Case study

Developing nature-based tourism products with customers by utilising the Delphi method

Henna Konu

University of Eastern Finland, Centre for Tourism Studies, P.O. Box 86, FI-57101 Savonlinna, Finland

ABSTRACT

The aim of this study is to assess the suitability and opportunities for utilising the Delphi method in the tourism sector by examining the applicability of the method in data collection and customer involvement for different purposes in new service development (NSD). This is done by introducing an NSD case aiming to find and evaluate ideas for nature tourism products. Data was collected by using two Delphi rounds and the suitability of the method was evaluated for selected criteria and describing the type of information that was gained during the process. The results show that the Delphi method suites customer involvement in the front-end stages of NSD well and the data collected provides rich information especially for service concept and service system development.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Previous studies have identified several benefits of customer involvement in new service development (NSD) for companies including enhanced competitive advantage, boosted public relations, understanding of customer needs, enhanced development of customer relationships, reduced market failures, accelerated NSD processes and higher new service acceptance rates (e.g. Alam, 2002; Enkel, Kausch, & Gassmann, 2005; Griffin & Page, 1996; Gruner & Homburg, 2000; Lagrosen, 2005; Magnusson, Matthing, & Kristensson, 2003; Matthing, Sanden, & Edvardsson, 2004; Olson, Walker, & Ruekert, 1995; Sandberg, 2007; von Hippel, 2001). It is also argued that customer involvement is especially useful in the front-end stages of the innovation process (idea generation, idea screening and concept development stages of NSD) because these stages are the most information intensive (Alam, 2002, 2006; Gruner & Homburg, 2000; Zahay, Griffin, & Fredricks, 2004). However, previous studies have shown that customers are usually involved in the later stages of the innovation process for instance when testing a nearly finished product for sale and marketing (Prahalad & Santos, 2009).

Depending on the level of interaction in the NSD process a customer may play an active or passive role (Hjalager & Nordin, 2011). The information customers can contribute also depends on the context and situation (Edvardsson, Kristensson, Magnusson, & Sundström, 2012). Edvardsson et al. (2012) use two different dimensions to elaborate four different service-related customer conditions, namely, the use situation and the resource context. According to them a customer may provide information either inside (in situ) or outside the use situation (ex

situ), and all situations happen either in-context or ex-context. They define a context as a resource constellation available to customers in use situations. Ex-context means that the information can be gained from a person who does not have a direct experience from an actual context (Edvardsson et al., 2012). Based on these Edvardsson et al. (2012) developed four ideal types of customers as a source of information, namely The correspondent (has experience in a real service context and situation), The reflective practitioner (has experience in a service context, not connected to real-life situation), The tester (has learned service context from the outside, testing simulated real-life situation) and The dreamer (has not been a part of real-life value-creating situation, learned the context from outside). Hence the informants with different knowledge and information about the context and situation may provide different kinds of information for NSD purposes. The informant may also have a different role in diverse NDS phases.

Hjalager and Nordin (2011) state that in the tourism industry there is a need to focus on topics related to user-driven innovation practices and methods. Although several studies have discussed diverse methods that are seen as being suitable for acquiring customer information (e.g. Alam, 2002; Lagrosen, 2005; von Hippel, 1986), there are only a few studies that focus on development and assessment of methods for involving customers (Edvardsson et al., 2012). Additionally, only a limited amount of information is available about the methods of how customer insight is actually acquired in real cases of service development praxis (Nijssen & Lieshout, 1995, cited in von Koskull & Fougére, 2011), especially in a tourism and hospitality context. One exception is a study by Komppula and Lassila (2014) in which they evaluate actual service development cases from the tourism industry by comparing the applicability of different customer involvement methods. Edvardsson et al. (2012) have reviewed and categorised methods used in customer

E-mail address: henna.konu@uef.fi.

involvement in NSD, but most of the studies they use as examples are from technology and manufacturing industries.

To the author's knowledge there are no studies that have examined or applied a Delphi method in a new service development context in hospitality and tourism. The Delphi method is usually used when the aim is to collect subjective judgments on issues or problems for which no previously researched or documented information is available (Hsu & Sandford, 2010). Hence it can be assumed that the method would suit the idea generation phase of NSD well, where the goal is to get new ideas as a basis for the service development.

The aim of this study is to assess the suitability and opportunities provide by the Delphi method in the tourism sector by examining the applicability of the method in data collection and customer involvement for different purposes in NSD. The applicability and usefulness are analysed by using several criteria adapted from previous studies: mode of customer information (Edvardsson et al., 2012), managerial criteria (Komppula & Lassila, 2014), and purpose, stage, intensity, and mode of involvement (Alam, 2002). In addition emphasis is placed on evaluating what kind of information is gained through the process. The information gained and the Delphi process itself are evaluated by using the critical issues of Delphi and these are discussed in an NSD context.

This study is a part of a wider tourism development project aiming to develop nature tourism products for a hiking area. The paper describes the overall NSD case, but it concentrates on examining the first phases of an NSD process – idea generation and evaluation – in more detail. The study aims to make a contribution to the tourism management literature providing an empirical example of how consumers are involved in NSD in the tourism industry. Applying the idea of Edvardsson et al. (2012) in this study the *context* refers to the destination (hiking area) and the situation to the consumption/development process of nature tourism.

The paper is structured as follows: first, the theoretical background of the Delphi method and its usage in tourism and management studies are presented. Thereafter a description of the case is provided followed by the report of the data and findings. Finally, the findings and suitability of the method are discussed, and theoretical and managerial implications are described.

2. Delphi in tourism marketing and management studies

2.1. Characteristics of Delphi

Delphi is a method that is used in exploratory qualitative research and is utilised for soliciting opinions from experts about novel ideas or complex problems by conducting several questionnaires and controlled feedback (Day & Bobeva, 2005; Donohoe & Needham, 2009; von Bergner & Lohmann, 2014). The method was first developed in 1948 for military intelligence activity, later to be deployed for development by the Rand Corporation in a period from 1950 to 1963 (Donohoe & Needham, 2009; Helmer, 1966; Hsu & Sandford, 2007). Delphi studies became more popular in the mid-1960s for forecasting purposes (Hsu & Sandford, 2010). Currently the Delphi is regarded as a legitimate methodology, which earlier was questioned in terms of precision and accuracy, but today the discourse has shifted to its methodological application and refinement (Donohoe & Needham, 2009). According to Gupta and Clarke (1996) the number of Delphi studies peaked starting from the middle of the 1980s and it has sustained its position from the 1970s onwards.

Traditionally the Delphi method entails interactive and systematic forecasting relying on a panel of experts and their opinions, but it has also been used in planning, issue identification/prioritisation and framework/strategy development (Day & Bobeva, 2005). In the words of Gupta and Clarke (1996, 185) the method is "*a qualitative, long-range forecasting technique, that elicits, refines, and draws upon the collective opinion and expertise of a panel of experts*". Miller (2006) describes the difference between the Delphi technique and a common survey by saying that the Delphi technique aims to address "what could/should be"

and the common survey tries to identify "what is" (see also Hsu & Sandford, 2010). The Delphi technique can be utilised for achieving several different goals, including determining and developing possible alternatives, exploring or exposing assumptions that lead to different judgements, generating consensus, and educating the respondents (Hsu & Sandford, 2010).

As a Delphi study does not necessarily aim to gain a consensus, different applications of the Delphi method are used including e.g. a Classical Delphi, Modified Delphi, Decision Delphi and Policy Delphi (Keeney, 2009; Keeney, Hasson, & McKenna, 2011). Keeney (2009) lists different types of Delphi and their main characteristics. This study can be categorised as a Decision Delphi (Keeney, 2009; Keeney et al., 2011) as the aim is to gain information to support decisions related to new service development (finding new service ideas, evaluating and selecting potential service/product ideas to be developed further) instead of gaining consensus on certain issue. The Decision Delphi usually includes similar process as a Classical Delphi, including an open first round that facilitates idea generation (Keeney, 2009; Keeney et al., 2011). In this study the Delphi technique is seen as being positioned within an interpretative paradigm as it is viewed and qualitative and subjective in nature (e.g. Fitzsimmons & Fitzsimmons, 2001; Rauch, 1979; Turoff, 1975). According to Engles and Kennedy (2007) this paradigm fits the Decision Delphi well as its goals are to examine different views and support decision-making by identifying all the possibilities available (see also Keeney et al., 2011).

The main attributes of the Delphi are that it is an anonymous, structured, repetitive, iterative and reflexive process (Day & Bobeva, 2005; Donohoe & Needham, 2009; Hsu & Sandford, 2007; Jung-Erceg, Pandza, Armbruster, & Dreher, 2007; Pandza, 2008). These act as the basic principles of the method (Pandza, 2008).

Anonymity is seen as one of the primary characteristics of the Delphi method as it can reduce the effect of dominant individuals (Hsu & Sandford, 2007). The anonymity of the experts is maintained during the entire process (Donohoe & Needham, 2009). Confidentiality is usually facilitated by the geographical dispersion of the experts and also by using electronic communications (Day & Bobeva, 2005; Hsu & Sandford, 2007). The Delphi process is also iterative and repetitive and this is based on the number of rounds of questions applied in the study and the same experts are asked the same questions (Donohoe & Needham, 2009; Hsu & Sandford, 2007, 2010; Pandza, 2008). In other words, the method includes an iterative process which makes it possible to ask amplifying questions related to the topics that come up during the previous rounds. It is also a structured process which means that the information flow is managed and coordinated by the researcher and hence there is no direct information flow among the experts (Donohoe & Needham, 2009; Pandza, 2008). The experts are also able to comment, and give estimations and opinions about the results from previous rounds making the process reflexive (Donohoe & Needham, 2009; Pandza, 2008).

A Delphi study usually includes three key stages. Day and Bobeva (2005) distinguish exploration, distillation and utilisation, and Donohoe and Needham (2009) mention preparation, convergence and consensus. Many authors (e.g. Day & Bobeva, 2005; Donohoe & Needham, 2009; Miller, 2001) emphasise that in order to conduct a successful Delphi study the procedure needs to be carefully planned and executed. In the first stage the most important and critical part is selection of the participants because it is directly related to the quality of the results generated (Donohoe & Needham, 2009; Hsu & Sandford, 2007). Gupta and Clarke (1996, 186) refer to Gutierrez (1989) by stating that "*Delphi's goal is not to elicit a single answer or to arrive at a consensus, but simply to obtain as many high-quality responses and opinions as possible on a given issue(s) from a panel of experts to enhance decision making*". The overall results depend on the experts chosen for the panel. So in the first stage of the Delphi process it is important to define the sorts of "experts" whose opinions are desirable and set the selection criteria. All in all, the method brings forth future visions of those experts who are involved most actively in the panel and most actively give their opinions