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PERFORMANCE ASSESSMENT IN BUSINESS OF AGRICULTURAL COMPANIES USING BALANCED SCORECARD MODEL

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ABSTRACT. The performance management is a strategic and integrated approach for long-time success of the activity of agricultural companies, by improving the performance of organization, teams and individuals. In search of success, the performance management uses a variety of models, techniques and methods, some taken from other systems and improved and others of focusing on strategy and its own, differentiating features that provide a strong competitive advantage. The Balanced Scorecard (BSC) model identifies several dimensions of the organization, representing areas where organizations need to achieve results at department, team or individual level. According to the type of the agricultural company, there can be esential financial aspect. customers. processes, knowledge and learning, service quality, market share etc. The company

under study, S.C. Agrocomplex Lunca Paşcani S.A., is representative in terms of ownership, farm and profile of the agricultural production in Moldavia region. According to the methodology developed, starting from the strategy of S.C. Agrocomplex Lunca Pascani S.A. we identified the strategic objectives for each situation and the level of reaching the objectives using several indicators. In the second stage of the BSC analysis, the indicators are defined according to the management priorities of S.C. Agrocomplex Lunca Paşcani S.A. in four categories, corresponding to the four dimensions of the classical model: customer perspective, perspective of processes within the company, employee perspective and financial perspective.

Key words: Agricultural company; Performance management; Balanced Scorecard (BSC) model.

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REZUMAT. Estimarea performanței în afaceri a societătilor agricole utilizând modelul Balanced Scorecard. Managementul performantei reprezintă o abordare strategică și integrată a asigurării de durată succesului în activitatea societăților agricole, prin îmbunătățirea performanței organizației, echipelor si indivizilor. În căutarea succesului, managementul performantei utilizează o diversitate de modele, tehnici si metode, unele preluate de la alte sisteme si perfecționate și altele proprii, cu accent pe strategie și pe elemente de diferențiere puternice care să ofere un avantai fată de concurentă. Modelul Balanced Scorecard (BSC) identifică mai multe dimeniuni ale organizatiei, reprezentând zone în care organizațiile trebuie să obțină rezultate la departamentelor, echipelor indivizilor. În funcție de tipul societății agricole, dimensiunile esentiale pot fi: aspectul financiar, clientii, procesele interne, cunoștințele și învățarea, calitatea serviciului, cota de piată etc. Asociatia luată în studiu, S.C. Agrocomplex Lunca Paşcani S.A., este reprezentativă în ceea ce priveste forma de proprietate, de exploatație și de profil a productiei agricole în zona Moldovei. Conform metodologiei elaborate, pornind de la strategia S.C. Agrocomplex Lunca Paşcani S.A., sunt identificate obiective strategice pentru fiecare situație în parte, iar gradul atingerii obiectivelor este măsurat cu ajutorul unor indicatori aleși. În a doua etapă a analizei Balanced Scorecard, indicatorii sunt delimitați în funcție de prioritățile conducerii S.C. Agrocomplex Lunca Pașcani S.A. în patru categorii, corespunzătoare celor patru dimensiuni ale modelului clasic: perspectiva clientilor, perspectiva proceselor din întreprindere, perspectiva angajatului si perspectiva financiară

Cuvinte cheie: societăți agricole; managementul performanței, modelul Balanced Scorecard (BSC).

Short overview on the performance management in agricultural companies

The performance management is a new concept in the domain of management ofagricultural companies, even if most of its major elements hase been present, known and practiced for a long time (Denton. 2005). Modern agricultural society has as a characteristic the emphasis of of in the role manager the management process. Some economists consider management the fourth factor of production, after land, capital. labour and The management oriented the farmers towards the use of inputs based on economic criteria, encouraging them not to exceed the consumption of inputs which do not ensure maximum profits.

High performance can not be only the product of intuition, due to the more complex character of the agricultural activity, but more to their qualification and verification in time. The economic efficiency resulting from the activity of the individual manager or management team is the criterion of value which is at the basis certificate in ofits top jobs. Performance management should be understood as an ongoing process, reflecting the normal management practices, not "special techniques" imposed on the managers agricultural companies. The performance management is strategic and integrated approach for ensuring long-lasting success in the activity of agricultural companies, by

improving the performance of organization, teams and individuals (Berrocal and Perez-Diaz, 2011).

The strategic character arising from concern for broader issues the organization has to deal with in order to operate efficiently and effectively in the external environment and also taking into account the direction it wants to take in order to meet the medium and long term Moreover, objectives. the establishment of any program of strategic management has as starting point the mission, vision, objectives and strategies of the organization, defined in the strategic planning phases. From them there are further developed the processes ofperformance evaluation and measurement.

search of success, the In performance management uses variety of models, techniques and methods, some taken from other systems and improved and others of their own focusing on strategy and strong differentiating features that offer an advantage in comparison with the competition (Kaplan, 2005). A major concern of managers and specialists ofthe agricultural companies was to obtain clarity at the organizational level and alignment to a strategic direction, in order to see their business visions put to practice. This can be achieved by using a business excellence model called the Balanced Scorecard (BSC). model was introduced in the science of modern management (Kaplan and Norton, 1996) as "a concept created for measuring the activities of an organization according to its vision and strategies".

Some authors prefer to use both variants at the same time: "formal technique of management and formal system of management" (Hasan and Tibbits, 2000), increasing the already existing confusion. Other researchers consider BSC to be a management philosophy as well as a performance management system (Hanson and Towle, 2000). Although it is quite common for the management terms to have different definitions. literature on the BSC goes one step forward. The concept is not only defined differently, but it is presented and perceived in different ways.

Translated into Romanian as the BSC, this concept offers the managers comprehensive image performance of a business. According to Denton (2005), De Wall (2003) and (2008) Bourne the BSC introduced in early 1990 as a new management concept, being immediately adopted both academia and in business. The value of this new concept has been recognized since then by awards such as that for the best theoretical model American Accounting from Association (Norreklit, 2003), while Harvard Business Review considered the concept of BSC as one of the most influential ideas for performance analysis in business of a company. De Wall (2003) appreciated the concept of BSC as the most successful in the domain of performance management.

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The BSC model identifies several dimensions of the organization, representing the areas where organizations need to achieve results, at department, team or individual level. Depending on the type of the agricultural society. essential can be the following: financial aspect, customers, internal processes, knowledge and learning, service quality, market share etc. Kaplan and Norton (1996) stop at four essential dimensions, giving four perspectives from which the business organization must be examined. This directly implies the obligation of managers to find answers to some key-questions:

- The financial aspect: its financial health. How do shareholders see the company? What does the company represent for shareholders?
- Customers: (external) customer satisfaction. How do customers see the company? What does it mean to our customers?
- Internal processes: process control. How can we control the primary business processes to create value for customers? What processes must we excel in to satisfy the customers continuously?
- Knowledge and learning: skills and attitudes of the employees and the organization's ability to learn. How can the company remain successful in the future? How must we learn and communicate in order to improve ourselves and thus achieve our vision?

As tool the BSC is considered, a comprehensive management tool (Ahn, 2001), a strategic management

tool (Hueng, 2000) or a strategic management mechanism (Pforsich, 2005). Some authors admitted from the very beginning that the BSC is more than just a simple technique of performance measurement and labelled the concept as a management system (Butler et al., 1997).

Strategic management of farms

Through its and nature peculiarities any farm, regardless of its size, unfolds its activity in an environment whose complexity is specific only to agriculture. The productive character of the farm production makes it interrelate economically. technologically. socially, legally etc. with different companies.

In this context. the farm open system that represents an interacts with the environment directly and generally. environment includes direct customers, suppliers, competitors and government agencies, professional organizations The general etc. environment circumscribes environment. macroeconomic environment. technological social. political and international environment. Also, the environment has an impact on the farm through the influence of numerous factors: natural (including biological), technological, economic etc., in a favouring or disfavouring way for the agricultural production. All these elements with greater or lesser risk, call for a strategy ensure balance. to sustainability and a certain level of

economic performance in the long run.

The strategy involves its all major long-term objectives, the main ways of achieving the necessary resources and the steps to achieve them (Gruia, 2011). The content of the main components of the definition of strategy refers to:

- a) The major objectives of the farm represent some economic, technological, organizational or social long-term goals. The period of these objectives is usually of 3 to 5 years, and for a number of branches, such as viticulture, fruit trees, some branches of animal husbandry, the deadlines may be much higher. An important strategic objective is, for example, streamlining production.
- b) The means to achieve strategic objectives have in view the methods and tools used. These will be chosen according to the economic status of an enterprise (farm), and the favourable or unfavourable effect of the factors of production, managerial competence etc.
- c) The necessary resources refer both to their nature (financial, material, human) and the size and opportunities of insurance (own or borrowed). Generally, the limited character of these resources, in agriculture, requires careful and correct evaluation, given the inflation rate, interest on loans etc.
- d) **Deadlines** for achieving the objectives have in view: the date of starting the strategy implementation; intermediate deadlines that mark significant progress in outlining the

strategic objectives, final deadline for implementation of the strategy.

The strategies are developed and all levels pursued at of farm management. The aim of the strategy is to determine *how* the results will be achieved, the targets set by taking into account the internal and external factors. The strategy has a strong entrepreneurial character, i.e. managers always have to choose between different ways of carrying out the activities, to maintain an active and competitive atmosphere if a change appears in relations with the external environment (Buria Buria, 2010).

In agriculture, some of the most important strategic options that are available for managers are: profiling; specialization, farm size, cooperation, diversification agricultural ofproduction. computerization agricultural activities: integration. Although for most farms (companies, in particular), the newest trend is the specialization ofproduction, connected to the latest and most complex developments of the market economy; quite often there appear, opportunities for diversification of production. diversification of the agricultural production is to expand the range of products produced, as a main way of superior valorisation of natural. economic, technological and human resources available, at a time, in an agricultural farm (Brezuleanu, 2009).

The diversification of the production can be effective, especially in large farms, with a considerable

economic and human potential manifested in a number of branches of production, which meet the most favorable marketing conditions. The diversification of the production, as a strategic policy is a main way of acchieving the objective of creating more products, determined by the social division of labour. Through the diversification of the agricultural production it is ensured the highest level of the economic, technical and human potential in farms, where this potential is already very strong.

strategic option, As a computerization of the farms involves the design of the changes necessary in their activities in order to enable a significant increase in operation and effectiveness, based on widespread electronic of computing equipment. The high costs involved are offset by the greater advantages: increasing computerization level and the rate of decision reaction and action of staff, with direct effects in terms of economic results.

complex Highly economic process, the farm integration consists in gathering under one organizational authority the whole chain of the organisation that carries out an agricultural product. The integration process is initiated and conducted, usually by a trader who is called integrating pole and the structures of production or service that take part in the integration are called integrated structures.

Case study: Balanced Scorecard (BSC) model in a Romanian agricultural company

The farm under study S.C. Agrocomplex Lunca Paşcani S.A is representative in terms of ownership, farm and agricultural production profile in Moldavia region.

S.C. Agrocomplex Lunca Pascani S.A is headquartered in Pascani town, Iasi County, Romania, and has as activity the vegetal agricultural production, namely cereal industrial crops cultivation. selling agricultural products production. delivery service agriculture and livestock production. Currently the company uses 3246 hectares, land for which there are long-term lease contracts and concessions, of which 3061 ha is arable land and the remaining 185 ha is cultivated pasture. The company also deals with dairy cattle whose effective range at around 545 heads and sheep milk with about 779 heads. In the service sector, the company has a modernized bakery according to the EU norms which was opened on 15.04.2005, and which produces 13,000 loaves of bread daily.

According to the methodology developed (Brezuleanu et al., 2011), based on the strategy of S.C. Agrocomplex Lunca Paşcani S.A we identified the strategic objectives for each situation and the level of reaching the objectives using several indicators. In order to ensure the accuracy of the information on the achievements of the vital domains of activity of S.C. Agrocomplex Lunca

Pascani S.A there are defined both the monetary indicators and nonmonetary ones, for example relating to customer satisfaction, functionality of internal processes or innovations. From this perspective, the BSC is a management approach, with the help of which S.C. Agrocomplex Lunca Pascani S.A. can be run, after defining some monitoring strategic, flexible and efficacy indicators. The objective of BSC is to provide a picture of the development of the company and of the main areas of responsibility to the leadership of S.C. Agrocomplex Lunca Pascani S.A and to the employees. The determined indicators are not just one set of unidirectional sizes, but a complex system of mutual dependence. In practice the usefulness of this system of indicators was maximum as far as managers of the company turned their attention on 25 most indicators. The indicators underlying the BSC model can be separated at first in early indicators and late indicators. Early indicators are used at the beginning or at an early stage of process. They measure those processes, which. today. must establish with certainty the profit or cash flow that the company will have over 5 years. The early indicator signals to what extent there have been investigated the desires and expectations of the customer and also how much known were his ways to achieve the product or services before signing the contract The indicators are calculated at the end of a process and indicate a retrospective

approach to the extent that the process was more or less well managed. Examples of such indicators are: turnover, "the cash flow", profit, production cycle, return on investment, staff satisfaction.

In the second stage of analysis, the BSC indicators are divided according to the management priorities of S.C. Agrocomplex Lunca Paşcani S.A. into four categories corresponding to the four dimensions of the classical model: customer perspective, perspective of business processes, employee perspective and financial perspective.

The four perspectives of the classical model of the BSC applied to the S.C. Agrocomplex Lunca Paşcani S.A. are presented below.

Customer perspective. What expectations can customers create if the strategy is implemented successfully?

At the centre of customers' perspective of S.C. Agrocomplex Lunca Paşcani S.A. is fulfilling the and expectations of the customers. Among the major factors influencing the future success of S.C. Agrocomplex Lunca Pascani S.A. there are customer satisfaction, their loyalty and winning new customers. Even the indicators taken into account customers' perspective connected by cause-effect relations. In case of size of image and reputation an important role is played immaterial factors as the name of the agricultural company. These factors are particularly important for the company's attractiveness in the eyes of customers. The third category of relationship with customers the includes delivering, reaction and delivery time as well as the quality to found auickly and easily. be Indicators for the customers' should reflect perspective the customer's point of view on S.C. Agrocomplex Lunca Pascani S.A. Indicators listed above may supplemented various by indicators: new customers assigned to interest groups, the percentage of deliveries at term, total amount, the waiting time at signing the contract, frequency of mentions of the name S.C. Agrocomplex Lunca Pascani S.A. in press, radio and television, the number of articles in the press, the number of visitors to specialized fairs, the number of sponsorships.

Perspective of processes. In this regard, the question is formulated as follows: What processes should be improved to satisfy customers? The production processes in Agrocomplex Lunca Pascani S.A. are deemed to commence with technological works for field crops and forage plants, works in a dairy farm, and ends when obtaining an order and delivery of various types of crops and livestock for the business customers submitting to the by provisions of the The strategy. production is mechanized and performed on the compact surfaces. using high power tractors together with all the range of agricultural machinery for field crops and forage base. In the spirit of environmental law there are preoccupations for biological and integrated disease and pest combat, doing away with pesticides, fungicides and insecticides with high toxicity, achieving products capable to protect people health. The design of a Scorecard requires the identification of the critical processes that constantly influence customer satisfaction and financial goals of S.C. Agrocomplex Lunca Pascani S.A. The appropriate indicators of this dimension may be: production cycle, production costs, raw material costs, number of hierarchical levels for every 100 employees. extent external periodic report of the company.

Perspective of employees. The appropriate indicators of employees provide a perspective on the skills and potential of the employees and on the use of information technology. They generally have long-term significance and because of this, they are very important.

Example of late indicators corresponding to the employee perspectives employee are: satisfaction. employee loyalty, employee productivity; and of the early indicators there are: training employees, suggestions of improvement from the of part employees, setting and reaching goals employees' help, effective with teamwork informal infrastructure (information and communication flows). Other indicators that can be considered for this dimension are: percentage of employees who are also shareholders, increasing turnover per

employee, income tax, tax increase, the degree of solving the complaints, the number of proposals for improvement.

Financial perspective. What financial result can be presented to shareholders while the strategy is implemented successfully? financial perspective is the most important perspective of BSC. A feature of the BSC approach is to consider both current data and the future ones, in order to identify the problems early. It describes the longterm objectives of S.C. Agrocomplex Lunca Pascani S.A. in terms of profitability. increase revenue increase productivity, reduce costs and so on. The objectives of the other perspectives found are to he eventually in the financial perspective. The indicators corresponding financial to the perspective are a measure for the success of the company. For the BSC, only those indicators that provide significance strategic should chosen. The financial indicators refer specifically to: liquidity, profitability and stability but may be supplemented by income, return on equity, return on turnover. cash flow, growth turnover, percentage of new products in turnover. Financial analysis shows how to achieve financial balance on short and long term as objective of the analysis based on the balance sheet (Tables 1 and 2).

Table 1 - Indicators of profit and loss account

Indicators	2010	2011	2012	2013
Turnover, lei	9941879	11128177	14170243	12313571
Total revenues, lei	10446189	13686206	15226548	14853470
Total expenses, lei	10222353	13565330	14996905	14584493
Gross profit	223836	120876	259643	268977
Net profit	182541	93158	248928	250503
Number of employees	125	113	113	110

Table 2 - Indicators of profitability

Indicators	2010	2011	2012	2013
Gross profit margin (%)	2.19	0.89	1.73	1.84
Net profit margin (%)	1.78	0.68	1.65	1.71
Labour productivity lei/employee	83569.5	121116.9	132715.9	132586.3

So, in 2013, the agricultural company had a positive financial evolution in comparison with the previous years. The financial management of the agricultural society tends to maintain a financial

balance and good liquidity. This positively influences the activity of production and investment programme. The technical equipment made in recent years is one of the key elements of the results. The high

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degree of equipment with technical means, is a strength to the agricultural company under study in comparison with the competition. From a technical standpoint, the agricultural company is effective because the equipment positively affect the costs, marketing activity and activity of achieving the mechanical works on time and of high quality.

Although the BSC approach offers to managers S.C. Agrocomplex Lunca Paşcani S.A. information from four different perspectives, at the same time it minimizes the workload of information, limiting the number of performance measures used. It forces managers to focus on a set of measures that prove to be ethical.

Table 3 - Perspectives of Balanced Scorecard (BSC) model for S.C. Agrocomplex Lunca Paşcani S.A.

Customer perspective	INDICATORS		
C1 Development of mass of customers	% of new customers		
C2 Customer loyalty	Turnover from new customers		
C3 Development of the image of the	Customers lost		
agricultural company	Increase of turnover by customer loyalty		
Processes perspective	ha cultivated with cereals, fodder		
P1 Development of strategic segments	Market share		
P2 Development of innovative processes	Number of new varieties of bread put on		
P3 Quality	the market		
P4 Observance of European environmental	Turnover related to products		
laws	Litigations		
	Complaints		
Employees perspective	Increase of labour productivity per		
A1 Development of competences	employee		
A2 Stability in the company	Knowledge of legislation in the sales		
A3 Employee satisfaction	department		
	Degree of resolution of complaints		
	Number of proposals for improvement		
Financial perspective	Increase turnover		
F1 Increase of the activities of the agricultural	Variation of operating profit		
company	Variation of financial expenses		
F2 Increase rate in operating profit	Resources / turnover of their own means		
F3 Compliance rates of return on adequate	Indirect costs / net turnover		
capital			
F4 Decrease of financial costs			
F5 Improve operational performance			
F6 Reducing indirect expenditure			

Analysing *Table 3* we can see that the BSC model brings together in one report, many seemingly disparate elements of a plan for a competitive market for S.C. Agrocomplex S.A.:

customer focus, reducing response time, promoting teamwork, reducing the launching time for new products, management for long-term development etc. By forcing the top

managers to consider simultaneously all the important operational measures, the model allows them to see whether the improvements in one area happened somehow at the expense of other areas, protecting against sub-optimization.

CONCLUSIONS

Acquiring high performance management capabilities in agriculture requires professional training and periodic renewal of knowledge within an organized framework, as the most competent entrepreneurs the highest have chances to gain profit.

The technical and economic training under conditions of agriculture requires complex management capabilities, allowing entrepreneurs to use management tools and techniques specific to them, to organize and develop a sense of fairness, to know how to talk to farmers.

of The vocation modern management is performance. Performance in management is the sum of leading performances and in the system of the leaders of farms. Management products are economic efficiency of farm system, expressed by its ability to cope with change, way of the organization and materialization of relations between all components, the selection of favourable actions, the mobilization of the entire management team, the ability to adapt to restrictive and

regulatory system created by legislation.

Some of the major benefits that the successful with implementation of a strategic system of management based on the Balanced Scorecard (BSC) to Agrocomplex Lunca Pascani S.A. are the following: improves management by reducing costs and increasing productivity, alignment of operational activities to the strategic plan, the visibility provided by this model supports taking better decisions faster for budget and control of processes of the company under study. This model offers recognition of both individual and team merits by facilitating the link between learning, performance and reward. Once the strategic planning process based on the BSC is completed, it must be constantly revised and updated to relevance of the strategy in relation to any changes in internal or external environment

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