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The Creation of the Performance Measurement System - House Model

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Abstract. This paper is focused on the performance measurement. The aim of this paper is the presentation of the new performance measurement model called the 'House' model. The result of the research project was the suggestion of the 'House' model which was formulated after a short evaluation of the satisfaction with the performance measurement systems. The author's view of this measurement system model and its levels is explained in the next part of the paper. Particular parts are focused on the relationship between the performance measurement system and the surrounding from which comes out the components influencing the system, particular performance measurement systems, subsystems of the performance measurement system (processes in the enterprise) and indicators (metrics) that is the entities of the measurement system. The 'House' Model has been developed and is based on the study of the theoretical and practical materials. There were used analytic methods, synthetic methods, comparative and creative thinking methods during the process of the model creation. The result of the paper is the suggestion of the performance measurement system which is aimed to the explanation of basic relationships and stakeholders. The model is very simple so that it can be easily understood and implemented.

Keywords: House model, performance measurement

1. Introduction

The topic is examined in various academic fields. Experts in the field of accounting, economics, human resources, marketing, operation management, psychology and sociology, these all examine independently the ways of the enterprise performance measurement.

A former focus on efficiency in the financial field is based on an external view of the performance, often directly related to the importance of an enterprise share price. Therefore, there was no need to acquire extended knowledge of how a profit was generated, and how managers were satisfied with a limited analytic model provided by financial statements. Now, the situation is different. Most markets in advanced economies are saturated and global competitors govern require thorough knowledge of how a profit and cash flow are obtained (and, more generally, how the performance is "created" no matter how it is defined), and so that they are able to forecast that the events come and to react to them quickly.

2. Aims and Methods

The aim of this paper is the presentation of the new performance measurement model called the "House" model. The model is simple and understandable, so that it can be applicable in terms of small businesses because small businesses often do not have highly professional staff for complex performance monitoring and evaluating. Author systemized current theories, models, approaches, trends and empirical principals of the performance measurement models, so that she could use this knowledge for her own interpretation of the performance measurement model and its verification in chosen enterprises.

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Methods used during individual stages of the research are not clearly determined. All parts used analytic methods, synthetic methods, comparative methods and creative thinking methods, however in different extend. Classification analysis was used for the differentiation between individual definitions and concepts of performance and performance systems. On the level of mutual relations it is possible to disclose more complex dependences between the performance elements and factors influencing the performance and its measurement, primarily functional dependences. The knowledge synthesis is a condition for the formulation of the conclusion. The author clarified functional mechanisms of observed phenomena by integrating of observations in a broader context. The synthesis is not mere sum of individual phenomena but creation of new concepts and new views. The author assessed properties of examined phenomena using comparative methods. New topics were generated primarily as reflections of provoked thinking processes through free association and new thought combination. Apparent similarities observed by the method of similarities comparing were the inspiration for seeking effective features of examined subjects (performance measurement systems).

3. Satisfaction with the Performance Measurement Systems

Denton has presented the result of the IMA (Institute of Management Accountants) research. IMA carried out a research of opinions of its one and half thousand members - what are their experiences with the performance measurement systems (Mikušová, 2005, p. 87). The IMA review showed that 80% of its respondents required making changes in the systems of performance measurement over last three years. The changes varied from radical changes (the rejection of a current system) to growth changes (measurement addition or exclusion). 33% respondents required the total change of the measurement system. 31% from the respondents reported that their current performance measurement system was less than adequate or even insufficient in support for enterprise management objectives and initiatives. Only 15% considered the performance measurement systems to be very good or excellent for a communication strategy. Balanced scorecards were evaluated much better by the users. Key challenges for performance measurement are intangible assets. 60% of respondents in the IMA review state that innovation is a key part of the enterprise mission statement. Still, more than 50% of respondents found the measurement systems to be insufficient or less than adequate in this field. Totally, less than 10% of respondents considered performance indicators for intangible assets to be very good or excellent. A KPMG study of US and European enterprise and government executives has revealed that one of the most frequently reported common disappointments is the lack of the data integrity and the system inability to produce useful information to support decision-making. Furthermore, the study has revealed that the performance measurement systems are not related to the strategic measures of the enterprise depending on delayed or advanced indicators being wrongly integrated with internal and external information, and relying too much on financial indicators (Mikušová, 2010, p. 158).

Despite the enhanced interest of practitioners in the BSC implementation, there is a lack of broad empiric data. A research which was concentrated on the balanced scorecard implementation and the application in the Czech business environment found that more than a half of addressed companies were satisfied with the current system of indicators (Výzkum BSC v českém prostředí, 2007). A reason for satisfaction were: the systems used such as TQM (24% of respondents), management by objectives (MBO) (22%), activity based management (ABM) (15%), customer relationship management (CRM) (15%), shareholder value (10%), and, particularly, ISO (73%). Furthermore, it was revealed that, although enterprises were satisfied with the current system of indicators, some weaknesses could be found there. The most serious is a failure to observe a development and no application of information technologies (80% of enterprises), and a failure to follow enterprise processes (60% of enterprises). The activity of employees is not in compliance with an enterprise strategy almost at one third of satisfied enterprises. A not functional communication, both vertical and horizontal, is the last significant weakness at satisfied enterprises.

4. Research Issues

There are many models, constructions and frameworks for the enterprise performance measurement. Nevertheless, a question appears whether they have any justification, how they may exist and whether they

actually represent a contribution for corporate practice. It can be said that each of them has its role because each of them brings a new view of performance and its measurement. The research team approached the solution of the research which was a proposal and verification of the performance measurement model. The model was later called the 'House' Model.

The development of a particular proposal requires dealing with two principal research issues:

- What are features of the useful performance measurement system of the enterprise?

An answer expects a research of requirements and suppositions in a process of the performance measurement system, the system itself and the research of the specification process of the indicators and its attributes.

- Can we assume that there can be developed standards for performance evaluation which would be applicable for any enterprise?

An answer expects a research of attributes of the available enterprise performance evaluation and their comparison.

5. Levels of Measurement System Model

The performance measurement system 'House' Model is considered in four levels:

System I (business unit) - a relationship between business unit (System I) and the performance measurement system (System II), and surroundings of the System I: Employees, their attitudes – measurement system acceptance or rejection, top management approach to the introduction of measurement system, a technical, technological and moral support to the measurement system introduction, business policy of the enterprise, and so on (included in the System I) as well as a position and influence of competitors, legislation, national policy, a situation in the region, and so on (situated in the surroundings of the System I) are features significantly affecting the entire procedure and the way of the performance measurement.

System II (performance measurement system): A performance measurement system is understood as a unit providing interconnection of indicators in particular measured subsystems of the System I as well as among the subsystems. It enables to measure the performance of the enterprise as a whole. Individual performance measurement in individual subsystems without mutual relationships to the others will not result in a potential analysis and the determination of ways of how to improve the performance of the enterprise (System I) as a whole. On the contrary, it can happen that the efforts aimed at improving the performance in one subsystem can be the damage resulting for another subsystem performance, which can lead to an adverse impact to the performance as the whole in its final consequence.

*Measurement subsystems***:** Subsystems, in which measurement is performed, are processes taking place inside an enterprise (System I). A level of execution of the processes (their performance) determines the performance of the enterprise. Therefore, developing a measurement system, the relationship and interconnection of the processes should be taken into account.

*Indicators***:** The indicators (metrics) are understood as features of a system measurement of enterprise performance, i.e. the System II, while causal and correlation relationships apply: A change in a value of one indicator influences a value of another indicator in another measured system as part of the System I by which the author determines a particular enterprise.

6. A Suggestion of the Model

6.1. Relationship between a stakeholder and the enterprise

The enterprise (business) is not only the instrument for increasing the value of capital or the means of economic values creating. It presupposes a coalition of stakeholders and it works thanks to the balance of their interests. If this balance is disturbed and the interests of some of the stakeholders are not met then there is a danger of coalition disintegration and the enterprise dissolution.

Having studied the mentioned materials and materials not mentioned here because of the lack space, it was decided that *stakeholders* will be an essential component for developing a model. Most models deal with

key stakeholders even though they concentrate on customers and employees only. It was decided to include all key stakeholders in the model because all of them, although at a different rate, influence the performance of the enterprise. All stakeholders feel very strongly about a long-term existence of the enterprise and its good condition, but each of them follows his/her interest. Employees struggle for maximum wages, suppliers for maximum prices, customers require minimum prices and the state wants taxes and etc. With respect to individual stakeholders, it is obvious that the value of the enterprise is different for them. Each of them judges the value of the enterprise according to what he/she has invested in it in comparison with alternative opportunities. Businesses performing in the environment with limited sources and striving to optimize the process of economic values creation necessarily require a sensible choice in allocating the funds with the aim to meet stakeholders' demands. That is why the determination of key stakeholders is the first step in the development of the model of performance measurement system in each enterprise.

Furthermore, theories of shareholders were considered. The conclusion is that, despite a great number of critics, a position of *shareholders* will be preferred, since they bear the biggest risk, while their remuneration is not often adequate. Other groups of stakeholders will be considered: as *employees* (identified with resources), *customers***,** and the last large group summarily called as the *surrounding***.** A *supplier* takes a specific position in this big group. Although other stakeholders in the group of the surrounding are various, their influence cannot be underestimated because also here - at the other groups of the surrounding - features that influence a performance measurement system (System II) appear.

The model is based on the conception of "psychological agreement" from beginning of the 1960s – a stakeholder wants something from the enterprise and offers something to it. It is possible to find, through the model, a way how to mutually satisfy both adverse streams of requirements. The enterprise has to have a clear idea of who the key stakeholders are and what they want. But this is not sufficient. If the stakeholders satisfy their requirements and needs then the enterprise has to get vice versa something from them. It is usually capital from investors, profit from customers, employees' skills, goods from suppliers and others. It is also necessary to define which strategies should be used to satisfy both the stakeholders and each enterprise.

The enterprise has to understand which processes will be required to be able to introduce the strategy and so that their purposefulness and efficiency are ensured. Processes can be implemented only if the enterprise has got the appropriate resources - physical infrastructure, tangible and financial funds, skilful staff, advanced technologies and etc.

Following numerous variants has been chosen for a graphic representation of a model and in order to indicate mutual relationships such a form of a house (these variants, in author´ s opinion, precisely presents an idea of the model): *employees* as a base of the enterprise, *processes* forming creative, efficient component of the particular enterprise, processes which are protected by walls - pillars of the enterprise – presented by *strategies* and *resources* which are being converted in the processes. Results and outputs of the process are intended to stakeholders, from which the most important – shareholder – creates a roof of the house (enterprise). The proposal of an enterprise performance measurement system is presented in the Figure 1.

A position of a *shareholder* on the top of the model is not accidental. He is eminently interested in excellent performance of the enterprise, particularly in output based on a chosen financial indicator. Two groups were considered in the model: an owner, the holder of a part, it is a typical shareholder. The other group consists of other capital providers although they are not real shareholders.

Other stakeholders contribute to the satisfaction of shareholders, it comprises satisfied customers, employees, surrounding, i.e. suppliers, public, government institutions, and so on. Due to their satisfaction, the results required by shareholders are achieved. Moreover, an enterprise expects to receive something from those stakeholders. Processes should take place in the enterprise so that customers, suppliers and governmental institutions are satisfied. Processes fulfill a chosen strategy and require resources of the enterprise. Strategies and resources serve as pillars that are vital for the implementation of processes.

There was placed another stakeholder - *employee* – on the model base. Also his position is not accidental. While shareholders are considered to be an element that covers the model, the employees including their knowledge and skills serve as a base for functioning of that enterprise (Horváthová, 2010). There was not considered only a physical number of employees with some qualification structure but also employees as an

intellectual capital. At this point, overlapping of employees as stakeholders and also employees as one of the enterprise resources occurs. Processes can produce quality outcomes to satisfy both customers and other stakeholders on condition that the employees are satisfied (which requires wages adequate to the work environment, opportunities for self-improvement and the like). Then the enterprise expects from its staff a contribution to its activities (e.g. quality work, new ideas and etc.).

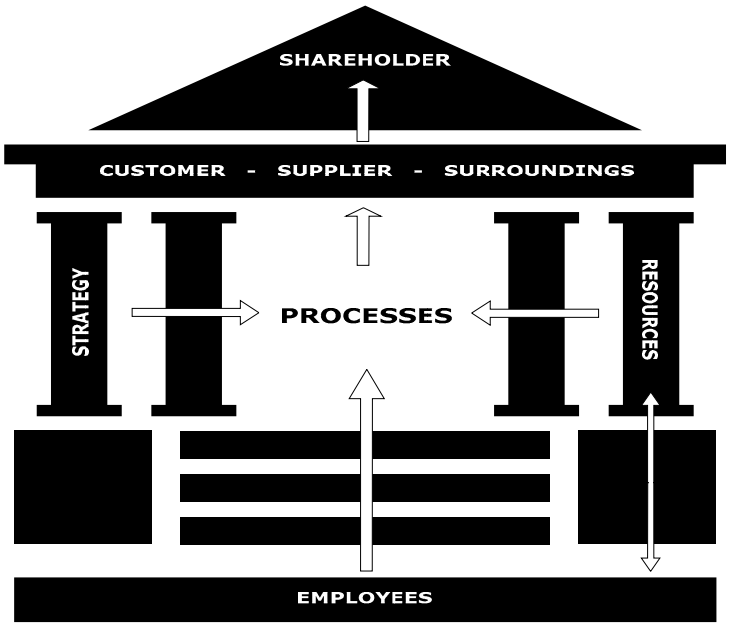

Fig. 1: House Model

Source: Author

7. Conclusion

The appearing competitive environment creates a press to revaluate a nature of enterprise reporting and to execute changes in performance systems measurement. The performance and its monitoring has become not only a tool of competitiveness but also enterprise existence precondition. The presented model of performance measurement is indented mainly (but not exclusively) for a small business. Its advantage is its simplicity because it does *not have to be applied in its whole scope.* Its bonds can be used quite independently for the evaluation of enterprise's performance with the *focus on a chosen stakeholder*. A connection of corporate level indicators with indicators in the concrete subsystems of measurement has to become apparent and the created diagram (which was not presented in the paper because of the lack of the space) forces to seek and maintain casual links across the whole system of measurement. The model emphasizes the effort of enterprise to measure how the parts of value chain are meshed together and to create a competitive advantage instead of relying on particular processes indicators. This article was created with financial support from the Student Grant Competition EKF, VSB - TU Ostrava project SP2011/51 Interdisciplinary approach to crisis and crisis management.

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