 1999).

Results – Social network analysis of Veszprém Tourism Association

The entire social network of the members of Veszprém Tourism Association

The analysis of all connections of the members of association suggests they have arborescent business cooperations and work with plenty of non-member partners. Among the latter ones, certainly there are some named by other partners as well, and therefore have high level of indegree. With respect to their activities, they mostly work for the local media [Veszprém Tv, Mész Rádió, Veszprémi 7 Nap (weekly paper), Veszprémi Napló (journal)], and the University of Pannonia, Bakony–Balaton TDM (DMO), and the Local Government of Veszprém represent centrality in the network. These results are not surprising as the local media and the municipal government are key partners; obviously many actors are also members of Bakony–Balaton Regional TDM (DMO), whose activities spread over a larger area than the association in concern.

With regard to partners outside the association, the largest share (18%) of cooperations was related to marketing communication service providers, whereas tourism information service providers (mostly Internet sites) got the second place (15.4%). Additional significant actors (around 10%) are Internet accommodation reservation agencies and other service providers.

Social network of the members of Veszprém Tourism Association

The next paragraphs analyse the ties of VTE's members within the association. For the purpose of the analysis VTE and the closely-linked Tourinform Office (hereinafter as TDM organisation) are removed from the network, since their high level of indegrees (the number of adjacent edges that is the number of neighbours, partners) and high-level of centrality arising out of their roles and functions distort the true network of connections among the rest of the actors as well as the indices that can be derived from the data.

Before commencing the above analysis, the figure of the network that includes the TDM organisation to be removed from the scope of analysis at a later stage is illustrated below. Figure 1 shows the abbreviations used to mark each member of the Association (a combination of alphabetical and numerical digits) as well as the colour codes applied to clearly distinguish the three different types of service suppliers (tourism basic services – light, other tourism services – medium, other services consumed by tourists – black):

- accommodation – SZ + number,
- actor providing accommodation and boarding – SZV + number,
- catering provider – V + number,
- other tourism services – EKT + number,
- other services consumed by tourists – TE + number.

In the Figure light, medium, and black indicate basic tourism service suppliers, other tourism services, and other services consumed by tourists. Figure 1 clearly shows the central role played by VTE and TI (Tourinform Office), which, in terms of data, means while there are as few as maximum 10 indegrees to other actors, VTE has 41 and TI has 22 indegrees. The centrality of those two organisations guarantee there aren't any elements completely isolated in the network, because any element (EKT2) has at least one tie to TDM organisation (to VTE or TI).

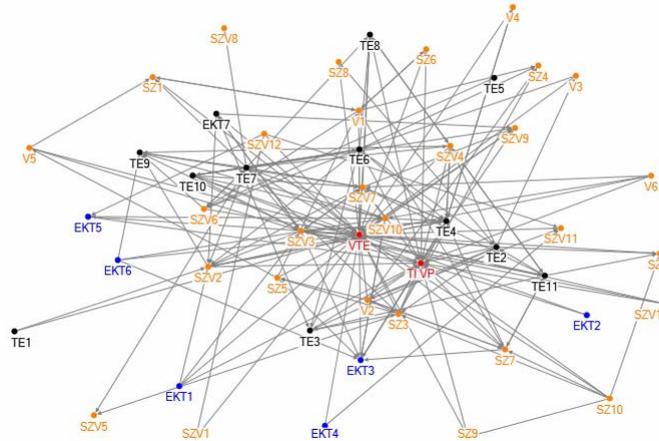


Figure 1: Social network of the members of Veszprém Tourism Association (edited by the author)

The indices have demonstrated evidence to the small-world nature of this network, as network diameter is 3 (6, excluding TDM organisation), the average geodesic distance is 1.94 (2.72, excluding TDM organisation). The diameter shows that from any actors you can get to any other actor through maximum 2 (5) mediators, whereas in accordance with the average geodesic distance the distance between actors is 1.94 (2.72) on average. These parameters play a very importance role in information flow. Table 1 indicates although network density is very low, the distances shown above provide information flow among the members of VTE.

Table 1: Network density of members of the Association (edited by the author)

	Directed network		Undirected network
	Complete	without TDM organisation	
Density	0.086	0.062	0.107
Standard deviation	0.280	0.241	0.309
No. of ties	186.000	123.000	212.000
Variance	0.079	0.058	0.096
No. of cases	2162.000	1980.000	1980.000
Missing value	0.000	0.000	0.000

The density of the complete network is 0.086 that is 8.6% of all potential connections exist in reality. If TDM organisation is removed from the network, the value of this index further decreases (*Tab. 1*). This volume, the general level of relation is, however, a general phenomenon in the analysis of destination networks; results of previous studies shown that tourism destinations are typical of networks with very low density (e.g. Tomaselli et al., 2013; Baggio, 2011; Baggio et al., 2008b; da Fontoura, Costa – Baggio, 2009; Scott et al., 2008b).

Standard deviations are 0.28 and 0.241 that is more than threefold and fourfold of the average, which are very high values. In this very case it means ties among members are distributed unevenly. Density measurement of ego network can help to identify actors in central or peripheral position (Letenyei, 2005).

In the previous paragraphs VTE's actors' social network was analysed as a directed network, which means the data matrix considered the direction of ties: only the direction mentioned in the questionnaire was taken into account. Those ties, however, can also be examined undirected, since they are business relations that affect both parties, and it might as well be the case that either party forgets about the other while filling in the questionnaire. With regard to undirected network the network density of VTE's members' social network is still low (10.7%) but slightly higher than in the previous case (directed network). Deviation is threefold of the average, which reflects a fairly uneven distribution of connections.

Social networks of basic tourism service suppliers of Veszprém Tourism Association

The same letter and number combinations are used to sign service suppliers in figures 2, 3, and 4 as in the figure illustrating the entire network, but the colour coding has changed: medium indicates catering providers, light indicates accommodations, and black indicates suppliers providing accommodation as well as boarding.

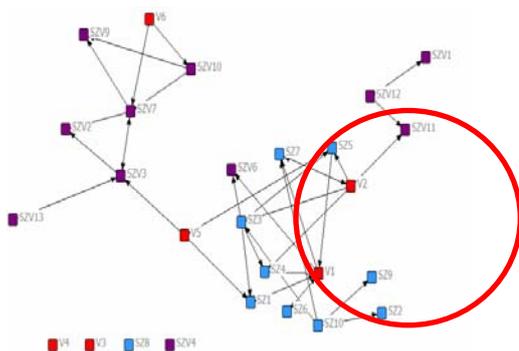


Figure 2: Network of basic tourism service suppliers of Veszprém Tourism Association (edited by the author)

Figure 2 shows the social network of basic tourism service suppliers. Members in this sub-network have very loose connections only and there are few edges compared to the total possible number of edges. There is only one area, circled in bold, with significantly higher number of ties, yet the maximum number of degrees related to a single point is still as low as 6 (at two actors, V1 and SZ3). The latter one, however, applies even only if connections are perceived as undirected. With regard to the entire network there is one actor (V5) that prevents the structure from splitting into two halves, but there is a number of other suppliers functioning as bridge in the network in order to ensure the flow of resources (especially information) among the basic tourism service suppliers of the Association.

In the event only accommodation suppliers' network is analysed within the association, then a fragmented structure including some isolated actors is seen, that is they have no connection with other accommodation. There are some accommodation suppliers, who co-operate with other accommodation suppliers, whereas during the interview it was revealed such cooperation is limited to redirection when fully reserved, that is if a supplier is fully reserved, then recommends another supplier of the same or lower category in town. They create the connections illustrated in Figure 3: actors providing accommodation only mostly cooperate only with other actors of the same profile, and the same applies to suppliers of accommodation and boarding.

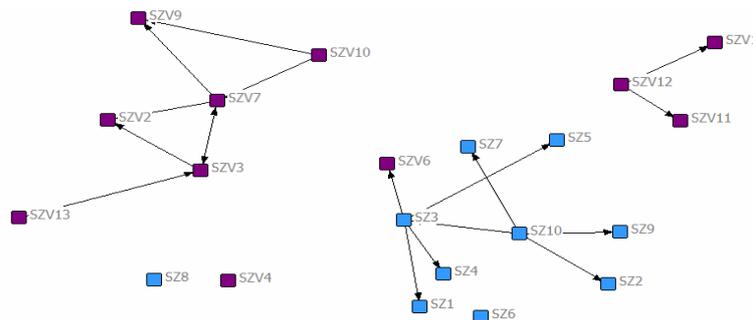


Figure 3: Network of accommodation suppliers (edited by the author)

The network of members that provide accommodation only (*Fig. 4*) virtually does not exist, as they keep contact with one another only via the Association; furthermore the interviews have shown that such relations exist at micro-regional or regional levels only, probably because in the latter case suppliers are no more competitors, but their cooperation enhance and widen the range of options offered in the micro-region or region, thus generate higher aggregate sales. If we analyse what sorts of accommodation and catering suppliers the actors offering catering services

only are linked, it becomes clear actors pay attention to deliver quality and offer nearly the same standards in their cooperations.

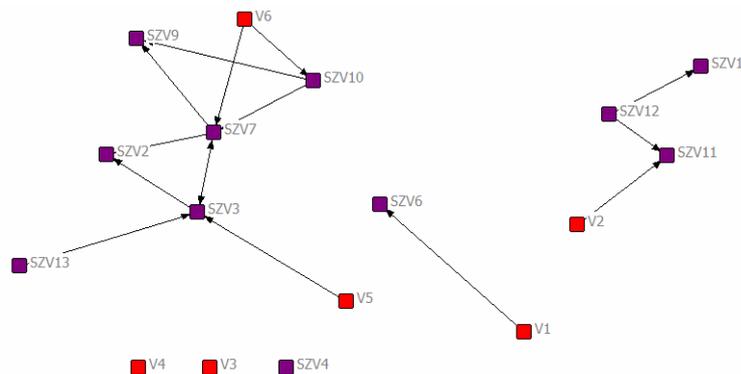


Figure 4: Network of catering service providers (edited by the author)

The entire social network of the members of Veszprém Tourism Association

In this chapter network analysis indices are used to investigate the structure drafted by the connections of members. First the degree density of VTE members' social network will be examined.

On the basis of indegree and outdegree there are 8 and 12 actors with high values², respectively, which are equivalent to 17% and 26% for a total population of a 45 members; in other words that small share of respondents have plenty of connections, whereas the majority have few connections only. In harmony with other published findings in the literature, members of VTE are also characterised with scale independence, so there are few members with large number of connections in a network, and the majority of members have few connections.

The highest value of indegree density was 22.7%³, and there are four more actors with similar value. It means about 20% of all members of the Association reported connection with them. These four actors include four attractions of national recognition and two high-class suppliers of accommodation and catering services. Except for one actor, actors with indegree densities between 10 and 20% are basic tourism service providers (mainly accommodation), including one event attracting visitors from the entire country. As far as outdegree density is concerned, high

² Indegree and outdegree values were maximum 10 and 9 in VTE's members' network, so values of 5 and above are interpreted as high indegree and outdegree.

³ Indegree and outdegree densities in that case were calculated by dividing the indegree or outdegree of a particular point by (N-1).

values are gained mainly by actors offering other services for tourists (e.g. museums, institutes for culture and art), but also by some basic service suppliers. It means mainly institutes from non-profit sectors aim at keeping relations with the members of the Association.

To sum up, density indices allow us to conclude that in terms of business connections basic tourism service suppliers rather have 'recipient' status, while suppliers of other tourism services function as 'emitters' in the network. If seen as an undirected network, these two types of suppliers have equal shares on the top of the list, so the density of connections increases in the vicinity of actors. One quarter of all respondents (11 actors) ended up in the last quartile of in the rank of indegrees and outdegrees with values of 1 or 0, which indicates a very low tie/ willingness to have ties with the network and the members of the network. Almost two-third of them is basic tourism service suppliers, whose inclusion into the network is a key task for their management.

The next group of indices is used to measure centrality of members; by definition, centrality differs from density in measuring the number/share of implemented ties an actor possesses. Basically, it was introduced to measure ego network, but may be extended to give information on the entire network as well. Among the various centrality indices, the most common one is degree centrality. In case of directed graphs, just like in this case, centrality calculated on the basis of degree is called prestige. The prestige of a particular actor is calculated by comparing the number of real ties (indegrees) to the total possible number of ties. If the focus is on outdegrees of an actor, then the influence of the actor can be identified and measured (Letenyi, 2005).

The above prestige analysis of actors shows (based on indegree density) that the most centralised actor with the highest prestige is a non-profit institution (TE4), the second place is given to a high-quality basic tourism service provider (SZV3) playing an important role in the life of the Association. In the third place there is one of the largest touristic attraction in town (EKT9), followed by two basic tourism service providers (SZV2, SZV7). These actors are typical of having higher number of indegrees than outdegrees, nevertheless there is room for further refining the interpretation of their prestige levels if the prestige of elector members are examined. The higher the prestige of members they are elected by, the higher the prestige the elected actors will have. Table 2 below summarises the data of that analysis.

Table 2: High-prestige members of Veszprém Tourism Association (edited by the author)

	Indegree	Electors voted for a particular actor (indegree)	Explanation
EKT9	8	SZV3(9), SZV2(8), SZV4(5), SZV6(4), SZV7(7), SZV10(5), EKT6(0), TE7(3)	the majority (8/5) have indegrees exceeding 5 – EKT9 has high prestige, because has high number of indegrees and elected by actors with high indegree
TE4	10	EKT3(6), SZV3(9), V4(1), TE6(2), SZ3(4), SZV7(7), SZV2(8), SZV10(5), SZ7(4), SZV4(5)	the majority (10/6) have indegrees exceeding 5 – TE4 has high prestige, because has high number of indegrees and elected by actors with high indegree
SZV7	7	V6(0), TE4(10), TE10(2), TE7(3), SZV10(5), SZV3(9), TE11(3)	the majority (7/4) have indegrees below 5 – the number of indegrees would result in high prestige, but elected by actors with low indegree
SZV2	8	SZV3(9), EKT7(0), EKT1(1), TE6(2), TE1(0), TE7(3), SZV7(7), TE4(10)	the majority (8/5) have indegrees below 5 – the number of indegrees would result in high prestige, but elected by actors with low indegree
SZV3	9	EKT1(0), EKT6(0), V5(1), TE7(3), TE10(2), EKT7(1), SZV13(0), SZV7(7), TE2(3)	the majority (9/8) have indegrees below 5 – the number of indegrees would result in high prestige, but elected by actors with low indegree

To sum up, it can be concluded that the top two actors with the highest prestige are an actor of national recognition and offering other complementary services and an actor also of national recognition and offering other services consumed by tourists. The high prestige levels detected correspond with the fact that they are two key actors in the Association: the first member (EKT9) is a shareholder in VTE [although I did not manage to interview, many actors refer to the connection (owing to the high level of prestige) with it quite often], whereas the latter actor (TE4) is the member of the association's board or management.

Having analysed ties of actors with high prestige, the following statements may be made:

- Actor EKT9 is an attraction of national significance, who is on legal terms is a member of the Association, a shareholder of non-profit ltd, but informal talks accompanying the formal interviews suggest there is no close cooperation established between the association and the actor in concern. Basic tourism service suppliers, especially accommodation suppliers, have connections with the actor and offer in accommodation packages favoured by tourists (offer

tickets to one of the most significant attraction in town). Considering Håkansson's typology (2008), there is lack of personal or activity-based relationship between them; nevertheless they are mutually dependent on cooperation, since the actor offers a very important element to the package (resource), without which most tourists would find the complete offer less attractive. As discussed earlier that actor had refused participating in the research, so the scope of study was limited to indegrees only.

- Actor TE4 is a renowned and important non-profit institution (as well as attraction) also of national recognition. It was found that 80% of its connections with tourism service suppliers are reciprocal, and was said to have been an active member of the Association. Primarily it is linked to basic tourism service suppliers, including to two catering provider enterprises with well-established resource and activity-based relationships of personal source (e.g. shared events). With the rest of basic service suppliers it has resource and activity-based relationships, but the survey revealed no personal aspects.
- Actor SZV7 is a provider of accommodation and catering services; according to the responses, half of its connections are reciprocal and have ties with partners of versatile activities. It is linked also to basic service suppliers, mainly to offer visitors other services, but also to important partners of cultural background (e.g. area for exhibitions, events). Looking at all connections of the actors the majority of all key ties have personal source and relate to producing companies, and activity- and resource-based connections dominate the ties with various actors of tourism.
- In case of actors SZV3 and SZV2 the level of reciprocity is also low, and cooperations are mainly typical of other tourism services and other services consumed by tourists, to which these actors are related to function as accommodation and catering service provider. Relations are therefore primarily based on activity, but resource-dependence is also significant, because high-category accommodation providers are in great need of guests and renowned performers attracted by cultural institutions and events. According to informal discussions accompanying the formal survey, the owner of actor SZV3 has been participating national events of tourism and playing an active part in social and cultural life of Veszprém. Consequently, personal relations have a fundamental role in business activities as well, and he/she is the chairperson of the Associations. The social network of actor SZB2 is similar to that of SZV3, namely personal aspects dominate business relations. That actor has been actively present in the local arena for several decades and has strong connections not only with local entrepreneurs but also politicians and decision-makers.

With the help of UCINET 6 software the entire network was analysed for form information on density. Both in and outdegree level values suggest the network has normal centrality, as there are outdegrees emitted by a number of actors and many actors absorb plenty of indegrees. It is further reinforced by the fact that deviation in both outdegree as well as indegree remained below average. It must be noted though the light network may fall into pieces easily. In the network of tourism service providers catering service providers (restaurants) functions as 'bridges' to ensure connectivity among other parts of the network. From professional viewpoint it is absolutely clear and understandable, since in the town there are many pensions providing the guests with bed and breakfast only, so keeping good relationships with restaurants nearby is absolutely essential.

Conclusions

The simplest network analysis index (density) and the map of social network clearly demonstrate the central role played by the Association and the related Tourinform Office in the conventional business relations. In these cooperations, the Association is the actor that keeps the network uniform and unified, and integrates normally isolated actors into the social network of service providers. The Association and the Tourinform Office responsible for operative work are able to unite the actors, urge and endeavours cooperations; moreover, their role is of key importance in the operation of the tourism destination.

In accordance with results of previous studies (e.g. Tomaselli et al., 2013; Baggio, 2011; Baggio et al., 2008b; da Fontoura Costa – Baggio, 2009; Scott et al., 2008b), the density of network being studied in this research was also very low. It applies not only to tourism destinations, but also to social networks in general is typical of having network density between 1–10% (Baggio et al., 2008a; Barabási – Albert, 2002). The density of the social network of actors in Veszprém as a tourism destination is very low (total network – 0.086; network excluding TDM organisation – 0.062; undirected network).

By analysing the density, indegree and outdegree centrality, and prestige of the members of the association it can be concluded that the management of the Veszprém Tourism Association (Chairman, executive officers) is in harmony with the power positions taken within the networks, and the actors with highest level of local recognition, prestige, and power control and manage the life of the association (except for one basic tourism service provider SZV7).

Additionally, this method made the management aware of the actors in peripheral position, i.e. which members should be more involved in the life of the association and the work of members.

Further research directions

This research presents a snapshot of results achieved during the studies, nevertheless it is definitely worth doing follow-up studies on a regular basis to monitor the changes in relations and make propositions in the activities of the management accordingly.

The scope of analysis of connections in the research was limited to classic statistical methods (not detailed in this paper), but may be extended to any dimensions (e.g. separately on the flow of information, knowledge, services, etc.); by mapping the network an laying layers on the top of one another even more accurate conclusions can be drawn.

By extending the scope of research and improving the tools involved it would also be possible to conduct a more comprehensible study of a larger number of tourism destinations enabling us to draw conclusions of extended nature and to seek relation between tourism destinations of various structures with their competitiveness or any other feature influencing market share.

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