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RECURRENT DECISIONS AND INNOVATION MANAGEMENT IN TOURISM

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A possible starting point when considering the theory of decision-making is offered in the concept of recurrence of problem situations as a concept which is in direct connection with innovative management. The importance of innovative management is present in all activities including too tourism. For the successful realisation of innovation in tourism two aims should be satisfied:

- Foresee as much as possible non-recurrent problem situations.
- Increase the number of self-occurring, non-recurrent problem situations.

Decisions made by innovative managers, and especially top managers in tourism, who are often confronted with non-recurrent situations, and need to make non-structured decisions, can best be described using the descriptive model for decision-making.

To enable the realisation of given goals of quality decision-making in management for Croatia's tourism it is necessary to depart from recurrent and self-transcendental systems (to which belongs also tourism), and include an intelligent support system for decision-making. To enable a practical realisation it is necessary to create and maintain a completely new culture of tourism management directed towards the concept of creativity and innovation.

Key words: innovative management, tourism, recurrent problem situations, decision-making models, intelligent support system for decision-making.

INTRODUCTION

The task of making decisions in tourism can be approached through emphasis on the role of invention and innovation, and as such, decision making can be considered as a PROCESS OF PROBLEM SOLVING, i.e. solving problem situations.

Problem situations can be considered as 'subjective' and 'objective' realities. Subjective realities we understand to be that which is directed at the tourism manager

as carrier of the management process. Objective realities we understand to be that which is directed at the tourism enterprise within which the manager is just one of the many parts of the concept management, i.e. he enables the practical realisation of foreseen management commitments and tasks. This paper poses two questions what is the connection between tourism enterprises (regardless of the level of association) and problem situations? In which ways can innovative management influence recurrent problem situations, and what methods are needed to elevate the level of innovation?

1. INNOVATION AND RECURRENT PROBLEM SITUATIONS¹

Every tourism enterprise shows the tendency to exploit its environment (resources which can be partially interpreted as a part of the enterprise), against which the environment exhibits resistance. Such a situation represents – a *problem situation* for the enterprise. A problem situation is a problem in the sense that it has to be somehow solved. The environment in which an enterprise functions can be understood as consisting of situations. The same is also true for subsystems, i.e. elements of the same enterprise proper for which the enterprise itself is the environment. Considering these situations many characteristics can be described amongst which is recurrence.

The characteristic recurrence is important for decision making in tourism, and can be described:

- If the tourism enterprise is continually confronted with exact recurrent situations only, the task at hand will be clear. A standard procedure should be determined with the help of which such repetitive situations are equally, efficiently and definitely and painlessly dealt with.² Under such conditions a routine is achieved with which a high level of standardisation of activities available. As such, respecting this condition, the enterprise which employs a relatively low qualified, but well trained personnel (in the best case of an appropriate vocational profile, narrowly qualified) will achieve a high level of efficiency, security and comfort, etc.
- If the enterprise is confronted with a non-recurrent situation then a different situation is created. We should here make a distinction. In the class of non-recurrent situations we will differ between two possible cases: the first we will call the case of semi-recurrent situations, and the second, real non-recurrent situations.⁽²⁾ Semi-recurrent situations are characterised through their representation of relative information only. Namely, semi-recurrent situations can be recognised as belonging to a class of situations for which a solution for the situation can be subsequently formed (even some general formal methodology). The main problem here, then, is how to find a way of adopting and applying existing general formal methodology to exact semi-recurrent situations.

¹ Recurrence of problem situations is the quality (relative) of level of acquaintance, i.e. the frequency of repetition of the problem situation (1).

² Clearly this situation from a psychological aspect can be represented as non-recurrent, and in fact, can be considered as unknown in which case a new solution has, in essence, to be found.

- If the enterprise is confronted with a real non-recurrent situation then a specific situation is created. Real non-recurrent situations are those for which we have no finished, no indirect applicative formula for problem solving, nor a principle solution which can be used for the whole class situation. Something new is required, and that is innovation. It should also be mentioned that the enterprise must be interested in promoting innovation without regards to the real situation in which it finds itself (recurrent, semi-recurrent or non-recurrent). It should also be mentioned that *the first condition for creativity is that man is able to ask questions (as with children)*.³

Referring to problem situations, the whole tourism industry must aim to achieve the following goals:

- Reduce problem situations to a minimum. Completely eliminate the occurrence of non-recurrent problem situations. In other words increase the number of recurrent or at least semi-recurrent problem situations.
- Regard, where possible, all problem situations as future (possible) non-recurrent situations and prepare possible solutions for such situations.
- Increase the number of self-occurring non-recurrent problem situations, i.e. formulate new solutions for existing problems -- define new causes for existing problems.

The last two aims are the basis for forming inventiveness, i.e. a measure of management innovation in tourism. Analysis of the relationship between decision-making and problem situations confirms the appropriateness of understanding decision-making as solving problem situations.

The general aims of the organisational system and as such the system in tourism can be defined as follows (4):

- Functional continuity of the system
- Increased functional efficiency of the system
- Continuity of increased efficiency of the system

If we wish to satisfy the first aim, then the complete system should aim at reducing the number of non-recurrent problem situations, i.e. change all problems to a known and solvable standard procedure.

If we wish to satisfy the following two aims, which is in fact a successful development of the system, then the aim of the system should be:

- Foresee non-recurrent situations and present possible solutions
- Successfully confront unforeseen problem situations, i.e. provide a mechanism for their successful solution within the system of decision-making.

³ This idea has been clearly formulated by E. Fromm in his book 'The Creative Attitude' (3)

- Successfully provide new solutions, i.e. new premises for existing problem situations - provide a mechanism for their solution within the decision-making system.

The problem at hand, then, is *How to solve problem situations, and How to make a decision?* A number of different models for decision-making provide possible solutions. Of big importance is, however, how to connect the different characteristics of these models with innovation and recurrence?

2. INNOVATION AND TYPES OF MODELS FOR DECISION-MAKING

The most appropriate decision-making models for innovative management with marked non-recurrent situations (both for objective and subjective realities)⁴ are descriptive models. This is particularly relevant for top management in tourism. The possibility of using results from prescriptive models is, however, not excluded: first of all for lower management levels, or advisers and consultants, i.e. top manager assistants who will pass-on the obtained results from these models for further consideration by top management. Deterministic decision-making models contribute the least to innovative management. Such models are used for determining appropriate results on the basis of a given model structure, for example, accounting.⁵ This type of model represents recurrent situations.

3. INNOVATION AND TYPES OF DECISIONS

The characteristics for problems which can be cited typical for top management in the tourism system are as follows:

- * experience, intuition, thought ability and preference of the decision maker,
- * solution finding implies a variety of data and information, problem normalisation and structuring, data manipulation and calculation,
- * the order of these operations is not known in advance, as the decision-maker might wish to alter them within accordance with data and interim results,
- * decision criteria are varied, heterogeneous, mutually in conflict, unstable and dependent on exact situations.

⁴ Depending on the aim of the decision-making, models can be considered as: • prescriptive models with defined goals; • descriptive models which are primarily directed towards creating a better understanding of the ways in which the investigated system works. The main source of information for prescriptive models is quantitative figures and information. For descriptive models the main source of information is non-quantitative, i.e. qualitative figures and information. Prescriptive models are models for operation research, i.e. quantitative models. Descriptive models are expert systems and various intelligent support systems for decision-making, which represent the present highest level of development for such models. 'Models for intelligent support systems for decision-making aim at joining modern technology and creativity to achieve competitive advantages for an enterprise in the areas of inventiveness and orientation towards the environment' (5,7).

⁵ Such models can be classified as per their use as: • deterministic models, and • decision-making models (6).

Referring to the above discussion it can be concluded that non-structured decisions⁶ are especially used by top management in tourism meaning that descriptive decision-making models are primarily used.

Research has shown that managers employed in hotels in Croatia possess only a few of these characteristics. Investigation on management decision-making in large hotels for solving recurrent decision-making reveals the following results⁷:

- Top managers are mostly confronted with recurrent problems, 25% constantly, and 75% very often. Hotel directors (58%) very often with recurrent problems, 8% from time to time, 8% very rarely, 17% never. Only 8% are constantly in contact with recurrent problems. For functional management, 67% are very often in contact with recurrent problems, 25% from time to time and 8% never.

We conclude that a small number of problem situations in hotels are considered by managers as unknown, new and at the same time independent from the level of newness (semi-recurrent and non-recurrent). Besides this, the percentage of top managers who experience every problem situation as completely unknown is significant.

Another part of the investigation shows the same managers making programmed (prior known) types of decisions as follows:

- All top managers especially often make programmed decisions: 25% of hotel directors constantly, 67% especially often, and 8% only from time to time. The larger number of functional managers - 58% make programmed decisions from time to time, and 33% especially often.

Research shows that the majority of managers especially often make programmed decisions, which agrees with the results of the previous investigation., as the most problem situations are experienced as completely or partly unknown. A somewhat different situation is present for functional management., which make non-programmed decisions more often than other management, although a significant number of situations are experienced as known. This type of management uses creativity the most.

The conclusion that creativity is least used by top-level management is particularly worrying. This is in complete contradiction to the requirements of modern top management, where the highest level of creativity should be present.

⁶ Structural decisions are those which are made within the boundaries of a given structure and are, therefore, conditioned by that structure. Non-structural decisions are those which are made in situations without a constant role or channel of communication (5).

⁷ I. Brajdić: Doctorial dissertation, Opatija, 1994, p.p. 191-194

4. INNOVATION AND MEASURES FOR IMPROVING DECISION-MAKING

Depart from the theoretical and practical results gained, it is possible to develop measure directed at increasing management creativity in tourism. Various measures can be successfully applied to solving problem situations in tourism. We discuss them below:

- - Increased level of awareness towards the new problem.
- Consideration of the existing problem as a new, unknown problem in a new light.

Both of these measures are connected to the concept recurrent and non-recurrent problem situations.

Another possible measure for improving decision-making is the process in which the subjective 'known or unknown' replaces the objective 'known or unknown'.

- A possible answer to the question 'How to overcome difficulties in the development and application of decision-making models in the tourism industry?' is offered through the deliberate connection of prescriptive and descriptive models. This is achieved through surrounding decision-making models with a suitable intelligent 'shell', or to provide an intelligent interface between these models and the end user - tourism manager or expert for a particular area of decision-making, for example congress tourism. This is of special importance for managers in the tourism industry which is not a transformational-material system - does not manage processes which, when designing a final product, considerably use mathematical measurement tools, i.e. a strict technical line of production.

- For quality work in the application of the innovative approach for tourism, intelligent information support systems for decision-making for management for tourism in Croatia, should be introduced. Such an approach offers the following benefits:

- Enables the development of innovative methods based on decision-making models.
- Enables the use of these methods directly via adequate descriptive models, and indirectly via prescriptive models.
- Enables mechanisms for learning (remembering) to be built into the tourism industry. This guarantees that the gained knowledge of managing the system will not be lost (for the system), if the system loses the manager, who possesses the knowledge.⁸

⁸ The theory of self-transcendental systems tells us that such systems are those which learn, and learning is impossible without remembering (of course it should not be forgotten that too large a learning damages creativity). It follows, therefore, that procedures for remembering which follow the managers' work in tourism at all levels should be developed. Clearly, managers as people do remember (the question of quality is here suggested), however, the problem here is that the system as a whole does not possess (adequate) memory following the leave (death, notice, etc.) of a particular manager.

- Built-in knowledge on management and decision-making provide a basis for the application of an array of methods needed for prognostic purposes.
- This knowledge is a basis for recognising given situations as objective recurrent and non-recurrent.

CONCLUSION

Only with the aid of intelligent support systems for decision-making can IT offer successful support for various models of decision-making, especially prescriptive models, for managers from the tourism industry. To achieve this it is necessary to especially develop and use conversational aspects of such systems. Through using completely and fully 'artificial intelligence', various built-in elements of the system decision-making models should be independently developed and efficiently used. The introduction of intelligent support systems for decision-making for tourism in Croatia advocates the need, amongst other things, to create and maintain a completely new culture directed towards such a concept, which is mostly the task of top management both in the tourist, hotel and other industries. This calls for adequate change in the behaviour of top management. Research shows that for both Croatia and other countries 'the role of the manager whose basic task should be to create a vision for future development of the enterprise, when dealing with everyday, often operative tasks and control, should be changed'. (8)

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Sažetak

REKURIRAJUĆE SITUACIJE I INOVATIVNI MANAGEMENT U TURIZMU

U okviru teorije odlučivanja moguće je krenuti od pojma rekurentnosti (ponovljivosti) problemske situacije kao pojmu koji je u neposrednoj svezi s inventivnim managementom. Značenje inventivnog managementa je izraženo u svim djelatnostima pa tako i turizmu. Pretpostavka za uspješno ispoljavanje inventivnosti u turizmu se može sagledati kroz ispunjenje dva cilja:

- a) predvidjeti (prognozirati) čim je više moguće nerekurirajućih problemskih situacija,
- b) povećati broj samoizazvanih nerekurirajućih problemskih situacija.

Inventivnom managementu, a posebno top managementu u turizmu s izraženim nerekurirajućim situacijama su najbliži Deskriptivni modeli odlučivanja, pri čemu se posebno koriste nestruktuirane odluke.

Da bi se realizirali postavljeni ciljevi kvalitetnog odlučivanja u managementu turizma potrebno je polazeći od rekurentnosti i samotranscendirajućih sustava (u koje spada i turizam) prići izgradnji Inteligentnog sustava za podršku odlučivanju. Da bi se to u praksi i realiziralo potrebno je kreirati i održavati sasvim novu kulturu turističkog managementa usmjerene ka konceptu kreativnosti, inventivnosti.

Ključne riječi: inventivni management, turizam, rekurentnost problemskih situacija, modeli odlučivanja, inteligentni sustav za podršku odlučivanju.