



EFFECTS OF USING OPERATIONAL BALANCED SCORECARD IN AUTOMOTIVE INDUSTRY. A CASE STUDY

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Abstract

Strategy definition is an elementary key of success and should be present in any industry, but an extra attention is paid to the automotive field. Thus, strategy definition and cascade in the organization is needed to drive the organization in the right direction, in the desired direction and ensuring the commitment, involvement of the employees.

This paperwork presents a case study from automotive industry, of applying Operational Balanced Scorecard methodology, under Company Strategy Deployment unique and personalized approach to company needs. A systemic outlook and an appropriate involvement support the company's continuous improvement efforts.

The introduction presents general information on the Total Performance Scorecard and its ad-vantages. Going forward, the Company Strategy Deployment approach of the mentioned tools are described, showing in parallel the evolution of the implementation in an automotive respectable company. The paper ends up with the formulation of conclusions regarding the deduced effects.

Key words: scorecard, policy deployment, company strategy, mission, vision

1. Introduction

Many times, we encounter within existing organizations a mismatch between individual objectives and company objectives, requiring a synchronization through a managerial method that harmonizes and transposes the objectives from the macro level (mission, vision) of the company, to the objective level of each individual/employee [1].

The Total Performance Scorecard is a practical and theoretical tool that provides the organization and the individual a method that offers the possibility of

obtaining performance at the company and individual level.

The most important assets within a company are "people". We recognize that the tacit dimensions of knowledge possessed by an individual are as important to the achievement of the company's objectives as the explicit, codified forms of knowledge that have been accumulated over time [2] [3]. Leaders have the ability to inspire the teams they lead [4]. It is unlikely that an employee's identity will be long-term linked to an organization; that's why managers must create loyalty and involvement not through condescension, e.g. "the

organization will take care of him", but by offering an interesting and challenging workplace [5]. Creativity cannot be led or controlled, but it can certainly be led or killed. Even the financial gain of each employee is not a strong enough reason. Research shows that people are much more motivated if they have a combination of intrinsic factors (for a personal reason) and extrinsic factors (obtaining recognition and financial security) [6]. The barrier of time stands in the way of creativity and learning. Information can be delivered at high speeds and employees are put in a "swim or drown" situation, while Know-How requires time to be developed. Recent research in many organizations has shown that time pressure inhibits creativity [7] [8].

Global development requires an adapted, pleasant and ethical way of working in organizations. Organizations must be defined by vision, learning and a balanced relationship between the goals of the company and the employees [9].

Existing research which develops and applies a customized version of balanced scorecard based on a new set of performance measures in airlines [10]. Data on eleven performance enablers for a case study of 100 world major airlines during 2009 to 2013 is considered in the study to develop performance measurement framework of Airlines based on balanced scorecard [11].

Measuring performance has increasingly become a focus in hospitality industry. One of the most important approaches to measure performance is the balanced scorecard, which summarizes a critical set of indicators that measures and evaluate the performance of the organization [12] [13].

The Balanced Score Card (BSC) is one of the most popular public service reform initiatives in Ethiopia (Ethiopian Railways Corporation) that tries to translate a company's strategic direction and objectives into actionable initiatives and measurements [14] [15].

The development of high integration and maximum coherence between the key intangible assets and the overall organizational activity, subordinated to the stated and necessary strategies would create conditions for continuous improvement of the organizations and more stable social development [16] [17].

The Balanced Scorecard (BSC) has over the last two and a half decades received much attention as a management model for both private and public sector organizations. However, the BSC concept's use and application in local governments and municipalities remains relatively understudied [18]. This is particularly the case for the Norwegian context [19] [20]. Every organization has a vision which describes what the organization wants to accomplish in the world [21] [22]. The organization can work out a strategy on how to get there and the whole organization can be focused on this [23].

2. Material and Methods

Such approach was applied in an automotive corporation, which choose to no disclose its name. The case study is based on real data. In the following sentences the detailed process will be described.

Within large companies present in several countries, regardless of the industry in which they operate, the existence of the company's Mission and Vision is a basic element in defining the strategy at the global and individual levels for each factory. Also, every year the headquarters defines targets for the performance indicators of the main processes. The challenge comes to each location of the factories related to the breakdown of targets, at the level of departments, processes, teams, sub-teams and individuals. So that each individual and group of individuals, through the daily activity of each, collaborate to achieve the general goals defined at the factory level.

In the case of the company in the case study, the strategy is defined for a period of 3 years and periodically reviewed several times a year. For the definition of the strategy, several elements identified in the definition of the context of the organization were taken into account.

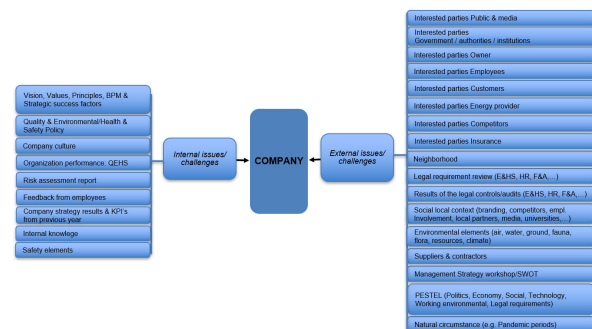


Fig. 1: Organizational context

The organizational context was defined as:

Internal challenges: Vision, Values, Principles, Strategic success factors, Quality & Environmental/Health & Safety Policy, Company culture, Organization performance: QEHS, Risk assessment report, Feedback from employees, Strategy results & KPI's from previous year, Internal knowledge and Safety elements.

External challenges: Interested parties Public & media, Interested parties, Government / authorities / institution, Interested parties Owner, Interested parties Employees, Interested parties Customers, Interested parties Energy provider, Interested parties Competitors, Interested parties Insurance, Neighborhood, Legal requirement review (E&HS, HR, F&A, ...), Results of the legal controls/audits (E&HS, HR, F&A, ...), Social local context (branding, competitors, employees involvement, local partners, media, universities, ...), Environmental elements (air, water, ground, fauna, flora, resources, climate), Suppliers & contractors, Management Strategy workshop/SWOT, F&S&T, Ethics, Economy, Social, Technology, Working environmental, Legal requirements, Natural circumstances (e.g. Pandemic periods).

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The elements from the context of the organization are the input elements in defining the company's strategy.

To ensure that each department defines the strategy correlated with the company's Vision and Mission, each manager organized a workshop together with the team members with the aim of defining the department's Mission and Vision in correlation with the company's Mission/Vision and then defining the department's strategy, strategy that leads the whole team to achieve the vision. The strategy of each department is structured in 4 categories, namely:

1. Customers (external dimension)
2. Customers (internal dimension)
3. Internal processes
4. Knowledge & Learning

In the first category "Customers (external dimension), the team of each department answers the question "What expectations do the Customers/Headquarters have from the company?" thus identifying what their expectations are, identifying what needs to be done in the next 3 years at this stage.

The questions that must be answered in the second category are: "What expectations does the company have from the department?" What results must the department deliver?", "What expectations do the other departments have in relation to our department? What needs to be done to increase the efficiency of working in a team, between departments?"

In the 3rd Internal Processes tab, the helpful question is "What development needs does the team have?" What does he need in order for teamwork to improve?"

In the last category "Knowledge & Learning", the team must answer the following question "What motivates each member of the team?"

By applying these helpful questions, each team/department has the opportunity to identify the elements, the basic activities that must be undertaken in order to move towards the department's Vision/Minion, implicitly the achievement of the company's Mission/Vision.

The elements identified in each category are distributed over a time interval of 3 years, depending on the priorities, depending on the needs, the lacks of the respective department. To achieve this, for each element identified, it is necessary to define one or more improvement projects and identify, select performance indicators for each element, so progress can be

measured and evaluated through periodic reviews.

This process is applied by each department within the company, e.g., Production, Technology, Quality, Logistics, Financial, Human Resources. The definition process is completed by organizing a meeting, workshop with the entire Top Management team. In which each department manager presents the defined strategy and receives feedback from the other department managers, thus achieving harmonization and calibration between departments, thus obtaining the company's strategy homogenized within the departments and presenting the path to achieving the company's Vision and Mission.

For example, applying this unique and personalized method of defining the "Company Strategy Deployment" strategy, a number of 63 improvement projects were defined within the studied company, within the interval 2020 - 2022 (3 years), depending of priorities, their distribution within the years being approximately 50% in the first year, 30% in the second year and the remaining 20% in the 3rd year, following that the strategy is reviewed annually by each team, resuming approximately the same process described before. The distribution of projects with a higher concentration in the first years is natural because the visibility towards the future has greater clarity in the nearer year and the longer period has a higher uncertainty.

Company Name						
Company Strategy Deployment						
Stare	CARTEA	Misiune: Alinașii sunt cei mai buni de calitate și oferă pe competiție și responsabilitate socială				
Planșă	Selecție	Căpătând calitate și performanță în fiecare și producție și servicii				
Titlu	2020-2022	Misiune: Serviciu este cel mai bun în procesul de gestionare a afacerii				
Revizii	0	© 2020-2022				
Categorie	Descriere	2020	2021	2022	Progres de implementare (%)	KPI/Indicatori
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	90%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	80%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	70%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	60%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	50%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	40%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	30%	Calitatea produselor și serviciilor
Operativitate	De a realiza un nivel ridicat de calitate și performanță în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	Industria este lideră în producție și servicii de calitate în fiecare și producție și servicii	20%	Calitatea produselor și serviciilor

Fig. 2: Example of one page company strategy deployment

The progress of the defined strategy, implicitly of the improvement projects, is monitored at the Top Management level every 3 months, by organizing certain meetings, reporting sessions, presentations.

At the end of each year, a presentation session of the successfully implemented projects is organized, also these projects are evaluated by the participants of the meeting based on evaluation sheets, obtaining a score at the end, thus being able to nominate and award the better projects developed and implemented successfully.

At the beginning of each year, the strategy is reviewed, in order to evaluate the degree of progress through the implementation of improvement projects and to define new improvement projects for the following years, in addition to projects already defined

in previous years.

At the beginning of each year, a presentation session is organized for all employees, where the Mission and Vision of the company are presented and described, as well as the results of the previous year, the successfully implemented improvement projects and the new revision of the company's strategy, implicitly also the new objectives for the year fiscal. A more simplified version was also presented to the entire Production staff. In this way, knowledge of the Mission, Vision and strategy is ensured throughout the company, implicitly also the improvement activities that take place in each department.

3. Results

In the chart below, the yearly savings evolution is presented, on 2017 it was the first year when the methodology was applied and the strategy with improvement projects were defined, monitored and implemented. The values are calculated and validated by Controlling department.

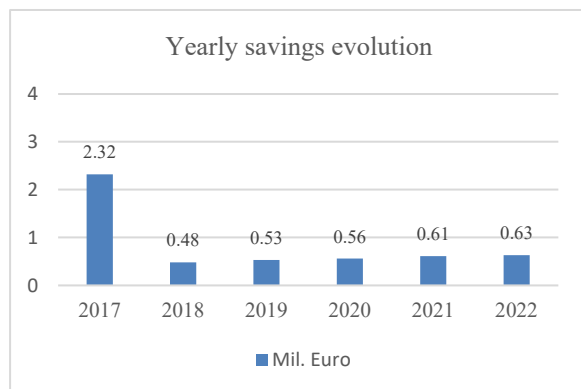


Fig. 3: Yearly savings evolution

Through the application of OBSC, a higher degree of initiatives and involvement from the employees was identified, due to the fact that the purpose of the activities carried out was clearer for everyone, also the knowledge of the future outlook boosted the staff. If the information related to the results and strategies were not known among the employees, at the initiation of the study, a higher level of negative rumors, speculations and even conflicts within the organization was found.

Through the application of OBSC, a higher level of transparency was observed vis-à-vis the activities carried out in teams, different departments thus ensuring the transparency of the activities carried out between teams, the motivation of the staff reached higher levels.

4. Discussion

Applying the "OBSC" Operational Balanced Score Card method, e.g., the breakdown of the objectives from the global level from the Mission, Vision and Global Objectives to the location-specific factory level, at the department level and at the

individual level, a transparency was obtained of the direction in which the company is heading, the staff felt and considered that they took part in defining the direction, the strategy.

Company Strategy Deployment is a method developed within the studied company, based on the OBSC concept, namely the top-down stratified breakdown of the organization's objectives. The concept of CSD - Company Strategy Deployment begins with learning and formulating the purpose of the company, the team and the individual. Thus, it benefits from the sustainability of the change and improvement actions that are to be implemented. Improvement and change only come if people change and improve within themselves. Moreover, such an approach stimulates the involvement, learning, creativity and self-knowledge of individuals and teams. It also stimulates learning between team members by creating a presentation framework and recognizing successes.

The annual turnover of the company in 2017 was approximately 80 million euros, meaning that in the first year of application it brought a benefit of almost 3%, proving the potential of this method, obviously it must be supported by other Lean methods within the improvement projects unrolled.

The motivation of each individual, to the greatest extent, is brought by the identification of the similarity between the company's objectives and those of individual personal development, also the fact that the employees were involved in the definition of the strategy, brought a personal element, ensuring the involvement of the staff at a high level.

The results obtained in the first year of application, without additional resources and with the same staff, prove the strength of the staff's motivation, and the need to focus the entire organization on the defined objectives [24].

An observant element during CSD - Company Strategy Deployment applications is the fact that the involvement of all departments in defining and allocating the strategy is essential, the participation of all functions in the efficiency and success of the company brings more motivation to all employees. In general, there is an erroneous approach among companies, namely the active participation in the development of the strategy only by the basic processes such as Production, not the rest of the support or management processes, for example Financial, Human Resources, IT.

Due to the fact that the strategy is presented transparently periodically and the permanent evolution towards achieving the Vision is monitored, it has been observed that a much higher level of involvement, motivation and trust has been obtained from the staff. Always knowing where the company is going and what needs to be done next, a suitable analogy for the company is with a ship sailing in an ocean, and the employees as the sailors. It is always important for the

sailors to know the purpose and target to which the ship is heading, thus ensuring a future perspective.

Within a company, it is not enough that the target and the direction are known, it is important that the target is correct and aligned with the Vision/Mission and direction of the parent factory (headquarter).

One of the elements that differentiates this study from others is the fact that the definition of the strategy is carried out Down-Top, and the staff work in teams by departments for the definition, then at the end the harmonization and calibration between the departments and the alignment to the Mission/Vision of the company will be carried out.

5. Conclusions

In the case study, it was observed that the definition of the Mission and Vision in each department and the definition of the Down-Top strategy bring an additional element to the degree of staff involvement.

Applying the helpful questions from the four dimensions: customers (external dimension), customers (internal dimension), internal processes, knowledge & learning, offers support for understanding the role and purpose of the department, the team in the organization, implicitly the role of each individual.

Through a transparent communication related to the achieved achievements, established objectives, Mission/Vision and the progress of the strategy, the elements that contribute to uncertainties related to the present and the future are reduced and/or eliminated, thus reducing the frequency of misinformation among employees and a framework with efficient communication is created.

By applying the OBSC methodology, the long-term results of the organization can be influenced, thus ensuring continuity in the development of activities in the business environment. In order to ensure this continuity, the systematic application of the methodology is needed at least once a year.

As described in the introductory chapter and in the case study, it demonstrates that this methodology is applied in a wide range of industries, regardless of the field.

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