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REFERENCE MODELLING FOR DESTINATION MARKETING ORGANISATIONS – THE CASE OF AUSTRIAN NATIONAL TOURIST OFFICE

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Abstract

Internet and e-Commerce have provoked major re-configurations of the tourism value chain. Especially Destination Marketing Organizations (DMO) as marketing and information service providers have to face the threat of disintermediation; and they need to respond with higher level services and products. This paper presents our findings from a knowledge management project with Austrian National Tourist Office (ANTO). We introduce affinity group marketing as a means to leverage ANTO's core competence in cross-cultural match-making and discuss how affinity groups as a market segmentation concept can be exploited for ANTO marketing projects. Furthermore, we develop a metamodel capable to support affinity group marketing in DMO. This metamodel, the so-called MINT Model (from Market INTelligence), has been evaluated for its flexibility and generality in 25 ANTO offices. Accordingly, it may serve as a reference model for affinity group marketing that can be used as an information system blueprint for other DMOs.

Keywords: Affinity Groups, Knowledge Management, Destination Marketing Organizations, Market Segmentation, Metamodeling.

1   DESTINATION MARKETING ORGANIZATIONS IN A CHANG-
ING TOURISM INDUSTRY

There is almost no industry as much affected by innovations in information technology as the tourism industry. This phenomenon is rooted in the nature of tourism which is best described as an information business (Schertler 1994). The Internet has triggered a decline both in information asymmetry and in transaction costs (Choi et al. 1997) leading to new configurations of the tourism value-chain. The dynamics of this process forces companies to quickly align their business strategies. Many suppliers follow the trend towards disintermediation by adding e-commerce channels to their operations (Buhalis 2003). Hence, intermediaries have to re-think their strategy and relationship towards suppliers and customers. In this context, a new service orientation is needed in addition to the more traditional focus on transactions.

Destination Marketing Organizations (DMO) face a very special challenge in this environment of change. Traditionally, they lack a transactional backing of their operations. Collins and Buhalis (2003) define them as provider of information products and services for customers, intermediaries and suppliers in the tourism value chain. DMOs promote a destination, i.e. a country, a region, or a city as a tourism brand. Promotion mainly focuses on so-called incoming countries, i.e. originating countries of foreign tourists. Traditionally, DMOs have been funded by the government and tourism companies of the destination. But since the advent of the Internet, tourism service providers are shifting away from DMO membership towards self-arranged marketing campaigns in cooperation with local agencies in incoming countries. This trend puts the threat of disintermediation of DMOs into the focus. As a consequence, DMOs should restructure in order to become profit- and project-oriented organizations. Beyond traditional provision of information about the destination, they have to develop and promote higher level services and products for which tourism service providers, intermediaries, or individual tourists are willing to pay. These services and products should build on the core competency of DMOs: the cross-cultural match-making between a destination's tourism service providers on the one hand and intermediaries or individual tourists from incoming countries on the other hand. Dedicated information systems are needed in order to market such services in an efficient manner.

This paper presents affinity group marketing as a novel approach for DMO to build specialized information products and services. We present the case of the Austrian National Tourist Office (ANTO) and derive a reference model for affinity group marketing that can serve as a blueprint for specialized information systems of DMO. We refer to this model as the MINT Model (Market INTelligence). The rest of the paper is structured as follows. Section 2 gives an overview on the theoretical background of affinity group marketing. Furthermore, we sketch our methodology which builds on reference modelling and case study research. In Section 3 we introduce the case of ANTO and present the MINT model. Moreover, we discuss the evaluation of the MINT model and sketch its implementation at ANTO called MINT system. Section 4 concludes the paper and gives an outlook on future research.

2   THEORETICAL BACKGROUND AND METHODOLOGY

In this section we first sketch the theoretical background of affinity group marketing. After that, we illustrate the essentials of reference modelling and case study research. These two approaches provide the foundation of the MINT model that we present in the main section. Accordingly, the research presented in this paper can be classified as empirically founded design science.

2.1   Affinity Group Marketing

The term *affinity* stems from Latin affinitas, which means neighbourship, proximity or connection. In behaviour science affinity is described as attraction due to similar feature characteristics (Wolman

1973). Informally, an affinity group can be understood as a collection of people sharing an interest, a place, a concern, or an idea. They are driven by a feeling of togetherness, social identification and conformity of norms of the respective group (Macchiette and Abhijit 1994). The affinity of a subject can be related to an object. Such affinity objects include social entities like music bands or football teams; material objects like cars, watches or stamps; or certain topics like politics, music, sports, or religion (Wilke 1990). Accordingly, an *affinity group* can be described as a community of people that align with one another due to the same affinity object. The probability with which an individual decides to join an affinity group rises with increasing affinity towards an affinity object. This probability is also influences by structure, homogeneity, and level of interaction of the affinity group, as well as the benefit that the individual expects from membership. Affinity groups are consensual groups with self-selection characteristics. They arise from self-interest of their members and not from any imposed pressure. Therefore affinity groups are so-called natural groups (Swaminathan and Reddy 2000). In a narrower sense an affinity group is a social group whose members interact directly with one another accompanied by a tight companionship. In a wider sense affinity groups form a social category of individuals with the same affinity to a certain affinity object, but without personal interaction.

Affinity groups can be operationalized as an efficient concept of market segmentation, because they are based on self-selection of individuals. Traditionally, marketing literature distinguishes four types of segmentation variables: geographic, demographic, psychographic, and behavioural variables (see e.g. Kotler 2000). Multi-attribute segmentation uses several variables in order to identify smaller, well defined target groups (Kotler 2000). Affinity group segmentation has to be considered as such a multi-attribute segmentation as it combines interpersonal and intrapersonal aspects to form a homogenous behavioural segment. Since affinity groups are always oriented towards a specific object they can fairly easily be marked-off from other affinity groups with other affinity objects. Affinity groups are predestined for the application of marketing instruments, especially to promote products that are related to affinity objects. *Affinity group marketing* refers to the acquisition of affinity group knowledge and its application in marketing campaigns. Affinity group marketing involves three participants: a service provider, an affinity group marketing expert, and an affinity group. The *service provider* charges the affinity group marketing expert to arrange a marketing campaign for his service. The *affinity group marketing expert* identifies the particular features of the service and determines those affinity groups that might be interested in such services. Then, the marketing campaign is tailored to address the members of the *affinity group* by presenting the service as being closely related to the affinity object of that group. For DMO, the adoption of affinity group marketing is especially appealing. Tourism service providers strive to attract subjects to travel to an object which may be a hotel, a museum, an amusement park to name but a few. By becoming an affinity group marketing expert, DMO can offer tailored marketing campaigns to tourism service providers.

Consider the example of Hotel Sacher in Vienna. Hotel Sacher as a tourism service provider might charge an affinity group marketing expert with a marketing campaign. The latter could identify aficionados of classical music to be a suitable affinity group. If no knowledge about this affinity group is available, it has to be acquired via market research. Then, the marketing campaign will especially address aficionados of classical music and stress the close relationship between Hotel Sacher and classical music, e.g. by emphasizing that the hotel is located next to Vienna Opera House. This example illustrates how affinity group marketing can be implemented by DMO. Furthermore, affinity group marketing leverages a DMO's core competence in cross-cultural match-making in the area of tourism.

2.2   Reference Modelling

The construction and usage of reference models is commonly referred to as *reference modelling*. A *reference model* is an information model that can be reused in another context than that in which it has been constructed (Becker et al. 2004a). A constitutive feature of a reference model is its claim for referenceability. As a consequence, a reference model remains valid beyond the scope of the individual case for which it has been created and can therefore be reused in other cases (Becker et al. 2004a).

Furthermore, Schütte stresses the recommendational character of a reference model (Schütte 1998). According to Schütte three different types of reference models can be distinguished (Schütte 1998): Procedural reference models describe steps in order to efficiently achieve a goal. They are frequently used in software engineering and business process reengineering. Typical examples include the classical waterfall model for systems development (Boehm 1976) or the rapid prototyping model (Bratko 1989). Reference information systems models describe business processes which are supported by standard enterprise resource planning software packages. Those include e.g. the SAP R/3 Reference Model (Keller and Teufel 1998). Reference organization models describe subdivisions of a concrete type of business as e.g. the ARIS reference model (Scheer 1999). Reference modelling has been applied successfully in different businesses and branches of industry, e.g. in e-government projects (Becker et al. 2004b). To the best knowledge of the authors, reference modelling has up to now neither been applied in the context of the tourism industry nor for destination marketing organizations. In the following section we sketch the case study methodology that we applied to build the MINT model.

2.3   Methodology

As there is no research available that discusses information systems engineering for DMO, we adopted an explorative case study approach (see Yin 1993). Although this research design cannot provide empirically generalized predictions, we can nevertheless gain insight into the peculiarities of this specific domain. Hence, the MINT model deducted from this research relies on analytical generalization and particulation (see Stake 1995). In order to draw a complete picture we used three types of evidence including documents, archival records, and interviews. Documents and archival records comprise documentation of information systems in use; documents created throughout the execution of business processes; and Word and Excel files that are used to administer business partner information. Furthermore, we conducted interviews with 25 staff members of ANTO's German office. The information we gathered via these interviews drove the definition of the MINT model. Before implementing the MINT model in an information system for ANTO, we tested it for its generality and flexibility. These tests included interviews and discussions with 200 of 250 ANTO staff members working in 25 different offices in various incoming markets around the world. Furthermore, we implemented the MINT system based on the MINT model. Its heavy usage in ANTO's daily operations may be regarded as another piece of evidence for the validity and applicability of the MINT model.

3   REFERENCE MODELLING FOR DMO

3.1   The Case of Austrian National Tourist Office

The Austrian National Tourist Office (ANTO) is a DMO promoting the destination Austria. ANTO is basically organized in two geographical layers: the central headquarters in Vienna as the counterpart for Austrian tourism service providers, and multiple satellite agencies in countries which are important to Austrian incoming tourism. Our research project with ANTO had the goal to improve customer relationships and ANTO services by providing a systematic framework for managing ANTO's market knowledge. We conducted explorative interviews with staff of the German ANTO division and modelled the business processes that are related to the products described in the product catalogue of ANTO. These products belong to the categories Advertising; Direct Marketing and Guest Loyalty Program; e-Marketing; Press and Media Work; Sales Promotion and Operations; Trade Fairs; Event Marketing; and Information Policy/austria.info Holiday Service Center.

After analysis of the processes related to the products we verified the business process models with satellite offices of ANTO in different countries in order to grant referenceability and correctness. Accordingly, they provide a solid basis for the MINT Model which is later proposed as a reference model for DMO. The interviews and the documentation of business processes revealed that ANTO was suffering from four major problems. Firstly, employees administrated business partner addresses on their

local computer or on paper filing cards making such data inaccessible for other staff. Secondly, information about the destination Austria was held on paper in each office. This made it difficult to propagate up-to-date information from the headquarters to the satellite offices. Employees rather used the Internet than folders from their bookshelves. Thirdly, a concept was lacking to systematically match incoming tourists, intermediaries, media, or transportation companies with tourism service providers of the destination Austria. Fourthly, there was only little formalization of business processes which made controlling and alignment with business goals rather difficult. We address these problems via a web-based information system which integrates knowledge management with concepts from affinity group marketing as the semantic structure of knowledge entities. There is the need for a centralized address administration tool. In the following subsection we will illustrate the MINT model and how it supports affinity group marketing.

3.2 The MINT Model

Figure 1 shows the MINT Model in UML class diagram notation and its high-level entities. A PROJECT represents the customized creation of a product or service which is defined by a PRODUCT. A PRODUCT serves as a blueprint listing potential service components that are created in PROCESS STEPS. A project involves one or more EMPLOYEEs and PARTNERs which can be either CUSTOMER of the project or SUPPLIER. It is possible to administer projects without partners. These projects follow the so-called General Service Commission of ANTO to market Austria as a tourism brand abroad. In order to promote "lessons learned" (van Heijst et al. 1996) and "best practices" (O'Leary 1998) projects are stored in a project history and linked to affinity groups. These projects can also be used with all its involved parties as a template, e.g. for recurring conferences. Moreover, the project history offers a historical view on the customer relationship. This feature provides ANTO with an infrastructure to discover customer preferences and trigger focused product marketing campaigns.
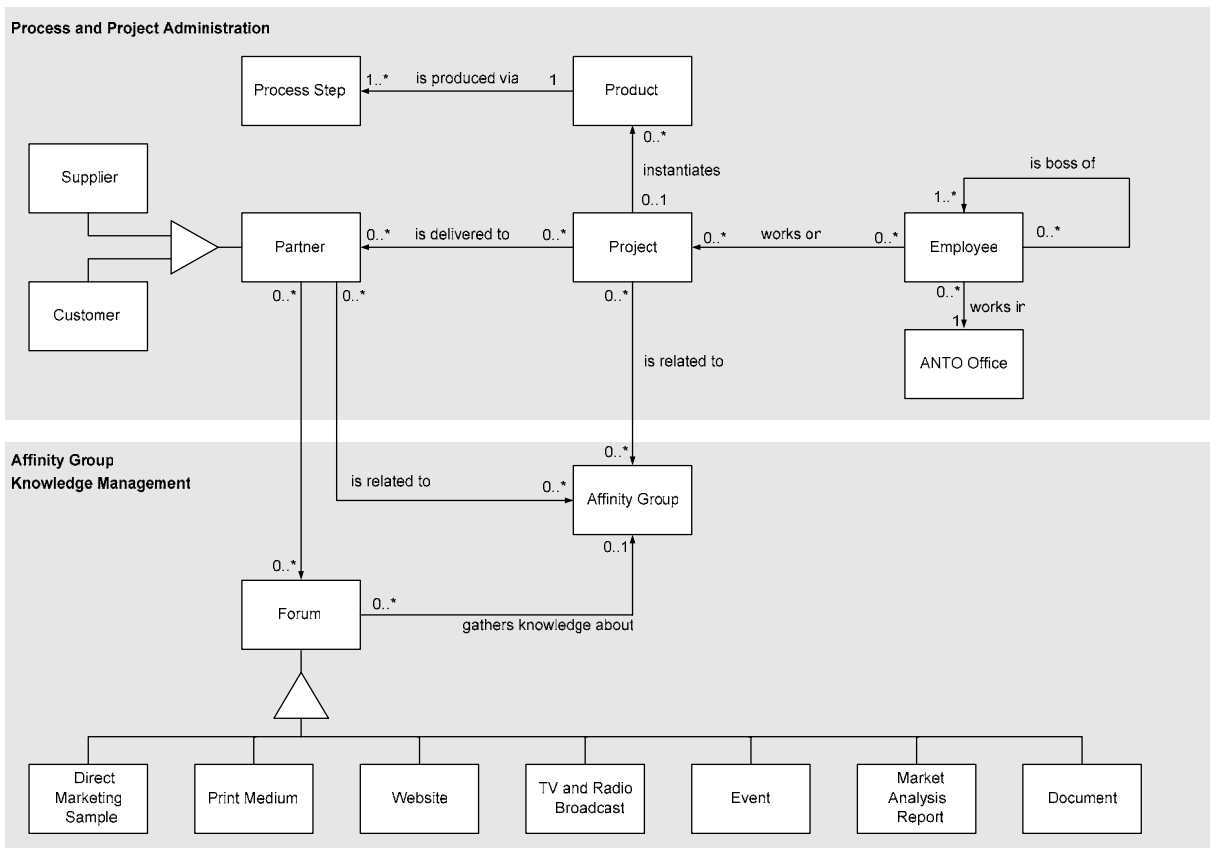

Figure 1.   High-level UML class diagram of the MINT model.

Affinity group knowledge in MINT is arranged around FORUMs. A forum is a generalization of platforms used by members of a specific affinity group, and of links to resources that bear knowledge about the respective affinity group. Forums may be related to partners, e.g. when they serve as a contact person for that forum. Special forums have special attributes either about the size of its audience and costs using them to communicate with the affinity group; or about the population of a survey and costs for obtaining it. Each type of forum includes about 10 different attributes (depending on its type) covering those aspects that have been identified in interviews with ANTO as relevant for marketing campaigns. Special forums belong to the following seven categories, illustrated by examples of the affinity group "Skateboarders" in Germany.

- A DIRECT MARKETING SAMPLE contains detailed information about the owner of the sample, about the population, and about fees for a direct marketing campaign. Any agency that can provide addresses of people that are interested in skateboarding are of relevance.
- PRINT MEDIUM holds information about the circulation, the periodicity, and fees for posting an advertisement. These details are stored for the relevant special interest media, such as Limited Skateboard Magazin, Skateboard, Lodown, Slap, Transworld Skateboarding or Trasher.
- WEBSITE may contain information about page impressions per month and fees for posting banners. Especially interesting are those websites that offer a community forum or chat, as e.g. http://www.skateboard.de or http://skate.andmuchmore.com in the context of skateboarding.
- BROADCAST include radio transmissions or telecasts and data about their airtime, periodicity, audience rating, and costs for one advertising spot. MTV broadcasts focusing on skateboarding lifestyle are equally interesting as programs about skating on e.g. EUROSPORT.
- EVENT covers regular conferences, meetings, parties, parades, etc. which play an important role for the affinity group to meet. Descriptive attributes include time, location, periodicity, and costs of advertisement or participation. Skate-contests and freestyle-events such as the Dortmund Monster Mastership (Skate World Cup) or Ethnies European Open belong to this category.
- MARKET ANALYSIS REPORT contains information about the publisher of the report, about the population, the date of the survey, and the price for buying it.
- DOCUMENT may serve as a container to store internal surveys or other documents related to a specific affinity group. Those include any files that are considered as important for the knowledge about skateboarders, such as life style reports, audience analysis and event documentations. All these different knowledge aspects about an affinity group enables ANTO for a quick assembly of customized marketing campaigns for an Austrian touristic service provided in an incoming market of choice.

3.3   Application of the MINT Model: Mozart 2006

In order to illustrate how ANTO works with the MINT system, we will briefly sketch the Mozart 2006 project, a current project of ANTO. In 2006 Austria celebrates the 250th birthday of Mozart; reason enough to address classical music lovers around the world to pay Austria a visit during that time and visit some of the numerous related events. ANTO seeks to support the Austrian tourism industry building on affinity group knowledge that is administered with the MINT system. On the one hand, incoming travel agents as well as hotels in Austria will need to understand the differences between classical music lovers for example in North America, in Japan or in Germany in order to *design* specific tourism packages for them. On the other hand the Austrian tourism industry wants to communicate their products to this affinity group in major incoming markets.

Working with the MINT system basically involves two different activities: a) the acquisition and b) the application of affinity group knowledge. This affinity group knowledge is acquired by each ANTO office separately. ANTO staff members research for forums of classical music and document their findings in a structured manner in the MINT system. In a later project phase this knowledge can be applied for the customization of marketing campaigns. Via the MINT system important partners for cooperation can be found such as special interest travel agents; promotion through third party en-

dorsement integrating famous conductors or musicians can be undertaken; adequate e-mail newsletters can be designed and sent to relevant addresses; banners can be placed on the most important websites; or events can be planned and carried out.

In the context of the Mozart 2006 project, market research has revealed that classical music lovers as a group are quite heterogeneous: they can be divided into more homogenous sub-groups. Those above fifty years age show a very different behaviour in contrast to students or self-employed music-lovers when it comes to media use and communication with peers. As a consequence, these groups will be addressed in a different way in the later project phase. Such market knowledge offers ANTO the basis for attractive products and services for various tourism companies strengthening its position in the tourism value chain.

4   CONCLUSION AND FUTURE WORK

We have presented a reference model for affinity group marketing of DMO. It is helpful for companies like ANTO in order to respond to the challenges of the Internet and e-Commerce in general by adopting a strategy to become a high quality information provider to all parties involved in the touristic value chain. Affinity group knowledge strengthens ANTO's core competence in cross-cultural match-making. We operationalized affinity group knowledge by the help of a metamodel that we call MINT Model (from Market INTelligence). This model has been checked for generality and flexibility by conducting about 200 interviews with ANTO staff members in ANTO offices in 25 countries. Furthermore, we implemented the MINT system for ANTO building on the MINT model. This system supports the acquisition of affinity group knowledge and its application in projects like Mozart 2006.

Due to its generality and flexibility, the MINT model represents as an approach towards affinity group marketing that is applicable in various kinds of settings. We especially consider the model to be independent of the size of the destination. Yet, further research is needed on the applicability of affinity group marketing (whether operationalized by the MINT model or not) for destinations of different size. Beyond the application of affinity group marketing for a large destination like whole Austria, we consider the approach to be attractive for small destinations like a valley or a city as well. Arguably, DMOs of such small destinations should have even better insight into the specifics of their destination than DMOs of large destinations. This should facilitate the identification of relevant affinity groups and, as a consequence, the tailoring of focused affinity group marketing campaigns in incoming markets. In future research we plan to analyse the impact of size of the destination on the applicability of affinity group marketing.

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