PRIORITIZATION OF PERFORMANCE MEASURES USING AHP

ABSTRACT

The purpose of this paper is to provide an integrated approach that prioritizes   performance measures and critical success factors toward strategic objectives of a firm. Analytic Hierarchy Process (AHP) is used to prioritize Key Performance Indicators (KPIs) and Key Result Indicators (KRIs) as well as Critical Success Factors (CSFs) in the frame of a single hierarchy.

Keywords - Performance measures, Analytic hierarchy process, Critical success factors.

1.Introduction

Organizational performance measurements have attracted much attention of scholars and practitioners. When discussing performance measurement, prioritization of relevant characteristics should be emphasized as a multi-criteria decision making problem which will be solved using AHP. The application of the suggested model will enable staff to align their daily activities closer to the strategic objectives of the firm.

2.Hypothesis

Today the most popular measures of organizational performance is deployed using the term KPI. Unfortunately, in many practical cases performance measurement is failing. The measures that are widely adopted have no linkage to the CSFs of the organizations (Parmenter, 2015). The main purpose of performance measures is to ensure that staff members spend their working hours focused primarily on the organization's CSFs. It is the CSFs, and performance measures within them, that link daily activities to the organization's strategies. A well thought through and executed strategy is the responsibility of a selected group of senior executives in the organization. Whereas, the CSFs should be the daily focus of all staff in the organization which will help drive strategic initiatives.

According to (Parmenter, 2015) there are four types of performance measures in two groups: *result indicators* and *performance indicators*. To fully understand what to increase or decrease, we need to look at the activities that created a particular result indicator. Performance indicators are measures tied to a team or a cluster of teams working closely together for a common purpose. Good or bad performance is

the responsibility of one team. Some measures are more important, hence by using the extra word "key" we come to the following: (1) KRIs, which give the board an overall summary of how the organization is performing. Separating KRIs from other measures has a profound impact on reporting, resulting in a separation of performance measures into those impacting governance and those impacting management; (2) KPIs, which focus on the aspects of organizational performance that are the most critical for the current and future success of the organization.

3. Suggested Approach
In contradiction to (Shahin and Mahbod, 2007), where SMART criteria are used in the AHP scheme (Saaty, 1980), in suggested model CSFs are placed as criteria. It is supposed that organizational goals/strategies should be stated in a SMART mode a priori, therefore in suggested model critical success factors quite naturally appear as criteria instead of the SMART components, and KPIs and KRIs are placed as alternatives. Each of the KPIs' and KRIs' subset is to be prioritized separately, so essentially we will have a hierarchy with two different sets of alternatives. Finding of CSFs, KPIs and KRIs can be carried out by using procedures suggested in (Parmenter, 2015). Better practice recommends to limit the number of CSFs, KPIs and KRIs up to 10 each to allow dimensions of matrices in the AHP be more conducive to process. For any type of organization each KPI or KRI should not necessarily affect every CSF, therefore in this case not every child item (alternative) of the hierarchy should be connected to every parent node and the hierarchy may not be complete. Presence of several connections of each KPI and KRI with different CSFs reflects the fact that these measures should have significant impact on the organization (e.g., KPI or KRI impacts on more than one of top CSFs).

4.Conclusions
In this paper an approach is proposed using AHP to prioritize key performance measures of an organizations, namely KPIs and KRIs as well as CSFs, towards strategic objectives and initiatives of the firm. Separation of KRIs and KPIs reflects the degree of interest of governing body (board) and management. Some advantages of the proposed approach are as follows: (1) Evaluating KPIs and KRIs by the integration of AHP and CSFs goal setting can take both quantitative and qualitative factors into consideration; (2) The proposed approach gives the possibility to involve all informed persons in establishing indicators and their priorities; (3) Flexibility of the AHP does not need repetition of all judgments when a change in the model is made. Some limitations of this model are: (1) Accuracy of the suggested approach is limited by estimates obtained in the processes of judgments in the AHP and actual finding of the right performance measures; (2) Variation in the views of the people participating in the judgmental process of the prioritization procedure (e.g. consistency ratios) might lead to differing results.

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