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THE METHODOLOGY OF MONITORING THE IMPLEMENTATION OF A STRATEGY IN AN ELECTRICITY DISTRIBUTION ENTERPRISE

Summary

Lately, a greater emphasis has been placed on the quality of environment and sound management of resources, and above all on energy sources as the basis of the human life quality and of sustainable development. The sustainable development of an organization is monitored through the organization's performance, which is the result of its strategy that has incorporated all stakeholders' requirements beforehand. Although a great number of companies apply a strategic management concept and business success measurement methods, researches show that only every tenth company manages to implement the defined strategy. The main causes of unsuccessful strategy implementation can be found in the lack of adequate strategic control mechanisms. The paper presents the methodology developed with an aim to remove the main obstacles to successful implementation of the defined strategy and to the monitoring of an enterprise's effectiveness.

Key words: *measures, monitoring of the strategy implementation, Analytic Network Process (ANP)*

1. Introduction

The concept of sustainability, as a condition of human survival and prosperity, is widely accepted today. It is based on the Theory of Justice according to which the right of the present generation to use resources and environment with an aim to satisfy its needs should not abolish the same right of the future generations [11]. Sustainable state is seen as a state in which the minimum of stability and balance of a system is achieved, which means that the parameters that manage the relationships between components in a system remain the same even after disturbance. If the sustainability concept is not applied, inefficient economic development, in the sense of unnecessary waste of resources and energy, with a tendency of long-term efficiency deterioration comes as a result.

Lately, a greater emphasis has been placed on the quality of environment and sound management of resources, and above all on energy sources as the basis of the human life quality and of sustainable development. To that end, several theories that deal with the issue have been developed, such as Holistic Resource Management – HRM [13] and Urban Metabolism [18]. The concept of Holistic Resource Management is directed towards

achieving goals in the area of life quality, ecosystem products and the sustainability of natural resources. Since the idea of sustainable development includes an ethical attitude towards the future generations and since energy represents the basis of the future development, the process of efficient management of resources at the local, national, regional, and global levels, providing all stakeholders' satisfaction, is very important. At the same time, it is a condition for the implementation of the idea. On the other hand, all the elements of energy system, organizations that function within its framework, have to contribute to achieving the idea of sustainable development.

The sustainable development of an organization could be seen as a constant satisfaction of all its stakeholders, and that is something that all organizations should aspire to achieve. It is monitored through the organization's performance, which is the result of its strategy that incorporated all stakeholders' requirements beforehand. When the performance is moving in the desired direction for a longer period of time, we can say that that is the organization's sustainable development. The main characteristics of sustainable development of an organization are synchronisation of its mission and vision, the development of strategy to achieve these and the implementation of the system of measures to implement the strategy.

2. Selection and implementation of an enterprise's strategy

Strategy is a collection of decisions and activities directed to achieving goals of an organization, whereas its capabilities and available resources are adjusted to opportunities and threats coming from its immediate surroundings [2]. The main role of a strategy is to challenge the limitations of surroundings by combining resources and other competences of an organization and find the best ways to achieve mission and vision of an organization. The process of defining a strategy consists of defining strategic goals and measures for its implementation. The purpose of setting strategic goals lies in putting strategic visions into precisely defined results and outcomes that the management wants to achieve and to use them as tools to monitor the improvement and success of an organization [3].

An important task of a strategy is to connect goals of an organization with the interests of internal and external stakeholders. This implies that the organization has to identify their interests, strengths and influences regarding its business beforehand [5]. In defining strategic goals one should start with the results of strategic analysis, vision, mission, and the philosophy of the organization. The implementation of the organization's strategy refers to the realization of changes and activities defined in a set of measures to implement the organization's strategic goals. Organizations have to create efficient strategic control mechanisms if they want to implement their strategies successfully [3]. Often, strategic plans and programs, as part of a set of measures for the implementation of strategic goals, are extensive, too complicated, and unclear to the employees at lower levels of organization. Additionally, even though they are more specifically compared to the vision, the set strategic goals are general and immeasurable- Thus, based on them, the employees in the organization do not get an insight into how their daily activities contribute to the realization of the strategy. So, most organizations have not been able to implement their strategies since they were not able to manage what they could not describe or measure. Due to that, a need has arisen to put strategic goals into a system of concrete goals or performance generators (critical success factors – CSFs) and measures (of performance) whose realization would be systematically monitored and measured. This prevents business functions in an organization to work only for their functional goals and interest and ignore the goals set at the level of the organization. In order for this kind of hierarchy of goals to make sense, it is necessary for the goals at the lowest level of hierarchy (measures) to be measurable, defined conceptually and time-wise, adequate, and realistic [3].

3. Models for measuring business success

Managers have perceived that for the monitoring of business success and the making of high quality decisions it is not sufficient to have only financial measures, but also measures of nonmaterial character through which nonmaterial property would be monitored. As a response to the adjustment to new business conditions and the need for new nonfinancial measures, several different methods of business success measurement have been developed, such as: Balanced Scorecard (BSC), Six Sigma, European Foundation for Quality Management (EFQM), Malcolm Baldrige Award Criteria, Economic Value Added (EVA), Prism of Performances, and others. The researches show that more than 60% of the most successful world organizations use BSC [17]. Strong evidence of the omnipresence of BSC was presented by Haket Group which in 2002 revealed that 96% of approximately 2 000 global organizations that were interviewed had introduced or plan to introduce BSC in the future [8].

Within the implementation of the BSC method, an organization should consider a selection of perspectives based on which a balanced system of success indicators of an organization will be built, i.e. in the framework of which critical success indicators and measures will be identified. When choosing perspectives, the most commonly used concept is the Balanced Scorecard concept by Kaplan and Norton which recommends the use of customer perspective, internal process perspective, learning and growth perspective, and financial perspective. Nevertheless, every company has to start from its own specific situation in choosing the necessary perspectives, which was recommended by the very authors of the given concept who say that the four perspectives "should be seen as a model not a mould" [7]. Researches of BSC practitioners have revealed that most companies use only 20 to 25 measures at the highest level. During the selection of measures, an enterprise should have in mind the following criteria: relation to strategic goals, quantity, accessibility, user-friendliness, and relevance. For each measure there is a description and frequency of measurement, measuring tool, target values (limits) that should serve for comparison with the measured value. The critical success factor is reached when all its characteristics are within set limits. After choosing critical success factors and measures in all perspectives, all of their relationships within certain perspectives should be revealed; as well as the relationships between factors of success and measures that are placed in different perspectives. Relationships are represented by a strategic map that gives a graphical display of everything a company has to do in every set perspective in order to implement a strategy [8].

The set balanced system of measures is decomposed in a descending order, i.e. from higher levels to lower levels of organizational units. This process of cascading enables lower levels of an organization/a system to develop critical success factors and measures that are related to a system strategy but reflecting the state of the given level at the same time. While certain success factors and measures used at lower levels can be the same in the whole system, in most of the cases a balanced table of measures is different at lower levels of an organization/a system and includes items that reflect specific circumstances and challenges that emerge at those levels [9]. Fig. 1 shows the transfer of strategic goals and critical success factors from the level of energy system to its lower levels. Although a great number of companies apply the strategic management concept and business success measurement methods, researches show that only 35% of surveyed companies stated that the existing performance measurement systems are efficient, and only every tenth company manages to implement the defined strategy [8]. The main problems in the implementation of BSC in practice are: inadequate selection of measures, quantification of nonfinancial measures and measuring their influence on reaching strategic goals, defining goal values that are not based on realistic possibilities of their improvement, lack of the cascading system for BSC to lower levels of companies, and inadequate selection of perspectives [1, 6, 10, 14, 16].
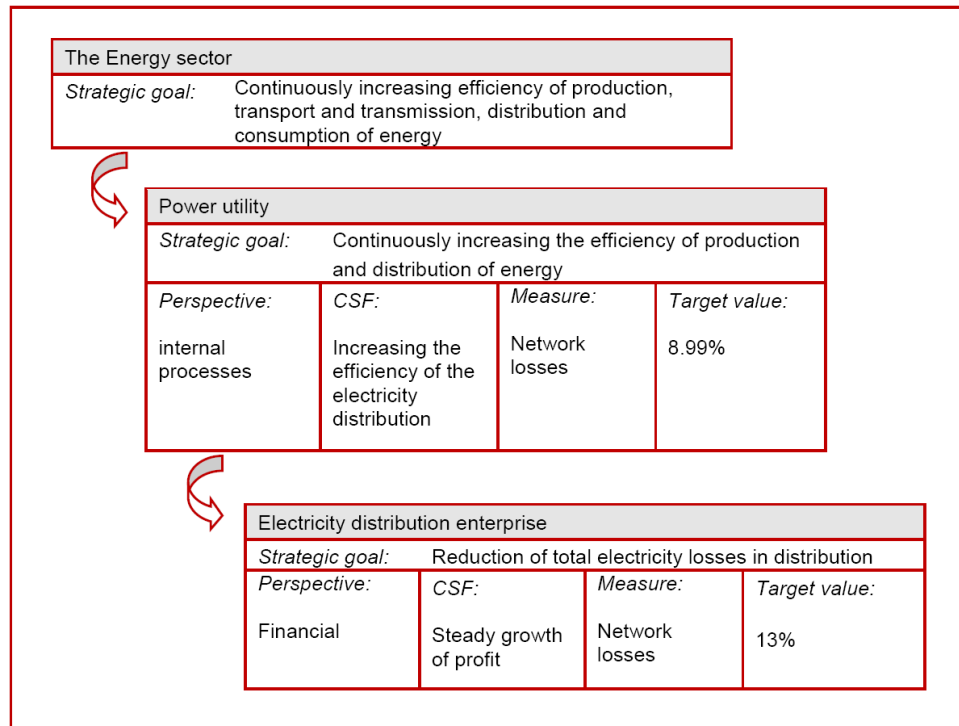
Fig. 1 Cascading BSC, the example of an energy system

This paper offers a methodology directed towards solving most of the listed problems. In the selection of measures, the use of the Multi-Criteria Decision-Making method is envisaged. The use of these methods in the development of the strategic BSC map provides a systematic and impartial process of the selection of measures and the main problem of failure in applying BSC to business systems is eliminated or reduced to a greater extent. Besides the use in the selection of measures, the Multi-Criteria Decision-Making methods are used as tools in calculating the level of implementation of strategic goals, i.e. the set strategy according to a specifically defined methodology.

4. Illustration of the methodology for the evaluation of the strategy implementation

Methodology for the evaluation of the strategy implementation, through the evaluation of the level of the implementation of set strategic goals that result from the vision of the business system, is developed with the aim to eliminate one of important problems in the implementation of BSC. The methodology refers to the quantification of nonfinancial measures and measuring its influence on the implementation of strategic goals. The first step of the methodology uses Analytic Network Process (ANP) to evaluate alternatives (that represent the measures) in reference to critical success factors that are directly related to strategic goals. The ANP method enables the modelling of functional interaction between criteria and alternatives in the model and the defining of the problem by modelling influences between network elements [12]. In order to calculate the priorities of ANP elements, firstly it is necessary to show links and explain the types of clusters and knots in the ANP network and calculate necessary interdependency matrixes.

During the development of the ANP model for the evaluation of the business system strategy implementation, equal importance is given to all perspectives, so that they do not have a direct influence on the overall weight factors of measurement characteristics and critical success factors in the evaluation of the implementation stage of strategic goals. Thus, the balanced perspective criteria are met as well. Authors of some papers have given more importance to the customer and the financial perspective although it has been shown that

today the growth and development perspectives have a greater influence on the creation of value and on the survival, development and growth of the company [15]. The process of the creation of the ANP model for the evaluation of the implementation of the strategy takes place through the following activities:
- Setting local priorities (weight) of the strategic map elements,
- Defining the formula for the calculation of dependent measures.

4.1 Setting local priorities of the strategic map elements

After the development of a strategic map, it is necessary to define the level (weight) of mutual influences of all strategic map elements. Thus, one should define the effect of measures on each critical success factor in a strategic map. In addition, the impact of individual critical success factors on the strategic goals should also be defined as well as the impact of strategic goals on the realization of the overall business system strategy. During the strategic map modelling, internal dependencies of elements within perspectives occur (dependencies of critical success factors and measures within one perspective), as well as external dependencies of perspectives (dependencies of critical success factors and measures of different perspectives). Besides the listed dependencies, there are external dependencies of strategic goals and success factors of perspectives as well (Fig. 2).

In order to define the weight of mutual influences of strategic map elements, it is necessary to create a nonlinear network that is based on the strategic map. The network should be composed of clusters and elements. By comparing the pairs of interdependent elements, one should create interdependency matrixes for measures, critical success factors, and strategic goals. The established interdependency matrixes are used to calculate the weight factors of strategic map elements. In the same way, the weight factors of critical success factors are defined according to their importance regarding the achieving of strategic goals, as well as the weight factors of strategic goals in reference to the implementation of the enterprise strategy. The sum of weight factors of relations in one CSF or strategic goal always equals 1.

4.2 Defining the formula to calculate dependent elements of a strategic map

Strategic map shows all cause and effect relations of BSC elements. In developing the formula to calculate the level of implementation of the set strategy, one should firstly define the value of measures, i.e. elements of the strategic map. Strategic map elements can be dependent and independent (Fig. 2). Independent elements do not depend on other elements and they can be seen as independent variables. The only independent variables of the strategic map are measures which are used directly and indirectly to calculate the values of all other strategic map elements that represent dependent variables. Dependent variables depend on one or more independent strategic map variables, i.e. the values of dependent variables are a linear combination of values of independent variables. Dependent variables are represented on the strategic map by critical success factors (CSF), strategic goals (SG), and the strategy.

Figure 2 shows that the level of fulfilment of CSF depends on the fulfilment of the values of goal measures, the level of fulfilment of SG depends on the fulfilment of CSF, and finally, the level of fulfilment of the business system strategy depends on the level of SG implementation. Management should define goal values (boundaries) for all independent variables (measures). Besides the setting of goal values, it is necessary to define the least favourable possible value that can be tolerated in the system. That value will be used in the process of calculating the values of dependent variables. One of the two listed values will represent the lower limit (minimal value) that will be marked as L and the other one the upper limit (maximum value) that will be marked as U. The goal values can be represented by the lower or the upper limit depending on the very type of measure. When it comes to the absence from work, the lower limit will represent the goal values while in the case of income per

employee, the lower limit will be represented by the least favourable possible value. The formula to calculate dependent variables of the map is separately defined to calculate the critical values of success factors on the one hand and to calculate the values of strategic goals and the strategy implementation on the other.
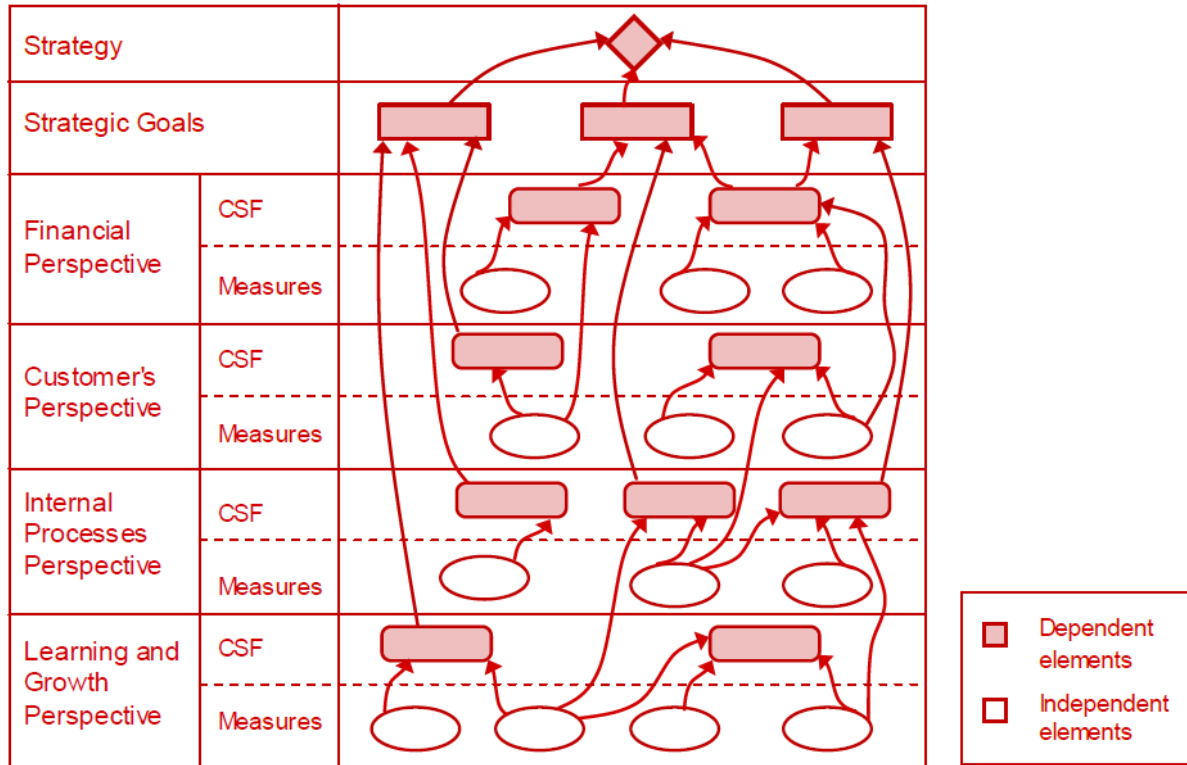

Fig. 2 Dependent and independent strategic map elements

4.2.1   Mathematical model to calculate the achieved values of CSF

The value of one or more measures (independent variables) can influence the value of CSF (dependent variables). The sum of coefficients of the influence of the values of measures on the value of CSF always has to equal 1. Figure 3 shows a general overview of interdependency of CSF and measures.
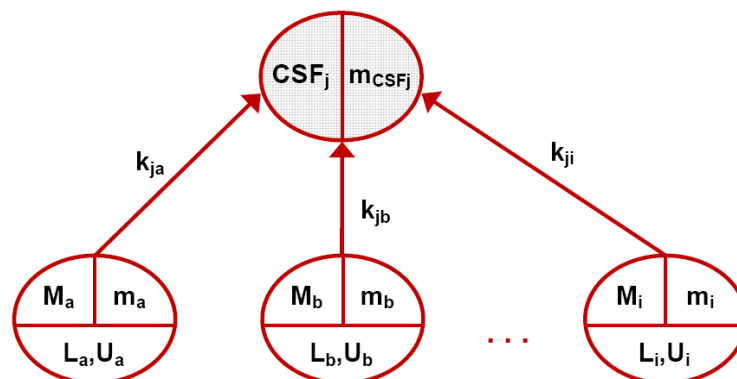

Fig. 3 The model of functional dependency of CSF and measures

where:

CSF_j – critical success factor (dependent variable), $j = 1, 2, …, n$

m_{CSFj} – CSF value,

M_i – measure (independent variable), index i depends on the strategic map position of the measures,

m_i − measurement value,

L_i − lower limit of the M_i measure,

U_i − upper limit of the M_i measure,

k_{ji} − the weight factor of the influence of the M_i measure on the achievement of critical success factor CSF_j.

Please note that m_i, L_i, and U_i are expressed in the absolute value of the measure values with its measure unit and the value of m_{CSFj} (value of dependent variable) is expressed in the relative value of the measure without its measure unit and it belongs to the interval from 0 to 1.

Exceptionally, the value of dependent variable can go out from the set interval if the set goal values are exceeded. Generally, if the specified CSF is in a linear dependency regarding the measure i, the value of CSF is calculated using the following formula:

$$m_{CSFj} = \sum m_{ri} \cdot k_{ji} \qquad (1)$$

The relative achieved value of the measure (m_{ri}), with the goal value being equal to the upper limit, is calculated using the following formula:

$$m_{ri} = \frac{m_i - L_i}{U_i - L_i}, \qquad (2)$$

In the case of measures whose goal value equals the lower limit, the relative achieved value of the measure is calculated using the following formula:

$$m_{ri} = \frac{U_i - m_i}{U_i - L_i} \qquad (3)$$

4.2.2   Mathematical model to calculate the achieved values of SG and strategy

One or more CSFs can influence the achievement of SGs which are an integral part of a strategy. CSFs can be positioned in different perspectives. The value of strategic goals in this step represents dependent variables, and the CSF value after its calculation becomes measures. The sum of coefficients of the influence of SG value always has to equal 1. Figure 4 shows an overview of the interdependencies of the strategic goal and critical success factors.
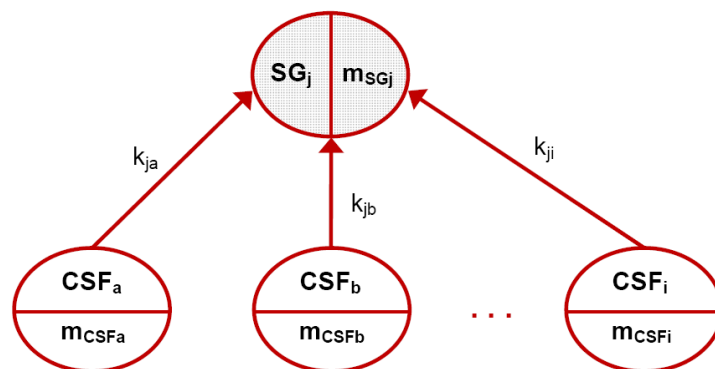

Fig. 4 Model of functional dependency of SG and CSF

where:

SG_j − strategic goal (dependent variable), j = 1, 2, … , n

m_{SGj} − SG value (the value of dependent variable),

CSF_i − critical success factor (independent variable),

m_{CSFi} − calculated value of CSF expressed in the relative sum of the measure value without its measure unit,

k_{ji} − weight factor of the CSF_i influence on the achievement of the strategic goal SG_j.

Generally, when a specific SG is in linear dependency regarding i CSF, the achieved value of SG is calculated using the following formula:

$$m_{SGj} = \sum m_{CSFi} \cdot k_{ji}$$ (4)

The value of achievement of the strategy of a business system (m_s) which is in linear dependency regarding i of strategic goals is calculated using the following formula:

$$m_S = \sum m_{SGi} \cdot k_i$$ (5)

where:

m_{SGi} – calculated measures of the implementation of strategic goals,

k_i – weight factor of the influence of SC_i on the achievement of the business strategy system.

The value of the achievement of the strategy, which is calculated in this step, represents a dependent variable, and the achieved values of strategic goals are independent variables. The calculated value m_S transformed into percentages shows the percentage of the achievement of the set business strategy system.

5. Validation of the methodology for the strategy implementation evaluation in an electricity distribution enterprise

The validation of the methodology was performed in the electricity distribution enterprise "Elektrokrajina" Banja Luka (herein after referred to as Elektrokrajina) that supplies electricity to 230186 consumers.

5.1 Identification of strategic goals, CSFs and measures in Elektrokrajina

Based on the analysis of external surroundings, strategic goals of the energy system and internal processes, the top management of Elektrokrajina has defined the following strategic goals:

SG1. Electricity supply safety.

SG2. Reduction in the total electricity losses in distribution.

SC3. Development, construction, and modernization of electricity distribution.

After defining the main business processes and their interactions and the analysis of enterprise strategic goals, Elektrokrajina defined CSFs and potential measures that are divided on strategic maps into four perspectives: financial perspective, customer's perspective, perspective of internal processes, and learning and development perspective. Every measure is described through the code, name, measure unit, calculation formula, and measure frequency (description of the measurement M61 is given in Table 1). The selection of the most relevant measures, using the multi-criteria decision making, was performed for every perspective of the four listed ones, based on the set model of measure selection (Fig. 5) [4].

Table 1 Measure description

CODE	MEASURE	PERSPECTIVE
M61	Duration of unplanned long interruptions (ULI) per customer	Internal processes perspective
MU	CALCULATING FORMULA	MEASURING PERIOD
min/cust.	(sum(duration ULI x number of customers that experienced the supply interruption))/total number of customers	Quarterly

Weight of the influence of certain criteria for the selection of measures was defined at the beginning of the analysis: Data Availability (0.138), Metrics Complexity (0.084), and Relationship with Strategic Goals of Higher Level (of Energy System) (0.546) and Influence on Organizational CSF (0.232). Within each perspective, a comparison of pair dominance in relation to the set criteria for the selection of measures through the development of comparison matrixes was made. Then, within each observed criteria, a sequence of relevance (participation) was defined. Finally, the importance (weight) of measures was calculated at the level of the model, i.e. in the framework of every perspective.
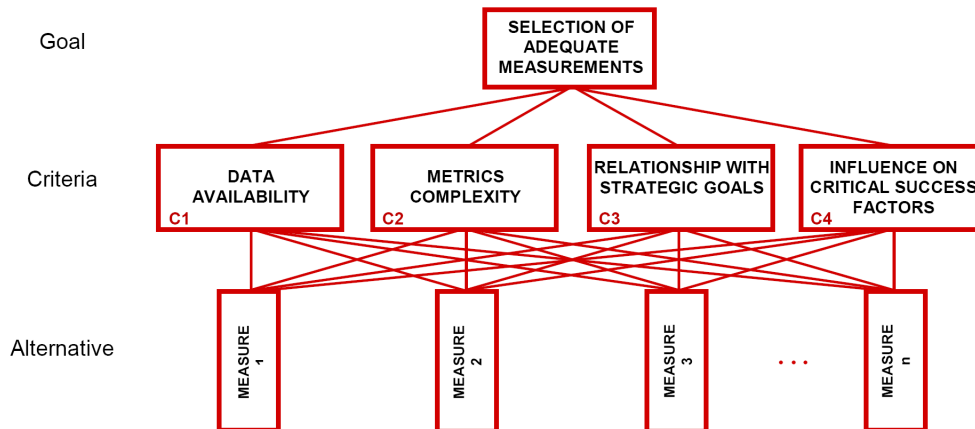

Fig. 5 AHP model for the selection of measures in perspectives

The company management made selection of measures according to the perspectives and on the basis of the received priority list. In the financial perspective, the measures „Monitoring the effects of investments" and „The percentage of improvement in high consumption customers' payment" were rejected; in the customer perspective, the measure „Percentage of complaints on the quality of the voltage" was rejected; in the perspective of internal processes, the measures „Percentage of revised accounts", „Percentage of estimated bills", and „Percentage of warned customers for debt exceeding a defined limit" were rejected; and in the learning and growth perspective, the measures „The rate of employee turnover" and „Percentage of coverage of defined competencies" were rejected [4].

5.2   Evaluation of strategy implementation in Elektrokrajina

The first activity in the strategy implementation phase is the comparison of local priorities, i.e. the weight of strategic map elements which are divided into independent elements (measures) and dependent elements (critical success factors and strategic goals). Figure 6 shows the ANP model with established interdependencies between strategic map elements. These interdependencies create comparison matrixes and define which pairs of elements will be compared in defining their importance regarding achieving the goal values of higher level elements. Figures 6 and 8 show that the critical success factor *CSF6 – Continuous delivery of electricity* relates to *M33, M41, M61, M62, M101, M102,* and *M111 measures*, which means that the level of fulfilment of *CSF6* (as a dependent element) will depend on the level of fulfilment of goal values of given measures (as independent elements of the map).
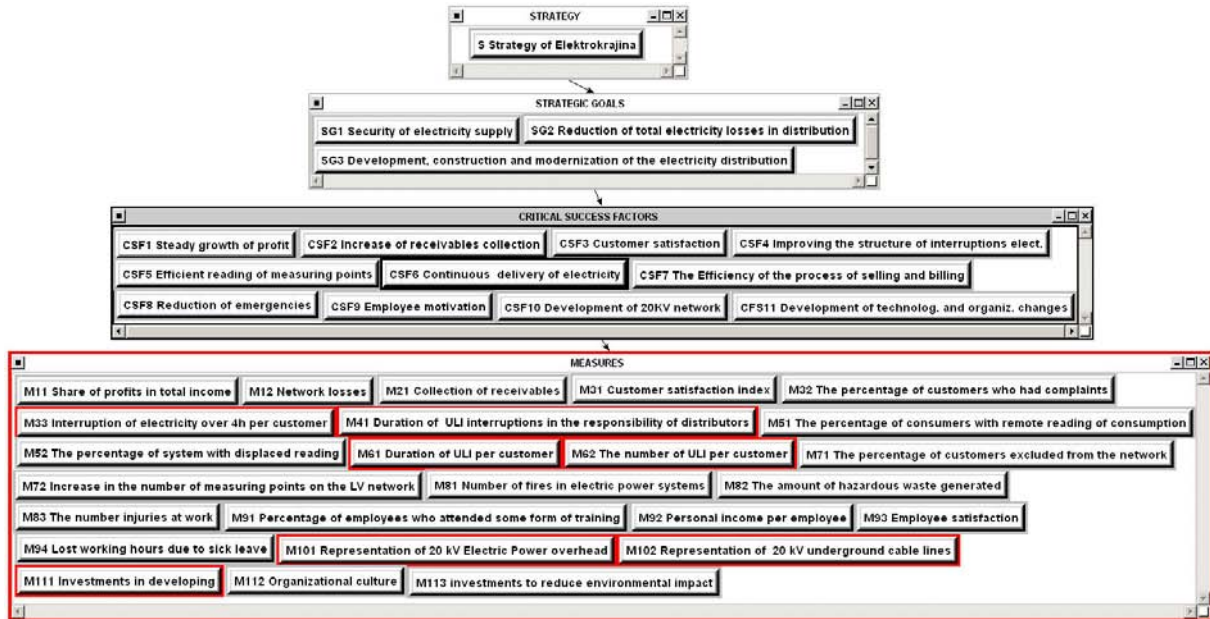
Fig. 6 ANP model for the calculation of local priorities of strategic map elements in Elektrokrajina

Figure 7 shows the comparison matrix and the values of local priorities of the above mentioned measures in relation to the fulfilment of the critical success factor CSF6.
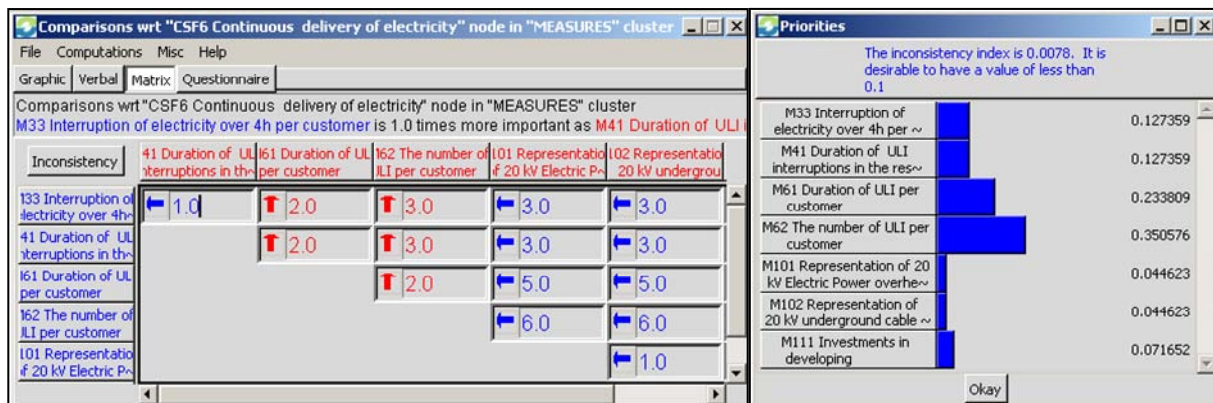

Fig. 7 Comparison matrix and the values of local priorities of the critical success factor "Emergencies decrease"

Priorities/weights of the elements of the strategic map of Elektrokrajina (k_{ji}), calculated by means of the AHP method, are given in strategic map levels using the diagram "Critical success factors – measures" (Fig. 8) and the diagram "Strategic goals – critical success factors" (Fig. 9).

After the calculation of priorities of measures and the collection of their achieved values calculated in prescribed time intervals, the relative achieved values of measures for 2008 and 2009 were calculated according to (2) and (3). These expressions were needed for the calculation of the achievement of CSF, strategic goals, and the very strategy of the enterprise (dependent elements of strategic map). Calculated values of independent variables for 2008 and 2009 are given in Table 2.
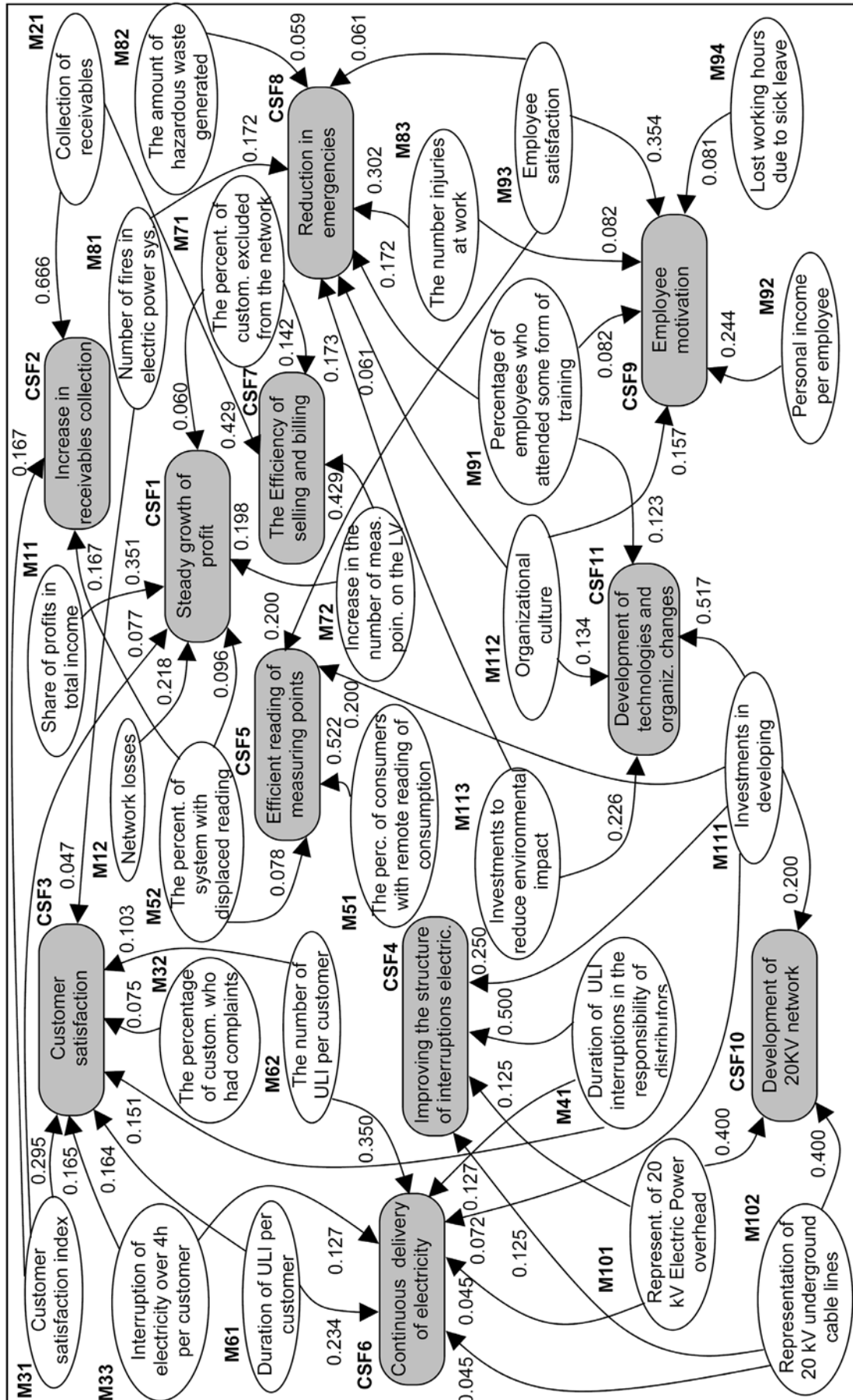
Fig. 8 Diagram "CSF – Measures" with local priorities in Elektrokrajina
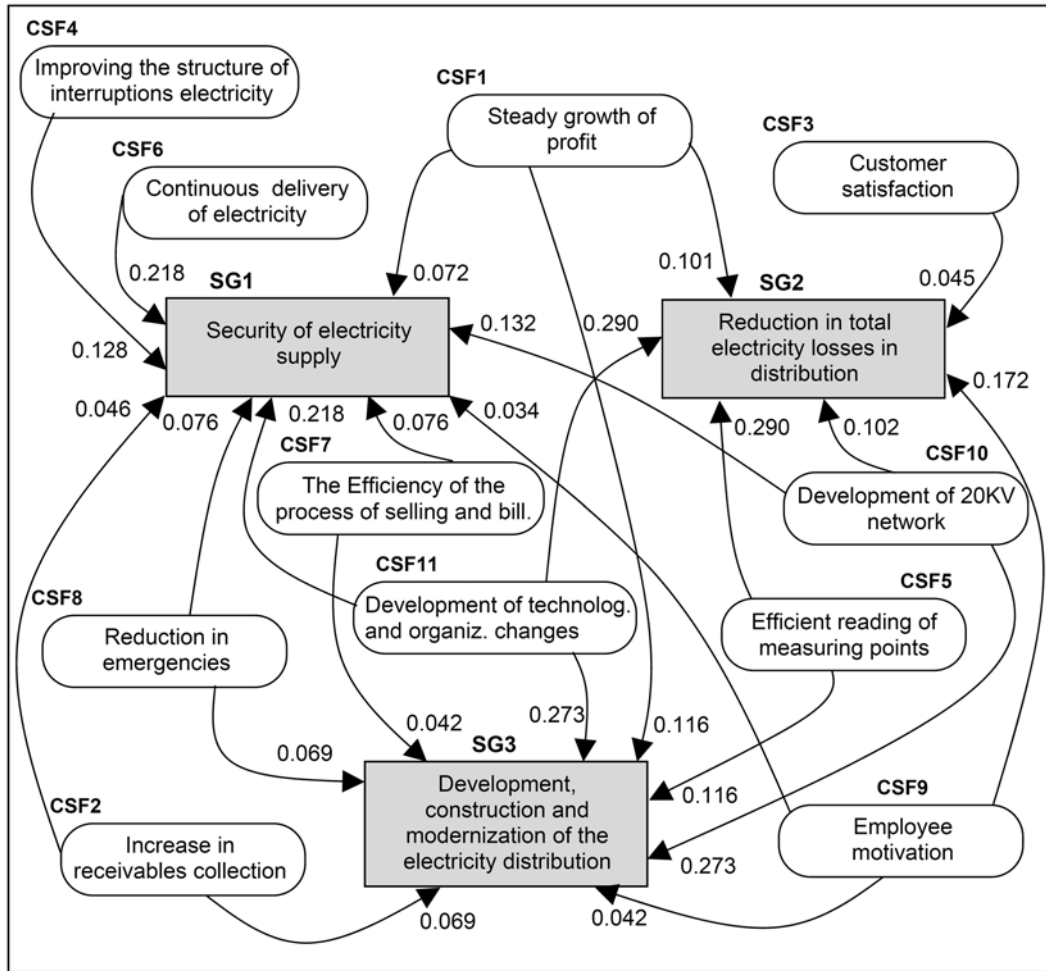
Fig. 9 Diagram "Strategic goals - CSF" with local priorities in Elektrokrajina

Table 2 Relative achieved values of measures in Elektrokrajina for 2008 and 2009

Code	Measure unit	Target value*		Achieved value** (m_i)	Relative achieved value (m_{ri})	Target value*		Achieved value** (m_i)	Relative achieved value (m_{ri})
		L_i	U_i			L_i	U_i		
		2008				2009			
M11	%	2	2.5	2.48	0.960	1	1.5	1.35	0.700
M12	%	18	20	20.81	-0.405	18	20	19.65	0.175
M21	%	95	100	98.88	0.776	95	100	103.64	1.728
M31	scale 1-5	3.5	4.5	3.5	0.000	3.5	4.5	3.7	0.200
M32	%	6	7	6.15	0.850	6	7	8.69	-1.690
M33	%	.0018	.0022	.0021	0.250	.0018	.0022	.0018	1.000
M41	min/ cust.	80	100	82.88	0.856	80	100	88.33	0.584
M51	%	1	3	0	-0.500	1	3	1.8	0.400
M52	%	1	3	0	-0.500	1	3	2	0.500
M61	min/ cust.	400	430	415.8	0.473	400	430	380.76	1.641
M62		6	7	5.48	1.525	6	7	6.87	0.130
M71	%	1	1.5	1.22	0.560	1	1.5	1.62	-0.240
M72	%	1	1.5	1.76	1.520	1	1.5	1.57	1.140
M81		0	3	7	-1.333	0	3	0	1.000
M82	ton	2	2.2	2.05	0.750	2	2.2	2.07	0.650
M83	%	0	1	1.24	-0.240	0	1	0.5	0.500
M91	%	8	10	7	-0.500	8	10	9	0.500

Table 2 Relative achieved values of measures in Elektrokrajina for 2008 and 2009 (continued)

Code	Measure unit	L_i	U_i	(m_i)	(m_{ri})	L_i	U_i	(m_i)	(m_{ri})
			2008				2009		
M92	BAM	750	850	788	0.380	750	850	893	1.430
M93	scale 1-5	3.8	4.5	3.1	-1.000	3.8	4.5	3.2	-0.857
M94	%	4.5	5	4.98	0.036	4.5	5	4.86	0.280
M101	%	70	77	73.4	0.486	70	77	75.4	0.771
M102	%	25	30	25.53	0.106	25	30	27.15	0.430
M111	%	0.7	1.5	0.5	-0.250	0.7	1.5	1	0.375
M112	scale 1-7	4	5	3.1	-0.900	4	5	3.3	-0.700
M113	1000 BAM	60	70	75	1.500	60	70	70	1.000
* Shaded cells in columns L_i and U_i show favourable limits for certain measures					** For measures that are monitored quarterly or monthly, "Achieved value" column contains average yearly values that will be used in achieved strategy calculation				

Table 3 gives a comparative review of the calculated values of dependent elements of the strategic map (critical success factors, strategic goals, and business system strategy) for 2008 and 2009 in accordance with formulas (1), (4), and (5) of the defined methodology.

Table 3 Comparative review of achieved values of dependent variables of Elektrokrajina in 2008 and 2009

Element of strategic map		Realization	
Code	Name	2008	2009
CRITICAL SUCCESS FACTORS		m_{CSFj}	
CSF1	Steady growth of profit	0.535	0.559
CSF2	Increase of receivables collection	0.433	1.268
CSF3	Customer satisfaction	0.406	0.515
CSF4	Improving the structure of electricity interruptions	0.439	0.536
CSF5	Efficient reading of measuring points	-0.550	0.151
CSF6	Continuous delivery of electricity	0.794	0.712
CSF7	Efficiency of the process of selling and billing	1.065	1.196
CSF8	Reduction in emergencies	-0.200	0.525
CSF9	Employee motivation	-0.460	0.040
CSF10	Development of 20KV network	0.187	0.556
CSF11	Development of technologies and organiz. changes	0.028	0.388
STRATEGIC GOALS		m_{SGj}	
SG1	Security of electricity supply	0.368	0.612
SG2	Reduction in the total electricity losses in distribution	-0.139	0.299
SG3	Development, construction, and modernization of electricity distribution	0.098	0.515
STRATEGY		m_S	
S	Strategy of Elektrokrajina	0.174	0.510

Elektrokrajina significantly improved the realization of the set strategy in 2009 (by 35.1%) compared to 2008. Improvement is evident in almost all elements of the strategic map, except in the electricity distribution continuity that remained at the same level (even though significant improvement was made in the structure of electricity supply interruptions). Significant improvements were made in the implementation of the three strategic goals, especially the development, building and modernization of electricity distribution system. In the future, the enterprise should work more on decreasing the total electricity losses in distribution

(this strategic goal reached only 29.9% of what was planned in 2009) and on increasing the employees' motivation (CSF "Employees' motivation" reached only 4% in 2009).

6. Conclusion and future research proposals

Modern business conditions include increasingly demanding requirements of stakeholders regarding the socially responsible business adjusted to the goals of sustainable development that emphasize environmental protection and sound management of ecosystem resources. First of all, this refers to fuels that are the basis of further development of economy and society as a whole. An organization can fulfil the listed requirements only with efficient management and a timely definition of a good strategy and its successful implementation. Successful implementation of the particular system strategy is possible only by dividing it into its subsystems through the system of critical success factors, measures and goal values, whose level of implementation is monitored in defined time intervals. The methodology presented in the paper enables more realistic business planning as well as more realistic evaluation of business effectiveness, as it has been shown by the case of a real enterprise that operates in the framework of an energy system. At the same time, one has to bear in mind that every established system is unique and it is the result of a vision and mission of a concrete organization, which means that it cannot be copied from one organization to another. Further research should aim at the implementation of the given methodology at the levels of all subsystems of a selected energy system or some other system and the evaluation of strategy implementation at the level of the system as a whole.

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