

# INTEGRATED PERFORMANCE MANAGEMENT

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Abstract: Recently the performance of companies has gained a significant meaning due to globalization and new conditions in the field of the markets and the competition area. To be successful the set objectives derived from the strategy in different levels must be controlled and an approach must be chosen that integrates the three parts, performance management concept, IT and organisation. The proposed article is to depict the basic requirements for integrated performance management and shows as a result a meta model, where all the basic objects and their relations are considered.

## 1 INTRODUCTION

Through globalization and thereby extended markets the pressure of competition on enterprises continuously rises (Ronaghi, 2003b). The offers on services and new products extend and the Internet gives the customers the possibility to recognize changes in price and quality and react by changing the supplier. New technologies and shorter innovation cycles bring new products on the market. The requirements of the stakeholders grow and the time to react to changing environmental conditions is getting shorter. New legal conditions force the enterprises to the disclosure of their achieved performance. These facts require a competitive operational reaction time and a high flexibility and ability regarding new strategic targets (Piser, 2004) and top performance of the company (Kuong, 2003). A success factor in this connection is the measurement and management of the performance in the relevant fields.

The traceable performance measurement in the company has always been a very difficult task for the management. The main criticism of the implemented approaches was the focus on financial measures (Ronaghi, 2003a). New and modern performance management concepts promote now a multi perspective point of view and both financial and non-financial figures. Analysis of the practical use show, that there are still weaknesses to overcome like:

- The missing of the focus on strategic aspects and success factors.

- The complicated maintenance of the IT-systems.
- Obsolete and irrelevant performance data.
- The low involvement of the employees for the use of the system.
- The missing link between different performance management concepts.
- The inappropriate chosen indicators not for measuring the performance.
- The insufficient report systems aligned to the requirements of the individual persons.
- The missing link between performance management concepts, organisation and IT, etc.

The mentioned facts show that there is a need for an integrated performance management model (see section 2), that considers the basic requirements regarding the performance management concept, the IT and the organisation. This paper introduces a meta model (see section 3) derived from requirements of different sources and weaknesses that are arising by the use of performance management concepts. The mentioned meta model gives the possibility to get an overview of the necessary objects that are used as a base for modern integrated performance management.

## 2 INTEGRATED PERFORMANCE MANAGEMENT

The aim of performance management is systematically generating and controlling the performance of an enterprise (Melchert, 2004) and

consists of the four main activities planning, doing, checking and acting. A successful implementation of such a method is only possible by linking strategy to the operational execution. The integrated performance management is here seen as a critical and important approach which provides an interface between management and its operations at various levels and consists of the following three parts namely performance management concept, IT and organisation, that are briefly described in the following sections.

## 2.1 Performance Management Concept

The main criticism of performance management in organisation is even today the strong adjustment on monetary figures. But by constantly changing market requirements and environmental conditions, this alignment is insufficient. New concepts introduce the balanced use of financial and non-financial, internal and external measures and support the shift from a single dimensional point of view to a multi perspective one. As another very crucial success factor it has been proven that strategic concepts are very important to overcome the new economic conditions. Different objectives that are derived from the strategy are the base to define actions or projects to achieve the set targets (Ronaghi, 2003a). The indicators used for measuring are distinguished between leading and lagging indicators and are linked to the objectives.

Regarding these paradigms a lot of concepts have been developed with different emphasis and focus (Verweire, 2004) like the Performance Pyramid (Lynch, 1991), EFQM-Model (EFQM, 2004), Quantum Performance Measurement

(Hronec, 1996), Intellectual Capital (Sveiby, 1998), Balanced Scorecard (Kaplan, 1992), by far the most wide spread and accepted, and many else. These different dimensions of performance must be understood and strengths and weaknesses of the different frameworks must be evaluated (Verweire, 2004).

A suggestion for a classification of the different concepts and methods regarding their applicability in companies with certain requirements is shown in figure 1. The properties are put on the left hand side and on the right side their values. The mentioned properties can be amplified at any time by factors that are important for a company to implement a method.

## 2.2 The IT

The IT-support during the development process of the performance management system and the further implementation is very important to ensure high flexibility, equal data basis and actual data. The IT is an “enabler” for management theories but on the other hand the heterogeneous systems, the wide spread data sources and legacy systems lead to some difficulties.

The IT must have an appointed architecture, to meet all the requirements that are set for such systems. Especially the availability of financial, non-financial, external and internal data and the possibility to analyse them by providing an OLAP functionality and to give the management the feasibility to navigate through the data with certain granularity is important. Very often a Data Warehouse (DWH) is used to meet the challenges like the extraction, transformation, loading of data (ETL-process), security mechanisms, history of

Property	Value		
Linking to Vision and Strategy	fulfilled	partially fulfilled	not fulfilled
Perspective View	fulfilled	partially fulfilled	not fulfilled
Linking of Objects	fulfilled	partially fulfilled	not fulfilled
Key Figure Management	fulfilled	partially fulfilled	not fulfilled
Frequency of the Measurement	low	middle	high
Addressee	Top	Middle	Employees
Necessary stage of Maturity	low	middle	high
Necessary Know-How of the Employees	low	middle	high
Implementation effort (tech./org.)	low	middle	high
Maintenance effort	low	middle	high
Planning horizon	short	middle	long
Diffusion of the Concept	low	middle	high

Figure 1: Classification Schema for the PM-Concepts

changes in the data, user administration etc. of performance management systems. But the use of a DWH should only be taken into consideration if there is already one in use or if there are plans to implement a DWH for further purposes regarding the applications in the enterprise. But the DWH is not enough to meet all requirements for the integrated performance management like:

- Documentation of the developing process
- Definition and description of the performance indicators
- Comments on the “Strategy Map” (Kaplan, 1996), etc.

An additional layer must be established one level over the DWH given the possibilities to fulfil the described points above. It serves like a pool were all the information is gathered. Therefore this layer is called “Performance Pool”. In the top level the front end tools are settled. Figure 2 shows the different layers deduced as an architecture for an integrated performance management.

### 2.3 The Organisation

The organisational surrounding shows different interests of the internal and external stakeholders. These interests influence the strategy of an organisation and the problem is that they are in some aspects contrary. It’s the task of the management to find a good balance and comprise between these

interest groups to assure the success and profit of the company.

Because of the recent fraud and the crisis in the financial market new laws force companies to disclose information about their performance data. So push techniques regarding the communication must be used to provide the addressee with the desired information. Furthermore the information-consumer must have the possibility to decide and to chose which amount of information concerning different hierarchical levels in the company is the optimal one.

Integrated performance management assumes an opened communication culture in the organisation. If this culture does not exist steps must be taken to create such environment. This procedure takes a pretty long time and its difficulties should not be underestimated.

Although partly conflictive discussed the option to link objectives to an incentive system is more and more required. Certain roles are defined in the organisation to better assign and define the tasks.

### 3 INTEGRATED PERFORMANCE MANAGEMENT META MODEL

The target of this section is to summarize the mentioned facts of the previous sections as basic requirements for a modern integrated performance management to derive a meta model. The sources for

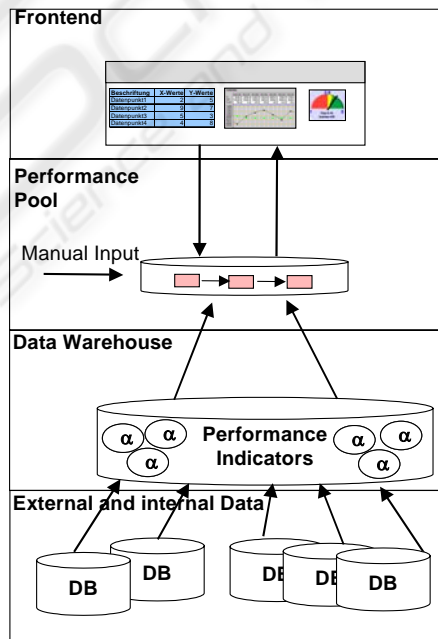


Figure 2: IT-architecture for integrated performance management

the requirements (here labelled R) as introduced are surveys, laws, vendor catalogues, literature, stakeholder interests and practical experiences (see figure 3):

- R1:** The objectives are derived from the strategy
- R2:** Success factors effect the strategy
- R3:** Actions and projects to support the realisation of the set objectives
- R4:** Financial and non-financial indicators are used
- R5:** There is a differentiation between leading and lagging indicators.
- R6:** There are internal and external indicators
- R7:** Indicators are linked to objectives
- R8:** As-is and target values are linked to time periods
- R9:** Different perspectives (e. g. financial, customer, process, innovation) are used
- R10:** The data has a certain granularity and can be analysed by OLAP-functions
- R11:** Internal and external data is used
- R12:** Performance Indicators can be composed and analysed
- R13:** The IT-System supports the pull and push technique
- R14:** An Extraction, Transformation, Loading (ETL) process delivers automatically the data
- R15:** The interests of the stakeholders are

considered

- R16:** Stakeholders have a certain role
- R17:** There is a link to an incentive system
- R18:** The measurement is possible through different hierarchical levels

Figure 3 shows the integrated performance management meta model that maps all the basic requirements and shows the relation between the objects.

#### 4 CONCLUSION AND FURTHER WORK

This article depicts the basic requirements for integrated performance management regarding three areas namely the performance management concept, IT and the organisation. This requirements to modern integrated performance management and their relation build the base for a meta model. Future research has to examine the applicability of the meta model introduced by implementing it with the help of a meta modelling tool like ADONIS® (BOC, 2004).

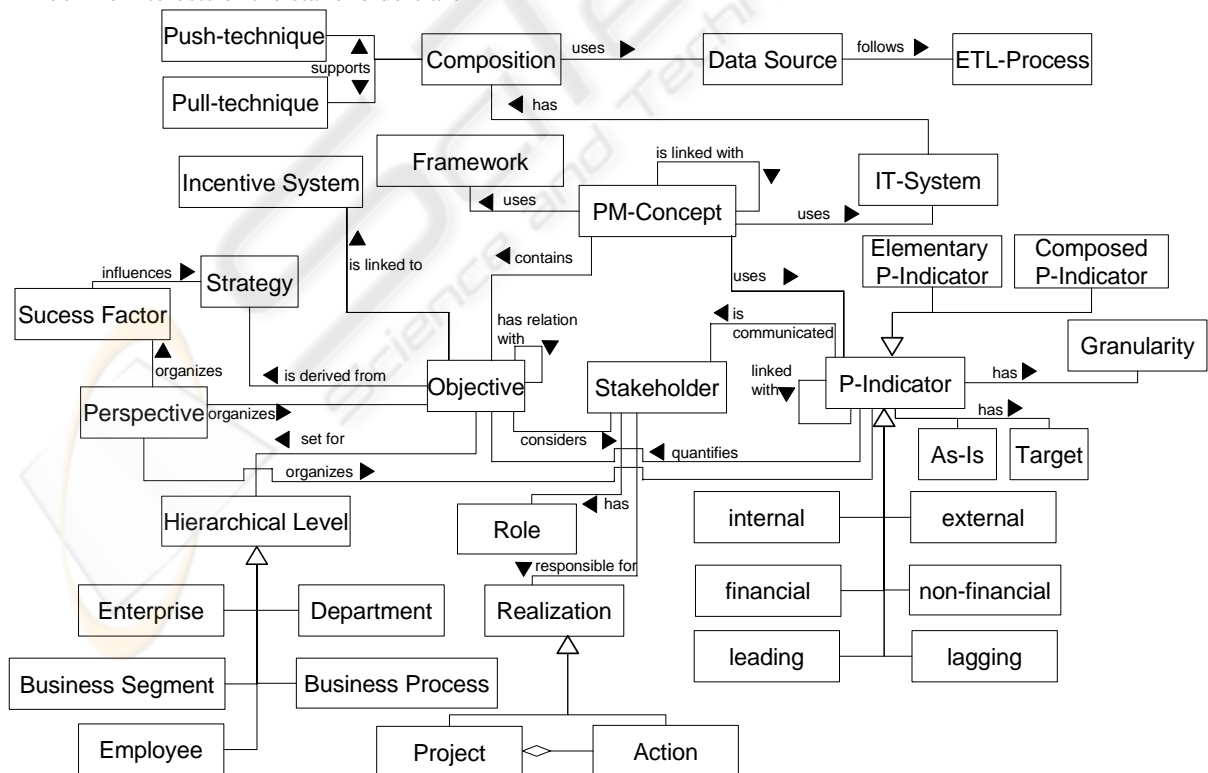


Figure 3: Integrated performance management meta model.

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