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## Construction of the Model of Health Tourism Innovativeness

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### Abstract

Innovation in tourism is a response to the growing public demand to live a long life, remain healthy and retain beauty and good form. The main goal of the paper is to create a theoretical model of the health tourism innovativeness system. The paper is novel in character, since to date the innovations occurring in health tourism have not been classified and there is no model of this innovativeness. The article presents the results of an expert poll, which was carried out in two rounds using the Delphi method. The result of research is construction of three different models of health tourism innovativeness. The paper fills the gap in the theory of management science.

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### Introduction

The open economy poses large sets of challenges in the management of contemporary business. The speed of innovation results from the emergence of new networked business models for competitiveness and innovation. The new emerging forms of business organisation require reconsideration of the dynamic capabilities, innovation strategies of the firms and other management issues.

The research problem discussed in this paper is health tourism innovativeness system. Health tourism is defined as a type of tourism the main goal of which is to improve or preserve health (Boruszczak, 2010). The earlier studies by the Author (Szymańska, 2012) demonstrated that health tourism included: SPA & wellness, aesthetic medicine, health spa-based tourism and medical tourism.

The core questions for the development of health tourism innovation are as follows: What is the innovation

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system (or systems) in health tourism? Can any of the systems described in the literature on innovation management theory be applied here?

The economics of tourism, as a field of research of the science of economics, covers a large number of issues (Thomas, Shaw & Page, 2011; *Ekonomika*, 2011; Kornak, 1999). However, researchers do not pay much attention to innovations in tourism. The few publications which can serve as a reference point include the attempts to trace back the research done on this subject matter which were taken by Hjalager (2010), OECD (2006), Dziedzic (2011), or Szymańska's search for manifestations of the innovativeness of tourism enterprises (2009, 2013). Because of insufficient research on the innovativeness of tourism enterprises, the implementation of the objectives of the project should be based on innovation theory in economic sciences.

The classical definition of innovation was created in the early 20<sup>th</sup> century by Joseph Schumpeter (1960), for whom innovation was:

- the introduction of new products into production or the improvement of existing products,
- the introduction of a new or improved production technology,
- the use of a new sales or purchase method,
- the opening of a new market of both sales or distribution of output and supply,
- the use of new raw materials or intermediate products,
- the introduction of changes in the organisation of production.

J. Schumpeter's line of thought was continued, *inter alia*, by Rosenberg (1994), Drucker (2004) and Gault [2010]. Attempts to build models of the innovativeness of enterprises were taken, *inter alia*, by Webber (1996) and Ciborowski (2004). Some of these models – e.g. those developed by Hargadon and Sutton (2006) or Webber (1996) – are very simple, whereas others are much more extensive, e.g. those prepared by Kline and Rosenberg (1986) or Szymańska (2013). In addition, the researchers point out the significant role of advanced computer techniques and networked connections (Stepaniuk, 2012). Most of the models that have been developed address the innovative activities of production enterprises, but none of them covers innovativeness in the scope of health tourism.

The point of departure for developing the model is innovation theory and models of innovativeness, particularly their more recent generations, starting with coupling models and ending with *user-driven innovation* models.

Since health tourism develops dynamically, there are more and more publications on this subject matter on the publishing market. They are mainly descriptive and reporting in character. Consideration should first be given to the book *Turystyka zdrowotna* (2010), the authors of which mainly concentrate on the characteristics of health resort-based offers and SPA and wellness services. The publication in book form entitled *Turystyka uzdrowiskowa. Stan i perspektywy* (2009) is an attempt to comprehensively address one of the forms of health tourism. It contains the presentations delivered at the conference convened by the Academy of Tourism and Hotel Management in Gdańsk from 8 to 9 October 2009. Szymańska (2012) attempted to systematise these issues.

The article presents the results of an expert poll, which was carried out in two rounds using the Delphi method. On the basis of the research performed, two models of health tourism innovativeness systems were adapted (for aesthetic medicine and medical medicine) and an original model of the innovativeness system was created for SPA & wellness tourism. However, the experts did not indicate any system for health resort-based tourism.

## 1. Research methodology

The research methodology is qualitative in nature. The conceptual assumptions of the construction of the health model innovativeness are developed for the expert poll using the Delphi method.

The objective of the expert poll is to seek an answer to the following research question: Which of the innovativeness models used to date can be useful as patterns for building the methodology for designing the model of the innovativeness of health tourism? Perhaps, none of the existing models in the literature meets the requirements of health tourism.

The poll was carried out in accordance with the instructions/procedures and arrangements adopted at project implementers' meetings, consisting of the following key stages:

- the choice of respondents for the poll,
- the preparation of initial lists of models of the innovativeness of health tourism,
- the elaboration of theses and a set of questions with predefined answers,
- the distribution of invitations and questionnaires,
- the implementation of the actual poll in the form of two Delphi rounds,
- the preparation of a report on the research and the (choice) specification of the model (models) of the innovativeness system of health tourism.

In order to ensure converging positions of experts, it was assumed that the questionnaire surveys would be carried out in two rounds and that the experts taking part in each round of the poll would be able to give answers in relation to any research areas (of their own choice). Within the framework of round I of the poll, respondents verified an initial list of models which may be used in constructing of the innovativeness system of health tourism.

The aim of round II of the poll was to specify the opinions of experts concerning the theses posed, with the participation of experts from round I and those who would possibly join the poll in round II.

The leading Polish experts in the field of economic sciences took part in the expert poll. They represented the disciplines of economics and management science (5 experts), including particularly economists who specialised in the analysis of innovativeness models and in the economics of tourism. Moreover, the participants in the poll included 2 tourist agency owners who sold medical tourism offers, 2 doctors and 1 specialist who developed the procedure for putting a health resort into operation. The Delphi questionnaire was sent out to 12 experts, but the 10 experts specified above took part in the poll. Seven of them addressed all the Delphi theses, whereas three (2 economists and 1 doctor) only submitted their comments on the particular assumptions. A total of 10 experts took part in each round.

Then, the questionnaire was sent to a selected group of experts who had large substantive knowledge and experience in the thematic areas covered by the research. The questionnaire contained theses illustrating 9 models of innovativeness systems.

## 2. Results of the Delphi poll

The innovativeness models proposed as the research theses were designed on the basis of the considerations reported in the literature which were described in the Introduction. As a result of these considerations, 9 different models of innovativeness systems were developed. They are presented in the Table in the order in which they appeared in the economic literature (innovation theory, from in the 1950s (linear systems) to the last decade (UDI and diffuse systems). For each of the four forms of health tourism, theses were proposed concerning the particular innovativeness systems. The Table shows the results of the research in the form of an average number of indications in both of the Delphi rounds.

Table 1. Characteristics of innovation models systems and Delphi results (results in round I/results in round II)

Models of innovation systems	Characteristics of models	SPA and wellness	Aesthetic medicine	Health resort-based tourism	Medical tourism
Science pushed	A linear model of the innovation process <i>pushed by science</i>	0/0	2/0	0/0	<b>5/5</b>
And another entry	A linear model of the innovation process <i>pulled by the market</i>	<b>6/6</b>	<b>5/3</b>	0/0	0/0
Conjugated	Interaction models where the connections among the individual elements result from the couplings between science, market and enterprise	1/1	3/2	2/1	3/1
Integrated and networked	Integrated systems based on networked connections – flexible,	1/0	<b>4/4</b>	½	0/0

systems	based on the system of a response related to the consumer, continuous innovation				
Information technology systems and information and communication technology systems	A set of interrelated elements designed to process data using a computer technique. As innovation systems evolve, the role of information and communication technologies grows; therefore, it can be recognised that these technologies accompany each of the successive generations of innovation systems	0/0	0/0	1/0	1/0
Self-learning systems	Focus on the management of knowledge and learning assisted by a set of electronic tools facilitating the current transfer of information and decision-making.	2/1	1/0	0/0	1/1
Open innovations	The concept is based on the conviction that companies may, and even should, seek ideas and ways of creating innovations, not only within their structures, but also their environment – among external partners (companies, organisations and customers)	5/4	4/1	3/0	3/1
User driven innovation (UDI)	Demand-based approach to innovation - based on the conviction that consumers (users) have an increasingly large influence on the available commercial offers, participating in the process of creating products and services which they purchase.	4/3	1/0	1/0	0/0
Diffuse innovation systems	Focus on open innovations inside and outside the organisation. Innovation is created (higher value is generated) by establishing an efficient knowledge flow system (inside and outside)	0/0	2/0	0/0	1/0

Source: own elaboration based on own research and E. Szymańska, Innovative processes at enterprises which provide services in the organization of tourist events (in Polish), Publishing House of Białystok University of Technology, Białystok 2013, pp. 68-85.

A direct reference to one of the innovativeness system models was found for medical tourism. Experts were positive that the *science pushed* innovation process model would be most adequate (Fig. 1.).

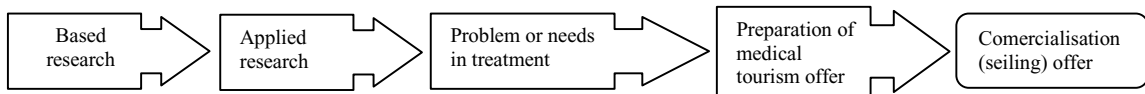


Fig. 1. The innovativeness system model for medical tourism (*science pushed*)

Source: own elaboration based on: E. Szymańska, *Innovativeness of Tourism Enterprises in Poland (in Polish)*, Oficyna Wydawnicza Politechniki Białostockiej, Białystok 2009, p. 29.

The model presented in Fig. 1 shows successive stages of the innovation process where knowledge is stage I and the factor which initiates the innovation process. In this case, this is medical knowledge. Subsequently, there is an attempt to meet the needs (a health problem), by determining and selecting relevant procedures. The last stage is commercialisation, i.e. the placing of the innovation on the medical market and making it available to tourists using medical tourism offers.

It turned out that the model which combined two models occurring in innovation theory and could be called *open and pulled* model was most appropriate for the innovativeness system of wellness & SPA tourism. The attempt to design such a model is shown in Fig. 2.

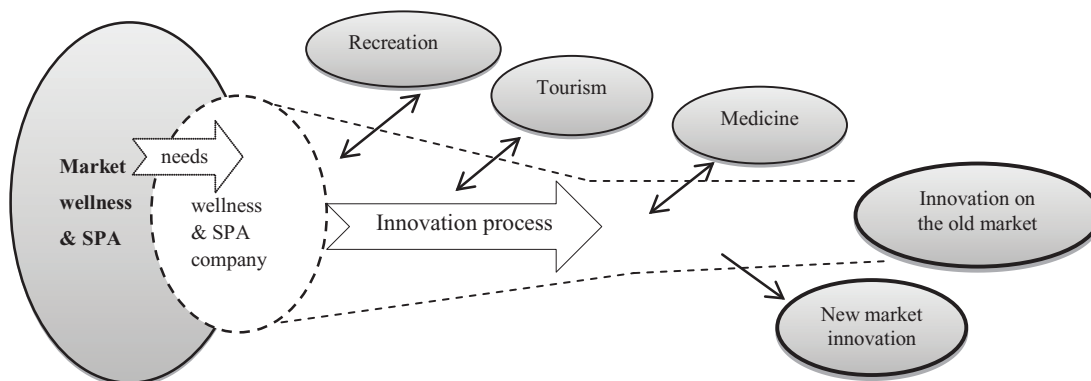


Fig. 2. The innovativeness system model for wellness & SPA tourism (open and pulled by the market)

Source: own elaboration based on: H. Chesbrough, *Open innovation. The New imperative for creating and profiting from technology*, Harvard Business School Press, Boston, 2003..

Elements characteristic of both models are shown here, i.e. the market element, the particularly important customers' roles in innovation processes and their being open to the external environment. Henry Chesbrough (2003), who created the concept of open innovation, showed this process in the form of a screen where new ideas originating in companies or in their environment enable the creation of innovations on the present market, but also enable the creation of new markets. Combined with a linear model *pulled by the market*, it makes it possible to place the innovativeness system of wellness & SPA tourism on many markets and close to the customer.

Another form of health tourism for which a combination of two models was determined is the tourism related to aesthetic medicine. In this case, experts also pointed out the significance of innovation processes inspired by the market, but coupled with networked systems (cf. Fig. 3). This means that the linear character of the model pulled by the customer should be combined with a networked model, with flexible connections and a permanent contact with the consumer, where innovation is continuous in nature.

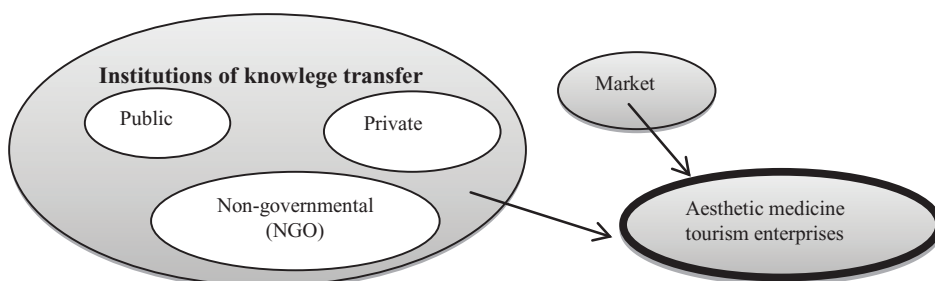


Fig. 3. The innovativeness system model for tourism intended to use the services of aesthetic medicine (networked and pulled by the market)

Source: own elaboration.

Given the fact that innovations in the area of aesthetic medicine are created continuously and in response to the always highlighted customers' needs, the element of a wavy line was used, to denote flexibility and feedback (the arrow connecting the last element of the process with the initial one, i.e. the market (customers' needs)).

## Conclusions

Summing up the results of the performed qualitative research, it should be recognised that the innovativeness of health tourism has an extremely complex character. In the experts' opinion, each of the forms of this tourism operates in a different innovativeness system to which different models correspond. In turn, experts were unable to assign any of the existing models to health resort-based tourism. Therefore, it can be concluded that they could not see any elements of order (system) in the innovative activity of health resort-based tourism or failed to discern manifestations of innovativeness per se.

On the basis of the performed Delphi research, two innovativeness system models were elaborated. The *networked and pulled* model turned out to be most adequate in the case of the innovativeness of aesthetic medicine. In turn, the *open and pulled* model was most adequate for wellness & SPA tourism. The Author set out to design draft models of this type, which are presented in Figures. In the case of medical tourism, the result of research considerations turned out to be a simple one, since the experts recognised that the innovation system model *pushed by knowledge* was the optimal one.

On the basis of the results of the expert research, several important reflections and guidance for further research can be formulated. First of all, the next stage of research which needs to be undertaken is the verification of the elaborated models in practice. For this reason it is planned that an extensive questionnaire survey on representative samples will be carried out, including entities from each of the abovementioned groups of entrepreneurs. A discussion should be started on an attempt to assess the innovativeness of these enterprises, with particular consideration given to health resort-based tourism, for which no innovativeness model was indicated.

Summing up, it should be emphasised that the demand for innovations in health tourism will continue to grow. This is a result of the fact that people live longer and of their natural need to retain good health, beauty and good form as long as possible. Therefore, the attempt to systematise the innovativeness of the entities which provide services in this area addresses this need. In this article, the Author attempted to reduce the research gap in the scope of the management of innovations, but this research should be continued to ensure that it is also applied in practice. This study is novel in character, both as regards the issues considered and the models elaborated, making a contribution to innovation theory and management science.

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