THESIS ON ECONOMICS H19

# Creation of a Supportive Model for Designing and Improving the Performance Management System of an Organisation. Case studies

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**Dissertation was accepted for the defence of the degree of Doctor of Philosophy in Business Administration on 25th April, 2011**

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Defence of the thesis: May 31, 2011

Declaration:
Hereby I declare that this doctoral thesis, my original investigation and achievement, submitted for the doctoral degree at Tallinn University of Technology has not been submitted for any academic degree.

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ISSN 1406-4782
ISBN 978-9949-23-096-9 (publication)
ISBN 978-9949-23-097-6 (PDF)



Publication of this thesis is granted by the Doctoral School of Economics and Innovation created under the auspices of European Social Fund

MAJANDUS H19

# Organisatsiooni tegevusedukuse juhtimissüsteemi kujundamist ja täiendamist toetava mudeli loomine. Juhtumiuuringud

TARMO KADAK

TTÜ
KIRJASTUS

To my Son

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# INTRODUCTION

"Relevance Lost: The Rice and Fall of Management Accounting" by Johnson and Kaplan (1987), which outlined the situation that had developed in management and cost accounting in previous decades, was a signal of the revolutionary events to take place soon in these spheres. Designing organisations' results was in actions also before that and many ideas developed then here are used also today (*e.g.* DuPont model, General Electric balanced performance indicators). The concept of *performance* was in use already before this fictitious time line, but during the following decade more systematic organisational performance related work rose to the agenda: measurement, management, design to attain the desirable and the creation of various support structures. The changes that started to happen were aimed at shifting from the financial indicators that had been in the focus of measurement systems so far toward increasing the share of nonfinancial indicators, from summarizing the past toward shaping the future that would enable the expected financial results to be realised. It was a change in paradigm at academic as well as practical level, which led to an explosive growth of literature and practical tests. The growth was also caused by that the concept of performance itself is multifaceted, used not only by one or two disciplines but it started to appear in many spheres. Moreover, its expansion also involved performance turning into a source of perfection for several disciplines: Management Control System (MCS), Enterprise Resource Planning (ERP), Management Information System (MIS), Management Accounting System (MAS), Risk Management. Many studies were conducted to identify how many of the successful organisations already used the performance measurement and management systems or intended to use them. In parallel, works describing and facilitating the introduction of the systems started to appear. There was much less information on whether the new systems brought the expected benefit to the organisation, although such questions were raised. At the same time, information started to appear about problems encountered while implementing the performance systems.

The most generally expressed result of a defective implementation of performance measurement and management systems is that the system cannot provide information and assistance what it was created for. Eventually the organisation cannot achieve that it was created and implemented for. For example, when the system has to help an organisation achieve certain objectives, if the implementation fails the achievement of the objectives is highly questionable. A high proportion of system failures in practice indicates systematic shortcomings in the implementation practices of the system, and, on the other hand, grows into a challenge to suggest solutions that would minimise such failures and would enable organisations to fully benefit from the system.

This thesis will focus on the failures in the implementation of the Performance Management Systems (PMS) and on creating a model providing a possible solution to minimise failures. *The objective of the thesis* is to create a model for increasing implementation possibility of PMS and benefit from their effect by analysing the

causes of PMS implementation difficulties and failures. To achieve this objective the author has set the following research tasks in his research.

1. Analyse shortcomings of failures in literature in order to discover the most frequent and important reasons.
2. Use research findings from previous analyses for creating a supportive model to implement PMS. The model would focus on eliminating just the main and most frequent shortcoming.
3. Test the model empirically on two organisations' PMS. On the basis of the empirical research findings assess the model's efficiency in minimising unsuccessful implementations.

The thesis is structured as follows.
The first chapter describes the shortcomings of failures and their systematisation.
The second, theoretical chapter provides the theoretical viewpoints of the research problem. The research methods have been described and justified in the third chapter. The first section of the fourth chapter describes the creation of the new model and its components. The second section of the fourth chapter tests the model empirically at the example of two organisations' PMS. Based on the results an assessment is provided on the new model's efficiency in minimising unsuccessful implementations. The final chapter concludes the thesis.

The model to be created for constructing and using an efficient PMS is based on observing the chain concept. Both the structure and functioning of PMS can be viewed as a chain where the chain fulfils its function when it is continuous. If the chain has been broken or some link in the chain does not fulfill its function, then the information does not spread along the chain and the chain as a whole does not fulfill its function. Analogously it is possible to assess how PMS is functioning. The structural components of PMS must be firmly interlinked, since one component depends on the other, thus making up the whole. The same applies to the functioning of system where consecutive activities must occur. If that is so we can claim that most probably PMS is efficient.

Consequently the *research question* raised in the thesis has been formulated as follows: Do the PMS in the structure and use of which we can clearly identify occurrence of the chain principle contribute (better) to the achievement of the organisation's strategic objectives than those PMS where this principle has not been followed and the chain is broken?

Speaking of the *topicality of the problem*, the explosive growth of PMS in the first half of the 1990s was accompanied by PMS implementation problems. Unsuccessful implementations are a real life problem on which facts will be provided in the following chapter. More than half of the organisations are not able to implement their systems and consequently do not benefit from them. At the same time, while some organisations succeed in implementing PMS, which

involves improvement of the organisation's performance, a justified question is raised why some succeed and the others do not? What are some organisations doing differently while implementing and using the system than others? Whether and by what are the systems of successful organisations different from the systems and system parts of unsuccessful ones?

The same question was asked also by Kennerley and Neely (2002): Why Performance Measurement Systems fail under organisational changes? To answer these questions it is essential to investigate the failures, which the author of this thesis will do in the following chapter.

In order to answer these questions several other questions must be answered first. What after all confirms the failure of implementation? Success is confirmed by PMS working efficiently and organisational results are generated/improved. This in turn brings up the following questions: Are there any preconditions in these systems that must be fulfilled for the PMS implementation and application to be successful? What are the components the system must have and what conditions these must conform to? What is the system in general and in which way PMS as a system's functioning is arranged for the benefit of the organisation? All these questions will be attempted to answer in this thesis.

Regarding the *PMS failure* we must take a closer look at what PMS failure means at all and what it may involve?

In the broadest sense, failure is expressed in that after implementation of PMS, after an expected time interval the organisation's (interim) results do not improve or the (strategic) objectives are not gained by the end of the (strategy) period. Non-attainment of objectives directs attention to the PMS.

PMS can be discussed as a chain and moving along the chain, starting from the PMS design to summarising the organisation's results from the aspect of strategic goals, weak links may theoretically occur in several segments:

1. through the PMS structure activities are not set or wrong activities are set for units to be carried out, which cannot lead to desired results;
2. units are set targets that would theoretically lead to the achievement of objectives if these activities are executed, but actually other activities are carried out in the phase of execution, which are not based on goals and therefore there is no desired results;
3. continuing with wrong activities may be due to that interim results are not collected in the organisation, or
4. not performing the right activities may be due to that the organisation does not react to unsatisfactory in interim results ensuing from unnecessary activities;
5. when interim results are collected, the shortcomings may be lack of communication, which does not lead to adjusting activities, or wrong results are gathered, or lack of an adjusting system itself including not doing adjusting activities, which will ultimately lead to that the objectives are not achieved.

These weaknesses in the chain are analysed in the following chapter.

Since organisations are very different, is it possible to compare PMS of different organisations at all? Although organisations can use identical PMS, due to the differences in organisations their systems are still different in essence. The unique nature of systems of organisations has been underlined also in specialised literature. For example, Hoffmann (2008) points out that:

> "it is generally accepted that there is no universally best management control system for projects that applies to all situations in all organisations. Literature on the implementation of management control systems in general suggests that these systems should be tailored to fit the characteristics of an organisation in order to achieve better performance (Anthony and Govindarajan, 2007; Merchant and Van der Stede, 2003)".

However, there are certain system components common for different organisations as well as for different systems, which enable to make different systems comparable to each other. Relevant here are in the first place the existence of system components, secondly content of them and thirdly mutual relationships of the system components, whether these are connected or there is discontinuity between them.

To sum up the above, the problem this thesis seeks to solve is briefly as follows. Most of the strategic PMS implemented in organisations cannot quite benefit to the organisation what they were created for. Unsuccessful implementation involves both direct and indirect financial loss, which exerts negative impact on future development projects, depreciating their value in advance. Hence there are difficulties in implementing PMS as a result of which PMS cannot benefit the organisation to the full extent. This is most likely to cause also the strategic goals of the organisation are not gained (due to non-implementation of the strategy).

If the proportion of failures is high, obviously there must be some recurrent/symptomatic obstacles encountered during the implementation. Although, on the one hand, implementation is highly organisation focused, on the other hand, while rising to a higher level than the organisation specific details – the level allowing comparison of organisations and their operation – we can speak of common points in PMS implementation that should be taken into consideration. Using these points (with design and implementation) it is likely that the number of shortcomings will decrease and that should provide a higher number of success stories.

Compared with the available sources of literature most of which focus on what kind of indicators different organisations and sectors use most to measure their performance, there are quite few sources of literature on why they fail and few qualitative studies that would identify the causes. Literature contains hints that this field has not been much developed further (Annala *et al.,* 2009):

> "Despite the various frameworks, for example Neely *et al.* (2000) state that many of them provide little guidance for how the appropriate measures can be identified, introduced and used to manage the business. Also when the Balanced Scorecard was first launched, little attention was paid to the process

> of performance measurement system design. However, Kaplan and Norton soon recognised the importance of this topic and therefore created a brief description of an eight-step process to enable managers to design balanced measurement systems".

The large amount of literature mentioned in the chapter of problem statement does not give an answer to the question why failures occur. Additionally, the causes of failure may be complex, which cannot be discovered with quantitative methods of research. Still, there are sources of literature which indicate what PMS should contain, its component parts (plans, rules); there is less literature on what should be taken into account in implementation and still fewer sources on what it takes for the system to run. Such a symbiosis where three parts (design, implementation and use) are used together has not been found much by the author in literature (Neely, Kollberg). There is little literature also on how to assess PMS efficiency.

And yet such a integrated approach provides guidelines to the organisation which wants to implement PMS how to implement it, and the organisation which already has implemented PMS an opportunity to test the system to find reasons for inefficiency, or simply improve its system. Comparing an organisation's PMS to that of an efficient PMS model (following the chain principle), recommendations can be given when these diverge to perfect the organisation's PMS in order to avoid creation and use of an inefficient PMS.

Considering the high proportion of failures and lost benefit because of non-implementation it is extremely topical to propose a solution to this problem.

To sum up the introduction, PMS is a very popular topic, but it is not easy to benefit from this system. Problems are encountered in the implementation of PMS that do not allow benefitting fully from it. Inefficiency of the system may reveal not earlier than when the deadline of accomplishing the strategic objectives has arrived. Then it is too late. This thesis will create a model that allows supervising the creation of PMS so that the PMS would be efficient. The new model will also enable to evaluate efficiency of the existing PMS and where weaknesses occur point out what should be improved.

## Acknowledgements

Author is grateful to:
supervisors Professor Jaan Alver and Professor Emeritus Kaido Kallas, Associate Professor Kostel Gerndorf, Marika Kirsspuu, Kaja Olek, Mare Orav and Aet Toots.

## Abbreviations

| | |
|---|---|
| BSC | Balanced Scorecard |
| CPO | Chief Performance Officer |
| CSF | Critical Success Factor |
| EFQM | European Foundation for Quality Management |
| EPS | Earning per Share |
| ERP | Enterprise Resource Planning |
| HRM | Human Resource Management |
| IMD | World Competiveness Yearbook published by IMD |
| KPI | Key Peformance Indicator |
| MAS | Management Accounting System |
| MCS | Management Control System |
| MIS | Management Information System |
| NPM | New Public Management |
| PMCS | Peformance Management Control System |
| PMF | Peformance Management Framework |
| PMS | Peformance Management System |
| ROE | Return on Equity |
| ROI | Return on Investment |

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# 1. PROBLEM STATEMENT

A great number of research papers, articles and other sources of literature have been published in performance related topics. It has been said that since 1994 a new paper about performance management has come out per every 5 hours on weekdays. Hence, about 12 million papers about the subject would have been published by today (Marr and Schiuma, 2002). Neely (1999) counted some 3,615 published articles on performance measurement between 1994 and 1996 alone. Consulting firm Bain and Company reported that by 2008, 53 percent of the respondents worldwide were using BSCs in their companies (Rigby and Bilodeau 2009). The subject has not remained only at the level of theory but attempts have been made to implement the performance related methods also in practice. There is also a lot of literature on the design and implementation of Performance Measurement Systems (Bourne *et al.*, 2003; Gooderham, 2001; Neely *et al.*, 1997; Bititci *et al.*, 1997; Letza, 1996). And there are also many different implementation processes and examples from practice (Kaplan and Norton, 1996; Olve *et al.,* 1998). The popularity of the Performance Management Systems in practice is confirmed also by the judgement expressed in 2000 that by the end of the same year 40−60% of the US large enterprises use Balanced Scorecard (BSC) as one of several PMS (Neely and Bourne, 2000).

On the other hand, the literature also contains hints to that difficulties have been encountered while implementing PMS, which do not allow fully benefitting from the system (Meekings, 1995; Bierbusse and Siesfeld, 1997; Hacker and Brotherton, 1998; Lewy and Du Mee, 1998; McCunn, 1998; Sedecon, 1999). A consequence of non-benefitting from strategic PMS is that organisations are not manageable as a whole, they are not managed based on common objectives and the desired long-term goals are rather not achieved than achieved. In addition to the "stronger" aspect of non-implementation of the system there is also a "soft" side – if no benefit is gained from the system, it might have a negative effect on the organisation in multiple ways. In addition to direct measurable expenses there are working hours spent; speaking of the indirect aspects, it will be more difficult to carry out subsequent improvement proposals due to the increased negative attitude. A question is to be asked – will the organisations which have succeeded in implementing PMS achieve better results than others? Notwithstanding the popular nature of the topic there are few empirical research papers available (Yeniyurt, 2003). Some studies still confirm that PMS improves the organisations' performance and the results accomplished are better than in the organisations which do not use these systems. These research findings illustrate the benefit gained from excellently designed and executed PMS. Some research results related to the topic follow.

**Benefit from using PMS**

Aberdeen Group found (Table 1.1) that organisations with advanced PMS achieved significantly higher financial results than organisations with medium level and organisations having difficulties with PMS (Closed Loop…, 2005). Since PMSs

are sophisticated and their implementation is a time consuming process it may be said that their implementation has indeed been undertaken in connection with strategic objectives and better financial performance can very likely be based on a systematically implemented strategy rather than external results and activities of the strategy.

Table 1.1 Relations between performance management and organisational performance

| **Indicators** | **Best-in-class** | **Average** | **Laggards** |
|---|---|---|---|
| Gross margin, % | 32 | 24 | 15 |
| Market share in profitable segments, % | 25 | 19 | 14 |

The research figures demonstrate that organisations with the best PMS level achieved higher gross profit margin and market share.

One of the first research studies over a longer period of time (1996–99) revealed (Table 1.2) that organisations with balanced PMS are more successful than organisations without balanced PMS (Schiemann and Lingle, 1999).

Table 1.2 Relationships between performance management and organisational performance

| Indicators | Organisations with a balanced PMS* | Organisations with a nonbalanced PMS** |
|---|---|---|
| Perceived as an industry leader over the past 3 years | 74% | 44% |
| Reported to be financially ranked in the top 3 of their industry | 83% | 52% |
| Last major cultural or operational change judged to be very or moderately successful | 97% | 55% |
| Three year Return on Investment (ROI) | 80% | 45% |

* containing financial and non-financial data.

** containing mainly financial data.

This finding points to specific characteristics of the system and requirements (balanced or nonbalanced PMS), which may lead to unsatisfactory final results. The same research identified some typical components that will carry on the system's specificity and also outline why results are better in organisations with balanced PMS than with nonbalanced PMS (Table 1.3).

Table 1.3 Organisations with different performance management systems have different characteristics

| Characteristic | Organisations with a balanced PMS, % | Organisations with a nonbalanced PMS, % |
|---|---|---|
| 1. Clear agreement on strategy among senior management | 93 | 37 |
| 2. Good cooperation and teamwork among management | 85 | 38 |
| 3. Unit performance measures are linked to strategic company measures | 74 | 16 |
| 4. Information within the organisation is shared openly and candidly | 71 | 30 |
| 5. Effective communication of strategy to organisation | 60 | 8 |
| 6. Willingness by employees to take risks | 52 | 22 |
| 7. Individual performance measures are linked to unit measures | 52 | 11 |
| 8. High levels of self-monitoring of performance by employees | 42 | 16 |

The research already shows that PMS designed according to different principles/criteria have different effects on key components for organisational management. The main difference is greater vertical and horizontal cooperation and communication within the organisation involved in the balanced systems. Lack of communication is clearly noticeable in the hierarchy related components, *e.g.* linking units performance measures to the organisation's strategic measures and linking employees' measures to units' measures (components 1, 3, 5, 7).

Literature contains also references to benefitting from successful implementation of PMS.

> Ittner *et al.* (2003) and Lingle and Schiemann (1996) found evidence that organisations making more extensive use of financial and non-financial measures and linking strategic measures to operational measures have higher stock market returns.
>
> Lawson's *et al.* (2003) study shows that the use of PMS as a management control tool reduces the overhead costs by 25% and increases sales and profits.
>
> A survey conducted among 1000 companies demonstrated that most of the organisations (88%) regularly using the BSC reported improvements in operating performance, and 66% of them also reported an increase in profits (DeBusk and Crabtree, 2006).
>
> An article by Martinez and Kennerley (2006) has stated that according to research, implementation of PMS increased the firm's share price.
>
> Many enterprises (Mobil Oil, Cigna Insurance, Chemical Retail Bank *etc*) have achieved remarkable performance results only after three years from implementing BSC (Verweire and Berghe, 2004, p. 43).

Generalizing observations from literature allows to state that measuring and managing of performance is continously popular and organisations with implementing and using PMS provide higher financial and nonfinancial results than organisations using less performance management based principles (Waal, 2007). Studies show also that there are certain demands for the system whose observation will guarantee success.

As mentioned in the introduction, there are still some obstacles to benefitting from the system and literature contains many facts on unsuccessful implementations (and use) of BSC.

Some general observations follow.

> Despite evidence of increasing scorecard use both in the USA and UK, until recently less attention has been paid to the problems or difficulties associated with implementing a balanced performance measurement system (Bourne, 2005).
>
> From industrial conferences (*e.g.* Business Intelligence, 2000), one may well come to the conclusion that there are few problems with implementing new performance measurement systems. There are certainly many success stories (*e.g.* Kaplan and Norton, 2000, the Mobile case), but there is a growing literature addressing the difficulties of implementation and it is claimed by some that 70 per cent of performance measurement initiatives fail (McCunn, 1998).
>
> The same failure rate (70%) has been observed for the BSC (Neely and Bourne, 2000).
>
> Studies have shown that PMS implementation in industry still lags far behind expectations (Olsen *et al.,* 2007, p. 562).

Before going on with the topic of implementation we should define what the PMS that is so difficult to implement is. How is it functioning? Without stopping on various definitions (which have been presented in the theory chapter) it should be pointed out that PMS with its structure and functioning helps the organisation make sure its long-term objectives are achieved. The author of this thesis defines PMS as follows: PMS is an integrated/holistic approach to the organisation, which derives for executive units and employees their short-term tasks based on the strategic goals of the organisation (or on other which has regarded as performance), regularly monitoring their conformity to expectations and where necessary, launching adjusting activities when (interim) results are not as expected. All this in order to help the organisation ensure achievement of its long-term goals with its arrangement.

The operating principle of PMS can be briefly described as follows. It is assumed that an organisation which wishes to use a PMS does it in order to improve its (market, financial) situation in the future. The presence and awareness of this assumption are of essential importance for benefitting from PMS. Improvement of the situation would mean periodically performing certain activities which are previously defined in faith and belief that just these activities will lead to the

desired results. This in turn requires first an assessment of the present situation that needs to be imporoved (on the basis of specific criteria), defining of the desirable situation in the future (difference between the present and desirable has been called *performance gap* in some sources of literature (Wade and Recardo, 2001, p. 42)), defining series of activities and all this in order to reach a new status (according to the same criteria but with better target values). All this may be called also strategy making and execution. During the strategy execution it is necessary to monitor the interim results, communication to parties concerned, so that, if necessary, the organisation could perform adjusting activities. The starting point for the system is current statics and the pathway to future statics is the dynamics in the future. For the system to function, it needs resources/fuel (finances, working hours, system infrastructure, knowledge, administration's concern, regular maintenance).

**Causes of failure**

In addition to benefitting from the system literature has identified many failures related with PMS implementation. As follows, some justifications of failures will be brought out, which will be later analysed and grouped in order to discover one, the most significant cause.

1. PMS has a central role in the strategy execution process and thereof PMS contributes a lot to support this process successfully.
   Fortune magazine study from 1999 found that 70% of CEO failures came not as a result of poor strategy, but the inability to execute (Niven, 2005, p. 10). In the opinion of the author of the thesis this indicator clearly underlines the significance of the executing strategy in addition to the strategy itself.

2. The answer to the question why the execution of strategy is so complicated, lies by Kaplan and Norton in the form of four barriers that must be surmounted before strategy can be effectively executed. They state also that only 10% of organisations execute their strategy, which is a very low number and indicates to big problems existing in this field in the author's opinion. The barriers are (Niven, 2005, p. 11):
   a) Vision barrier: only 5% of the workforce understands strategy;
   b) People barrier: only 25% of managers have incentives linked to strategy;
   c) Management barriers: 85% of executive teams spend less than one hour per month discussing strategy;
   d) Resource barrier: 60% of organizations do not link budgets to strategy.

3. All causes of failure presented by Schneiderman (1999), author of the first BSC, may be classified as design failure and have been used in many papers as the main factors of failure causes:
   a) the independent (*i.e.* nonfinancial) variables on the scorecard are incorrectly identified as the primary drivers of future stakeholder satisfaction;

b) metrics are poorly defined;
c) improvement goals are negotiated rather than based on the stakeholder requirements, fundamental process limits, and improvement process capabilities;
d) there is no deployment system that breaks high level goals down to the sub-process level where actual improvement activities reside;
e) a state of the art improvement system is not used;
f) there is not and cannot be a quantitative linkage between non-financial and expected financial results.

The author cannot agree with the last statement because the outputs of current activities, many of which are not measurable in money, shape the organisation's financial results in the future. PMS attempts to create linkages between these two different dimensions of time, which is the gist of PMS.

Additionally Schneiderman (2006) has characterised the situation as follows:

> "The much sought-after linkage between performance measurement and strategy is poor in practice, partly as a result of the forced classifications into the categories of financial, customer, internal processes, and learning and growth [. . .]. Current practice is ad hoc and the resulting linkages are not compelling".

4. Bourne *et al.* (2002) are categorising reasons for success and failure from literature and proposed them using three categories of Pettigrew *et al.* (1989), which are (Figure 1.1):

a) Contextual issues:
- the need for a highly developed information system;
- time and leadership and resistance to change;
- lack of leadership and resistance to change.

b) Processual issues:
- vision and strategy were not actionable as there were difficulties in evaluating the relative importance of measures, and the problems of identifying true "drivers";
- strategy was not linked to resource allocation;
- goals were negotiated rather than based on stakeholder requirements;
- state of the art improvement methods were not used;
- striving for perfection undermined success.

c) Content issues:
- strategy was not linked to department, team and individual goals;
- large number of measures diluted the overall impact;
- metrics were too poorly defined;
- the need to quantify results in areas that are more qualitative in nature.

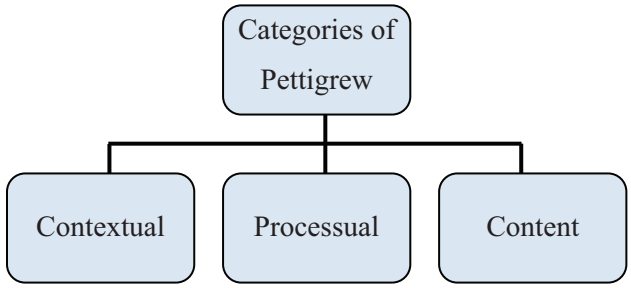


Figure 1.1 Three categories of Pettigrew (Composed by the author)

5. Bourne *et al.* (2002) says there are four main blocking factors to implementation of the measures:

- the effort required;
- the ease of data accessibility through the IT systems;
- the consequences of measurement;
- being overtaken by new parent company initiatives.

6. Clinton *et al.* (2002) believe that difficulties are related with selecting process of measures and with their appropriate use.

7. Frigo and Krumwiede (1999, p. 44) concluded that scorecard users rated about a third of customer and internal process area metrics as between "less than adequate" and "poor." In addition, "only 16.8% rated customer metrics as 'very good to excellent,' and only 12.3% said their internal process metrics were "very good to excellent".

8. BSC expert Niven (2005) believes that half of BSC users are not achieving the results they hoped for and a significant number of users rate their performance measurement systems as "adequate".

9. They seem to have a difficult time choosing the proper metrics and then using them appropriately (Clinton *et al.,* 2002).

10. CIMA technical report (Effective Performance…, 2005, p. 23) points out the following weaknesses discovered in their research:

- 78% of companies that have implemented strategic performance measurement systems do not assess rigorously the links between strategies and performance measures.
- 71% have not developed a formal causal model or value-driver map.
- 79% have not attempted to validate the linkages between their non-financial measures and future financial results.
- 45% found the need to quantify results to be a major implementation problem.

**Summary of shortcomings**

The above described causes of shortcomings have been summarised by the author as follows.

1. The Fortune survey indicates if an organisation even has a good (realistic) *strategy,* then the obstacle to the success of the organisation is *poor execution.* To facilitate strategy execution a number of tools has been created, *e.g.* BSC, which, however, also need to be executed and difficulties have been perceived there too. It should be added that BSC execution need not yet signify strategy execution. This means that with an excellently designed BSC an organisation has got an instrument with the help of which to execute the strategy. The next aspect where to focus attention to is acting on the basis of BSC during the strategy period, since even when acting according to BSC there are several possibilities of failure. In most general terms, the research suggests that PMS as a strategy execution tool has (general) weaknesses.

2. Observations by Kaplan and Norton also *verify difficulties in strategy execution*. Their notes are related on the one hand with conducing background of strategy execution – attention of senior manager to project and on the other hand with effect on the creation of PMS structure caused by the same poor attention:
   a) Operational *activities of managers are not aligned with strategy* causing effect that strategy has not reached the employee level. Herein the author can conclude that managers' and their employees' everyday activities are not related with strategy and actual everyday activities are not addressed to the achievement of strategic objectives;
   b) Strategy is complicated and *not clear to employees* causing the effect that strategy is not present at employees' everyday level and therefore the probability of achieving strategic objectives is low from the start;
   c) Strategy execution is *not paid enough attention to and resources* (budget contributes to other activities not derived from strategic priorities).

All these shortcomings are transmitted in the PMS design on to the PMS structure.

3. Remarks from Schneiderman suggest causality and they are about the *execution process* itself, in which PMS has essential contribution to success through support:
   a) The factors and activities that lead to stakeholders' satisfaction are not defined. Hence it is not known what exactly leads to their satisfaction and therefore it is difficult to define the paths leading there and the activities of tracking the pathway and adjusting activities will not produce any results. This involves low probability of achieving the actual objectives;

b) *Objectives of units are not aligned with* organisation's or actual executors. As a result everyday work of the units and their employees is not aimed at the achievement of strategic objectives. Methods for executing are missing;
c) The *measures* may therefore prove *inaccurate* and these cannot be used to track the pathway to strategy execution;
d) Information from performance assessment that should necessitate *adjusting activities, do not bring this effect*. Even improvement activities are undertaken these are not based on the facts collected by the system. This entails that adjusting activities lack a real opportunity to influence the organisation's objectives;
e) Execution is essentially complicated and achievement of results is rendered purely a matter of chance by that *tasks are not cascaded,* which separates employees' everyday activity from strategy execution and in turn will cause the sitauation that strategic objectives are not achieved;
f) There *are no linkages* between everday activities and effects of the same activities on the achievement of financial results.
g) Causes of failure are also insufficient attention to execution as a phase in the general usage of PMS.

4. According to Bourne, a problem is the nonconformity of strategy to requirements for delegation, as a consequence, most probably the strategy will not be executed.

a) *Allocation of resources* (time, money, missing leadership in execution and lack of information system) for strategy execution is not systematic and sufficient.
b) *The vision and the strategy itself have* weaknesses which do not allow to take the strategy to the units and employee level. As result their everyday work is not targeted at the achievement of the organisation's strategic objectives.
c) *Poorly* designed *measures* and their multitude.
d) *No measurement* in important areas for strategy execution.

5. Clinton *et al.* detect causes in the poor selection of measures, which involves PMS structure measures which actually do not express strategic objectives.

6. Frigo *et al.* say the cause is poor measures leading to the situation where activities may be well executed, but if they are wrong, the probability of achieving the objectives is low.

7. A weak linkage between strategy and the measures mentioned in CIMA report implies that there is no linkage between strategy and performance measures that measure its execution and achievement. This does not allow executors to set objectives which would be derived directly from the strategy and there is no

confidence that the executed activities will lead to the achievement of strategic objectives.

8. Lack of causal model is associated with the preparation of the strategy itself and deployment for the executors. No alignment between strategic objectives and executed activities occurs.

9. A weak linkage between nonfinancial indicators and financial results implies a weak alignment between everyday activities and their impact on the organisation's financial results.

10. Problems with the quantification of results imply that the level to be achieved has not been defined. This involves weak alignment and it is not known what exactly is regarded as the achievement of strategic objectives. This does not allow to communicate the same to executors and there is no confidence that executed activities will lead to the achivement of strategic objectives.

**Grouping shortcomings**

Grouping the above-mentioned shortcomings, more general and specific groups of reasons can be identified. General difficulties are largely associated with strategy execution (Fortune, Kaplan and Norton, Schneiderman, CIMA) and it has been mentioned once that vision and strategy themselves are inadequate (Bourne, CIMA).

The following more specific difficulties are encountered in strategy execution as a process:

1. Communication difficulties: strategy has neither been deployed nor aligned with managers, units and employees (Schneiderman, Clinton, CIMA); strategy is not clearly understood (Kaplan and Norton).
2. Measures are poor (Schneiderman, Bourne, Frigo, CIMA) and there are too many of them (Bourne), which all is a consequence of poor selection process of measures (Clinton). This implies a lack of an efficient method.
3. Insufficient resources for strategy execution, resources are allocated without consulting strategic priorities but on some other basis (Kaplan and Norton, Bourne).
4. Feedback related: adjusting activities are not based on actual results or these are not performed at all (Schneiderman, Kaplan and Norton); additional pay is determined not based on strategy execution (Kaplan and Norton).
5. Problems are encountered in PMS implementation (Niven), insufficient initiative (Kaplan and Norton, Bourne), insufficient allocation of time and money for execution (Bourne). This indicates the lack of system operating "fuel".
6. Problems caused by PMS: lack of an advanced information system (Bourne).

More specific weaknesses can in turn be divided into two (Figure 1.2):

- Difficulties with communication: both deployment of objectives and feedback. Also measures can be regarged as means of communication tools 1, 2 ,4.
- Difficulties arising from insufficient leadership and resources in PMS implemention 3, 5, 6.

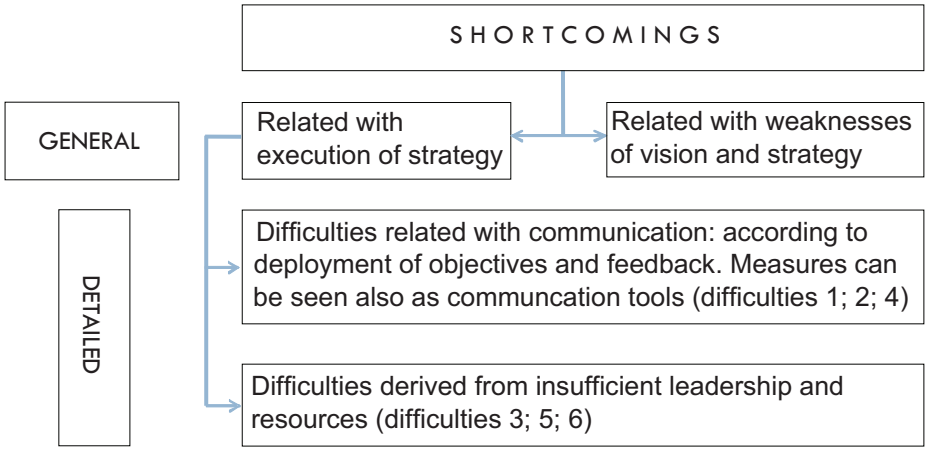



Figure 1.2 Summary of shortcomings

Difficulties with communication affect creation of PMS structure and its functioning more directly. Insufficient leadership and resources influence the quality of the structure and functioning somewhat more indirectly.

Difficulties with communication have been pointed out by many authors.

Verweire and Berghe (2004, p. 7) claim that communication has a significant role in the performance management process.

Merchant (1989) argues that communication failure is an important cause of poor organizational performance.

Weak communication is mentioned also by Malmi (2001) in his reseach:

> "Most interviewees stated that they have derived their measures from strategy, based on cause-and-effect reasoning. When asked to give an example of such cause-and-effect chains, the claimed link between strategy and measures appeared weak in most companies. Comments suggest that the initial idea of linking measures is not well understood".

Breakdowns in communication and difficulty in translating the strategy into action are common reasons for failure. It is often difficult for employees to know what to do to improve performance (Debusk and Crabtree, 2006).

Chtioui (2010) in his research reached a conclusion that communication contributes to the realisation of control objectives. Depending on the model adopted, it acts as:

a) a control tool;
b) a motivational factor;
c) an instrument of influence;
d) a coordination mechanism.

Employees of a well-known auditing firm, Arthur Andersen, unveiled that the control framework is often unsynchronised with the organisation's objectives. A challenge there is to identify and communicate the strategy and then design and implement a PMS which is clearly linked to strategic objectives. The trick is to identify the critical sources and find related measures that will lead to performance (Stivers and Joyce, 2000).

Comprehension of causal connections (author: which is the result of working communication) are important for the achievement of results (Luft, 2004). He finds that the reason why poor causality (author: result of communication) exists is due to that defining of the profit creating process and their indicators that would cover these processes in the best way, is extremely uncertain and not well understandable for anybody in the organisation.

This has been studied also by Webb (2004) who in his experiment verified that managers focus more on fulfilling the objectives where causal connections are visible, perceptible and strong.

Previous research by the author of this thesis (Alver and Kadak, 2009) pointed out an analogous problem: relationships with firm's objectives (financial, personnel, product and their development areas) and data used for measuring the results were studied. Although the research demonstrated significant alignments, non-alignments still appeared between objectives and the indicators monitoring their achivement, both in strong and soft areas.

These shortcomings can also be addressed as lack or weakness of communication where the objective is not observed in the execution phase.

Taking into account the failure rate, on the one hand, and shortcomings, on the other hand, there is an obvious need for an instrument with the help of which to avoid failures in PMS design and usage.

**Possible weaknesses in the chain**

In the following the author has, based on the above shortcomings in communication, analysed where in the PMS chain the weak spots described in the introductory chapter of the thesis (page 8) theoretically may occur (Figure 1.3).

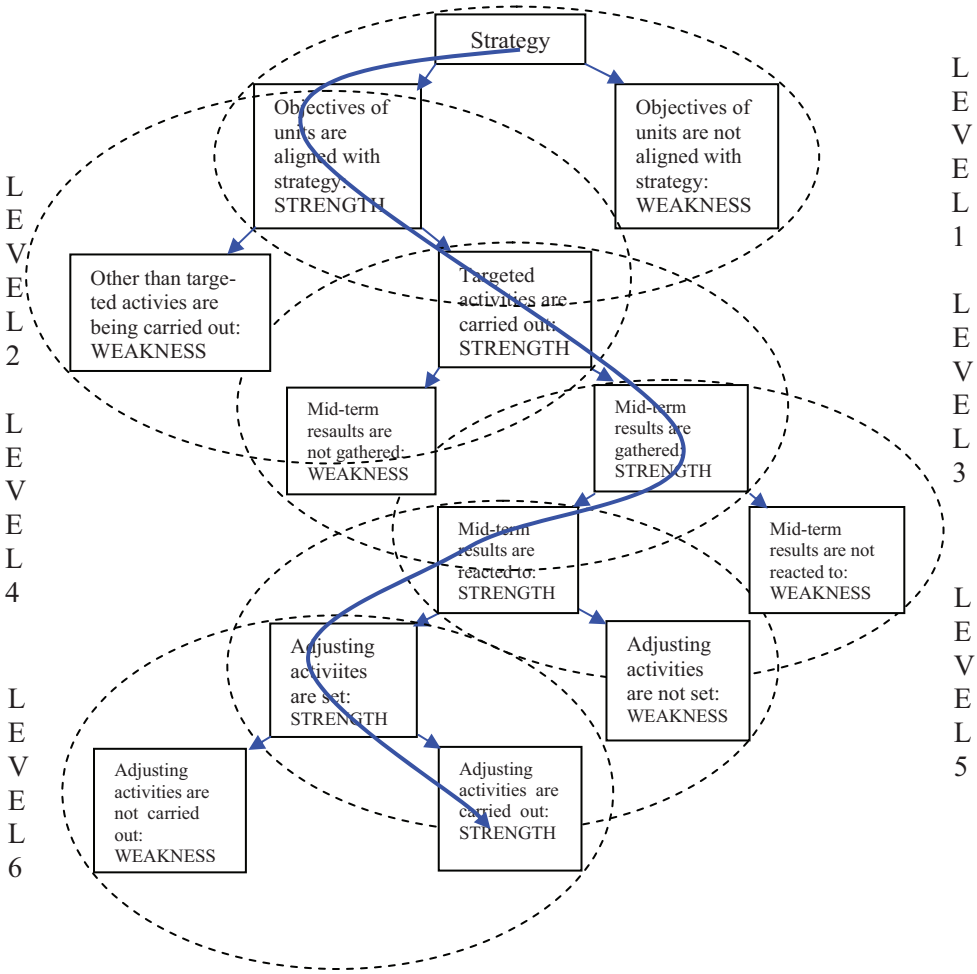



Figure 1.3 Occurrence of shortcomings in PMS chain (compiled by the author)

The shortcomings mentioned in *item one* (see page 11) refer to shortcomings in the PMS structure design. The task of structure is to deduce for the achievement of the desirable condition in the future a temporal division of labour with aids allowing measurement of the pathway. Shortcomings can derive from inappropriate design of PMS structure, or in the event of an appropriate design, lack of content in system components (organisation in the hierarchy has no interim results of units and temporally divided activities along with interim activities which would ultimately lead to strategic objectives, or the target values are set too low and therefore will not lead to results) (level 1 in Figure 1.3).

Shortcomings mentioned in *item two* (see page 11) imply already weaknesses in the system functioning: communication or shortcomings in employees' skills. Both may be caused by shortcomings in the system's execution phase: insufficient

training in division of work and new work tasks. Wrong activities should be detected in the process of monitoring activities via incidence of unsatisfactory results (level 2 on Figure 1.3).

Shortcomings mentioned under *item three* (see page 11) imply shortcomings in the system functioning and are caused by not collecting mid-term results (level 3 on Figure 1.3).

Shortcomings mentioned in *item four* (see page 11) refer to shortcomings in system functioning: data related organisation of work. Mid-term results are collected but unsatisfactory results are not reacted to and not communicated (level 4 on Figure 1.3).

Shortcomings in *item five* (see page 11) indicate malfunctioning of adjustment to objectives and activities. Unsatisfactory mid-term results are detected but on the basis of these no adjusted or new objectives or adjusting activities are set for the new mid-term period (levels 5; 6 on Figure 1.3).

Based on the PMS shortcomings found in literature and the just analysed weaknesses in the chain, these can be grouped, synthesised and used for the creation of a model that would help execute PMS which would work efficiently.

The problem description has sought to describe and open the problem. First the popularity of the subject, as well as difficulties involved in implementation were discussed. Non-implementation has negative consequences for the long-term results of the firm. This will not allow them to benefit as much as the firms which have successfully implemented PMS. Based on the literature the author analysed the reasons for implementation failures. The analysis of failures implied one main reason – shortcomings in communication.

The next chapters of the thesis provide, based on the conducted analysis, a possible model to follow in creating and implementing PMS in order for the implementation to be successful.

# 2. TERMINOLOGY OVERVIEW, HISTORY, THEORIES

This chapter divides in two sections. First section outlines definitions and the history of performance and PMS. Second, the section of theories analyses performance measurement and management, and PMS definitions. Additionally the systems theory is described and based on that PMS as a system is reviewed and PMS implementation concepts found in the literature are analysed their conformity to the chain principle.

## 2.1 What does performance mean?

Speaking of PMS needs look how performance is defined. Definitions of performance in the literature are extremely wide-ranging. Performance can be addressed from different aspects. Some of them are presented as follows (Figure 2.1).

The economic term "*performance*" is used in **different disciplines**: Management Accounting, Strategic Management, Production Management, Human Resource Management (HRM), Marketing, Project Management, Occupational Psychology and Organisational Behaviour, Information Management, Accounting and Finance.

Performance has **different measurement objects**: both a final result (statics) and the process (dynamics) are viewed (Armstrong, 2006, p. 7).

**Different units of measure** are used for assessing/measuring performance: based on both objectively and subjectively defined criteria; additionally, performance is measured in monetary value expressed in absolute figures and with ratios derived from these, as well as in non-monetary value and often with the binary system 1/0.

The stretch of performance into the future may be of **different duration**: short, medium and long term. Performance can be expressed on the operative level, tactical and strategic level.

From the aspect of organisational **integrity,** performance can only stand for organisational level performance, or together with the performance of its individual parts or with the performances of other unrelated parts.

According to Poister (2003, p. 3), performance has **different dimensions** (effectiveness, operating efficiency, economy, productivity, service quality, customer satisfaction and cost-effectiveness).

But linkages only with one dimension can be met. Andersen and Fagerhaug (2002, p. 1) claim that the term "performance" evolved in the mid-1980s from the term "*productivity*". They say that the history and actual measurement of performance started with productivity and its measurement.

A comparison is drawn with sports with precise measurement (*e.g.* track and field events) and subjective assessment (*e.g.* gymnastics).

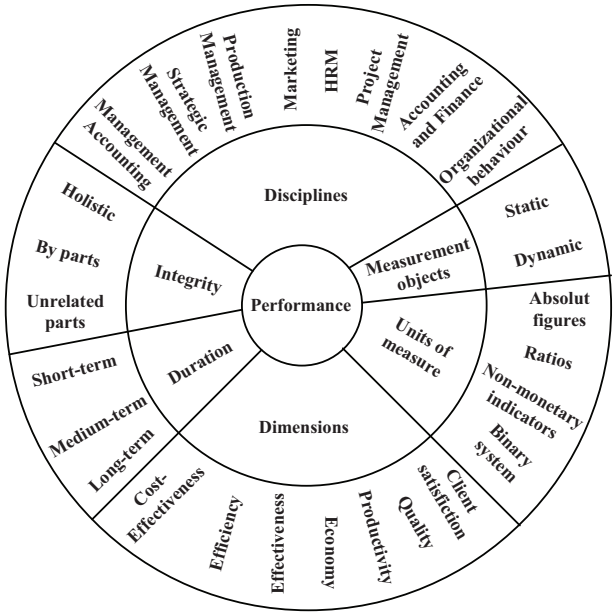



Figure 2.1 Different perspectives of performance (compiled by the author)

Such a wide-broad definition of performance is confusing and therefore it should be always specified what kind of performance is meant. The situation in defining performance is summarised by Smith and Goddard, Otley, Fitzgerald and Moon, Andersen and Fagerhaug, Armstrong.

> The literature on performance management is eclectic, diffuse and confused. The definitive "general theory" of performance management remains elusive, and is unlikely ever to emerge. Important contributions can be found in fields as diverse as strategy, organizational behaviour, operations management, industrial economics and accountancy (Smith and Goddard, 2002).
>
> Performance itself may be seen as an ambiguous term that has no simple definition and the term does not specify to whom the organization is delivering its "performance" (Otley, 1999).
>
> Performance is a multidimensional construct, the measurement of which varies, depending on a variety of factors that comprise it (Fitzgerald and Moon, 1996).

Andersen and Fagerhaug (2002, p. 6) write that quite different things are meant by performance:

> currently, there is no one, generally accepted definition of what constitutes performance. In fact, it is probably not useful to strive for one either, as this varies over time, from industry to industry and, probably, from region to region.

Armstrong (2006, p. 7) writes that:

> performance is often defined simply in output terms – the achievement of quantified objectives. But performance is a matter not only of what people

> achieve but how they achieve it. According to Oxford English Dictionary, the definition of performance is: the accomplishment, execution, carrying out, working out of anything ordered or undertaken.

Verweire and Berghe (2004, p. 6) have explained that a reason why organisational performance is so difficult to define is to be found in the multidimensionality of the performance concept. Because performance can be defined in financial terms (*e.g.* market value, profitability); but is often used in other environments, such as operations (*e.g.* efficiency, effectiveness, number of outputs, throughput time, product or service quality), marketing (*e.g.* customer satisfaction, number of long-term customers) and others.

In the following, the author of the given thesis has pointed out different aspects of performance of above wide-range situation according performance definitions what he regards as relevant of this research.

In the given thesis the approach to performance is associated with organisations which implement PMS knowingly, in a formalised way, and therefore performance is addressed together with the objective – why it is measured, and when (sub)objective leads to an organisation's objective (Christmas) tree or fish bone, it is a *integrated approach*. Performance without the main objective and measurement has no value. Although performance depends on what the expectation/objective is, in the given thesis we focus not on whether the respective objective has the respective performance for its characterisation, but we move from the relationship between an individual objective and performance on to a more general level, different performances, how they start, are achieved, and their interlinkage, post-interim result actions.

Here the normative approach should be discussed. Although an organisation can regard any indicator as performance, but when it does not fit into the integrated PMS concept we cannot speak of it as a systematic performance indicator. Under the normative approach PMS is assessed against the perfect PMS. This allows judging conformity or non-conformity. Creation of a perfect PMS is discussed in the fourth chapter of this thesis.

In this thesis the author addresses organisational performance. It should be mentioned that the conceptual definition of organisational performance has been derived by Jay Barney (1997). He started his conceptualisation from that an organisation is a combination of productive assets created for obtaining economic advantages. So as the organisation could sustain, owners of productive assets must be satisfied. Owners are interested in supplying these assets only when they are satisfied with returns. Hence, organisational performance is defined in terms of value that the organisation creates using its productive assets compared to value the owners of these assets expect to obtain. If the value created is at least as large as expected, the owners will probably make these assets accessible to the organisation. On the other hand, if the created value is less than expected, then the owners may look for other alternatives and leave them without their support.

The author of the given thesis is of the opinion that this concept is too superficial, narrow and limited only to the owner's wishes. Although it has been underlined that this is the definition of organisational performance, intra-organisational performance has not been considered upon. Moreover, with such a concept it is predetermined that performance is measured in monetary terms. The author of the given thesis admits different interests of owners and management. Owners are interested in result rather than the ways it is achieved; but the result desired by owners is input for the management. The author of the given thesis finds that concept of organisational performance needs addition. First, we must move on from the level of owners to the level of those who satisfy owners' interests – executive management, or the performance concept must go further into the organisation and to values measured with non-monetary values, the achievement of which will lead to financial performance. Secondly, organisational performance must be integrated as well as hierarchic.

The *time duration* is strategic in this thesis. PMS also exerts influence on strategic objectives, hence we can speak in this thesis about strategic PMS.

As mentioned above, result as well as process are defined as performance as *measurement object*, depending on what has to be assessed. If the result can be assessed, it is more preferable, the author finds; if it is not possible for some reason, performance should be defined as a process and assessed (particularly in the public sector). The best is their symbiosis where successful implementation of a process can lead to the desired result. Then, and particularly when the final result is revealed after a long time interval, it is necessary to evaluate the process to know about the possibility of achieving a final result during the process. In any case, by evaluating both result and process the judgement must have value in the eyes of its addressee. The latter should draw some conclusions from this just keeping in mind his area as a whole.

According *disciplines***,** thesis is related with management accounting and strategic management. About performance *dimensions* and *measurement objects* author does not set limitations. Essential is that given dimension of objective and unit of measure of target value both are derived from higher level objectives.

Summarizing definitions of performance author emphasizes the following.
Speaking of some specific performance the (irrespective of duration of performance, in which dimension or area it exists, measured by which measure units) the current condition and expectations in relation to the condition/level in the future must be focused on. And the successfulness of activities – performance – can be assessed in relation to this expectation only when the time has come when the intended condition should have appeared. This definitely presumes prior planning in time and measurement later.

Implementation and assessing of PMS therefore presumes, of course, that expectations of results are defined, and additionally, awareness of the causal presence of the so-called value chain/success model (which is usually created in the process of strategic action plan), delegation with rights (and with intended interim

results). Defining expected results is mostly not a problem in the private sector organisational level since an organisation is created with the purpose of increasing owners' wealth (revealed through such indicators characterising performance as profit or company`s market value) (although many organisations may have a weak knowledge of their success model, how to gain profit via the value chain), whereas in the public sector it is a big problem. And an organisation implementing PMS in the public sector inevitably has to surmount this. Otherwise it will come into conflict with the fact that if the desired result is not defined in advance, then afterwards there will be nothing to pass on in the organisation, downwards in hierarchy, and consequently there cannot be any result at the end of the period if there is not any at the beginning. Hence, in any case it is necessary to define (strategic) objectives that meet the conditions of objectives – specific and within the organisation's capacity (Kadak, 2005).

As follows, the autor gives overwiew of developments of performance measurement and management systems.

## 2.2 History of Performance, PMS and Measurement

In the years 1920–1925, DuPont and General Motors experimented presenting decentralised structure combined with profit centres. Reorganisation was supported also by the so-called DuPont model presentation with the Return on Investment (ROI) concept. The latter linked financial ratios to ROI. The financial ratios pyramid had a clear hierarchic structure linked to different company levels (Neely, 2002). This means that management took responsibility for the achievement of budgeted ROI and therefore the focus was not only on marginal and net profit but also on return on investment (Johnson and Kaplan, 1987).

The subsequent revolution in performance measurement induced enterprises to implement financial measures and nonfinancial indicators that would appropriately reveal their objectives and indicate results. Although General Electric introduced the first balance performance indicators already in the 1950s (Burns, 1998), an immense upsurge of interest in performance measurement was in 1980–1990, which with the support of enterprises' approval involved the need to start using balanced approach for measurement (Neely, 2002).

The events that started to happen soon after were introduced by words uttered by Kaplan in 1984:

> "Despite considerable change in the nature of organizations and the dimensions of competition during the past 60 years, there has been little innovation in the design and implementation of cost-accounting and management control systems. Virtually all of the practices employed by the firms today… had been developed by 1925" (Kaplan, 1984).

Weaknesses of the traditional performance measures developed by then, which originated from cost-accounting and accounting, can be summarised as follows (Bourne, 2005):

- focus on short termism;
- lack of strategic focus;
- encourage local optimisation;
- minimisation of differences rather than continuous improvement, and
- lack of external focus.

In 1979, Rockart presented a new idea to improve management control systems and management information systems. He suggested a concept named "Critical Success Factors" (CSF). His concept was considerable assistance to managers for a breakthrough in management control, in order to draw their attention to specific areas (Waal, 2007).

Although implementation of this idea offered some solutions, "orders" stayed for such systems that would present results with the help of causal relations. This is understandable because in the process of increased task deployment there was still the need for monitoring the interrelated contributions of components (Kadak, 2004).

Olve *et al.* (1999) said that managers were searching for more simplified ways to represent cause-effect relationships at companies.

In the 1980s, IT development, increasing competition, growing share of service enterprises, shortening of product life cycle were the factors that started to influence enterprises' activity. Hence, very many problems that had to be solved piled up in front of the systems within a short period of time. Therefore a new revolution in performance measurement could be prognosticated.

Keegan *et al.* (1989) and others proposed a matrix for measuring performance, which also reflected a need for balanced measurement. The matrix divided the measures 1) on the basis of either "cost" or "noncost" and 2) "external" or "internal" measures, underlining the need for greater balance of the measures over their dimensions (Neely, 2002).

Eccles predicted in 1991 "a performance measurement revolution", which would happen within the next five years. In the process of this revolution, traditional financial information systems were to be replaced by nonfinancial information systems. In his opinion the revolution was necessary in order to increase managers' satisfaction with available information and to satisfy enterprises growing demand for information (Eccles, 1991).

SMART (Strategic Measurement and Reporting Technique) pyramid, which was developed by Wang Laborites, also supports the need to include internal and external performance measures (Lynch and Cross, 1991). He adds the notion of cascading measures down the organisation, so that measures at the level of divisions and work centres would reflect the company's vision as well as internal and external objectives of business units (Neely, 2002).

Based on previous performance measurement methods in the service sector, Fitzgerald *et al.* (1991) differentiated two basic types of measures – those that relate to results (competitiveness, financial result) and those that focus on determinants of these results (quality, flexibility, resource utilisation, and

innovation). Such classification emphasises, referring to the causality concept, that the results obtained today are functions of past business performance in relation to specific determinants. This points to the need to identify drivers of performance in order to achieve intended performance outputs (Neely, 2002).

Brown developed the concept of linking measures through cause and effect relationships further. In his macro process model of the organisation he shows clear links between five stages in a business process and their performance measures. These stages are defined as inputs, processing system, outputs, outcomes and goal. The model demonstrates how inputs influence performance of processing systems and ultimately the organisation's goals (Brown, 1996). Brown also says that each previous stage determines performance in the next stage (Neely, 2002).

The most popular of the performance measurement systems has been Balanced Scorecard, proposed by Kaplan and Norton (1992, 1996). It identifies and integrates 4 perspectives of looking at performance (financial, customer, internal business, and innovation and development perspectives). Balanced Scorecard reflects many attributes of other measurement systems but links measurement to the company's strategy more explicitly (Neely, 2002). Conceptually, the use of the scorecard is similar to the use of the *Tableau de Bord* developed in France early in the 20th century. *Tableau de Bord* represents a hierarchy of interrelated measures and cascading measures at different levels of organisation (Epstein and Manzoni, 1997).

The European Foundation for Quality Management (EFQM*),* Business Excellence Model and its US equivalent, the Malcolm Baldrige National Quality Award, which were not designed to measure performance, take a broader view of performance, addressing many areas of performance not considered by BSC. Business Excellence Model is a broad management model that explicitly highlights the enablers of performance improvement and indicates result areas that should be measured. However, it is for self-assessment rather than for measurement of objectives, and the categories for measurement are very broad. Whilst the result areas are easily measurable, some of the enablers are not (Neely and Adams, 2000). Earlier performance measurement systems (or object of measurement) concentrated on financial indicators, whereas operating profit margin and ROI and Return on Equity (ROE) were more popular. Since investors focused on financial indicators it was important to take these also into enterprises.

The trend of non-financial indicators lasts, as the focus on financial indicators would continue the "command and control" principle in organisational management assuming that current cost figures were sufficient for company management. In reality, the external environment has changed and cost control will not guarantee success any more. Therefore the performance measurement focuses on new objects and these are not measurable in monetary terms as much as income and cost.

## 2.3 Theory framework

The theory framework for the thesis comprises:

- performance measurement and management systems;
- systems theory;
- chain principle;
- PMS implementation concepts in literature.

### 2.3.1 Performance measurement and performance management, and PMS

This subsection will address:

- differences between performance measurement and performance management, definition of performance measurement, and the objective and reasons for using performance measurement systems;
- performance management, how it is functioning, reasons for using performance management systems;
- what PMS is, most common PMS and what is regarded as PMS efficiency.

Speaking of performance, we must differentiate between measurement and management of performance. These differences have been described by Waal and Nielsen.

According to Waal (2007, p. 28),

> performance measurement and management are interlinked most generally speaking so that the former is data collection and the latter acting on the basis of collected information.

The idea is repeated also by Nielsen (2009).

> "Performance management is larger domain and includes performance measurement as a component: performance measurement is the process of assessing progress toward achieving predetermined goals whereas performance management is building on that process, adding the relevant communication and action on the progress achieved against these predetermined goals".

Summing up the previous definitions author sees a similarity that performance measurement is addressed as data collection rather than data usage for specific (adjusting) purposes. Author agrees with this approach and adds image that performance measurement system is the core/heart of performance management system.

They are temporally interlinked so that chronologically earlier measurement is followed by interpretation of measurement results, analysis and communication. Performance measurement was also introduced first in discussions and performance management later. Kaplan and Norton initially created BSC for performance measurement (1992) and later it was developed further for

performance management (1996). In more recent years, the balanced scorecard has grown into a tool used as a basis for developing a strategic management system (Clinton *et al.,* 2002).

Literature has created a picture that historically the development of the content of performance has been from individual (not holistic) financial indicators toward more holistic nonfinancial indicators. The author is of the opinion, however, that today we cannot declare that about the level of integration in the past, as these indicators could also have formed a whole in the past (either DuPont model, which enabled deployment), a manager could create a linkage with a potential expected result on the their basis. Simply the number of components in this whole was smaller and simpler than today but sufficient for the manager for management and sustainability of the firm at that time.

Performance measurement systems as a term are very comprehensive. Franco-Santos *et al.* (2007) counted 17 definitions of performance measurement systems, underlining that not being able to reach consensus can "inhibit the development of the field". In the given thesis the term "*performance measurement"* is used; in other areas other terms can be used for the same activity, for example, HRM uses the term "*assessment*, *appraising"*.

*Performance measurement* has been defined by many authors.

> Performance measurement is the process of quantification of information, and a performance measurement system can be defined as the set of metrics used to quantify the efficiency and effectiveness of an action (Neely, 1997).
>
> Performance measurement can be addressed as the process of quantifying the efficiency and effectiveness of purposeful activity and decision-making (Waggoner *et al.*, 1999).
>
> Poister (2003, p. 4) says that: performance measurement is intended to produce objective, relevant information on program or organizational performance that can be used to strengthen management and inform decision making, achieve results and improve overall performance, and increase accountability.
>
> Amaratunga and Baldry (2002) say that performance measurement provides basis for the organisation to assess how well it is moving toward the objectives, helps identify strengths and weaknesses, and decides future initiatives in order to improve organisational performance. Results of performance measurement indicate what has happened, but not why it happened or what to do about this.
>
> Performance measurement is the process of quantifying the efficiency and effectiveness of past actions (Neely *et al.,* 2002).

The following definition by Neely (1998) is significantly broader which contains also a description of performance. "Performance measurement is the process of quantifying past action, in which measurement is the process of quantification and past action determines current performance. Organisations achieve their goals by satisfying their customers with greater efficiency and effectiveness than their

competitors. Effectiveness refers to the extent to which customer requirements are met and efficiency is a measure of how economically the organisation's resources are utilized when providing a given level of customer satisfaction. Performance measure can now be defined as a metric used to quantify the efficiency and/or effectiveness of past action".

Strategic Performance Management System (SPMS) is called by Webb (2004, p. 929) "a set of causally linked financial and non-financial objectives, performance measures, and goals designed to align individual actions with the strategy of the organization".

Analysing the above definitions author of this thesis finds that these already refer outside the organisation: customers, competitors and owners. This presumes knowing of what the latter need and "bringing" of that knowledge into the organisation and acting according to that. Additionally, there is a causal connection that past activities take effect today. Also an organisation's economic performance via using the organisation's resources when satisfying the above groups has been mentioned. All authors regard performance measurement as a process. Author of this thesis agrees goal setting, data collection and communication process according performance measurement. Performance measurement is a process where measures are set for the objectives first and then their results are monitored, information is provided with the content being comparison of actual results to previously fixed desired levels, in order to make decisions on the basis of these but which themselves are not part of performance measurement. This is aimed rather at highlighting the past. At the same time, it helps to design the future with spotlighting the knowledge from past. This is already within the framework of performance management.

Like the notion of performance is broad, also the notion of performance measurement is broad and the literature also contains opposite statements that performance measurement is to influence organisations' results.

Berliner and Brimson state that:

> "performance measurement is a key factor in ensuring the successful implementation of a company's strategy" (O`Mara *et al*., 1998).

There are still statements exactly opposite of the latter.

> Performance measurement does not automatically lead to performance improvements. It should always initiate action through the use of appropriate measures (Rigas and Fan, 2000).

This confirms again opinion and author agreed with this that adjusting activities are launched on the basis of measurement results, or these are external to performance measurement activities. In the following author looks reasons why organisations use measurement systems.

**Objectives and reasons for using measurement systems**

A Gates` study (1999) pointed out reasons why organisations have started to use performance measurement systems (Verweire and Berghe, 2004, p. 4):

- Organisation lacked focus (44%).
- Strategy and incentives misaligned (34%).
- Strategy implementation frustrated (30%).
- Employees confused about strategy actions (28%).
- Other (21%).

Andersen and Fagerhaug (2002, p. 7) have identified the reasons for performance measurement in different organisations:

- Performance measurement as a panel of instruments.
- Performance measurement as a warning system.
- Performance measurement as designer of behaviour.
- Performance measurement to implement strategies and policies.
- Performance measurement to track trends.
- Performance measurement to improve prioritisation.
- Performance measurement to improve project evaluation.
- Performance measurement data as an instrument of marketing.
- Performance measurement as an input to bonus and incentive system.
- Performance measurement as a basis for comparative analysis.
- Performance measurement to increase motivation.

Author of this thesis finds that reasons for using derive from discontent with current situation and hook with will to improve activity in future more efficient. Reasons by Andersen and Fagerhaug indicate into what performance measurement contribute or provides input via information for improving efficiency in future.

Also Simons, Kennerley and Neely, Reichheld provide an overview of the purposes of measurement system.

> The purpose of a performance measurement and control system is to communicate information. These systems focus on financial and non-financial information that influence decision-making and managerial activities. They are used to change an organisation's activity patterns. Desired activity patterns may be associated with efficiency and error-free processing (*e.g.* profit margins in the production process). On the other hand, they may be related to the current patterns, product creativity and innovation patterns, or inner processes such as new product sales, or annual improvements of the production speed (Simons, 2000).
>
> A purpose of performance measurement systems is to help organisations define the sets of measures reflecting organisation's objectives that would adequately and appropriately assess its outcomes (Kennerley and Neely, 2002).
>
> Reichheld (1996) insists that the measurement system is a key to success and defines what a company will become by tracking the flow of value to and from a firm`s customers, employees and investors.

As different are definitions different authors also accentuate different aspects on what PMS have to respond or contribute. For example Kollberg divided these aspects into five groups (Kollberg, 2007):

- performance measures should be derived from strategy (Neely *et al.*, 1995; Anthony and Govindarajan, 2001),
- monitor a "balanced" picture of the organisation (Keegan *et al.*, 1989; Kaplan and Norton, 1992),
- be multi-dimensional in such that they reflect all areas of performance (Epstein and Manzoni, 1997),
- encourage congruence of goals and actions (Bititci *et al.*, 1997; Epstein and Manzoni, 1997) and
- monitor past and future performance (Fitzgerald and Moon, 1996; Olve, Petri, Roy *et al.*, 2003).

On the opinion of author of the given thesis a purpose of performance measurement systems is through data collecting and information flow to improve organisational effectiveness and efficiency.

*Performance management* has also been defined by many authors.

> Performance management can be defined as a process that helps an organisation formulate, implement and change its strategy in order to fulfil stakeholders' satisfaction (Verweire and Berghe, 2004, p. 7).

Definitions by Cokins, Edis, IMA and NAHT already relate performance management to strategy execution.

> Performance management is the framework for managing the execution of an organization's strategy. It is how plans are translated into results. Think of performance management as an umbrella concept that integrates familiar business improvement methodologies with technology (Cokins, 2006, p. 2).
>
> The term Performance Management refers to any integrated, systematic approach to improving organisational performance to achieve corporate strategic aims and promote its mission and values (Edis, 1995).
>
> Performance management is comprehensive management process framing the continuous improvement journey, by ensuring that everyone understands where the organisation is and where it needs to go to meet stakeholders' needs (Tools and…, 1998).
>
> NAHT (Performance…, 1991) describes PM as "a process that links people and jobs to the strategy and objectives of the organisation".

Armstrong (2006) found, that performance management can be defined as a systematic process for the improvement of an organisation's performance through the development of employee and group performance. This means achievement of better results from the organisation, work groups and employees through comprehending and managing performance in the framework of agreed, planned objectives, standards and required components. Processes exist for establishing shared understanding about what is to be achieved, and for managing and

developing people in a way that will enhance the probability of achieving it in a shorter and longer term.

The above definitions demonstrate that with the help of PMS as a continuous process, attempts are made to achieve an important aspect for the organisation – execution of strategy and strategic objectives. On that aspect it differs from performance measurement.

The author of this thesis defines PMS as follows: PMS is an integrated/holistic approach to the organisation, which derives for executive units and employees their short-term tasks based on the strategic goals of the organisation (or on other which has regarded as performance), regularly monitoring their conformity to expectations and where necessary, launching adjusting activities when (interim) results are not as expected. All this in order to help the organisation ensure achievement of its long-term goals with its arrangement.

It should be mentioned that performance management is understood in Europe and in the USA somewhat differently. Most of US literature use the term to describe the human resource management process, which sets expectations and objectives for the employees, supervision and individual performance appraisal, conducting appraisal of performance, identifying competencies and deciding individual financial and non-financial consequences of performance. On the other hand, many sources of literature outside the USA address performance management as a strategy setting and execution process at all levels of organisation. The most recent literature observes that the two performance management concepts are converging towards each other. Those who look at performance management from the human resource aspect, argue that there is a direct link between personal and organisational objectives, while those who see it from strategy viewpoint, say that organisational strategy can be achieved only through the knowledge and commitment of the members of organisation (Waal, 2007).

Below are five definitions of performance management based on HRM:

- Performance management is: employee development with competencies and commitment to work towards the shared meaningful objectives within an organisation supporting and encouraging their achievement (Lockett, 1992).
- Performance management is business administration (Mohrman and Mohrman, 1995).
- Performance management is: the process of directing and supporting employees to work as effectively and efficiently as possible in line with the needs of the organisation (Walters, 1995).
- Performance management is a strategic and integrated approach to increasing continuous success by improving performance of the employees and by creating capable teams and individual contributions (Armstrong and Baron, 2004).
- PMS is a powerful behavioural instrument. What you measure is what you get. If the system contains appropriate measures that are linked to organisation's strategy, then people are provided help in their activities (Stivers and Joyce, 2000).

The design of employee behaviour, which is important for the achievement of performance in the context of HRM, is outside the context of the given thesis, like management styles, since PMS structure is universal, independent of management style.

**How is performance management conducted?**
Waal's (2001) definition of strategic performance management (as a process) shows how and for what purpose management/leadership in organisation occurs:

- by systematically defining the mission,
- via strategy,
- via the organisation's objectives, making these measurable through critical success factors and performance key indicators (which of course assumes their being defined), in order to be able to take adjusting actions to keep the organisation on the track.

Since these five parts are hierarchically interlinked, author of given thesis stress that one of them may not occur without being linked to others but together they form an integral whole.

Waal has written that the performance management process consists of different sub-processes: strategy making, budgeting/target setting, execution/forecasting, performance measurement, performance revision and rewarding. These integrated sub-processes create the performance-driven behaviour of employees that is needed to become and stay at the top level (Waal, 2001, p. 8).

First definition shows that specific components are needed for performance management: mission, strategy, organisational objectives, critical success factors, key performance indicators. The author of the given thesis is of the opinion that if these components are interlinked, they may be called PMS structural components, which together with regular data collection form performance management.

An analogous approach is supported by Verweire and Berghe (2004, p. 7): important aspects of performance management are setting performance goals, developing strategies, and translating them into concrete guidelines for actions (*i.e.* making strategies operational).
Although strategic performance management was defined here, operational performance management must be definitely linked to strategic (or tactical) management; otherwise we cannot talk about the integral management of an organisation.
Author of the given thesis described functioning of PMS on the page 22.

*Why do organisations use PMS?* By Verweire and Berghe (2004, p. 7), the purpose of performance management is to achieve organisational effectiveness and "to get better results".

That has been explained by Simons:

> without a clear-cut objective every employee may start acting on his own. And when everyone is pulling in different directions (trying to execute the objective), then the strategy is doomed to fail. But when all employees focus attention on measures, then all employees take the company strategy as the basis pursuant to their objectives and measures (Simons, 2000, p. 231).

Target groups in the system are managers. Performance measurement and control system are specially designed to be used by managers (Simons, 2000). Here the principle of responsibility should be observed (every manager is responsible for outcomes within his/her area and to carry out this responsibility he/she needs information on what is happening in the area). To facilitate their work they may deploy it downward with the same principles (under decentralisation), which would form an integral, organisation-wide system.

*What is PMS then?* In the given thesis the author uses his definition of PMS (presented on the page 45). PMS is a system which with its (hierarchical) structure/setup and functioning supports/helps the organisation to achieve its long-term objectives. It may be put as follows:

PMS = structure + functioning.

In comparison with others authors of the thesis underlines in his definition of PMS rather the importance of alignment (described more detailed on the chapter four) in the structure and functioning and as a whole.

In introduction chapter raised question what should be constituent parts of PMS? That has been described by many authors and institutions.

An overview of PMS parts is provided in the definition (about Controlling) by Waal (2007), according to what its structure is defined as a combination of the following parts:

- the organisation's structure (*i.e.* delegation of authorities and responsibility);
- performance measurement and assessment standards;
- infrastructure for the planning and control cycle, and
- infrastructure for the organisation's management information.

The following two lists contain activities that must be done to improve performance. The two institutions LGMB (People and…, 1993) and the Audit Commission (Paying…, 1995) in the UK suggest that, in order to improve both organisational and individual performance, the following management functions are important:

- defining and setting organisational and individual aims and objectives;
- corporate planning;
- linking organisational strategy and service objectives to jobs and clients;

- identifying staff training and development needs;
- assessing the results through personal appraisal using relevant performance indicators;
- performance agreements or contracts;
- using the knowledge gained through training to modify performance attitudes;
- external and internal communication systems and
- organisation development and performance review.

According to Price (2006), performance management parts are:

- integration into business strategy;
- development of individual and team performances;
- focus on training and development;
- formal assessment components;
- line managers' accountability, and
- integration into HRM and rewarding practices.

The following two lists contain requirements for PMS. From a review of mainly US literature, Millett and Harvey (1998) suggest that an ideal PM model has features that support:

- communicating of objectives to all employees;
- relating individual and departmental performance targets to a broader set of objectives;
- reviewing formally progress towards these target objectives;
- identifying training, development, and merit pay assessments and
- evaluating and improving the effectiveness of the process.

In the opinion of Kennerley and Neely (2002) Performance Measurement Framework (PMF) must:

- provide a "balanced" picture of the business;
- provide a succinct overview of the organization's performance;
- be multidimensional;
- be comprehensive;
- be integrated both across the organization's functions and through its hierarchy and
- explain how results are a function of determinates.

PMS must be horizontally and vertically integrated:

> A key characteristic of PMF is their ability to integrate horizontally across functions and vertically through the hierarchy of the organisation (Ray and Neely, 2009).
>
> Performance management is an integrated set of planning and review procedures, which cascades down through the organisation to provide a link between each individual and the overall strategy of the organisation (Rogers, 1994).

> Performance management systems are defined as:… the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities (Simons, 2000).

Author of the thesis analysed previous lists and noticed that structure of PMS is characterised by:

- hierarchical (Ray and Neely, Rogers, Millett and Harvey);
- integrated (Ray and Neely, Rogers, Price), and
- holistic, process-driven (Rogers) approach.

Activities included in PMS are:

- planning (LGMB);
- development (LGMB, Price, Millett and Harvey);
- implementing (LGMB);
- collecting information (Simons);
- controlling (Waal, Millett and Harvey);
- assessment (LGMB, Price);
- reporting (LGMB, Price).

In practice many systematic approaches are used for managing performance. On the basis of literature we can speak about several wide-spread performance management frameworks (Tangen, 2004 p. 72; Verweire and Berghe, 2004, p. 48):

- Framework of Sink and Tuttle (1989);
- The TOPP performance model by Rolstadas (1998);
- Balanced Scorecard by Kaplan and Norton (1992);
- Performance measurement matrix by Keegan (1989);
- Performance pyramid by Cross and Lynch (1989);
- Performance measurement questionnaire by Dixon (1990);
- The performance prism by Neely *et al.* (2001) and
- Performance Measurement for World Class Manufacturing by Maskell (1991).

Different frameworks stress different aspects and in the following is one opportunity to group them.

According to Toni and Tonchia (2001), the main models of PMS in the literature can be referred to as five typologies (Tangen, 2004, p. 71):

> 1. PMS that are strictly hierarchical, characterised by cost and non-cost performance on different levels of aggregation, till they ultimately become economic financial (for example: Lockamy and Cox, 1994).
> 2. PMS that are "balanced scorecard", where several separate performances, which correspond to diverse perspectives (financial, customer, *etc*), are considered independently (Kaplan and Norton, 1992), (Maskell, 1991).

3. PMS that can be called “frustum”, where there is a synthesis of low level measures into more aggregated indicators, but without the scope of translating non-cost performance into financial performance (Cross and Lynch, 1992).
4. PMS that distinguish between internal/external performances (Thor, 1993).
5. PMS that are related to the value chain (Sink and Tuttle, 1989), (Moseng and Bredrup, 1993).

To summing up the author of thesis adds that addition common known PMS own created ones are used as well.

In the introduction chapter author raised a question about PMS efficiency. In the following he investigates how it has been discussed in literature.

**PMS efficiency**

Like in every system, one of the main assessment criteria of PMS is efficiency. Therefore it should be examined in PMS whether the system helps the organisation fulfil its objectives. In the following some statement about PMS efficiency are presented.

The system is efficient when it can react and adapt to changes in the environment surrounding the organisation and within the organisation, and according to this provide information (Haldma, 2010). The author of the thesis quite agrees with this approach adding that implementation of this information should lead to the desired results.

Olsen *et al.* (2007) have assessed PMS efficiency with the help of 3 criteria:

- causality;
- continuous improvement;
- process control.

The author himself has defined system efficiency provision via meeting the following criteria (Kadak, 2005):

- constructed hierarchically;
- measures given to subunits and achievement of their goals, drives fulfilment of organisation’s objectives;
- supported by other units and fields (for example, results are related with bonuses and motivations);
- measures follow trends and changes of environment.

PMS efficiency is defined also so that top management uses most of the system measures in organisational management. A proof of that is the fact that relevant documents are used in management meetings and these indicators are monitored (Bourne *et al.,* 2002).

Showing sophistication of assessing PMS efficiency author presents following comparison. Since PMS design is the so-called “tailoring“, a tailor-made suit can

be assessed by many with their own eye, specialists even better and the wearer can also perceive its efficiency – whether it fulfils the expectations, objectives, which it was made for. Good qualities of PMS – its functionality and efficiency are not so clear for the bystander or user. Because who could (looking only briefly without special preparation and) give a relevant judgement and what would it be based on? But judgement about efficiency is relevant. That could be assessed within a short period of time (on the basis of system's parts) only if the organisation already has this system in some form. In that case, gaining or not gaining of the system generated interim results, and reacting or not reacting to them would characterise at least minimally the existing system in terms of efficiency.

System efficiency could be much more accurately assessed after the organisation's intended final results are known, for the achievement of which PMS contributes. This would assume waiting for the end of the period and then the efficiency of the system should also be assessed on the basis of achievement or non-achievement of final results.

The latter assessment would be more precise than the short-term one but the knowledge would be available after as long a period as its efficiency should influence the organisation's results. Then it may be fatally late to draw conclusions on the basis of assessment results and to do something.
In the ideal situation, assessment should be made with the precision of a longer period and duration of a shorter period. Therefore the new model should satisfy both conditions.

### 2.3.2 Systems Theory and Performance Management as a System

What are the criteria of a system? When can we speak of a system and when only of individual parts of the system? The following example will help answer these questions. If a car has been taken to pieces, then these are parts of a car or a movement system. What comes next depends already on the person's wish or experience whether he calls them car parts (assuming that after assembling these make a self-moving car), or regards them as scattered pieces of metal. It may be said that the total value of these parts is a trifle of the value of a working car. If the parts are in place, all parts can perform their role and make their contribution; in that case it is a valuable and efficient movement system and when driven, it is a functioning movement system. An analogous parallel can be brought also with the performance management system.

The word "system" is used in the meaning of order and regularity in almost all areas. Every system can be described as a logical and organised problem solving process. In the following some approaches of different researchers to the system will be given.

In 1951, Ludwig von Bertalanffy, a biologist, described system using anatomical terminology. The body's muscles, skeleton, circulatory system and so

on, were described as subsystems of a total system (the human being). Bertalanffy's contribution was important in that he described system as a complex of interrelated elements (Kerzner, 2006, p. 36). Drawing parallels between system and performance management system with Bertalanffy's anatomical terminology, it may be said that when an organisation as a whole can be compared to a human being, then performance management is like the circulatory system in the human being, which feeds in order to lead a valuable life.
Boulding (1956) identified communication problems that may occur in joining systems. Boulding leaned on the fact that specialists of subsystems have their own language and they may not understand each other. He propagated such an efficient system where all specialists of subsystems use the same language (*e.g.* mathematical language) (Kerzner, 2006, p. 36).

A system is a set of components that work together in an interdependent way to accomplish something. Systems take inputs and, through a series of processes, transform those inputs into outputs – products, services, or information (Bacal, 1999, p. 26).

Mereste (1987, p. 15) has summarised definitions of different researchers and identified the most important characteristics of a system pointed out exclusively in all definitions. These are:

- non-amorphism, *i.e*. different components, elements which are in a certain way interlinked with each other, can be discerned in a system;
- integrity or unity expressed first of all in its clear separability from other systems, which is the result that relationships between system components are in a way stronger than between the system and other systems.

Gerndorf (2005) defines a system as a set of interlinked functional components, which works for the achievement of objectives. He goes on with the system description: input – output principle has a universal nature and therefore it has been used in the organisation and management theory as the basis for solving very different problems. The model contains a row: input – processes – output.

What could be the respective parts in PMS? The author of the given thesis thinks PMS as a system can be presented as follows.

Inputs: (strategic) objectives taken by the organisation or faced by it

Process: intraorganisational temporal and activity objectives for executors are derived from the inputs (organisation's objectives); new work tasks are derived in a way that would guarantee information support to executors; data collection is organised in the light of these tasks and objectives; data processing is organised according to PMS structure and communication of information to those

responsible; adjusting activities are launched on the basis of information. A chain is created and kept working:

PMS = structure creation + implementation + using/functioning as a process

Interim output: conclusions from interim results and adjusting activities

Final output: objectives accomplished by the organisation (strategy executed)

When can we speak of a performance management system? When the system under study has the characteristics of this system, or it meets the requirements of performance management system (normative approach) and there is a sufficient system support/infrastructure which enables the system to work temporally. This may be summarised as follows: in order for the system to work both "hard" and "soft" sides of the system must be represented.

### 2.3.3 Chain principle

While created model in the given thesis stresses chain principle, author searched can it be meet in the literature. Marr has created a framework to help understand the process of information processing. Since PMS is closely connected with information, it is appropriate also for PMS. According to Kollberg's doctoral thesis (2007): "the framework encompasses three levels that are important to consider in an information system. *First,* the computational theory of the task that the system performs is taken into account. This level focuses on what the system does, and why it does it. *Secondly*, the choice of representation and the transformation by which the information is propagated through the system is focused. How the information is transformed in the system is thus considered in this level. *Thirdly,* the details on how the system is physically realised in the organisation are considered".

Kollberg has analysed PMS in three closely interconnected parts: design, implementation and use of measures. She has linked these three components of PMS to Marr's framework.

> The *design dimension* corresponds to the **first level** of description and investigates what the system does and why. The design dimension includes the contents of the system, what kind of measures the system emphasises and why it points to the things it does.
> The *implementation* reflects the **second level** of description and focuses on how the performance measurement system is transformed in the organisation. The choices of representation are illuminated through describing how the system is deployed and disseminated throughout the organisation. The focus is

on how the system is transformed from the initial introduction to the full integration into the organisation.

The *use dimension* focuses on the physical realisation of the system in the organisation and it thus represents the **third level** of description. It explores activities, such as reconstruction of strategy, reporting of results and communication within units, dissemination of information, and strategic planning all related to the system realisation. Thus, the use dimension focuses on how people make use of the system in work practices.

These three components are closely interrelated and influence each other.
There are many possible choices at each level of description presented by Marr (1982), and the choices made at one level may constrain what will work at other levels (Hutchins, 1995). Thus, there is a close interrelation between the levels of description. A basic assumption in this thesis is that the design, implementation and function dimensions are strongly interrelated in the process of development. In other words, what measures were emphasised in the performance measurement system, why these choices were made, and how the system was transformed in the organisation influence how people use it in practice. In order to understand the application of performance measurement systems it is thus important to investigate the entire development process including the design, implementation and function dimensions.

The author of the thesis analogously perceives PMS being divided into three, distinguishing the design, implementation and functioning phase. In the PMS structure (design) he examines system components in a chain being interrelated.

Synthesising the system theory and chain principle.

Based on the general system theory, a system can be divided into subsystems. This basic idea is that a system is divided into subsystems based on some predetermined principle (attribute), these in turn into sub-subsystems *etc.* until a required degree of detailisation for the research is achieved. The principle of dividing into subsystems must ensure that all subsystems formed relatively independent, non-overlapping, and explicit wholes that would encompass the system as a whole and could be investigated as independent systems (Gerndorf, 2005).

The author of the given thesis in his model addresses three PMS subsystems: structure, implementation and use. Gerndorf goes on:

"the lowest rank subsystem is named system element in that case. All subsystems including system elements can be studied as independent systems, which have also inputs and outputs. The latter are very important as just inputs and outputs join subsystems into an integral system".

Here the author of the given thesis creates a linkage to the chain where he analyses subsystem elements as occurring in the chain and being interrelated.

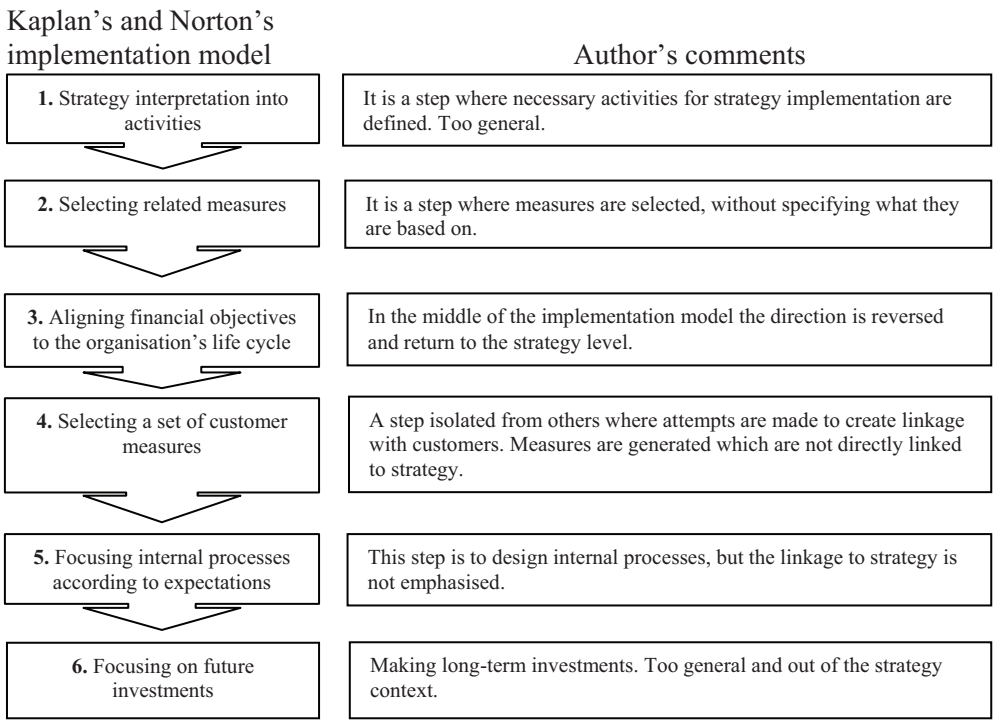
### 2.3.4 PMS implementation concepts in literature

PMS implementation models are aimed at creating permanent bases in an organisation that would continuingly allow the organisation to achieve long-term objectives. Bourne (2005) says that PMS design processes have grown out:

- of the literature (Wisner and Fawcett, 1991);
- from consultation experiences (Sink ,1986; Eccles and Pyburn, 1992; Kaplan and Norton, 1993, 1996, 2000; Vitale *et al.*, 1994; Kaydos, 1998) and
- action research (Bitton, 1990; Dixon *et al.,* 1990; Neely *et al.,* 1996, 2000).

Performance management systems are different by different authors, their contents and scopes are different for different authors too. Therefore the author of the given thesis has analysed the structure of implementation models in order to identify their scope, what they discuss, what they emphasise and what the target to be reached with their help is and most importantly, investigate whether they have undeniable attributes of chain or consistency creation that would help avoid communication related mistakes in PMS design and functioning and would illustrate the steps taken toward the achievement of performance. The author has tried to group the steps in implementation models into three parts of PMS: PMS structure creation, implementation and functioning of PMS.

The literature contains PMS implementation concepts of different authors: Kaplan and Norton, Bacal, Armstrong, Andersen and Fagerhaug, Waal with steps.



| Bacal's implementation model (Bacal, 2004, p. 23) | Author's comments |
|---|---|
| 1. Performance planning | It is objective setting and communication from manager to employees whereas manager gets objectives from nowhere above. Objectives are specified in the model with neither CSF nor KPI. |
| 2. Constant performance communication | It is intense exchange of information between manager and executor, where they react only to external environment impacts, since inner interim results are gathered in the next step. Reporting/document design. |
| 3. Data collection, scanning and documentation | Activities for learning about intraorganisational interim results. PMS functioning phase. |
| 4. Performance assessment meetings | Communication of intraorganisational interim results, analysis, making conclusions and planning adjusting activities. PMS functioning phase. |
| 5. Performance diagnoses and training | Search for solutions to the problems encountered while summarising interim results. Pure PMS operating phase where adjustments are made on the basis of results. |

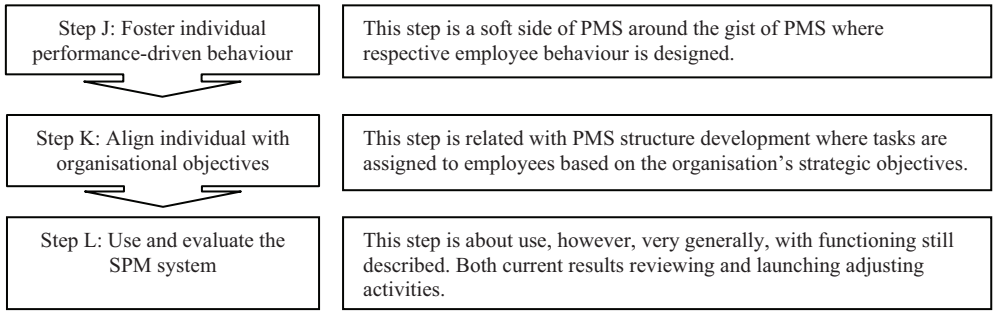
| Armstrong`s implementation model (2006, p. 181) | Author's comments |
|---|---|
| Stage 1. Deciding on the business case for introducing performance management | The step preceding creation, agreeing on starting performance management. |
| Stage 2. Determing objectives and guiding principles for performance management | Defining what performance management have to improve and consist in general. |
| Stage 3. Getting the commitment and active participation of top management and line managers | This is step to succeed with performance management support from top management and managers are asked. |
| Stage 4. Drawing up guiding principles on how performance management should work | Describes how to design the system and how the system should function. |
| Stage 5. Defining performance management processes and documentation | Fixing how structure of system (objectives, target setting) will take place and designing functioning. |

| | |
|---|---|
| Stage 6. Pilot-test | Test embraces main processes like objective setting, measures selection, compilation of improvement plans, feedback. |
| Stage 7. Communication | Introduction performance to all related parties. Compilation internal documentation. |
| Stage 8. Planning arrangements for training in performance management | Step consists training of employees to act in new manner. |
| Stage 9. Implementing | Implementation embracing communication and treaining. |
| Stage 10. Evaluating | This is assessment of functioning system after one year working but functioning of system itself. |

| Andersen and Fagerhaug's performance measurement system design stages (2002, p. 43) | Author's comments |
|---|---|
| 1. Understanding and mapping business structures and processes | An introductory step on the basis of what something starts to develop in PMS. It is considered necessary to think about main business things. Precedes the creation of PMS structure. |
| 2. Developing business performance priorities | A step that would precede strategy making, where inputs are stakeholders' demands for the organisation. Represents collecting of these demands, which should be taken into account in the future while devising PMS. |
| 3. Understanding the current performance measurement system | A step that again precedes the strategy preparation. It is important here to understand the current performance measurement system and the question is whether PMS of the new strategy will be quite new or an adaptation of the old strategy PMS. |
| 4. Developing performance indicators | A step where a chain is created. Performance indicators are developed. It is touched upon quite generally and it is not directly said what these are derived from. |
| 5. Deciding how to collect the required data | A step where in the stage of deriving indicators it is analysed immediately whether this information can be collected at all. On that basis also single reporting can be created immediately, so that it would work also currently - implementation. |
| 6. Designing reporting and performance data presentation formats | A step where reporting is designed. It is contemplated to whom and what kind of information should be communicated (answer to this question can be derived from unit's tasks). Implementation step. |

| | |
|---|---|
| 7. Testing and adjusting the performance measurement system | A step where trial implementation and trial testing are done. |
| 8. Implementing the PMS | A classical trial implementation step after which regular use of the system begins. |

| Waal's strategic performance management Implementation model (Waal, 2007, p. 323) | Author's comments |
|---|---|
| Step A: Prepare the project | A preparatory stage for the creation of PMS. |
| Step B: Set-up a consistent responsibility structure | A preparatory step for the creation of PMS where organisational structure will be fixed prior to PMS creation. The author has a question whether it is right to create the structure first, before the tasks are identified, since the structure should depend on tasks? |
| Step C: Develop scenarios and strategic objectives | With this step designing of PMS structure starts. Objectives for units are developed based on the structure. |
| Step D: Develop strategic action plans | This step continues to design PMS structure. Strategic action plans to show short-term activities will be developed. Execution of these activities according to plans would lead to the achievement of strategic objectives. |
| Step E: Develop CSFs and KPIs | This step continues to design PMS structure. Strategic CSFs and KPIs will be established with the participation of unit managers. Definitions, responsibilities and target values of KPIs will be established. |
| Step F: Develop BSC | For the organisation using BSC, CSFs and KPIs created in the previous step are set on the basis of scorecard. This step continues development of PMS structure. |
| Step G: Develop exception and action reports and rolling forecasts | It is preparation for the system functioning via reporting, on the one hand. On the other hand, reporting must be organised, fixed once and for all, which is *implementation* rather. |
| Step H: Set up a performance management ICT architecture | This step concerns what is surrounding the gist of PMS as development of three parts of PMS. |
| Step I: Foster organisational performance-driven behaviour | Implementation stage where reporting and responsibility related issues between different levels of organisation are fixed. |




The models are summarised against the background of temporally consecutive steps in the table below (Table 2.1). The author omitted Kaplan's and Norton's and Armstrong`s model as a too general one.

Table 2.1 Implementation model steps against the background of three PMS components (compiled by the author)

| | **Waal** | **Andersen and Fagerhaug** | **Bacal** |
|---|---|---|---|
| **Preceding** | 1.Project preparation stage (A)<br>2.Creation of integral structure (B) | 1.Comprehension and mapping of business structures and processes (1) | |
| **Structure design** | 1.Establishing strategic objectives (C)<br>2.Setting objectives for units (C)<br>3.Making strategic action plans and annual plans (D)<br>4.Creation of strategic CSF and KPI based on organisation's strategic objectives (E)<br>5.Creation of CSF and KPI for all units, setting target values (E)<br>6.Creation of BSC (F)<br>7.Alignment of employees' objectives to the organisation's objectives. Also alignment of responsibility, targets and initiatives (K) | 1.Collecting stakeholder needs (2)<br>2.Creating performance indicators (4) | 1.Performance planning (1) |

| | | | |
|---|---|---|---|
| **Implementation** | 1.Establishing activity reporting (G)<br>2.Designing management reports (G)<br>3.Planning information movement between management levels (I) | 1.Establishing reporting (5)<br>2.Designing reporting and performance data presentation format (6)<br>3.System fixed, access for the users granted<br>4.Training | 1.Designing of performance communication (2) |
| **Functioning** | 1. Functioning of the system through CSF and KPI, management reports and activities launched on the basis of these (L) | | 1.Data collection, reviewing and documentation (3)<br>2.Performance assessment meetings (4)<br>3.Performance diagnoses and training (5) |
| **Scope of the model** | Extensive, from creating organisational structure to organising reporting information flow and adjusting activities. | From mapping the current processes to employee development after learning the results. Sparse in the meantime. | From planning to employee development after learning the results. Sparse in the meantime. |
| **Presence of chain** | Very thorough steps, structure design is largely perceived, but the parts of implementation and functioning are minimal. Chain can be perceived but it is not presented as chain, and PMS contains a "soft" side. | No chain can be detected in this model. | Model contains some chain components: target setting, collecting of interim results, which are very superficial. The author still believes it is not sufficient to implement an effective performance management system with the help of this. |

PMS design has been described also by Simons, Otley and Niven.
PMS parts in Simons' approach (2000) are very thorough. He underlines the importance of linking the organisational structure, units design, reporting hierarchy, measures and market.

The author of the given thesis takes a somewhat narrower view and presumes that the organisational structure is largely based on that already. Simons draws a parallel between a Performance Management Control System (PMCS) and car control. The steering wheel, accelerator and brake enable to determine the direction

and speed of the car. Indicators on the dashboard display actual speed and warn of operation/working problems.

Simons' (2000) PMCS foundation is budgeting systems. Every company wants to earn a profit. Accounting system collects information on economic transactions, which are gathered into an income statement, balance sheet and cash flow statement. Internal control system establishes the procedures by whom and how information should be recorded.

Otley (2008, p. 26) suggest answering four questions before creating a performance management framework in an organisation, which he recommends should asked be continually:

- What factors does an organization see as crucial to its continued success, and how does it measure and monitor its performance in each of these areas?
- What level of performance does the organization wish to achieve in each of these areas, and how does it go about setting appropriate performance targets?
- What rewards (both monetary and non-monetary) will managers gain by achieving these performance targets (or conversely, what penalties will they suffer by failing to achieve them)?
- What information flows are necessary for the organization to be able to monitor its performance on these dimensions, to learn from its past experiences and adopt its behaviour in the light of those experiences?

Niven (2005) in his book introduction promised to provide step-by-step assistance to BSC implementation. Unfortunately his treatment is quite superficial and therefore does not rule out mistakes in the system and there may be no chain.

*In conclusion*, in principle these concepts contain PMS structure design and implementation itself. It may also be said that PMS implementation concepts have quite a wide scope. For example, they embrace also designing system supporting concepts (performance targeted behaviour, management styles, beliefs, organisational structure). These concepts are difficult to use in practice as tools for designing a new PMS, or assessment of an existing PMS. The structure design and implementation parts should be separately identified on the basis of these, by adding the part of current use.

The models analysed here contain the chain principle weakly. Transition from the organisational level to level of the functions happens in one step, one sentence, not apprehending what possible mistakes it actually involves. The closest is the approach by Waal; however, the chain does not clearly show up there either and hence PMS implementation on the basis of these does not enable to get efficient help for executing the organisational strategy.

The approaches described in the theory statement have been synthesised by the author for creating his model.

# 3. METHOD OF RESEARCH

The method of research is as follows. First, based on the literature analysis, the most frequently reflected shortcomings related with PMS usage are identified. Opinions expressed by various authors are grouped, analysed and generalised. As a result, the author of the given thesis reached the main shortcoming, which is associated with communication in different parts of PMS.

The author supplemented some aspects of the PMS implementation theory with his own ideas. As a result, the *normative* PMS functioning approach was created. The so-called normative model is used to study qualitatively the implementation of PMS under strategy execution in two organisations (from the aspect of usefulness). Alignment/chain is studied on the basis of documents used in the organisations as verifiable evidence.

## 3.1 Limitations in the thesis

The understanding what is meant by PMS and what it consists of is very wide. Some treatments of PMS regard also an organisation`s structure design, choice of management style or reckoning with it, and managers' supporting attitude toward the system (*e.g.* Waal) as its parts. The author of the thesis takes all this as the setting influencing PMS implementation, which under favourable conditions will facilitate the implementation of PMS and consequently can also assist the organisation achieve its objectives and vice versa. Studies of successful and unsuccessful implementations have pointed out these factors: insufficient time and resources, no wish to show results in unfavourable light, no full awareness of benefit from implementation, top management's interest in implementation (Bourne *et al.*, 2002). De Lancer Julnes and Holzer (2001) have presented the most important factors to achieve the actual usage of measures:

- organisation's "readiness" to develop and implement performance measures;
- identify and involve the organisation's internal and external interest groups;
- involve employees;
- culture and awareness that the adaptation of performance measures can generate performance management culture.

These are omitted from this thesis, although the author considers them necessary attributes that facilitate the use of PMS. These are "soft" parts of PMS, which must be present and PMS with its three parts will be based on them, which, when created and used appropriately will give maximal support to the organisation for the achievement of its objectives. The weights of these parts are characterised by that the "soft" parts cannot replace shortcomings in "strong" parts.

The second limitation is that this model offers solutions for large rather than small organisations. It is characteristic of the latter that the enterprise is managed by owner-manager who only knows the vision and strategy himself, and it can be generalised that employees are not well educated there. This thesis focuses on organisations with multidimensional management (owner/initiator – management – area managers – middle managers – employees), division of labour as well as documented strategy.

The third limitation is that the author starts the investigation from an existing strategy, or from strategy execution via his modifications, and focuses on PMS as a tool of executing the strategy. An organisation's success depends on strategy execution. Actually the strategy execution is preceded by strategy preparation, which in turn is preceded by scenario creation, selection, *etc*. This is the part the given thesis is less focused on. And the author assumes the strategy to be executed is good (the author will not evaluate whether the strategy itself is good or bad in the economic sector context, whether it reveals customers' interest, *etc.*). A somewhat superior position of strategy execution over strategy itself is confirmed also by Verweire, Kaplan and Norton. Business observers are increasingly more convinced that capability of executing a strategy is more important than quality of the strategy (Verweire and Berghe, 2004, p. 2). Kaplan and Norton (2001) see the strategy execution ability as a bigger challenge than determining of the right vision and strategy.

The fourth limitation is that an issue characterising the "soft" side such as, for example, whether managers should be involved in the measures selection process or not, is ignored. If we define PMS as a system with the help of which to lead the organisation toward the desired result, then all managers are working on this because nobody wants to lead the organisation farther away. Hence it can be argued that every organisation has a PMS, the question is only about its level and awareness. The author confines this list to the organisations which knowingly use PMS for moving toward the results and which have a strategy.

## 3.2 Description of the research method

The reasons for successful and unsuccessful implementations are hard to investigate in quantitative methods, because they are highly organisation focused results where the negative result may be due to various reasons. Hence the transorganizational approach is not appropriate.

A system works well when something is achieved with its help (lasting dynamics leads to appropriate statics). For example, a car is working well when it takes the rider from one place to another. If it is broken there will be no result and it must be admitted that the motion system – car – does not work well. Working "well" in the case of PMS (largely) is seen only at the end of the strategy period. And then it is

already too late to fix the non-working system – find mistakes/repair. The system should be evaluated against something/diagnosed during its working period. What can be evaluated with the system after all? Conformity of its individual parts to certain requirements and conformity of the relationships between the parts to certain requirements can be evaluated.

As mentioned above, there are many quantitative studies that describe which measures are used by organisations. These do not yet give any answer regarding the causes of failure. A better result is received with the qualitative method, the so-called case study: why some succeed and why some fail.

The author analyses the level of PMS and its components qualitatively in two organisations. He conducts a qualitative assessment of PMS components and thereby gives a comprehensive assessment of the organisation's PMS. When in the process of research it is discovered that an organisation's PMS has shortcomings, then based on normative PMS, reasons should be found why implementation failed.

The author is using longitudinal triangulation where data are collected from similar documents on processes happening in different periods (within the strategy period). For the public sector organisation the author used content analysis of documents and participant observation, having worked there himself for 4 years.
For the private sector organisation he conducted interviews and document content analysis, more specifically with qualitative document observation. Author had no permission to record interviews. In a content analysis it is important to ensure that the documents analysed would make up a representative sample.

For that purpose he analysed (1) the organisation's strategy documents, (2) organisational and its units' action plans, (3) studied its strategic and operative management system, (4) structure of regular performance related reports and communication, (5) rewarding principles.

The author conducted the content analysis based on the following steps: defined the documents to be studied, specified the objective, ascertained that the sample of documents is representative, then conducted the analysis and interpreted the results. In order to evaluate interpretations veraciously he used internal and external coherence. He observed that the latter was in conformity with what was described in the literature and used these studies to describe the research. He used an analytic presentation for presenting the case results.

Since one of the above-described main causes of failure is the difficulty of delegating/deploying upper (strategic) objectives downwards, the author will focus just on the theoretical treatment of this part.

## 3.3 Motivation of the target group selection

A purpose of PMS is to help organisation achieve its strategic objectives. Hence the first criterion for choosing the target group is related with the achievement of objectives and this we will know only after the time has arrived to achieve results, or the strategy period is over. Hence the target group should consist of those organisations which have gone through one full strategy cycle under PMS. The strategy cycle with the objectives is an important touchstone for PMS. If an organisation is able to produce the expected result at the end of the strategy period (need not be financial result, but if there is a value chain or success model, must be able to convert "nonmonetary success" into future financial success), this allows to believe that it has to have a good PMS. The second criterion for selecting organisations in the target group is the knowledgeable implementation of PMS. As organisation is using BSC or some other system knowledgeably.

In the past decade, many public sector organisations have also implemented the private sector management principles including PMS. However, "few attempts have been made to develop a generic framework that would be applicable in a wide range of public and non-profit organizations (Micheli and Kennerley, 2005)". Public and private sector PMS do not differ essentially; the difference is only in the structural components of PMS. Hence the model created in this thesis can be used also in the public sector and consequently one target group organisation is a public sector organisation. The case study will be conducted in one private sector organisation and in one public sector organisation. The second reason comes from the conditions of generalisation. In a qualitative study it is difficult to ensure generaliseability. Therefore the author has compiled the sample for model testing based on the most frequent types of organisations: for-profit or private sector organisations, and non-profit or public sector organisations. Due to the large amount of resources in the case study, the author had to limit the model testing to one from each type of organisation. Organisations were selected so that both have strategy related documents, have gone through one strategy cycle and strategic results are available. Both use PMS knowingly. The thesis does not compare their PMS to each other but conformity of their PMS to the normative approach created in the thesis.

The validity of the model must be evaluated by testing the organisations' PMS. If an organisation has achieved its strategic objectives and no discontinuity in the same chain is observed, it may be said that the model is appropriate. In case the test results show that an organisation's PMS has shortcomings in a certain part that does not allow the organisation by following the model to achieve the intended results and the organisation has not achieved them, it may also be claimed that the model is appropriate.

However, the author wants to point out that an organisation could achieve its strategic objectives as a co-effect of several factors, and one factor could have been

a good PMS. Theoretically there might be cases where PMS is valid but strategic objectives are not achieved, or where PMS is not valid but strategic objectives are achieved. These are exceptions rather that need to be studied in greater detail.
When an organisation implemented a PMS knowingly (it has a value creation model, success model, *etc*) and its results improved, can we say it is because of PMS? We cannot say it 100% because it could be a good fortune; however, without an efficient PMS it is very unlikely – like driving a car with your eyes closed.

## 3.4 Empirical part

In the practical part of the thesis the efficient PMS implementation model by the author has been qualitatively tested in two organisations, which have gone through the full strategy cycle (which provides information on the achievement or non-achievement of strategic objectives).

Now we can ask whether it is justified to study the private and public sector together, the more so that they are so different and the public sector is much more complicated. The author is of the opinion that a public sector organisation also must have a measurable result. It applies even more to public sector organisations, which have declared that they are using BSC or PMS – these systems require a measurable objective which is achieved after a period of time as a result of the organisation's joint efforts. Because there are no less or more performance management systems, furthermore, such an approach as New Public Management (NPM) takes over the experience of the private sector. Although the public sector has somewhat different steps/ways of reaching the objectives of units, a public organisation and units must have concrete objectives. The author does not compare private and public sector PMS systems to each other but how these systems meet the requirements of the model.

# 4. RESULTS AND CASES

This chapter is to create a model proceeding from the problem presented in the problem statement chapter, based on the approaches in the theoretical part of the thesis. First, the model is constructed theoretically and then it will be tested on two organisations with the help of case studies in subsections 4.2 and 4.3.

## 4.1 PMS chain principle

### 4.1.1 Birth of chain

The analysis of PMS shortcomings (in chapter of problem statement) identified that PMS implementation failure is connected mostly with communication, which does not allow to communicate information in several directions in PMS. Communication problems were related with the hierarchical deployment of objectives, poor measures and feedback:

- By not communicating objectives units, teams and employees have no strategy based inputs for changing their day-to-day work.
- Poor measures represent the same problem but from another aspect – measures are more concretised representatives of the same objectives, or when objectives are not deployed measures cannot be hierarchical either. Another aspect of weak measures can be that when objectives themselves are hierarchical, a measure as a specific way of expressing the objective needs not express and communicate the actual meaning of the objective. Therefore for achievement of the target value of a measure may not involve the achievement of the objective.
- Feedback does not allow to provide input for conducting adjusting activities to eliminate the impact of unsatisfactory deviations on the basis of the data collected.

A similar connection between the strategy and day-to-day activities is of utmost importance. Achievement of integration between long-term strategy and day-to-day performance is of decisive importance. Therefore the strategy must be rendered a day-to-day phenomenon (Verweire and Berghe, 2004, p. 8).

A solution to the problem where PMS in many organisations actually cannot support the achievement of its long-term objectives (mainly due to communication problems), would be strict abidance by the (simplified) chain principle of PMS design and functioning.

A purpose of PMS implementation is to move from the current qualitative condition of the organisation into different qualitative condition in the future (Figure 4.1.1).

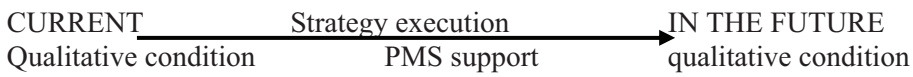



Figure 4.1.1 Change of qualitative conditions (compiled by the author)

The pathway there can be addressed as a set of different but interlinked stages/parts. One set is formed of activities and another set of system components: interim objectives, measures, interim results *etc*. All along the way from the current condition to the future condition the organisation is accompanied by PMS, based on the chain structure.

The following moments are typical of a chain. A complete chain consists of links/components. A chain can fulfil its function only when it is unbroken. Then all its links can fulfil their role and therefore also the chain as a whole. In that case every link is filled with power or information which is transmitted from the beginning to the end of the chain. If the chain is broken, the link next to the break cannot fulfil its role any more and communication of power or information will cease. After the broken link is fixed the transmission is restored. PMS with all its parts should be viewed in a similar way.

**General description of the chain and two directions of two chains**

First, movement (of information) in PMS chain occurs (1) in the chain of objectives (Figure 4.1.2). There the necessary sub-activities derived from the organisation's long-term objectives are communicated to the respective units. In that way all requisite activities get an executor, or the objective is split/deployed. Then, in the strategy execution and PMS functional phase, (information) communication movement will occur (2) in the result chain, which is movement in the opposite direction and where executing units with the results of their sub-activities exert the expected influence on the achievement of the organisation's long-term objectives, *i.e.* individual results are transformed into overall results of the organisation.

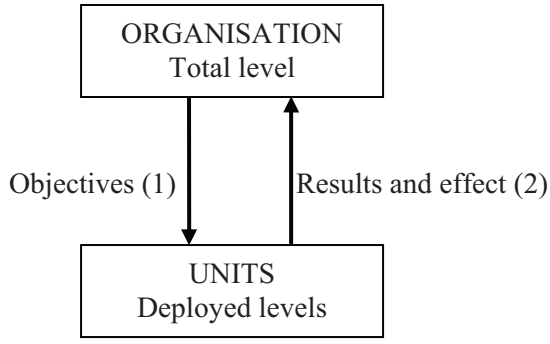



Figure 4.1.2 Communication of information in two chains (compiled by the author)

Since the interval between setting long-term objectives and the final result being revealed is long (measured in years), then it is important to know before the date the final results become evident whether the long-term objective is likely to be achieved or not. For that the "long journey" needs to be deployed into shorter periods and then conclusions have to be made assessing the actual interim results

against short-term objectives. The chain of both objectives and results will be deployed shorter by this amount (a month, quarter, half year, year).

Due to unsatisfactory interim results or other circumstances (*e.g.* changes in external environment) an adjustment would be made to the system. This would somewhat (but not significantly) change the next period´s objectives of some executing units and the cycle will repeat: information is collected to know interim results; these are assessed and a judgement is made, which will lead to the amendment/adjustment of the next period's objectives.

It will be guaranteed by moving along this chain that exactly these activities which lead toward the achievement of the overall objective were derived from the overall objectives to strategy executors. The achievement of these is monitored on the basis of the criteria (measures) derived from the objectives. It rules out any other, out of context results, keeping only those that are necessary with the overall objective in view. If this consistency is guaranteed and the chain is working, or all parts/links in the chain are functioning as necessary, there is a solid foundation also for the achievement of the organisation's objectives. If the chain is broken, it is very likely that the results are not achieved.

In such a description we can speak of two chains:

(1) first – setting objectives based on the organisation's objective;
(2) second – collection of results, analysis, drawing conclusions, communication and implementing adjusting activities.

These chains are not working simultaneously. The first one happens earlier in time and is more static and shorter (objectives setting). The second chain works later in time, is more dynamic and longer (collection of results and responding). These chains come into contact with each other in two points. First, where in the functional phase it is initially observed what has been set in the chain of objectives, and then where the functional phase sets the short-term period objectives for the chain of objectives.

What should be included in the composition of an ideal PMS (normative approach)? What are the parts that should be assessed in a PMS? Very many factors can influence the achievement of an organisation's objectives. Should PMS take all of them into account? The theory chapter of the thesis confirmed that PMS frameworks are broad and contain as much as possible in order for the external part of PMS to be minimal, and then the achievement or non-achievement of objectives can still ascertain also the efficiency of PMS. Still, there is something in every organisation besides PMS that is out of the reach of PMS.

The efficiency of PMS (discussed on page 50) can be assessed after becoming aware of the strategic results. An earlier option, without waiting for the results, is to assess PMS fragmentally, by parts. If the assumption that its parts are constructed and interlinked pursuant to certain principles is true, PMS of this organisation should also be efficient and render maximum assistance to the

organisation for the achievement of its strategic objectives. Such a premature assessment, without waiting for the achievement of final objectives, and assessment of its parts, allows to discover a PMS inefficiency early and by removing it restore for the organisation an opportunity to achieve the objectives. In order to evaluate/diagnose a system, this system and its parts should be assessed normatively/against the ideally working one (like in medicine where an illness is compared to a healthy/perfect condition and a non-existing perfect condition is equivalent to a disease, shifting from general illness to a more detailed cause of the condition). In this case, this would allow to assess the system from the aspect of efficiency without waiting for the end of the period. The basis of comparison would be a new (normative) PMS model.

Hence, in order to investigate PMS creation and functioning, PMS as a system should be deployed first and then the components of its parts should be examined, which would already enable us to assess efficiency/functionality of different components and interrelations between the parts and components.

In a performance management system we can distinguish three main parts, which can be examined on the basis of the above-described two chains (objective setting chain and result collection chain) (Figure 4.1.3).

<table>
<tr><td rowspan="2">Objective setting chain</td><td>PMS structure</td></tr>
<tr><td>PMS implementation</td></tr>
<tr><td>Results collection chain</td><td>PMS functioning</td></tr>
</table>

Figure 4.1.3 Relations between chains and PMS parts (compiled by the author)

Therefore the author considered it necessary to evaluate separately:

- *the structure* of PMS through its components (the chain of setting objectives),
- *functioning* of PMS through its components (the chain of collecting results), and
- *implementation* of PMS that connects them.

Although the author arrived independently at the treatment of PMS consisting of three parts, by dividing PMS into parts, he still does not regard himself as the first describer of three PMS parts. He has met such an approach also in the literature where other ways have been used to reach them and their contents are slightly different (*e.g.* Neely, 2000; Kollberg, 2007).

Otley (1999) has described the MCS analogously. His MCS framework consists of five parts including:

1. objectives,
2. strategies and plans to achieve them,

3. target setting,
4. rewarding and incentives structures, and
5. information feedback cycle.

Points one to three can be regarded as structure design and the fifth one as functioning of the system. The fourth part can be regarded as the ”soft part” of the system.

### 4.1.2 Chain creation between PMS parts

Here we discuss the generation of *the first part of PMS* or PMS structure pursuant to the chain principle. While above the directions of objective deployment and aggregation of results were discussed, then now the temporal direction must be added. The direction of actions deployment and of aggregation of results can be addressed together (as one). PMS will derive from looking at one chain from two different directions. The *first direction of the chain* (temporal part) derives from the organisation’s desire to reach somewhere (some condition) in the future; the *second direction of the chain* (process part) is already the activity for the achievement of the desired results. Both are directed at the same target, to reach via actions and by a certain date a previously specified condition (Figure 4.1.4)

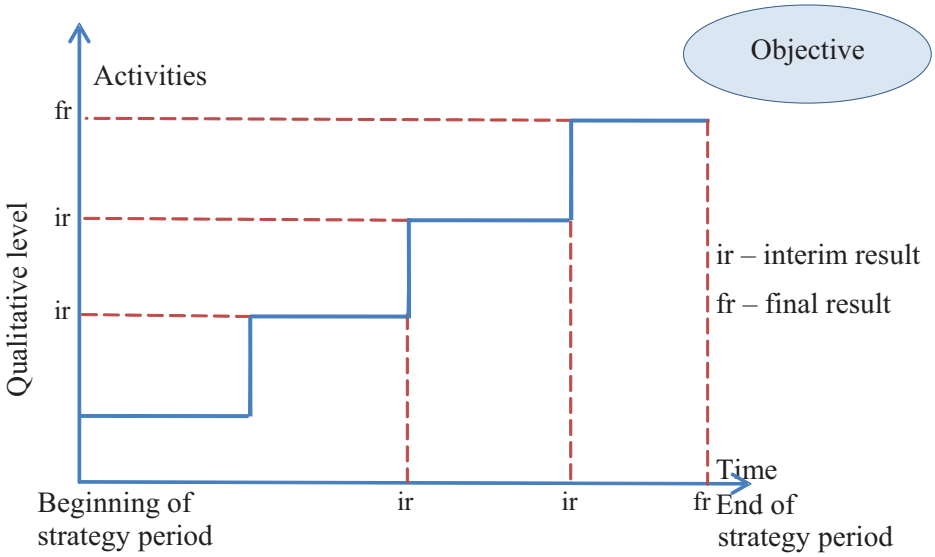



Figure 4.1.4 Division of the PMS structure chain: temporal and activities (compiled by the author)

Both directions (parts) of the chain are interrelated through temporally performed activities and the final result is the achievement of the desirable at the desired time

– in the future. Time and activities are closely connected: activities are fixed temporally and in a time period several predetermined activities are made in parallel.

The other direction of the chain (activity part) involves many executors or contributors in organisation who help to realise the desirable. Their actions must be coordinated rather than counteracting or duplicating. Actions/steps by executing units lead to the achievement of the organisation's overall objective. This direction of the chain has an internal focus in the organisation, aimed at setting units' objectives concerning time and activity.

The two-directional chain principle is the basis for designing a PMS structure. Hence, the desirable final result to be achieved in the future is a sum of results of actions of different temporal duration (Figure 4.1.5).

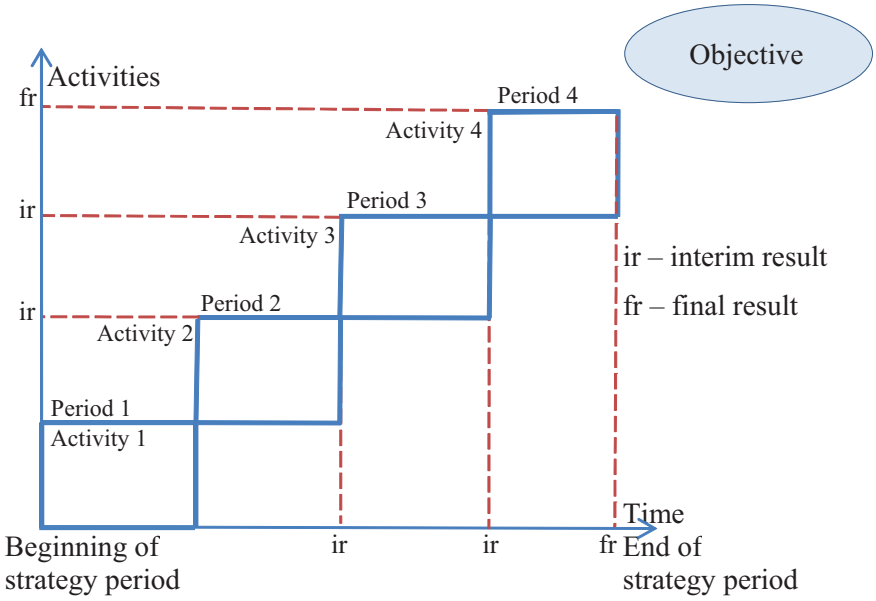



Figure 4.1.5 Final result formation from results of temporal activities (compiled by the author)

The figure shows that the objective must be expressed as a result of carrying out four activities, each of which has predetermined duration.

When the time interval between the moment of setting the objectives and the desired realisation moment is relatively short, then also the likelihood of making mistakes (not achieving the objective) is smaller than with a more distant objective. When this time interval is longer, the likelihood of making mistakes increases, because actions carried out by the organisation during this time may be hit by more disturbing (deviating from the direction) factors than during a short period of time. Here the system must provide support for that the wish intention would be definitely carried on in time during the 'journey', would be continuous and will

not change/disappear, or get adjusted over time. The more distant in the future the desirable realisation will be, the higher the likelihood of failure and at the same time, the support system must be stronger by the same degree.

*The second PMS* related **part** – implementation – would be communicating and establishing of new temporal objectives for units or executors. It is a transition stage where the above created PMS structure is implemented for utilisation. This gives the executors new knowledge, or in the following periods just these things will be done slightly differently. Implementation can be summed up as an activity where new rules/principles are explained and established for the units.

**The** *third PMS* related **part** is the current functioning of the system. This part focuses on collecting and communicating of the results. The chain is formed of the following actions:

- monitoring of the interim results (presumes that information is specified, collected, analysed and communicated previously),
- reacting,
- making adjusting activities and adaptations, and
- maintenance of the system itself.

If some changes/adaptations are still made during the strategy execution, there must be a mechanism for adapting the activities (regular meetings/dialogues with the format requiring revision, where exactly they have reached by that moment, and on the other hand, take into account external changes and then adjusting earlier decided further activities).

**The core of PMS and what surrounds it**

Above we got as far as three main parts of PMS which are needed for an efficient system (based on the chain concept) and which are the core of a system:

- system structure design (structure is relatively static, only its target values may change over time);
- implementing (short-term dynamics);
- functioning (lasting dynamics).

In addition to the core there are also the so-called "soft parts". An organisation which wants to implement an efficient performance management system (*e.g.* BSC) must have a number of qualities that can be regarded as "soft qualities". An organisation needs to have certain dominating principles, a certain critical mass of these. This requires a certain level of preparation (a set of knowledge, interest, resources, awareness of the need to change something when it is not possible to continue in the old way). All this is an input/basis for creating and using an efficient PMS. Literature contains questionnaires which should be completed before setting to implement so as to ascertain there is suitable groundwork for that (Waal, 2007, p. 40; Niven, 2005, p. 56).

This implementation groundwork is something that is connected with the need to improve performance, or in other words, discontent with the present or future situation where the organisation is or will be. Without that need PMS is of no use, since the organisation does not wish to reach somewhere and PMS is actually not used and it acquires a declarative significance. An organisation must have this need and quite probably this need comes to the organisation via its owners' will; however, if the team is very ambitious it may also come from below – from the top executive team. The will to improve is an endless fuel/energy for operating the system without which the system would cease to work and would stop. The system must be maintained currently. The public sector is often like an orphan here, where such fuel (in the form of improvement interest) has very poor qualities or missing at all. This in turn does not allow to implement PMS, keep it in operation, and benefit from it. Nevertheless, the chain principle can be transmitted to these public sector organisations which have implemented PMS or intend to do it. The difference of the public sector PMS structure from that of the private sector will be disclosed in part 4.1.4.1.

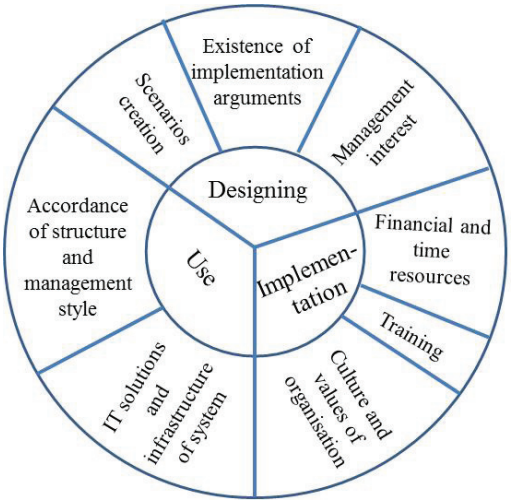



Figure 4.1.6 Core of PMS and its "soft parts" (compiled by the author)

The core of PMS can be surrounded along with the reasons for implementation also by some of the so-called "soft parts" of PMS, which support the design and functioning of PMS (Figure 4.1.6).

The presence of "soft" parts was revealed also in the theory chapter of the thesis, where the scope of different PMSs was discussed. In the given thesis these parts are omitted, although the author regards them as necessary qualities facilitating the use of PMS. In the following the PMS components pointed out in this subsection will be analysed in greater detail.

### 4.1.3 Short description of PMS as a system

**Structure of PMS**

PMS designs of different scope can be encountered in the literature. For example, using non-financial indicators are regarded as PMS design (Medori and Steeple, 2000). According to the author's definition, PMS structure design represents documented objectives of units and employees for the next year or shorter period, which are derived from the organisation's strategic objectives. At the organisational level there should be a scheme (*e.g.* objectives – Christmas tree or fish bone) where the division of tasks and expected results could be easy to follow, thereby preventing alteration or disappearance of transmission of objectives. Objectives must occur in a chain. The table below characterises the importance of objectives being aligned throughout the organisation (Table 4.1.1).

Table 4.1.1 Relations between PMS structure (structural PMS) and results to be achieved (compiled by the author)

| PMS STRUCTURE | | | ORGANISATION'S RESULTS |
|---|---|---|---|
| STRATEGIC OBJECTIVES | UNIT'S OBJECTIVES | EMPLOYEES' OBJECTIVES | |
| YES | YES | YES | YES |
| YES | YES | NO | NO |
| YES | NO | NO | NO |
| NO | YES/NO | YES/NO | NO |

Objectives are achieved only when employees' objectives are derived from units' objectives, and the latter in turn from the strategic objectives of the organisation. In case of non-alignment an organisation cannot achieve its objectives.

The literature has addressed PMS design as (Najmi *et al.,* 2006):

> generic performance measurement system (PMS) design approach consisting of three basic elements:
> (1) direction: mission, vision and strategic objectives;
> (2) processes: top level processes, detailed processes;
> (3) measures: strategic indicators and operational indicators.

The existence of the element of "direction" implies that the company has defined its mission, vision and strategic objectives and that the company's direction is clear. "Processes" imply that the company is being managed by processes and is familiar with process improvement practices. Finally, "measures" implies that the company has attached measures to its processes that have been derived from the strategy and reflect the company's direction.

All the above elements, according to the author's approach, are classical components of a PMS structure and chain can be perceived in them. The second has underlined defining of specifically those processes that influence the (strategic)

objectives defined in the first item. The third element points out that measures were to be set for the processes in the second item and these were aligned just to the strategy.

Interlinking of the structural components is of critical importance in the structure. This is underlined by many researchers:

> understanding the "value drivers" and selecting the right PMs to serve as proxies (*i.e.* understanding how value is created in the firm and the cause-effect relationship between measures) are fundamental to the design of a PMS (*e.g.* Ittner and Larcker, 2001; Bryant *et al.*, 2004).

**Implementation of a PMS**

Implementation is a one-time preparatory action for putting the precedent part of PMS – structure – into operation, which ends when units have comprehended their tasks, as a result of training units have new competences to fulfil new tasks and are ready to start acting "in a new way" from a certain round date. Implementation contains introduction of changes to documentation (units' statutes, work tasks, roles, duties, accountabilities, motivation).

This presumes assessment of conformity of the existing competences to new requirements after tasks for the new period are accessible and in the event of discrepancy, organising training. Implementation must also contain assignments to keep PMS functioning.

Implementation involves risks, which the organisation must be aware of Waal (2007, p. 331) has pointed out important factors that exert negative influence on successful implementation of strategic performance management if:

- not making sure there is a support base for performance management in the organisation;
- making too many changes in the new system;
- not enough commitment from top management;
- not enough involvement of organisational members;
- not the right combination of skills in the implementation team;
- too many projects in the organisation at the same time;
- unclear responsibilities for implementation tasks;
- not enough insight into and clarity of the strategy;
- not enough control of primary processes;
- not enough training of organisational members;
- not paying enough attention to organisational members' fear of performance management being used by managers to settle scores;
- going too fast.

The importance of implementation cannot be underestimated. The structure of a PMS may be perfectly designed but when structural components are poorly implemented, the result is that the strategy execution does not begin as it should. Though the functioning of PMS will reveal non-achievement of interim results,

time is lost until tasks of a new strategy are communicated to executors. A "soft part" in implementation may be an executing team and support from other structural units.

**Use/functioning of PMS**

There are studies which have examined the current use of performance management. It has been pointed out that 56% of performance management projects fail, especially in the functioning phase (Waal, 2002; Waal and Counet, 2006). This implies that the functioning phase is not less important than the structural design phase.

The author defines PMS functioning as the current operation of the system that begins from a round date (beginning of month, quarter or year) when a new strategy execution begins, new assignments enter into force.

Subsection 4.1.2 pointed out some activities which constitute the functioning of PMS. Now we can expand the list of related activities. Functioning related regular activities:

- data collection,
- analysis,
- drawing up and presenting reports,
- communication,
- interpreting,
- managers and top level must peruse reports, react to them,
- feedbacking with "carrot and stick" judgement is very important. Otley (2008) mentions it in the PM framework as a separate process,
- planning of adjusting activities (with new KPI target values), and
- executing of adjusting activities (the new activities probably involve that post-strategy actions will be somewhat influenced by them and they need to be adjusted slightly in the new light).

We can speak of the so-called "soft side" also in the case of functioning phase. Material resources are important for a system to function: management's working time, system operation and maintenance costs, software support. A very important intangible resource is the management's interest in system results. Since a system concerns the entire organisation, then in order to ensure the functioning of the system it is important that the management's concern were expressed not only in the system results but also in the operation of the system.

It is important in the use of PMS to have support structures and resources allocated there, *e.g.* Chief Performance Officer (CPO). Reacting to performance results, either by approving or disapproving of them is equally important.

The importance and form of information communication have been addressed by Kaplan and Norton. "In order to evaluate how performance initiatives enhance a company's performance, they propose three types of meetings to monitor results and share experiences. Managers should first convene meetings that review the

performance of operational departments, and address specific problems that have arisen. Secondly, they should convene strategy management meetings that review balanced scorecard performance indicators. This type of meetings should also contain initiatives to assess general progress and identify obstacles to strategy execution. Lastly, during the third type of meetings, managers should assess the performance of the company's strategy and adapt it if necessary. The three types of meetings have different topics, different frequencies and different sets of attendees" (Kaplan and Norton, 2007).

PMS functioning classically starts when implementation ends and operation by "new rules" begins. In reports milestones set in the PMS structure, their achievement and communication of results are monitored.

Functioning, on the one hand, ends the chain (comprising of PMS structure, implementation and functioning), but on the other hand, provides also an input to PMS structure after interim results are known. This result will supplement units' success factors, key indicators of success and target values for the next period. Actually this is what closes the chain. When this total chain works incessantly it is very likely that organisation will achieve its long-term objectives (Table 4.1.2).

Table 4.1.2 Functional PMS and relationships between results (compiled by the author)

| **PMS STRUCTURE** | **PMS FUNCTIONING** | | **ORGANISATIONAL RESULTS** |
|---|---|---|---|
| OBJECTIVES | MONITORING* | ADJUSTING** | |
| RIGHT for units | YES | YES | YES |
| RIGHT for units | YES | NO | NO |
| RIGHT for units | NO | YES | NO |
| RIGHT for units | NO | NO | NO |
| WRONG for units | YES or NO | YES or NO | NO |

* contains also data collection, analysis, communication

** contains planning of adjustments and execution

Theory has not touched much upon PMS functioning. Still, Waal (2007) has listed components of successful change. These changes occur with both strategy and change execution and their functioning and other parts of PMS have a great importance for the achievement of results. The author has supplemented the table by linking the components to three parts of PMS. The co-effect of all three PMS components can be viewed with the help of the table below (Table 4.1.3).

Table 4.1.3 Components of successful change (Waal, 2007, p. 332) with author's additions

| **PRECONDITIONS FOR STRUCTURE*** | | | **IMPLEMENTATION** | | **FUNCT-IONING** | **ORGANIS-ATIONAL RESULTS** |
|---|---|---|---|---|---|---|
| Pressure to change | + involv-ement | + commu-nication | + training | + support structure and process | + reward/ recognition | = continuous change |
| No | Yes | Yes | Yes | Yes | Yes | No action |
| Yes | No | Yes | Yes | Yes | Yes | No emotional tie |
| Yes | Yes | No | Yes | Yes | Yes | Quick start; quick ending |
| Yes | Yes | Yes | No | Yes | Yes | Concern and frustration |
| Yes | Yes | Yes | Yes | No | Yes | Fight symptoms instead of causes |
| Yes | Yes | Yes | Yes | Yes | No | No long-term change |
| Yes | Yes | Yes | Yes | Yes | Yes | Continuous change |

*A precondition for effective use of PMS (reason for implementation) might be the need to change something ("soft side" around the PMS core). Projects starting without this need cannot be successful because organisation lacks fertile ground for that. It is important that the top level was aware of this need. PMS cannot be implemented successfully without employee evolvement, whereas initiatives coming only from below, without management's interest, cannot be implemented either. It is important to constantly communicate new system advantages to employees and show their practical benefit; and training is of great importance for acquiring respective competences in the implementation phase.

The table shows that all components must exist for the achievement of results. When the chain is broken, the result is not achieved, either partly or fully.
Hence, to sum up, two system parts and their interaction are needed for organisational performance (Figure 4.1.7):

- first, the system itself created for the organisation and following the chain principle – defining the performance itself, what it consists of: temporally, for executors (units) and content (with its components and what is decided by whom, what must be done by which date, and what this "what" is for anyone), and
- secondly, there must be certain processes – (system) management (doing what needs to be done).

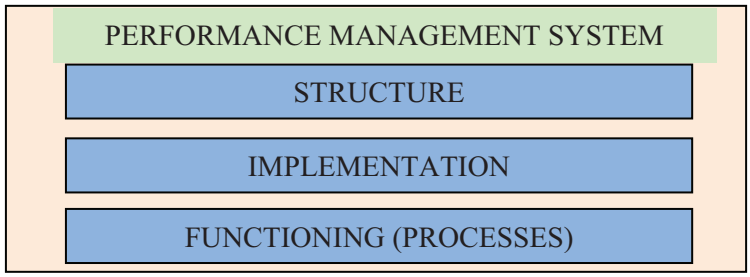



Figure 4.1.7 Parts of performance management (compiled by the author)

Like for driving a car a system – car and action − is to be managed. With these two system parts present it is possible to achieve the desired success with car driving, depending on what is regarded as success (for instance, win a race, or transport goods, *etc*). In the event of failure it is only a question of, first, whether the car as a motion system did not meet the requirements (established general criteria for the object) or secondly, inappropriate/non-purposeful use/operation of the system (system management shortcomings: if goods were destroyed they could have been transported using the principle of another system – racing).

A part between the two system parts is necessary to implement the system – a transition stage for getting to know the system and getting it ready for work, in order to currently and systematically address it further (implementation).

## 4.1.4 PMS creation based on the chain principle

The previous subsection of the section described PMS chain and its parts; this subsection describes the creation of PMS according to the chain principle. The above description of PMS structure also described time and activities whose total would lead to the achievement of organisational objectives as a result of their implementation. In order to get to these "right" activities which would exert such impact, various interrelated components must be designed first. The latter ensure the channelling of the activities that need to be executed.

### 4.1.4.1 Structural components of PMS and requirements for them

**Strategy execution and the related PMS support**

To reach from the current condition to a condition desired in the future, the organisation must all the way long be accompanied by a set of integrated activities (action plans) devised in the faith that just these activities will lead to desired condition. Most frequently this set as a total is referred to as organisational strategy. Its spread in organisational management dates back to the 1950s when the need for differtiating oneself from competitors emerged. A certain long-term plan had to be devised, since the desired condition was not realised within a short period. For that purpose a military term was introduced in business – strategy, or how to reach from current condition to the condition desired in the future.

Different definitions of strategy can be found in the literature. Also the scope of what is meant by strategy, or what it is believed to consist of, is wide. It may cover plans only, or also objectives *etc.* are included. Developing and crafting strategy has been considered an art and its implementation by some rules not very resultative (Mintzberg, 1987). Mintzberg goes on: "nobody in the history of the world has ever created a strategy through an analytical process" (Mintzberg *et al.*, 1998).

> There is even an opinion that a common mistake is that strategy is an outcome of a rational decision-making process where managers of the organisation first decide the best strategy and then take steps to execute the strategy. However, such a rational decision-making process is not always perceptible in practice. In many cases managers or employees take up activities which in the course of time become part of the strategy. In that case organisations formulate the strategy after it has been executed, not before. They execute a lot of activities, then review them and conclude that what is executed is the strategy. Strategic planning and strategic use are here used to perceive the pattern of these activities, which is called strategy (Chakravarthy and White, 2002).

The author finds that although such a step may be widespread among organisations operating in a turbulent environment and classified as reactors according to Miles and Snow (1978) typology, then for those operating in a stable environment it is not a classical, successful strategy execution. It is a recent trend and resembles not management, which is keeping events themselves under control, but with going along with the flow of events, in principle, submission surrounded by beautiful and modern motivations to show that they indeed are designing events. Because what they want to execute is missing or even if it exists in some form it is not in a transmissible/delegatable condition, which does not allow members of the organisation anticipating, developing, and the result is a constant "fire extinguishing" or reacting to new changes of direction by *One-Man Show* type managers. This is not typical of a constantly improving, learning, advanced, sustainable organisation.

The author finds that even in art creation we can speak of certain serial activities, from which great art can develop. The question is reduced to how detailed activities are considered. Going to the level *a´la* 'draw a line with a paintbrush on the canvas from left to right,' is found by the author to be too specific and agrees with the opinion of respected strategy experts. However, if to direct art creation with such recommendations as it is necessary to have a topical message, a clear vision, design a concept from this, have methodological knowledge about communicating this, *etc,* to create a good piece of art, then, when abiding by these, the outcome might be a high-quality result or *vice versa*. An artist himself may not be aware of what the stages of his art creation are called, going through these stages intuitively. But a bystander is aware of these stages, using the respective terminology, having analysed the creation processes of many renowned artists and

then generalised similarities. It is the same with strategy. In the given thesis the author sees strategy as the defining, specifying and descriptions of objectives and activities which are defined in faith and belief that just these activities will lead to the desired results and on the basis of which activity execution can commence, ultimately leading to the achievement of the previously defined long-term objectives.

This thesis analyses strategy execution with the support of PMS at the level which would allow comparing different organisations. This level does not allow going into too many details, since like every piece of art is different, the situation and strategy of every organisation (position in market, resources, capability *etc*) are also different. Nevertheless, such a generalising level allows assessing execution of different organisational strategies. Only such comparative level enables to learn from each other. The given thesis does not focus on strategy making but execution with the help of PMS.

As follows, the given part notes the stages and interim points/components to ensure strategy in the form of activities reaching the executors in such a condition that on the basis of information on it conclusions could be made regarding the steps of execution. All these components help form a PMS structure based on the chain principle. With the help of these support points/components the probability and quality of executing different organisational strategies can be made comparable.

Theoretically, there is a possibility that there is only one information communication, when everyday tasks are transmitted to executors from the strategy once immediately and no information is needed about the reverse flow – execution. Because executors' everyday activities will not change, executors will not deviate from what was set during the strategy period, and also co-units act in the same way, cooperating in a synchronised way. In practice (in the conditions of human organisation and constantly changing external environment) such a possibility of acting in closed conditions remains purely theoretical. There are too many factors that prevent such approach and measures are needed which would therefore exclude failure (non-achievement of strategic objectives). For that purpose interim stages have to be established in a chain temporally and in the form of components on the way of information communication from strategy to executors and in the opposite direction – from executing results to the achievement of strategic objectives.

**Going in-depth axis**

In the previous subsection (4.1.1) two directions of a chain were mentioned:

- objective setting direction, and
- result generation direction.

These were supplemented by the time and activity axis (subsection 4.1.2).

In the following let us examine the going in-depth direction, which channels appropriate activities which need to be executed to reach executors with the help of PMS structural components in an undistorted way, by going from the most general level to more individual level.

It supplements the first direction and makes sure that right objectives are set for the units. For that purpose movement is along (described below) the PMS structural components at an integrated level (covering the whole organisation), from which objectives that need to be fulfilled are formed.

As a rule, an organisation's strategy is derived from the organisation's *mission,* which answers the question what it wants to offer to society and to its initiator by its existence. If an organisation has, based on the mission, formulated its **strategy**, the formulation is mostly in a form and level that requires concretisation, so that activities could be derived from that strategy, which the organisation then has to start executing. Secondly, during the strategy concretisation specific interim and final results need to be determined, which the organisation has to achieve, in order to be able to say in the meantime that strategy execution has reached a certain stage or that it has been fully executed.

Strategy concretisation is carried out by deriving *strategic objectives* from the strategy. Their number depends on how complicated the strategy is – the more complicated, the more strategic objectives there are. If to take the ability to concentrate attention as the basis, which says a maximum of 8−10 different objects of attention are possible, such number could be appropriate also for objectives. Still, this precision of strategy may not be sufficient either, because, first, strategic objectives can be reached in different ways (different interpretations should be avoided that might occur because of the large amount of executors), and secondly, this may not result in an unambiguous understanding for the organisation regarding the value of which particular indicator they try to adjust. Like the status quo of an organisation can be defined with the indicator value, the future condition must be definable with the same indicators, however, with deliberately changed (target) value levels.

*Strategic action plan* helps proceed methodically from strategic objectives. Its role as a document is to translate the strategy (which is achievable mostly within three to five years) and strategic objectives, which concretise the strategy, into realistic short-term activities which enable execution and monitoring of execution in a time horizon (often a year). In practice, a substantial problem starts evolving from that moment, which was detected already in the problem statement chapter.
"Research indicates that although many companies often have a good strategic plan, more than half of them are not able to articulate and communicate this strategy effectively to the organisation. The main problem for these companies is they lack the ability to execute their strategy properly. At the same time, most

companies state that clear, action-oriented deployment of their strategy significantly influences their success“ (Waal, 2007, p. 100).

In the author’s opinion, this is an example of how important the communication related issues in strategy execution are and how much it helps the organisation which has managed to do that, and for how many it is for some reason an insurmountable obstacle and is discontinued there. Poor communication entails the breaking of the chain. A making strategic action plan is still at the level of the organisation as a whole.

Waal (2007, p. 102) recommends dividing strategy into two:

> strategic growth development process and strategic operational development process. Both directions are different, with different durations and action plans applicable to them, they use different people and resources (mainly R&D, marketing and sales fields would be involved in the growth development process and mainly production related fields with the operational development process). The former direction would focus on new markets, search for distribution channels and products. It would create new sources of revenues during the next three to five years. The operational development trend direction seeks to specifically lower costs by raising efficiency. This will lead to improving of the new added activities during the next year or two. In that case also strategic objectives should enable such a classification. Keeping of these directions apart reduces uncertainty and tensions inside the organisation.

An action plan has a role to play in strategy deployment. An action plan is a document, set of objectives, measures, target values and (executors`) activities with a time frame, executors and need for resources. It should embrace an organisation as a whole, at the same time enabling communication to units or so that units themselves could conceive what is expected from them in relation with strategy. Expected interim results should be classified by time and activities, which would take closer in time to strategy execution. Two levels can be distinguished in action plans. The first, organisational level covers strategic objectives of the organisation and objectives derived from these to units. The second, unit level, describes the activities that the units need to do in order to achieve their objectives. Action plans should contain the important points in strategy execution, discussed below.

After deriving strategic objectives, also *critical success factors* (CSF) should be fixed in action plans. These are most urgent, critical (qualitatively expressed) areas where the biggest obstacles in strategy execution occur which the organisation should surmount to achieve a particular strategic objective. These are areas (factors) that help focus every objective, which exist at the initial moment of strategy execution (in case they do not exist, this strategic objective need not be set, because the situation where they want to reach has already arrived) and therefore they do not allow achieving the strategic objective at the moment and must be surmounted as a result of purposeful action. Surmounting them must lead to achievement of the objective. If it does not, the success factors and measures were

derived incorrectly. For the sake of clarity and good management there might be a maximum of two success factors per one objective (Waal, 2007).

To ensure the surmounting of the critical success factors and first of all achievement of objectives measurement (to know where specifically they want to reach and to know whether and when they have arrived) (quantitative) *key performance indicators* (KPI) or measures need to be imported to the system. Simons (2000, p. 234) has said the following about measures: measures communicate to people what is important. Hence, through measures organisational strategy reaches to employees. To understand whether the measure is appropriate, suitable to support the objective, the measure must meet three requirements:

1. aligned with strategy,
2. be effectively measurable (measures should be objective, complete and responsive),
3. linked to value (input – process – output).

When these three conditions are met by all measures, one can be confident that the organisational strategy and measurement system are interrelated.

It is advisable to have not more than three measures per CSF, which would make 3−6 measures per objective. An organisation which is well aware of its success factors may skip the step of determining the success factors and reach the key performance indicators directly from strategic objectives. Key indicators with *target values* must be, since they show what the actual aspirations are and whether these are achieved later.

With these chain generating stages they are still at the level of an organisation as a whole. The steps taken so far have led from the organisational strategy to the point where the organisation has descriptions of the bottlenecks that need to be overcome (in the form of success factors) in order to get to strategy execution. To reach the desired conditions and enable measurement of the path key indicators (measures) have been derived from the critical success factors of objectives, which together with target values enable to monitor the surmounting of these success factors and achievement of objectives.

**Adding the unit axis**

Further movement in the chain must be vertical, along the above-mentioned structural components in the organisation (from the level of the whole organisation) to the executing *unit level.* Since these are organisations characterised by division of labour, then units of the organisation will be working for the achievement of strategic objectives, which in addition to development objectives have each their own existential functions. Hence also the requirement in the criteria of strategic objective setting that it must be possible to link the objective to

area/function, which then will be responsible for achieving the corresponding objective.

Here the *units* get (from the organisation's strategic objectives) *objectives* for themselves. The organisation's action plan itself may amount to and include also units. In that case there is no need for separate *unit action plans*. Otherwise it results from the objectives derived for units. Organisation's (total, including all units) action plan contains also units' activities (also after these are defined). Existential tasks of units determine the area/function that the unit is currently doing. Now tasks involving execution of a new strategy of the organisation are added. These tasks added from the strategy may be called also development objectives, which should not be mixed up with the operational development strategy. Since the latter constitutes in mainly activities targeted at making operating more effective, then development objectives and development strategy may coincide in their operating activity but development objectives are set for the units which carry out the growth development strategy. Execution of development objectives can be called development activity.

It is the same with units – their organisation strategy based objectives have some factors (*critical success factors*) that need to be surmounted. The surmounting of these factors is monitored by *performance key indicators* with *target values*. Additionally another success factor may be designated for a success factor, the accomplishment of which will lead to the surmounting of the first success factor. With the two different success factors the former should be called result critical success factor and the latter leading to the former, or effort critical success factor. The surmounting of the latter is again monitored by the effort performance key indicator with target value.

Critical success factors and key performance indicators of the organisational level and unit level are interlinked, since the units surmounting the organisational success factors or organisational success factors should be definitely revealed in the list of objectives of some units, since the head office does not fulfil them (objective setting direction – top down). Otherwise the chain will be broken (Figure 4.1.8). Hence the key indicator target values at the organisational level are formed as a result of actions of one or several executing units (result direction - bottom up).

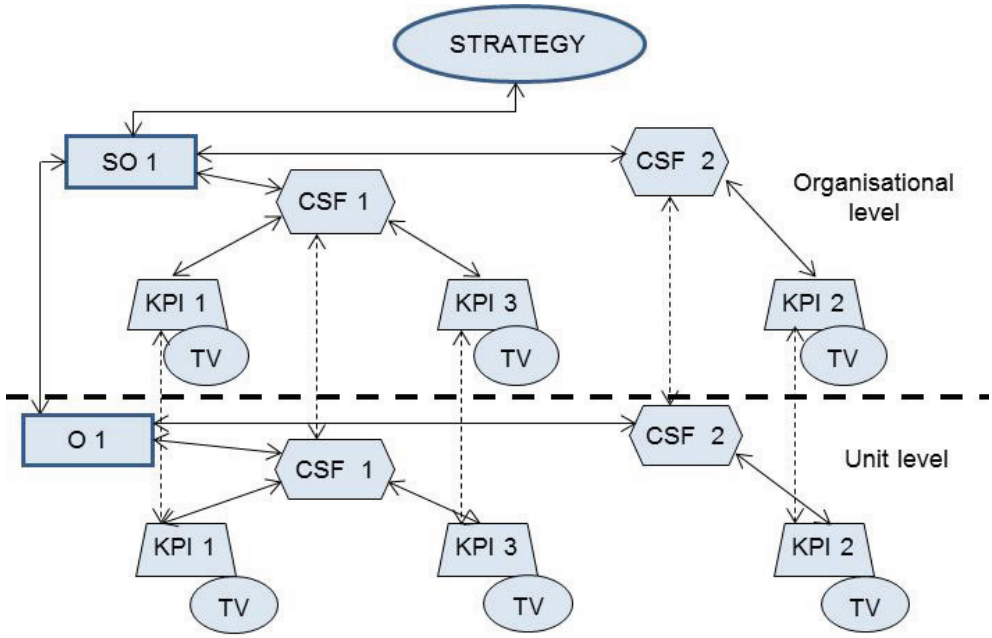



Figure 4.1.8 Relationships between structural components of PMS on the different levels (compiled by the author)

Unit or organisational level success factors coincide when what is made at the organisational level is extensive and going in-depth and can be used also by units for defining their success factors. Several subunits or only one can have a hand in influencing one key indicator target value at the organisational level. Breaking the chain is an event where nobody makes efforts in the name of achieving an organisational level key indicator target value. The probability of achieving an objective spontaneously and without interfering is low. When the chain is broken, it is very likely that the objective characterised via the key indicator target value is not achieved.

**Adding the time axis**

Now we have come to the definition of the final objective via measures; but since their achievement starts immediately, the path to the achievement must be deployed into many shorter time periods and the time axis brought in with the beginning today and end in the future, at the end of the strategy period.

Until that moment, measures/key indicators and target values have been determined for executing units, which they must achieve with their operation in connection with the implementation of the organisation strategy. The defined indicators are like milestones where they have to reach. Since these are objectives of units derived from organisational strategy, then their achievement is not short term (otherwise the objective would be achievable promptly and the organisational

strategy already executed). For that purpose units need to continuously carry out (perform) activities throughout the strategy period, as a result of what the unit's objective should be achieved. Usually these are not recurrent, similar activities such as production activities, but different consecutive (development) actions. These activities probably change during the strategy period. The next activities, different from the previous are taken up when the previous one has reached a desired phase. The execution process, however, may contain the same activities also throughout the strategy period. These (development) activities constitute a process and when this process leads the unit to the achievement of the objective measured by the target value of key indicators/measure, it is a (development) *key process.* This should not be mixed up with the so-called operating process of the same unit's resulting from its existential function. Hence the unit is conducting in parallel the so-called ordinary activity (*running the business*) and development activity, which changes its operating activity in a certain direction and contributes to the achievement of the organisation's strategic objectives (*e.g.* production produces further, or performs operating activities, but does it in a different manner or performs development activities). Production units are characterised rather by short-term (1−2 years) (development) activities (*e.g.* reduce expenses, increase effectiveness) and marketing, and product development units by long-term (3−5 years) growth targeted (strategic growth development, according to Waal) activities (*e.g.* new market penetration, establish new distribution channels, design new products). Most units have both in parallel. (Head of unit actually needs information on both ordinary and development activities).

The literature views performance mainly just as strategic based development activities. The author finds that also the results of the so-called ordinary activities should be regarded as (operative or tactical) performance. These activities would be aggregated on the unit results map. If only development activities are monitored and ordinary activities are not successful for some reason, it would involve strategy failure with high probability, since it is not possible to implement a strategy if the operating activities are deficient. It is hard to believe that strategies are based only on development activity and not on ordinary activity. Anyway, it would definitely have negative effects also on financial results. This view is shared also by March (1991), who believes there (information system*)* must be a balance between using the innovative and old.

Objectives and key processes may both have sub-objectives and sub-processes, which lead to the achievement of objectives, or they can be viewed as *lagging indicators* and *leading indicators,* which provide the former. Deriving one from the other can also be viewed as creating an additional link in the chain. This has its own key performance indicators with target values.

A PMS structure follows the classical principles presented by Fitzgerald *et al.* (1991) and which also the creators of BSC have proceeded from – every

organisation has two kinds of indicators. The former influence the results (competitiveness, financial results), the latter focus on what determine these results (quality, flexibility, use of resources and innovation). Such a classification reveals the causality concept showing that the results achieved are functions of previous business activity combined with specific enablers.

The key process is a derivative from the effort KPI and the latter in turn a derivative from the effort CSF. Hence the chain breakage can be addressed as a situation where an organisation has defined the success factors but has not derived from them activities/processes that after implementation would surpass the success factor. The key process success factor is also a qualitative indicator, which characterises a certain area which at the moment hinders implementation of the key process and which needs to be surmounted. Surmounting is characterised with the help of effort key performance indicators (measures) (or activity already), which are divided into those characterising inputs, process and outputs. *Inputs* must be sufficient for *activities*, which have *outputs* ensuring that success factor of effort is surmounted, and which guarantees that sufficient effort KPI target value is achieved. Inputs necessitate relevant resources to achieve the objective, or a connection is generated between PMS and budgetary funds for strategy execution. When inputs are consolidated one can set about drawing up a (development) budget. Adding the ordinary activity budget, we get the organisation's master budget for the next period. However, input may also be something other than resource, for example, precise data, working hours allocated for a project *etc*. New activities in key processes are also inputs to defining training needs.

In order to ensure accessibility of interim results on the strategy implementation path, the output KPIs should be brought out at least once a year, but where possible, more frequently. This creates the temporal direction of the chain and allows to track the way to the organisation's strategic objectives at least with yearly steps.

**Summary of PMS structure**

When units are given the strategy based targets with KPIs and target values and also activities with KPIs and time limits have been fixed (or available) for executing units, the structure for performance management exists (Figure 4.1.9). On the basis of that structure we can gather information and communicate it to managers, and on the basis of which adjusting activities are carried out, where necessary. If this chain is observed both regarding the structure creation and PMS functioning, it may be said that PMS works efficiently and the organisation is very likely to achieve its long-term objectives.

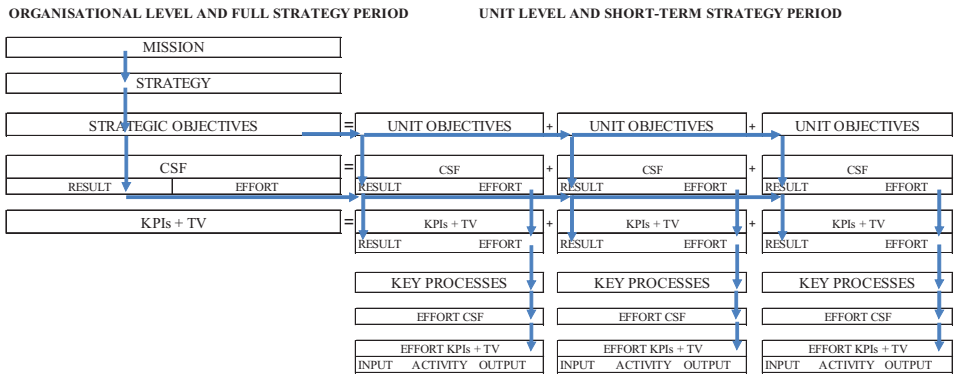



Figure 4.1.9 Relationships between structural components of PMS of private sector organisations (compiled by the author)

All this long, a three-directional chain is necessary so as processes/activities could be derived from the organisation's objective with the deadline many years away, which the units need to perform in the short term as well as in the following years. Since functional division of labour is dominating in organisation, units have to make efforts to the best of ability, which they do, or they are which through short-term activities generate long-term success/result. Hence, so as the right things are done well today it is necessary to derive an unbroken chain from strategy/future into the present day. In this way we can prevent "wrong activities" from being "mistaken for the right ones" in structural units' development activities.

**Permanent PMS structural components hierarchically**

Based on the communication problem pointed out in the problem statement section, PMS structural components should be addressed consecutively – in a chain. Going from the general, abstract and long-term dimension toward a more detailed, specific and shorter dimension, each structural component of PMS can and have to derive its criteria which it must meet in order to allow to get from it continuously on to the next link in the chain, which in turn must meet the respective criteria. Hence it commences from the strategic objective and ends with defining the inputs needed for the achievement of this objective.

The author groups the above structural components of PMS into two: recommended and obligatory.

Recommended are the components which help derive or support deriving, so as the right KPI target values could form. They do not let deviate from deriving the right KPIs for strategic objectives. A deviation would cause the situation where units achieve KPIs with target values, but their achievement will not involve achievement of the KPI target values of the organisation's strategic objectives. The recommended components are: mission, strategy, action plan, various CSFs at organisational as well as unit level.

Obligatory components (13) fix precisely where the organisation needs to get and enable it to track its pathway in the short term. The recommended components must support deriving appropriate or aligned obligatory components. The obligatory components are: the organisation's and units' objectives and KPIs of these objectives with target values; KPI key process for every process with input, activity and output KPIs and target values for every key process (activity) (Table 4.1.4).

Table 4.1.4 Obligatory and recommended components of structure of PMS in the private sector (compiled by the author)

| **OBLIGATORY AT ORGANISATIONAL LEVEL** | **OBLIGATORY AT UNIT LEVEL** | **RECOMMENDED** |
|---|---|---|
| (1) Strategic objective | (4) Strategic objective | Result CSF |
| | | Effort CSF |
| (2) Key performance indicators (KPI) + (3) Target value (TV) | (5) Key performance indicators (KPI) + (6) TV | |
| | (7) Key process | Effort CSF |
| | (8) Output key indicator (KPI) + (9) TV | |
| | (10) Activity key indicator (KPI) + (11) TV | |
| | (12) Input key indicator (KPI) + (13) TV | |

Such a step-by-step (in chain) movement is necessary so as the day-to-day activities of organisational units were derived from the organisation's strategy and would lead to its achievement or alignment must be ensured already in the structure design phase. Monitoring of the execution of the strategy with the support of the PMS structure is already a task of reporting structure and management.

It cannot be ruled out that the organisation is able, based only on its mission, to assign day-to-day tasks to its units (omitting from the chain critical success factors, key performance indicators, key processes with success factors and key indicators), but its likelihood is small and possibilities of misapprehending numerous. In case unsatisfactory deviations still occur, it is not possible to find where the mistake got into the system and therefore it cannot be removed either. Due to this theoretical possibility this (chain) model does not pretend to be the only true one, but just these structural components (and with these names) are addressed under this model and its validity will be tested. All this in order to ensure movement of objectives

along the continuous chain to executors. Due to the existence of mentioned probability, the author has grouped the structural components of PMS into recommended and obligatory.

**Requirements for components of PMS structure**

In the following, criteria are provided for every structural component, which can be used to assess its efficiency in the chain. It is helpful also in case some other kind of terminology is used in the organisation. With the efficiency criteria, a specialist who knows the area and has got acquainted with the organisation's activity should be able to assess whether the component fulfils its task in the chain or not. It is made easier by the description of its essence and requirements.

In addition to the presence of structural components, also their content/quality should be assessed, because their weak content may also cause breaking of the chain.

To evaluate the content, the author has aggregated criteria on the basis of which to organise the assessment (Table 4.1.5). The best result is obtained when the appraiser assesses PMS on the basis of these criteria after having got acquainted with the organisation's activity and then tracks the transmission from each part of the chain to the next one.

Table 4.1.5 PMS structural and chain components, compiled by the author (based on different sources of literature)

| **Structural components** | **Content/objective** | **Requirements for structural component** | **Criteria for assessing the efficiency of components for the chain** |
|---|---|---|---|
| Mission | Describes generally, in a few sentences an organisation's contribution to society, why the organisation exists, what its mission is *etc.* | - Show course of action, outputs;<br>- Must answer the questions: "What do we as an organisation want to accomplish, what is our mission?" | - Is it within the power of the organisation to achieve;<br>- Does it enable to derive a strategy;<br>- Does it contain references to customers, business activity, development, values. |
| Strategy | Describes in a few sentences how an organisation intends to fulfil its mission based on its potential, operating environment and considering the stakeholders' interests. | Must answer the questions: "In which way do we as an organisation intend to achieve our mission?" and "In which way will we accomplish what we want?" | - Do they contain events the organisation is able to influence;<br>- Do they allow deriving activities needed to implement the strategy in a yearly time horizon;<br>- Is it possible to derive strategic objectives from it. |
| Strategic objectives | Make the strategy more specific to enable temporal and activities deployment later | - Should be easily communicated throughout the organisation (corresponds level of acceptance);<br>- Short, radical statements. | - Are they clearly linked to the strategy;<br>- Do they satisfy 5 criteria (Waal, 2007, p. 85);<br>- Do they satisfy SMART conditions;<br>- Can they all be communicated to units;<br>- Do they allow deriving result and effort CSFs. |
| Strategic action plans | Describes activities at the organisational level, which have to be executed in order to achieve strategic objectives and measurable improvement of performance. | Must show objectives and activities, measures, target values, timetable, those responsible persons/units | - Does it contain activities that need to be performed during the strategy period with yearly steps<br>- Must contain value drivers (CSF, KPI) |
| Critical success factors (CSF) | These are factors that specify the strategy, on the one hand, and existing factors that inhibit from achieving the | Must be expressed in qualitative terms | - Are they within the limits of the organisation's current areas of activity;<br>- Are they clearly linked to strategic |

| | | | |
|---|---|---|---|
| of strategic objectives: | strategic objectives at the moment, on the other hand. Need to be surmounted as a result of purposeful actions. | | objectives;<br>- Are they not expressed in quantitative terms;<br>- Are they clear, short, not contradictory/ (unambiguously interpreted). |
| Result CSF | CSF essential for monitoring results of the objective.<br>Focuses on final period results | Must answer the question: "What is the result when we achieve the objective?" | Do they contain both financial and non-financial measures? |
| Effort CSF | CSF essential for monitoring the efforts for the achievement of the objective. Will lead to the achievement of result CSF. Measures which "conduct" or lead to result CSF. | Must answer the question: "What is essential, absolutely necessary to achieve the objectives successfully?" | Does it lead causally to the achievement of result CSF? |
| Key performance indicators (KPI) of strategic critical success factors | Occur with every CSF and monitor whether CSF is surmounted or not. If KPI is related to result indicator, it is a result KPI and in the case of effort CSF it is the effort KPI. | - Must answer the questions: "How we measure CSF?" and "How can we see results of CSF?"<br>- Expressed in quantitative terms. | Do they meet the conditions of 4 criteria:<br>- Definition of the measure must be concise, easy to understand and conclusive<br>- Organisation must measure this, have procedures, resources and information system<br>- The measure contains reporting frequency<br>- Do they have target values? |
| Unit objectives | Since strategic objectives in the organisation are to be achieved by units, the objectives derived for them are indicated (preferably with yearly steps) here. | - Should be easy to communicate through units;<br>- Brief, strong statements. | - Are there clear cause-effect relationships between an unit's objectives and the organisation's strategic objectives?<br>- Do they meet SMART conditions?<br>- Are unit's objectives aligned to the objectives of its existence? |
| CSF of unit objectives | Factors that exist at the moment and which inhibit achieving the unit objective at the moment and which | Expressed in quantitative terms | - Are there any clear cause-effect relationships between objectives and CSF?<br>- Do they satisfy the conditions of five |

| | | | |
|---|---|---|---|
| | must be surmounted as a result of purposeful activity. | | criteria? |
| Result CSF | CSFs which are important for monitoring the reults of unit objectives. | Must answer the question: "What will be the result when we achieve the objective successfully?" | Do they contain both financial and non-financial measures? |
| Effort CSF | CSFs which are important for monitoring the efforts made for the achievement of objectives. Will lead to the achievement of result CSF | Must answer the question: "What is absolutely necessary to achieve the objectives successfully?" | Does it lead causally to the achievement of result CSF? |
| KPI of CSF of unit objectives | Occur with every CSF and monitor whether CSF is surmounted or not. If KPI is linked to result indicator, then it is result KPI and if with effort CSF, it is the effort KPI. | - Must answer the questions: "How we measure CSF?" and "How can we see the results of CSF?"<br>- Expressed in quantitative terms | - Are there any clear relationships that exactly these KPIs lead to surmounting of CSF?<br>- Do they satisfy the conditions of 4 criteria?<br>- Is this KPI revealed also at the organisational level? |
| Unit key processes | Identifies activities (processes) that influence the achievement of objective most. Derived from unit's effort KPI. | | Are there any clear relationships that exactly these processes lead to the achievement of unit's objectives? |
| Process CSF of unit key processes | Process CSF describes the results the organisation expects from the respective process.<br>These are factors which exist at the moment and inhibit implementing of the process at the moment. Need to be surmounted with purposeful action. | Expressed in qualitative terms | - Are there any clear cause-effect relationships between processes and CSF?<br>- Do they satisfy conditions of 5 criteria;<br>- Are associated with unit's effort KPI. |
| Unit's KPI of key process CSF | Effort KPI is used to measure inputs, activities and outputs of the activities. | - Must answer the questions: "How we measure CSF" and "How can we see results of CSF?"<br>- Expressed in quantitative terms | - Are there any clear relationships that exactly these KPIs lead to surmounting of CSF?<br>- Do they meet the conditions of four criteria?<br>- Inputs, activities, outputs. |

Hence, on the whole, the following components with time limits are needed for communication of information in a chain from strategy to units:
Strategy – strategic objectives – critical success factors of objectives – key performance indicators of success factors with target values – unit objectives – critical success factors of unit' objectives – key performance indicators of success factors with target values – key processes – critical success factors of effort – key performance indicators of success factors for inputs, activities and outputs.
Additionally, a critical success factor of effort with the respective key performance indicator can be derived for every critical success factor of result at the organisation and unit level.

Relationships between components (the objective setting direction – top down) at the level of organisation as a whole are depicted on the chart below (Figure 4.1.10).

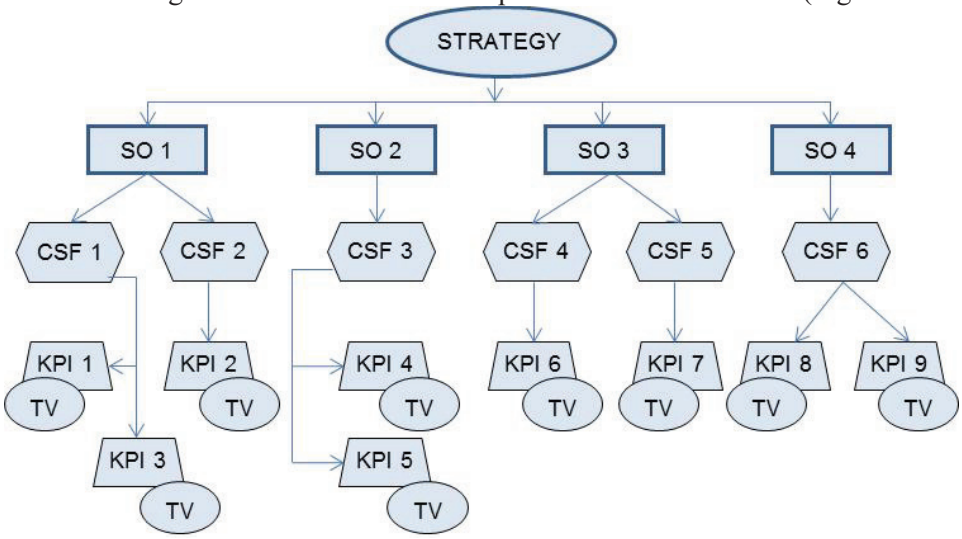



Figure 4.1.10 Relationships between components at the organisational level (compiled by the author)

Relationships between the organisational and unit level components are depicted on Figure 4.1.8. It is important that the components are aligned. Any cessation will significantly decrease the probability of achieving objectives.

**Relationships between PMS and BSC**
As mentioned above, PMS has somewhat wider range than BSC. Many organisations use BSC as the central part of their PMS, where the critical success factors derived from strategic objectives are expressed in the forms of certain perspectives; but this framework is not the only one. Other frameworks have been mentioned in the theory chapter. Additionally, an organisation can also use a third – own created approach. However, since BSC is the most popular among them, it is

appropriate to analyse the setup of its concept from the aspect of satisfaction of the chain requirements.

From now on, instead of BSC we speak of the Strategy Map, which is an updated version of Balanced Scorecard, an analytical framework created by Kaplan and Norton (2004). The input for the Strategy Map is (similarly with classical PMS) a strategy. Strategic objectives are also strategy derivation. When an organisation is using the Strategy Map, the related documents show the same components as in the classical PMS: critical success factors of objectives – measures (key performance indicators) – target values. CSFs are classically derived from objectives. Objectives are classically not depicted on the Strategy Map; but since their derivations – critical success factors – are depicted (Waal, 2007, p. 147), an organisation must have objectives outside of the Strategy Map. As a rule, the map does not show target values either. The number of strategic objectives should be maximum of 8−10 from the aspect of observation ability, and if to agree with the recommendation to have 2 success factors per every objective, the number of (original) success factors should be limited to a maximum of 20. Anyway, a classical Strategy Map observes in this respect the same consistency as in the above PMS structure. External to the Strategy Map are also key activities that need to be done to achieve the process measures. Additionally, external to the Strategy Map are also key indicators of output, process activities and input. From the chain aspect, the external components of the Strategy Map still have to exist.

Strategy Map perspectives are interrelated by a cause-effect relationship, which can be viewed in regard to each other also as leading and result perspectives. Here we can draw a parallel with the classical PMS where in addition to result CSFs there are also effort CSFs, which lead to the achievement of result CSFs. In any case, the role of leading indicators and effort critical CSFs consist in that their achievement opens the way to the achievement of lagging indicators and result critical CSFs. The former must be achieved earlier in time and if chosen appropriately, they will lead to the desired result.

Hence the Strategy Map integrates CSFs that may be of both result and effort. Most of the success factors occur in the role of success factors of both result and effort. The critical factor placed “lower“ on the Strategy Map plays the role of the effort success factor for a “higher“ one, but for a “lower“ success factor it is the result CSF. The result CSF is a derivation from a strategic objective.

As mentioned above, a Strategy Map examines CSFs of objectives to point out better the cause-effect relationship on certain perspectives/basis/grounds/form/areas/ (classically finance, customer, internal processes and development), for which BSC has deserved many words of praise as a good means enabling visualisation of exemplification of the causality and achieving of long-term success by an organisation. Its perspectives are easy to view and are presented in a chain, from which derive what kind of results (short-term) activities must produce, doing of what leads to the achievement of the

organisation's long-term objectives. The Strategy Map contains a clear financial view of what is to be achieved financially (profit, ROE, turnover, Earnings per Share (EPS)) as a final result of strategy execution, and which in case of strategy usually remains somewhat the background. Learning and innovation lead to more efficient internal processes, the realisation of which leads to the fulfilment of customer needs and responding to changes in these needs (or growth of responding capacity) and which ultimately will lead to the improvement of the financial result as one of the results involved in strategy execution. Two lower perspectives are called also activities and two upper ones results.

The Strategy Map has more hierarchies (and hence also cause-effect relationships). They come from above, the strategy (financial (final objective)) level, down to day-to-day level through these perspectives. The same map depicts the results that have to appear when the strategy period ends as well as those that need to be done in a shorter time perspective (lower levels on the map).

We must distinguish between the organisational and executing unit levels also in the Strategy Map. Hence, following the chain principle, all CSFs and measures (KPIs) on the map must be transferred to units' as executors (strategy) maps. As Strategy Maps show only CSFs, certain activities for their achievement must follow. This part is already omitted from the map; nonetheless, these key activities must be covered. Actually, BSC had a classical form where for every objective there a measure, target value, activities, who's responsible and deadline had been set.

A problem arises also in connection with the so-called obligatory perspective grounds of the Strategy Map.

Organisational Strategy Map displays CSFs of strategic objectives. According to the chain principle, all success factors must be aligned directly from objectives and indirectly from strategy, but there may be no objective external success factors. Otherwise a question arises where they come from and what is pursued with them if they do not come from the strategy. However, if to look at the organisation's Strategy Map − how to distinguish on the Strategy Map between the success factors which come from the strategy itself and the success factors which result from the classical form of Strategy Map (the so-called obligatory success factors). Or, what are the organic success factors for the strategy and which stem from the Strategy Map form.

If to relate success factors to each other by lead and result, the success factors of lead/effort may be derivations of the result success factors. If to continue this we get that surmounting of the lead/effort success factor must commence earlier in time and the earliest at the lower end, and some day may be they get to the success factors at the upper end. And now, would the understanding that all success factors are interrelated not cause a misapprehension that the success factor of every higher perspective should wait for its achievement until it has been reached from below? The most frequent lower end success factor – employee satisfaction – would always ensure achievement of the higher end?

The Strategy Map form is based on a constantly improving process: continuous product development, incessantly new processes and constant learning. This involves that success factors must also be presented on the map in these perspectives; however, what if an organisation does not have them in any of the perspectives, but the form requires them? Using the BSC groundwork there will be more CSFs; but when arranging them into the BSC format, the organic chain of activities is suddenly broken and when the Strategy Map form does not happen to join it together there might be difficulties with the execution of strategy. This may be a reason for failure and those who succeed in BSC might have been able to restore this chain incidentally?

Such a support in the form of classical BSC seems to be insufficient and may not replace the organic chain. Usually there are 1−2 CSF per every strategic objective. Let us assume that the average number of strategic objectives is 5; then we get 5−10 CSFs on average, which should be of the same magnitude as the number of CSF used on the Strategy Map. There should be a maximum of 2 KPIs per every CSF, hence 10−20 on average. And there should be as many key processes monitored currently.

When the most frequent success factor in the perspective of learning – employee satisfaction – is close to the maximum already, an increase in it cannot exceed the result success factors depending on it and the success factors placed higher are not surmounted and objectives not achieved. Do they still manage to squeeze objectives into these classical perspectives? BSC recommendation has said that perspectives depend on the organisational strategy and these need not be like a strait jacket (Verweire and Berghe, 2004 p. 39); but is not it possible to view the perspectives selected based on the strategy from the aspect of chain continuity? Objectives are usually not very much connected, they often concern different perspectives of the organisation that need to be strengthened; with BSC, however, they are all interrelated by perspective. External objectives of every Strategy Map must be associated with some perspective and in case it is neither the first nor the last, it must be associated with CSF of other objectives so as to be for them either a lead or result perspective, which makes it extremely arbitrary. Maybe the causality questioned in the case of BSC (Kasperskaja and Tayles, 2008; Larsson, 2010) is also a reason for major failure, because there may be no causality if the chain principle is not observed. Moreover, BSC has been constructed with the help of very many relationships, which actually may not be relations in practice.

In the following the author has proceeded with a critical analysis of BSC and added some critical notes on BSC from literature.

> Laitinen (1996) considers the selection of (four) basic dimensions and their interrelationships problematic. He claims that measures in practical applications appear to be only loosely connected to each other, being unable to provide any clue about which company-internal factors should be developed to achieve success in the market place and in financial terms.

> Norreklit (2000) has similarly questioned the existence of a causal relationship between the four areas of measurement. Moreover, she questions the validity of BSCs to serve as a strategic management control tool.
> By stating this, Balanced Scorecard places itself at a very high echelon in the organisation, where the strategy is set and not where is executed. There is no surprise of some criticism about this framework. Critics regard its value as a strategy deployment and communication tool, but acknowledge its inability to evaluate or measure performance across and through all functions of the firm (Malina and Selto, 2001). In simple terms, Balanced Scorecard has the scope and the multi-stakeholder dimensions we spoke of before, but it is not a multi-hierarchical framework since it cannot easily cascade down the hierarchy.

To conclude, BSC offers cause-effect relationships between CSFs. The objectives are easy to visualise and understand with the help of BSC. The classical PMS structural components directly omitted from the Strategy Map are the organisation's strategic objectives, target values, key processes and output, process activities and input key indicators with target values. Hence the classical Strategy Map includes only one out of 13 obligatory structural components of PMS – measures. If the missing components exist outside of the map, then BSC conforms to the chain principle; otherwise the chain is broken.

**Specificities of PMS in the public sector**

Waal (2007) writes, based on the literature, that one of the most important attempts to apply business principles in the public sector has been the introduction of NPM, which was launched in the USA and UK. An analogous path has been undergone by performance management, which initially was developed for the private sector. By now there are many indications that performance management, especially BSC, is gaining ground also in the public sector (Modell, 2004). However, it has been admitted that in real life the implementation of PMS in the public sector is much more complicated than in the private sector (Pidd, 2005).

The fundamental structure of organisational PMS should depend neither on the ownership of the organisation nor on whether the organisation is for-profit or non-profit. In both cases the organisation is established for providing some good to society members. The private sector asks for a tangible reward for the good; public sector as a rule does not directly ask for a from the recipients reward for providing the good. But even without having direct tangible interest a public sector organisation has situations where they are not satisfied and want to achieve satisfaction in a distant future, in which PMS can be of assistance. If organisation does not have a certain desirable condition currently and it has consequently defined for itself an objective that it wants to reach after years, both public and private sector organisations should have an analogous fundamental structure of PMS: strategy – strategic objectives – critical success factors – key performance indicators – target values – implementation – collecting results – analysis and adjusting activities. A difference is only in the content of PMS.

It must be possible to fill the content of the performance concept both in the private sector and in the public sector: success is the respective successful action of the one in whose power/sphere of influence it is to achieve the objective. This may be viewed at the organisational level, where management is successful when the organisation achieves its objectives, or at the unit level, where unit manager achieves success when the unit fulfils the tasks set, or at some other level: employee, team, function, *etc*.

In real life we should take into consideration in the public sector case that their publicised objectives are extremely varied. This is due to the fact that many of the objectives of a public sector organisation are political or targeted at the public, to communicate the politicians' message to the public. These objectives are often so varied that they are not destined to be fulfilled. Moreover, they are presented in such a way that it is not possible to identify the organisation's role in achieving the objective, since objectives are influenced by many other factors besides this organisation. The public sector tends to set objectives that are beyond their scope, and therefore they may be destined not to be fulfilled. However, since non-fulfilment as a rule does not involve any sanctions, there is no need to act differently. Moreover, the duration/period of validity of such objectives can be limited to the length of an election cycle. Another problem is that objectives are difficult to measure and methods of measurement are poor.

If to continue setting up a private sector PMS with these initial conditions in the public sector, strategic objectives in the organisation should be distributed/deployed between units. This leads to the situation that some units have objectives for the achievement of which they inevitably lack *e.g.* competency, capability, finances, or time. Even if to set key performance indicators for these objectives, the first interim results should already indicate the unlikelihood of achieving these and the adjusting activities cannot yield results.

Based on that peculiarity, distinction is made between political leadership and managerial leadership in the public sector. Performance of political leadership is measured with the so-called impact or *outcome indicators* and performance of managerial leadership or executive management is measured by *output indicators*. To achieve output indicators organisations need to do planned activities and while doing that track the *activity indicators.* And since it is important that finances conform to objectives, *input indicators* are monitored. A chain is formed here: at a certain level of input indicators a certain amount of activities can be performed and these activities ensure a certain level or amount of output indicators. Output indicators are related to outcome indicators (Figure 4.1.11).

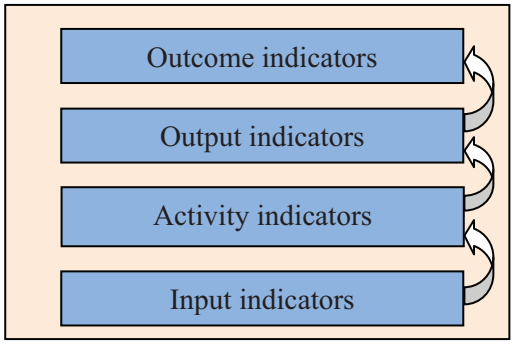



Figure 4.1.11 Relationships between indicators in the public sector

In the following two paragraphs the author has used the approach described by Waal to describe the peculiarity and relationships between indicators in the public sector in greater detail. In contrast to the private sector, the executive party of a public sector organisation itself does not create a strategy, it is done by governing bodies (politicians or members appointed by them) higher than the executing organisation. Although the supervisory board controlled by politicians may delegate strategy preparation to the organisation's management, the strategy is still subject to their approval for the achievement of what they desire. In the public sector there is political leadership responsible for creating the respective strategy, on the one hand, and executive leadership which is responsible for strategy execution, on the other hand. This distinction in leadership and responsibility is what causes many conflicts, for instance, in performance management focus (Waal, 2007). The author adds that it also creates a lot of confusion.

Hence policies (politicians` work results) are not influenced by an executing organisation, they are generated by political leaders and with these policies they try to achieve outcome indicators. These outcome indicators are quite comprehensive, vague, *etc*. A question may often arise whether they can be achieved, whether there are enough resources for their implementation, *etc*. These policies are actually a continuation to the policies made by politicians outside the public sector organisations. Many of those included in the strategy are not destined to be fulfilled. Moreover, they may change when other politicians rise into view. However, an organisation must collect outcome indicators, since on the basis of these outcomes they can say whether the policies from the above are effective or not. An organisation (management) can influence strategy execution or only the output indicators related to the achievement of strategy execution.

A public sector organisation which is using the Strategy Map, has in addition to output indicators also outcome or impact indicators included there, which, the author`s opinion, is (for the above reasons) confusing and requires therefore special attention to differentiate between them.

A Strategy Map is above all a strategy execution instrument and should express important aspects connected with strategy execution. Outcome indicators are not to be achieved directly by executive management and therefore a strategy cannot be worked out and it is of no use; consequently indicators that do not concern strategy should not be expressed on the Strategy Map. What should be distributed inside the organisation is the strategy prepared less those strategic objectives which are out of reach for the executive party of the organisation.

In order for the executive management to achieve output results it is necessary to currently carry out activities and here come activity/effort indicators, which may be taken also as leading indicators. In order to do activities we need inputs – resources, and here arise input indicators. Units also set objectives for themselves, which have been derived from the organisational strategy, but objectives for units are still such that are in unit's power or aligned from organisation's output indicators. In this way, to have a chain, output CSFs and KPIs are derived from the unit objective on which they currently report.

We can speak of obligatory and recommended components of structure of PMS also in the case of public sector (Table 4.1.6).

Table 4.1.6 Obligatory and recommended components of structure of PMS in the public sector (compiled by the author)

| **OBLIGATORY AT ORGANISATIONAL LEVEL** | **OBLIGATORY AT UNIT LEVEL** | **RECOMMENDED** |
|---|---|---|
| (1) Strategic objective (executive) | (4) Strategic objective (executive) | Strategic objective (political) |
| | | Outcome CSF |
| | | Outcome KPI + TV |
| (2) Output KPI + (3) TV | (5) Output KPI + (6) TV | Output CSF |
| | (7) Activity KPI + (8) TV | Activity CSF |
| | (9) Input KPI + (10) TV | Input CSF |

The table is supplemented by a figure that depicts relationships between different indicators (Figure 4.1.12).

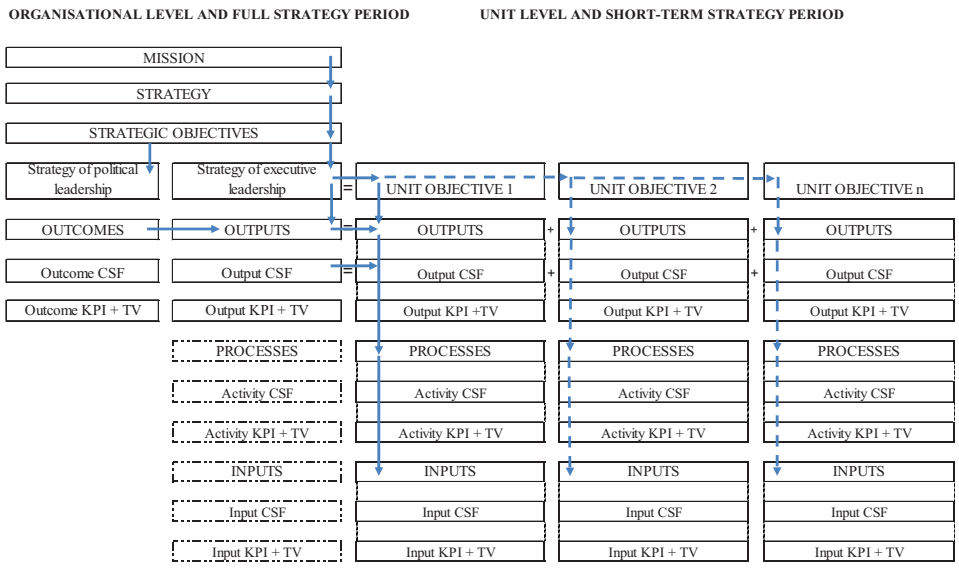



Figure 4.1.12 Relationships between structural components of PMS of public sector organisations (compiled by the author)

**Conclusion**

Taking into consideration performance theory based on the peculiarities of the public sector; outcome indicators in the public sector are out of control of the executive management and therefore cannot be imported to the organisation for distribution. (Because public sector policies are made by politicians and remain out of the sphere of influence of the executive organisation. Executive management cannot directly influence them, and consequently it is no use to set them as objectives for the executive management or deploy in the organisation). However, based on the PMS principle according to which the desirable result to aspire to must be defined, it has to be done also in a public organisation. The specific "thing" would be output indicators the executive party of the organisation with the executive management must focus on. This is the "upper end" from which to start aligning down the objectives to units. Performance of the organisation's management and executive organisation should be assessed on the basis of output indicators, which meet the criteria set for the objectives (in the table PMS structural and chain components) and enable to import deployment into the organisation. Hence, the chain concept is applicable in the public sector.

### 4.1.4.2 Implementation and regular functioning of PMS based on the chain principle

Implementation is an interim stage between the PMS structure and its continuous functioning. It is a single action, but its role in the efficient functioning of PMS is also important.

Implementation classically begins when the PMS structure has been created: day-to-day tasks have been derived from the strategy to all units as contribution givers. It ends when units have perceived their tasks, have competencies after training to fulfil new tasks and are ready to start living in "a new way" from a certain round date. Changes are introduced to documentation (unit statutes, work assignments, roles, duties, responsibilities, principles of rewarding), information flow is described (including reports).

This presumes, after tasks are assigned, that conformity of existing competencies to the new (requirements) is assessed and in case of deviations, training courses are organised.

The organisational ISO 9000 standard helps an external appraiser to make sure that employees are doing the "right things", because ISO is monitoring that, but not 100%.

Assessment of PMS on the basis of this model demands a lot of preparatory work to understand the traditions, culture, and context of the organisation. On this ground it is possible to analyse a PMS. Hence the model is meant to be used after thoroughly studying the organisation. IT alternative is paid little attention to – it is assumed that the requisite data are available in the databases and software solutions are a technical issue that can be solved.

The functioning classically starts from a round date (beginning of month, quarter or year) after implementation has ended and the strategy execution starts by living according to the "new rules". New work assignments come to force. This requires also acting "by the new rules". The chain is formed of consecutive activities.
In the functioning of PMS we can speak of regular activities:

- Data collection according to PMS structure settings,
- analysis,
- drafting reports/accounts according to milestones set in the PMS structure,
- communication,
- upper level must peruse the reports and react to them,
- plan and implement adjusting activities in the event of unsatisfactory interim results ("carrot and stick").

Requisite resources to ensure the functioning of PMS are: management working time, costs of keeping the system in operation, CPO, software support.
The chain consists in regularly collecting and presenting of interim results, and reacting to them. The latter must again influence the next period`s objectives, CSFs and KPIs. In this way the functioning chain will get to the PMS structure chain.

This section of the thesis has described the creation of the PMS model based on the chain principle. Summing up the above, we can point out relationships between its three parts (PMS structure design, implementation and current functioning) and components of the parts. The model shows, first, these three parts occurring in a

chain (Figure 4.1.13), and secondly, components of these parts appearing in a chain (Figure 4.1.14).

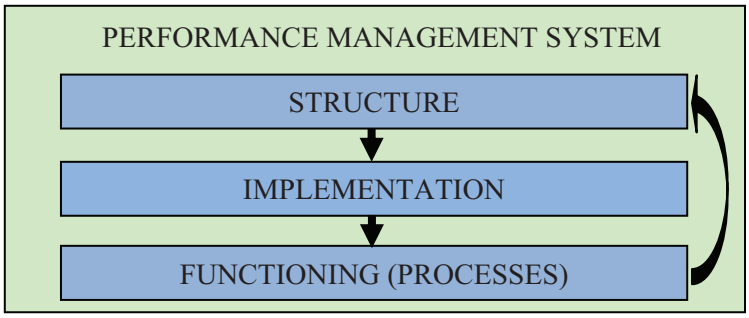



Figure 4.1.13 PMS parts occurring in the chain

Figure 4.1.13 depicts the PMS parts appearing in a chain: structure – implementation – functioning – structure. During the implementation the components in the PMS structure are set/established for executing units. Also the functioning phase concentrates on them, collecting, communicating the results and deriving adjusting activities.

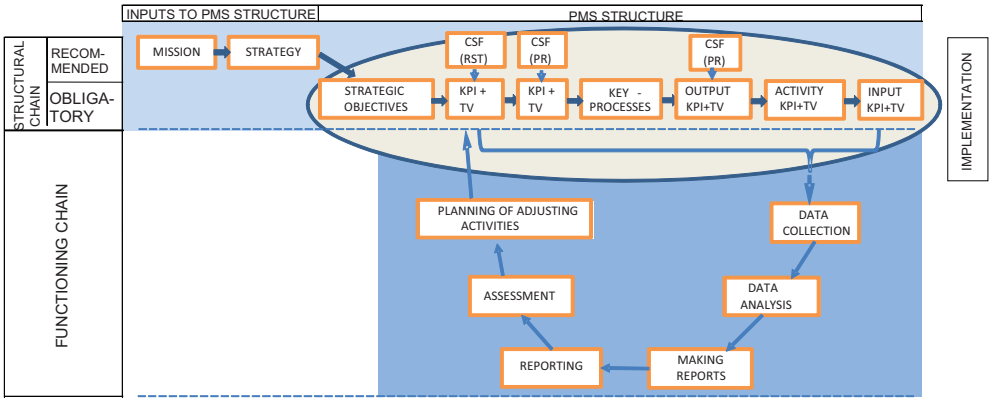



Figure 4.1.14 Relationships between parts and components of PMS in the chain

In addition to PMS parts, components of PMS parts also occur in a chain on Figure 4.1.14. In addition to the fact of a PMS part or component being present, the model set requirements for their content. If they meet the requirements, we can speak of an unbreakable chain and a functioning PMS.

## 4.2 The Case of Enterprise Estonia

### 4.2.1 Background data

Enterprise Estonia was established in 2000 by the Estonian Ministry of Economic Affairs as a result of merging five previously independent agencies which were providing various support measures. The primary role of Enterprise Estonia was first of all to continue providing services and support grants provided by the merged agencies, at the same time streamlining cooperation between them and the synergy arising from their activity. Until autumn 2003, Enterprise Estonia also comprised agencies as its structural units. Since the fourth quarter of 2003, it has operated under the name of Enterprise Estonia. Since the spring of 2004, Enterprise Estonia is officially a final beneficiary of the European Union structural funds. This change also brought changes to the strategy (first of all in the form of new National Development Plan objectives) and structure.

Budget volumes in 2003–2007 were as follows (mln EUR):
2003: 41
2004: 57
2005: 98
2006: 95
2007: 70
2008: 175

Enterprise Estonia is formally a foundation over which the Republic of Estonia exercises control (via the Supervisory Board of Enterprise Estonia). The Supervisory Board in turn nominates the one-to-five member Management Board. Since Enterprise Estonia is active in many areas, it is more or less dependent also on several external institutions.

The Supervisory Board members express the interests of major external interest groups:

- Ministry of the Interior as organiser of some regional development targeted programmes;
- Ministry of Economic Affairs and Communications as the organiser of the majority of the entrepreneurship related programmes and the initiator of the organisation;
- Ministry of Finance as “interested party” in budget utilisation;
- Estonian Association of Travel Agents wishes to have a say in the development of tourism products;
- Ministry of Regional Affairs Bureau concerns about the development of peripheries;
- Estonian Employers` Confederation as a representative of employers.

The number of personnel as of June 2008 was 221 people. The Management Board comprised four members when established at the end of 2000. Since then, the number of members has been decreasing gradually. In 2003−2007 there were two

members (in 2005, during a short period, the Management Board consisted of one member). Since the fourth quarter of 2008, it has four members. The structure of Enterprise Estonia is depicted on Figure 4.2.1.

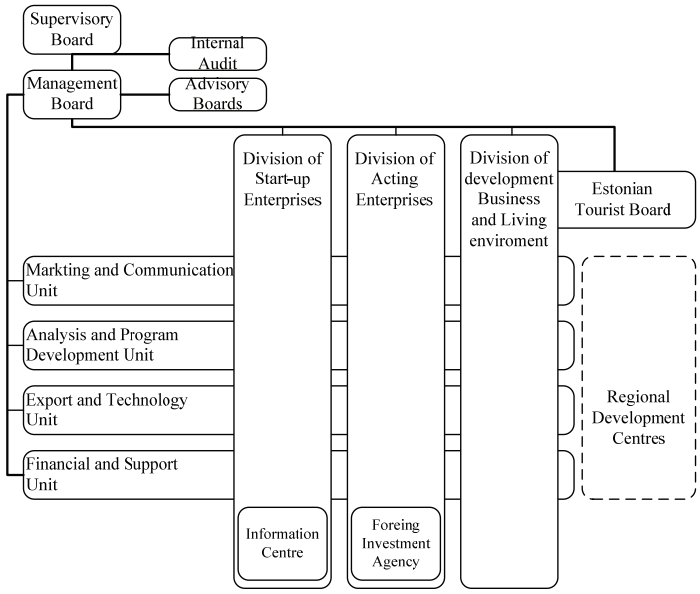



Figure 4.2.1. Structure of Enterprise Estonia 2004−2008

The objectives and main statutory tasks of Enterprise Estonia from statutes are as follows (EASi põhikiri, clause 2.1):

> An objective of the foundation is to ensure purposeful and effective implementation of entrepreneurship development targeted national and foreign aid programmes and projects in the following fields:
> - attract foreign investments;
> - export of products and services;
> - technological development and innovation;
> - tourism;
> - regional development;
> - development of small and medium-sized enterprises.

The principal functions of the foundation are (EASi põhikiri, clause 2.3):

- work out development programmes for Estonian entrepreneurship, coordinate, implement and finance projects and programmes in the fields mentioned in the statutory objectives;
- collect, systematise, analyse and communicate information in the fields referred to in the statutory objectives;
- make proposals on national strategy documents in the fields referred to in statutory objectives.

This thesis studies the strategy period 2003−2007, for which the first strategy document was made in 2002-2003.

### 4.2.2 PMS structure analysis

The literature has emphasised specificity of the public sector compared to the private sector, and thus it is important to find out primarily whether the management of Enterprise Estonia and the executive party of Enterprise Estonia are decision-making or only executive bodies. This is what the relationship of the executive party of Enterprise Estonia to the strategy and indicators which to import into the units for fulfilment depend on. Waal writes (2007, p. 346) that: "in a public sector, on the one hand, there is political leadership, which is responsible for developing the strategy and on the other hand executive leadership, which is responsible for executing the strategy". He goes on: "while the results of input, activity, and output CSFs and KPIs are within the responsibility sphere of the public organisations, outcome CSFs and KPIs are not. The effects of policies and regulations in society are influenced by many factors outside the control of the public organisations. Also they are often only noticeable after a lengthy period of time, and they are often interpreted in a political way". Hence, when the organisation's strategy is designed by political leadership and satisfies the conditions named by Waal:

1) is not influenced by the organisation itself, and
2) results become obvious after a very long time (*e.g.* after the strategy period),

then the achievement of outcome indicators cannot be the task of the executive management.

To answer the above question, the author of the given thesis analysed the basic documents, other legal documents and established practices.

Analysing the basic documents of Enterprise Estonia by considering the role of governing bodies, the division between strategy making, deciding and implementation was identified. The statutes unambiguously sets that the strategy is decided by the supervisory board (EASi põhikiri, clause 3.2.2.1). Looking at the statutory management functions it turns out that it has an executive role (EASi põhikiri, clauses 3.3.6.1; 3.3.6.2; 3.3.6.4). Analysing the division based on established practice, which is based on the tasks assigned to Enterprise Estonia by the Ministry of Economic Affairs and Communications (representative of owner) with annual administration agreements, and from the legal point of view, where products of Enterprise Estonia – programmes[1] are created at the Ministry's initiative and are enforced as ministerial orders in the *State Gazette*, it gives on the whole a clear key how to look on the strategy from the viewpoint of the executive party of organisation.

[1] In the following author uses term programme speaking of products of Enterprise Estonia.

Consequently, Enterprise Estonia conforms exactly to the typical public sector organisation described in the theory chapter, where executive management is not responsible for the achievement of outcome indicators set in the strategy. Therefore the typical public sector outcome CSFs and KPIs are not for the management of Enterprise Estonia to achieve, or it is no use searching for performance indicators of the executive party of Enterprise Estonia from them. They should be searched from among (strategy) output indicators. Achievement of outcome indicators is a task of political leadership of Enterprise Estonia and the Ministry which creates and administers the programmes, who then via programmes, on the one hand, and their influence on management and activities of Enterprise Estonia, on the other hand, should achieve the intended outcome indicators. And it is a task of Enterprise Estonia to collect these indicators and communicate to the Ministry (it is the administrative agreement based obligation of Enterprise Estonia).

Dividing resposibility in this way and relevance of it in public sector was known in Management Board. Member of it writes in article introducing master thesis of him, that roles in strategy making between policy makers and executors need more clear specifying (Kolk, 2002).

Hence, considering the PMS chain for the executive party of Enterprise Estonia, the organisational level output indicators are most important. These are for the management to fulfil and the performance of Enterprise Estonia can be evaluated on the basis of whether they are achieved or not. Output indicators must be in the exclusive power of the executive party of Enterprise Estonia and linked to the outcome indicators. Then, by moving vertically along the chain these must be deployed to units and by moving horizontally, activity indicators and input indicators with critical success factors, key performance indicators and target values must be derived from them. Such a setup and components form a structural chain of PMS in the public sector.

In the following we analyse the PMS and its parts in Enterprise Estonia from the aspect of chain presence.

**Analysis of PMS structural components in Enterprise Estonia for the strategy for the years 2003-2007**

**Mission**

Mission is not a direct component of PMS, but it has a major role in designing it. The mission of Enterprise Estonia is formulated as follows:

> "The mission of Enterprise Estonia is to improve competitiveness of Estonian enterprises and entrepreneurship environment via innovation and regional policies".

Based on the requirements for the mission, in order to be efficient, it must be within the organisation's power of achievement, indicate the course of action and target group, and it must be possible to derive a strategy from it.

If the mission of Enterprise Estonia were a mission of a private enterprise, it should be only possible that the instruments influencing its competitiveness, innovation policy and regional policy represented in its mission would be for the executive management to create. Actually, in Enterprise Estonia these policies are made in the ministries and ministries are also regarded as owners of Enterprise Estonia programmes (Kelder, 2006, p. 61). However, programmes are worked out in cooperation with employees of Enterprise Estonia and based on data gathered by Enterprise Estonia. After designing the programmes, they are enforced with ministerial orders and given to Enterprise Estonia for implementation. Mission itself also confirms that the task of Enterprise Estonia is to implement (already created) policies rather than to create them (otherwise the mission would have pronounced it). Hence, innovation, regional policies and products are *de jure* established by institutions other than Enterprise Estonia.

The mission of Enterprise Estonia satisfies the criteria of the above PMS structural component. The organisation's direction of activity is unveiled here, "implementation of innovation policies and regional policies". The mission also shows in whose interests and what the organisation wants to achieve – in the interest of Estonian companies and higher competitiveness of entrepreneurship environment.

The next structural component of PMS is organisational strategy.

**Strategy**

Strategy itself is not a direct structural component of PMS; but it has a very big role in other components and chain creation. A strategy in conformity with the requirements should answer the questions, "in which way we as an organisation intend to achieve our mission?" and "In which way shall we carry out what we want?" It must be possible to derive strategic objectives and activities from this.

The strategy of Enterprise Estonia is not available in the traditional form, formulated in a few sentences. The strategy is stated in the Enterprise Estonia strategy document, which contains 18 pages and is divided into the following sub-sections (EASi strateegiadokument…, 2003):

- Vision and mission.
- Vision explanation.
- Impact of Enterprise Estonia's activities.
- Priorities of Enterprise Estonia. Strategic objectives. Functions of Enterprise Estonia.
- Large and small Strategy Map.
- What are the values in Enterprise Estonia.
- Strategy areas.
- Critical success factors. Measures.
- Annexes 1−4: Strategy Maps, comments on strategic objectives and critical success factors.

It should be mentioned that Enterprise Estonia used as central part of PMS, updated version of BSC – Strategy Map. The strategy document of Enterprise Estonia explains the strategy saying: "The strategy decides the objectives and principles of activity of Enterprise Estonia pursuant to the statutes and mission". Hence, it must contain the objectives and principles of activity and by following these, the mission will be fulfilled. In this way it conforms to the requirements.

The question "how" is supplemented by values based on what and by valuing certain qualities the organisation intends to achieve its objectives. The strategy of Enterprise Estonia has well described different levels of impact on society in the part of activity impacts. However, the question "how" has not been answered directly in the strategy document. This question has been answered through the Strategy Map, which, however, without mentioning "directly", can be regarded as an indirect description, which may encourage various interpretations. The strategy does not directly identify activities for strategy implementation.

Strategic objectives are the next component of PMS structure that must arise from the strategy.

**Strategic objectives**

Mission and strategy have a guiding role in the development of strategic objectives, which are themselves direct components of PMS structure.

While the strategy of Enterprise Estonia was not presented in a traditional form, the strategic objectives are. According to requirements, they should be easy to communicate through the organisation, brief and forceful statements.

According to the strategy document, Enterprise Estonia has six strategic objectives:

1. Regionally balanced competitiveness of business environment (author: staying competitive in comparison with neighbouring countries).
2. Conformity of programmes to customer needs.
3. Increased entrepreneurial activity in society.
4. Financing in conformity to the objectives set for Enterprise Estonia;
5. Operational proficiency.
6. Motivated and competent employees.

Though the strategy is not formulated in a traditional way, strategic objectives still create a faint idea of the strategy and are helpful for going on with the chain identification analysis.

The author of this thesis attempts to construe the strategy of Enterprise Estonia based on the mission, strategic objectives and the question "how". We accomplish the mission by creating a regionally balanced competitive business environment, by implementing programmes that correspond to the customer needs and increasing entrepreneurial initiative in society, operating proficiently and having motivated

and competent employees. We achieve all this in case finance is in conformity with the objectives set for us.

Strategic objectives, being interconnected, can be presented as follows:

- objectives 1 and 3 show the direction how the organisation is directed out and what it wants to achieve,
- objective 2 indicates that "products" of Enterprise Estonia must satisfy "customer" needs (companies' support needs),
- objective 4 regard it important that the finances available conformed to the objectives of Enterprise Estonia,
- objectives 5 and 6 indicate the qualities with the help of which they intend to achieve objectives.

Strategic objectives must, for the chain continuity, meet qualitatively the SMART conditions. The table below (Table 4.2.1) analyses how strategic objectives of Enterprise Estonia satisfy SMART conditions:

- Specific.
- Measurable.
- Accurate.
- Realistic.
- Time bound.

The author has evaluated the conformity of every objective to the criteria and added his comments.

Table 4.2.1 Conformity of strategic objectives of Enterprise Estonia (contained in the strategy document) to SMART conditions (compiled by the author)

| **Criterion**<br><br>**Objective** | **Specific**<br>Unique or distinctive | **Measurable**<br>described with numerical and/or quality indicators | **Accurate**<br>Avoiding vagueness and uncertainty | **Realistic**<br>Achievable in these conditions | **Timebound**<br>Specifying the deadline of achieving the objective |
|---|---|---|---|---|---|
| 1. Regionally balanced business environment competitiveness | Meets the criterion (1) | Strategy does not contain numerical values. Numerical values in 2005 action plan. Formula missing. (1/2) | Not accurate (0) | Influenced by many factors uncontrollable by organisation. Not realistic for management (0) | Time not specified. Achievement by the end of strategy period. (1) |
| 2. Conformity of programmes to customer needs | Meets the criterion (1) | Strategy does not contain numerical values. Numerical values in 2005 action plan. Formula missing. (1/2) | Not accurate (0) | Elaboration of measures supervised and approved by the ministry (0) | Time not specified. Achievement by the end of strategy period. (1) |
| 3. Increased entrepreneurial initiative in society | Meets the criterion (1) | Strategy does not contain numerical values. Subsequent documents do not contain numerical values (0) | Not accurate (0) | Influenced by many factors uncontrollable by organisation. Not realistic for management (0) | Time not specified. Achievement by the end of strategy period. (1) |
| 4. Conformity of finance to objectives set for Enterprise Estonia | Meets the criterion (1) | Strategy does not contain numerical values. Numerical values in 2005 action plan. Formula missing. (1/2) | Meets the criterion (1) | Financing can be sufficient or insufficient. Depends not only on Enterprise Estonia (0) | Time not specified. Achievement by the end of strategy period. (1) |
| 5. Operational proficiency | Meets the criterion (1) | Strategy does not contain numerical values. Numerical values in 2005 action plan. Formula missing. (1/2) | Not accurate (0) | In the organisation's power (1) | Time not specified. Achievement by the end of strategy period. (1) |
| 6. Motivated and competent employees | Meets the criterion (1) | Strategy does not contain numerical values. Numerical values in 2005 action plan. Formula missing. (1/2) | Meets the criterion (1) | Achievable with sufficient resources and management potential (1) | Time not specified. Achievement by the end of strategy period. (1) |

To investigate whether the objectives meet the measurability criterion we analysed measures of objectives (KPI). Achievement of every strategic objective is measured with the help of different measures. The number of measures per objective is as follows:
1. the first strategic objective, 11 measures;
2. the second strategic objective, 4 measures;
3. the third strategic objective, 1 measure;
4. the fourth strategic objective, 2 measures;
5. the fifth strategic objective, 9 measures;
6. the sixth strategic objective, 9 measures.

Measure maps point out measure calculation formulas (with the note to specify) and frequency of measurement. Target values were set for measures in the 2005 action plan; by that time many of the measures in the strategy document had been replaced by others and their calculation formulas were missing.

If to value the conformity of every objective to every SMART criterion at 1 point, we had a total of 18.5 points or 62% (maximum of 6x5). It must be said therefore that conformity in qualitative terms exists for the management in the extent of 62%, based on that four strategic objectives (1−4) are out of the reach of influence of the executive management, on the one hand; and yet we can evaluate their conformity to SMART criteria, on the other hand. Because assuming that they still can be influenced by the executive management, who could undertake to achieve them. They conformed to the criteria in the extent of 48%. Hence, these objectives are not in such a condition that the executive party of the organisation could commit to achieve them, which completely conforms to the public sector principles. Objectives 5 and 6 are in the management's power, the conformity of these objectives to SMART criteria is 80%.

One of the requirements for strategy is that it must be connected to activities. Strategic objectives of Enterprise Estonia are presented against the background of the Strategy Map, which conventionally determines specific perspectives. Strategic objectives themselves are not presented on the Strategy Map; only their critical success factors are. The Strategy Map does not show activities either; these must be displayed outside the Strategy Map. Now, if to study the time horizon of the strategic objectives, these are long-term objectives, on the one hand, but placed in the Strategy Map context, on the other hand, the time horizon of some objectives may become shorter depending on this context. The reason is that a classical strategy map itself is structured so that the "upper part" of the map shows long-term objectives and moving downwards, we reach short-term perspectives, which must be achieved earlier in time in order for their impact to pass on for the achievement of objectives placed higher. So, on typical maps the "lower part" usually represents employee development, which must be dealt with currently in order to get to the fulfilment of temporally more distant objectives. Hence the

"lower part" objectives on Enterprise Estonia Strategy Map would mean short-term perspectives and therefore would not satisfy the requirements of long-term objectives. All users of Strategy Map face this risk.

Therefore the Enterprise Estonia action plans must definitely specify what kind of activities have to be done to achieve each objective, for example, which processes have to be improved and what has to be developed in personnel. Otherwise, when the European structural funds programmes and basic processes were implemented since 2004, although the strategy is for the years 2003−2007, was the improvement of internal processes written in the strategy in advance for prevention because they need to be improved anyway? Improvement as a part of PMS functioning chain should be actually applied only when it is obvious that the "upper part" of the Strategy Map is not fulfilled, or in the meantime when it turns out for instance that products do not satisfy customer needs any more; then the adjusting activities should be initiated, where one part would be changing of internal processes. Only then can these objectives be filled with content, not before. At the same time, when it takes so long for the public sector to know the results of the "upper part" of the Strategy Map (Waal, 2007), there is no ground from which to start changing the processes. In that case the "subsequently" placed output indicators should be what entail respective changes in processes and development sphere. Also theory says so. Additionally the output indicators have to be achieved by the management of Enterprise Estonia and unsatisfactory interim results should necessitate adjusting activities. In any case, not to be vague and hope that BSC implementation alone is enough, the processes and competencies that need to be changed must be filled with content (what, why and when).

On the whole it can be said that formally there is a chain between the strategy and strategic objectives, but nonconformity to requirements set for strategic objectives can be perceived from the qualitative side, which makes the chain continuity questionable. Strategic objectives are only partly in compliance with SMART criteria, which may cause that objectives are not in an appropriate condition for deployment to units and for execution, and may cause non-achievement of the objectives. Moreover, no objectives have been unambiguously derived from strategic objectives or presented in the strategy for the executive management of Enterprise Estonia to achieve (Figure 4.2.2).

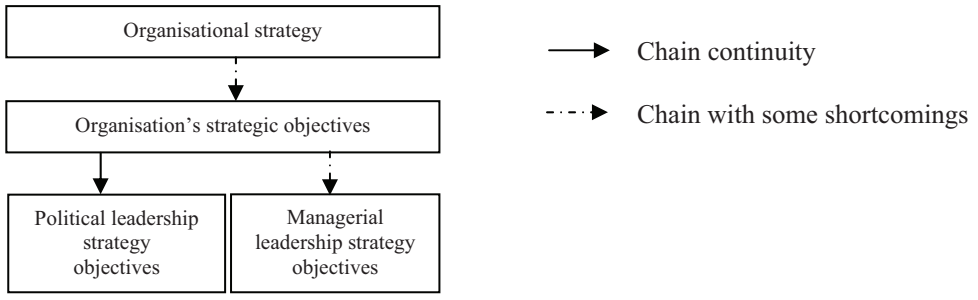



Figure 4.2.2 Generation of strategic objectives in Enterprise Estonia

The next step will be horizontal movement in the chain and CSFs and KPIs with target values are derived from strategic objectives.

**CSF, KPI and target values of strategic objectives**

The task of CSF referring to every strategic objective is to specify the objectives through the factors that most obstruct the achievement of the objective and to derive from them KPIs (called measures in the strategy of Enterprise Estonia) with target values.

Enterprise Estonia has distinguished CSFs at two Strategy Maps – large and small. The strategy document writes about the large map:

> The map seeks to depict all critical success factors that influence activity of Enterprise Estonia on one picture and show their mutual relationships. Thereby Enterprise Estonia can see what needs to be developed, where to focus attention the most in order to reach vision execution. Critical success factors on the large map are the main components monitored by Enterprise Estonia in its activity.

The map contains 61critical success factors.

Regarding the small map, the strategy document writes as follows:

> The map seeks to concentrate the most important success factors from the large Strategy Map into one picture. As a result all less critical factors have been excluded and the focus is only on the most important. Additionally every success factor has been supplemented by a respective measure. The small Strategy Map has been made to focus attention of Enterprise Estonia management bodies on the most important subjects in strategy implementation.

The map contains 24 critical success factors and 36 measures.

Enterprise Estonia has presented its strategic objectives and therefore also CSFs and KPIs against the background of Strategy Map perspectives (impact on society, customers, finance, internal processes, employees and development). The strategy document provides no target values. Target values came out later in time, for the first time with the action plan of 2005.

Enterprise Estonia has divided its CSFs into three, based on priority:

1. The most important for every Strategy Map perspective where the most attention must be focused (7 depicted on the small map).
2. Other success factors supporting the most important success factors. Through these Enterprise Estonia needs to achieve good results in the implementation of the most important factors (16, shown on the small map).
3. Success factors which at the moment are not picked out as most important for Enterprise Estonia; however, they may turn into such factors in the future (38, shown on the large map).

Relationships between these success factors groups can be regarded as lagging and leading type success factors.

Returning to the beginning of the analysis where the basic documents and practices of Enterprise Estonia revealed that the executive management of Enterprise Estonia does not decide the strategy and taking into consideration the requirements established for public sector CSFs and KPIs, to facilitate strategy implementation and monitoring, the CSFs and KPIs on the Strategy Map must be classified as:

- outcome CSF/KPI,
- output CSF/KPI,
- activity CSF/KPI, or
- input CSF/KPI.

Otherwise, when outcome CSFs are not differentiated from other CSFs, we cannot know what the desired impacts of policies made by ministries on society are, and furthermore, what is the performance of the executive party of Enterprise Estonia, or what output CSFs are the achievement of which should be in the power of the executing organisation already. Enterprise Estonia itself does not have such a division of CSFs.

The table below provides strategic objectives, CSFs and KPIs of Enterprise Estonia (Table 4.2.2). Since the strategy document of Enterprise Estonia does not provide which success factor out of four it is, then the author has made this division at his discretion, based on the content of success factors and measures, and the tasks/requirements set for them.

Table 4.2.2 Strategic objectives, CSFs and KPIs. Grouping of CSFs (based on the author's estimate)

| **Strategic objectives** (strategy annex 3) | **Critical success factors** (strategy annex 4) | **Measures/KPI** (strategy: small Strategy Map) | **Success factor grouping** (author's estimate) |
|---|---|---|---|
| 1. Regionally balanced business environment competitiveness (IMPACT PERSPECTIVE) | 1. Competitiveness of Estonian entrepreneurship environment | Competitiveness index on the basis of IMD[2] rating | Outcome CSF |
| | | Position in IMD competitiveness rating (author: country rating) | |
| | 2. Development of business and living environment in regions | Average entrepreneurship activity level in regions compared to Estonian average | Outcome CSF |
| | 3. Development of operating | Number of new jobs | |
| | | Number of new jobs in | |

[2] IMD competitiveness ranking in World Competiveness Yearbook. http://www.imd.org/research/publications/wcy/index.cfm

| | | | |
|---|---|---|---|
| | enterprises | enterprises based on new technologies | Outcome CSF |
| | | Net sales increase | |
| | | Export sales increase | |
| | | Net sales increase in enterprises using new technology | |
| | 4. Support to start-up enterprises | Share of sustainable enterprises | Outcome CSF |
| | | Number of new enterprises using new technology | |
| | 5. Conformity of measures to social needs and objectives | Assessment of measure | Outcome CSF |
| 2. Conformity of measures to customer needs (CUSTOMER PERSPECTIVE) | 6. Conformity of programmes to customer needs | Assessment of programmes[3] | Outcome CSF |
| | 7. Updating programmes | Number of new (or adjusted) programmes | Outcome CSF |
| | 8. Recognition and reputation of organisation | Number of new successful customer contacts | Outcome CSF |
| | | Reliability of Enterprise Estonia in society | |
| 3. Increased entrepreneurial activity in society (CUSTOMER PERSPECTIVE) | 9. Propagating entrepreneurial activity in society | Research of entrepreneurial attitudes | Outcome CSF |
| 4. Conformity of finance to objectives set for Enterprise Estonia (FINANCIAL PERSPECTIVE) | 10. Confidence of the state | Conformity of resources to policy implementation objectives | Input CSF |
| | 11. Cost-effectiveness | Ratio of administrative costs to total costs | Activity CSF |
| 5.Operational proficiency (INTERNAL PROCESS PERSPECTIVE) | 12. Optimal internal processes | Conformity of processes to EU and national assistance requirements | Activity CSF |
| | | Assessment of employees and owner on rules of procedure | |
| | 13. Budget planning quality | Share of rejected high-quality projects | Activity CSF |
| | | Share of budget under-fulfilment | |

[3] Since the programmes drafted by Enterprise Estonia are inspected, adjusted and approved by the Ministry, it cannot be influenced by Enterprise Estonia.

| | | | |
|---|---|---|---|
| | 14. Policy planning and assistance to owner | Owner's assessment of the assistance to policy planning process in Enterprise Estonia | Activity CSF |
| | 15. Accessibility of high-grade information to employees | Employee satisfaction with information | Activity CSF |
| | 16. Cooperation with partners | Share of cooperation projects | Activity CSF |
| | 17. Management quality | Presence of EFQM | Activity CSF |
| | | Employee satisfaction with management | |
| 6. Motivated and competent employees (EMPLOYEE AND DEVELOPMENT PERSPECTIVE) | 18. Competent employees | Share of mapped competencies | Activity CSF |
| | | Mapping of needs for competencies | |
| | 19. Advice and communication competence | Professional assessment | Activity CSF |
| | 20. Knowing customer needs | To learn customer needs | Activity CSF |
| | 21. Training | Number of training hours per employee | Activity CSF |
| | 22. Employee satisfaction | Personnel turnover | Activity CSF |
| | | Employee satisfaction index | |
| | 23. Organisation's reputation in the labour market | Number of high-grade job-seekers | Activity CSF |
| | 24. Remuneration | Wage comparison with Fontes salary "boxes" | Activity CSF |

Observations: there are a total of 24 CSFs (most important and important). Every strategic objective has its own CSF and all CSFs have their own KPIs. The number of CSF (most important and important) per strategic objective varies from one to seven. If to take into account also less important CSFs on the large map (less important), which makes the average number of CSF per objective 10.5, there is a risk to lose focus.

Although classical public sector Strategy Map has four perspectives, then there are cases where customer perspective has been split (Niven, 2003, p. 157) and therefore perspectives follow the principle of CSF division into five:

- The uppermost, first perspective CSFs – impact on society or stakeholders – are similar to outcome CSF.
- The next, second – customer perspective CSFs are similar to output CSF.

- The next two, third and fourth – internal processes and development – perspective CSFs are similar to activity CSF.
- The lowest, fifth – sufficient (financial) resources – perspective CSFs are similar to input CSF.

Such sequence (following cause-effect relationships) of CSF helps evaluate the resource sufficiency (inputs) for the achievement of outputs as they arise from outcome CSFs. With existing resources (inputs) it is possible to do a certain amount of activities the results of which are respective output indicators.

Strategy MAP of of Enterprise Estonia has five perspectives. Accrued objectives of perspective grounded subobjectives of policies (Kolk, 2002). The Strategy Map of Enterprise Estonia does not follow the classical succession of perspectives. It begins from below with activity CSFs (5. development and 4. internal processes), followed by input (3. finance), output (2. customer) and outcome (1. impact) CSFs. Without differentiating between CSFs it is not possible to know which indicators are the tasks of the executing organisation in Enterprise Estonia strategy.

Hence, to know different CSFs, they should be searched from the Strategy Map to discern the indicators (CSF/KPI) that would be for the executive management to ensure (see Table 4.2.2). At the same time, it cannot be ruled out that this step has been skipped and what we search for are below – among unit objectives. Such a step would marginalise the organisation as a whole and 7 structural units would take the place of the whole.

To make distinction the author noted behind every CSF which indicator out of four it might be. On the whole, the author discerned (see previous table):

- 7 outcome indicators from objectives 1 (5) and 2 (2);
- 0 output indicators;
- 16 activity indicators, from objectives 2 (1), 3 (1), 4 (1), 5 (6), 6 (7);
- 1 input indicators, from objective 4 (1).

*Outcome CSFs* are everything related with impacts on society. They cannot and might not be for the executive management of Enterprise Estonia to achieve; however, the contract under public law has imposed an obligation on Enterprise Estonia to measure them, because these data are wanted by the ministry that designs these policies. Additionally, the author classified among outcome indicators also the customer perspective CSFs for the reason that while looking at these CSFs, and the fact that the obligation to create and enforce programmes lies on the ministry instead of Enterprise Estonia, then also the achievement of these outcomes is out of the influence of the executive party of Enterprise Estonia. The author identified a total of 7 outcomes indicators; outcome CSFs can be considered CSFs 1−7. Their similar trait is that they all are consequences of executive policies and since policies are made outside Enterprise Estonia, then Enterprise Estonia

cannot be responsible for achieving these results either. And they are also out of the influence of Enterprise Estonia (*e.g.* national competitiveness does not depend on the contribution of Enterprise Estonia only; entrepreneurship environment and enterprise development is influenced by very many factors, from which only one can be contribution of Enterprise Estonia, *etc.*).

*Output indicators*[4] are very important (Waal, 2007). They characterise indicators the achievement of which is in the power of the executive management of Enterprise Estonia and it is possible to derive from them CSF to deploy to units for implementation.

What is output in the case of Enterprise Estonia? Waal says that output implies what an organisation is producing. The mission of Enterprise Estonia has referred to its activity as "policy implementation". What does policy implementation mean and what is policy? Programmes (products) were made at the initiative of ministries from which most were to be distributed as grant (support programmes) to enterprises and others to be used for conducting activities that Enterprise Estonia had to carry out (own activity programmes). Hence, the policy to be implemented was concentrated into these programmes and the task of Enterprise Estonia was to implement them.

Here arises a new question: What is programme implementation? "EASi lugu (2005[5]) " says that financing products and services of Enterprise Estonia are meant for different target groups. In more words: various programmes are formed of policies, which are allotted in the form of support to enterprises. Hence, programme application and implementation can be regarded as their processing pursuant of the rules of procedure and in specified amounts.

Taking into consideration the criterion that output indicators show what the organisation produces (currently and in connection with outcome indicators – proceeding action), the author did not identify output indicators on the Strategy Map.

The Strategy Map of Enterprise Estonia level does not show such CSFs which intrinsically were output indicators (in the impact or customer perspective, influenced by the executive organisation and related to products). Without them it is not possible to assign tasks that are for the organisation to achieve in connection with strategy implementation. Therefore it is not possible to say when Enterprise Estonia as a whole has performed well and when not and whether the objectives in the power of the organisation have been achieved. This is a sign of the PMS chain having being interrupted (Figure 4.2.3).

[4] The author uses the term "indicator" as a combination of CSF and KPI in this context.
[5] A document (the Story of Enterprise Estonia) written for getting ISO, which summarises organisation's operating principles.

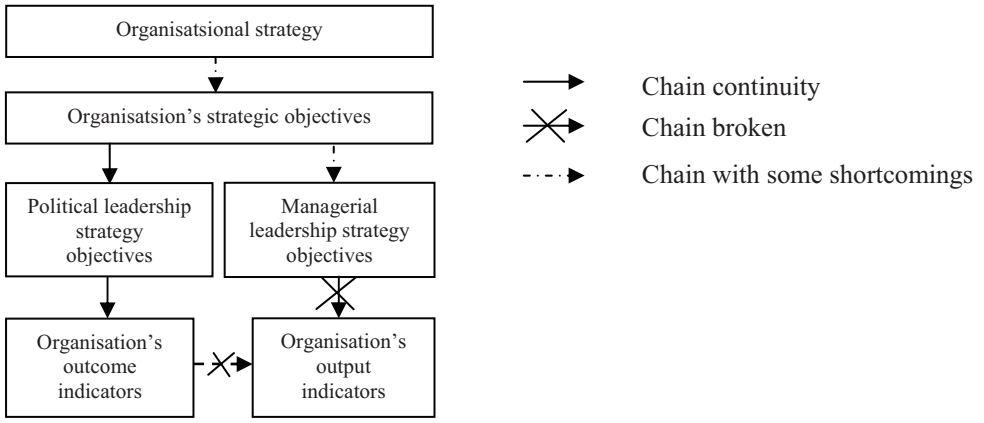



Figure 4.2.3 The situation in connection with Enterprise Estonia output indicators

In case an organisation's strategy document (and level) does not contain any output indicators, they may be reflected at the unit level and units have themselves derived output, activity and input CSFs (skipping the organisation step) – this is verified by analysing an unit´s Strategy Maps. In that case it would mean that the organisation has no objectives, however, units do and by achieving them they would still fulfil the organisation's objective without the latter directly having one. Such a situation would be weird, but still better than the situation where output indicators were missing. If there are no output indicators at the unit level, it is not possible to assess the unit's work results. Their presence is analysed at the unit level.

Hypothetically there may be a possibility that although output indicators are missing both at the organisational and unit level and therefore they are not an objective, maybe they have been used in the PMS functioning phase, for organising current activity and output indicators are still present in reports and result assessment meetings? For that purpose the author analyses regular meeting reports and minutes at the PMS functioning phase.

The role of *activity indicators* at the organisational level Strategy Map is rather illustrating, as units start working for the achievement of the organisation's output indicators and therefore it is more important that activity indicators on the unit maps were derived from unit output indicators. Nevertheless, when activity indicators are available at the organisational level it should be checked whether there is vertical alignment between organisational and unit level activity indicators (Figure 4.2.4).

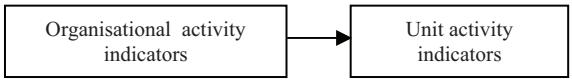



Figure 4.2.4 Relationships between organisational and unit level activity indicators

Enterprise Estonia has organisational level activity CSFs and CSFs 8; 9; 11−24 can be regarded as ones (Table 4.2.2).

Analysing alignment between the organisational level and unit level Strategy Maps it was discovered that 12 out of 16 activity indicators on the organisation's map were included in unit Strategy Maps. Or the alignment rate was 75%. The following activity indicators are left "up in the air":

- policy planning and owner assistance;
- accessibility of high-quality information to employees;
- organisation's reputation on the labour market;
- remuneration.

*Input indicators* can be derived from activity indicators and they describe inputs needed for the implementation of previously defined activities. More important than organisational level alignment here is that units' input indicators were derived from unit activity indicators.

At Enterprise Estonia level, the indicator "national confidence" with the measure "conformity of resources to policy implementation objectives" can be regarded as an input indicator. It is important for the chain that the input indicator will lead to activity indicators. It can be concluded in the case of Enterprise Estonia that a connection exists (although at a general level), where in case of sufficient financing it is possible to achieve all activity indicators on the Strategy Map. All inputs are reduced to finances.

To sum up the strategic objectives CSF, it must be said that the chain was interrupted at the organisational level, which has involved that the executive organisation does not know where Enterprise Estonia should aspire to in strategy implementation and therefore does not know how far they are, whether they should do something differently than so far and when they have arrived (Figure 4.2.5).

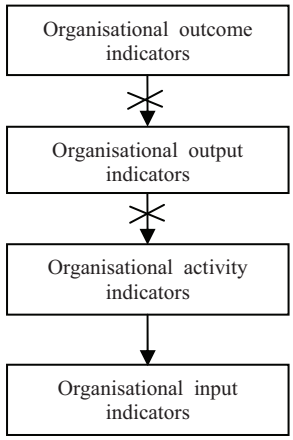



Figure 4.2.5 Chart to illustrate the situation

There must be at least one *KPI* per every CSF. On the Strategy Map of Enterprise Estonia every CSF has its own KPI; the number of KPI per CSF is between 1 and 3. Additionally KPIs must meet certain requirements. That they are laconic, unambiguous and conclusive is generally guaranteed in Enterprise Estonia. Every KPI must have a target value. *Target values* were established for KPIs in the 2005 action plan or in spring 2005. This involved a 2-year lag between setting the strategic objectives and becoming aware of exact targets.

The next step will be deriving unit objectives from the organisation's strategic objectives.

**Unit objectives**

Going from the organisational level to unit level in the PMS structure, the next component of PMS structure after strategic objectives, CSF and KPIs is unit objectives. Shifting from an organisation's strategic objectives to unit' objectives can be regarded as vertical movement along the chain. To ensure chain continuity these must be derived from the organisation's strategic objectives (Figures 4.2.6). Taking into consideration that the organisation's strategic objectives contain also political leadership, only objectives arising from managerial leadership should be deployed to units from among the organisation's strategic objectives. The fulfilment of these unit level objectives is monitored via unit output indicators. Essentially, from the unit's aspect, these are outcome indicators for units, but for the sake of conformity of these terms, these indicators could be called output indicators for an unit because then there is alignment with the organisation's output indicators. It should be mentioned also that although the organisational level outcome indicators are not managerial, then using the term 'outcome indicators' at the unit level may be confusing.

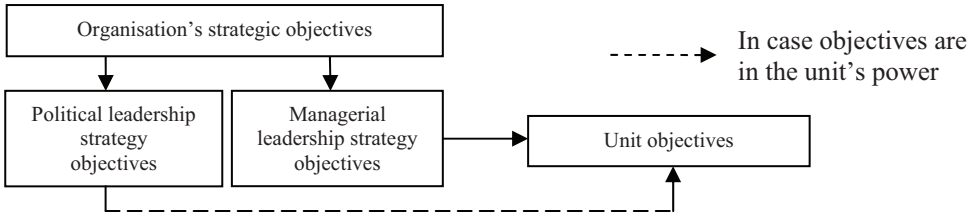



Figure 4.2.6 Ways of deriving unit objectives

Also Atkinson and McCrindell (1997) write about the importance of relationships between unit and organisational objectives. One out of four main implications presented by them regarding also government agencies is that:

> "any agency must identify how each of its responsibility units contribute to its objectives and assess each unit's contribution to achieving the agency's objectives".

In the following author analysed alignment of unit objectives to Enterprise Estonia's strategic objectives, or whether all strategic objectives that can be influenced by the management are deployed to units. When strategic objectives were identified (in the strategy document) at the organisational level then for units these are not documented. To get a some idea we need to analyse the Strategy Maps of Enterprise Estonia (contain CSFs). Unit Strategy Maps are designed by consulting company Ernst&Young in the report of March 5, 2004, based on the Enterprise Estonia vision, mission and above described overall level Strategy Map. An objective of the report was to "take the objectives and measures of Enterprise Estonia described in the generally Balanced Scorecard to the next level" (Strategy Map of…, 2004). Maybe unit objectives would be derived pursuant to this chain principle.

Since the report contains unit Strategy Maps and does not contain explicitly formulated unit objectives for the strategy period, it can be said that unit CSFs are not derived from unit objectives but from organisational level CSFs. According to theory, these may derived from Strategy Map perspectives. In that way, if to look at the CSF at the Enterprise Estonia Strategy Map and when an equivalent CSF is also on the unit Strategy Map, then it may be said that in case CSF has been derived for an unit from the organisational level the same objective has been derived that is monitored by that CSF. Such an approach is based on the analyser's subjectivity and therefore for creating and securing alignment these relationships should be documented by the organisation. The table below is completed by the author so as to compare whether the strategic objectives of the organisational level are revealed as CSFs in the unit Strategy Maps and if they are, then in which units (Table 4.2.3).

Table 4.2.3 Organisation's strategic objectives and the same Strategy Map perspective CSF of units (most important and important) (Compiled by the author)

| Strategic objective (strategy 2003−2007) | I Div | II Div | III Div | Turist Board | APU [6] | ETU[7] | FSU[8] | MU[9] |
|---|---|---|---|---|---|---|---|---|
| 1. Competitiveness of regionally balanced entrepreneurship environment | YES | YES | YES | YES | - | - | - | - |

[6] Analysis and Programme Development Unit
[7] Export and Technology Unit
[8] Financial and Support Unit
[9] Marketing and Communication Unit

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 2. Conformity of programmes to customer needs | YES | YES | - | - | YES | - | - | - |
| 3. Increased entrepreneurial activity in society | YES | - | - | - | - | - | - | - |
| 4. Conformity of finance to objectives set for Enterprise Estonia | YES | YES | YES | YES | - | - | YES | - |
| 5. Operational proficiency | YES | YES | YES | YES | YES | YES | YES | YES |
| 6. Motivated and competent employees | YES | YES | YES | YES | YES | YES | YES | YES |

The table shows that all objectives including political objectives have been deployed to units.

As mentioned above, unit objectives have not been formulated for the strategy period. Therefore we assessed indirectly the linkage of unit CSFs to the organisation's strategic objectives.

For every strategic objective there is at least one unit whose task it is to contribute to the achievement of these objectives. All units contribute to the achievement of objectives of high "operational proficiency" and "motivated and competent employees." They can do it only in relation to their activities. Here arises the so-called compulsory improvement of the question, as the Strategy Map form envisages improvement of internal processes and development of employees. But still, what in particular in connection with strategy implementation has to be improved and developed? At the moment when the strategy is being prepared we cannot know its "content". Some questions are caused by that only one unit contributes to the objective of "increased entrepreneurial activity in society," while based on the mission of Enterprise Estonia, its basic units could all contribute. The second noteworthy aspect is that only 2 out of 4 units and 1 support unit give their contribution to the objective "conformity of programmes to customer needs;" their tasks are the modernisation of programmes and development of new programmes. The other two basic units are targeted at customers and thus their programmes should conform to the customer needs. Programme development should be taken with some reservations. Since programmes are worked out by ministries, then what is the role of an unit there? Consequently, objectives of both executive and political leadership have been deployed to units.

Since the analysis was not made on the basis of objectives, is it possible that units' objectives are presented in other documents (unit statutes, unit action plans)? The analysis has pointed out that only a few units have a written objective.

To sum up, units had no objectives written down. The strategic objectives of the organisational level and units' CSFs were indirectly compared and on the basis of that it is possible to say that the chain between these links is working. Both executive and political leadership objectives were deployed to units. The outcome is that units have no facilities, resources, *etc.* for the achievement of these and their performance cannot be assessed on the basis of these criteria.

In the next step CSFs and KPIs will be derived from unit objectives.

**Unit objectives output, activity and input CSF, KPI and target values**

The next step in the PMS structure, moving horizontally along the chain, is to find output, activity and input CSFs derived from unit objectives with KPIs and target values.

Unit output indicators can be reached in two parallel ways: In one case, we reach to unit output objectives from the organisation's strategic objectives and unit output indicators are derived from them; and in the second case, we get to unit output indicators from organisational level outcome indicators (via the organisation's output indicators) (Figure 4.2.7).

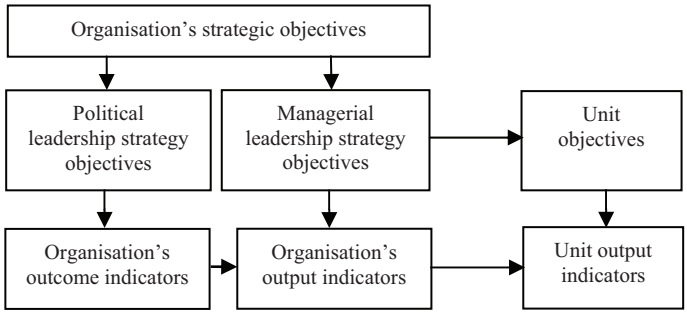



Figure 4.2.7 Ways to reach unit output indicators

There may be no contradiction between the results obtained in the above-mentioned two ways – unit objective is monitored via the achievement of the same output indicators.

A further analysis of the presence of PMS structural chain of Enterprise Estonia should take into account that there are no output indicators at the organisational level that would meet the criteria of output indicators – were connected to Enterprise Estonia products – proceeding.

However the term "output indicators" is not unfamiliar to Enterprise Estonia and the term has been used outside the Strategy Map, with programmes. Every programme (as a policy implementation instrument that meets well the definition of the output indicator) had their own outcomes, outputs, activity and inputs established (Table 4.2.4). Programme outcome indicators should overlap with those on the Strategy Map and eventually ensure the achievement of these strategic

objectives of the organisation which are related with the impact on society. Annex 4 of the guidelines of Enterprise Estonia action plans says as follows about outputs:

> "Outputs are indicators which show the most direct outcome of the activities: values, products or other conditions providing permanent change. It must be possible to achieve the program's objectives (author: programme outcomes) via outputs and with the help of their. Differentiating between objectives (author: outcomes) and outputs it has one more practical value. Often it is not possible to achieve programme's outcome during its implementation. For example, in case it is a training course for export managers of a furniture company, their improved knowledge will be revealed only after the training course when firms have been able to introduce effective changes to export management. In that case the programme terminates by making outputs accessible; using outputs, the beneficiaries must achieve the outcome after the end of the project period. The achievement of socio-economic impact (improvement of employment) is even longer. Therefore it is especially important that outputs were reasonably planned and clearly described".

Table 4.2.4 2006 action plan for training support programme provisions

| **Outcome indicators:** | **Activity indicators:** |
|---|---|
| Jobs created – 100 | Number of applications proceeded – 1 500 |
| Jobs retained – 2 000 | Number of pre-advised applications - 600 |
| Number of training participants – 4 000 | Number of applications pre-inspected in MAK and declared to be in conformity – 300 |
| Net or export turnover growth – 50 Mln EEK | Number of MAK briefing days – 4 |
| **Output indicators:** | Number of briefing days for training providers – 4 |
| Number of entrepreneurs supported (800) | Number of briefing days for entrepreneurs – 4 |
| Number of entrepreneurs or employees participating in training courses (4 000) | Number of training days for preparation of training projects – 4 |
| Grant recipients' satisfaction rate (90%) | **Input indicators:** |
| Grant recipients have co-financed 60 million kroons for human resource development | Pre-advising of applicants and proceeding of applications – 5-6 entrepreneurship consultants, 3 junior consultants |

Hence it may be said explicitly that Enterprise Estonia established programme outputs for itself, which fully meet well also the requirements set for output indicators. (Also used activity and input indicators of programmes met requirements of measures of public sector well). These outputs can be aggregated to the programme covering/administering/executing unit; in that case it is possible to monitor, in addition to the achievement of outputs of a single programme, the same indicators at the division level which is specialised in implementing one kind of priorities and policies of Enterprise Estonia. These unit outputs would in turn form aggregate output indicators of Enterprise Estonia (to keep the perceptible volume these should be definitely aggregated at Enterprise Estonia level; otherwise ca 30 programmes, each having 3−4 objectives, in total 90−120 are too many).

The units of Enterprise Estonia have two theoretical options for creating output indicators:

- arising from above or derived from organisational output indicators, or
- arising from below or formed from programme output indicators.

The first option will not create output indicators for units because they were missing at the organisational level. For the second option to become available it must be analysed whether the programme output indicators converge into the division[10] Strategy Maps and action plans. If yes, then although output indicators are not determined at the Enterprise Estonia level, they are fixed at the unit level, which implement the respective policy implementation instruments – programmes. If they do not converge, this would mean that Enterprise Estonia has not attached significance to them. If that is the way, there are neither respective reports nor perception when the objectives are achieved. PMS is applied but it is not defined what organisational and unit performance is.

The analysis of unit Strategy Maps demonstrated that although there are output indicators for programmes applied by units, in the Strategy Maps they converge neither to units nor Enterprise Estonia level. The second document which might reveal unit output indicators is action plans for division. These should aggregate programme logframe (logical framework) output indicators. The analysis of unit action plans for identifying output indicators and unit objectives also produced a result that output indicators did not converge and they were not even mentioned in action plans.

This is evidence that output indicators do not fulfil their role in the chain at the unit level, either. And an unit output indicator is what characterises achievement or non-achievement of the unit's objectives. Here a question arises what is regarded as achievable objectives by units on Strategy Maps? Looking at the Strategy Maps, these are organisational level outcome indicators, the shortcomings of which were discussed above in greater detail.

Hence, in brief, output indicators were determined at the programme level but they were not used for unit and organisational target setting. It must be admitted that where output indicators related to organisational outcome indicators are determined the PMS chain is interrupted.

In that case an organisation and units act without purpose; they do not know where and when they want to reach or how far they are. Hence no regular collecting of information, reporting or adjusting activities can exist in that case. One cannot achieve what one does not want to achieve.

[10] Line units of Enterprise Estonia

Unit Strategy Maps show CSFs, but also without differentiation: outcome, output, activity and input. Divisions' impact and customer perspectives do not reflect indicators that they can influence or organisational level (political) outcome indicators have been transferred there. Above it was acknowledged that unit maps do not show output indicators. However, activity and input indicators are covered there.

The question is whether the activity indicators on Enterprise Estonia and unit Strategy Maps have been continuously reflected in programme activity indicators, or whether there is an alignment/chain between them? Analysing action plans/logframes of programmes it was found that organisational and unit level activity indicators have not reached there, *i.e.* there is no horizontal alignment between them. Activities at the product level lead to the same programmes related (undervalued at organisational and unit level) output indicators. The situation is characterised by the following chart (Figure 4.2.8).

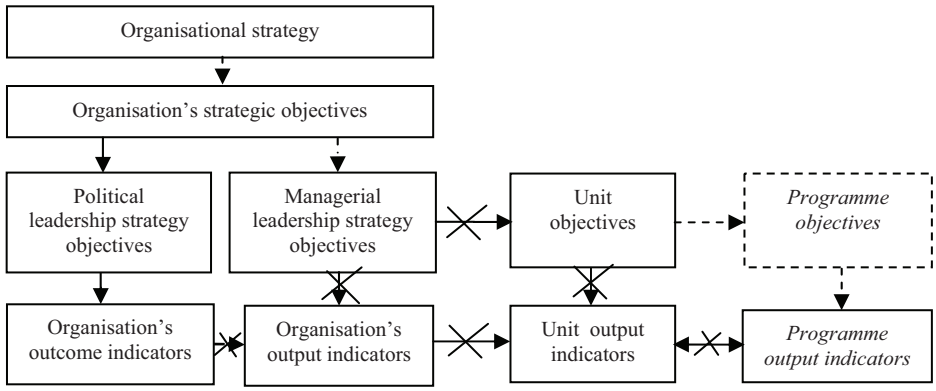



Figure 4.2.8 PMS to unit level indicators

Now a rhetoric question arises: in case activity indicators exist at Enterprise Estonia and unit Strategy Maps, and if programme activity indicators are not aligned to the organisational level and activity indicators must result from output indicators, then which outputs are the organisational and unit level activities derived from? Every activity must lead to some output. What are the outputs these activities would lead to?

Additionally, at every programme level there are also inputs (financial, human or other resources) for conducting intended activities in the programme. Here would be a principal alignment between the organisational level and product level input indicators. However, only in this way that programme level input indicator monitors the sufficiency of finances for the achievement of output indicators of program, organisational level input indicator must additionally take into account also the sufficiency of finances for conducting support activities. A summary of the

relationships between indicators of Enterprise Estonia at three different levels is depicted on the chart below (Figure 4.2.9).

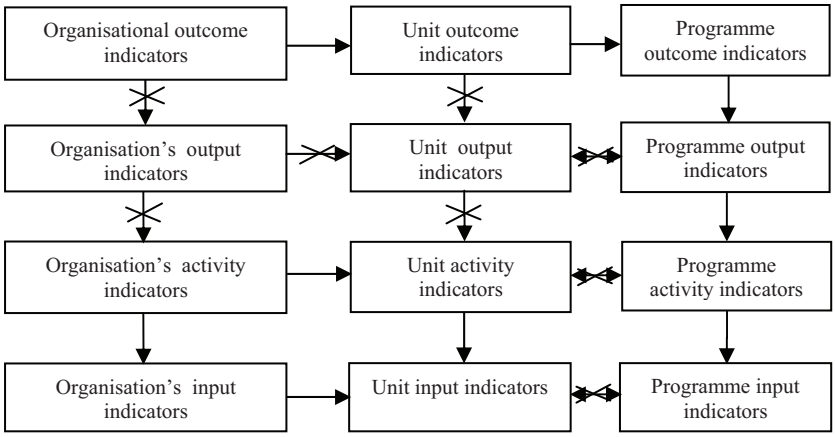



Figure 4.2.9 Organisational, unit and programme level indicators

Every CSF on every unit Strategy Map has a KPI. The number of KPIs per CSF is between 1 and 4. KPIs obtained target values with the 2005 action plan.

**Action plans**

A purpose of strategic action plans is to describe activities that must be carried out in order to achieve strategic objectives and reach measurable performance improvement (Waal, 2007). Action plans should translate the long-term orientation of strategy into realistic and implementable short-term activities. Unit action plans should be derived from them, which describe the activities that the unit undertakes in this period for the achievement of short-term objectives. The author of the given thesis is of the opinion that everything that is included in the action plans must be reflected in Strategy Maps. The linkage between the Strategy Map and action plans consists in that the Strategy Map expresses indicators (CSF, KPI, TV) which help to measure the efficiency of activities described in action plans.

Enterprise Estonia does not have a document by that name. At the beginning of every year, during the drafting process of actions plans and budgeting they made an action plan for the current year, which focused on describing the current year`s activities. The organisation's consolidated action plan was made on the basis of unit action plans. Hence the condition of being short and based on units as executors has been fulfilled; however, since the consolidated action plan is made using the "bottom up" principle and the strategy contrariwise, there is a risk that they may not coincide.

As it has been mentioned, a consolidated action plan was for the current year. Therefore there is nowhere to show activities that last longer than a year (which actually occur with strategy implementation). Nevertheless, they may be reflected

in different years' action plans as continuing activities. Action plans contain main continuing activities under every CSF, CSF perspective with their measures.

As follows annual action plans are briefly analysed.
The consolidated action plan for 2005 says that "the currently structured action plan is made at Enterprise Estonia for the first time; so far the action plans have been planned mainly for structural units. Consolidated action plan and consolidated reports to be made from now on provide a complete picture of Enterprise Estonia`s activities and allow to monitor fulfilment of strategic objectives". Hence, although it is the annual consolidated action plan, its task is to reflect (strategic) activities lasting longer than a year.

The structure of consolidated action plans for 2005, 2006 and 2007 include also the strategic objectives of Enterprise Estonia for the year 2003, although not completely. The consolidated action plan consists of the following chapters:

- A brief economic overview.
- Management quality of Enterprise Estonia and its improvement.
- Impact on entrepreneurship and living environment.
- Impact in the area of tourism.
- Customer satisfaction.
- Effective basic processes.
- Competent personnel.
- Finances in conformity with objectives.
- Enterprise Estonia`s budget for 2005/2006/2007.
- Conclusions.

In addition to the descriptive part, chapters provide also CSF (which occur in the action plan alternately under the name of objectives and success factors; to ensure the connection to the strategy document, the author has called them critical success factors), measures (KPI) and target values for the years 2004−2006 (at least in action plan for 2005). The action plan for 2007 added target value for 2007. Previous years` target values have not been replaced by actual results for the reason that the effect of grants issued in preceding years was measured in 2007 or later.
Since there is a temporal lag between the strategy document and action plans, it is important to study their mutual conformity. Are the critical success factors and measures provided in action plan for 2005 (approved by the board on 25 August 2005) the same as in the strategy document, since the time interval between them is big?

The table below brings together the groups of success factors in action plans with measures (years 2005−2007, by perspectives. Table 4.2.5).

Table 4.2.5 Critical Success Factors and measures of perspectives during the strategy period

**CSF: 1. Development of start-up and operating enterprises (Impact perspective)**

| | MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| **1.** | M.1 New start-up enterprises | Yes | Yes | Yes |
| **2.** | M.2.1 Enterprises supported | Yes | Yes | Yes |
| **3.** | **M.2.2 New jobs created** | Yes | Yes | Yes |
| **4.** | M.2.3 Jobs retained | Yes | Yes | Yes |
| **5.** | M.2.4 Number of participants in training courses | Yes | Yes | Yes |
| **6.** | M.2.5 Amount of foreign investments involved (mln EEK) | Yes | Yes | Yes |
| **7.** | M.2.6 Amount of R&D investment (mln EEK) | Yes | Yes | Yes |

**CSF: 2. Development of entrepreneurship and living environment in regions (Impact perspective)**

| | MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| **8.** | M.3.1 Number of beneficiaries from investment projects | Yes | Yes | Yes |
| **9.** | M.3.2 Number of qualitatively improved tourism and recreational objects | Yes | Yes | Yes |
| **10.** | M.3.3 Number of successfully launched undertakings | Yes | Yes | Yes |
| **11.** | M.3.4 Private sector jobs created | Yes | Yes | Yes |
| **12.** | M.3.5 Ratio of non-profit organisations to 1000 population | Yes | Yes | Yes |
| **13.** | M.3.6 Accessibility and quality of public services | Yes | Yes | Yes |
| **14.** | M. Number of projects carried out by supported non-profit organisations | Yes | Yes | Yes |
| **15.** | M. Number of qualitatively improved local physical infrastructure objects | Yes | Yes | Yes |

**CSF: 3. Promotion of tourism (Impact perspective)**

| | MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| **16.** | M.3.7 25% growth in export of tourism services by 2007 (compared to 2003) | Yes | Yes | Yes |
| **17.** | Number of queries about tourist facilities (growth %) | Yes | Yes | Yes |
| **18.** | New travel agencies in destination countries which have started to intermediate Estonian tourism products or increased assortment | Yes | Yes | Yes |
| **19.** | Number of articles published about Estonia as a travel destination (by foreign journalists hosted by Enterprise Estonia) | Yes | Yes | Yes |
| **20.** | Tourist firms implementing marketing plans with the help of a support programm | Yes | Yes | Yes |
| **21.** | New or upgraded tourist products | Yes | Yes | Yes |
| **22.** | Number of tourism entrepreneurs trained | Yes | Yes | Yes |

Annexes to the action plan also provide concretised forms of "policy implementation" – programmes written after every measure – which shows that programme outcome indicators converge to divisions, indicating their significance for the executive organisation.

Critical success factors and measures under customer satisfaction are:

**CSF: 4. Conformity of services to customer needs (Customer perspective)**

| MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|
| **23. M.3.1 Customer satisfaction** | Yes | Yes | Yes |
| **24.** M.3.2 Customer's opinion of how useful the service is | Yes | Yes | Yes |

**CSF: 5. Reputation and familiarity of Enterprise Estonia (Customer perspective)**

| MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|
| **25.** Familiarity of Enterprise Estonia | Yes | Yes | Yes |
| **26. Reputation of Enterprise Estonia (reliability)** | Yes | Yes | Yes |

Critical success factors and measures under effective basic processes are:

**CSF: 6. Optimal internal processes (Internal processes perspective)**

| MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|
| **27.** Pertinence of applications | Yes | Yes | No |
| **28. Efficiency of internal processes according to EFQM** | Yes | Yes | No |
| **29.** Share of pre-advised projects | Yes | Yes | No |
| **30.** Average speed of proceeding applications | Yes | Yes | No |
| **31.** Deviations from project report proceeding time | Yes | Yes | Yes |
| **32.** Deviations from payment application proceeding time | Yes | Yes | Yes |
| **33.** Functioning quality system, documents regulating internal processes, developed processes | No | No | Yes |
| **34.** Grant executive unit accreditation to Enterprise Estonia for period 2007-2013 | No | No | Yes |
| **35.** Efficient and optimal internal processes of Enterprise Estonia | No | No | Yes |

Critical success factors and measures under competent personnel:

**CSF: 7. Employee competency (Employee and development perspective)**

| MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|
| **36. Level of employee competencies** | Yes | Yes | Yes |

**CSF: 8. Employee satisfaction (Employee and development perspective)**

| MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|
| **37. Employee satisfaction index** | Yes | Yes | Yes |

The level of competencies raises a question, since they started to elaborate it in 2007 and it was not ready by the end of the strategy period.

Critical success factors and measures under conformity of finances to objectives:

**CSF: 9. Cost-effectiveness (Finance perspective)**

| MEASURE | 2005 | 2006 | 2007 |
|---|---|---|---|
| **38. Ratio of administration costs to grant awards** | Yes | Yes | Yes |

**Changes to initial strategy document**

There are differences between the action plan for 2005 and the strategy document for 2003−2007. No strategic objectives are listed in the action plans. Action plans no longer reflect one out of six strategic objectives – increased entrepreneurial activity in society[11]. Thus it may be said that strategic objectives of Enterprise Estonia changed in 2005.

The number of critical success factors had decreased from 24 (small map) to 9. The number of measures dropped from 36 to 35. The action plan for 2005 contained 35 measures. The action plan for 2006 did not change measures. The action plan for 2007 added 3 and erased 4 measures. The new measures were not periodical (were short-term, *e.g.* monitored whether the organisation gets accreditation or not).

Typed in *bold* (in the Table 4.2.5) are the measures which coincided with those in the strategy document and action plan for 2005. The biggest change in measures has been in the impact perspective where only one measure has been taken over into the action plan from the strategy document.

Analysing the nature of measures (22) in the impact chapters of the action plan a conclusion may be drawn that these are outcome indicators that have to be applied for policies to exert influence on society rather than programme related output indicators, the achievement of which can be facilitated by the executive organisation. The remaining 9 CSFs can be classified as follows (based on CSF definition and content of most of the measures, although the output measure could be (2): M.2.1; M.2.4):

Outcomes are reflected by, 3:

- promotion of start-up and operating enterprises,
- promotion of entrepreneurship and living environment in regions,
- development of tourism.

Outputs are reflected by, 0.

[11] Appears from comparison of CSFs

Activities are reflected by, 5:

- conformity of services to customer needs,
- reputation and familiarity of Enterprise Estonia,
- optimal internal processes,
- competent employees,
- employee satisfaction.

Inputs are reflected by, 1:

- cost-effectiveness.

Hence the action plans and reports comply with the strategy document. There are no new output indicators which would be related to outcome indicators.
The action plan for 2006 (approved by the board on 22.December 2005) changed the target values of two measures applicable to all the strategy period.

The action plan for 2007 is analogous to the previous ones by its structure. The action plan for 2003−2007 (submitted to the board for approval on 25.January 2007) changed annual target values of 16 measures. Hence it may be said that the target values of measures for the strategy period 2003−2007 were determined in the action plan for 2007. Hence the fulfilment of strategic objectives has to be compared to the target values of measures set for 2007.

To sum up, it may be said about the annual action plans that the difference from the strategy document is considerable (Table 4.2.6).

Table 4.2.6 Difference between 2003−2007 strategy document and action plans

| **Components** | **Strategy document** | **Action plans** |
|---|---|---|
| Strategic objectives | 6 | 5 |
| Critical success factors | 24 | 9 |
| KPI | 36 | 35 |

Action plans reflect success factors of five strategic objectives out of the original six. The number of success factors was reduced from 24 to 9 compared to the strategy document. Measures were changed essentially. Only 7 out of 36 measures in the strategy document remained in action plans (the other 28 were new measures). A target value was set for every measure. The first target values were set in the action plan for 2005for the whole strategy period and some of them were increased in the action plan for 2007. The achievement of these target values must lead to the achievement of strategic objectives. The change of strategic objective, success factors and measures in action plans did not involve a chain recovery in the part of Enterprise Estonia and unit output indicators.

To *assess the PMS structure* of Enterprise Estonia, the author uses the model created by him. The table below evaluates the obligatory components of PMS on the basis of whether they are present, and in case they are, whether they meet the requirements of the component content and impact of the component on the chain (Table 4.2.7).

Table 4.2.7 Conformity of PMS structure of Enterprise Estonia to the model

| ORGANISATIONAL LEVEL COMPONENTS | PRESENCE | CONTENT CONFORMITY | IMPACT ON CHAIN |
|---|---|---|---|
| (R) Strategic objective (political) | YES | Content not assessed because no effect on chain was detected | No effect on chain |
| (R) Outcome CSF | YES | | |
| (R) Outcome KPI + TV | YES | Appeared with action plan for 2005 | |
| (O) Strategic objective (executive) | YES/NO | Conformity of objectives of executive management to SMART 62%, of all objectives 48%. | Due to non-conformity to SMART affects chain continuity |
| (R) Output CSF | NO | As it is missing content cannot be assessed | No effect on chain |
| (O) Output key performance indicators (KPI) + | NO | As it is missing content cannot be assessed | Missing components caused chain interruption |
| (O) TV | NO | As it is missing content cannot be assessed | |
| **UNIT LEVEL** | | | |
| (O) Strategic objective (executive) | NO | Not present in writing. Indirect comparison identified that political objectives were (also) deployed to units. | Missing components caused chain interruption |
| (R) Output CSF | NO | As it is missing content cannot be assessed | |
| (O) Output key performance indicators (KPI) + | NO | As it is missing content cannot be assessed | |
| (O) TV | NO | As it is missing content cannot be assessed | |
| (R) Activity CSF | YES | Alignment with organisational level indicators was 75%. Useless without indicators | Did not and could not restore chain continuity |
| (O) Activity key performance indicators (KPI) + | YES | | |
| (O) TV | YES | Appeared with action plan for 2005 | |
| (R) Input CSF | YES | Related to activities | |
| (O) Input key performance indicators (KPI) + | YES | | |
| (O) TV | YES | Turned up with action plan for 2005 | |

It may be said in brief about the structure of PMS that Enterprise Estonia had a mission, strategy and strategic objectives accompanied by well organised documents. Additionally, it had good methodical instruments in the form of action plan annexes, which contained forms to be completed to reach from strategic objectives to yearly activities.

At the organisational level, critical success factors and measures were formulated for every objective. CSFs and KPIs were grouped as outcome, activity and input indicators. A part – output indicators – was not separated from the strategic objectives, which is in the power of the executive management of Enterprise Estonia. Though the management of Enterprise Estonia wrote the strategy, the trend was determined and approved by the Supervisory Board representing the owner's/initiator's will (statutes of Enterprise Estonia, board tasks). The organisation could have set the indicators left over from the dividing operation as internal performance objectives of the organisation.

The analysis of CSFs and KPIs identified their absence at the level of Enterprise Estonia as a whole. Output indicators were present at programme level, but they were not aggregated to the unit and Enterprise Estonia level, which then, using joint resources, would have been attempted to achieve. In that spot the chain in the PMS structure was interrupted.

At the unit level also outcome, activity and input indicators were present. Output indicators were missing also at the unit level.

The number of inputs needed for conducting activities was fixed for every programme. Activities were determined which via cause-effect relationships lead to the achievement of output indicators of the programme. The importance of outputs and their classical role was underlined also in internal documents of Enterprise Estonia (Annex 4). Target values came to the Enterprise Estonia level KPIs (measures) with action plan for 2005. The situation of PMS is presented in the chart (Figure 4.2.10).

Annual action plans changed significantly the objectives, success factors and measures in the strategy document, both their content and number. This is a sign of a functioning reporting system and adjustment, but a more precise picture will be given in the subsection describing PMS functioning phase.

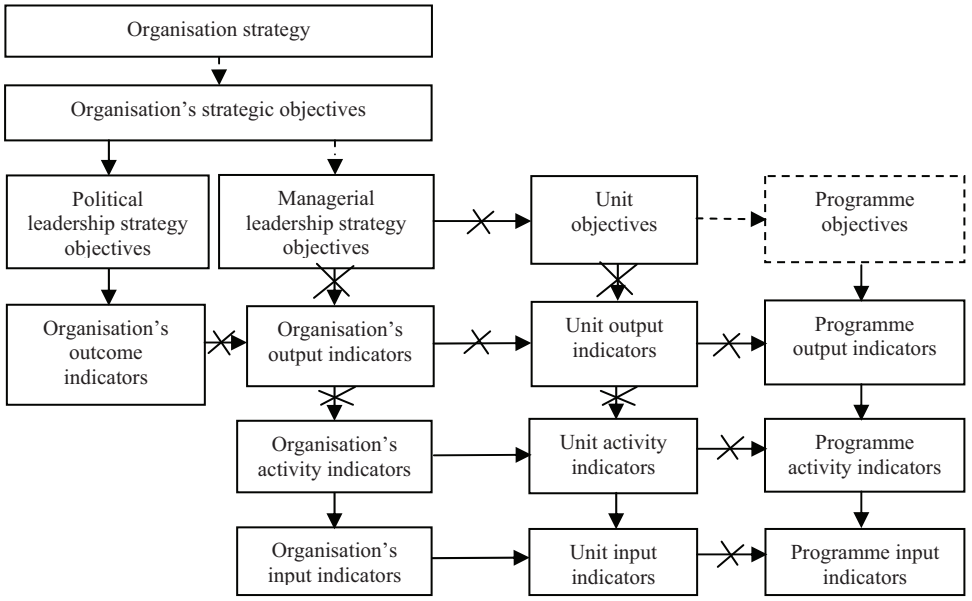



Figure 4.2.10 Overview of Enterprise Estonia's PMS structure

In the situation where the supervisory board was incapable of generating managerial implementation, a management full of initiative could have created that. As a result, output indicators would have been established in the organisation, which would have filled the PMS structure with adequate content.

Based on two facts, the author finds that such a situation where the executive party of Enterprise Estonia did not attach importance to output indicators and attached importance to outcome indicators, did not arise accidentally or out of ignorance, but it was definitely a result of the understanding dominating in the organisation. Namely, it was believed in the organisation that outcome indicators are to be achieved by management and this understanding was transmitted to PMS, which led to that no significance was attached to output indicators.

It has been said in "EASi lugu", (p. 10): "*according to the scorecard method, all objectives of Enterprise Estonia are divided between different structural units. This is to ensure clear responsibility for the fulfilment of Enterprise Estonia objectives. For example, it is clearly fixed how many new jobs must be created by the start-up enterprise division, how many by the acting enterprise division and how many by the development entrepreneurship and living environment division, so as the Enterprise Estonia objective for the new jobs creation was achieved*."

The objectives mentioned in this paragraph are genuine outcome indicators. Exactly the same approach was expressed in the strategy, Strategy Maps and action plans.

The second fact confirming that the management considered outcome indicators to be so-to-say their own, arose from the answer by the chairman of the board of

management to the questions asked by the newspaper *Äripäev* on 10.07.2008:

Questions**:** What is the specific contribution of Enterprise Estonia to the society? For what is it responsible? Are there any indicators which enable to say that you are doing well? What are they?

Answer: *Enterprise Estonia has objectives in the areas of setting up new enterprises, increasing enterprises' export potential and product development capacity, tourism revenue, activity of civic society and improving entrepreneurship environment. The objectives are divided into sub-objectives, by setting measures and target values for them.* Enterprise Estonia is using the Balanced Scorecard management model."

This confirms once more what the management believed has to be achieved by them. This is confirmed also by the outcome indicators on the Strategy Map: Estonia's rating in the IMD competitiveness ranking and the competitiveness index on the basis of IMD ranking list. Is the management of Enterprise Estonia able to influence the national rating in that list?

A similar problem in the public sector has been pointed out before. Namely, Di Francesco (1999) mentions the need to specify output indicators as a problem involved in performance measurement in the public sector. He offers a solution that output indicators should be determined by taking account of the price, quality and quantity, and the relationship between output indicators and outcome indicators should go through efficiency.

As a result of the chain interruption, a situation developed in Enterprise Estonia where the executive party of organisation lacked most important objectives to achieve and on the basis of what to assess their performance. This shortcoming occurred at the organisational and unit level. However, there were activity and input objectives for the executive party, although their achievement will not have led to anything; organisation had not set results of activities to be executed. Such a continuous aimless action did not leave employee motivation unaffected. This is characterised by high resignation rate and one of its reasons – large number of objectives and their unclear linkage to strategy – was mentioned in a personnel audit (EASi personalivoolavuse…, 2006).

A solution would have been deriving of output indicators with KPIs and target values from outcome indicators to the organisational level for restoring the chain. Then they would be deployed to units. Actually, it would have been sufficient if the existing programme output indicators had been aggregated to units and changed for the content of current reports. This would have had a good effect on motivation by giving clear directions to employees what Enterprise Estonia expects and values in their work.

### 4.2.3 Analysis of PMS implementation

PMS was implemented gradually. The implementation process can be divided into two. The bigger, more intensive and shorter part was carried out when the new strategy and structure of Enterprise Estonia was presented during 2003. The second, longer lasting part was done after the first one and the preparation of the unit Strategy Map can be regarded as the beginning of this stage.

The strategy for years 2003−2007 was worked out to January 2003 and it was analysed by the author of the given thesis in the subsection discussing PMS structure. The strategy contained structural components of PMS, for example, Enterprise Estonia level Strategy Maps (large and small). The new structure of Enterprise Estonia entered into force on 01. October 2003.

The implementation of the new strategy focused on putting the new structure of Enterprise Estonia into operation. The new strategy and structure were introduced intensively from May 2003 to August 2003. In that process the new structure was presented to the board, employees, ministries, county elders, representatives of tourism organisations. The new structure defined:

- main functions of units with activities, responsible persons and outputs (strategic management, programme development, marketing, accounting, programme monitoring, assessment of programme impact, internal audit, personnel management, IT management, proceeding *etc*);
- job profiles and employees for them;
- customer-applicant segmentation principles;
- target groups;
- main processes.

By the end of the stage, there was an Enterprise Estonia level strategy, and of the Enterprise Estonia level Strategy Map communication to employees from the PMS structure.

Since the main objective of PMS implementation is to communicate to employees their objectives in connection with the new strategy, the second part of PMS implementation was distributed over a longer period and was dependent on how the objectives were set for units. In that stage very many training courses of different levels were conducted, integrated business software Navision with proceeding, financial and customer administration modules was introduced, the basic procedural process was updated.

In spring 2004, at the initiative of the consulting firm Ernst&Young, unit Strategy Maps were composed. This was what created a precondition for taking the next step in the PMS structure implementation – for the creation of unit objectives and activities arising from them and their communication to executors.

In brief, the general background of PMS implementation was satisfactory. "EASi lugu" (2005, p. 9) says that "all management, employees and representatives of customers and partners were involved in the strategy process for getting adequate and sufficient information from the preparation of the first strategy document of Enterprise Estonia in 2002".

During the implementation, preconditions were created for using PMS; unfortunately the shortcomings described in the PMS structure subsection of this section did not allow to communicate to executors the tasks that would have helped them give their contribution to the achievement of the objectives within the power of Enterprise Estonia. If there is nothing to communicate it cannot be communicated either.

This shortcoming left a trace on the implementation success and must be regarded as chain interruption where necessary activities leading to the achievement of objectives were not communicated to executors in the PMS implementation. Therefore, regardless of the good background, implementation remained too general.

### 4.2.4 Analysis of PMS functioning

While analysing the functioning phase of Enterprise Estonia's PMS chain it must be taken into consideration, as pointed out already in the PMS structure subsection, that the chain was interrupted where output indicators should have been, because the latter were missing, which resulted in that output indicators to be influenced by the executive party of the organisation were missing; however, the executive party had committed to achieve the outcome indicators. When the holistic chain of PMS is interrupted, PMS cannot any more support the achievement of objectives and these are most probably not achieved.

Outcome indicators are clearly out of the influence of Enterprise Estonia (*e.g.* as a result of support jobs are not created in enterprise which received a grant, it is rather a result of many other than support factors; Enterprise Estonia with its activity cannot influence the country's position in the IMD competitiveness ranking list). Output indicators had not been set. However, there were activity indicators and input indicators, but their achievement cannot be an objective in itself because these must lead to in chain the achievement of output indicators. The former can be discussed as lead indicators, not as lagging indicators.

Analysis of the PMS functioning phase cannot focus on analysing how output indicators are covered because the latter are missing in the PMS structure. Since the management had adopted outcome indicators to be achieved (and also formulated it respectively in the PMS structure), then the author of the given thesis has analysed the PMS functioning phase just from the aspect of outcome indicators: whether these outcome indicators are the content of the functioning phase, whether data are collected for them, analysed, communicated in the functioning phase, and whether adjusting activities are carried out, where necessary? The author has also analysed the functioning phase from the aspect of indicators which have actually occurred in current reports.

As an object of analysis it has been investigated whether the same measures are reflected in the opposite to annual action plans – in annual reports and current reports. If they are, then it is obvious that data are collected and presented. In that case it can be said that the first activities of the functioning phase form a chain.

However, are adjusting activities done after unsatisfactory outcomes, are these activities carried out? If yes, then it can be said that all functioning phase activities form a chain and thereby ensure the achievement of outcome indicators by the end of the strategy period.

**Reporting**

Reporting as communication of information must for the sake of chain to be present to submit information to the respective target groups on indicators set in the PMS structure, hence for the achievement of outcome indicators set as objectives.
Enterprise Estonia had the following regular reports:

- annual report that reflected the action plans of the year;
- quarterly: quarterly reports to ministry and supervisory board;
- meetings for monthly reporting: portfolio, processes, marketing and general issues.

Annual report

An action plan was made for every year early in the year, which was submitted to the supervisory board and Ministry. Enterprise Estonia`s action plan was prepared on the basis of unit action plans. Activity reports were made for the same target group twice a year based on the from-bottom-up principle.

Annual reports were prepared once a year. There are two types of annual reports: short and long.

Short reports contain the same chapters as the annual action plan. These reports are analysed from the aspect of whether the indicators are present or not.

The structure of a long report is based on units; the part concerning divisions also provides an overview of programmes. This reporting format does not reflect results of CSFs in action plans. For some units their internal objectives can be distinguished (APU; ETU), which confirm their (partial) presence, on the one hand, and not being present in other units is a sign of their non-obligatory nature.

The achievement of the target values of measures in the strategy document was not shown in the reports of 2004.

The report of 2005 compares the actual results of 2005 to target values. The consolidated report for 2005 provided actually achieved values for all measures. All measures in the report coincided with those of the action plans (table 4.2.5). Hence all outcome, activity and input indicators of the action plans were shown in the report. The report does not contain cumulative results of 2004 and 2005. Target values were achieved as follows:

- Outcome indicators 71% (15 out of 21 measures).
- Activity indicators 80% (8 out of 10 measures).
- Input indicators 0% (0 out of 1 measure).

The report of 2006 compares the actual results of 2006 to target values for 2006. The report does not contain cumulative results of 2004−2006 period. All measures in the report coincided with those of the action plan for 2006. Target values were achieved as follows:

- Outcome indicators 61% (11 out of 18 measures).
- Activity indicators 50% (5 out of 10 measures).
- Input indicators 100% (1 out of 1 measure).

The report of 2007 compares the actual results of 2007 to target values for 2007. The report does not contain cumulative results of 2004−2007 period. Target values were achieved as follows:

- Outcome indicators 69 (9 out of 13 measures).
- Activity indicators 57% (4 out of 7 measures).
- Input indicators 0% (0 out of 1 measure).

It is noteworthy that the outcome/impact indicators brought out in the consolidated report of 2005 are actual the results of 2005. At the same time, the consolidated action plan for 2007 contains a note that the effect of grants awarded in 2004−2006 is measured partly in 2007 or later. Starting from annual report for 2006, forecast values or anticipated values are provided as the achievement values of outcome indicators. This raises a question in which way the actual results of 2005 were obtained if measurement is conducted much later? The truth involved here is that because the actual results of achievement are missing it is not possible to undertake adjusting activities. Considering the achievement of all main indicators the management has committed to achieve – outcome indicators – the need for adjusting activities exists. Not knowing the actual results (that can be concluded from the note that they are measured in 2007 or later) they can neither be planned nor carried out. This does not enable to improve unsatisfactory results in the next period. Action plans do not mention improvement of the unsatisfactory results of the previous period either. Here in the PMS functioning phase the chain is interrupted where indicators are not collected and communicated, *i.e.* outcome indicators the executive party of Enterprise Estonia committed to achieve are not collected currently during the strategy period. Hence adjusting activities cannot be performed.

Actual results were published again in consolidated reports in 2007.

Current reporting

The content of current reports must relate to the achievement of annual objectives, which are monitored in the short term. They must have a clear linkage to annual objectives, in the context of Enterprise Estonia mainly to outcome indicators.

For current reporting thematic meetings were held in Enterprise Estonia with one-month step in the following issues:

- general issues,
- marketing issues,

- portfolio issues, and
- process issues.

Minutes and reports of the current report meetings contained neither programme output indicators nor strategy based outcome indicators (at least not inside directed; monitoring reports were submitted outside every six months, targeted at ministries and fulfilled as an obligation arising from the administrative agreement rather than for managerial purposes). Hence it was not confirmed possibility that although output indicators were not reflected in the PMS structure, they were monitored as a part of reporting in the PMS functioning phase. The outcome indicators the executive party committed to achieve were not the content of regular current reports either. This confirms again the above observed interruption of the chain in the PMS functioning phase in the part of data collection.

The author analysed reports *de facto* or what was actually reported currently, with the purpose to reach maybe the the so-called output indicators of content. The PMS functioning phase focused on such indicators (which according to the definition are equivalent to output indicators as they relate to programmes – products) as programme budget fulfilment. This was the recurrent content of monthly portfolio meetings. Specific reporting forms are available for these indicators. Regular reports were submitted to the supervisory board also regarding of the EU structural fond programmes support amounts. It was in principle an output indicator which was not established as an objective. It existed on neither the organisational nor unit Strategy Maps. It was not an institutionalised indicator. If to try to interpret this situation so that, for instance, when the board adopted the budget these numbers were set to be achieved and this act was superior to other strategy documents and then they started to proceed from the budget implementation, but the results achieved were modest in that respect:

- In 2004 ca 66% of the budget was fulfilled.
- In 2005 ca 66% of the budget was fulfilled.
- In 2006 ca 80% of the budget was fulfilled.

If to consider them as output indicators of content, then unsatisfactory budget implementation results were not followed by adjusting activities, including marketing (*i.e.* minutes of the marketing meeting do not show that certain programmes require more marketing), which would have led to budget implementation. In that case also a chain interruption must be admitted.

The analysis of performance-related pay implied that the incentive system of Enterprise Estonia communicated the opposite – regardless of moderate budget results they paid semi-annual and annual bonuses, *i.e.* these were not important indicators for the incentive system. This confirms that budget implementation was not a strategic output indicator although this was focused on at the operative level.

Output indicators which were within the power of the executive party of the organisation were not established in official documents, were not collected

currently, not assessed and hence it was not possible to react to them. Since these are the indicators that an organisation can set for its employees to be achieved and fulfilled, then they are important indicators for employees for providing feedback, motivating, rewarding *etc*. The fact that these were not accentuated and other (outcome indicators) were set for objectives caused tension in employees and increased staff turnover. Reasons for quitting were written in the personnel audit (EASi personalivoolavuse…, 2006) plus managers` work was assessed with neither official nor unofficial measures, or bonus was paid on other bases. This came out from a performance appraisal document of head of division. It shows the numerical indices (no relationship with the division Strategy Map) to be achieved by head and actual results. The latter were not achieved for the most; nevertheless, the chairman of the management board decided to award the maximum incentive pay.

*Summary of functioning.* Conducting the analysis it had to be taken into account that Enterprise Estonia had no output indicators in the organisation's power at the organisational and unit level, which would have been currently collected, analysed, reported in the PMS functioning phase and unsatisfactory results of which adjusting activities would have induced. Therefore the analysis focused on outcome indicators of Enterprise Estonia, which the executive party itself considered its objectives of achievement. The analysis identified an interruption in the functioning phase chain. Namely, there was no current collecting and analysis of outcome indicators in the organisation management. This did not allow to perform adjusting activities in the event of unsatisfactory results, both at the organisational and at unit level.

The most frequent indicator that was currently operatively monitored was programme budget implementation; but it had no established relationship with the achievement of strategic objectives (this measure was not linked to strategy). Moreover, modest budget implementation results neither induced adjusting activities nor influenced pay-for performance. Hence quite other things were monitored and evaluated than what would have resulted from strategy related documents.

The management of Enterprise Estonia had an obligation arising from the law to conduct risk assessment once a year. The major risks recurring from year to year were confusion with understanding and executing the strategy. Hence the difficulties pertaining to content reached the management and adjusting activities could have been launched on that spot to improve the strategy implementation.

### 4.2.5 Achievement of strategic objectives

This part analyses the achievement of action plan objectives. Strategic objectives with success factors and measures for the strategy period 2003−2007 changed significantly compared with the strategy approved for 2003 and the new objectives with success factors and measures came into annual action plans (subsection – action plans) during the strategy period.

In the consolidated report of 2005 from target values of 35 measures:

- 23 were achieved or surpassed (achievement rate 66%);
- 8 were not achieved (achievement rate 23%), and
- on 4 data were not collected, or on 11%.

The report does not contain cumulative results for 2004 and 2005. If to compare the target values achieved by the end of 2005 to those which had to be achieved by 2004 and 2005, the achievement rates are as follows:

- 40% were achieved;
- 43% were not achieved, and
- on 17% data were not available.

In the consolidated report of 2006 from target values of 35 measures:

- 16 were achieved or surpassed (achievement rate 46%);
- 12 were not achieved (achievement rate 34%), and
- on 7 data were not collected, or on 20%.

The report does not contain cumulative results for 2004−2006. If to compare the target values achieved by the end of 2006 to those which were to be achieved by 2004−2006, the achievement rates are as follows:

- 37% were achieved;
- 43% were not achieved, and
- on 20% data were not available.

The consolidated report of 2007 compares the results of 2007 to 2007 target values. The report does not contain cumulative results for 2004−2007. If to compare the target values achieved by the end of 2007 to those which had to be achieved by 2004−2007, the achievement rates are as follows:

- 44% were achieved;
- 39% were not achieved, and
- on 17% data were not available.

The last results can be considered a result of strategy implementation. Consolidated report was not prepared for the whole strategy period 2003−2007.

**Strategic objectives and CSFs achieved**

The achievement of strategic objectives of Enterprise Estonia by the executive organisation cannot be evaluated through the achievement of output indicators typical of the public sector because these are missing.

In order to still monitor the objectives related performance in general, the organisational level outcome, activity and input indicators have been summarised in the achievement of objectives as follows.

Enterprise Estonia had set weights neither on strategic objectives nor measures. To evaluate total fulfilment of objectives, the author has assessed all CSFs and measures, giving them equal weights. According to the literature managers can show "the upper part" of the scorecard better during a short period (due to the impact of incentive packages); hence equal attention should be paid to the achievement of all measures including the lower ones, the impact of which on final results is longer (Christopher *et al*., 2003). Hence the author's decision to attach equal weight to all of them.

Aggregate achievement rate of CSF has been derived from the weight to measures achieved from all CSF related measures (Table 4.2.8). For example, surpassing of the first CSF was measured with the help of seven measures, four of which were achieved, which makes the CSF achievement rate 57% (4/7).

Table 4.2.8 Achievement rates of CSFs and strategic objectives

| No of CSF | CSF | CSF achievement rate* | Weights | No of strategic objective | Average objective achievement rate | Weights | Organisational level** |
|---|---|---|---|---|---|---|---|
| 1 | Development of start-up enterprises | 57% | 33% | 1 | 52% | 20% | 37% |
| 2 | Development of entrepreneurship environment in regions | 71% | 33% | | | | |
| 3 | Tourism development | 29% | 33% | | | | |
| 4 | Conformity of programmes to customer needs | 100% | 50% | 2 | 100% | 20% | |
| 5 | Reputation and familiarity of Enterprise Estonia | 100% | 50% | | | | |
| 6 | Optimal internal processes | 33% | | 3 | 33% | 20% | |
| 7 | Competent employees | 0% | 50% | 4 | 0% | 20% | |
| 8 | Employee satisfaction | 0% | 50% | | | | |
| 9 | Cost-effectiveness | 0% | | 5 | 0% | 20% | |

*Share of measures which achieved the target value in CSF and objective measures – maximum of 100%.

**average achievement rate of objectives – maximum of 100%.

Total achievement rate was 37%. Outcome objectives were achieved partly (to the extent of 52%) (in Table 4.2.8 Objective 1) – these are out of power of the executive management. This is influenced by many other factors besides finances allocated by Enterprise Estonia: domestic and export demand, customer purchasing power, enterprise management competence, competitors' strengths, enterprise's competitive advantages, etc. Therefore the methods of collecting outcome indicators need to be updated, which by the end of the strategy period was not accomplished.

Output indicators at the organisational and unit levels did not exist and hence it is not possible to evaluate management achievements.

Additionally, one activity objective was achieved – Enterprise Estonia`s reputation and conformity of programmes to customer needs. However, since this was not derived from output indicators, it lacks actual content. The following activity and input objectives were not achieved:

- optimal internal processes;
- competent and satisfied employees, and
- cost-effectiveness.

Activity indicators (conformity of programmes to customer needs, operational proficiency, motivated and competent employees, cost-effectiveness) may still be considered being within the power of achievement of the executive party (although effect of achievement on upper level indicators – output indicators – is missing). If we now try to assess the achievement of objectives which were within the power of achievement of the executive party (Objectives 2−5 in the Table 4.2.8), then their total achievement rate would be 33%.

The very high share of unfixed measures – 17% is worth mentioning separately. 4 out of 6 measures were measured in 2004−2006 and these measures were omitted from the action plan for 2007.

### 4.2.6 Case conclusions

The achievement rates of those strategic objectives that the executive party of organisation was incapable of influencing were higher then others (Table 4.2.8 Objective 1).

Those that could be influenced were not taken as objectives. If to take activity indicators to be in the power of the executive management of Enterprise Estonia, then a 33% total achievement rate of objectives was achieved.

Analysing the causes of this situation along the PMS chain, it should be noted that the chain was interrupted in three places:

1. The chain was interrupted in the PMS structure:
   a. partial conformity of objectives to SMART criteria;
   b. outcome indicators of units were aligned with organisational, but executive party of organisation has no power to influence them;
   c. in the place of organisational and
   d. unit level indicators.

2. In the implementation phase, for the above reasons, it was not possible to communicate these strategy related objectives which were within their power of achievement to units.

3. In the functioning phase the chain was interrupted in two places:
   a. where the outcome measures of objectives assumed by the executive party of Enterprise Estonia were not regularly collected/measured, it was not possible to react to unachieved target values;
   b. where appropriate output indicators in principle were collected – budget implementation – but deviations were not reacted to and adjusting activities were not entailed.

Based on the created model, the chain was interrupted between PMS parts as follows (Figure 4.2.11).

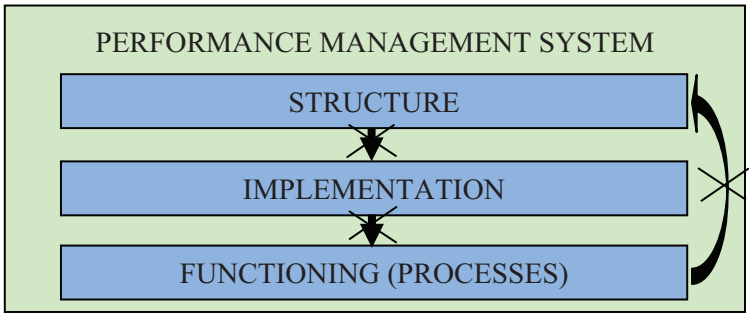



Figure 4.2.11 Relationships between Enterprise Estonia PMS chain parts

Since the achievement or non-achievement of the organisation's objectives is influenced by several factors at the same time, from which one is efficient function of PMS, then it cannot be said unambiguously that the low achievement rate of objectives was due to shortcomings in PMS only.

Taking into consideration the low achievement rates of strategic objectives achieved by Enterprise Estonia and, on the other hand, chain interruptions in the structural, implementation and functioning phase of PMS, it can be stated that it is appropriate to analyse PMS based on the chain principle. The shortcomings are indicative and the organisation can perform concrete adjusting activities to improve the integrity of PMS, increasing thereby the probability of achieving the objectives.

## 4.3 The Case of Baltika

The case study analyses PMS of Baltika from the chain presence aspect. When strategic objectives can be communicated to executors by moving along the chain in the PMS structure and activities occur currently in chain in the system functioning phase starting from data collection up to monitoring of the execution of adjusting activities, then it is more likely that the objectives are achieved (compared to when the chain is interrupted). If strategic objectives are achieved and this an analysis confirms that the chain is not interrupted, the chain approach can be considered appropriate. And contrariwise, when objectives are not achieved and an interruption occurs in the chain, and the places of interruption can be identified, the chain approach can also be considered appropriate.

The analysis investigated the presence and interrelationships of all parts of PMS and their components and their conformity to requirements (see Table 4.1.5).

### 4.3.1 Background data

The history of the Baltika Group (BG) dates back to the year 1928 when a sewing industry "Gentleman" was founded in Tallinn. Today the Baltika Group is an international fashion retail group with AS Baltika, founded on 01. August 1991, as the parent company. The company was listed on the Tallinn Stock Exchange on 05.June 1997. The group operated the retail concepts of Monton, Baltman, CHR/Evermen and Baltika Outlets (which have a total of 70 shops) and retail sales area in seven countries: Estonia, Latvia, Lithuania, Poland, Ukraine, Russia and Sweden.

As at 31. December 2002, the group comprised 10 companies and employed 1725 people. The consolidated sales revenue of the group were 26.5 million euros and net profit 1.1 million euros in 2001. The parent company`s intrest was between 50.1% and 100% (Figure 4.3.1).

Since the establishment of AS Baltika in 1991, the company has defined itself as follows:
1991 production company,
1999 clothing company,
2000 clothing company with own retail,
2001 clothing retailer with own production,
2002−2005 specialist fashion retailer.

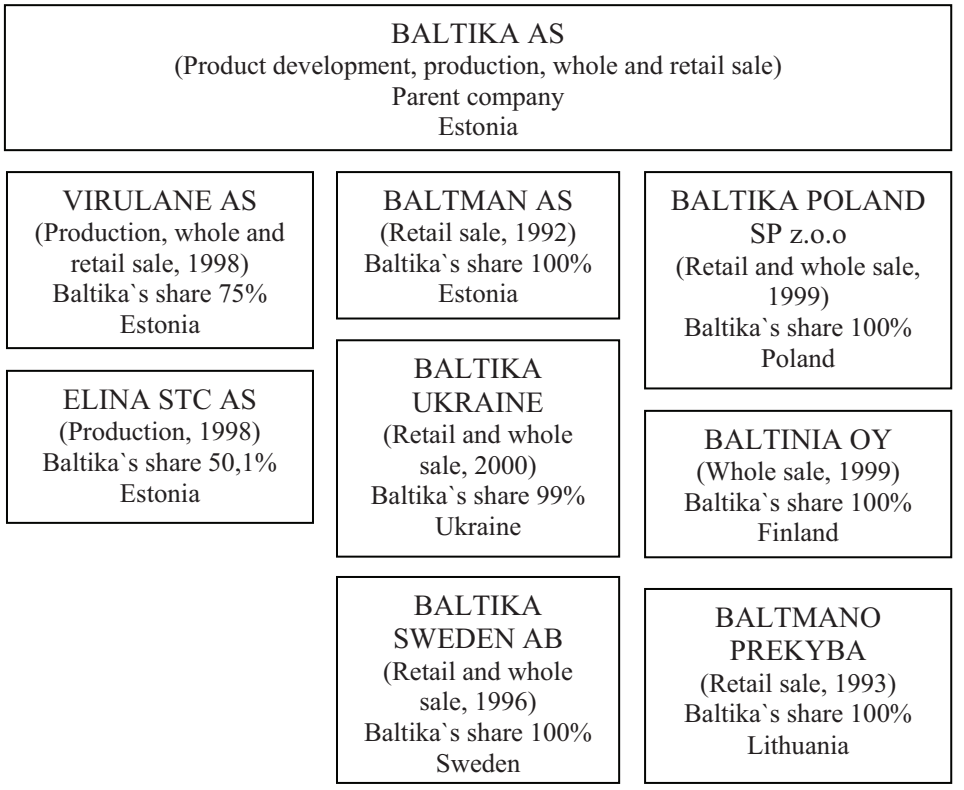



Figure 4.3.1 Structure of the Baltika Group as of 2002

The thesis analyses the strategy period 2002−2005[12]. The previous strategy period (2000−2001) had seen a very important change for Baltika – the turnaround from a production company into a retailer began. This turnaround continued in the next strategy period.

The annual report says that:

> "While the strategy for 2000-2001 attached value besides production (so far in the focus) to sales, the next strategy for the period 2002-2005 had to focus on retail. The final consumer rose to the focus". In retrospect it says that the strategic turnaround of the Group into a vertically integrated fashion retailer was completed by the end of 2005 (Annual report…2005).

The management structure of Baltika at the beginning of this strategy period is depicted on the chart below (Figure 4.3.2).

[12] In 2002, the strategy period was expected to be 2002−2004. The year 2005 was added at the end of 2004 when it turned out that some of the strategy related activities cannot be carried out in that calendar year.

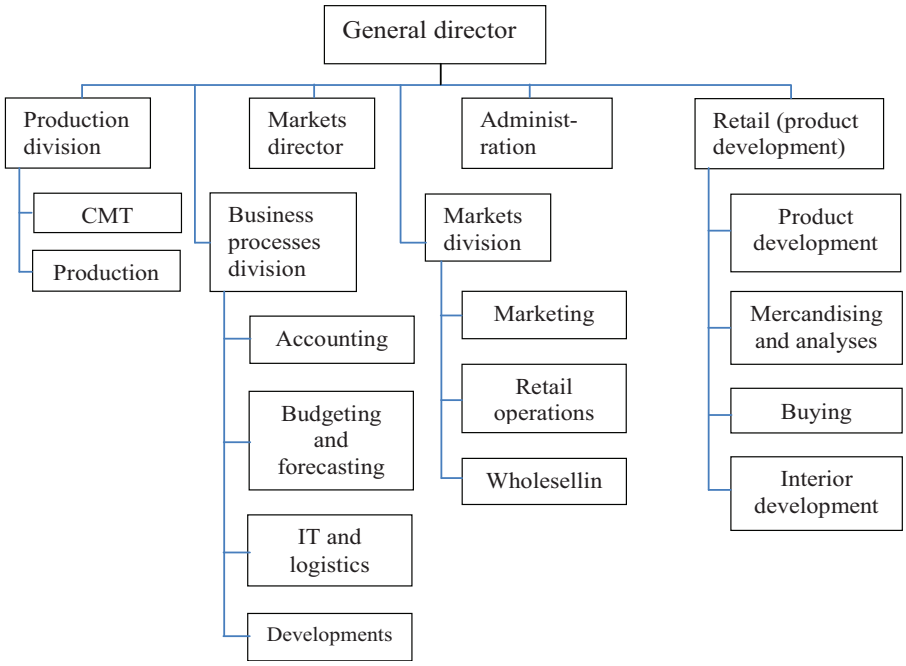



Figure 4.3.2 Management structure of Baltika in 2001

In retrospect of changes the company itself has divided the periods as follows (Annual report…2005):

- At the end of 1990s, application of a vertically integrated business model began;
- 2000 − 2001, the new strategy started to take shape gradually and this period can be called preparation for the turnaround. A new retail concept was developed;
- 2002 was the beginning of the strategic turnaround, launching Monton brand in the market;
- 2003 – year of changes. Other two concepts were renewed and the shop portfolio adapted to changes. The entire organisation was restructured according to actual profit centres. These were based on brands and retail markets;
- 2004 – improvement of supply management, restructuring of retail organisations.

### 4.3.2 PMS structure analysis

**Mission**

Mission is not a direct structural component of PMS, but it gives a strong contribution to its creation. It helps to channel the subsequent components of PMS. A mission should answer the questions who the products are targeted at, what the company wants to offer to society and its founder with its existence.

The mission of Baltika for the period under study was as follows:

> "Our mission is to offer the best solution to people to express themselves through fashion. To fulfil our mission we learn to know the needs of consumers of our clothes and offer them via high service and a convenient shopping environment a regularly updated modern, high-quality and stylish clothing. We believe that it is possible to keep the promise given to consumers only under the conditions of constantly growing value of the company and highly motivating and safe work environment."

The strategy document (2002) contained a somewhat differently formulated mission:

> "Our mission is to offer to customers fashion goods that support and supplement their lifestyle, being for them the best method of self-expression, helping our customers to feel and act in the best possible way. For our employees we want to provide a highly motivating and safe work environment. By fulfilling the mission we make sure the company value will increase constantly".

The mission of Baltika meets the PMS structural component requirements (presented above in the thesis). It opens up the organisation's course of action: "providing modern and high-quality clothes", and how to do that – "in a good shopping environment with high service level". The fulfilment of the mission is within the reach of achievement of the group. It is possible to derive a strategy from the mission, as the main activities for the fulfilment of the mission are defined. It contains references to customers, development (regularly updated, modern, high-quality, stylish clothing) and values (providing employees with a motivating and safe work environment). It is clearly explained what the company wants to offer to society and founders. Additionally, a simplified series of activities is pointed out, which must be done regularly: by learning to know customer needs offer them regularly updated, high-quality and stylish clothes at high service level in a convenient shopping environment. Also a financial aspect has been added to the mission (increasing the company value). Regarding the social and development aspects, the mission says that previous activities will be carried out if there is a motivating and safe work environment.

The next structural component of PMS is organisational strategy.

**Strategy**

Strategy is not a direct structural component of PMS either; it has, however, a strong impact on these components and chain creation. A strategy in conformity with requirements should answer the questions: "How we as organisation intend to achieve our mission?" and "How shall we accomplish what we want?"

A 5-page strategy document (2002) was written for the years 2002−2004, comprising the following parts:

1. Mission (quoted above).
2. Strategy.
3. Development of retail concepts.
4. Development of retail network.
5. Financial objective of strategy.

The strategy part of the documents says:

"The principal strategic objective of Baltika is to grow into a leading specialised fashion chain in Central and Eastern Europe by 2004, be a choice preferred by our consumers thanks to regularly updated fashions, high quality and professional service. Our objective is to win the confidence of our customers and achieve that they perceive the brands operated by us as security of being fashionable".

An efficient strategy has to:

- contain events influenced by the organisation;
- enable to derive activities needed for the implementation of the strategy with a one-year time horizon;
- enable to derive strategic objectives from these.

Based on the simple series of activities formulated in the mission and the Success Model created by the author of the given thesis, it may be concluded that the strategy contains events that Baltika is able to influence and enables to derive activities from them. The next part shows that strategic objectives are derived from the strategy.

Here the author thinks it is important to describe the situation where the company was in that period and which had affected its strategy and PMS. As said, it was the first strategy period after such an important change in operating activities. The change – from production company to a fashion retailer – was cardinal and one strategy period is too short for completing such a change; and if to use the concept of constant learning, it is continuous. Fashion trade demanded, first, a higher level of cooperation than so far, because the fashion creation-purchase-marketing and sales cycle demands intensive co-contributing from different units, and secondly, special attention to supply management, because as demand for fashion goods is very difficult to forecast, goods remaining on hand demand rapid reaction. Therefore the inventory related issues obtained a special significance in the PMS

structure; additionally the imminence of contingencies involved in changes and need to react quickly brought to PMS more informality and less documentation.

Although many external consultants were involved, the company preferred to create solutions themselves instead of outsourcing. Self-creation must be taken into account also in the case study, since terms used in the area may not be used in self-creation and therefore the author of the given thesis needs to use content analysis for searching for classical PMS components, because the components may be under different names or quite in a different form.

Although the previous strategy period was regarded as preparation, the above – short lifecycle of goods – involved in this period for many units cardinal changes in the essence of operating activity and in basic processes. There were a lot of informality and adaptation to new conditions, which continued in the next periods when the major documentation of what needed to be done occurred.

The strategy of the period analysed was focused on the following stage in the operating activity change process: development of concepts and retail network.

The author also thinks it is important to underline the following aspect. Baltika has constructed the so-called Success Model (the author's term). In many enterprises the central part of PMS is for instance BSC, but Baltika had created their own Success Model for that purpose. In the same way as BSC presents connections between certain areas, which ultimately, in mutual relationship, influence the final result of the organisation, the Success Model contains the related factors/areas that influence the final result of Baltika. Factors were identified in the Success Model and the approach on what the company' success depends was revealed there. Success was considered to be the achievement of sales revenue and profit shown as an objective and therefore the Success Model is also monetary focused. The focus in the Success Model was on increasing sales revenue via increasing retail area in various regions (countries and cities). Keeping the costs under control (variable costs per unit and fixed costs per function) at the same time, the co-effect of these factors would ensure the intended profit. The strategy of Baltika was focused on the implementation of this Success Model with an emphasis, due to this period's strategy, on retail network development. The 12 indicators arising from the Success Model systematically identified what the success most depended on. The Success Model will be discussed in greater detail in the next part of the case study.

The concretisation of the strategy is conducted by deriving strategic objectives from the strategy.

**Strategic objectives**

The mission and strategy have an indicative role in the development of strategic objectives, which themselves are direct structural components of PMS.

Taking into account the distinctive features within the reach of achievement of public and private organisations, it must be admitted that private sector organisations, unlike the public sector, must have everything they want to achieve

within their power of achievement. Therefore there is no need to differentiate the objectives of the executive management from strategic objectives, because everything must be for the management to achieve, all strategic objectives must be in the management's power.

Three objectives were fixed as strategic objectives for the period 2002−2005:

1. double sales revenue by 2005;
2. triple profit in the period;
3. ROE at least 15%.

Looking at these objectives we can conclude that the first two are lead objectives and the third an lagging objective (under the assumption that equity volume will not be changed).

There were no other strategic objectives. However, early in every year sub-objectives were set for that year. In 2002 they were (Annual Report…2002):

1. to accelerate the growth of sales in comparison with the year 2001 by 22% and to increase the share of retail sales to 50% of the total sales;
2. to launch a new international fashion brand;
3. to prepare and launch a new retail concept (portfolio of retail brands) to segment the markets.

The following sub-objectives were set for 2003(Annual Report…2003):

1. to improve the efficiency of operation of retail sales space;
2. to reduce the percentage of old (older than one season) inventories in the system;
3. to increase sales revenue (particularly in the retail system);
4. to ensure and strengthen positive cash flow.

The sub-objectives for 2004 were(Annual Report…2004):

1. increase sales efficiency (sales growth per $m^2$) 8%;
2. open new retail space and close less profitable ones;
3. improve the retail system operating expenses to total revenue ratio;
4. improve the 1st price marginal (compared to 2003/1) 2004/1−5%, 2004/2−7%;
5. improve the discount rate (compared to 2003) by 1.2% from 17.9 to 16.6;
6. loss in Poland maximum 5 million kroons;
7. growth in production costs 1.6% (1.8 mln kroons);
8. growth in general management costs 0 (compared to 2003);
9. stronger based to finance the growth of group;
10. system of measures to support conduct of profit centres in the interest of BG future results;
11. better inventory management:
    a. inventory turnover rate 3.5;

b. the amount of old inventory not more than 10%;
c. channels for realising inventories;

12. keep up wholesale level (2003);
13. profitable realisation excess production capacity;
14. growth in advertising costs not more than 2%.

Sub-objectives for 2005 were (Annual Report…2005):

1. increase in retail sales at least 20%;
2. increase in retail sales efficiency;
3. increase in gross margin;
4. well managed operating expenses.

Looking at the sub-objectives it must be admitted that these are, analogously with the strategic objectives, quite monetary focused. Considering that the strategic objectives of Baltika are too general, sub-objectives show on the achievement of what the focus should be in that year to achieve the strategic objectives. Based on the strategic objectives of Baltika, every sub-objective must contribute in a more direct or indirect way either to increasing sales revenue, decreasing expenses (or keeping under control), or both. Sub-objectives are clear, but some of them still need deployment, because they are difficult to relate to specific executors for implementation. For example, many different functions contribute to the achievement of sub-objectives "sales efficiency growth" and "improve retail system operating expenses to total revenue ratio". From the chain aspect it is important that sub-objectives were aligned to executive units (must be learnt while analysing unit objectives) and in the PMS functioning phase reporting against them would occur (must be learnt when analysing PMS functioning).

These sub-objectives can be regarded as *effort* objectives the achievement of which must lead to the achievement of *result* objectives (strategic objectives) by the end of 2005.

Strategic objectives must, for the PMS continuity, meet the SMART conditions. For that purpose the author has analysed the conformity of Baltika's strategic objectives to these conditions (Table 4.3.1):

- Specific.
- Measurable.
- Accurate.
- Realistic.
- Time bound.

Table 4.3.1 Conformity of strategic objectives of Baltika to SMART conditions (compiled by the author)

| **Criterion**<br><br>**Objective** | **Specific**<br>Unique or distinctive | **Measurable**<br>Described with numerical and/or quality indicators | **Accurate**<br>Avoiding generality and vagueness | **Realistic**<br>Achievable in these conditions | **Time bound**<br>Specifying the deadline of achieving the objective |
|---|---|---|---|---|---|
| 1. Double sales revenue by 2005 | Meets the criterion (1) | Meets the criterion (1) | Meets the criterion (1), but subsequent plans must specify which units and on what will focus | Meets the criterion (1), but subsequent plans must reveal where the growth comes from | Meets the criterion (1) |
| 2. Triple profit in the period | Meets the criterion (1) | Meets the criterion (1) | Meets the criterion (1) | Meets the criterion (1), but subsequent plans must reveal where the growth comes from | Meets the criterion (1) |
| 3. ROE at least 15%. | Meets the criterion (1) | Meets the criterion (1) | Meets the criterion (1) | Meets the criterion (1) if the two preceding strategic objectives are achieved | Meets the criterion (1) |

Assessing the conformity of every objective to every SMART criterion at 1 point, the total number of points would be 15 or 100% (maximum 3x5). Attention should be paid to deployment of revenue and expenses objectives to units, for the implementation.

In brief: all objectives meet the SMART criteria and so far we can speak of a functioning chain in the PMS structure (Figure 4.3.3).

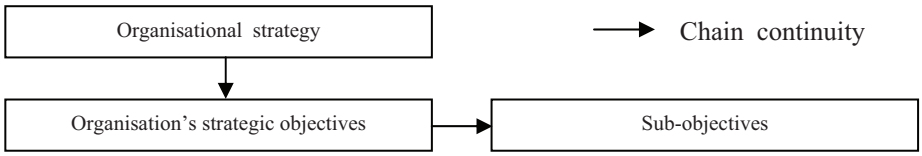



Figure 4.3.3 Birth of strategic objectives at Baltika

The next step is the horizontal move in the chain and CSFs and KPIs with target values are derived from strategic objectives.

**CSF, KPI and target values of strategic objectives**

It is the task of CSFs of every strategic objective to specify the objectives through factors that most influence the achievement of the objective and derive KPIs (measures) with target values from them. Success factors can be regarded as recommended structural components of PMS, with the help of which KPIs that monitor the achievement of the objective are channelled. KPIs with target values can be considered obligatory structural components of PMS. They help to learn to know whether the objective was achieved or not through a certain value.

Although CSFs are recommended structural components of PMS, they should be present considering the specific nature of the strategic objectives of Baltika. Namely, the objectives of sales revenue increase and keeping expenses under control in an important growth phase depend on very many factors and contributions of units/functions, and on the other hand, influence many qualitative indicators of Baltika and *vice versa*, therefore there must be a more specific focus.
The strategy document does not contain structural components of PMS by this name. Next the author analysed the strategy document contents, since regardless of the name they may be present and/or other parts of the document fulfil the role of success factors.

The strategy part of the strategy document contains six items – can these be regarded as success factors? It writes that the objective ahead of Baltika can be achieved:

1. with the help of fashion offers targeted at different consumer groups, which will be achieved by *developing effective and active retail solutions;*
2. by rapidly and creatively combining consumer information and global fashion trends *in product development*;

3. with the help of a vertically integrated business model, which enables to apply *contemporary logistics solutions* to provide consumers with a new fashion after every two weeks and high level availability of goods;
4. by investing in BG owned production companies, ensuring flexible production with *short production times* to satisfy consumer needs;
5. with *strong retail organisations* in BG destination markets, which ensure fast and effective implementation of BG strategies and tactical solutions;
6. with a work environment oriented to versatile professional development *of employees.*

The task of success factors is to concretise the strategy. These must be surmounted as a result of purposeful activities. The criteria of success factors are:

1. they are in the limits of the existing activity areas of the organisation;
2. they have a clear connection to the strategic objective;
3. they are expressed in qualitative terms, not expressed in quantitative terms;
4. they are clear, short, not contradictory, unambiguous.

Do these 6 items meet the criteria of success factors?

- They all meet the first criterion.
- Based on the second criterion, they are not directly related to any of the strategic objectives. It may be said however that more directly or indirectly they influence earning income and keeping expenses under control. In what way are these success factors related to sub-objectives? It must be admitted again that they can be linked to any of the sub-objectives specifically. They rather exert a co-effect on different sub-objectives. For example, all the so-called success factors can be regarded as CSFs of sub-objective "sales efficiency growth".
- They are all expressed qualitatively, quantitative expression is missing.
- From the aspect of clarity and preventing different interpretations, they rather do not meet the requirements. First, an interview with the business processes manager revealed that for example the term "strong retail organisation" caused confusion in the company, since it was not defined adequately. Secondly, they are too general (need to be specified).

In brief, it may be concluded that although they are much more specifying the areas of activity than strategic objectives, they are too general because of nonconformity to the last criterion, and hence they cannot completely fulfil the role of success factors.

At the same time, they draw attention to the areas where activities must be done. What are they drawing attention to then? They underline retail development, the importance of product development, logistics and short production time. The author is of the opinion that they hint to the existing mission and Success Model. Namely, product development that takes into consideration consumer wishes and

fashion trends creates products which are channelled into its retail network through fast production or procurement, modern logistics solutions and as a result of which consumers make their purchases. All this happens smoothly when employees are professional.

The lack of detail in the so-called 6-items is compensated by sub-objectives. Although these have a different role than success factors, looking at the sub-objectives their effect is ambiguous: either an increase in income or keeping expenses under control; and on the other hand, considering the specific nature of Baltika's strategic objectives, it may be concluded that just sub-objectives draw attention to something more detailed, and therefore it might be concluded that these help fulfil the role of success factors, being sub-objectives by name. However, do they meet the criteria of success factors in other respects?

- They are within the limits of the organisation's areas of activity.
- They lack direct connection to strategic objectives, which exists indirectly, because every objective exerts influence on income and/or expenses of Baltika.
- They cannot be presented qualitatively, but only quantitatively.
- They are clear, short and not contradictory.

In brief, it can be said that the so-called 6-items and sub-objectives together fulfil the role of success factors. A common shortcoming of both is that they are not directly connected to strategic objectives. But it is still perceptible and to sum up, they help to channel strategic objectives.

KPIs are obligatory structural components of PMS. It is important that every strategic objective of Baltika has KPI (*e.g.* sales objective − monitoring of sales revenue), as well as target values (*e.g.* sales revenue objective – double growth). Also every sub-objective has KPIs and target values.
So far we can speak of the presence of chain in the PMS structure (Figure 4.3.4).

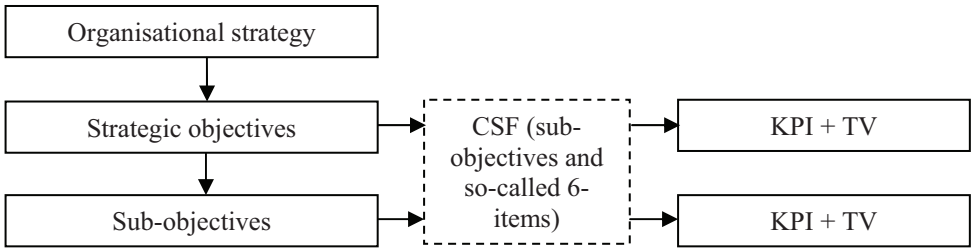



Figure 4.3.4 PMS structure to strategic objectives' CSF and KPI (including sub-objectives)

It may be argued in brief that although success factors did not exist directly and their role was borne by other parts of the strategy document, their objective having been divided between the two was achieved. Objectives' KPIs with target values were directly and fully present.

**Description of the Success Model**

The strategy of Baltika is tied to Success Model. The Success Model is a central part of Baltika's PMS. In the Success Model structure created by Baltika we can see the factors that ultimately lead to the achievement of strategic objectives: doubling of sales revenue and tripling of profit. These factors will be influenced by units during the strategy period, which set for themselves respective objectives via sub-objectives. The Success Model was based on Goldratt's Theory of Constraints. According to this theory, performance indicators for most companies – net profit (NP) and return on investment (ROI) can be related to each other as follows (Olek, 2002):

$NP = T - OE$ and

$ROI = (T - OE) / I$

where *NP* − *Net Profit;*

*T* − *Throughput* or revenue *(R)* – total variable costs *(TVC);*

*OE* − *Operating Expense.* Are formed of all expenses necessary in order to keep the system in work;

*ROI* − *Return on Investment*;

*I* − *Investment*. Largely coincide with balance sheet assets (including inventory) used in accounting.

**Sales revenue creation as an objective in the Success Model**

A central part of the Success Model was sales revenue growth by increasing retail space. When the implementation of strategy for the underlying period began Baltika had X shops with the total area of Y $m^2$, which produced in total Z euros of retail sales revenue. Here we can speak of average sales per square metre or Z/Y (€/$m^2$). Subtracting the production or purchase costs of goods from the sales revenue, the result was the additional value 1 that can be expressed also through the sales revenue to cost of goods ratio. If to the subtract expenses of shops (which can be expressed also per $m^2$) from the additional value 1, the result is the additional value 2.

To achieve the strategic sales revenue objective by the end of 2005 at the same per $m^2$ sales, the square metres had to be increased by Y+ $m^2$. Such a calculation could have accurred in 2002 when they knew how many square metres more they needed at average indices to achieve the intended sales revenue by the end of 2005. The missing $m^2$ difference had to be covered by investments during the strategy period: first in shop installation, goods displayed and in training of employees. In a new region, a relevant advertising campaign had to ensure the familiarity of trademarks. All this was preceded by a search for a suitable shop area in a region with high purchasing power. An interview with the business processes manager showed that this objective was not anonymous *(e.g.,* simply 3 new shops are set up. There was a list of possible new shops during objective setting). The objective was to search for them and if no appropriate ones were found, there was no obligation to open them,

because alternative was to increase sales efficiency more then it was planned in the beginning.

On the whole: to achieve the strategic profit objective by the end of 2005 it was necessary to ensure the same sales revenue per square metre, increase the amount of square metres, ensure the same additional value per unit, the same expenses of shops per square metre and keep operating and financial expenses under control.

The second part of the Success Model was more explicit.
Based on its strategy and business model, Baltika relies most on retail sales. This is more profitable than wholesale and subcontracting production. The second place is occupied by wholesale, the third by other sales (Figure 4.3.5).

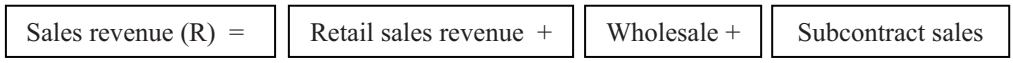



Figure 4.3.5 Sales revenue creation

Retail sales revenue are created in several different ways and depend on the interaction of several factors, for example:

- average sales price x quantity sold, or
- average sales per store x number of stores, or
- average sales per area sq.m x sales area (sq.m), or
- average purchase (€/transaction) x transactions per visitor x visitors, or
- sales in first price net - discount amount, or
- sales in first price net x average discount, or
- sales per loyal client database x number of loyal clients, or
- sales per option x number of different options.

These equations are mathematically correct and ensure sales revenue, but based on their character, they are not sufficient for setting an objective for one unit only (too general) since an unit is not directly able to influence them. For that purpose they need to be deployed and this deployment should be expressed in documents, first of all, based on the organisation strategy, in unit objectives.

**Profit generation as an objective in the Success Model**
By subtracting from sales revenue the production or purchase costs of goods sold, the result is the additional value 1.
Cost of Goods Sold is equal to Sales revenue x 1− actual margin (P.S. margin = Gross Profit/sales revenue);
Cost of Goods Sold is formed of the sum of the following costs:

- service costs;
- costs of materials;
- additional costs for purchase of materials;
- write off costs of goods;
- costs of unused equipment capacity.

The purchase price of goods sold when purchased is formed from:

- purchase price;
- additional costs by purchase;
- potential service costs (for example ironing);
- goods write off costs.

Gross profit is generated from the additional value 1 by subtracting operating expenses. Operating expenses are formed of the operating expenses of shops and markets, personnel expenses, customs expenses, rent, depreciation, training expenses. They are recorded by units and expense by rows, countries and regions, and shop per square metre. The latter are formed of shops operating expenses, personnel expenses in retail, depreciation and other expenses.

Net profit is calculated by subtracting from or adding to gross profit the difference between financial revenues and expenses, property revaluation and taxes. Financial expenses arise from foreign exchange gains and losses and interest expenses. The latter arise from various factors. The main is the inventory turnover: the bigger the inventory circulation, the shorter the cash is tied up in inventory and the smaller the interest expenses.

When earning revenue is an objective in the implementation phase for units influencing the revenue (responsibility centres) and when expenses are, resulting from the annual budget, set as an objective for units, and that is currently monitored and adjusted, then the preconditions for the achievement of objectives are provided.

The Success Model contains 12 measures:

1. Sales revenue.
2. Retail square metres.
3. Sales revenue per retail square metre.
4. Value added rate.
5. Total residual income.
6. Residual income per sales area unit.
7. Delay penalty.
8. “Cash tied up in chain”.
9. Weighted cash tied up in chain.
10. Age-specific inventory.
11. Outcome of production unit or “profit”.
12. Outcome of sales unit or “profit”.

Additionally the Success Model contained monitoring of the operating expenses across market organisations and brand teams as units and as well as expense rows.

Knowledgeable and balanced implementation of both parts of the model had to ensure implementation of the strategy and desired results.

Strategic objectives, sub-objectives and the Success Model are interrelated in a way that the Success Model identified the factors sales revenue and profit depend on,

and the strategic objectives gave them target values that had to be achieved in the strategy period (Figure 4.3.6).

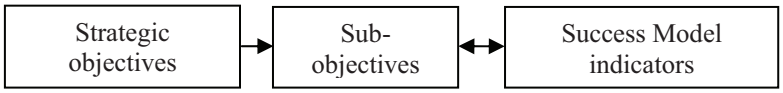



Figure 4.3.6 Relationships between objectives and the Success Model

Sub-objectives specified where to focus more attention in the current year. The relationship between sub-objectives and the Success Model was mutual. Sub-objectives being also relatively monetary based, were presented in the "Success Model language". Both objectives established/enforced the Success Model content to the executors.

**Unit objectives**

Moving on in the PMS structure from the organisational level to the unit level, the next structural component of PMS after strategic objectives, CSFs and KPIs are unit objectives. The movement from the organisation's strategic objectives to unit objectives can be discussed as a vertical movement along the chain. For the chain continuity these must be derived from the organisation's strategic objectives.

The objectives of Baltika must be analysed in two parts: first, revenue and expense objectives to units, based on strategic objectives and then how the integrated level sub-objectives reach units.

All units of Baltika should have objectives the achievement of which will ensure the achievement of sales revenue and profit objectives, which is the basis for achieving strategic objectives.

But is it possible to say that all units have got themselves objectives from the strategic objectives at organisational level?

Baltika had a consolidated income statement for the strategy period 2002−2005, which revealed doubling of sales revenue and tripling of profit. When the strategy was prepared (in 2001) it existed only at the organisational level and before every new financial year turned into an aggregated budget, being formed of revenue and expenditure budgets of all units of Baltika. It may be argued therefore that when the units of Baltika had their own budgets and their implementation was set as an objective, then all units had got for themselves (monetary) objectives derived from the organisational level, or there was alignment between strategic and unit objectives (Figure 4.3.7).

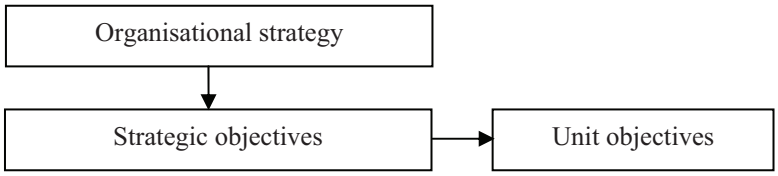



Figure 4.3.7 PMS structure after unit objectives (alignment of strategic objectives)

Since Baltika had also more explicit sub-objectives, then in addition to units revenue and expense objectives they had to get some of these. It was important to have those objectives since units start acting for their achievement during the strategy period. Key activities are derived from them. Baltika's revenue and expense objectives are too general for that.

Deployment between executive units is needed also for such sub-objectives for the achievement of which several units contribute together. For example, one of the sub-objectives in 2004 was "rise in sales efficiency". This concerned the product development unit, which should offer clothes desired by customers, production/purchase in product quality, retail sales in sales activity.

For the chain continuity it is important that the (biggest) units affecting the group revenues and expenses had sub-objectives documented:

- Retail division influencing revenues, by countries and brands;
- On the expenditure side, production, retail sales, purchase division, logistics, brands, support functions.

However, whether and what were established to units in documents from other objectives, were these derived from the organisational level sub-objectives?

The document analysis showed that every unit currently got objectives for the next year. A planned activity, who orders the activity (in the company), deadline, potential impact of the activity on the company (either preconditions for earning revenue and/or reducing risks and/or efficiency growth and/or expenses and saving money) were fixed for every objective.

For example, organisational level sub-objectives for 2003 were:

1. Increase the efficiency of operating retail areas.
2. Lower the share of old inventory (older than 1 season) in the system.
3. Increase sales (primarily in the retail system).
4. Ensure and reinforce positive cash flow.

21 sub-objectives were derived in the document for the achievement of these organisational sub-objectives, which later were linked to executive units. The first six of them are listed below:

1. To specify brands` positions and "lead" every brand`s result separately (general director, retail, product development, buying, interior development, market director, marketing, retail operations, wholesale).
2. To create targeted client programmes for all of the brands (market director, marketing, retail operations, wholesale).
3. To evaluate the shop location of new conceptions and make the necessary amendments (retail, product development, buying, interior development, market director, marketing, retail operations, wholesale).
4. To raise the market organisations` responsibility for the results (general director, retail, product development, buying, interior development,

business processes, accounting, budgeting and forecasting, IT and logistics, developments).

5. To solve the "Russian problem" of overdue debt (general director, market director)
6. The preparation and marketing of renewed CHR/EV and Baltman concepts (retail, product development, buying, interior development, market director, marketing, retail operations, wholesale).

In terms of processes, the integrated level objectives reached units as activities during which the general director and unit manager together derived tasks for the unit, how the unit can contribute to the achievement of the organisational level sub-objectives.

The documents analysed evidenced that different approaches were used in different years. The objectives for 2002 were linked more directly, the connection between the organisational level sub-objective and unit objective was direct there. For example, the logistics area received the main tasks from the organisational level sub-objective "Prepare and launch a new retail concept", which had to be carried out for the implementation of the strategy project:

1. Describe the schedule of different collections.
2. Specify and present logistic characteristics and other more important terminology in organisation.
3. Describe work tasks of employees in the division.
4. Establish principles of international structure.
5. New maintenance training for different units.
6. Monitor the suitability of existing information system and the strategies of Baltika.
7. Baltika's purchase policies.
8. Current reports of divisions.

So far we can speak of a functioning chain where sub-objectives at the organisational level reached the executive units (Figure 4.3.8). It should be noted that in different years it happened sometimes more directly, sometimes more indirectly.

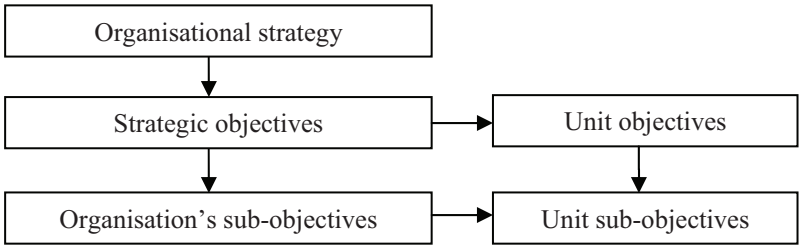



Figure 4.3.8 PMS structure after units' sub-objectives (alignment of sub-objectives)

Units' sub-objectives can be regarded as effort objectives, the achievement of which will lead to the achievement of units' result objectives: achievement of revenue and expense objectives.

**Unit action plans**

An objective of strategic action plans according to Waal (2007) was: "to describe the activities that need to be executed in order to achieve the strategic objectives and reach measurable performance improvement". Action plans should translate long-term orientation of strategy into realistic and implementable short-term activities. From the latter the unit action plans should be derived, which would describe the activities that the unit will undertake in that period to achieve short-term objectives.

An action plan has an important role in practice. Waal: "translating strategic plans into short-term action plans proves to be the main difficulty. Strategic plans do not sufficiently focus on the concrete actions to achieve the strategic targets, and the link to the short term (*i.e.* the budget) is often obscured".

Hence, a task of the strategic action plan is to describe activities which in the event of implementation lead to the achievement of strategic objectives and measurable improvement of performance. Short-term activities will be derived from them to units, which must be linked to unit objectives derived from the organisation's strategic objectives.

The presence of an action plan is significant in the case of Baltika, because financial objectives are relatively general and their achievement (especially revenues) presumes a series of activities. For example, how many shops will be opened in shopping centres in a new year – this will increase sales revenue, gross profit and thereafter also net profit. Action plans must combine sub-objectives, activities, inputs available at the level of Baltika.

An analysis of interviews and documents revealed that there was no document by that name. At the same time, it was identified that a written action plan was replaced by certain regular activities. This is associated with the informal approach dominating in the company. Baltika had centrally established uniform forms on the basis of which half-year plans had to be made and submitted. These were made twice a year. For instance, these items at the market level were:

- developments;
- overview of competitors' activities;
- number and area of shops;
- sales efficiency of brands;
- operating level objectives per $m^2$ and turnover.

These plans and reports do not meet the criteria of a classical documented action plan; but occurring as sets of activities with a six-month step from subsequent period`s activities they could, in the author's opinion, be sufficient for the purpose of focusing and fulfil the role of an action plan.

**CSF, KPI and target values of unit objectives**

Unit success factors cannot be regarded as obligatory structural components of PMS. Their role is to aim focus at something specific for the achievement of an objective. When revenue and/or expense objectives were set for units, they also needed success factors, because there are many ways to increase sales revenues and CSF helps to set a focus for that. It was noted above that success factors were not directly present at the whole level, but they existed indirectly (under other names) enabling connection to units (for example, to retail sales, product development, logistics and production). In general, unit success factors should be derived from unit objectives and not so much from organisational level success factors. Did the so-called success factors at the level of Baltika reach the units or were the unit success factors derived from unit objectives? This is clarified by analysing unit objectives and success factors together.

Here we should discuss separately success factors, measures and target values of objectives derived from revenues and expenses objectives and sub-objectives.
When units have their own budgets, their total revenues and expenses can be regarded as KPIs of sales revenue and profit objectives with target values. These objectives had no success factors.

Sub-objectives were present at the whole Baltika level, which helped the strategic objectives to focus on something more specific. Sub-objectives were also present at the unit level. Did they have success factors?

An analysis of interviews and documents revealed that components by name of success factor were not used in the documents or practice. Have some other components, for example, unit sub-objectives, analogously with the organisational level, fulfilled the role of success factors? The author tries to answer this question below.

In addition, the unit level critical success factors must meet certain criteria:

1. are within the limits of the existing areas of activity of the unit;
2. have a clear connection to unit objectives;
3. are expressed in qualitative terms, not expressed in quantitative terms;
4. are clear, short, not contradictory, unambiguous.

Based on the analysis of unit sub-objectives, it can be said that all sub-objectives meet the first criterion. The connection to the second criterion varied by year – in some year it was more direct, in some other more indirect. Sub-objectives are expressed quantitatively because of having measures and target values. They are clear and unambiguous.

As they meet most of the four criteria (3/4), it may be concluded with some reservation that unit level sub-objectives partly fulfilled also the role of CSFs. The answer to the above raised question which they are more derived from (either the

Baltika level success factors or unit level objectives) is rather in favour of the latter because the same objectives were the substitute for success factors.
Taking into account the unit objectives derived from the Success Model, which, typically of the success factors, draw attention to something important, a conclusion can be reached that although CSFs were directly not present this role was fulfilled by several other parts of the strategy. Unit objectives have measures and target values.

So far we can speak of an uninterrupted chain where objectives derived from the organisation's strategic objectives with measures and target values have reached units (Figure 4.3.9).

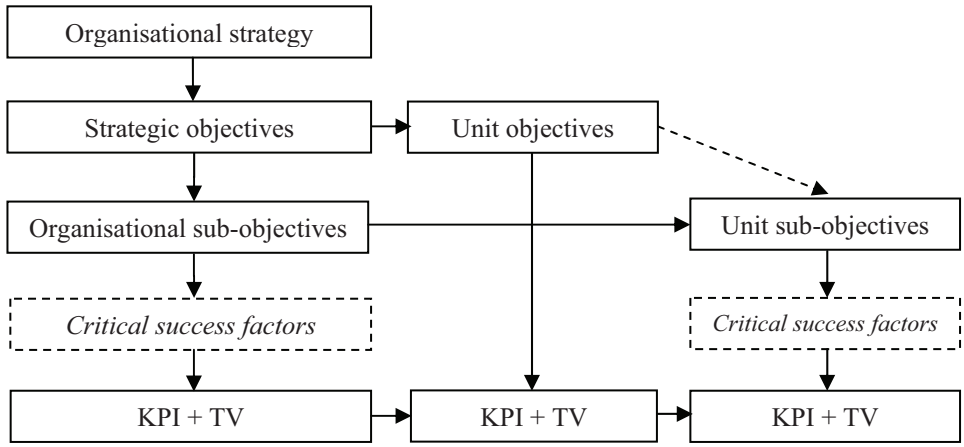



Figure 4.3.9 PMS structure after unit CSF, KPI and target values

The following was taken into consideration when reaching the unit level at Baltika (from the interview): "Our attitude has been that: if to define from a higher objectives more detailed sub-objectives to units, they often reach local measures which may contradict the overall result. For example, the cost of a standard minute in production was an important indicator of production effectiveness (the cheaper the production, the greater the profit) – as a result, continuous production was set for an objective – even when there was no need to produce anything. *I.e.*, goods that nobody wanted were stockpiled and sold later at discount prices or written off – the result was negative effect on total net gain. Hence we preferred to explain to units how they influence total result instead of defining for them their own measures. When a local measure was given to units, a more general measure was always more important, which this unit had an effect on but which was not for them to influence 100%".

To achieve unit objectives they have to currently do certain activities which together form the key process.

**Key processes and output, activity and input KPI**

Unit objectives derived from organisational strategy cannot be achieved in the short term (otherwise the objective can be achieved and the organisational strategy executed immediately). For that purpose units need to constantly carry out/perform some activities throughout the strategy period, as a result of which they should achieve the unit objective. These (development) activities form a process and when this process will lead to the achievement of unit objectives measured by the target value of measures, then it is the (development) *key process.* Key processes must be aligned from measures of unit objectives. Because the strategic revenue and expense objectives of Baltika are too general, the key processes must be derived from the measures of unit sub-objectives.

For example, sub-objectives in 2004 were linked to the opening of new shops, updating of logistic solutions, better management of inventory. Therefore the key process of a regional sales division should contain activities that help to increase sales revenue. The product development division should have a key process which contains activities to produce more clothes to the liking of the target group. The development division should choose new regions where to increase shops area. The market division should increase popularity in new regions. Key processes in divisions classified as cost centres should lead to how more outputs in their area could be produced at the same input expenses.

In practice, it was the competence of every unit manager to define the key processes. There were no documents where this should have been formulated. However, some unit managers themselves made suitable instruments for the management and a better overview of their unit (*e.g.* flow diagrams, schedules) with more detailed descriptions of activities.

Surpassing of the key process success factors is characterised with the help of process (or already activity) key performance indicators/measures, which are divided into those characterising inputs, activities and outputs. *Inputs* must be sufficient for *activities* the *outputs* of which ensure surpassing of the effort success factors, which in turn ensure that measure target value of the (effort) objective is achieved. Inputs determine the resource necessary for the achievement of objective, or a connection between PMS and budgetary funds for strategy execution is established. But input need not be a resource measured only by monetary.

Has Baltika established three kinds of measures for every key process: output – activity – input? Documents on this part were few, but there was still a document at the unit level which revealed that Baltika assigned unit tasks on the basis of:

- task description;
- task outputs;
- resources.

Interviews implied that in real life the objective and activity needed for the achievement of this objective were defined automatically, because most of the unit managers had been working at the company for years and therefore the conformity

of resources needed for activities was easy to provide. However, there were cases where inputs had to be increased currently to achieve the result – then such allotments were made in order to achieve the objective. It can be concluded here that the objective and resources needed for the achievement of this objective were related.

Despite the small number of documents, it can be said in brief about key processes that key activities for the achievement of unit sub-objectives were essentially defined based on resources needed for the implementation of these activities.

For the *assessment of PMS structure* of Baltika, the author relies on the previously created model. The table below evaluates the obligatory PMS components from the aspect whether they are present or not; when they are present, whether they meet the requirements for the respective component essentially and the component's impact on chain (Table 4.3.2).

Table 4.3.2 Conformity of Baltika's PMS structure to the created model

| WHOLE LEVEL COMPONENTS | PRESENCE | CONTENT CONFORMITY | EFFECT ON CHAIN |
|---|---|---|---|
| (O) Strategic objective | YES | Conform | Chain is continuous |
| (R) Result CSF | YES, not defined which | Conform indirectly as so-called 6-itmes and sub-objectives | No effect on chain |
| (R) Effort CSF | | | |
| (O) Key performance indicators (KPI) + | YES | Conform | Chain is continuous |
| (O) Target value (TV) | YES | Conform | Chain is continuous |
| **UNIT LEVEL** | | | |
| (O) Strategic objective | YES | Conform | Chain is continuous |
| (R) Result CSF | YES, not defined which | Conform indirectly as so-called 6-items and sub-objectives | No effect on chain |
| (R) Effort CSF | | | |
| (O) Key performance indicators (KPI) + | YES | Conform | Chain is continuous |
| (O) TV | YES | Conform | Chain is continuous |
| (O) Key process | YES | Conform indirectly | Chain is continuous |
| (R) Effort CSF | Did not search | - | No effect on chain |
| (O) Output KPI + | YES | Conform | Chain is continuous |
| (O) TV | YES | Conform | Chain is continuous |
| (O) Activity KPI + | YES | Conform | Chain is continuous |
| (O) TV | YES | Conform | Chain is continuous |
| (O) Input KPI + | YES | Conform | Chain is continuous |
| (O) TV | YES | Conform | Chain is continuous |

It can be said that the PMS structure of Baltika was uninterrupted and therefore enabled, based on the organisational strategy, to derive activities units need to do during the strategy period (Figure 4.3.10).

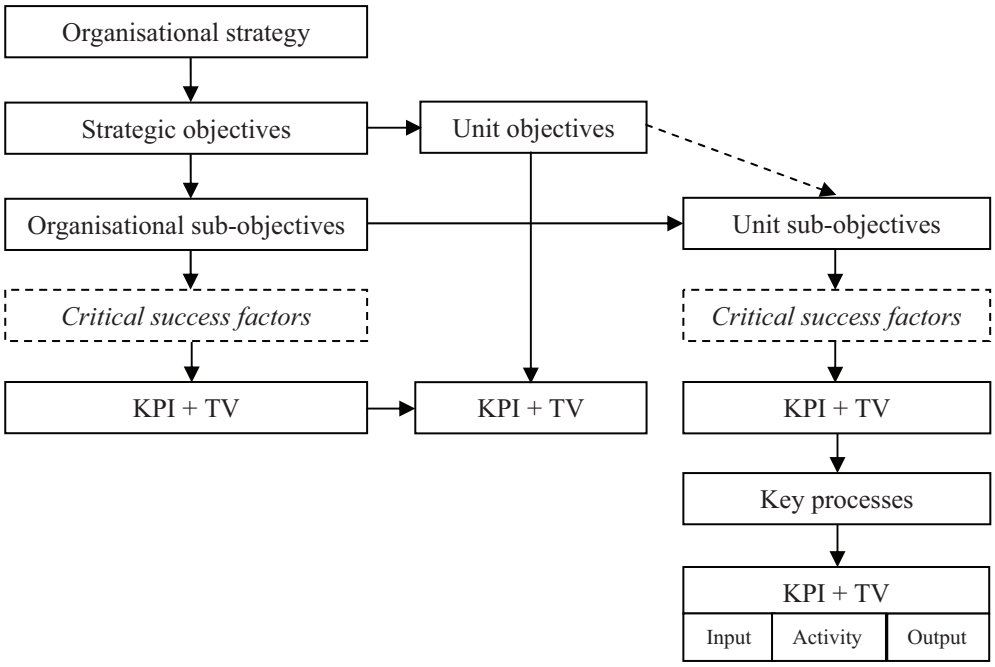



Figure 4.3.10 Total structure of PMS (after key processes)

All obligatory structural components of PMS were represented in the structure. Many components occurred in the form of periodical activities instead of a classical version. Success factors were not directly present, neither at the whole nor unit level; but they were replaced by other parts of strategy at the organisational and unit level. Success factors are recommended in the PMS structure and their direct absence did not cause interruption of the chain because eventually all organisational level strategic and sub-objectives reached executive units. Action plans were replaced by regular meetings with their materials. Key processes were for the head of every unit to decide. Activities that had to be carried out had measures and target values to enable in the PMS functioning phase to monitor results of activities and, where necessary, react preventively. The contents of the PMS structure are established for the executors in the PMS implementation phase.

### 4.3.3 Analysis of PMS implementation

Most of the presentation and implementation of the new approach (Theory of Constraints and Success Model) was completed in the previous strategy period (2000−2001), which was the first period after the new approach was introduced. The content of new result indicators and effects of various activities on indicators were explained to key persons of Baltika and affiliated companies of the group. The need to work out and carry out changes in four areas of activity from among

the existing policies was described for the strategy implementation: in product development and marketing, logistics, production, sales. Strategy work groups were formed of key personnel for these activities. New functioning rules were worked out in the above areas, which were partly applied. The introduction of "the new" to unit employees was not organised centrally; this was for the manager of every unit to decide how and whether he did it.

The incentive system was rearranged in the implementation phase. All employees of Baltika were to be motivated by the operating profit of Baltika – their annual profit bonus depended on that indicator. The bonus rate was based on average wages. The management of Baltika was made additionally motivated by the net profit of the group. From the interview: "unit managers were notified of the incentive system according to what revenue and profit centres were motivated by their sales indicators and profit. Although both Baltika and affiliated companies monitored also the fulfilment of expense budgets, the bonus system was not linked to those results".

In greater detail, for example, the units of sale system (selling subsidiaries, shops) and sales managers (director of trade division, director of retail operations, *etc*) were to be responsible for sales revenue. Sale units in markets were responsible also for achieving shop space efficiency indicators.

Materials on the strategy implementation were relatively few. There were some documents used in strategy workshops with managers held twice a year. Their objective was to equalise knowledge and generate ideas.

Notwithstanding the scarcity of materials a conclusion can be drawn that during the implementation unit objectives and sub-objectives in the PMS structure were set as objectives to units through the incentive system. Hence the indicators in the PMS structure that had to be achieved were communicated to executive units in the implementation phase.

### 4.3.4 Analysis of PMS functioning

PMS use supports strategy execution, collection and communication of objectives/tasks at different levels of the organisation, which were generated in the process of designing the structure of PMS – all this in order to achieve the organisation's strategic objectives. The PMS functioning phase begins when objectives are communicated to units, unit managers become aware of what they are expected to do, *i.e.* when the structure of PMS has been set up. On the basis of this knowledge begins the implementation of activities that are supported by PMS with information collection and communication. During the implementation of an organisational strategy PMS must regularly draw interim conclusions to be sure that the trend (of implemented activities) is right and effective, so that adjusting activities could be performed, where necessary. Interim conclusions are accompanied by data collection, analysis and communication of information.

For the chain continuity, PMS functioning must contain data collection and communication of information on the same indicators as were established in the PMS structure. Otherwise the chain is interrupted.

In the functioning phase of Baltika, it should be taken into account that since the central part of PMS was the Success Model much of the information was collected based on the needs of the Success Model. But since the strategy, strategic objectives, sub-objectives and Success Model were interlinked a lot of the information collected for the Success Model could be directly used also for monitoring the indicators in the PMS structure.

Since it was the first strategy period in the new conditions, IT system was constantly developed and collecting many indicators was not possible during that period, but later it was.

The table below contains indicators covered in the Success Model (12) and their monitoring frequency (Table 4.3.3). Those indicators were covered in internal reports, but mostly without comments.

Table 4.3.3 Result indicator system of the Success Model

| Place of monitoring | Result indicators and/or incentive | Frequency | Notes |
|---|---|---|---|
| Production | 7. Penalty for delay (Throughput Money-days) | Not measured, IT support missing | Was planned to monitor in the following units: production, purchase of goods, purchase of production services, intermediate depots, logistics. |
| | Penalty for delay of goods returned | Not measured, IT support missing | Measure of quality unit. |
| | Lead time (duration of the cycle) | Measured if needed, IT support missing | |
| | 10. Age-specific inventory, (Money-days) | Weekly | Helped to assess the work of logistics and purchase unit managers. Shops, materials warehouse, production (intermediate products), finished goods warehouse, intermediate depot. |
| | 11. Result of production unit | Monthly | Was calculated both for the whole division and for sub-structures of the division. |
| Product development | 4. Value added rate | Weekly | Product saleability and variable costs depend most on their work. |

| | | | |
|---|---|---|---|
| Sales | 1. Sales outside the group or final sales in chain | Weekly | Was monitored by markets, retail cooperation forms, trademarks, shops. |
| | 12. Sales units' "profits" calculated without intermediate prices | Monthly | Was calculated both for the whole division and for sub-structures of the division (*e.g.* shop, sales, result of product development). |
| | 4. Value added rate | Weekly | Product saleability depends most on their work. |
| | 7. Penalty for delay | Not measured, IT support missing | Was planned to monitor in the following units: production, purchase of goods, purchase of production services, intermediate depots, logistics. |
| | 2. Sales area ($m^2$) | Weekly | Was monitored by markets, retail cooperation forms, trademarks, shops. |
| | 3. Sales per sales area | Weekly | Was monitored by markets, retail cooperation forms, trademarks, shops. |
| | 5. Additional value | Weekly | Used for assessment of the activity of top executives in Baltika sales structure. |
| | 6. Additional value per sales area | Weekly | Used for assessment of the activity of top executives in Baltika sales structure. |
| | 8.9.10. Inventory indicators: money tied up in chain, age-specific inventory | Weekly | Shops, materials warehouse, production (intermediate products), finished goods warehouse, intermediate depot. |
| | Residues at the end of season | Not measured, IT support missing | For merchandsers. |
| Whole company | Net profit of the group | Monthly | |

An interview with the business process manager revealed how collection and communication of units' key process indicators was organised. She as a very good information systems expert together with unit managers first, based on unit objectives, set measures for key processes which they should achieve after a certain period of time. In the functioning phase he himself monitored the results from the

information system and communicated them to unit manager. Being a listed company they took the achievement of strategic and other disclosed objectives very seriously and therefore adjusting activities were made when some objective was not fulfilled based on mid-term results.

The revenue and expense objectives derived from the strategic objectives of the company were currently monitored in all units and in the company as a whole monthly – monitoring both their growth compared to the previous period and deviation from the budget.

The achievement of strategic objectives related sub-objectives was monitored with different frequencies, with the steps of a maximum of one year.

The author of the given thesis gives an example: 2002 and 2003 sub-objectives and for comparison what are expressed in reports against exactly the same objectives. Sub-objectives for 2002:

1. To accelerate the growth of sales in comparison with the year 2001 by 22% and to increase the share of retail sales to 50% of the total sales.
2. To launch a new international fashion brand.
3. To prepare and launch a new retail concept (portfolio of retail brands) to segment the markets.

The achievement of these was monitored at Baltika internally and they were revealed also in the annual reports.

It can be said about the first objective that sales revenue increased 17% compared with 2001 and the share of retail sales contributed 52% of total sales of the group.

The international fashion brand in the second objective – Monton – was launched in September 2002 simultaneously in five main retail markets.

Regarding the third objective, the report says that starting from September 2002 the group has 4 retail brands.

The sub-objectives for 2003 were:

1. To improve the efficiency of operation of retail sales space.
2. To reduce the percentage of old (older than one season) inventories in the system.
3. To increase sales (particularly in the retail system).
4. To ensure and strengthen positive cash flow.

The achievement of these was monitored at Baltika internally and they were revealed also in annual report. For example, the outcome of the first objective was 18% smaller efficiency of sales than a year before.

The achievement rate of the second objective was that by the end of the year the inventories were 50% smaller than a year ago.

Regarding the third objective, the report writes that the consolidated sales revenue of Baltika increased 2.3% and retail sales revenue 26% in comparison with the previous year.

The outcome of the fourth objective is positive cash flow of 25.3 million, compared to the previous year's -30 million.

To sum up the functioning, the Success Model related indicators were monitored most frequently. Revenue and expense objectives derived to units from strategic objectives were monitored regularly, with one month steps. The achievement of sub-objectives was monitored and covered in reports also regularly. There was alignment between the objectives in the PMS structure and the indicators monitored. Adjusting activities were undertaken, where necessary. The analysis detected no interruption of the PMS functioning chain.

### 4.3.5 Achievement of strategic objectives

The Success Model was based on increasing sales revenue through a growth in the sales area. The sales area increased in the strategy period, which created preconditions for the achievement of a strategic objective – growth in sales revenue (Table 4.3.4).

Table 4.3.4 Sales revenue and growth in the sales area in 2001-2005 (Annual reports of Baltika 2001-2005)

| Year | Sales area, $m^2$ | Growth,% | Sales revenue, thousand EUR | Growth,% |
|---|---|---|---|---|
| 2001 | 8 649 | | 26 487 | |
| 2002 | 8 870 | +2.5 | 31 025 | +17.1 |
| 2003 | 10 109 | +14.0 | 31 767 | +2.3 |
| 2004 | 11 668 | +15.4 | 37 189 | +17.1 |
| 2005 | 12 736 | +9.2 | 43 518 | +17.0 |

Three objectives were fixed as strategic financial objectives for the period 2002−2005, and their results:

1. Objective 1: double sales revenue by 2005 (in 2001 26.5 mln EUR; in 2005 at least 53.0 mln EUR); actual sales revenue 43.5 mln EUR or the achievement of the objective 82%. 2005 report: Sales revenue increased 3.6-fold in 2002−2005.
2. Objective 2: triple profit in the same period (in 2001: appr. 0.96 mln EUR; in 2005 at least 2.88 mln EUR); actual profit 4.26 mln EUR or the achievement of the objective 148%. 2005 report: net profit increased 4-6-fold in 2002−2005.
3. Objective 3: ROE at least 15%. 2005 report: ROE increased from 4.4% in 2001 to 44.1% in 2005, or the achievement of the objective 294% (44.1%/15%).

Baltika itself had ranked its objectives based on Goldratt's Theory of Constraints and did not set any weights for the objectives. However, to assess the achievement of strategic objectives unambiguously, the author has attached equal weights to all of them (Table 4.3.5).

Table 4.3.5 Achievement of strategic objectives of Baltika, 2002−2005 2005 (Annual reports of Baltika 2001-2005)

| Strategic objective | Result | Weight | Weighted result |
|---|---|---|---|
| 1. Sales revenue | 82% | 33.3% | 27.3% |
| 2. Profit | 148% | 33.3% | 49.3 |
| 3. ROE | 294% | 33.3% | 97.9% |
| TOTAL | | | 174.5% |

Hence, it can be argued that Baltika achieved its strategic objectives approximately 175 percent.

### 4.3.6 Case conclusions

PMS chain continuity was identified in the PMS structure where the chain was continuous, as well as in the PMS functioning phase where the functioning chain was continuous. In the PMS implementation phase, objectives were set for the executive units which they had to achieve. In the functioning phase, the indicators that occurred in the PMS structure were reported on.

According to the created model, the chain was continuous between the parts of PMS (Figure 4.3.11).

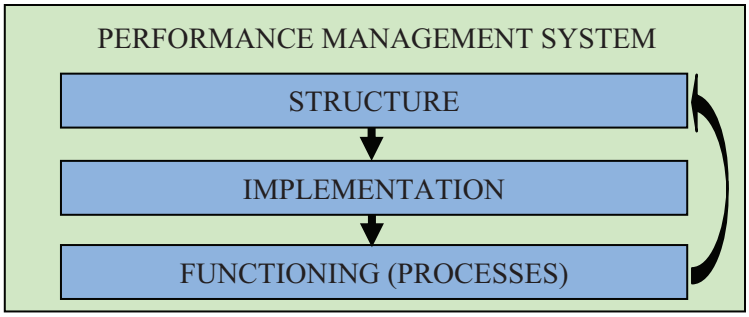



Figure 4.3.11 Relationships between the PMS chain parts of Baltika

Baltika achieved its strategic objectives by the end of 2005. It must be taken into consideration here that the achievement of a company's objective is affected in addition to the efficiency of PMS by many other factors. Therefore we have to admit that the conformity of Baltika's PMS to the chain principle may be only one factor that might have ensured the achievement of strategic objectives, but

probably not the only one. An example might be positive economic developments in destination countries during that strategy period.

Taking into consideration the conformity of the PMS of Baltika to the chain principle, on the one hand, and that it achieved the strategic objectives indeed, on the other hand, it may still be said that the chain principle is appropriate for assessing PMS efficiency.

# SUMMARY

Despite of great popularity of Perfromance Management System (PMS) less than half organisations are succeeding with implementation. In the literature sources can find fact that 70 per cent of performance measurement initiatives fail.

The most generally expressed result of a defective implementation of performance measurement and management systems is that the system cannot provide information and assistance what it was created for, organisations are not manageable as a whole, they are not managed based on common objectives and the desired long-term goals are rather not achieved than achieved. Therefore is relevant to design and have functioning efficient PMSs.

This thesis focused on the failures in the implementation of the PMS and on creating a model providing a possible solution to minimise failures.

In the introduction of the given thesis was set the objective to create a model for enhancing benefits from using PMS and it is functioning.

Created model for constructing and using an efficient PMS is based on observing the chain concept. Both the structure and functioning of PMS can be viewed as a chain where the chain fulfils its function only when it is continuous. If the chain has been broken or some link in the chain does not fulfill its function, then the information does not spread along the chain and the chain as a whole does not fulfill its function. Analogously it is possible to assess how PMS is functioning. The structural components of PMS must be firmly interlinked, since one component depends on the other, thus making up the whole. The same applies to the functioning of system where consecutive activities must occur. If that is so we can claim that most probably PMS is efficient.

Consequently the research question raised in the thesis has been formulated as follows: Do the PMS in the structure and functioning of which we can clearly identify occurrence of the chain principle contribute better to the achievement of the organisation's strategic objectives than those PMS where this principle has not been followed and the chain is broken? The author set three research tasks for that purpose.

First, he had to analyse unsuccessful implementations of PMS found in the literature. Answering to question about benefits from implementation of PMS, author presented some studies confirming that PMS improves the organisations' performance and the results accomplished are better than in the organisations which do not use these systems.

During the research author gathered the viewpoints of different authors` (Kaplan and Norton, Schneiderman, Bourne, Clinton *et al*., Frigo and Krumwiede, Niven,

CIMA researches) related with failures together, grouped them presenting more general and specific groups of shortcomings.
General shortcomings are associated with strategy execution and with fact that vision and strategy themselves are inadequate.

Specific groups of shortcomings were:

- communication difficulties,
- measures are poor,
- insufficient resources for strategy execution,
- feedback related,
- problems in PMS implementation,
- problems in PMS functioning.

These were divided into two:

- difficulties with communication: both deployment of objectives and feedback. Also measures can be regarded as means of communication tools;
- difficulties arising from insufficient leadership and resources in PMS implemention.

In this way author reached the main and most frequent reason – lack of communication in different parts of PMS and between the parts.

The second research task was to use the research results of failure analyses for creating a model that would support the implementation of PMS. During theoretical model creation the author focused just on removing the above-mentioned main and most frequent shortcoming.

In theoretical chapter author searched definitions of performance and the history of performance and PMS, analysed definitions of performance measurement and management and PMS, presented basis of systems theory. In addition author analysed implementation models and concluded that these do not stress sufficiently importance of relationships between PMS` parts and between parts` components, which in circumstances of non-sufficient relationships may cause lack of communication with consequences.

The chain principle is facilitative mode understanding/identifying of important relationships in the composition of PMS that might otherwise look sophisticated. Originating from chain principle ensures converting strategy step-by-step to them who are able to execute set to them and aggregate result is achievement of strategic objectives. Chain is formed by links in converting and executing chain. Every link (parts of PMS and components of parts) has own role, it must be present and meet special requirements.

The introduction of the given thesis author pointed out weak spots in chain where discontinuance may theoretically occur. Model assures (observing chain principle) continuance in these spots as follows.

At first, to ensure alignment of unit` objectives with organisational objectives, all organisational objectives (deployed way) with measures and target values must reach to units.

Secondly, for assuring that activities regularly performed by units are set them as an unit objectives according activities placed in PMS structure, for achieving every objective of unit key processes must be derived with measures and target values from activities listed in PMS structure.

For execution exactly these activities have to be performed and these are monitored in PMS functioning phase, where chain consists activities starting from data collecting.

Thirdly, to avoid occuring unsatisfactory results at the end of strategy period and avoiding with this improvement change, must at first in the PMS structure to set interim objectives and later in functionig phase to collect regularly indicators related with them.

Occuring unsatisfactory interim results responding must take place in functioning phase of PMS. Plan which consists activities for eliminating shortcomings have to compile for that and execute this.

In creation of model author set some limitations:

- Author omitted “soft parts” of PMS from thesis, although the he considers them necessary attributes that facilitate the use of PMS.
- The second limitation is that this model offers solutions rather for large than small organisations.
- The author starts the research from an existing strategy, or from strategy execution via his modifications, and focuses on PMS as a tool of executing the strategy. He does not focus on the preparation of strategy.

In the model the author divided PMS into three:

- PMS structure design,
- implementation of PMS, and
- functioning of PMS.

As a chain can be seen existence of these three parts and interrelations between them. The obligatory structural components (occuring in a chain) of the PMS of private sector organisations at the organisational level are:

- strategic objective,
- key performance indicators (KPI) and target values (TV).

Obligatory components at the unit level are:

- strategic objective, key performance indicators + TV,
- key process,
- key output indicator KPI + TV,
- key activity indicator KPI + TV and
- key input indicator KPI + TV.

Obligatory structural components (occuring in a chain) of the PMS of public sector organisations at the organisational level are:

- strategic objective,
- key performance indicators of output + TV.

Obligatory components at the unit level are:

- strategic objective (for the executive party),
- output key performance indicators + TV,
- activity key performance indicators + TV and
- input key performance indicators + TV.

In the PMS implementation phase, new temporal objectives formulated in the PMS structure are communicated and established for units or executors. It is a transitional stage where the above created PMS structure is put into operation. This provides new knowledge to executors as a result of which these things will be done in a slightly different manner than before in the next periods. Implementation can be summarised as a process where new rules/principles are clarified and established for units.

The PMS functioning phase comprises gathering and communicating of information on the indicators formulated in the PMS structure, and where necessary, conducting adjusting activities. A chain is formed of the following activities:

- monitoring interim results, which presumes identification, collection, analysis and communication of information originally;
- reacting;
- planning and performing adjusting activities and adaptations, and
- system maintenance.

The third research task was to empirically test the created model on two organisations` PMS. If an organisation has achieved its strategic objectives and test results indicate that no discontinuity in the same chain is observed, it may be said that the model is appropriate.

In case the test results show that an organisation's PMS has shortcomings (these are referable) in a certain part that does not allow the organisation by following the model to achieve the intended results and the organisation has not

achieved them, it may also be claimed that chain principle for assessing PMS is appropriate.

The chosen target group consist organisations which have gone through one full strategy cycle under PMS. The second criterion for selecting organisations in the target group is the knowledgeable implementation of PMS.

The findings of cases were as follows.
The first case study about Enterprise Estonia (a public sector organisation), identified chain interruptions in several spots in all three parts of PMS: structure, implementation and functioning. Interruptions were referable.

Chain interruption in PMS structure occured as follows:

- objectives conformed partly to SMART criteria;
- outcome indicators of units were aligned with organisational, but executive party of organisation has no power to influence them;
- output indicators were missing at the organisational and unit level.

In the implementation phase they failed to communicate those strategy related objectives to units which were in their power of achievement.

In the functioning phase:

- outcome measures of objectives they committed to achieve were not collected regularly, and
- correct output indicators in term of content were collected regularly but deviations were not reacted to and adjusting activities were not induced.

Achievement rate of strategic objectives of strategy period 2003-2007 remain less than half.

In the second case study about Baltika AS (a private sector organisation), the author did not detect any chain interruption. The chain was found to be present in PMS structure, implementation as well as in functioning. The organisation achieved its strategic objectives of strategy period 2002-2005.

These cases helped to answer the research question that PMS in organisations whose PMS` structure and functioning is possible to clearly detect the presence of the chain principle, contributes better to the achievement of the organisation's strategic objectives, compared to those PMS where this principle is not observed and/or the chain is interrupted.

The findings of the case study allow stating that using the chain principle in PMS creation and improvement enhances the PMS efficiency, which in turn is able to

offer greater support to the organisation in strategy execution and achievement of strategic objectives.

Since the achievement and non-achievement of organisational objectives is influenced by many factors simultaneously, from which only one is efficient functioning of PMS, it cannot be declared that a high or low achievement rate of objectives was due to inefficient or efficient PMS only.

Practical contribution of this thesis can point out, that in addition to using the model created by the author in PMS creation, the model allows to diagnose the efficiency of implemented PMS and where mal-functioning is detected, to draw attention to the weaknesses in the respective parts of the system, which, after the shortcomings are removed, would restore the efficiency.

Created model is applicable in private and as well in public sector organisations.

In addition to creation of model the following author`s contribution can pointed out.

First theoretical contribution was supplementing PMS implementation theory through observing the chain principle in all three parts of PMS.

The second theoretical contribution by the author was classification of the structural components of PMS into obligatory and recommended. Obligatory components must all be present and secondly, meet their special requirements. When occurring in that way they form a chain.

Also the following theoretical contributions made by the author are worth mentioning:

The author supplemented the organisational performance concept. Namely, the author of the given thesis finds that first, from the level of the owner one must proceed on to the level where the owner's interests are satisfied – executive management, or performance concept must go on into the organisation and to values measured by non-financial indicators the achievement of which will lead to financial performance. Secondly, organisational performance within the same concept must be both complete and hierarchical.

The author supplemented the successful change components by Waal by grouping the components between three parts of PMS (PMS structure design, PMS implementation and PMS current use). This allows relating the important components for changes to three parts of PMS during the implementation.

The author additionally gathered all requirements for structural components of PMS based on literature and used these as a normative requirements for them.

Due to too narrow focus of given thesis, author could not to follow the impact of "soft side" to efficiency of PMS. The author considers important to investigate it in future.

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Waal, A. A., Counet, H. 2006. Lessons Learned from Balanced Scorecard: Research into Problems Encountered and Lessons Learned from Implementation and Use of Performance Management Systems. /Research report. Maastricht School of Management.

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Waal, A. A. 2001. Power of Performance Management: How Leading Companies Create Sustained Value. New York: John Wiley & Sons.

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## Appendix 1. Elulookirjeldus

1. Isikuandmed

| | |
|---|---|
| Ees- ja perekonnanimi | Tarmo Kadak |
| Sünniaeg ja -koht | 21. Aprill 1969, Tallinn, Eesti |
| Kodakondsus | Eesti |

2. Kontaktandmed


| | |
|---|---|
| Aadress | 10321, Kolde pst. 76 – 76, Tallinn, Eesti |
| Telefon | 3726204003 |
| E-posti aadress | tarmo.kadak@tseba.ttu.ee |


3. Hariduskäik

| Õppeasutus | Lõpetamise aeg | Haridus (eriala/kraad) |
|---|---|---|
| Tallinn Tehnikaülikool | 2011 | Filosoofiadoktor, Ärikorraldus |
| Tallinn Tehnikaülikool | 2000 | Sotsiaalteaduste magister, Majandusarvestus ja rahandus |
| Tallinn Tehnikaülikool | 1995 | Insener, Puidutöötlemise tehnoloogia |

4. Keelteoskus

| Keel | Tase |
|---|---|
| Eesti | kõrgtase |
| Inglise | kõrgtase |
| Soome | kõrgtase |
| Vene | kõrgtase |
| Saksa | algtase |

5. Täiendõpe

| Õppimise aeg | Täiendusõppe läbiviija nimetus |
|---|---|
| 20-22 Aprill 2011, Rooma | Euroopa Majandusarvestuse Assotsiatsiooni 34. aastakongress |
| 11-15 Oktoober 2010, Kopenhaagen | Kopenhaageni Ärikool |
| 19-21 Mai 2010, Istanbul | Euroopa Majandusarvestuse Assotsiatsiooni 33. aastakongress |
| 23-25 September, Nizza | Tegevusedukuse mõõtmise ja juhtimiskontrolli 6. konverents |
| 12-15 Mai 2009, Tampere | Euroopa Majandusarvestuse Assotsiatsiooni 32. aastakongress |
| 23-25 Aprill 2008, Rotterdam | Euroopa Majandusarvestuse Assotsiatsiooni 31. aastakongress |
| 18-20 Juuni 2007, Trento | Kulud ja tegevusedukus teenustel ja tootmises |
| 25-27 Aprill 2007, Lissabon | Euroopa Majandusarvestuse Assotsiatsiooni 30. aastakongress |
| 2-4 Aprill 2003, Sevilla | Euroopa Majandusarvestuse Assotsiatsiooni 26. aastakongress |

6. Teenistuskäik

| Töötamise aeg | Tööandja nimetus | Ametikoht |
|---|---|---|
| 01.09.2006 - | Tallinna Tehnikaülikool , Majandusteaduskond, majandusarvestuse instituut, juhtimisarvestuse õppetool | Lektor (1.00) |
| 01.09.2003 - 31.08.2006 | Tallinna Tehnikaülikool , Majandusteaduskond, majandusarvestuse instituut, finantsarvestuse õppetool | Lektor (0.50) |
| 2003- 2007 | Ettevõtluse Arendamise Sihtasutus | Eelarve üksuse juht |
| 1995 - 2002 | Erinevad eraettevõtted | Finants-direktor |

7. Teadustegevus
(1) Artiklid rahvusvahelistes ajakirjades ja raamatutes:
Kadak, T.; Alver, J. (2009). About the Conformity of Data Used in Planning and Performing in the Controlling Process: A Survey of Estonian SMEs. Müller, D. (Toim.). Controlling für kleine und mittlere Unternehmen (295 - 314).Oldenbourg Wissenschaftsverlag (ETIS 3.1)

(2) Konverentsikogumikud:
Roostalu, L.; Kadak, T. (2011). Which Values and Which Accountability: an Historical Case Study of Estonian Local Self-government. *In: Eesti Majandusteaduse Seltsi aastakonverentsi kogumik 2011: Eesti Majandusteaduse Seltsi aastakonverents 2011 Narvas 28. – 29. jaanuaril 2011. (Toim.) Värnik, R.*., 2011, 1 - 30. (ETIS 3.5)

Kadak, T. (2010). PMSi eripärast avalikus sektoris. *In: Raamatupidamiselt majandusarvestusele III: Raamatupidamiselt majandusarvestusele III, Tallinn, 10.12.10. (Toim.) Alver, J.; Paldrok, K.*. Tallinn: Tallinna Tehnikaülikool, 2010, 44 - 48. (ETIS 3.5)

Alver, J.; Kadak, T. (2009). Conformity of Data Used in the Controlling Process: A Survey of Estonian SMEs. Finance and Accounting: Theory and Practice, Development and Trends (34 - 40).Rīga, LU Akadēmiskais apgāds (ETIS 3.2)

Kadak, T. (2009). Kasu tõhusate PMSide rakendamisest: analüüs kirjanduse põhjal. Alver, J.; Paldrok, K. (Toim.). Raamatupidamiselt majandusarvestusele II (47 - 49). Tallinn: Tallinna Tehnikaülikool (ETIS 3.5)

Kadak, T. (2008). Difficulties in implementation of efficient PMS. Alver, J. (Toim.). Business analysis, accounting, taxes and auditing : proceedings of the conference = Majandusanalüüs, majandusarvestus, maksundus ja auditeerimine : konverentsikogumik : 6.-7.11.2008 Tallinn (47 - 52). Tallinn: Tallinn University of Technology Press (ETIS 3.4)

Kadak, T. (2008). Raskused tõhusate PMSide rakendamisel. Analüüs kirjanduse põhjal. Alver, J. (Toim.). Business analysis, accounting, taxes and auditing : proceedings of the conference = Majandusanalüüs, majandusarvestus, maksundus ja auditeerimine : konverentsikogumik : 6.-7.11.2008 Tallinn (338 - 344). Tallinn: Tallinna Tehnikaülikool (ETIS 3.4)

Roostalu, L.; Kadak, T. (2008). Tegevuspõhine kuluarvestus Tallinna Keskraamatukogus. 1 - 25. (ETIS 3.4)

Kadak, T. (2007). Tegevusedukuse mõõtmise ja juhtimise süsteemide arengu ülevaade. *In: Raamatupidamiselt majandusarvestusele I: Raamatupidamiselt majandusarvestusele I, Tallinn, 08. november 2007. (Toim.) Alver, J.; Paldrok, K.*. Tallinn: Tallinna Tehnikaülikool, 2007, 62 - 68. (ETIS 3.5)

Kadak, T. (2006). Importance of goal clarity by implementing efficient Management Information System. *In: Accounting, taxes and audit : proceedings of the conference : 26.-27.10.2006, Tallinn (Toim.) Alver, J.; Toots, A.*. Tallinn: Tallinna Tehnikaülikooli Kirjastus, 2006, 88 - 91. (ETIS 3.4)

Kadak, Tarmo (2005). Assumptions of implementing efficient management information system in public sector. *In: Accounting and performance management perspectives in business and public sector organizations : conference proceedings : September 29-30 2005, Tartu : Accounting and Performance Management Perspectives in Business and Public Sector Organizations, Tartu September 29-30.2005.* Tartu: Tartu University, 2005, 247 - 251. (ETIS 3.4)

Kadak, T. (2004). Kuluarvestussüsteemidest arvestuse arengu valguses. *In: Majandusarvestuse aktuaalsed probleemid äri- ja avalikus sektoris: konverentsikogumik : 23.04.2004 = Actual problems of accounting in private and public sector: proceedings of the conference :* Tallinn: Tallinna Tehnikaülikool, 2004, 66 - 71. (ETIS 3.4)

(3) Konverentsi ettekanded:
Kadak, T. (2011). Does Efficiency of PMS influence Organizational Performance? Case Study. *In: 34th Annual Congress of European Accounting Association, Rome, Italy, April 20-22, 2011:* EEA, 2011. (ETIS 5.2)

Roostalu, L.; Kadak, T. (2010). Management Accounting in the Municipality of Tallinn During the Last 75 Years. *In: 2nd Balcans and Middle East Countries Conference on Auditing and Accounting History. Congress Proceedings: 2nd Balcans and Middle East Countries Conference on Auditing and Accounting History. Turkey, Istanbul.* Turkey, Istanbul: Association of Accounting and Finance Academians, 2010, 1 - 27. (ETIS 3.4)

Kadak, T. (2009). Observing continuance approach on assuring efficient PMS. Case study in organisation of public sector. *In: 5th Conference on Performance Measurement and Management Control, Nice, France, September 23-25, 2009:* EIASM, 2009. (ETIS 5.2)

Alver, J.; Kadak, T. (2008). Conformity of Data Used in Planning and Performing in the Controlling Process: A Survey of Estonian SMEs. *In: International Scientific Conference Finance and Accounting: Theory and Practice, Development and Trends: International Scientific Conference Finance and Accounting: Theory and*

*Practice, Development and Trends, Riia, 18.-19.09.2008.* Riia:, 2008, 78. (ETIS 5.2)

(4) Juhendatud kümme magistritööd.

8. Kaitstud lõputööd

Magistritöö „Soome Vabariigi kontserniaruandluse võrdlev analüüs“, 2000

Bakalaureusetöö „Turupositsiooni parendamise võimalused AS Standard näitel“, 1995

9. Teadustöö põhisuunad

Majandusarvestuse uuringud
Tegevusedukuse mõõtmine ja juhtimine era- ja avaliku sektori organisatsioonides

## Appendix 2. Curriculum Vitae

1. Personal data

| | |
|---|---|
| Name | Tarmo Kadak |
| Date and place of birth | 21th April 1969, Tallinn, Estonia |
| Citizenship: | Estonian |

2. Contact information

| | |
|---|---|
| Address | 10321, Kolde pst. 76 – 76, Tallinn, Estonia |
| Phone | 3726204003 |
| E-mail | tarmo.kadak@tseba.ttu.ee |

3. Education

| Educational institution | Graduation year | Education (field of study/degree) |
|---|---|---|
| Tallinn University of Technology | 2011 | Doctor of Philosophy in Business Administration |
| Tallinn University of Technology | 2000 | Master of Social Science, Accounting and Finance |
| Tallinn University of Technology | 1995 | Engineer, Woodworking Technology |

4. Language competence/skills

| Language | Level |
|---|---|
| Estonian | fluent |
| English | fluent |
| Finnish | fluent |
| Russian | fluent |
| German | basic skills |

5. Special Courses

| Period | Educational or other organisation |
|---|---|
| 20-22 April 2011, Rome | European Accounting Association 34th Annual Congress |
| 11-15 October 2010, Copenhagen | Copenhagen Business School |
| 19-21 May 2010, Istanbul | European Accounting Association 33rd Annual Congress |
| 23-25 September, Nice | 6th Conference on Performance Measurement and Management Control |
| 12-15 May 2009, Tampere | European Accounting Association 32nd Annual Congress |
| 23-25 April 2008, Rotterdam | European Accounting Association 31st Annual Congress |
| 18-20 June 2007, Trento | Conference on Cost and Performance in Services and Operations |
| 25-27 April 2007, Lisbon | European Accounting Association 30th Annual Congress |
| 2-4 April 2003, Seville | European Accounting Association 26th Annual Congress |

6. Professional Employment

| Period | Organisation | Position |
|---|---|---|
| 01.09.2006 - | Tallinn University of Technology , School of Economics and Business Administration, Department of Accounting, Chair of Management Accounting | Lecturer (1.00) |
| 01.09.2003 - 31.08.2006 | Tallinn University of Technology , School of Economics and Business Administration, Department of Accounting, Chair of Financial Accounting | Lecturer (0.50) |
| 2003 - 2007 | Enterprise Estonia | Head of Budget unit |
| 1995 - 2002 | Different private sector companies | Financial director |

## 7. Scientific work

(1) Articles in international journals and books:

Kadak, T.; Alver, J. (2009). About the Conformity of Data Used in Planning and Performing in the Controlling Process: A Survey of Estonian SMEs. Müller, D. (Toim.). Controlling für kleine und mittlere Unternehmen (295 - 314).Oldenbourg Wissenschaftsverlag (ETIS 3.1)

### (2) Conference proceedings:

Roostalu, L.; Kadak, T. (2011). Which Values and Which Accountability: an Historical Case Study of Estonian Local Self-government. *In: Eesti Majandusteaduse Seltsi aastakonverentsi kogumik 2011: Eesti Majandusteaduse Seltsi aastakonverents 2011 Narvas 28. – 29. jaanuaril 2011. (Toim.) Värnik, R.*., 2011, 1 - 30. (ETIS 3.5)

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Alver, J.; Kadak, T. (2009). Conformity of Data Used in the Controlling Process: A Survey of Estonian SMEs. Finance and Accounting: Theory and Practice, Development and Trends (34 - 40).Rīga, LU Akadēmiskais apgāds (ETIS 3.2)

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Kadak, T. (2008). Difficulties in implementation of efficient PMS. Alver, J. (Toim.). Business analysis, accounting, taxes and auditing : proceedings of the conference = Majandusanalüüs, majandusarvestus, maksundus ja auditeerimine : konverentsikogumik : 6.-7.11.2008 Tallinn (47 - 52). Tallinn: Tallinn University of Technology Press (ETIS 3.4)

Kadak, T. (2008). Raskused tõhusate PMSide rakendamisel. Analüüs kirjanduse põhjal. Alver, J. (Toim.). Business analysis, accounting, taxes and auditing : proceedings of the conference = Majandusanalüüs, majandusarvestus, maksundus ja auditeerimine : konverentsikogumik : 6.-7.11.2008 Tallinn (338 - 344). Tallinn: Tallinna Tehnikaülikool (ETIS 3.4)

Roostalu, L.; Kadak, T. (2008). Tegevuspõhine kuluarvestus Tallinna Keskraamatukogus. 1 - 25. (ETIS 3.4)

Kadak, T. (2007). Tegevusedukuse mõõtmise ja juhtimise süsteemide arengu ülevaade. *In: Raamatupidamiselt majandusarvestusele I: Raamatupidamiselt majandusarvestusele I, Tallinn, 08. november 2007. (Toim.) Alver, J.; Paldrok, K.*. Tallinn: Tallinna Tehnikaülikool, 2007, 62 - 68. (ETIS 3.5)

Kadak, T. (2006). Importance of goal clarity by implementing efficient Management Information System. *In: Accounting, taxes and audit : proceedings of the conference : 26.-27.10.2006, Tallinn (Toim.) Alver, J.; Toots, A.*. Tallinn: Tallinna Tehnikaülikooli Kirjastus, 2006, 88 - 91. (ETIS 3.4)

Kadak, Tarmo (2005). Assumptions of implementing efficient management information system in public sector. *In: Accounting and performance management perspectives in business and public sector organizations : conference proceedings : September 29-30 2005, Tartu : Accounting and Performance Management Perspectives in Business and Public Sector Organizations, Tartu September 29-30.2005.* Tartu: Tartu University, 2005, 247 - 251. (ETIS 3.4)

Kadak, T. (2004). Kuluarvestussüsteemidest arvestuse arengu valguses. *In: Majandusarvestuse aktuaalsed probleemid äri- ja avalikus sektoris: konverentsikogumik : 23.04.2004 = Actual problems of accounting in private and public sector: proceedings of the conference :* Tallinn: Tallinna Tehnikaülikool, 2004, 66 - 71. (ETIS 3.4)

(3) Conference presentations:

Kadak, T. (2011). Does Efficiency of PMS influence Organizational Performance? Case Study. *In: 34th Annual Congress of European Accounting Association, Rome, Italy, April 20-22, 2011:* EEA, 2011. (ETIS 5.2)

Roostalu, L.; Kadak, T. (2010). Management Accounting in the Municipality of Tallinn During the Last 75 Years. *In: 2nd Balcans and Middle East Countries Conference on Auditing and Accounting History. Congress Proceedings: 2nd Balcans and Middle East Countries Conference on Auditing and Accounting History. Turkey, Istanbul.* Turkey, Istanbul: Association of Accounting and Finance Academians, 2010, 1 - 27. (ETIS 3.4)

Kadak, T. (2009). Observing continuance approach on assuring efficient PMS. Case study in organisation of public sector. *In: 5th Conference on Performance Measurement and Management Control, Nice, France, September 23-25, 2009:* EIASM, 2009. (ETIS 5.2)

Alver, J.; Kadak, T. (2008). Conformity of Data Used in Planning and Performing in the Controlling Process: A Survey of Estonian SMEs. *In: International Scientific Conference Finance and Accounting: Theory and Practice, Development and Trends: International Scientific Conference Finance and Accounting: Theory and Practice, Development and Trends, Riia, 18.-19.09.2008.* Riia:, 2008, 78. (ETIS 5.2)

(4) Supervised 10 Master`s Thesis

8. Defended theses

Master`s Thesis “Comparative Analysis of annual reporting of group of Finland“, 2000

Bachelor’s Thesis “Improvement Market position, based on AS Standard“, 1995

9. Main areas of scientific work/Current research topics

Accounting reasearches
Performance Measurement and Management in private and public sector organisations

# KOKKUVÕTE

**Organisatsiooni tegevusedukuse juhtimissüsteemi kujundamist ja täiendamist toetava mudeli loomine. Juhtumiuuringud**

Vaatamata tegevusedukuse (tulemuslikkuse) juhtimise süsteemide (Performance Management System, PMS) suurele populaarsusele õnnestuvad nende juurutamisega alla poole organisatsioonidest. Kirjandusest võib leida viiteid, et ebaõnnestumismäär on *ca* 70%. TE mõõtmise ja juhtimise süsteemide puuduliku rakenduse kõige üldisemalt väljendatud tulemus on see, et rakendatud süsteem ei suuda pakkuda infot ja abi mille jaoks ta on loodud, organisatsioonid ei ole juhitavad kui tervikud, neid ei juhita ühtsetest eesmärkidest tulenevalt ning soovitud pikaajalised lõppeesmärgid jäävad pigem saavutamata, kui need saavutatakse. Seetõttu on oluline kujundada ja omada töötamas tõhusaid PMSe.

Käesolev väitekiri keskendus tegevusedukuse juhtimise süsteemide juurutamise ebaõnnestumise uurimisele ja võimaliku lahendust pakkuva mudeli loomisele ebaõnnestumiste vähendamiseks. Väitekirja sissejuhatavas osas seati eesmärgiks luua mudel PMSide kasutuselevõtu ja tema toimest kasusaamise suurendamiseks.

Väitekirjas loodav mudel tõhusa PMSi loomiseks ja kasutamiseks põhineb ahela kontseptsiooni järgimisel. Nii PMSi ülesehitust kui ka toimimist saab vaadelda kui ahelat, kus ahel täidab oma funktsiooni siis, kui ta on katkematu. Kui ahel on katkenud ehk ahela mingi lüli ei täida oma funktsiooni, siis info piki ahelat ei levi ja ahel tervikuna oma funktsiooni ei täida. Analoogselt on võimalik hinnata PMSi toimimist. PMSi struktuurikomponendid peavad olema omavahel tugevas seoses, sest ühest komponendist sõltub teine ja nii moodustub tervik. Sama kehtib ka süsteemi toime kohta, kus peavad esinema järjestikused tegevused. Kui see on nii, siis võib väita, et suure tõenäosusega on PMS tõhus.

Sellest tulenevalt on väitekirjas tõstatatud uurimusküsimus sõnastatud järgmiselt: kas PMSid, mille ülesehituses ja kasutuses saab selgelt tuvastada ahela põhimõtte esinemist, aitavad paremini kaasa organisatsiooni strateegiliste eesmärkide saavutamisele, kui need PMSid kus seda põhimõtet ei ole järgitud ja esineb ahela katkevus?

Selleks seadis autor kolm uurimisülesannet.
Esiteks tuli analüüsida kirjanduses leiduvaid PMSide juurutamise ebaõnnestumisi. Vastamaks küsimusele millised on kasud õnnestunud PMSide juurutamistest, esitas autor uurimusi, mis kinnitavad, et PMSi kasutamine parendab organisatsioonide tulemusi ning saavutatud tulemused on paremad kui neid süsteeme mittekasutavatel organisatsioonidel.

Uurimuse käigus koondas autor ebaõnnestumistega seotud erinevate autorite seisukohad (Kaplan ja Norton, Schneiderman, Bourne, Clinton jt., Frigo ja

Krumwiede, Niven, CIMA uuringud) kokku, grupeeris need tuues välja üldised ja detailisemad puuduste grupid.

Üldised raskused olid seotud strateegia elluviimisega ja sellega, et visioon ja strateegia on ise puudulikud.

Detailsemad põhjuste grupid olid:

- kommunikeerimisraskused,
- mõõdikud on viletsad,
- ebapiisav ressurss strateegia elluviimiseks,
- tagasisidega seonduv,
- probleemid PMSi rakendamisel,
- probleemid PMSi toimel.

Need jaotas autor kahte valdkonda:

- raskused kommunikatsiooniga: nii eesmärkide ositamine kui ka tagasiside. Ka mõõdikuid saab käsitleda kui kommunikatsioonivahendeid;
- raskused mis tulenevad PMSi juurutamisel ebapiisavast eestvedamisest ja ressurssidest.

Nii jõudis ta välja kõige peamise ja sagedasema põhjuseni – kommunikatsiooni puudumiseni PMSi erinevates osades ja osade vahel.

Teiseks uurimisülesandeks oli kasutada ebaõnnestumiste põhjuste analüüsis saadud uurimistulemust PMSide rakendamist toetava mudeli loomisel. Autor keskendus teoreetilise mudeli loomisel just eelpool mainitud peamise ja sagedasema puuduse kõrvaldamisele.

Väitekirja teoreetilises osas uuris autor tegevusedukuse definitsioone ja tegevusedukuse ning PMSide ajalugu, analüüsis tegevusedukuse mõõtmise ja juhtimise ning PMSide definitsioone, esitas süsteemiteooria alused.
Lisaks analüüsis autor teoorias esinevaid rakendusmudeleid ja järeldas, et need ei rõhuta piisavalt seoste tähtsust PMSi osade ja osade komponentide vahel, mis tegelikult ebapiisavate seoste korral võivad põhjustada kommunikatsiooni puuduse koos oma tagajärgedega.

Ahela põhimõttest lähtumine loodava rakendusmudeli juures on hõlbustav viis arusaamaks/esile toomaks olulisi seoseid muidu keerukana tunduda võiva PMSi koosseisus. Ahela põhimõttest lähtumine tagab sammsammult strateegia konverteerumise tegevusteks neile, kes suudavad neile seatut elluviia ja mille koondtulemusteks strateegiaperioodi jooksul on strateegiliste eesmärkide saavutamine. Ahela moodustavad lülid konventeerumise ja elluviimise ahelas. Igal lülil (PMSi osad ja osade komponendid) on oma roll, ta peab esinema ja vastama teatud kriteeriumitele.

Sissejuhatavas osas tõi autor välja võimalikud kohad kus PMSi katkemine võib toimuda. Mudel tagab (ahela põhimõtet järgides) jätkuvuse neis kohtades järgnevalt. Et esmalt tagada üksuste eesmärkide joonduvus organisatsiooni omadega peavad üksustesse jõudma kõik organisatsiooni eesmärgid (ositatult) koos mõõdikute ja sihtväärtustega. Teiseks tagamaks, et üksused teeksid jooksvalt just neile PMSi struktuuris üksuste eesmärgiks seatud tegevusi, tuleb üksuse iga eesmärgi saavutamiseks tuletada neist võtmetegevused koos mõõdikute ja sihtväärtustega. Elluviimiseks tuleb just neid tegevusi teha ja seda jälgitakse PMSi kasutusfaasis, kus ahela moodustavad tegevused, alates andmete kogumisest. Kolmandaks, et välistada ebarahuldavate tulemuste ilmnemine alles strateegiaperioodi lõpus ja välistades sellega võimaluse midagi parendada, tuleb esmalt PMSi struktuuris seada vaheeesmärgid ja hiljem kasutusfaasis nendega seotud näitajaid regulaarselt koguda. Ebarahuldavate vahetulemuste ilmnedes tuleb PMSi kasutusfaasis neile reageerida. Selleks tuleb koostada kava mis sisaldab tegevusi puuduste kõrvaldamiseks ja see elluviia.

Mudeli koostamisel seadis autor mõned kitsendused:

- autor jättis PMSi „pehmed“ osad välja, kuigi peab neid PMSi kasutamist soodustavateks vajalikeks eeldusteks;
- teise kitsendusena pakub mudel pakub lahendust pigem suurtele kui väikestele organisatsioonidele;
- autor alustas uurimist juba loodud strateegiast ehk strateegia elluviimisega läbi tema teisenduste ja keskendub PMSile kui abivahendile, et strateegia saaks ellu viidud. Ta ei keskendunud strateegia enda koostamisele.

Mudelis jagas autor PMSi kolmeks osaks:

- PMSi struktuuri kujundamine,
- PMSi juurutamine ja
- PMSi jooksev kasutamine.

Ahelana saab vaadelda nende kolme osa esinemist ja nende vahelisi seoseid.

Erasektori organisatsiooni ahelas esinevad PMSi struktuuri kohustuslikud komponendid organisatsiooni tasandil on:

- strateegiline eesmärk,
- tegevusedukuse võtmenäitajad/mõõdikud (KPI) ja sihtväärtused (SV).

Üksuste tasandil on kohustuslikeks komponentideks:

- strateegiline eesmärk,
- tegevusedukuse võtmenäitajad + SV,
- võtmeprotsess,
- väljundi võtmenäitaja KPI + SV,
- tegevuse võtmenäitaja KPI + SV ja

- sisendi võtmenäitaja KPI + SV.

Avaliku sektori organisatsiooni ahelas esinevad PMSi struktuuri kohustuslikud komponendid organisatsiooni tasandil on:

- strateegiline eesmärk,
- väljundi tegevusedukuse võtmenäitajad + SV.

Üksuste tasandil on kohustuslikeks komponentideks:

- strateegiline eesmärk (elluviivale osale),
- väljundi KPI + SV,
- tegevuse KPI + SV ja
- sisendi KPI + SV.

PMSi juurutamise faasis toimub PMSi struktuuris toodud uute ajaliste eesmärkide edastamine, kehtestamine üksustele ehk elluviijatele. Tegemist on üleminekuetapiga, kus eelnevalt loodud PMSi struktuur juurutatakse pidevaks kasutamiseks. Sellega edastatakse elluviijatele uus teadmine, mille tulemusena järgnevatel perioodidel tehakse senisest just neid asju natuke teistmoodi. Juurutamine ongi kokkuvõetav sellega, et see on protsess, kus toimub uute reeglite/põhimõtete selgitamine ja kehtestamine üksustele.

PMSi kasutuse faas koosneb PMSi struktuuris toodud näitajate kohta infokogumisest, edastamisest ja vajadusel korrigeerivate tegevuste läbiviimisest. Ahel moodustub järgmistest tegevustest:

- vahetulemuste jälgimine, mis eeldab algselt info määratlemist, kogumist, analüüsi ja edastamist;
- reageerimine;
- korrigeerivate tegevuste ja kohanduste planeerimist ning elluviimine ja
- süsteemi enda hooldamine.

Kolmandaks uurimisülesandeks oli loodud mudeli paikapidavuse testimine empiiriliselt kahe organisatsiooni PMSi peal. Kui organisatsioon on saavutanud oma strateegilised eesmärgid ja samas kui testi tulemustest selgub, et PMSi ahela katkemist ei täheldata, võib väita, et loodud mudel sobib. Juhul kui testi tulemustest selgub, et organisatsiooni PMSil on vajakajäämised (ja mis on viidatavad) teatud osa(de)s, mis ei luba organisatsioonil mudelit järgides saavutada soovitud tulemusi ning testitav organisatsioon ei olegi neid saavutanud, siis võib ka väita, et ahela põhimõtte kasutamine PMSi hindamisel sobib.

Sihtgruppi valiti organisatsioonid, kellel oli läbitud PMSi tingimustes üks täisstrateegiatsükkel. Teiseks kriteeriumiks sihtguppi kuuluvate organisatsioonide valikul oli PMSi teadlik rakendamine.

Saadud testimise tulemused olid järgmised.

Esimeses juhtumis, Ettevõtluse Arendamise Sihtasutuses (avaliku sektori organisatsioonis), ilmnes ahela katkemine mitmes kohas kõigis kolmes PMSi osas: struktuuris, juurutamisel ja kasutamisel. Katkevused olid viidatavad.
PMSi struktuuri kohalt esines ahela katkemine:

- eesmärgid vastasid osaliselt SMART kriteeriumitele;
- üksuste tulemusnäitajad olid joonduvuses organisatsiooni tasandi omadega, kuid organisatsiooni elluviival osal puudus võime neid mõjutada;
- organisatsiooni ja üksuste tasandil puudusid väljundnäitajad.

Juurutusfaasis ei saadud edastada üksustele strateegiaga seoses neid eesmärke, mis olid nende saavutusulatuses.

Kasutusfaasis:

- ei kogutud endale saavutamiseks võetud eesmärkide tulemusmõõdikuid regulaarselt ja
- sisuliselt koguti jooksvalt õigeid väljundnäitajaid, kuid ei reageeritud hälvetele ja ei kutsutud esile korrigeerivaid tegevusi.

Kokkuvõttes jäi organisatsioonil strateegiaperioodi 2003-2007 strateegiliste eesmärkide saavutusmäär alla poole.

Teises juhtumis, ASis Baltika (erasektori organisatsioonis) autor ahela katkevust ei tuvastanud. Ahel esines nii PMSi struktuuris, juurutamisel ja kasutamisel. Organisatsioon saavutas strateegiaperioodi 2002-2005 strateegilised eesmärgid.

Kahe juhtumi abil sai vastatud uurimusküsimusele, et PMSid, mille ülesehituses ja kasutuses saab selgelt tuvastada ahela põhimõtte esinemist, aitavad (paremini) kaasa organisatsiooni strateegiliste eesmärkide saavutamisele, kui need PMSid, kus seda põhimõtet ei ole järgitud ja/või esineb ahela katkevus.

Uuringu juhtumite tulemused annavad alust väita, et ahela põhimõtte kasutamine PMSi loomise ja täiendamise juures suurendab PMSi tõhusust, mis omakorda suudab organisatsiooni tugevamalt toetada strateegia elluviimisel ja strateegiliste eesmärkide saavutamisel.

Kuna organisatsiooni eesmärkide saavutamisele ja mittesaavutamisele avaldavad korraga mõju paljud tegurid, millest vaid üks on PMSi tõhus toime, siis ei saa üheselt väita, et eesmärkide madal või kõrge saavutusmäär tulenes ainult PMSi ebatõhususest või tõhususest.

Väitekirja praktilise panusena võib välja tuua selle, et lisaks autori loodud mudeli kasutamisele PMSide loomisel võimaldab mudel diagnoosida juba juurutatud PMSide tõhusust ja puuduste avastamise puhul juhtida tähelepanu nõrkustele süsteemi vastavates osades, mis peale puuduste kõrvaldamist süsteemi tõhususe

taastaks. Loodud mudel on rakendatav nii era kui avaliku sektori organisatsioonides.

Lisaks mudeli koostamisele saab autori panustena kokkuvõtlikult välja tuua järgmist. Esimeseks teoreetiliseks panuseks oli PMSi rakendusteooria täiendamine läbi ahela põhimõtte järgimise kõigis kolmes PMSi osas.

Autori teiseks teoreetiliseks täienduseks oli PMSi struktuuri komponentide liigitamine kohustuslikeks ja soovituslikeks. Kohustuslikud komponendid peavad kõik esiteks esinema ja teiseks vastama neile seatud nõuetele. Sellisel moel esinedes moodustavad nad ahela.

Märkimist väärivad veel järgmised autori teoreetilised panused:
Autor täiendas organisatsioonilise tegevusedukuse kontseptsiooni. Nimelt leiab käesoleva väitekirja autor esiteks, et omaniku tasandilt tuleb minema edasi omaniku huvide rahuldaja – tegevjuhtkonna tasandile ehk tegevusedukuse kontseptsioon peab minema edasi, organisatsiooni sisse ja mitterahaliste näitajate abil mõõdetavate väärtusteni, mille saavutamine viib välja finantsilise tegevusedukuseni. Teiseks peab olema organisatsiooniline tegevusedukuse sama kontseptsiooni raames nii terviklik, kui ka hierarhiline.

Autor on täiendas Waali eduka muutuse komponente viisil, et rühmitas komponendid kolme PMSi osa (PMSi struktuuri kujundamine, PMSi juurutamine ja PMSi jooksev kasutamine) vahel. See lubab muutuste elluviimisel muutuste jaoks olulisi komponente 3 PMSi vahel seostada. Ja keskenduda loomise või parendamise juures just vajalikule osale. Lisaks koondas autor kirjanduse baasilt kokku kõik nõuded PMSi struktuuri komponentidele ja kasutas neid normatiivsete nõutena neile.

Väitekirjas võetud kitsa fookuse tõttu ei saanud käesolev väitekiri jälgida PMSi „pehme“ poole mõju PMSi tõhususele, kuid seda peab autor oluliseks tulevikus uurida.

# ABSTRACT

**Creation of a Supportive Model for Designing and Improving the Performance Management System of an Organisation. Case studies**

The introduction of the given set the objective to create a model for enhancing benefits from using PMS and it's functioning. The author set three research tasks for that purpose.

First, he had to analyse unsuccessful implementations of PMS found in the literature. During the research he gathered the viewpoints of different author, systematised and grouped them on the basis of similar characteristics. In this way he reached the main and most frequent reason – lack of communication in different parts of PMS.

The second research task was to use the research results of previous analyses for creating a model that would support implementation of PMS. In the theoretical model creation the author focused just on removing the above-mentioned main and most frequent shortcoming.

The author made his own improvements to the PMS implementation theory. The first improvement was complying with the chain principle in all three parts of PMS. The chain principle facilitates understanding/identifying of important relationships in the composition of PMS that might otherwise look sophisticated. The in the model author identified parts in the so-called normative approach to PMS, dividing it into three:

- PMS structure design,
- implementation of PMS, and
- functioning of PMS.

The second improvement made by the author was classification of the structural components of PMS into obligatory and recommended. Obligatory components must all be present and secondly, meet their special requirements. When occurring in that way they form a chain.

The obligatory structural components of PMS of a private sector organisations at the organisational level are: strategic objective, key performance indicators/measures (KPI) and target values (TV). Unit level obligatory components are: strategic objective, key performance indicators + TV, key process, key output indicator KPI + TV, key activity indicator KPI + TV and key input indicator KPI + TV.

Organisational level obligatory components in the public sector organisations are: strategic objective, key performance indicators of output + TV. Unit level obligatory components are: strategic objective (for the executive part), key performance indicators of output + TV, key performance indicators of activity + TV and key performance indicators of input + TV.

In the PMS implementation phase, new temporal objectives formulated in the PMS structure are communicated and established for units or executors. It is a transitional stage where the above created PMS structure is put into operation. This provides knew knowledge to executors as a result of which these things will be done in a slightly different manner than before in the next period. Implementation can be summarised as a process where new rules/principles are clarified and established for units.

The PMS use phase comprises gathering and communicating of information on the indicators formulated in the PMS structure, and where necessary, conducting adjusting activities. Chain is formed of the following activities:

- Monitoring interim results, which presumes identification, collection, analysis and communication of information originally;
- reacting;
- planning and doing adjusting activities and adaptations, and
- system maintenance.

The third research task was to empirically test the new model on two organisation's PMS. The findings were as follows.

The first case study (public sector organisation) identified chain interruptions in several spots in all three parts of PMS: structure, implementation and use. Interruptions were referable.

Chain interruption in PMS structure occured as follows:

- objectives conformed partly to SMART criteria;
- output indicators were missing at the organisational and unit level.

In the implementation phase they failed to communicate those strategy related objectives to units which were in their power of achievement.

In the use phase:

- result measures of objectives they committed to achieve were not collected regularly, and
- correct output indicators in term of content were actually collected but deviations were not reacted to and adjusting activities were not induced.

All in all, the organisation did not achieve most of its strategic objectives.

In the second case study (private sector organisation) the author did not detect any chain interruption. Chain was found to be present in PMS structure, implementation as well as in use. The organisation achieved its strategic objectives. They helped to answer the research question that PMS in which structure and use it is possible to clearly detect the presence of chain principle, contributes better to the achievement of organisation's strategic objectives, compared to those PMS where this principle is not observed and/or the chain is interrupted.

The findings of case studies allow stating that using of the chain principle in PMS creation and improvement enhances the PMS efficiency, which in turn is able to offer greater support to the organisation in strategy execution and achievement of strategic objectives.

Since the achievement and non-achievement of organisational objectives is influenced by many factors simultaneously, from which only one is efficient PMS functioning, it cannot be declared that a high or low achievement rate of objectives was due to inefficient or efficient PMS only.

In addition to using the model created by the author in PMS creation, the model allows to diagnose the functioning of implemented PMS and where mal-functioning is detected, draw attention to the weaknesses in the respective parts of the system, which, after the shortcomings are removed, would restore the efficiency.

Also the following amendments made by the author are worth mentioning:
The author supplemented the organisational performance concept. Namely, the author of thesis finds that first, from the level of owner one must proceed on to the level where owner's interests are satisfied – executive management, or performance concept must go on into the organisation and to values measured by non-financial indicators the achievement of which will lead to financial performance. Secondly, organisational performance within the same concept must be both complete and hierarchical.

The author supplemented the successful change components by grouping the components between three parts of PMS (PMS structure design, PMS implementation and PMS functioning). This allows relating the important components for changes to three parts of PMS during the implementation.

The author additionally gathered all requirements for structural components of PMS based on literature.

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