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*Balanced Scorecard Design Toolkit contains “how-to” ideas for Balanced Scorecard methodology.*

*Balanced Scorecard helps to measure performance and share business goals.*

*Four must-use perspectives to describe any business unit. Always need to start with these metric groups.*

# Balanced Scorecard Design Toolkit

Balanced Scorecard is a well-known concept and it's easy to find helpful articles about what this concept is. Balanced Scorecard projections and perspectives are also talked about much.

Business professionals lack essential information about real-life metrics and information on how to build actual scorecard, which supports weights and scores, which allows calculating the performance values. This whitepaper is a Balanced Scorecard design toolkit, which contains some “how-to” ideas.

## Measuring business performance with Balanced Scorecard concept

Balanced Scorecard concept is about *measure* and *control*.

- The first step is to determine the goal of Balanced Scorecard: it should help to measure and control the performance of business unit;
- The next step is to assign a target performance values and develop a plan to archive the target results;
- The final step is controlling the performance, re-thinking business and separate business processes;

Balanced Scorecard must be a document packed with performance information. That's why it is the best way to share management and business goal ideas with colleagues.

## Balanced Scorecard Toolkit: Perspectives and Metrics

Robert Kaplan and David Norton in early 1990's suggested performance measurement perspectives:

- Financial Perspective
- Customer Perspective
- Internal Processes Perspective
- Employee Learning and Growth Perspective

These perspectives are must-use basic groups. Even if it's necessary to describe the business unit that is not involved in sales, financial perspective must be taken in account.

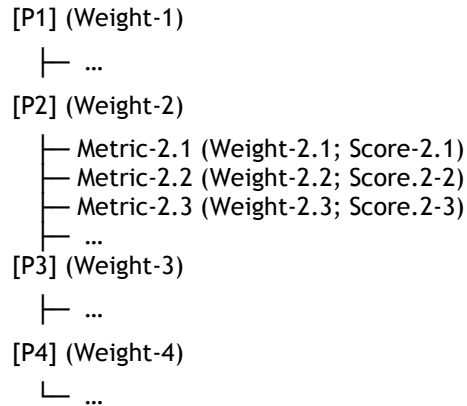
- ✓ Using these four perspectives is a guaranty that all aspects of business will be considered carefully.



### Balanced Scorecard Toolkit: Weights and Scores

Any scorecard support system should represent perspectives and metrics, providing them with adequate importance estimations and scores. The Balanced Scorecard may be represented as follows below:

*The Balanced Scorecard should be represented as a set of metrics, weights and scores.*



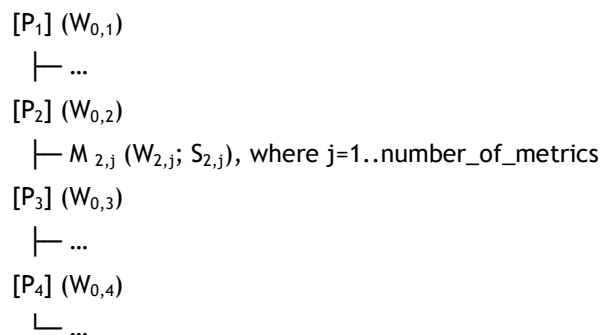
Can there be a sub-metric for Metric-2.1? It's up to Balanced Scorecard developer, but Balanced Scorecard is as effective as it is simple and easy to overview.

### Balanced Scorecard Toolkit: Calculations

How to calculate the performance value using a given values of metrics' importance and user assigned scores.

*Steps to calculate performance using a given values of metric importance and user's scores.*

The Balanced Scorecard showed above may be represented as:



The total performance value will be calculated in three steps:

1. Normalization of the score to absolute score values;
2. Normalization of the weight to absolute weight values;
3. Calculation the total performance values;

### Normalization and performance calculation

Normalization is necessary for further calculations. Assume, the initial weight and score values were given on scale [0..10], where 0 is for the "minimal



importance” and 10 is for the “maximum importance”. The same scale is used for score values - 0 might be for 0% progress and 1 might be for 100% progress. In this case the value  $W_{i,j}$  might be normalized to [0..1] scale by dividing  $W_{i,j}$  by 10:

- $NW_{i,j} = W_{i,j} / 10$ , where  $NW_{i,j}$  is a normalized weight value;
- $NS_{i,j} = S_{i,j} / 10$ , where  $NS_{i,j}$  is a normalized score value;

*Calculating the performance value using normalized score and weight values.*

The total performance value for the certain perspective  $P_i$  will be calculated as:

- $Performance(P_i) = NW_{0,i} * \sum_{j=1}^{N_i} NW_{i,j} * NS_{i,j}$

Where  $N_i$  is the number of metrics on i-level;  $NW_{i,j}$  - is a normalized weight of j-metric on i-level;  $NS_{i,j}$  - is a normalized score given by user of scorecard to j-metric on i-level. To calculate the total performance within all perspectives, it's necessary to summarize performance values for all levels:

- $Total\ Performance = \sum_{i=1}^M Performance(P_i)$

Where M is the number of perspectives, in our case  $M=4$ . The resulted performance value will be represented on [0..1] scale.

*Remember to carefully evaluate Balanced Scorecard metrics*

## Conclusion

Building a Scorecard that works involve two main processes:

1. Suggesting a proper metrics;
2. Calculating the total performance;

Metrics should be designed by key managers; suggested metrics should be carefully evaluated in action. As for calculating performance, start with some simpler tools, such as spreadsheet processor to describe the Balanced Scorecard of the business unit and calculate the performance.

*Get a sample Balanced Scorecard designed in MS Excel*

## About AKS-Labs

AKS-Labs is a provider of software solutions that simplify the development of balanced scorecards. Also, there are some ready to use balanced scorecards designed with MS Excel that are available at [www.strategy2act.com](http://www.strategy2act.com)

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