International Journal of Competitive Intelligence, Strategic, Scientific and Technology Watch SciWatch Journal 2 (2009), Issue 1, 75 - 76

# **REVIEW: "Making decisions using the balanced scorecard and the simple multi-attribute rating technique"**

Performance Measurement and Metrics, Volume 6, Issue 3, Pages 159-171 Valiris, G., Chytas P., Glykas M. (2005) (Review by T. Mosquera Blanco)

Performance measuring systems have grown in use and popularity over the last 20 years. During the last decade, a number of models for the design and implementation of measurement systems of the development of companies have been identified and analyzed in the literature. The most famous of them is the balanced scorecard. This framework explains, from a multidimensional pint of view, the balancing of financial and non-financial measures.

## **Balanced scorecard**

It supplements traditional financial measures with criteria that measures performance from three additional perspectives-: customers, internal business processes, and learning and growth.

## Multi-criteria decision making (MCDM)

MCDM is an approach that takes into account multiple conflicts of criteria that emerge in the decision-making process. It helps decision-makers understand a problematic situation, and thus make appropriate judgements leading to better decisions. The decisions in MCDM involve conflicting objectives. In MCDM more than one decision-maker is present

# Simple multi-attribut rating technique (SMART)

It is the MCDM approach most commonly used to lead decisions than include the measurement of multiple variables. When applying SMART, ratings of alternatives are assigned directly, in a natural scale of the criteria where available. The advantage of the SMART model is that it is independent of the variables. Since the ratings of variables are not relative, changing the number of variables considered will not change the decision scores of the original variables. This characteristic is particularly useful when new alternatives or features are added to the existing comparison.

### SMART methodology includes the following steps:

The "smart" balanced scorecard methodology is composed of the following stages:

- 1. *Establishing the mission, strategic objectives and CSF*. In this stage the focus is on understanding the organisation's strategy, culture and capabilities in order to specify the strategic objectives and critical success factors.
- 2. Identify all possible measures.
- 3. Identify key performance indicators (KPI) using the SMART approach. This stage aims to narrow down the list of all possible measures into a shortest one that provides the KPIs, which will be used in each perspective. This stage has six steps:
  - identify the criteria and the alternatives which are relevant to the decision problem;

- for each criteria, assign values to measure its performance and evolution;
- determine a weight for each criteria;
- for each alternative, take a weighted average of the values assigned to that alternative;
- make a provisional decision; and
- perform a sensitivity analysis to see how robust the decision is.
- 4. *Establish targets*. Measurement alone is not good enough. We must drive behavioural changes within the organisation if we expect to execute the strategy.

In this study the proposed methodology is illustrated using an example of a Greek financial institution.

The greatest significance of the methodology suggested here is that it provides a structure to guide decision makers through the process of selecting measures. Criteria must be identified and considered systematically, as well as the alternatives (i.e. measures). The decision maker is forced to be present in the assessment of the problem and in the evaluation of the alternatives available. Computational effort is minimal, as the SMART approach is automatically implemented with the help of software tools.