Business Performance Management

Knut Hinkelmann



Prof. Dr. Knut Hinkelmann



Learning goals

- Understand what business performance management is and how it benefits from real data
- understand the principles behind a Balanced Scorecard
- be able to derive goals from a company vision / strategy / mission and assign completely specified indicators (KPIs)



BUSINESS PERFORMANCE MANAGEMENT



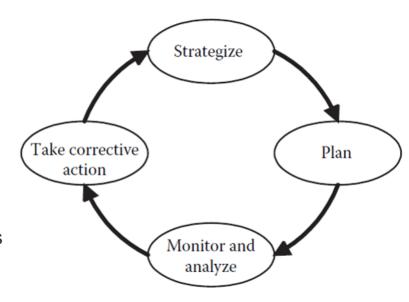


Business Performance Management (BPM)

Business Performance Management (BPM) is

a set of integrated, closed-loop **management** and **analytic** processes, supported by technologies, that address financial and operational activities

- BPM can be illustrated with a simple cycle:
 - ♦ **Strategize**: identify the most important objectives that the organization wants to achieve
 - ◆ Plan: may be broken down into more manageable strategic goals, measures, budget and initiatives
 - ♦ Monitor and analyze: Use technology to perform measurements that allow to analyze whether goals are achieved and understand causes of failures
 - **♦** Take corrective action





Frolick, M. N. and Ariyachandra, T. R. (2006). Business performance management: One truth. IS Management, 23(1):41–48...

Prof. Dr. Knut Hinkelmann



A general BPM methodology for strategy management – steps

- 1. Define strategy
- 2. Define goals
 - define KPIs and target values
- 3. Measure
 - current values of KPIs (using your data/analytics)
 - compare current to targeted values
- 4. Analyse: understand what caused deviations from target
- 5. Decide how to improve the situation



Business performance management (2)

■ BPM methodologies / sub-disciplines

- Financial: planning/budgeting + consolidation/financial reporting
- 2. Business Processes: Six sigma + DMAIC (define measure analyse improve control)
- 3. General: Balanced Scorecards

BALANCED SCORECARD





Balanced Scorecard – definition and goals

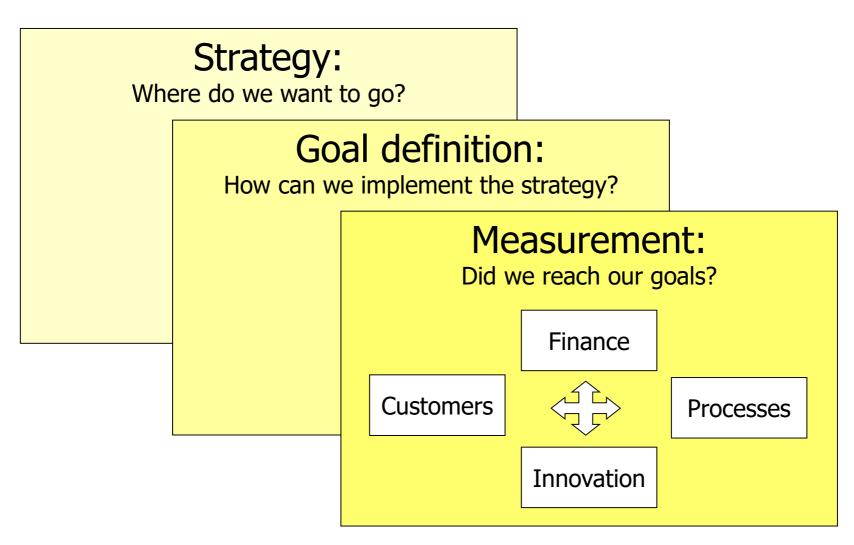
- A Balanced Scorecard (BSC) is a
 - ... strategic management instrument
 - ... performance measurement system
 - ♦ ... means of communication

- Goal: Connect goals to key figures / indicators in order to
 - ♦ ... concretise strategic and operational goals
 - ♦ ... communicate / explain strategic action and projects
 - ... measure success of initiatives, indicate trends





BSC – Steps in Development (1)





Quelle: (Niven 2003)



BSC – Steps in Development (2)

define strategy

define perspectives, success factors and goals

identify cause-effect relationships

define indicators and target values

create initiative plans

manage and develop the scorecard

Which strategy to follow?
Which areas to concentrate on?

What do we need to do well in order to be successful? What are the concrete goals?

How do the goals / success factors interact with each other?

What should be measured? When is a goal reached? What defines a critical situation?

Which initiatives need to be started to reach our goals?

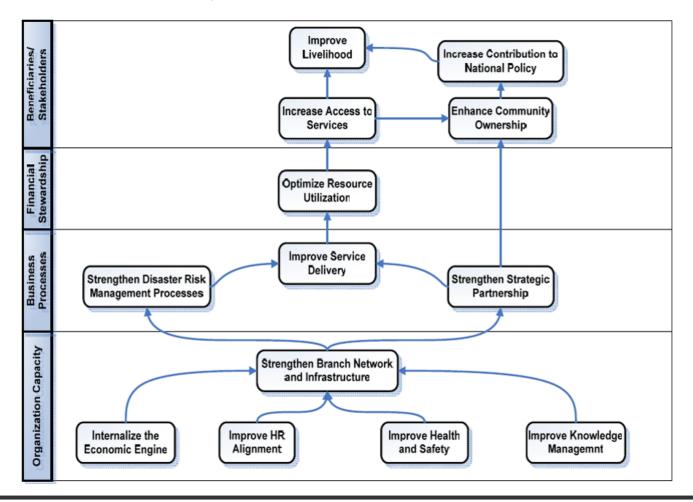
Which strategy to follow? Which areas to concentrate on?





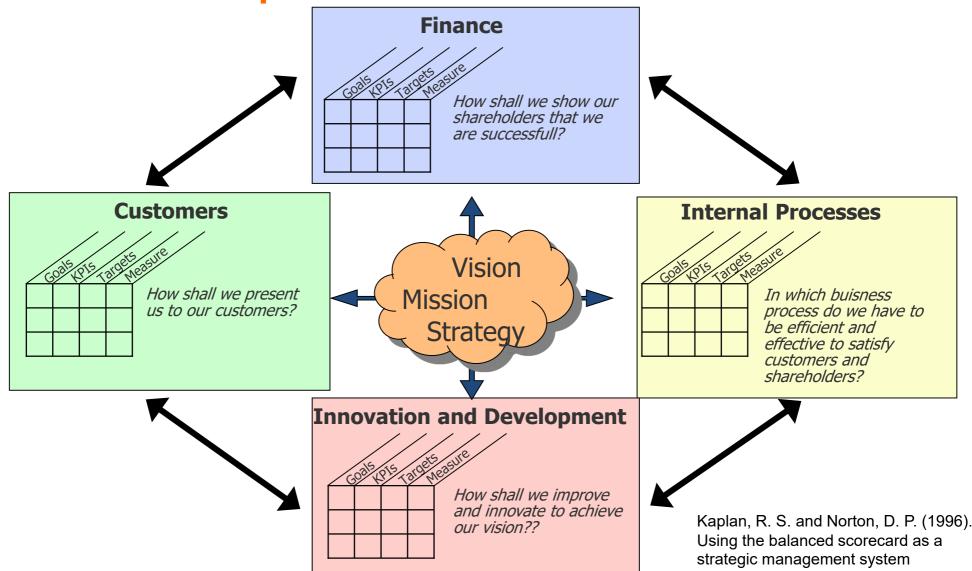
Example of a Balanced Scorecard

The BSC of the Kenya Red Cross





Standard Perspectives of a BSC





BSC Perspectives

Perspectives should be balanced:

- financial vs. non-financial indicators
- Views: internal vs. external

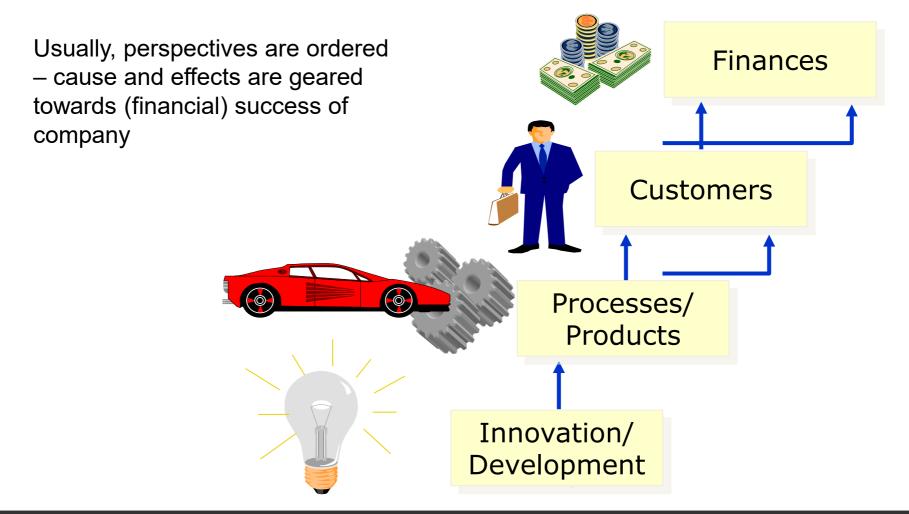


What are internal, what are external perspectives?

- historical correctness vs. future performance
- hard vs. soft factors



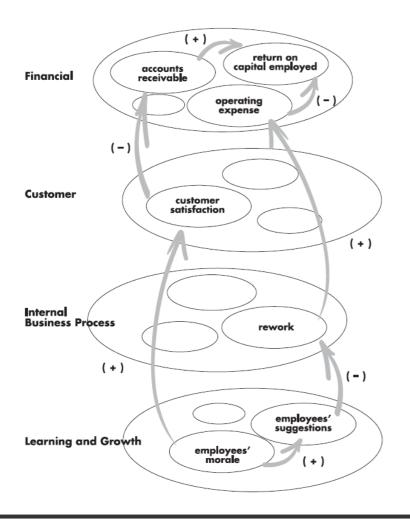
Principle: Cause-Effects are directed towards Success of the Enterprise







Dependencies



- Adding dependencies to a BSC helps everyone to understand how goals from different perspectives contribute to the toplevel objectives – this makes the BSC more valuable in its function as a communication artefact.
- Establishing links between goals is more reasonable than links between measures because relationships between goals ("if we achieve X, it helps us to achieve Y") are more easily understood than those between measures



BSC lifecycle

- Create the BSC
 - Management, head of department
- Connect the BSC to operative systems to derive indicators values
 - ♦ IT, domain experts
- Periodic update of figures/indicators
 - ♦ IT, domain experts





Definition of KPIs starts with the Goals

- KPIs (Key Performance Indicators) help to measure the achievement of goals.
- This means, KPIs only make sense, if the goals are known
- Steps for KPI definition:
 - 1. Define goals
 - 2. Determine KPIs for the goals
 - 3. Determin target values for the KPIs
 - 4. Measure the KPIs periodically
 - 5. Show KPIs and their values in a dashboard or report

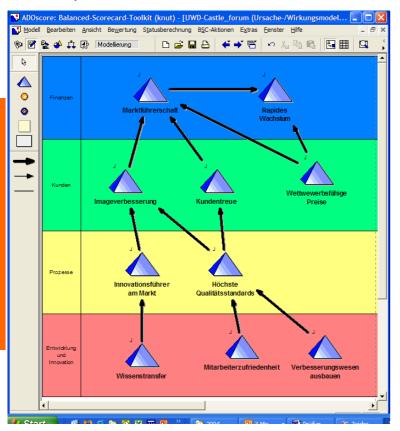


Prof. Dr. Knut Hinkelmann



1. Defining Goals

Example: ADOscore 1)



- Determine goals based on strategy and success factors
- Assign goals to perpectives
- Cause-effect relationship can help to determine means of a goal is not achieved:
 - Which other goals have an influence on goal X?



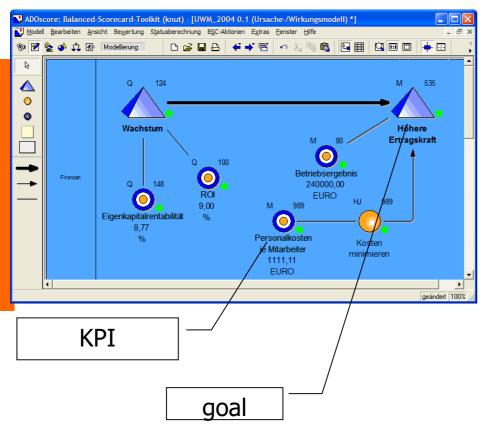
1) ADOscore is a tool from BOC to graphically support the development of scorecards





2. Determine KPIs

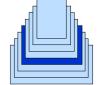
Example: ADOscore



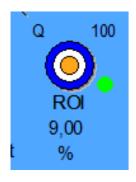
- For each goal appropriate indicators are determined
- KPIs are indicators to measure, whether a goal is achieved
- Specify indicators such that
 - ... the achievement of the goal can be recognized from the indicator
 - ... the behaviour of involved peoples in directed toward the goal achievement







3. Specify Target Values for KPIs



- Specify target values for the indicators
 - ♦ Types of targets:
 - minimal value (if a high value is expected)
 - e.g. ROI, revenue, number of customer
 - maximal value (if low value is benefical)
 - e.g. costs, time
 - interval (if value should be in a specific range)
 - e.g. number of employees



Prof. Dr. Knut Hinkelmann



Key Performance Indicators

- Key Performance Indicators (KPIs) are numbers used to measure goal achievement
 - Beware: most of the time, goal achievement cannot be measured directly (hence the term indicator!)!!
 - ♦ An indicator is usually just a piece of evidence for goal achievement!
 - ♦ it's like in criminology: sometimes you cannot prove guilt, but you have strong indications of it...





The company WoodToy Inc. designs and produces funny wooden toys for children and adults. An important goal in their strategy is to increase innovation, i.e. to have more innovative products. Recently, they have introduced an idea management system where employees from the R/D department can place ideas for new innovative products. The following two KPIs have been proposed for measuring the achievement of their strategic goal "increase innovation":

- ♦ KPI 1: Number of ideas in the idea management system
- ♦ KPI 2: Percentage of sales revenue attributable to new products that came out of the idea management system

Which KPI do you consider more suitable in order to measure achievement of the strategic goal?







The company YourERP sells licences for ERP software that they develop. In all licences, technical support is included at no additional cost. YourERP has learned that the satisfaction of their customers with their products depends to a large degree on how fast support issues are solved. They have defined the goal "solve support issues faster". The YourERP management has come up with the following alternative measures for that goal:

- ♦ KPI 1: average time (number of days) to first response
- ♦ KPI 2: average time (number of days) to final ticket resolution
- ♦ KPI 3: first contact resolution (= number of tickets resolved with the first response)

Which KPI do you consider more suitable in order to measure achievement of the strategic goal?







A telecommunications company sells many contracts to new and existing customers through telesales campaigns. The goal is to *maximise the profit that results from the campaigns*. The company has the ability to create predictive models of customer behaviour. Two indicators have been discussed for measuring the achievement of the goal:

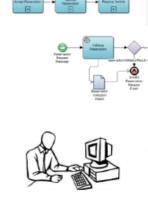
- ♦ KPI 1: revenue from all contracts sold through campaigns
- ♦ KPI 2: the net value (over the next 5 years) of all contracts sold through campaigns

Which behaviour will each of these KPIs trigger? Which one is better suited for measuring achievement of the goal?





A public administration serves citizens with various services. The underlying business processes are complex and knowledge-intensive, i.e. many exceptional situations can arise. In order to be able to measure more accurately the time needed for case completion, the management has introduced a workflow management system through which all cases should be handled. They are planning to measure the following KPI



♦ KPI: number of cases completed within a month

Do you foresee any problems with this KPI? Which? What do you propose to avoid them?









In Switzerland, physicians' activities are billed using so-called «tax points» that are proportional to the (assumed) difficulty of the activity and that are defined by the law for each activity. However, in some areas – e.g. psychosomatic medicine – tax points are systematically lower for almost all activities. A hospital wishes to assess the achievement of the strategic goal «increase efficiency of physicians» via the KPI

♦ KPI: number of hours per tax point.



Do you foresee any problems with this KPI? Which? What do you propose to avoid them?





Potential problems with BPM (Case discussion)

Design of KPIs

- when designing measures to "hold people accountable": danger of manipulation and/or incentivising ultimately undesired behaviour
- in that case there is the danger that KPIs improve while the situation is actually worsening
- danger of blaming the wrong people based on deviations from target: can be caused by a too shallow analysis of root causes for these deviations (e.g. salesforce overselling production capacity)

Interpretation of KPIs:

- avoid over-reactions to changes in KPIs
- ensure that root causes are identified



4. Dashboard: Show Goal Achievement

Comparing values of KPIs with their target values

Example: ADOscore

