PODRAVINA Volumen 16, broj 32, Str. 136 - 149 Koprivnica 2017.

DEVELOPMENT OF FAMILY TOURISM BUSINESSES IN RURAL AREAS: MULTI CRITERIA ASSESSMENT OF BUSINESSES IN EASTER SLOVENIA

RAZVOJ TURISTIČKOG OBITELJSKOG GOSPODARSTVA U RURALNOM PODRUČJU: VREDNOVANJE VIŠESTRUKIH KRITERIJA GOSPODARSKIH SUBJEKATA U ISTOČNOJ SLOVENIJI

Boris PREVOLŠEK
University of Maribor
Faculty of Tourism
Cesta prvih borcev 36, 8250 Brežice, Slovenia
Phone: +386 8 205 4019
E-mail: boris.prevolsek@um.si

Primljeno/Received: 25. 10. 2017.
Prihvaćeno/Accepted: 7. 12. 2017.
Izvorni znanstveni rad
Original scientific paper
UDK/UDC: [334.722.24:338.48] (497.4)“20”
338.486(497.4)“20”

Črtomir ROZMAN
University of Maribor
Faculty of Agriculture and Life Sciences
Department for Agri-business and Rural Development
Pivola 10, 2311 Hoče, Slovenia
Phone: +386 2 320 9000
E-mail: crt.rozman@um.si

Karmen PAŽEK
University of Maribor
Faculty of Agriculture and Life Sciences
Department for Agri-business and Rural Development
Pivola 10, 2311 Hoče, Slovenia;
Phone: +386 2 320 9000
E-mail: karmen.pazek@um.si

Aleksandar MAKSIMOVIĆ
College of Computer Science and Business Communications eMPIRICA,
Bosnia and Herzegovina
Bulevar mira bb (Office building Kvadar)
Brčko, Brcko District 76100

Jasna POTOČNIK TOPLER
Faculty of Tourism
Cesta prvih borcev 36, 8250 Brežice, Slovenia
E-mail: jasna.potocnik1@um.si
Phone: +386 8 205 7060

ABSTRACT

Worldwide and especially in Slovenia, family tourism businesses have a fundemantal economic role. This role has been constantly increasing and gaining its importance. The critical time in family tourism businesses, however, is mainly managing succession, which is defined as a transfer of ownership and is in close relation to the transfer of leadership. Data show that the process of the transfer to the next generation is survived by only one third of family businesses; many family businesses go bankrupt when the next generation takes over the business. This paper, therefore, examines the succession characteristics of individual family tourism businesses (restaurants) through the application of a multi-criteria model based on the DEXi and AHP methodologies. Multiple-criteria decision analysis is a sub-discipline of operations research that explicitly considers multiple criteria in decision-making environments.

Key words: family business, succession, tourism, multi criteria, DEX, AHP
Ključne riječi: obiteljsko gospodarstvo, nasljeđivanje, turizam, višestruki kriteriji, DEX, AHP

1 INTRODUCTION

Unsuccessful succession presents a serious problem not only to family businesses and their employees, but also to the prosperity of common national economies. According to some estimates the share of family businesses in the European Union (EU) is 70-80 percent of all enterprises (Mandl, 2008 in Duh and Letonja, 2013), and family enterprises in the United States represent 80 percent of business organizations (McCann, DeMoss, Dascher, & Barnett, 2003 in Duh and Letonja, 2013) . 40-60% (or even 80) of Slovenian SMEs are family businesses (Duh, 2008 in Duh and Letonja, 2013).

One of the greatest challenges facing a family firm is to successfully transfer the business to the next generation (Avloniti et al, 2014). This is also true in Slovenia, the research of Duh et al. (2006) found that on average almost 85% of the surveyed family businesses in Slovenia were owned by the first, or founding, generation, less than 15% by the second and the remainder by the third generation of a family.

According to Davis (1968), the transition of a family business to subsequent generations is the most fundamental mission. A successful succession is the key to the survival of the family business (Cabrera-Suarez et al., 2001; Shepherd and Zacharakis, 2000; Davis and Harveston, 1998; Barnes, 1988 in Avloniti et al, 2014). Numerous studies have been devoted to the family business succession problem (Duh et al., 2009; Morris et al., 1997; Dyck et al., 2002; Miller et al., 2003; Sharma et al., 2003). Letonja and Duh (2015) believe that »the survival of family businesses across generations depends upon different factors, including their ability to renew through innovation«.

Only one third of family businesses survive into the second generation, and only about 10-15% make it into the third generation (Birley, 1986; Ward, 1987 in Bretton Miller et al., 2004). According to Duh (2003), in Slovenia only one third of FOBs survives the transition to the next generation and just 10% to the third generation. The most common reason for this is the successors' wanting to run their own businesses. Thus succession is considered to be one of the most important issues in the family business field and, consequently, has been the subject of much research (Bird et al. 2002; Dyer and Sánchez, 1998; Lambrecht and Donckel, 2006; Handler, 1994).

However, many studies showed that transfer to the second generation is around 30%. The reason for such a low percentage being unsolved or badly solved succession, and the fact that many enterprises fail soon after the second generation takes over control (Kets de Vries, 1993; Miller, Steier, & Le Breton-Miller, 2003; Morris et al., 1997 in Duh and Letonja, 2013). According to the research of Letonja and Duh (2015) it is important that the potential successors are included as early as possible and that they are trained for the business.

Ward (1987, in: Duh, 2003, 93) states that transitions to the next generations have been successful in those family businesses that managed to »trim the family tree.« Successful family businesses have resisted the substantial involvement of family members in the management and ownership of the company, things which should be in the hands of only a small number of people. This is an area where sibling rivalry and rivalries between other family members can be encountered. Our study is based on eastern region of Slovenia, which is one of the less developed parts of the country with high levels of unemployment. The successful transition of family catering businesses to the next generation, and the constant development of these businesses, is therefore even more important for the development of the entire region (Prevolšek, 2012).

Based on this matter, this paper formulates the research questions as follows:

What are the criteria affecting the successful succession of the business transfer to the next generation?

What are the appropriate methodological approaches for the assessment of succession status?

Bohak et al. (2013) defined succession status as a long-term existence through the successful business transfer to the next generation, and proposed a multi-criteria decision analysis for studying a family business succession problem. By developing and using a multi-attribute decision model, the succession status of 40 family farms from the Mediterranean region of Slovenia was determined using the DEX method. The DEX method facilitates the design of qualitative (symbolic) decision models. In contrast to conventional quantitative (numeric) models, qualitative models use symbolic variables. These are well-suited for dealing with 'soft' decision problems, that is, less-structured and less-formalized problems that involve a great deal of expert judgment and where qualitative scales can be more informative than quantitative scores (Rozman et al., 2009). This is exactly the case in succession status assessment problems. In this light, (Saxena et al. 2010) the study of CEO succession relates to corporate governance, which will be shown with the use of the analytical hierarchical process (AHP). Barzoki et al. (2012) also used the AHP to assess the problem of succession in the case of Sfahanmelli bank.

The aim of this paper is to address the succession status assessment problem through the application of multi criteria decision modeling methodology. We propose 2 models: the first is based on the DEX qualitative multi criteria modeling methodology, whilst the other is based upon the AHP. The article is organized as follows: firstly the study area and data sources are defined, and this is followed by a short description of the methodology and its application to the problem observed. The multi criteria models developed are described in Section 3. Section 4 presents and discusses the results of service quality assessment for 10 representative tourist family businesses (restaurants and inns). The main findings and suggestions for further study conclude this article.

2 METHODOLOGY

Since multiple criteria which are sometimes difficult to measure and even may be contradicting (for instance age and experience) affect the success of transition of business to the next generation, we have chosen multi-criteria methodology for the study. Multiple-criteria decision-making (MCDM) or multiple-criteria decision analysis (MCDA) is a sub-discipline of operations research that explicitly considers multiple criteria in decision-making environments. It can be also used for different kind of assessments as demonstrated by Rozman et al (2009). Whether in our daily lives or in professional settings, there are typically multiple (conflicting) criteria that need to be evaluated in making decisions or assessment (Belton and Stewart, 2002).

We use two models: the first is based on the DEX multi-criteria model and the second is based on the analytical hierarchical process (AHP).

DEX (and its windows version DEXi) is a method of qualitative multi-attribute decision modeling and support. The main characteristic of the DEXi method is its capability to deal with *qualitative* variables. The objectives are hierarchically ordered into a tree structure. Each attribute is assigned a set of discrete values. The basic approach in the DEXi methodology is a multi-objective decomposition of the problem: the decision problem is decomposed into smaller and less complex decision problems (sub-problems). In this way we get a decision model consisting of attributes, which represent individual sub-problems. The attributes are organized hierarchically and connected with the utility functions. The utility functions evaluate each individual attribute with respect to their immediate descendant's objective in the hierarchy. Instead of numerical variables, which typically constitute traditional quantitative models, DEXi uses qualitative variables; their values are usually represented by words rather than numbers, for example »low«, »appropriate«, »unacceptable«, etc. Furthermore, to represent and evaluate utility functions, DEXi uses *if-then decision rules*. The decision rule can be for instance: »if the net present value is negative, then the alternative is not acceptable« or »if the labour used in the investment project is low then the alternative is excellent«. The utility function, in fact, represents a knowledge base (the complete set of »what if« decision rules), which is ultimately used to evaluate alternatives (Bohanec, 2006).

On the contrary, the AHP is a quantitative multi criteria method. It uses a multi-level hierarchical structure of the objectives, sub-objectives, and alternatives (Triantaphyllou & Mann, 1994). The variants are decomposed into specific parameters (criterion, attribute) and evaluated separately for each single parameter. Pros and cons as well as other influencing factors can be included as well. The final variant evaluation is provided with the combined proceeding. Ratio comparisons are performed on a fixed ratio scale. The goal is defined as a statement of the overall objectives. For a precise accountant, who only wishes to deal with finite numbers, the AHP allows decision-makers to derive ratio scale priorities as opposed to randomly assigning them. The AHP enables decision makers to incorporate both subjective and objective matters into the decision making process. This is done by describing complexity as a hierarchy and ratio through comparison of alternatives relative to the objective (called pair-wise comparison). However, at each level of the hierarchy, the relative importance of each component attribute is assessed by comparing them in pairs. The rankings obtained by the pairwise comparisons between the alternatives are converted to normalised rankings using the *eigenvalue* method. The pairwise comparison reflects the decision makers' estimates of the relative importance of each alternative in terms of a given decision criterion. A typical problem examined by the AHP consists of a set of alternatives and a set of decision objectives. In applications of the AHP to real decision-making problems, the entries in the above reciprocal matrix are taken from a finite set: {1/9, 1/8,…1, 2,…8, 9} (as suggested by Saaty (1980)).

2.1 Sampling and data collection

Our research is based on catering businesses in the Spodnje Podravje region. We have identified catering subjects in all 16 municipalities of the Spodnje Podravje region. Those municipalities are as follows: Cirkulane, Destrnik, Dornava, Gorišnica, Hajdina, Juršinci, Kidričevo, Majšperk, Markovci, Podlehnik, Ptuj, Sveti Andraž v Slovenski goricah, Trnovska vas, Videm, Zavrč and Žetale. In the research we have limited ourselves on restaurants and inns (Slovene Business Register Classification, I56.101). This Classification corresponds to catering including sale of prepared meals or drinks, as a rule served to eat in the bar or on the spot. Through Classification we have found that in the researched region there are 41 restaurants and inns. In the next step we have carried out a telephone research and asked the owners about about the family/non-family status. We have found that 32 of all restaurants and inns in the Spodnje Podravje region are family owned. Further on, we have conducted interviews about succession characteristics with 10 owners of family catering businesses.

2.2 DEXi model

The DEX model is developed through the following steps:

The decision problem is hierarchically decomposed into less complex individual problems. The decomposition results in a tree of attributes (see Figure 1). The terminal nodes (»leaves«) of the tree represent inputs to the model, and the root node represents the main output: the overall assessment of evaluated alternatives.

The hierarchy was set up on the basis of experience of Bohak (2011) and on the basis of conducted interviews/questionnaires with SMSs operators (what they felt was important for successful transition of family business to the next generation).

In the next step a set of value scales is assigned to each attribute. The value scale is discrete and typically consists of words (see Figure 2). In principle, the scale can be preferentially ordered (from 'bad' to 'good' values) or unordered. In Figure 2, all scales are ordered.

Table 1: Description of attributes

General characteristics of the operator • Age • Education	The age of the owner is important to the succession process. It influences the period of their leadership of the family business. The older the owner is, the sooner they will face the succession process. In our research, the average age of the owners was 52 years. The educational level of the owner is important in terms of the professional competencies, and consequently the succession in the family business is more effective. Nine of ten owners had finished high school.
Characteristics of the successor • Education • Successor preferences for the FOB • Assessment of successor by the operator	The education of the successor is important through the aspect of interest in the leadership of the family business. Sometimes it happens that one potential successor chooses a completely different profession to that which would be needed in the family business. This indicates a desire to work outside the family business. It is also important that the owner has a potential descendant to take over the company and family traditions.
Inclusion of successor into FOB management	It is crucial that the owner includes the potential successor in the family business early enough, especially in management. In that way the transition to the next generation will be more formal, because the successor already knows the crucial elements of the business process for successful leadership.
Financial dependence of the operator after the succession	Half of the entrepreneurs confirmed that they would be to a lesser extent financially dependent on the family business. The main reason for this is that even after the transfer to the successor they would be included in some business processes and, in a way, would partly retain control of the family business.
Number of successors	The number of potential successors shows whether the possibility for succession within the family exists. The decision of the potential successors, however, is a different story. Our research showed that half of the owners had two potential successors, and the other half of the owners had one potential successor.

- **General characteristics of the operator**
  - Age
  - Education
- **Characteristics of the successor**
  - Education
  - Successor preferences for the FOB
  - Assessment of successor by the operator
- Inclusion of successor into FOB management
- Financial dependence of the operator after succession
- Number of successors

Figure 1: The hierarchy of the multi criteria model

Scales

Attribute	Scale
Assessment of tourist FOB succession status	poor; good; very good; *excellent*
General characteristics of the operator	poor; good; *excellent*
Age	more than 60; 50-60; 40-50; *bellow 40*
Education	high school; vocational; *M.Sc. or Ph.D.*
Characteristics of the successor	poor; good; *excellent*
Education	high school; vocational; *M.Sc. or Ph.D.*
Successor preferences for the FOB	no; *yes*
Assessment of successor by the operator	poor; good; *excellent*
Inclusion of successor into FOB management	no; *yes*
Financial dependence of the operator after succession	yes; *no*
Number of successors	1; 2; *more*

Figure 2: Scales of attributes

Utility functions for each aggregate attribute are defined. In DEX, utility functions are represented by decision rules, which are acquired from the model developer and presented in a tabular form (see Figure 3). Decision rules define the aggregation of values in the model from its inputs through intermediate attributes toward the root. Therefore, decision rules have to be defined for all internal attributes, including the root; in the presented model this gives twelve utility functions in total. Here, in Figure 3, we show only one utility function, the one that aggregates the five attributes at the last level of the tree.

In Figure 3, the decision rules are presented in a so-called complex form where the asterisk »*« denotes any value and the »>=« stands for »equal or better.« The relative importance of attributes is also

	General characteristics of the operarator	Characteristics of the successor	Inclusion of successor into FOB management	Financial dependence of the operator after succession	Number of successors	Assessment of tourist FOB succession status
	29%	45%	9%	9%	9%	
1	poor	<=good	no	yes	*	poor
2	poor	<=good	no	*	<=2	poor
3	poor	<=good	*	yes	<=2	poor
4	poor	<=good	*	*	1	poor
5	poor	*	no	yes	<=2	poor
6	poor	*	no	*	1	poor
7	poor	*	*	yes	1	poor
8	<=good	<=good	no	yes	<=2	poor
9	<=good	<=good	no	*	1	poor
10	<=good	<=good	*	yes	1	poor
11	<=good	*	no	yes	1	poor
12	*	poor	*	*	*	poor
13	*	<=good	no	yes	1	poor
14	<=good	>=good	*	no	more	good
15	*	good	*	no	more	good
16	<=good	>=good	yes	*	more	good
17	*	good	yes	*	more	good
18	<=good	>=good	yes	no	>=2	good
19	*	good	yes	no	>=2	good
20	<=good	excellent	*	*	more	good
21	<=good	excellent	*	no	>=2	good
22	<=good	excellent	yes	*	>=2	good
23	<=good	excellent	yes	no	*	good
24	good	>=good	*	*	more	good
25	>=good	good	*	*	more	good
26	good	>=good	*	no	>=2	good
27	>=good	good	*	no	>=2	good
28	good	>=good	yes	*	>=2	good
29	>=good	good	yes	*	>=2	good
30	good	>=good	yes	no	*	good
31	>=good	good	yes	no	*	good
32	good	excellent	*	*	>=2	good
33	good	excellent	*	no	*	good
34	good	excellent	yes	*	*	good
35	excellent	good	*	*	>=2	good
36	excellent	good	*	no	*	good
37	excellent	good	yes	*	*	good
38	excellent	excellent	*	*	*	excellent

Figure 3: Aggregate decision rules for the top level of the hierarchy

expressed by weights at the top of the table. These weights have been estimated from the rules by DEXi using a linear regression method (Bohanec, 2008). According to some studies (such as Meiijaard et al., 2005, Bohak, 2011) the characteristics of the successor are the most important for successful transition. This is why we use the highest weight on the attribute Characteristics of the successor. We used equal importance weights for the remaining attributes.

Finally, the options are entered into the model and the estimation using the decision rules in figure 3 is conducted for each option.

2.3 AHP model

The pairwise comparison reflects the decision makers' estimates of the relative importance of each alternative in terms of a given decision criterion. A typical problem examined by the AHP consists of a set of alternatives and a set of decision objectives. In applications of the AHP to real decision-making problems, the entries in the above reciprocal matrix are taken from a finite set: {1/9, 1/8,…1, 2,…8, 9} (as suggested by Saaty (1980). In practice, the above discrete set is usually used. Saaty (1980) and Saaty& Kearns (1991) developed the following steps for applying the AHP:

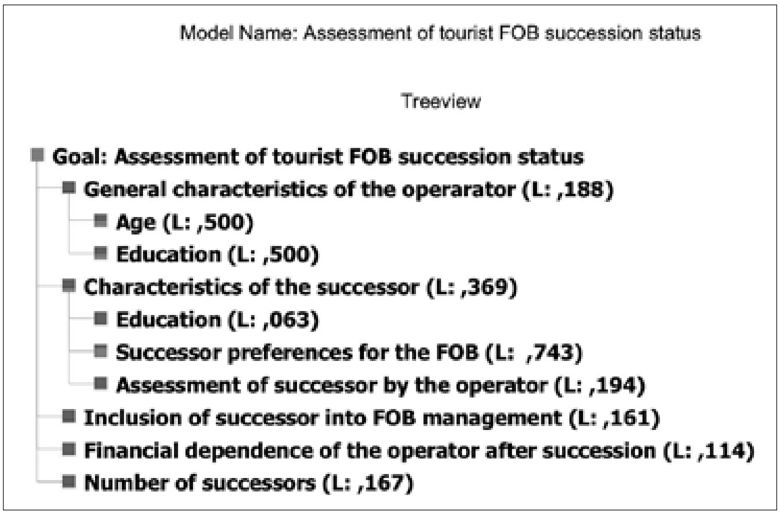

Figure 4: AHP hierarchy with derived priorities

1. Define the problem and determine its goal. The goal in the presented case is the same as in the DEXi model.

2. Structure the hierarchy from the top (the objectives from a decision maker's viewpoint) through the intermediate levels (objectives on which subsequent levels depend) to the lowest level, which usually contains a list of alternatives. We used the same hierarchical structure as in the DEXi model.

3. Construct a set of pairwise comparison matrices (size n x n) for each of the lower levels with one matrix for each element in the level immediately above by using relative scale measurement. The pairwise comparisons are done in terms of which element dominates the other.

4. There are judgments required to develop the set of matrices in step 3. Reciprocals are automatically assigned in each pairwise comparison.

5. Hierarchical synthesis is now used to weight the *eigenvectors* by the weights of the objectives and the sum is taken over all weighted *eigenvector* entries corresponding to those in the next lower level of the hierarchy.

6. Having made all the pairwise comparisons, consistency is determined by using the *eigenvalue*, λmax, to calculate the consistency index, CI as follows: $CI = (\lambda max - n) / (n - 1)$, where n is the matrix size. Judgment consistency can be checked by taking the consistency ratio (CR) of CI with the appropriate value. The CR is acceptable if it does not exceed 0.10. If it is more, the judgment matrix is inconsistent. To obtain a consistent matrix, judgments should be reviewed and improved.

7. Steps 3–6 are performed for all levels in the hierarchy.

For the organic farm-planning problem, a group of experts determined five different objectives: financial, human labour, technological, market, and risk objectives. These were used to evaluate the farm business alternatives against the goal. The hierarchy is basically the same as in the DEX-i decision model described in section 2.2

Expert Choice (EC) software was used to make the corresponding AHP priority calculations for the observed problem. Expert Choice simplifies the implementation of the AHP's steps and automates many of its computations (Al – Harbi, 2001). The expert group compared the relative importance of each objective in the pairwise manner using a 1-9 scale (a comparison scale where 1 means that the importance of two objectives is the same, while 9 means that one criterion is extremely more important than the other). The EC software allows us to enter the data for each alternative into the so-called Data Grid, where individual objectives can be entered directly. The use of the Data Grid combines the power of the hierarchy and the pairwise comparison process with the ability to evaluate hundreds or even thousands of alternatives. Pairwise comparisons are still used to evaluate the elements in the hierarchy itself, but not for evaluating the alternatives. The alternatives' priorities are established relatively to each covering objective by using ratio scaled rating intensities (scales). This procedure can be particularly useful when there are a large number of alternatives to be evaluated as there is no need to compare alternatives in the pairwise manner; the values are put directly into the Data Grid and priorities are calculated based on the pairwise comparison of intensities. In the case observed, the same rating scales were used as in the classification of numerical attributes for the DEX-i decision model.

Successor preferences for the FOB

2.4 Data sources

The Spodnje Podravje region contains 16 municipalities. According to the Slovene Business Register Classification (I56.101 in the Ajpes database) there are 41 restaurants and inns. 10 of those are family businesses that were the subject of our study. The main method of data acquisition was interviews conducted in each family restaurant containing questions with respect to the defined hierarchy of the multi criteria models. Furthermore, the business owners were also asked about criteria importance (e.g. age and education of the operator and successor, assessment of successor by the operator, successor preferences for the FOB, inclusion of successor into FOB management, financial dependence of the operator after the succession etc.) and this information was consequently used when defining utility functions and priorities.

In table 2 we show some basic data about the businesses.

Table 2: Demographic data about the businesses

Enterprise	Age of the operator	Nr. of potential successor	Year of establishment	Generation
E1	60	1	1974	2nd
E2	45	1	1987	1st
E3	56	2	1885	4th
E4	55	2	1930	3th
E5	56	2	1932	4th
E6	56	2	1988	1st
E7	56	1	1983	1st
E8	40	1	2001	1st
E9	35	2	2005	1st
E10	64	1	1978	1st

3 RESULTS AND DISCUSSION

The succession status using both models was analysed in 10 family tourism businesses (referred to as E1.. E10). Some of the analysed enterprises' characteristics are shown in table 3.

3.1 DEXi model

Figure 5 shows the overall aggregate results of the DEX-I model for the family enterprises E1 to E10 together with the values of input attributes, while Fig. 6 shows parts of the results graphically.

Figure 5 shows the input data and evaluation results for all 10 analysed enterprises. The data items that appear next to the terminal nodes (such as *Age* and *Education*) represent inputs, i.e. data that were collected through questionnaires. The items next to the aggregate nodes (attributes) (such as *General characteristics of the operator*) were determined by DEXi from the input data and according to the defined decision rules. The asterisk (»*«) means that no data were available for the particular input attribute. In this case, DEXi assessed the enterprises using the set of all possible input values at that point. In general, this could result in evaluations that are sets rather than single values.

Overall, enterprises E2 and E4 were assessed as poor. This can be contributed to the fact that the successor was assessed as poor (E2, E4). Enterprises E6, E9 and E10 were assessed as very good, due to the Characteristics of the successor being assessed as excellent.

DEXi Assessment of tourist FOB succession status.dxi 28.10.2016 Page 1

Evaluation results

Attribute	**E1**	**E2**	**E3**	**E4**	**E5**
Assessment of tourist FOB succession status	good	poor	good	poor	good
General characteristics of the operator	poor	good	poor	poor	poor
Age	50-60	40-50	50-60	50-60	50-60
Education	high school	vocational	high school	high school	high school
Characteristics of the successor	good	poor	good	poor	good
Education	high school	high school	high school	*	high school
Successor preferences for the FOB	*yes*	no	*yes*	no	*yes*
Assessment of successor by the operator	good	poor	good	poor	good
Inclusion of successor into FOB management	*yes*	*yes*	*yes*	*yes*	*yes*
Financial dependence of the operator after succession	*no*	*no*	*no*	yes	yes
Number of successors	1	1	2	2	2

Attribute	**E6**	**E7**	**E8**	**E9**	**E10**
Assessment of tourist FOB succession status	very good	good	good	very good	very good
General characteristics of the operator	poor	poor	good	good	poor
Age	50-60	50-60	40-50	*bellow 40*	more than 60
Education	high school	high school	high school	high school	high school
Characteristics of the successor	*excellent*	*excellent*	good	*excellent*	*excellent*
Education	vocational	vocational	high school	vocational	vocational
Successor preferences for the FOB	*yes*	*yes*	*yes*	*yes*	*yes*
Assessment of successor by the operator	good	good	good	good	good
Inclusion of successor into FOB management	*yes*	*yes*	no	*yes*	*yes*
Financial dependence of the operator after succession	*no*	yes	yes	yes	*no*
Number of successors	2	1	1	2	1

Figure 5: DEXi assessment of succession status for individual enterprises

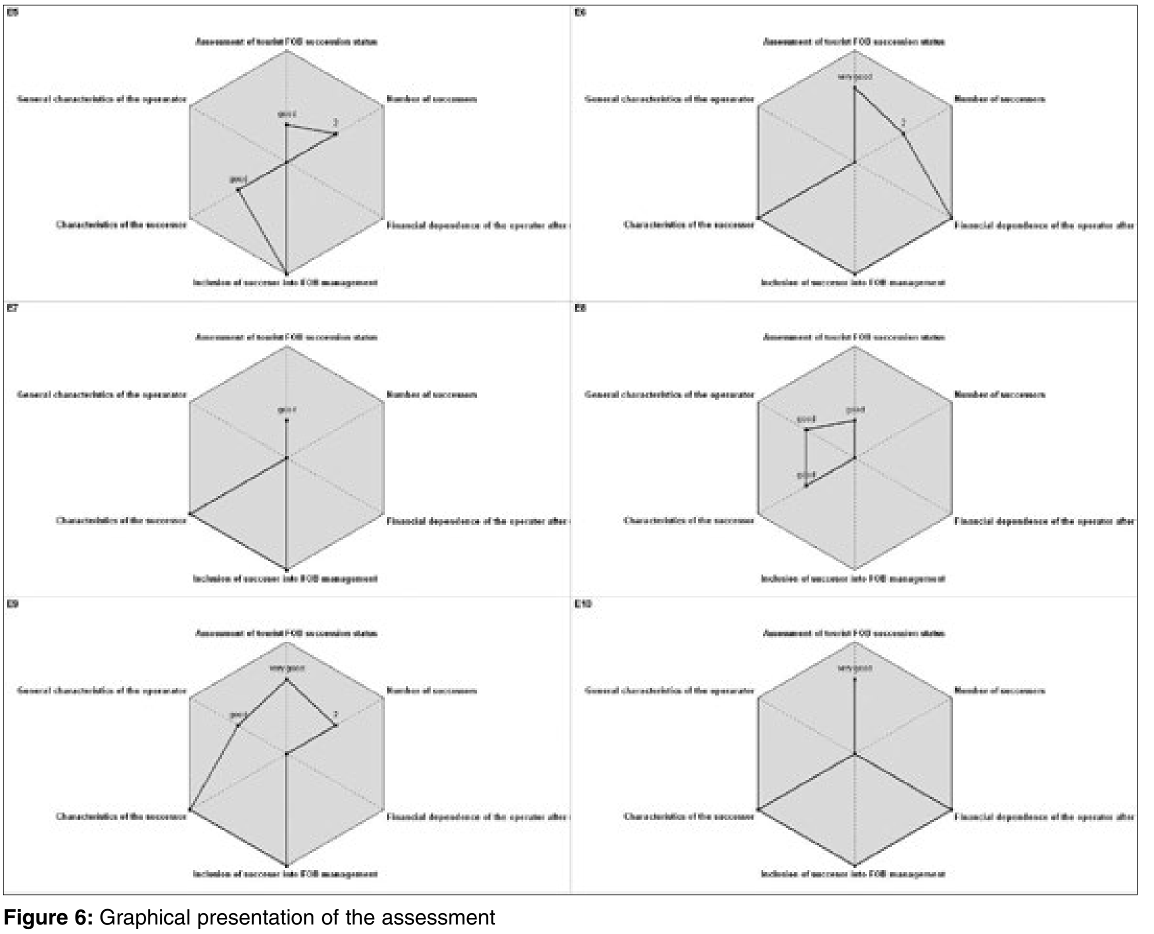

Figure 6: Graphical presentation of the assessment

DEXi Assessment of tourist FOB succession status.dxi 28.10.2016

Comparison of options

Attribute	E2	E3
Assessment of tourist FOB succession status	poor	good
General characteristics of the operator	good	poor
Age	40-50	50-60
Education	vocational	high school
Characteristics of the successor	poor	good
Education	high school	
Successor preferences for the FOB	no	yes
Assessment of successor by the operator	poor	good
Inclusion of successor into FOB management	yes	
Financial dependence of the operator after succession	no	
Number of successors	1	2

Figure 7: Comparison of E2 and E3

An important feature of using multicriteria decison models (MCDM) is the ability to »drill-down« through the tree structure of the model, look at data and assessments at the lower level of the model, and see how they contribute to the overall assessment. This is very important for better understanding and justification of the assessment process. Furthermore, such analyses can be easily and comprehensibly visualized using various charts. As an example, Figure 5 presents radar charts that show the evaluation of aggregate attributes at the highest level of the hierarchy according to the defined decision rules (these are shown in Figure 3). Individual points show the values of the four attributes that influence the general assessment. The ideal assessment would be achieved if the line were at the edge of the pentagram.

DEXi also enables direct comparison of the analysed alternatives. Figure 7 shows a comparison of E2 and E3. We can observe where the values' input (basic) attributes differ and that E2's successor characteristics were assessed as poor.

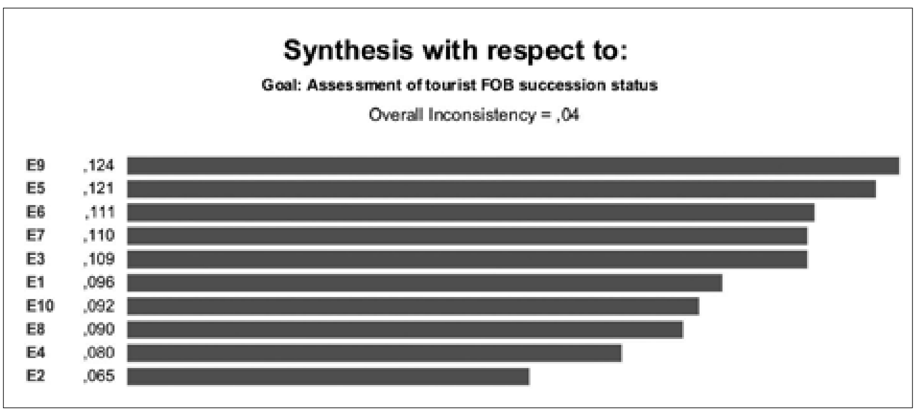

Figure 7: AHP model overall assessment

3.2 AHP model

The AHP model results are demonstrated in figure 7.

As with the DEXi model, the AHP enables the ability to »drill-down« through the tree structure of the model, look at data and assessments at the lower level of the model, and see how they contribute to the overall assessment. This is important for better understanding and justification of the assessment process. Furthermore, such analyses can be easily and comprehensibly visualized using various charts. As an example, Fig. 8 and show assessment of the lower level criteria (Characteristics of the successor) that can additionally contribute to the explanation of the results.

Figure 8 shows how the assessment of the aggregate attribute »General characteristics of the successor«, which was estimated as the most important, contributed to the final AHP model ranking.

3.3 Comparison of both models

The criteria importance weights (Figure 9) obtained from both models are somewhat different; however, the general priority ranking of criteria is comparable. The difference emerges from the weights

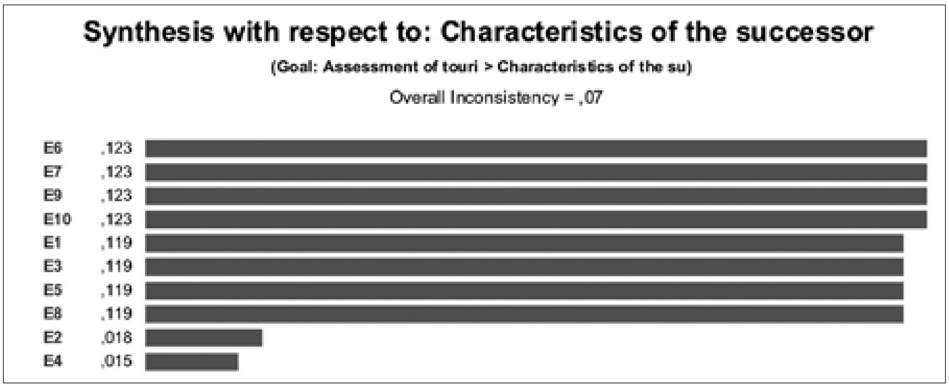

Figure 8: AHP assessment of aggregate attribute General characteristics of the successor

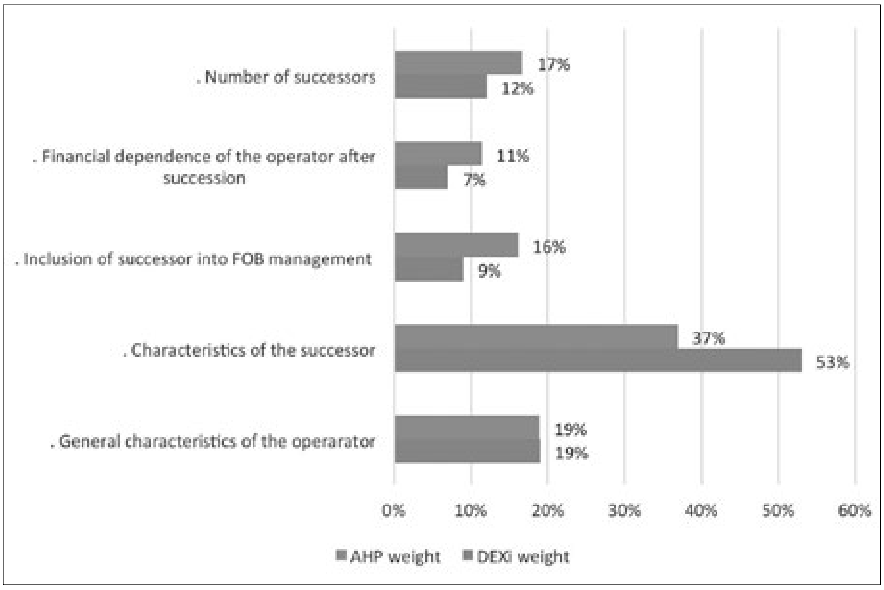

Figure 9: Importance weights of the criteria at the highest level of the hierarchy obtained from both models

Table 3: Comparison DEXi and AHP models

Enterprise	DEXi assessment	Rank	AHP assessment	Rank
E1	Good	2	0.096	6
E2	Poor	3	0.065	10
E3	Good	2	0.109	5
E4	Poor	3	0.080	9
E5	Good	2	0.121	2
E6	Very good	1	0.111	3
E7	Good	2	0.110	4
E8	Good	2	0.090	8
E9	Very good	1	0.124	1
E10	Very good	1	0.092	7

calculation methods used in DEXi, based on decision rules (see Pavlovič et al. 2011), and in the AHP (based on pairwise comparison matrix and eigenvector calculation).

In table 3 we show a comparison of the assessment and ranking from both models.

Despite the relative criteria importance weights (see Figure 9), the ranking of enterprises with respect to succession status is different between both models. The AHP model enables more precise ranking as demonstrated in the case of E10, which was assessed as »very good« by DEXi, but ranked 7th according to the AHP scores. This can be explained by the fact that the AHP calculations are much more precise, while DEXi assessment is provided during classes. However, we can also observe that enterprises E1, E3, E5, E7 and E8 are all ranked as »good« by DEXi. Those enterprises received AHP scores from 0.090 to 0.116 with a difference of 0.26 between the maximum and minimum scores.

Despite the deficiencies described in DEXi (such as the use of qualitative data only), we found that this approach fulfilled most of our expectations and revealed considerable advantages in comparison with other approaches. In particular, we emphasize that using the qualitative multi-criteria DEXi model is suitable in a field where judgment prevails and, thus, it is difficult to give numeric answers. Furthermore, combination with the AHP provides even more detailed insight into the situation in a family business and its future with respect to the operator. Enterprises E2 and E4 were both assessed as »poor« by the DEXi model and also ranked 9th and 10th by the AHP method. The low ranking of those enterprises can be attributed to the low scores for the »Characteristics of the successor«.

The approach represents a basic methodological tool for assessing the succession status of tourism enterprises. In this way we can also predict the future of an enterprise. We emphasize that for assessment at regional levels all businesses should be included in the research. However, the approach presented here provides a sound solution and its results could be used by government/regional authorities to create policy measures for the development of tourism businesses.

4 CONCLUSION

The model presented in this paper was developed to provide an integrative assessment of succession status at the family enterprise level. The multi criteria model encompasses the majority of aspects that influence the successful succession of a family enterprise, and is therefore the appropriate methodological approach for the assessment of the succession status.

The multi criteria methodology, based on the DEX and AHP methods, was applied to achieve this goal. Both models showed that differences in succession status exist between the enterprises analyzed. The AHP method however enabled a somewhat different, yet more precise ranking of the analyzed enterprises.

Business operator questionnaires were used as the main data source. The multi criteria models presented enable precise estimation of succession status according to the defined criteria. The added value of this approach in practice is the detailed analysis of attribute values made possible by the model's features (DEXi radar charts), which can provide substantial information on possible improvements to the succession situation for farm operators. The research has confirmed that the successful succession of the business transfer to the next generation is affected by the characteristics of the successor, the general characteristics of the operator, the inclusion of successor into family-owned business management, the number of successors, etc.

Succession status is a vital factor and these models enable problematic points in the succession process to be identified and can help improve elements that are important to the smooth and successful future operation of family tourism businesses.

REFERENCES

1. Ajpes. Register of Business in Slovenia. www.ajpes.si (accessed: 22 February 2016).
2. Andersen, A. (1997). Mass Mutual American family business survey: <
3. http://www.arthurandersen.com/CFB.97surv.asp>.
4. Avloniti, A., Iatridou, A., Kaloupsis, I., & Vozikis, G. S. (2014). Sibling rivalry: implications for the family
5. business succession process. *International Entrepreneurship and Management Journal*, *10*(4), 661-678.
6. Barnes L. B. (1988) »Incongruent Hierarchies: Daughters and Younger Sons as Company CEOs.« *Family*
7. *Business Review*,1(1), 9-21.
8. Barzoki, A. S., Esfahani, A. N., & Ahmad, R. Z. (2012). Studying application of succession planning
9. processes components in Isfahan Melli Bank. *Interdisciplinary Journal of Contemporary Research in Business*, *4*(1), 718.
10. Belton, V. & Stewart, J.T. (2002). Multiple objectives decision analysis. An integrated approach. Kluwer

11. Academic Publishers, Massachusetts.
12. Bird, B., Welsch, H., Astrachan, J. H., and Pistrui, D. (2002). Family business research: the evolution of an
13. academic field. Family Business Review, 15 (4), 337–350.
14. Bohanec, M. (2006). *Odločanje in modeli*. DMFA-založništvo
15. Bohanec, M. (2008). DEXi: Program for Multi-Attribute Decision Making User's Manual. *Ljubljana,*
16. *Slovenia: Institut Jozef Stefan*.
17. Breton-Miller, I. L., Miller, D. and Steier, L. P. (2004). Toward an Integrative Model of Effective FOB
18. Succession. Entrepreneurship Theory and Practice, 28(4), 305–328.
19. Cabrera-Suárez, K., De Saá-Pérez, P., & García-Almeida, D. (2001). The succession process from a
20. resource-and knowledge-based view of the family firm. *Family Business Review*, *14*(1), 37-46.
21. Davis, P. S., & Harveston, P. D. (1998). The influence of family on the family business succession process:
22. A multi-generational perspective. *Entrepreneurship theory and practice*, *22*, 31-54.
23. Davis, S. M. (1968). Entrepreneurial succession. Administrative Science Quarterly, 13(3), 402–416.
24. Duh, M. (2003). Family enterprises as an important factor of the economic development: the case of
25. Slovenia. *Journal of Enterprising Culture*, *11*(02), 111-130.
26. Duh, M. (2008). Overview of Family Business Relevant Issues: Country Fiche Slovenia. Project conducted
27. on behalf of European Commission in the Framework of the study Overview of Family Business Relevant Issues. Retrieved from http://ec.europa.eu/enterprise/policies/sme/documents/family-business/index_en.htm
28. Duh, M., and Letonja, M. (2013). Knowledge Creation in Family Businesses and Its Importance for Building
29. and Sustaining Competitive Advantage during and after Succession. International Journal of Business Administration, 4(6), 120 – 133.
30. Duh, M., Tominc, P., Rebernik, M. (2006). Succession Issues within Family Enterprises in Transition
31. Economies. UDK: 334.722.24(4-69)
32. Duh, M., Tominc, P., Rebernik, M. (2009). Growth ambitions and succession solutions in family businesses.
33. Journal of Small Business and Enterprise Development, 16 (2), 256 – 269.
34. Dyck, B., Mauws, M., Starke, F. A. and Mischke, G. A. (2002). Passing the baton: The importance of
35. sequence, timing, technique and communication in executive succession. Journal of Business Venturing, 17 (2), 143-162.
36. Dyer, W. G., Jr., and Sánchez, M. (1998). Current state of family business theory and practice as reflected in
37. Family Business Review 1998 – 1997. Family Business Review, 11 (4), 287 – 295.
38. Handler, W. C. (1994). Succession in family business: a review of the research. Family Business Review, 7
39. (2), 133–158.
40. Lambrecht, J., and Donckel, R. (2006). Towards a business family dynasty: a lifelong, continuing process. In
41. P. Poutziouris, K. X. Smyrnios, & S. B. Klein (Eds.). Handbook of Research on Family Business, 388–401.
42. Letonja, M., Duh, M. (2015). Knowledge transfer in family businesses and its effects on the innovativeness
43. of the next family generation. *Knowledge management research and practice*, 2015, vol. 13, 12., doi: 10.1057/kmrp.2015.25.
44. Mandl, I. (2008). Overview of Family Business Relevant Issues, Final Report. Austrian Institute for SME
45. Research. Vienna:
46. <http://ec.europa.eu/enterprise/policies/sme/files/craft/family_business/doc/familybusiness_study_en.pdf>.
47. McCann, G., DeMoss, M., Dascher, P., & Barnett, S. (2003). Educational Needs of Family Businesses:
48. Perceptions of University Directors. Family Business Review, 16 (4), 283-291.
49. Meijaard, J., Uhlaner, L., Flören, R., Diephuis, B., & Sanders, B. (2005). The relationship between successor
50. and planning characteristics and the success of business transfer in Dutch SMEs. *EIM, Zoetermeer*.
51. Miller, D., Steier, L., & Le Breton-Miller, I. (2003). Lost in time: intergenerational succession, change, and
52. failure in family business. Journal of Business Venturing, 18 (4), 513-531.
53. Morris, M. H., Williams, R. O., Allen, J. A., and Avila, R. A. (1997). Correlates of success in family business
54. transitions. Journal of Business Venturing, 12 (5), 385-401.

55. Prevolšek, B. (2012). *Nasledstvene značilnosti družinskih podjetij: primer gostinskih podjetij v Spodnjem*
56. *Podravju* (BSc thesis). Maribor: Faculty of Economics and Businesses.
57. Rozman, C., et al. (2009). A multi-criteria assessment of tourist farm service quality. Tourism Management,
58. 30 (5), 629-637.
59. Saxena, A., Deb, A. T., and Mehlawat, M. K. (2010). The linkages between corporate governance and CEO
60. succession: A theatrical episode, a theoretical framework and analytical model. Available at SSRN 1539239.
61. Sharma, P., Chrisman, J. J. and Chua, J. H. (2003). Succession planning as planned behavior:
62. some empirical results. Family Business Review, 16 (1), 1-14.
63. Shepherd, D. A., & Zacharakis, A. (2000). Structuring family business succession: An analysis of the future
64. leader's decision making. *Entrepreneurship: Theory and Practice*, *24*(4), 25-25.
65. Sonnenfeld, J. (1988). The hero's farewell: what happens when CEOs retire. New York: Oxford Univ. Press

SAŽETAK

Diljem svijeta, a osobito u Sloveniji, obiteljska turistička gospodarstva igraju ključnu ulogu u gospodarstvu. Ta uloga je svakim danom sve važnija. Kritično vrijeme kod obiteljskih turističkih gospodarstava je uglavnom vezano uz postupak nasljeđivanja koji se definira kao prijenos vlasništva i usko je vezan uz promjene u rukovodstvu gospodarstva. Podaci pokazuju da postupak prelaska vlasništva na sljedeću generaciju preživi tek jedna trećina obiteljskih gospodarstava; brojna obiteljska gospodarstva bankrotiraju kada poslovanje preuzme sljedeća generacija. U ovom se radu razmatraju karakteristike nasljeđivanja pojedinačnih obiteljskih turističkih gospodarstava (restorana) i to pomoću primjene višekriterijskog modela temeljenog na DEXi i AHP metodologijama. Analiza odluke pomoću višestrukih kriterija je poddisciplina operativnih istraživanja koja eksplicitno razmatraju višestruke kriterije u okruženju donošenja odluka.