Guidelines for Implementing Balanced Scorecard
**Contents**

1. Introduction..........................................................................................................4
2. Prerequisites.........................................................................................................4
3. Project planning....................................................................................................4
4. Implementation phases..........................................................................................5
   4.1 Model synthesis ...............................................................................................5
      4.1.1 Strategy synthesis.......................................................................................6
      4.1.2 Measure synthesis.......................................................................................6
   4.2 Technical implementation...................................................................................6
   4.3 Organisational integration................................................................................7
   4.4 Technical integration.......................................................................................8
   4.5 Operation of the BSC system ..........................................................................8
5. Estimating the project scope & costs....................................................................9
6. Fast track Balanced Scorecard Process..................................................................9

Appendix I: Implementation Examples ...................................................................11
Appendix II: Summary of BSC Project steps and estimates.........................................13
Executive summary

The Balanced Scorecard is a management system that enables organisations to clarify their vision and strategy and translate them into action. When fully deployed, the Balanced Scorecard transforms strategic planning from an academic exercise into the nerve centre of an enterprise.

A prerequisite for implementing a Balanced Scorecard is a clear understanding of the organisation's vision and strategy. The basis for the vision and the strategy should be the holistic view and the information the management receives during systematic strategy work.

The implementation of a BSC should always be organised as a separate management system development project. The project should be planned in the same detail as any other project in the organisation and standard project management procedures should be followed. The actual implementation of a Balanced Scorecard can be divided into five phases: Model synthesis, technical implementation, organisational integration, technical integration and operation. Many of the above phases can be performed parallel. This will shorten the total project schedule significantly.

During the model synthesis phase the organisation seeks consensus about their vision and strategy and derive the needed measures. Furthermore the strategy of the organisation is quantified into measures or Key Performance Indicators (KPI's). The measures can be derived from the strategy using Critical Success factors (CSF's) or alternatively using Strategy maps. The key properties of each of the measures in a Balanced Scorecard are also defined.

In the technical implementation phase the visions, strategies, critical success factors, measures etc. are entered into the system. The technical implementation steps include; installation of the software, training, building of the scorecards, setting target and alarm levels, setting data consolidation rules as well as defining graphs and possible customised reports.

The objective of the Organisational integration of the Balanced Scorecard is to integrate it with the management and reporting processes of the organisation and communicate the BSC to all the members of the organisation.

Technical integration is performed to reduce the effort needed to collect measure data. The Balanced Scorecard system is integrated to operational IT systems, databases and/or data warehouses such as financial reporting systems, Enterprise Resource Planning (ERP) systems or Customer Relationship Management (CRM) systems.

The benefits from the Balanced Scorecard are realised when the Balanced Scorecard is used in day-to-day operations. Data update, analysis and reporting are performed regularly within the management and reporting processes. From time to time it is also necessary to refine the Balanced Scorecard. The Balanced Scorecard should be a standard tool used by the management team in their strategy work.

Due to the nature of a Balanced Scorecard project exact time & cost estimates for the whole project can be difficult to make in advance. The needed effort depends very much on how far the organisation has advanced in its Balanced Scorecard thinking as well as the complexity and number of Scorecards implemented. The total costs for a typical Balanced Scorecard project consist of: Time used by customer's own resources (50%), outside process consultancy (20%), outside implementation consultancy (15%), software licences (15%).

A fast track approach to implement Balanced Scorecard can be used successfully when implementing Balanced Scorecards with organisations that have already used Balanced Scorecards or to create a fast pilot Balance Scorecard implementation.
1. Introduction

The Balanced Scorecard is a management system (not only a measurement system) that enables organisations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results. When fully deployed, the Balanced Scorecard transforms strategic planning from an academic exercise into the nerve centre of an enterprise.

This document outlines a procedure for implementing a Balanced Scorecard for organisations with little or no previous experience of Balanced Scorecards. The emphasis is on the practical and technical implementation of the Balanced Scorecard System.

A fast track approach is also outlined. This approach can be used when implementing Balanced Scorecards with organisations that have already used Balanced Scorecards or to create a fast pilot Balanced Scorecard implementation.

2. Prerequisites

Before an organisation can start implementing a Balanced Scorecard it needs a clear understanding of its vision and strategy. It is the management’s responsibility to define a vision, formulate a strategy and set strategic goals regardless of a Balanced Scorecard being implemented.

The basis for the vision and the strategy is the holistic view and the information the management receives during systematic strategy work. The strategic principles can seldom be bought from outside consultants, however outside expertise can facilitate the process of creating them. Common tools used to help structure the strategy work are; Strategy Mapping, PEST (Political, Economical, Societal, Technological) analysis, SWOT (Strengths-Weaknesses-Opportunities-Threats) analysis, Porter value chain analysis, Porter Five forces of competition analysis, BCG Matrix analysis.

3. Project planning

The implementation of a BSC should always be organised as a separate project. The project is very much a management system development project, rather than an IT project. Before the actual project starts the following questions should be answered:

- What is the goal of the BSC project?
  What current problem does the Balanced Scorecard solve? What is the goal state?

- Who leads the project?
  The leader should be at least a member of the management team of the SBU, which scorecard is defined.

- Who participates in the project?
  In a large organisation a member of the corporate management should be involved in order to align the SBU scorecard with the overall corporate strategy. In general different competences should be represented in the project team. The responsibility for BSC project should not be delegated to the controller(s), business development manager or quality manager. Top management input and buy-in is crucial for a successful Balanced Scorecard implementation.
4. Implementation phases

Several different procedures describing the building process of a Balanced Scorecard have been presented. The procedure described below is just one of them and is not necessarily better than any other procedure.

Before the organisation is ready to implement a balanced scorecard a consensus of the organisation's vision and strategy has to be reached (see ch. 2).

The actual implementation of a Balanced Scorecard can be divided into five phases:

- Model synthesis
- Technical implementation
- Organisational integration
- Technical integration
- Operation

Many of the phases can be performed parallel. This will shorten the total project schedule significantly.

4.1 Model synthesis

During the model synthesis phase the organisation seeks consensus about their vision and strategy and derive the needed measures. The model synthesis phase consist of two major tasks:

- Strategy synthesis (structure synthesis)
- Measure synthesis
4.1.1. Strategy synthesis

The objective of the strategy synthesis phase is to form and commit the management to a consensus view about the organisations vision and strategies. It is not unheard of that there exist several different views of vision and the strategic principles within an organisation (this is actually one problem that Balanced Scorecard addresses). A good way of finding consensus is to conduct interviews with the management team. The results of the interviews can then be concluded into a common view that everybody can commit to e.g. in a workshop environment. In addition the terminology and the elements used in the BSC as well as the structure of the BSC will be decided.

4.1.2. Measure synthesis

During the measure synthesis phase the strategy of the organisation is quantified into measures or Key Performance Indicators (KPI's). The measures can be derived from the strategy using Critical Success factors (CSF's) or alternatively using Strategy maps. The CSF approach is more straight forward, but lacks the ability to describe the logical cause and effect relationships between the measures in the different perspectives.

The key properties of each of the measures in a Balanced Scorecard are also defined. Attributes needed to be defined are; measure name, unit, responsible measure owner, timescale, target and alarm levels.

Responsibility: The owner of the Balanced Scorecard / project manager
Methodology: Process consultancy, workshops, management interviews
Effort: Strategy synthesis: Customer: 10-200 days Consultant: 5-100 days
Measure synthesis: Customer: 15-30 days Consultant: 5-20 days

Calendar time: Strategy synthesis: 3 – 36 months
Measure synthesis: 1 – 3 months

4.2 Technical implementation

With a powerful Balanced Scorecard tool like QPR ScoreCard the technical implementation of the Balanced Scorecard starts already during the Model Synthesis phase. The Visions, Strategies, Critical Success Factors, Measures etc. are entered into the system interactively as they are processed e.g. during a Workshop.

The technical implementation includes the following steps:

- Installation of the software,
- Basic training for the persons building scorecards
- Building of the scorecards (KPI's, ...)
- Setting target and alarm levels
- Setting calculation formulas to consolidate the data
• Defining graphical properties for graphs

If needed following additional steps can be taken:

• Importing historical measurement data from text file / excel
• Creating Reports with integrated Crystal Reports tools

In some cases the customer does most of the technical implementation. The implementation consultant then takes a more supportive role.

Responsibility: Implementation Consultant

Methodology: Workshops, off-site implementation

Effort: Installation: Customer: 1 days
        Consultant: 1 days

        Training: Customer: 2 days / Power User, 0.5 days / End User
                  Consultant: 2 days / 10 Power Users
                               0.5 days / 30 End Users

        Implementation: Customer: 1–3 days / Unique scorecard
                        Consultant: 2-5 days / Unique scorecard

        Custom reporting: Customer: 0.5 days/report
                           Consultant: 1 day/report

Calendar time: 1–6 months

4.3 Organisational integration

The balanced scorecard system should not be set up running as separate process in the organisation. The BSC is a management system and should be tightly integrated to the processes of the organisation and communicated to all the members of the organisation.

The organisational integration phase includes the following tasks:

• Definition of the persons who are responsible for measure data and their empowerment.
• Explanation of the objectives of Balanced Scorecard implementation to the employees.
• Re-engineering the management and strategy process
• Re-engineering the reporting process.

The BSC system should be used in management processes like "monthly review", "quarterly business review" etc. Action plans and Comments are added as part of the management processes. Usually salary bonuses are based on some measures included in the BSC system.

Responsibility: The owner of the Balanced Scorecard / project manager

© Copyright QPR Software Plc 1992-2000. All Rights Reserved.
Methodology: Process consultancy, process development, workshops

Effort: Customer: 10-50 days
Consultant: 5-20 days

Calendar time: 1 – 12 months

4.4 Technical integration

An effective way to reduce the effort needed to collect measure data is to integrate the Balanced Scorecard system to operational IT systems, databases and/or data warehouses. Typically the data for 30%-60% of the measures in a Balanced Scorecard is collected by 1-3 different operational systems such as financial reporting systems, Enterprise Resource Planning (ERP) systems or Customer Relationship Management (CRM) systems. The rest usually consists of intangible measures that need to be collected separately e.g. inputted manually.

The scope of the technical integration varies enormously, number of integrated measures and number of outside systems used being the most important drivers.

The technical integration steps are the following:

- Identification of the imported measures and the source systems
- Analysis of the database structure and exporting capabilities of the operative systems
- Defining the procedure to get measure data from data sources including data identification, modification and scheduling.
- Implementation of the link between QPR ScoreCard and the operative systems.

Technical integration can be performed parallel with organisational integration and often partially overlaps the operation phase. Effort and calendar time needed for this phase are highly dependent on the number and the complexity of the source systems.

Responsibility: Implementation consultant / customer IT department

Methodology: On-site and Off-site implementation

Effort: Analysis & specification: Customer: 5-10 days
Consultant: 5-10 days

Implementation: Customer: 1-10 days
Consultant: 1-100 days

Calendar time: 1 week – 6 months

4.5 Operation of the BSC system

Defining and building a Balanced Scorecard is a very useful learning experience in itself. The organisation receives deeper understanding of what drives its business and the cause and effect relationships between the drivers. Still the real benefits from the Balanced Scorecard are realised when the Balanced Scorecard is a part of the day-to-day operations.

During the organisational integration phase the Balanced Scorecard is integrated to the normal management and reporting processes of the organisation. Within these processes following tasks are performed regularly.
- Update measure values
- Analyse the Balanced Scorecard results
- Report the Balanced Scorecard Results
- Refine the Balanced Scorecard model

The Balanced Scorecard should also become a standard tool used by the management team in their strategy work.

**Responsibility:** Scorecard owners  
**Effort:** Continuously 2h / month / Scorecard

### 5. Estimating the project scope & costs

Due to the nature of a Balanced Scorecard project exact time & cost estimates for the whole project can be difficult to make in advance. The needed effort depends very much on how far the organisation has advanced in its Balanced Scorecard thinking as well as the complexity and number of Scorecards implemented. The estimates presented above represent averages for customers with little or no previous experience from Balanced Scorecards. The estimates should be re-evaluated separately for each case.

The total costs for a typical Balanced Scorecard project consist of:

- Time used by customer's own resources (50%)
- Outside process consultancy (20%)
- Outside implementation consultancy (15%)
- Software licences (15%)

In some cases customers might want to take the main responsibility for the Balanced Scorecard work. The consultant's role is then to train and support the customer, but not be involved in the actual implementation.

### 6. Fast track Balanced Scorecard Process

When implementing Balanced Scorecards with organisations that have already used Balanced Scorecards to some extent a fast track procedure can be used successfully. The fast track procedure can also be used to create a fast pilot Balance Scorecard implementation for any company familiar with performance measurement. The fast track procedure follows the same principle as the normal procedure, but many of the stages in the normal procedure are omitted because they are already done or self-evident.

The fast track procedure has five main stages/events:

1. **Mission, Vision & Strategy review and workshop preparation**

   A meeting with the leadership team where, the mission, vision, strategic and operational plans as well as budgets are reviewed. Furthermore a strategy map is outlined and workshop preparations are delegated. Workshop preparations include software installations.
2. Development workshop

A one-day workshop with the leadership team where the strategy map is completed, strategic objectives are identified and measures are selected and defined. The structure of the Balanced Scorecard is designed and a first draft of the Scorecard is implemented with QPR Scorecard.

3. Refinement & Consensus building

The draft of the Scorecard is refined by exposing it to wider group of people. During short meetings with key interest groups measure definitions are refined, targets set and measures sources identified. The results are immediately implemented into the Scorecard model in QPR ScoreCard.

4. Finalisation and communication workshop

To educate and communicate the Balanced Scorecard a final one-day workshop for all interest groups is held. A plan for extending the Scorecard to other units/lower levels is created. Integration of the Balanced Scorecard into the strategy and reporting processes is planned.

5. Technical integration kick-off

Technical integration of the Balanced Scorecard system to operational IT systems is kicked of with a joint meeting with the customers IT support. Measure data source systems are identified and data transfer formats are defined. The customer does the actual implementation.

Responsibility: Customer

Methodology: Workshops, On-site and Off-site implementation

Effort:

Workshops: Customer: 2 days / participant
Consultant: 2 days

Meetings: Customer: 4 x 0.5 days / participant
Consultant: 2 days

Implementation: Customer: 1-10 days
Consultant: 1 days

Calendar time: 1 week – 2 months
Appendix I: Implementation Examples

i) Small Implementation

**Hardware configuration:**
1. Windows NT/2000 server (Database+Web server+AS+WAS)

**Software configuration:**
1. QPR SC Application Server (AS)
1. QPR SC Web Application Server (WAS)
3. QPR SC Development-clients
30. QPR SC Browser-clients

**Scorecard size:**
1. QPR ScoreCard model
2. Consolidation Scorecards
5. Scorecards
200. Measure elements

**Users:**
3. Developers
5. Power Users
25. Normal Users

**Data Sources:**
0-3. Source Databases
1-5. Excel Files

**Project Estimates:**
Model synthesis:
Customer: 25 days
Consultant: 10 days

Technical implementation:
Customer: 25 days
Consultant: 10 days

Organisational integration:
Customer: 10 days
Consultant: 5 days

Technical integration:
Customer: 3 days
Consultant: 3 days

ii) Medium Implementation

**Hardware configuration:**
1. Windows NT/2000 server (Database)
1. Windows NT/2000 server (Web server+AS+WAS)

**Software configuration:**
1. QPR SC Application Server (AS)
1. QPR SC Web Application Server (WAS)
6. QPR SC Development-clients
300. QPR SC Browser-clients

**Scorecard size:**
1. QPR ScoreCard model
10. Consolidation Scorecards
40. Scorecards
1500. Measure elements

**Users:**
6. Developers
25. Power Users
275. Normal Users
### Data Sources:
- 1-5 Source Databases
- 1-40 Excel Files

### Project Estimates:
- **Model synthesis:**
  - Customer: 100 days
  - Consultant: 40 days
- **Technical implementation:**
  - Customer: 50 days
  - Consultant: 30 days
- **Organisational integration:**
  - Customer: 30 days
  - Consultant: 10 days
- **Technical integration:**
  - Customer: 10 days
  - Consultant: 10 days

### iii) Large Implementation

#### Hardware configuration:
- 1 Windows NT/2000 server (Database)
- 1 Windows NT/2000 server (AS)
- 1 Windows NT/2000 server (Web server+WAS)

#### Software configuration:
- 1 QPR SC Application Server (AS)
- 1 QPR SC Web Application Server (WAS)
- 15 QPR SC Development-clients
- 1000 QPR SC Browser-clients

#### Scorecard size:
- 3 QPR ScoreCard models
- 50 Consolidation Scorecards
- 250 Scorecards
- 10000 Measure elements

#### Users:
- 15 Developers
- 50 Power Users
- 950 Normal Users

#### Data Sources:
- 3-10 Source Databases
- 1-250 Excel Files

#### Project Estimates:
- **Model synthesis:**
  - Customer: 200 days
  - Consultant: 75 days
- **Technical implementation:**
  - Customer: 100 days
  - Consultant: 50 days
- **Organisational integration:**
  - Customer: 50 days
  - Consultant: 25 days
- **Technical integration:**
  - Customer: 25 days
  - Consultant: 25 days
### Appendix II: Summary of BSC Project steps and estimates

<table>
<thead>
<tr>
<th>Project phase/step/task</th>
<th>Customer effort (days)</th>
<th>Consultant effort (days)</th>
<th>Calendar time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Planning</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSC objectives and scope</td>
<td>2-5</td>
<td>1</td>
<td>2 weeks</td>
</tr>
<tr>
<td>Define tasks &amp; resources</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make roll-out plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set milestones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outline budget</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Model synthesis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategy synthesis</td>
<td>25-230</td>
<td>10-120</td>
<td>4-39 months</td>
</tr>
<tr>
<td>Management interviews</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Synthesis workshop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measure synthesis</td>
<td>15-30</td>
<td>5-20</td>
<td>1-3 months</td>
</tr>
<tr>
<td>Defining CSF's / Strategy Map</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selecting Measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining Measure properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technical implementation</strong></td>
<td></td>
<td></td>
<td>1-6 months</td>
</tr>
<tr>
<td>Installation of the software</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic training (Power Users)</td>
<td>2 / User</td>
<td>2 / 10 Users</td>
<td></td>
</tr>
<tr>
<td>Basic training (End Users)</td>
<td>0.5 / User</td>
<td>0.5 / 30 Users</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>1-3 / SC</td>
<td>2-5 / SC</td>
<td></td>
</tr>
<tr>
<td>Defining the Scorecard hierarchy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining the linked elements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting target and alarm levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting consolidation formulas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Setting graph properties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importing historical measurement data *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating customised reports with CR *</td>
<td>0.5 / report</td>
<td>1 / report</td>
<td></td>
</tr>
<tr>
<td><strong>Organisational integration</strong></td>
<td></td>
<td></td>
<td>10-50</td>
</tr>
<tr>
<td>Analysis of current processes</td>
<td></td>
<td></td>
<td>5-20</td>
</tr>
<tr>
<td>Re-engineering of processes</td>
<td></td>
<td></td>
<td>1-12 months</td>
</tr>
<tr>
<td>Defining responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication of BSC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>**Technical integration * **</td>
<td></td>
<td></td>
<td>10-50</td>
</tr>
<tr>
<td>Analysis &amp; Specification</td>
<td>5-10</td>
<td>5-10</td>
<td>1-12 months</td>
</tr>
<tr>
<td>Identify integrated measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify source systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gathering system/data descriptions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>1-10</td>
<td>1-100</td>
<td></td>
</tr>
<tr>
<td>Defining / mapping measure ID's</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creating Queries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testing</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Operation</strong></td>
<td></td>
<td></td>
<td>2 h / month</td>
</tr>
<tr>
<td>Update measure values</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report Balanced Scorecard results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyse Scorecard results</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refine Balanced Scorecard model *</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* optional task