# Business Performance Management / Balanced Scorecard

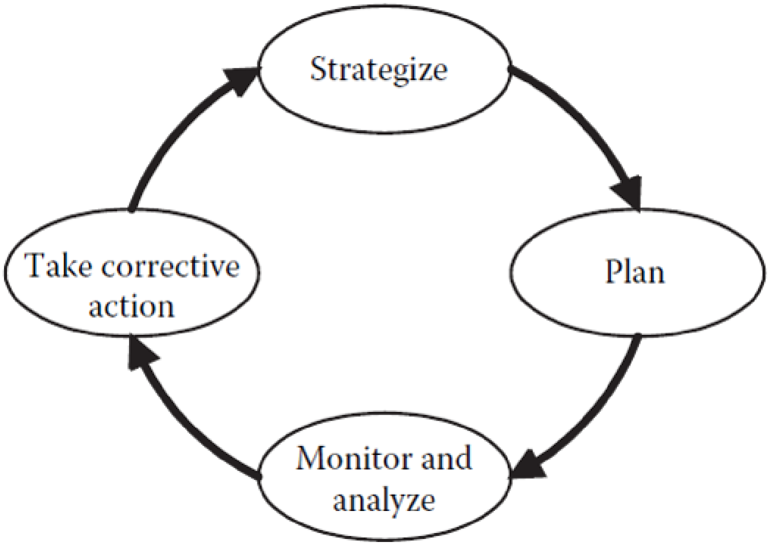
*Knut Hinkelmann*

# 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..

# 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

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

# Balanced Scorecard – definition and purpose

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

- **Purpose:** Connect objectives to key indicators in order to
  - … concretise strategic goals
  - … communicate / explain strategic action and projects
  - … measure success of initiatives, indicate trends

*following Knut Hinkelmann's slides on BSC*

# BSC – Steps in Development (1)

**Strategy/Goals:**
Where do we want to go?

**Objectives:**
How can we achieve the strategy?

**Measurement:**
Did we reach our objectives?

Finance

Customers

Processes

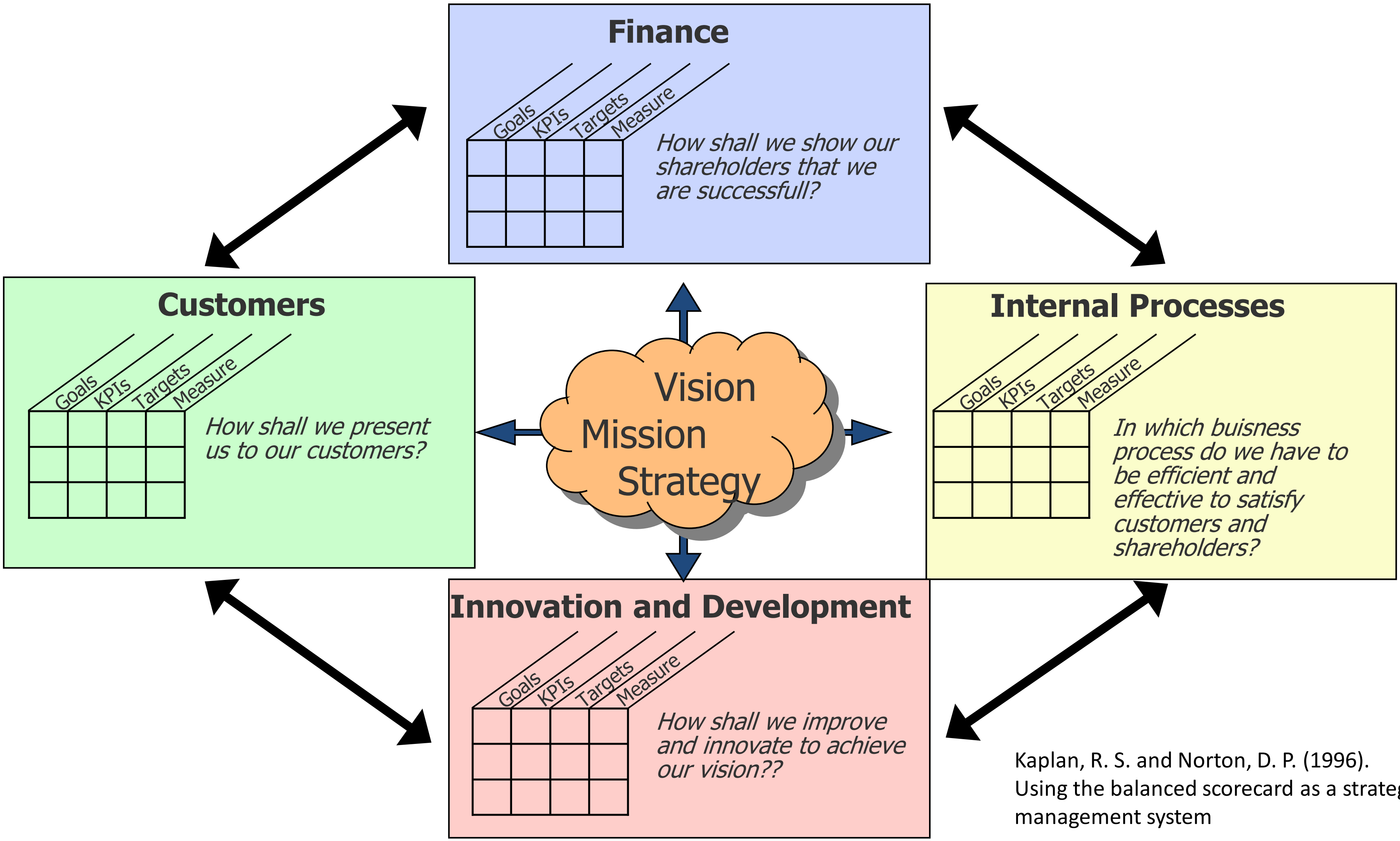
Innovation

Quelle: (Niven 2003)

# BSC – Steps in Development (2)

| | |
|---|---|
| define strategy | Which strategy to follow? Which areas to concentrate on? |
| define perspectives, success factors and objectives | What do we need to do well in order to be successful? What are the concrete objectives? |
| identify cause-effect relationships | How do the objectives interact with each other? |
| define indicators and target values | What should be measured? When is an objecitve achived? What defines a critical situation? |
| create initiative plans | Which initiatives need to be started to reach our objectives? |

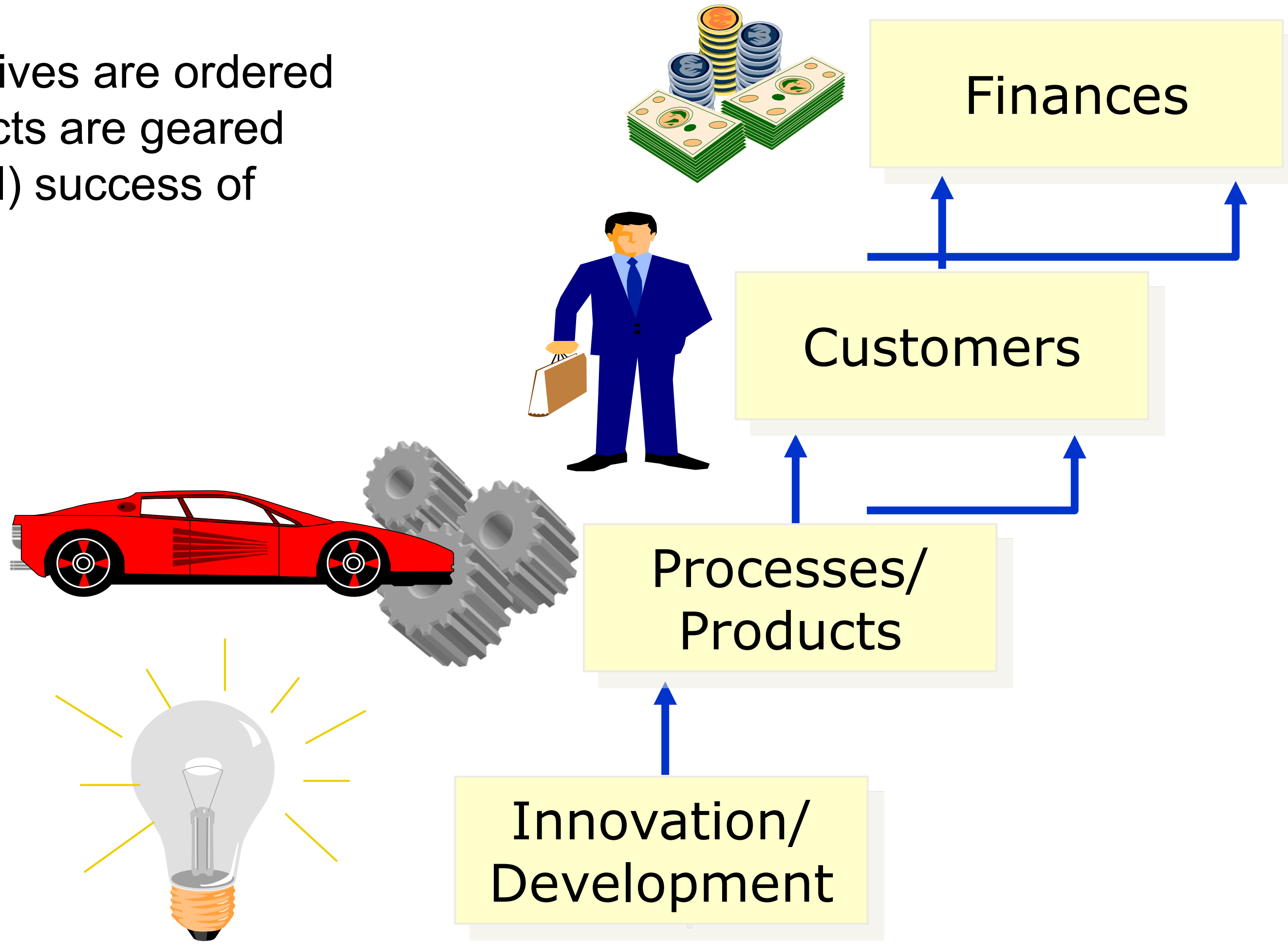
# Standard Perspectives of a BSC




Kaplan, R. S. and Norton, D. P. (1996). Using the balanced scorecard as a strategic management system

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

Usually, perspectives are ordered – cause and effects are geared towards (financial) success of company



# BSC lifecycle

- Create the BSC: Objectives, KPIs, target values
  - Management
- Connect the BSC to operative systems to derive indicators values
  - IT, domain experts
- Periodic update of figures/indicators
  - IT, domain experts

*following Knut Hinkelmann's slides on BSC*

# Key Performance Indicators (KPIs)

- 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 objective
  2. Determine KPIs for the objectives
  3. Determin target values for the KPIs
  4. Measure the KPIs periodically
  5. Show KPIs and their values in a dashboard or report

# Strategic Decisions

***Vision***

Market Leader for manufacturing high-end and middle-class bikes in the Swiss and German market.

***Mission***

Our mission is to be producer and vendor of well-designed and innovative, high-quality bikes; our highly skilled employees should contribute their outstanding know-how in the design process and be able satisfy individual customer needs.

***Strategic Goals***

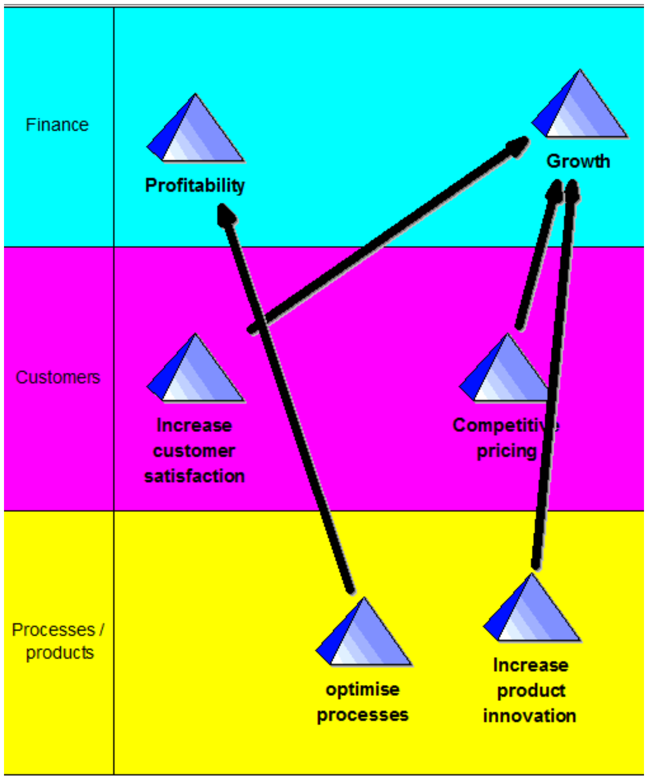
- Innovative products based on modern technology
- Keep high employee motivation
- Yearly growth of revenue
- Strategic partnerships for European market
- Refinement of third-party bicycle frames

- Vision: state of the organisation that should be reached. Where do we want to be in the future (e.g. in 5 years)?
- Mission: What is our purpose? With which means does the organisation want to achieve the vision?
- Strategic goal: What does the organisation need to achieve for reaching the vision

*following Knut Hinkelmann's slides on BSC*

# 1. Defining Objective

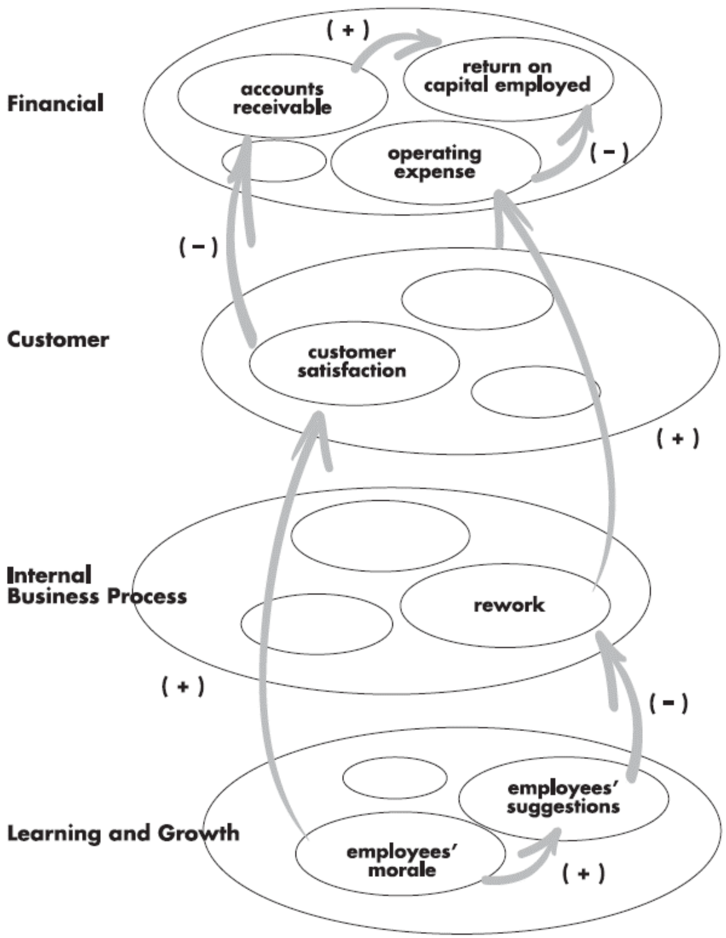
Example: ADOscore [1)]




- Determine objectives based on strategy and success factors
- Assign objectives to perpectives
- Cause-effect relationship: help to determine means if an objective is not achieved:
  - Which other goals have an influence on goal X?
    - Effects normally point upwards towards financial perspective

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

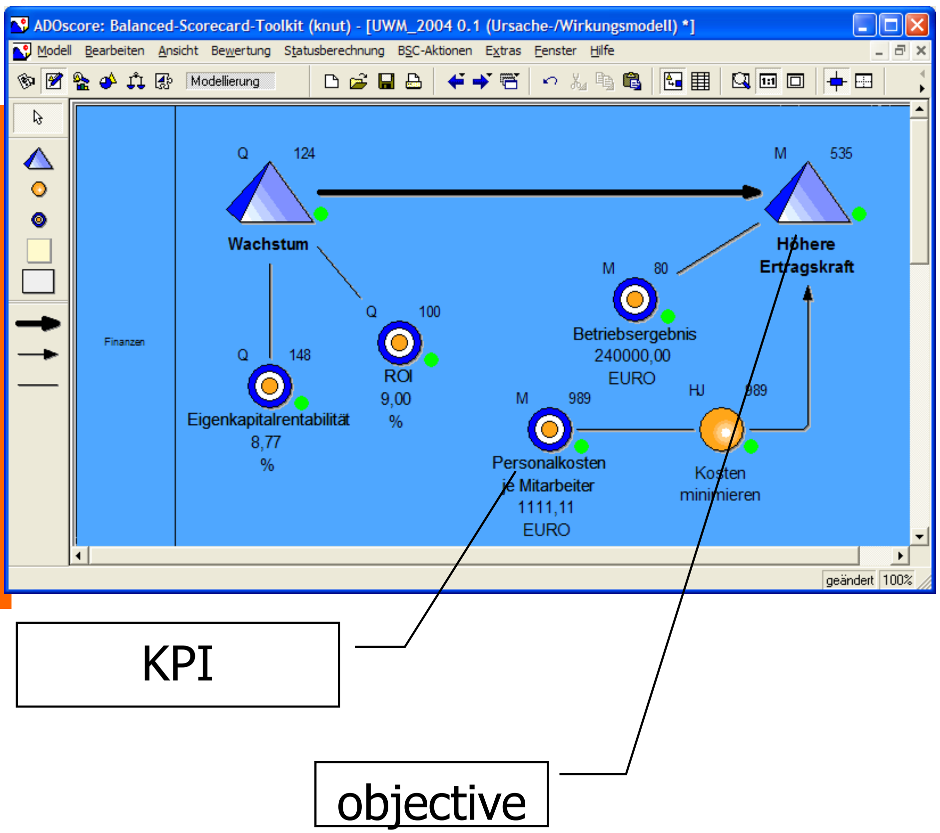
# Dependencies




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

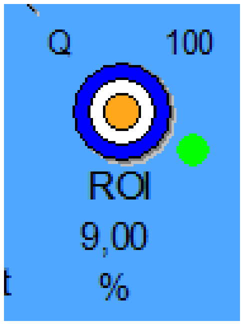
# 2. Determine KPIs

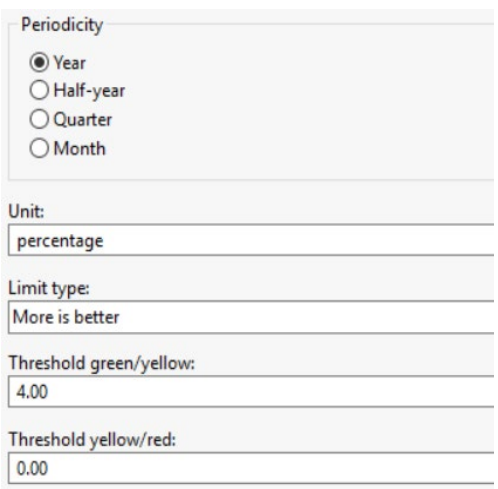
Example: ADOscore




- For each objective appropriate indicators are determined
- KPIs are indicators to measure, whether an objective is achieved
- Specify indicators such that
  - … the achievement of the objective can be recognized from the indicator
  - … the behaviour of involved people can be directed toward the achievement of the objective

# 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

# Key Performance Indicators

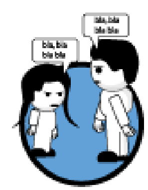
- Key Performance Indicators (KPIs) are numbers used to measure achievement of objective
  - Beware: most of the time, achievement of objectives can be measured directly (hence the term *indicator*!)!!
  - An indicator is usually just a *piece of evidence* for achievement!
  - it's like in criminology: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

# Choosing the right KPIs – example 1

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?***

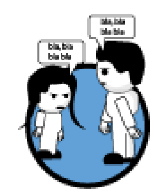


# Choosing the right KPIs – example 2


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?***

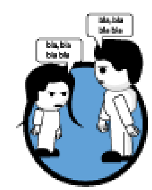


# Choosing the right KPIs – example 3

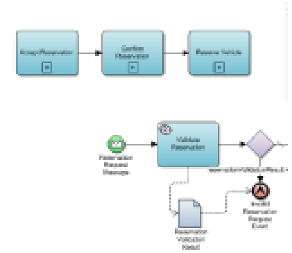
A telecommunications company sells many contracts to new and existing customers through telesales campaigns. The goal is to *maximise the profit that results from the campaigns*. The company has the ability to create predictive models of customer behaviour. Two indicators have been discussed for measuring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



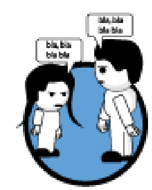
# Choosing the right KPIs – example 4



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

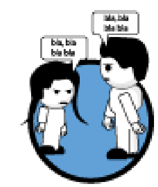
***Do you foresee any problems with this KPI? Which? What do you propose to avoid them?***



# Choosing the right KPIs – example 5

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?***

# Relate KPIs to Data Sources

- For each Indicator it has to be determined
  - the periodicity of measurement
  - how the KPI is calucated
  - which data sources it depends upon
  - how data sources are accessed
  - how data from different sources areintegrated

# 4. Dashboard: Show Goal Achievement

Comparing values of KPIs with their target values