DEVELOPING A GENERALISED INPUT-OUTPUT MODEL FOR THE VALORISING OF A TOURISM SITE POTENTIAL

ELABORAREA UNUI MODEL INTRĂRI–IEŞIRI GENERALIZAT PRIVIND VALORIFICAREA POTENŢIALULUI UNUI OBIECTIV TURISTIC

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Abstract: *In this paper, we aim at identifying the methods of determining the models of the influence of variations of some parameters on the "tourism process" and of its definition. The system in general can be described by proper modelling. The necessity for developing such a system model in the case of solving an optimisation problem results from the fact that its expression depends on the variables of the system. The generalised interpretation analysis of the tourism process leads to the development of a generalised model of inputs-outputs for the determination of the functional links existing between the different variables in order to establish functional dependence relationships. Applying the models, even if generally, can result in considerable improvements in increasing performance, in deepening knowledge, and understanding the ensemble in general.*

Rezumat: *Lucrarea îşi propune identificarea metodelor pentru determinarea modelelor influenţei variaţiilor unor parametrii asupra „procesului turistic" şi definirea acestuia. Sistemul în ansamblu poate fi descris printr-o modelarea corespunzătoare. Necesitatea elaborării unui model al sistemului în cazul rezolvării unei probleme de optimizare derivă din faptul că expresia acestuia depinde da variabilele sistemului. Analiza de interpretare generalizată a procesului turistic a condus la elaborarea unui model intrări-ieşiri generalizat pentru determinarea legăturilor funcţionale existente între diferitele variabile, în scopul stabilirii unor relaţii de dependenţă funcţională. Aplicarea modelelor, chiar la modul general, poate aduce îmbunătăţiri radicale în direcţia creşterii performanţei, aprofundării cunoaşterii şi înţelegerii sistemului per ansamblu.*

Key words: input-output model, optimising, tourism
Cuvinte cheie: model intrări-ieşiri, optimizare, turism

INTRODUCTION

Present trends in research-development aim at modernising, increasing efficiency, optimising tousim, and diversifying tourism offer. Studies and researches focus on market conjecture and on knowing tourism motivation. We need to develop prognosis, strategies, policies, marketing, and management related to market enhancement with a view to consumption of tourism products. We have acces to data banks, projects, and design in the field of management and development of tourism, as well as studies concerning the social and economic impact on the environment, criteria and norms of idenmtoification of tourism resources, assistance, expertise, evaluations, and feasibility studies [1].

When research in a new product or in anew operation leads to the conclusion that the objective potential can be reached, there is necessity for systematic, efficient, and economic investigation. In this study of research, it is important to know quantitative and qualitative relationships between the properties of the "process" and its significant variables. Developing such models can clarify some aspects concerning the nature and functioning of the studied systems [2].

MATERIAL AND METHOD

Activities concerning the geographical and tourism analysis with a view to valorising the potential of a tourism objective implies a series of processes and operations. The study concerning the tourism valorising pf a county, tourism center, resort, rural community, natural or man-made tourism components (cultural and historical, technical and economic, human settlements) in a county, natural or economic area, the analysis of development opportunities of the tourism function, as well as the geographical study concerning the organisation and management of a rural settlement for rural tourism and agri-tourism is a step forward in achieving the functional links between the different variables [3].

Reaching a proper quality of the tourism product in conditions of performance supposes a strict coordination of the links existing in the operating blocks.

The goal is to offer methods for the determining of the models of influence of the variations of some different parameters on the "tourism process". Finding and applying models, even in general, can bring about radical improvements in the direction of increasing their performance.

"Tourism process" defined from the point of view of the theory of the systems covers all the dependent and independent variables, flows, links, and interdependences that exist in the system state.

Definitions that are more complete are as follows:
- the succession of operations, states, or phenomena through which one activity is being carried out with a recreational, cognitive, or sportive character;
- an activity within which occurs a change, an evoilution, a development, or a performance;
- the totality of procedures used in a social action or process within which people interact mutually with other people, places, cultures, etc. in a limited, established time interval.

Building up a system of optimising the valorising "process" of the tourism potential of an objective

A product of good quality can only be obatined from proper raw material and with a technique involving or not certain steps.

The flow scheme shows that a "tourism process" in general is complex and specific to each type of tourism. The interfaces of the "process" has x inputs and y outputs (x is the number of parameters in the process as reaction variables; y is the number of commands generated for the direction of the process) [4].

The construction of the system starts by defining a model of generalised inputs-outputs model for the process of valorising the potential of a tourism objective – hotel, boarding house, challey, etc. We have opted for achieving such a model over a series of simplifications that aim mainly at some neglected elements considered to be insignificant either because of their low influence or because of a poorer presence of tourism products in their totality.

As such a generalised model is necessary for the development of a universal model to use in optimising, the variables considered significant for this model are symbolised by letters.

The structure of the input-output model can be supplied with a series of groups of variables:
1. The input variables (factors of the "process") that play the role of a cause are controlled and commanded structurally in the following groups:
   b) Input variables linked to the characteristics of the dwelling and of the annexes involved in the process;

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     c) Input variables linked to the geographical and traditional tourism potential: relief or support for tourism sites, tourism attractions – forms and landscapes), nature monuments, climate, fauna and flora;

     d) Input variables linked to the tourists entering the "tourism process".

2. The output variables characterising the state of the tourism objective depending on the input variable changes, which also results in calling them "state variables":

     a) State variable linked to the use parameters of the tourism products;

     b) State variables linked to the economic performance of the "tourism process".

3. Actions representing variable sizes of regulation, through which one can achieve control and command of the ensemble of input-output variables, which could be characterised by a relative interdependence. They represent in fact the feed-back component of the system.

4. Perturbation(s) sizes are other sizes that can influence the system in an unfavourable way.

Commands and perturbations associated to a system represent the mass of independent variables – the input variables [5].

RESULTS AND DISCUSSION

The main criterion in grouping variables has been dictated by the order of determinations and involvement as well as by the existence of some implicit relationships between the variables.

Starting from the variable block presented and from the information supplied by literature, we also present the possible links between these groups of variables both through the process (called also direct links) and indirectly, that act or are determined, or avoiding the actual display of the process, or eradicating it.

Analysing these relationships we can draw the conclusion that there is a wide range of opportunities of controlling the tourism process (through a large number of variables), but at the same time it is also extremely complex and can result in as many solutions of practical lack of determination which makes obvious the necessity of very well training the staff.

CONCLUSIONS

Analysing the system of generalised interpretation of the tourism process particularised for a certain tourism objective led to the development of a generalised input-output model which serves as a basis for the development of a model of determining functional relationships between the different variables in order to establish functional dependence relationships that can later be used in optimising, through a general model, the entire tourism activity on the ground of one or several criteria, in different conditions; this optimisation, adopted globally or partially, also adds to the package of optimising criteria a set of criteria of economic and organisational, and technical and ecological nature.

The importance of such input-output models resides in the fact that it can be applied and personalised for each tourism product, no matter its nature, in order to deepedn the knowledge and understanding of the process (we should bear in mind the sequences cause – effect, the inter-dependences between the variables), optimal design, optimising the exploitation of the components in function, optimal control, etc.

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