

Quest for Balance

*The human element in
performance management systems*

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2 Identifying the behavioral factors

In Chapter 2, a brief description was given of the history of performance management systems and an assessment was made of the need to identify behavioral factors that are important to successful design, implementation and use of a such a system. In this chapter, these behavioral factors are described.

Criteria for Regular Use

Since the objective of this book is to identify which behavioral factors are important to the *successful* implementation and use of a performance management system, criteria for regular use have been formulated. These criteria denote when use of the performance management system, and its CSFs, KPIs and BSC, is valuable to the organization and its managers. The criteria are a mix of tangible and intangible benefits, but focus more on the intangibles. It has to be noted that a successful implementation and use of a performance management system does not necessarily mean that the organization has its performance management system embedded in the planning and control cycle with periodic reporting and discussion. Successful implementation and use can already be achieved when the managers have an intensified awareness of the importance of the performance management system. The criteria for regular use are given in Exhibit 2.1, in the format of interview questions.

Criteria for regular use
1. Are the results of the organization, according to managers, improved through the use of the performance management system?
2. Are the results of the organization, objectively, improved through use of the performance management system?
3. Has the degree of performance management system use by managers increased?
4. Are there plans for follow-on projects?
5. Is there a difference in manager attitude towards performance management, from project start to currently?
6. Is there regular communication about KPI results?
7. Are the CSFs, KPIs and BSC incorporated in the regular management reporting?

Exhibit 2.1: The criteria for regular use

Behavioral Factors

As was stated before, many behavioral factors can contribute to the successful implementation and use of a performance management system. In order to make the investigation into these behavioral factors manageable, they have been grouped and arranged in a so-called classification scheme (Exhibit 2.2).

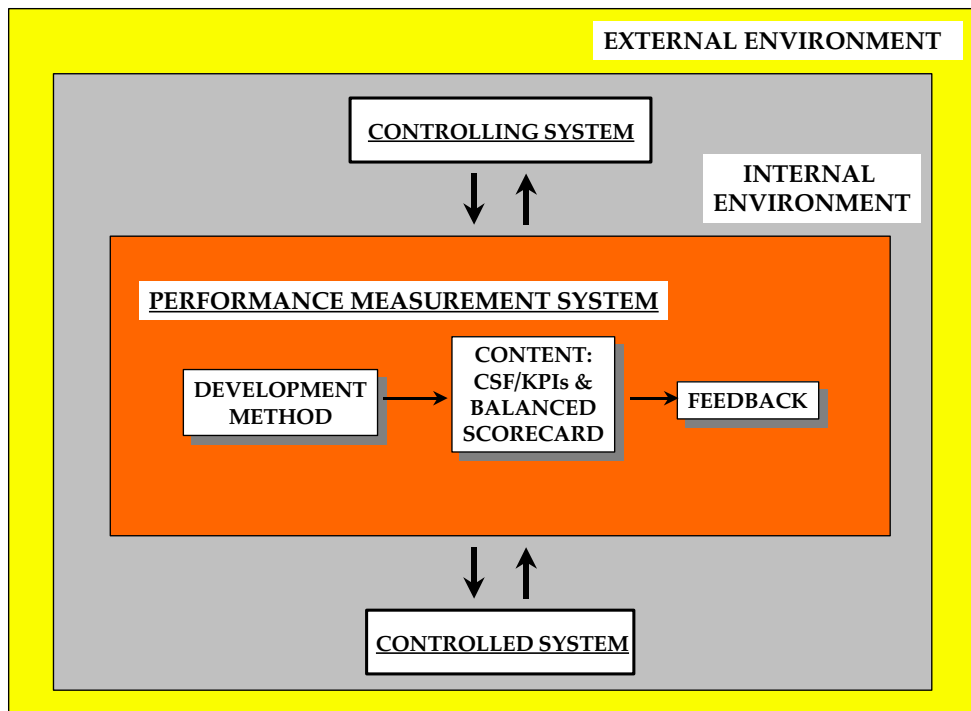


Exhibit 2.2: The classification scheme of behavioral factors

The classification scheme is developed by linking factors of effective control with the control cycle of performance measurement. The 'controlled system' and 'controlling system' are defined as being a manager respectively the superior of a manager. Efficient management control is determined by the degree of manageability of the controlled system and the management capacity of the controlling system. The 'internal environment' and the 'external environment' also have influence on the degree of control effectiveness. For effective control, the controlled system and controlling system both need a performance management system. Through the performance management system, the controlling system gets information about the performance of the controlled system, and the controlled system obtains information about its own performance. This system can be subdivided into several parts. The 'development method' part describes the way in which the performance management system is developed. The 'content' part stipulates the quality criteria which the performance management system, and the CSFs, KPIs and BSC it contains, has to meet, in order to be relevant to both the controlling and controlled system. The 'feedback' part describes the way in which information from the performance management system is conveyed to both the controlling and controlled system. The classification scheme can be further detailed into sub-parts (Exhibit 2.3).

Classification scheme part	Sub-part
Performance management system – Development method	Development method
Performance management system – Content	Quality (criteria for the indicators)
	Registration (of the indicators)
	Base (of the indicators)
	Targets (for the indicators)
	Balance (of the performance management system)
Performance management system - Feedback	Feed forward (with prognoses)
	Feedback (through reporting)
Controlled system	Management level
	Management style
Controlling system	Responsibility
	Supervision (by the promoter)
	Relation with controlled system

Classification scheme part	Sub-part
Internal environment	Alignment (with strategy and business processes)
	Organizational culture (incl. structure)
External environment	External environment

Exhibit 2.3: The sub-parts of the classification scheme

In the remainder of this chapter, behavioral factors applicable for each sub-part are described. The behavioral factors are derived from the requirements which, according to the literature, have to be taken into account during the development, implementation and use of a performance management system.

Performance Management System – Development Method

The performance management system has to be developed in a structured manner. The *development method* constitutes a description of the way in which the performance management system and its CSFs, KPIs and BSC have to be developed and imbedded in the organization. Included in the description are the project approach, assembly of the project team, starting time of the performance management system project, and a change management approach.

The development of the performance management system is not just a technical issue; a lot of change management issues also come into play. Managers often do not (readily) understand the performance management system, do not understand why so much effort should go in ‘just another system’, or are afraid the system makes their performance (too) visible. This can cause resistance, which frustrates the introduction of the system. Investing in the creation of a support base for the performance management system during the development stage is for this reason very important. This can be done by showing the reasons and goals for introducing the performance management system to the managers. These reasons can be: the continuity of the organization is at stake (for instance due to bad financial results), dissatisfied customers, worse benchmark figures than the competition, current management reporting does not provide enough insight in the execution of the strategy and crucial business processes, or it costs too much effort to generate the current management reporting while managers are discontent with the content of the reports. A performance management system could give insight into these issues and help managers solve them, so the continuity of the organization and of their positions is guaranteed. If managers are convinced by these arguments, they will support the implementation of performance management and the performance management system. The requirements described above are combined into the behavioral factor: *Managers accept the need for performance management.*

Future users of the performance management system can participate during the performance management system development stage in two ways. Active participation entails the identification of CSFs and KPIs by the users themselves, for their own responsibility areas. Passive participation entails the users giving feedback on the CSFs and KPIs, identified by a project team. Whatever the manner of participation chosen, users from many organizational disciplines should be involved as early as possible. Involving many disciplines results in a broader acceptance base for the performance management system and in a better coverage of the important business functions by the performance management system. Involving users at an early stage gives them a better possibility to influence the end results. An additional benefit is that users get a clear insight into the mission and strategy of the organization and how they can influence these to obtain a better organizational performance. Involvement in the development of CSFs, KPIs and the BSC increases the motivation of users to use the performance management system due to their input in the design of the performance management system. An active role also prevents the ‘not invented here’ syndrome, in which users get new things forced on them. The requirements described above are combined into the behavioral factor: *Managers have an active role during the development stage of the performance management system project.*

Choosing the right starting time for the development of a performance management system is crucial for the acceptance of the system. The organization and its managers have to be ready for such a far-reaching project. If the organization does not have a clearly defined mission and strategy, if there are many operational problems or if there are not enough resources, then it is probably better to wait with the development of the performance management system until a more appropriate starting time. In the organization there has to be a consensus that the chosen starting time is indeed appropriate. An appropriate starting time is when managers have enough time to

spend on the project or when there is a clear, urgent need for better management information. Managers have to be involved in the decision about the starting time, so they have a better insight into the decision making process and also can guarantee their participation. If there is no consensus or if managers have not been involved in the decision about the starting time, they may resist the project and may not co-operate. The requirements described above are combined into the behavioral factors: *Managers agree on the starting time* and *Managers have been involved in decision making around the project start time*.

Regular and structured communication needs to take place with all persons involved in the development of the performance management system. There should not be only communication about the reasons for the introduction of the performance management system and about intermediary project results, but also about daily project activities. For this, a communication plan is needed, describing the communication moments, content, communication manner (formal or informal) and communication receivers. An integral part of the communication should be a feedback mechanism from the organization to the project team, so a dialogue between the two is set up. A change in management information and the performance management system can lead to uneasiness and unrest in the organization. For instance, the unexpected confrontation with results on KPIs can cause great resistance by managers. Regular communication increases managers' knowledge about the project ('unknown, unloved') and can defuse a potential 'time bomb' under the project. An added benefit of regular communication is that managers get a better insight into the motives to introduce the performance management system. Communication will have a positive influence on the degree of acceptance of the system, which will even more increase when the future users of the performance management system participate themselves in the communication process. The requirements described above are combined into the behavioral factors: *Managers are informed about the status of the performance management system project* and *Managers are actively communicating about the performance management system project*.

Performance Management System - Content

The content of the performance management system can originate from several different sources, and has to meet certain standards. The content has to be of good *quality*: CSFs and KPIs have to be clearly defined, valid, relevant and measurable. In order to be able to report KPIs, *registration* of relevant data has to take place: data has to be collected, calculated and stored in the performance management system. The CSFs, KPIs and the BSC need a clear *purpose*, which is the monitoring of the execution of the strategy, of the performance on critical business activities, and of significant (temporary) developments in the internal and external environments. The CSFs and KPIs have to be in *balance*, which means that they monitor all relevant and critical aspects of the business. Finally, all the KPIs need to have *targets*, so that the performance levels the organization strives for are clear.

Performance Management System – Content: Quality

KPIs have to be defined clearly, which means they need to have an intelligible and consistent definition. A KPI is intelligible for managers if it is defined in terms which they understand and which match their daily practice, and when the indicator is not complex. In this way, the KPI is understood by the managers who have to work with them. Managers can also better judge the effect their activities have on the KPI result, and tailor their activities to get a better result or tailor the KPIs so they better represent their responsibility areas. A KPI definition is consistent if the definition stays the same through time. This is important for making relevant and meaningful comparisons over time. A KPI that is defined in an unclear, vague or too technical way causes confusion and misinterpretation. A good way to increase the understanding of managers is to involve them in defining their own KPIs. This will also increase the support for the new indicators. The requirements described above are combined into the behavioral factors: *Managers understand the meaning of KPIs* and *Managers are involved in defining KPIs*.

It is to be expected that the results attained on KPIs will lead directly or indirectly to financial consequences. According to the American Productivity & Quality Center, best practice organizations are able to display relationships among their performance management systems, human asset management results (e.g. retention, development, succession planning) and, to a lesser extent, financially driven business results.¹ To a lesser extent because the relation between non-financial indicators and financial results is often unclear and difficult to quantify for managers. In practice, managers often stick to financial indicators which have an explicit and clear relation with the financial result. As a consequence, the softer indicator such as client satisfaction and employee motivation is often left out. These indicators, however, are crucial to the continuity for an organization because they are indicators of future profitability and added value: a bad result on them will eventually lead to a bad financial result. If relationships, however difficult, can be established between non-financial indicators, actions taken on these will improve the organization's financial results and acceptance of these types of KPIs by managers will increase with

managers. These relations will also make more clear to managers what the financial consequences of their activities will be. The requirements described above are combined into the behavioral factor: *Managers have insight into the relation between KPIs and financial results.*

Performance Management System – Content: Registration

The data needed to calculate the results on the KPIs can come from several sources. They can be registered internally, manually or via internal information systems or they can come from external sources, like opinion polls and market surveys. Often there exists a preference in the organization to define KPIs that can be calculated from existing (operational and financial) data sources and information systems because these do not take too much effort to report. In itself, this is not a shortcoming as the organization has a lot of valuable information which should not be ignored in the performance management system. However, it should not occur that the organization bases its information supply solely on operational and financial indicators and that important non-financial indicators, like client satisfaction and employee satisfaction, which are not readily available are not included in management reporting. Because at many organizations it takes a lot of effort to generate data for many of the non-financial indicators, the result is often new management information which more or less resembles the old information set. Consequently, supplementary procedures and systems are needed to guarantee an automatic supply of non-financial indicators. This will save a lot of time and effort of managers in collecting and reporting this type of information, preventing managers thinking of non-financial reporting as an extra workload and decreasing the chance of them resisting the performance management system. The requirements described above are combined into the behavioral factor: *Managers do not get discouraged by the collection of performance data.*

Performance Management System – Content: Base

The strategy of an organization can be operationalized and made tangible by defining CSFs and KPIs. Because the strategy indicates the long-term goals of the organization, these CSFs and KPIs foster thinking about long-term performance. In addition, by using these CSFs and KPIs, managers are better able to see which results the organization obtains, having a motivational effect. For this to work, there needs to be consensus among managers about the strategy; the strategy must be translated in operational goals that incite action; and there must be a clear linkage between these operational goals, organizational performance and organizational strategy. The requirements described above are combined into the behavioral factor: *Managers have insight into the relation between strategy and CSFs/KPIs.*

Besides the strategy, the business processes of an organization can also be the basis for CSFs and KPIs. Because (especially complex) organizations dispose of a great variety of business processes and activities, only the crucial processes and activities should be taken as the basis for the indicators. Crucial processes and activities are defined by them as those that are critical for the continuity of the organization. Measuring these processes with tangible KPIs makes it easier for managers to see how their performance on these activities influence the overall performance of the organization on crucial business processes. The requirements described above are combined into the behavioral factor: *Managers have insight into the relation between business processes and CSFs/KPIs.*

Performance Management System – Content: Targets

Targets are the performance levels an organization strives for. Managers are involved in the process of target setting if they (the controlled system) have the freedom to negotiate the targets with their superiors (the controlling system). During this negotiation, managers and superiors exchange information about the nature and feasibility of the targets. In addition, managers have the opportunity to influence the expected performance levels. This results in a greater degree of understanding of what is expected and a higher acceptance by managers of the agreed-upon performance levels. Managers are also more motivated to reach the agreed upon targets, resulting in better overall organizational performance. However, targets should not just be the result of negotiations without taking into account stakeholder requirements, fundamental process limits and improvement process capabilities. It should be kept in mind that managers, when participating in setting targets, might be tempted to manipulate the process in order to obtain easier targets. The requirements described above are combined into the behavioral factor: *Managers are involved in setting KPI targets.*

Performance Management System – Content: Balance

The set of defined CSFs and KPIs has to provide a well-balanced overview of the actual performance of an organization. This means that a performance management system has to be created that not only contains financial but also non-financial indicators; not only quantitative, but also qualitative indicators; not only internal, but also external indicators; and not only short-term, but also long-term indicators. Indicators only have a signaling function. They give an abstract and partial view of reality. It is not possible to provide a complete view with one indicator. Consequently, managers need a balanced set to get an overview of their responsibility area. Such a set makes it possible for managers to explain the results in their responsibility area in a multi-dimensional way, and to see the cause-and-effect relation between their activities and their results. The requirements described above are combined into the behavioral factors: *Managers' KPI-sets are aligned with their responsibility areas* and *Managers have insight into the relation between cause and effect*.

Performance Management System - Feedback

As soon as an organization starts using the performance management system, information about performance on the CSFs and KPIs has to be reported. Managers receive *feedback* information in the format of management information on realized performance. Feedback makes it possible for managers to analyze results and take corrective actions. Managers receive *feed forward* information in the format of prognoses on expected performance. Feed forward makes it possible for managers to make estimations about future results and to take preventative action.

Performance Management System – Feedback: Feed forward

Many performance management systems only give the actuals to date with only limited attention being paid to future expectations by including prognoses in the reports. Too often, management assumes that good results in the past are a guarantee for good results in the future, but they are not. In today's turbulent, dynamic and quickly changing business environment future expectations are sorely needed. If managers make prognoses for their responsibility areas, they are not only better prepared on what is to come, but they can also undertake preventative action, if needed. These prognoses have to be of a good quality, so that managers have good insight into their areas and future performances. This will not only increase trust in the defined KPIs, but also in their own management abilities. The requirements described above are combined into the behavioral factors: *Managers are involved in forecasting* and *Managers trust good quality forecasts*.

The performance management system has to support managers actively in the execution of their activities. Consequently, the performance management system has to provide managers with the information that makes it possible for them to undertake corrective and preventative action. The key to a successful organization lies in its willingness to start using and acting upon the information provided by the performance management system. The performance management system is action-oriented if it not only contains information for taking action, but also enables managers to follow the execution of these actions and their results. If this is possible, managers will be greatly motivated because the performance management system helps them to solve issues, prevent problems and obtain higher performance. The requirements described above are combined into the behavioral factor: *Managers' activities are supported by KPIs*.

Managers need to compare their results with managers of other organizational units or even of other organizations. This means that KPIs have to be comparable throughout the organization: they must have the same meaning, the same definition and the same method of calculation. KPIs should also fit the frame of reference of managers, so managers can understand the comparisons between their performance and those of others. Making KPIs comparable has as an added advantage in that the organization can put its performance in perspective by benchmarking it against that of other organizations. This helps managers to learn whether their performance is 'on par' or whether it should be improved. Comparing KPIs is, however, not so straightforward. The moment of measuring and comparing KPIs is important. New systems are often implemented when things are not going so well for the organization. The chance of performance improvement anyway is, therefore, quite good. However, this will distort the result (in a positive way) of the KPI, making it less comparable. For many non-financial indicators, there will be a time lag before improvements show up. This has to be taken into account when considering the timing of making the comparison. The requirements described above are combined into the behavioral factor: *Managers' frames of reference contains similar KPIs*.

Performance Management System – Feedback: Feedback

Management information is intelligible for users if the performance management system is easy to understand. The use of colors, graphs, tables, standard formats and standard interfaces make the performance management system accessible. The principle should be that 'one picture says more than a thousand words'. Text supporting graphs should be short and concise. A good method to make an intelligible performance management system is to let the managers participate in the design of the system. This will give managers a greater insight into the structure and set-up of the performance management system and will also make sure it is better tailored to their needs. This increases the acceptance of the performance management system. The requirements described above are combined into the behavioral factors: *Managers are involved in making the CSF/KPI/BSC report layout* and *Managers understand the CSF/KPI/BSC reporting*.

Reliable information consists of data which has been measured systematically and objectively without distortion, interference or manipulation of managers and which can be verified by independent sources. There is a lot of literature about the positive relation between reliability of feedback and acceptance of feedback. If the receiver of the feedback considers this feedback to be reliable (i.e. an accurate depiction of his performance), then he/she will accept that feedback. This means the receiver will base his/her decisions and course of action on this feedback, which in turn will lead to better performance. The requirements described above are combined into the behavioral factor: *Managers trust the performance information*.

During information analysis, managers look at the deviation between targets (budgeted values) and actuals (realized values). Of interest are magnitude, cause, type and tendency of the deviation. Type means whether the deviation is incidental (question is then: for how long?) or structural (question is then: what are the future consequences?). The degree to which analyses are made by managers indicates how much the performance management system is used by these managers. The fact that managers make their own analyses will raise the quality of the analyses because these managers know best what is happening in their responsibility areas and are, therefore, in the best position to formulate corrective actions. It will also raise acceptance of the analyses because these are not forced on managers by a relative outsider. Precondition is that the performance management system makes information openly available, so that the manager can trust good quality analyses with enough depth. The requirements described above are combined into the behavioral factors: *Managers are involved in making analyses* and *Managers trust good quality analyses*.

Controlled System

The controlled system uses the performance management system to obtain information about the responsibility area, for self-control and self-management and for accountability to the controlling system. Every *management level* has its own specific CSF/KPI set and specific BSC. Because there are several management levels in one organization, there will be several sets of indicators and scorecards. There is a specific *management style* that a manager has to apply if he or she uses the performance management system in the communication upward to superior and downward to employees.

Controlled system: Management level

Since different management levels have different responsibilities, there have to be more than one set of CSFs, KPIs and BSCs in the organization, each representing these different responsibilities. Managers use those indicators that give them the best information for their decision-making process. In this way, every management level receives the information that is relevant to that level. Often, the set for top management will consist of mainly financial and long-term indicators. The lower in the organization the level, the more operational and short-term the indicator set will become. If the CSF/KPI sets are not specific enough, the performance management system is not able to support managers in making their decisions and in obtaining their specific goals because the provided information is not relevant and specific enough. This will lower the acceptance of the performance management system. The requirements described above are combined into the behavioral factor: *Managers use the CSFs/KPIs/BSC that match their responsibility areas*.

A manager can become overloaded with information. Many things can be measured but then the manager has to spend too much time measuring and trying to shift to the obtained data to get to the real valuable information. As Nobel-prize winning economist Herbert Simon put it: 'a wealth of information creates a poverty of attention'.² This overload fragments the manager's attention and effort. To prevent the problem, managers need to receive that amount of information that is needed to represent fairly their responsibility areas. This means, in general, limiting the CSF/KPI set to the critical indicators, 5 to a maximum of 15 indicators per organizational unit. The best way to

limit the KPIs is to let managers choose their own because they know best which indicators accurately monitor their activities. After choosing the set, managers should be able to spend enough time on working with these indicators. Because the set is limited, managers will not spend too much time. However, if they do not get enough time due to other work pressures or too many special tasks, the managers will not get enough added value out of their KPIs. The requirements described above are combined into the behavioral factors: *Managers' information processing capabilities are not exceeded by the number of CSFs/KPIs and Managers have enough time to work with their CSFs/KPIs/BSC.*

Controlled system: Management style

Various management styles can be distinguished like management by numbers, management by walking around, management by objectives and participative management style. This investigation focuses on the style a manager uses when applying the performance management system in managing subordinates, managing himself and communicating with superiors. What differentiates today's high-performing companies are the capabilities and behaviors associated with effective information use: the so-called 'information orientation' of the company and its leaders.³ A positive information orientation or attitude toward the performance management system and performance management entails that managers recognize the value of the new system for supporting their activities like managing employees, and in obtaining targets, which fosters the acceptance of the new system. Managers who have previously had positive experiences with CSFs, KPIs and the BSC often have a positive attitude toward performance management. A positive attitude can be affected negatively when the new system, which makes performance very transparent, is going to be used to punish bad results. Managers will then start to resist the performance management system and will manipulate the information in the system. The requirements described above are combined into the behavioral factors: *Managers have earlier (positive) experiences with performance management, Managers realize the importance of CSFs/KPIs/BSC to their performance, Managers can use their CSFs/KPIs/BSC for managing their employees, and Managers do not experience CSFs/KPIs/BSC as threatening.*

Controlling System

The controlling system is the superior of a manager. Managers use the information from the performance management system for accountability purposes and in this way can report and explain performance to their superior. The way this happens is governed by the planning and control cycle that exists in the organization. This cycle stipulates the *relation with the controlled system* (the communication which has to take place between manager and superior), using *the specific indicators for which a manager is responsible*. The controlling system has to appoint a specific person to sponsor and *supervise* the development, implementation and use of the performance management system.

Controlling system: Responsibility

For each KPI, a single manager should be appointed, who is formally responsible for the results of that indicator. This makes responsibility obvious when an issue arises around a particular indicator. If accountabilities for KPIs are not clear, the indicators can be viewed as being 'for information' only. As a consequence, either the indicator will not be managed, resulting in late action and bad performance, or many discussions will take place between managers. If results are bad, managers may put the blame on each other; if results are good, managers may undeservedly claim the glory. To prevent disagreements on a later date, managers should be involved when appointing indicators to people. Involvement will also raise the acceptance level of the accountability. The requirements described above are combined into the behavioral factors: *Managers have sole responsibility for a KPI and Managers can influence the KPIs assigned to them.*

Controlling system: Supervision

During the development and implementation of the performance management system, a sponsor from top management should be appointed who has to supervise the project and who is responsible for a successful implementation. This person has to be acceptable to the organization based on experience, seniority or other criteria. If the sponsor is not accepted by the organization, the individual will not be able to influence the project activities enough to make sure the project can be finalized successfully. If the sponsor has been accepted, the sponsor must make sure to spend enough time on the project. Then, the organization will see the promoter takes the project seriously. Because the implementation of a performance management system takes a lot of the organization's effort. Active and visible support of the project by top management is essential to convey the importance of the new system to the organization. Top management (the controlling system) has to use the

performance management system frequently and visibly in dealings with the controlled systems and has to regularly communicate the results from the performance management system to the organization. For instance, this can be done by regularly scheduling meetings to discuss the performance management system results. The requirements described above are combined into the behavioral factors: *Managers accept the promoter*, *Managers see the promoter spends enough time on the performance management system implementation* and *Managers clearly see the promoter using the performance management system*.

Controlling system: Relation with controlled system

In the relationship between controlling system and controlled system, there has to be a certain degree of trust in order to be able to use the performance management system effectively. This is because the performance management system makes the performance of the controlled system much more transparent than the traditional financial-based reporting system did. This makes the controlled system more vulnerable to criticism from the controlling system. If the controlling system then uses the information to punish or sanction the controlled system, the latter will not trust that the former makes appropriate use of the system. Managers will start to resent the performance management system and will sabotage it. The requirements described above are combined into the behavioral factor: *Managers and their controlling systems have a mutual trust*.

Internal Environment

The internal environment constitutes the 'inside world' or the context in which the performance management system, the controlled system and the controlling system exist and operate. Since development and adjustment of the strategy, the business processes, and the planning and control cycle take place continuously, an organization has to make sure there is *alignment* between strategy, processes and the performance management system. This means the performance management system, CSFs, KPIs and BSC need to be updated regularly to reflect the new situation of the organization. Effective use of the performance management system requires a change in *organizational culture*: from a focus on punishment to a focus on improvement. This has to be reflected in the reward structure and communication processes of the organization.

Internal environment: Alignment

Rapid changes in the market (competitors' actions, recessions) and inside the organization (reorganization, personnel turnover) force the organization to constantly adapt its strategy and business processes. This, in turn, causes adaptation of the performance management system, CSFs, KPIs and the BSC, which are monitoring the strategy and processes. Consequently, an organization has to review and update its performance management system regularly to make sure it still accurately represents the organization's performance. According to the American Productivity & Quality Center, best practice organizations recognize the need to monitor continuously and improve the performance management process. ⁴ This review and adaptation of the performance management system can take place during the annual planning process, making it an integral part of the organization's planning and control cycle. During the update, consensus needs to exist among the managers about the changes to be made in the performance management system, so these changes will be accepted by them. If review and adaptation do not take place, the quality of the information from the performance management system will decrease, thereby losing its relevance to the managers, who will be inclined to use the system less and less. The requirements described above are combined into the behavioral factors: *Managers find the performance management system relevant due to regular evaluations*, *Managers use the performance management system regularly during the planning and control cycle* and *Managers agree on changes in the CSF/KPI set*.

Internal environment: Organizational culture

Regular and frequent use of the performance management system requires alignment between the culture of the organization and the culture that is needed to practice performance management. This culture needs to be based on performance improvement, self-control, and learning -- not on punishment. This improvement culture, where mistakes are seen as sources for improvement and not as causes for punishment, can be characterized as a culture where there exists a small distance between controlling system and controlled system, collectivism, absence of masculine role patterns, long-term orientation and a great degree of tolerance for ambiguity. ⁵ This culture stimulates managers to use the results on their KPIs as the starting point for improvement actions. If an organization uses the performance management system solely for accountability and punishment purposes, there

will be a great incentive for managers to start manipulating the figures and optimizing the KPI results without necessarily solving underlying problems. The requirements described above are combined into the behavioral factor: *Managers are stimulated to improve their performance.*

In an organization, there can exist a (relatively) tranquil and stable or a turbulent working environment. In case of the latter, managers are confronted with many conflicts, overtime, unfinished business and stress. In a stable environment, these kind of situations occur considerably less. The working environment can impact the implementation of a performance management system dramatically. In a turbulent situation, managers will not have enough time, attention span or energy to spend on the implementation of and learning the performance management system. The requirements described above are combined into the behavioral factor: *Managers work in a stable, relatively tranquil environment.*

An open communication structure is important to convey the reasons for the performance management system and the status of the performance management system implementation. The results of the CSFs, KPIs and BSC have to be freely available to everybody in the organization. In this way, people in the organization are informed about their own results and the result of the overall organization. This will increase trust in each other and in the system. An added benefit is that openness makes comparisons between organizational units easier (benchmarking). If there is inadequate openness, distrust and fear for the performance management system will start to appear, especially if people think the system will be used for punishment. The requirements described above are combined into the behavioral factor: *Managers' results on CSFs/KPIs/BSC are openly communicated.*

There is a strong body of opinion in both psychology and in accounting, which suggests that performance measures are likely to have a stronger impact on individuals' reactions and upon their subsequent behavior if the indicators are used to evaluate the individuals' performance. Thus, it seems likely that members of organizations will be encouraged to react more responsively to feedback from performance measures if they are evaluated on the measures. For this reason, the implementation of a performance management system has to be supported by the reward system of the organization. It is important that the reward system positively reinforces desired behavior. Consequently, the performance management system and the reward system have to be aligned, so managers are adequately rewarded for the desired results on their KPIs. Rewards function as incentive for managers to use the performance management system. The requirements described above are combined into the behavioral factor: *Managers' use of the performance management system is stimulated by the reward structure.*

External Environment

The *external environment* comprises the outside world or the context in which the organization (the internal environment) exists and operates. The performance management system has to be able to monitor significant developments in the industry and the macro-environment in which the organization operates.

Organizations have to deal with several external stakeholders, like banks, stockholders, supervisory board and unions. All these parties request information from the organization for their own purposes. Consequently, they would like to influence the content of the organization's performance management system. The organization has to provide this information to a certain degree. By incorporating crucial stakeholders' information needs in the performance management system, the organization becomes more responsive to the outside world and competitors. This advantage has to be weighted against the risk of tailoring the performance management system too much to the requirements of the outside world, so that the information of the performance management system does not adequately cover the responsibility areas of the managers anymore. The requirements described above are combined into the behavioral factor: *Managers find the performance management system relevant because only those stakeholders' interests are incorporated that are important to the organization's success.*

The requirements that the law puts on external reporting can severely influence content and structure of periodic reporting. Incorporating crucial external reporting requirements in the performance management system makes the organization more responsive to the outside world. However, these outside information demands can be so strong that the internal reporting loses its relevance for managers. The figures and calculations can be set up in a way to satisfy external demands, but in this way they can lose the meaning for internal control purposes. If this happens, there is a chance the information of the performance management system does not adequately cover the responsibility areas of managers anymore, decreasing their faith in the performance management system. Research shows that external reporting requirements has an indirect influence on reporting by management teams. Consequences of certain organizational decisions, which could show up unfavorably in the external reporting, were

managed in such a way by managers that the internal reporting was changed so that favorable external reporting could be derived from it. This made the internal reports less (directly) relevant for managers. The requirements described above are combined into the behavioral factor: *Managers find the performance management system relevant because it has a clear internal control purpose.*

Overview of Behavioral Factors

Exhibit 2.4 contains the selected behavioral factors, per sub-part of the classification scheme. For each behavioral factor, a clarification question is given to eluminate the meaning of the factor.

Classification scheme part	Sub-part	Behavioral factor	Clarification question
Performance management system – Development Method	Development method	Managers accept the need for performance management.	Has the need for performance measurement been demonstrated?
		Managers have an active role during the development stage of the performance management system project.	Are users sufficiently involved during development stage?
		Managers agree on the starting time.	Has the appropriate starting time for performance management system project been chosen?
		Managers have been involved in decision making around the project start time.	
		Managers are informed about the status of the performance management system project.	Does regular communication take place during the project?
		Managers are actively communicating about the performance management system project.	
Performance management system - Content	Quality	Managers understand the meaning of KPIs.	Have KPIs been clearly defined?
		Managers are involved in defining KPIs.	
		Managers have insight into the relation between KPIs and financial results.	Is the relation between KPIs and financial results sufficiently clear?
	Registration	Managers do not get discouraged by the collection of performance data.	Are performance data collected with information systems?
	Purpose	Managers have insight into the relation between strategy and CSFs/KPIs.	Is the relation between strategy and CSFs/KPIs sufficiently clear?
		Managers have insight into the relation between business processes and CSFs/KPIs.	Is the relation between business processes and CSFs/KPIs sufficiently clear?
	Targets	Managers are involved in setting KPI targets.	Are users sufficiently involved during target setting?
	Balance	Managers' KPI-sets are aligned with their responsibility areas.	Has a balanced set of KPIs been made?
Managers have insight into the relation between cause and effect.			
Performance management system – Feedback	Feed forward	Managers are involved in forecasting.	Is the performance management system sufficiently future-oriented?
		Managers trust good quality forecasts.	

Classification scheme part	Sub-part	Behavioral factor	Clarification question	
		Managers' activities are supported by KPIs.	Is the performance management system sufficiently action-oriented?	
		Managers' frames of reference contains similar KPIs.	Are KPIs mutually comparable?	
	Feedback	Managers are involved in making the CSF/KPI/BSC report layout.	Is the performance management system sufficiently intelligible?	
		Managers understand the CSF/KPI/BSC reporting.		
		Managers trust the performance information.	Is the information in the performance management system reliable?	
		Managers are involved in making analyses.	Has the information been sufficiently analyzed?	
		Managers trust good quality analyses.		
Controlled system	Management level	Manager use the CSFs/KPIs/BSC that match their responsibility areas.	Have specific sets of CSFs and KPIs been made for each management level?	
		Managers' information processing capabilities are not exceeded by the number of CSFs/KPIs.	Is the number of KPIs per manager limited?	
		Managers have enough time to work with their CSFs/KPIs/BSC.		
	Management style	Managers have earlier (positive) experiences with performance management.	Have managers' attitudes toward performance management been checked?	
		Managers realize the importance of CSFs/KPIs/BSC to their performance.		
		Managers do not experience CSFs/KPIs/BSC as threatening.		
		Managers can use their CSFs/KPIs/BSC for managing their employees.		
	Controlling system	Responsibility	Managers can influence the KPIs assigned to them.	Have managers been made responsible for specific KPIs?
			Managers have sole responsibility for a KPI.	
		Supervision	Managers accept the promoter.	Has a promoter been appointed for the project?
Managers see the promoter spends enough time on the performance management system implementation.				
Managers clearly see the promoter using the performance management system.				
Relation with controlled system		Managers and their controlling systems have a mutual trust.	Has the relation between controlled and controlling systems a positive influence on their working together?	
Internal environment		Alignment	Managers find the performance management system relevant due to regular evaluations.	Is the performance management system an integral part of the planning and control cycle?
	Managers use the performance management system regularly during the planning and control cycle.			
	Managers agree on changes in the CSF/KPI set.			
	Organizational culture	Managers are stimulated to improve their performance.	Has a culture of improvement been established?	
		Managers work in a stable, relatively	Has the work situation in the	

Classification scheme part	Sub-part	Behavioral factor	Clarification question
		tranquil environment.	organization been improved?
		Managers' results on CSFs/KPIs/BSC are openly communicated.	Has an open communication structure been established?
		Managers' use of the performance management system is stimulated by the reward structure.	Has the reward structure been aligned with the performance management system?
External environment	External environment	Managers find the performance management system relevant because only those stakeholders' interests are incorporated that are important to the organization's success.	Has the influence of external stakeholders been limited?
		Managers find the performance management system relevant because it has a clear internal control purpose.	Has the influence of external reporting requirements been limited?

Exhibit 2.4: Listing of the behavioral factors per classification scheme part and sub-part

Operationalizing the Behavioral Factors

In order to answer the question which seeks to identify which of the behavioral factors (listed in Exhibit 2.4) contribute to successful implementation and use of a performance management system, the identified factors have to be operationalized. This is realized by converting the factors into questions.

The behavioral factors and corresponding questions can be grouped in three stages. These include: 1) the information plan stage, in which the decision to implement a performance management system is taken and a suitable development method is chosen; 2) the measure plan stage, in which the CSFs, KPIs and the BSC are developed; and 3) the action plan stage, in which the performance management system is put into use. ⁶These stages more or less match the three parts of the performance management system as described in the classification scheme (Exhibit 2.2): development method, content, and feedback. Kaplan and Norton distinguish four stages for developing a performance measurement system: 1) define the measurement architecture (including the choice of the unit where to implement the BSC); 2) build consensus around strategic objectives; 3) select and design measures; and 4) build the implementation plan (including implementing the BSC).⁷ If the first two stages of Kaplan and Norton are taken together and their combination is seen as the starting stage, I again arrive at three stages. They are referred to as: starting stage (S), in which the decision to implement a performance management system is taken; development stage (D), in which the performance management system is developed; and use stage (U), in which the performance management system is implemented and put into use. The behavioral factors, operational questions ⁸ and stages are given in Exhibit 2.5.

Classification scheme part	Behavioral factor	Questions	Influence on stage
Performance management system – Development method	Managers accept the need for performance management.	<ul style="list-style-type: none"> ▪ What were, according to you, the reasons for implementing a performance management system? ▪ Do you think that the use of the performance management system is important for the continuity of the organization? If yes, why? If no, why not? 	S(1)
	Managers have an active role during the development stage of the performance management system project	<ul style="list-style-type: none"> ▪ How would you describe your role during the implementation of the performance management system: active or reviewing? ▪ Were you sufficiently involved during the development of the performance management system, CSFs and KPIs? 	D(1)
	Managers agree on the starting time	<ul style="list-style-type: none"> ▪ Was, according to you, the right starting time chosen for the implementation? If yes, why? If no, why not? 	S(2)
	Managers have been involved	<ul style="list-style-type: none"> ▪ Were you involved in the decision making about the project 	S(3)

Classification scheme part	Behavioral factor	Questions	Influence on stage
	in decision making about the project start time	start time? If yes, how?	
	Managers are informed about the status of the performance management system project	<ul style="list-style-type: none"> ▪ How often were you informed, during the project, about the status of the project? Did you value this communication? Why? ▪ Which communication tools were used? 	D(2)
	Managers are actively communicating about the performance management system project	<ul style="list-style-type: none"> ▪ How often did you contribute to the communication about the project? ▪ Was, during the communication, feedback asked for? ▪ Was there any follow-up on given feedback? 	D(3)
Performance management system – Content	Managers understand the meaning of KPIs	<ul style="list-style-type: none"> ▪ Are you familiar with the definitions of the KPIs? How are these available? ▪ How often (per month/year) are these definitions changed? 	D(4)
	Managers are involved in defining KPIs	<ul style="list-style-type: none"> ▪ Were you (actively) involved in the defining of the KPIs? 	D(5)
	Managers have insight into the relation between KPIs and financial results	<ul style="list-style-type: none"> ▪ Do you discern a relation between the results on KPIs, actions taken and the organization's financial results? ▪ If yes, is this relation quantified, and how is this done? If no, why not? ▪ Are financial consequences of KPI results mentioned in the performance management system? 	U(1)
	Managers do not get discouraged by the collection of performance data	<ul style="list-style-type: none"> ▪ Is the time you and your subordinates spend on collecting data for KPI reporting acceptable? ▪ How much of the total data are manually provided? 	U(2)
	Managers have insight into the relation between strategy and CSFs/KPIs	<ul style="list-style-type: none"> ▪ Does the current CSF/KPI set measure the strategic goals of the organization adequately? If yes, which goals are being measured? If no, why not? 	D(6)
	Managers have insight into the relation between business processes and CSFs/KPIs	<ul style="list-style-type: none"> ▪ Is there an unambiguous relation between the CSF/KPI set and the crucial business activities of the organization? If yes, which crucial activities are being measured? If no, why not? 	D(7)
	Managers are involved in setting KPI targets	<ul style="list-style-type: none"> ▪ Were you sufficiently involved during the setting of targets for the KPIs? ▪ To which degree are KPI targets mentioned in the performance management system? 	D(8)
	Managers find KPI set relevant for their responsibility areas	<ul style="list-style-type: none"> ▪ Is the current CSF/KPI set an adequate reflection of your responsibility area? 	D(9)
	Managers have insight into the relation between cause and effect	<ul style="list-style-type: none"> ▪ Are there, in your opinion, clear cause-and-effect relations identified for the KPIs? If yes, how many relations? If no, why not? 	U(3)
Performance management system - Feedback	Managers are involved in forecasting	<ul style="list-style-type: none"> ▪ Are you sufficiently involved in forecasting? How are you involved? ▪ How often (per year) are forecasts made? 	U(4)
	Managers trust good quality forecasts	<ul style="list-style-type: none"> ▪ Has, in your opinion, the quality of the forecasts been improved, compared to the actuals? 	U(5)
	Managers' activities are supported by KPIs	<ul style="list-style-type: none"> ▪ To which degree do you undertake actions, based on the KPI results? Can you give an example of an action? If you do not take action based on the KPI results, why not? ▪ Are these actions better focused and more effective than in the past? 	U(6)
	Managers' frames of reference contain similar KPIs	<ul style="list-style-type: none"> ▪ Do you use the CSF/KPI set for comparing your performance with those of other units or organizations? If yes, what are the benefits? If no, why not? ▪ Is comparison of results/benchmarking viewed as threatening in your unit? If yes, why? 	U(7)
	Managers are involved in	<ul style="list-style-type: none"> ▪ Were you sufficiently involved in the reporting layout and 	D(10)

Classification scheme part	Behavioral factor	Questions	Influence on stage
	making the CSF/KPI/BSC report layout	content definition?	
	Managers understand the CSF/KPI/BSC reporting	<ul style="list-style-type: none"> ▪ Are colors, tables, graphs and standard formats used in the performance management system? ▪ How intelligible do you find the performance management system (incl. volume of reports)? 	D(11)
	Managers trust the performance information	<ul style="list-style-type: none"> ▪ How reliable is the performance management system information, in your opinion? ▪ How often do you have discussions about the reliability of the performance management system? 	U(8)
	Managers are involved in making analyses	<ul style="list-style-type: none"> ▪ Do you regularly make analyses of the KPI results? How? ▪ Are you sufficiently involved in analysis making? 	U(9)
	Managers trust good quality analyses	<ul style="list-style-type: none"> ▪ How open are you in your analyses? How serious are your conversations about your analyses? ▪ How is in general, in your opinion, the quality of analyses in the organization? 	U(10)
Controlled system	Managers use the CSFs/KPIs/BSC that match their responsibility areas	<ul style="list-style-type: none"> ▪ Is the CSF/KPI set a good representation of all the important issues on your management level? ▪ Is there a separate, specific CSF/KPI set for each management level? 	D(12)
	Managers' information processing capabilities are not exceeded by the number of CSFs/KPIs	<ul style="list-style-type: none"> ▪ Were you sufficiently involved in the priority setting of the KPIs? 	U(11)
	Managers have enough time to work with their CSFs/KPIs/BSC	<ul style="list-style-type: none"> ▪ How much time do you spend on working with the performance management system? Is this enough? 	U(12)
	Managers have earlier (positive) experiences with performance management	<ul style="list-style-type: none"> ▪ Did you have prior experience with performance management? Was this a positive or a negative experience? ▪ Did this experience affect your attitude towards this project? 	S(4)
	Managers realize the importance of CSFs/KPIs/BSC to their performance	<ul style="list-style-type: none"> ▪ Do you find the use of the performance management system, CSFs and KPIs useful for your role as manager? If yes, why? If no, why not? 	U(13)
	Managers do not experience CSFs/KPIs/BSC as threatening	<ul style="list-style-type: none"> ▪ Are the CSFs/KPIs/BSC threatening to you? Why? 	U(14)
	Managers can use their CSFs/KPIs/BSC for managing their employees	<ul style="list-style-type: none"> ▪ Are there advantages and disadvantages in using performance management when managing subordinates and communicating with superiors? If yes, which? If no, why not? 	U15
Controlling system	Managers can influence the KPIs assigned to them	<ul style="list-style-type: none"> ▪ Do you accept responsibility for the CSFs and KPIs appointed to you? ▪ Are you tackled on your performance? ▪ Do you tackle your subordinates on their performance? 	D(13)
	Managers have sole responsibility for a KPI	<ul style="list-style-type: none"> ▪ Are responsible persons appointed for each KPI? ▪ Is per KPI only one person responsible? ▪ Are there KPIs for which there is more than one person responsible? If yes, how are conflicts about these KPIs resolved? 	U(16)
	Managers accept the promoter	<ul style="list-style-type: none"> ▪ Who was the initiator of the performance management system development project? ▪ Who was the promoter of the performance management system development project? ▪ What was the management level of the promoter? ▪ How do you judge the role of the promoter during the 	D(14)

Classification scheme part	Behavioral factor	Questions	Influence on stage
		project?	
	Managers see the promoter spends enough time on the performance management system implementation	<ul style="list-style-type: none"> How much time (in hours and as a percentage of his time) did the promoter spend on the project? 	D(15)
	Managers clearly see the promoter using the performance management system	<ul style="list-style-type: none"> Does the management team work with the performance management system? How visible is this in the organization? 	U(17)
	Managers and their controlling systems have a mutual trust	<ul style="list-style-type: none"> How do you manage your subordinates: with tight or loose control? How are you managed by your superior: centralized or decentralized? Is there trust between you and your subordinates/superior? How long have you worked with your subordinates/superior? Has this made the implementation of performance management easier? 	U(18)
Internal environment	Managers find the performance management system relevant due to regular evaluations	<ul style="list-style-type: none"> How many times per year is the CSF/KPI set reviewed and evaluated? 	U(19)
	The performance management system is used regularly during the planning & control cycle	<ul style="list-style-type: none"> Are CSFs, KPIs and the BSC part of the yearly planning cycle? 	U(20)
	Managers agree on changes in the CSF/KPI set	<ul style="list-style-type: none"> How many changes are made each time to the CSF/KPI set? Who decides about these changes? Have you made suggestions for changes in the CSF/KPI set and have these suggestions been implemented? 	U(21)
	Managers are stimulated to improve their performance	<ul style="list-style-type: none"> How do you characterize the culture of your organization: focused on improvement or on punishment? How does this show? 	U(22)
	Managers work in a stable, relatively tranquil environment	<ul style="list-style-type: none"> Can you, in the light of all your activities, spend enough time on working with the performance management system and your specific KPIs? Do conflicts take place about KPI results? How do you characterize the working environment in your organization: stable or turbulent? 	S(5)
	Managers' results on CSFs/KPIs/BSC are openly communicated	<ul style="list-style-type: none"> Are the results of all the KPIs reported to all the managers, or does distribution take place per responsibility area? Do performance comparisons take place between managers (ranking)? 	U(23)
	Managers' use of the performance management system is stimulated by the reward structure	<ul style="list-style-type: none"> Are KPI results linked to your reward? If yes, are you happy with this link? If no, why not? Is the reward strictly financial, or also non-financial? What type of non-financial rewards are used? 	U(24)
External environment	Managers find the performance management system relevant because only those stakeholders' interests are incorporated that are important to the organization's success	<ul style="list-style-type: none"> Who are the external stakeholders? To which degree do they have an influence on the content of the CSF/KPI set? How often do conflicts take place with the stakeholders about this set? 	D(16)
	Managers find the	<ul style="list-style-type: none"> Is the CSF/KPI set used for external reporting? 	D(17)

Classification scheme part	Behavioral factor	Questions	Influence on stage
	performance management system relevant because it has a clear internal control purpose	<ul style="list-style-type: none"> ▪ Is there a separate external reporting set of internal reports being used? ▪ What, in your opinion, was the focus during the development of the CSFs and KPIs: external or internal? 	

Exhibit 2.5: Behavioral factors -- operationalized in interview questions

In Appendix A, an activity plan for conducting a case study is given. Also, the interview list, document research question list, questionnaire, and feedback reporting list of topics, that were used during the case studies, is given. It was guaranteed that questions that could be checked by means of more than one information source indeed appeared more than once.

Importance of specific stages

In order for an implementation of a performance management system to be successful, a good and proven development method needs to be applied. In addition to this, the time of starting the performance management system implementation has to be chosen carefully to ensure that there is sufficient time to develop the system. The main performance management system characteristics can be grouped according to a qualitative and rough evaluation of probable contribution of the characteristics to the design and development (similar to the S en D stages in Exhibit 2.5) and use (similar to the U stage in Exhibit 2.5) stages of a performance management system (Exhibit 2.6).

Characteristic of the performance management system	Probable contribution to:	
	design + development	use of data
Congruent with competitive strategy	high	low
Composed of financial and non-financial performance measures	high	low
Provide direction and support to continuous improvement activities	high	high
Provide support to identify tendencies and progress in performance	low	high
Facilitate understanding of cause-and-effect relationships regarding performance	high	high
Intelligible to majority of employees	medium	high
Cover all company's business processes	high	low
Real time in formation about performance	high	high
Dynamic	high	medium
Induce employees' attitudes	medium	high
Evaluate group performance instead of individual performance	medium	high
Allow performance to be compared against competitive benchmarks	high	high
Composed by efficiency and effectiveness performance measures	high	low
Linked to business processes	high	low
Be part of individual and organizational learning	low	high
Composed of integrated process and result performance measures	high	low
Integrated to management systems	high	high
Provide a perspective of past, present, and future performance	medium	high

Exhibit 2.6: Probable contribution of design and development stage, and use of data stage to certain performance management system characteristics (Source: Martins, R.A., 2000, 'Use of performance measurement systems: some thoughts towards a comprehensive approach'. In: A. Neely, ed., Performance measurement - past, present and future, Centre for Business Performance, Cranfield University, Cranfield: 363-370)

From Exhibit 2.6 it can be concluded that the design and development stage has a better chance than the use stage of including certain characteristics into a performance management system. This gives the basis for a second

question to be investigated: *Are behavioral factors from the starting and development stages more important to the successful implementation and use of a performance management system than those of the use stage?*

Notes

1. American Productivity & Quality Center (1999), *Performance management: tapping your organization's people potential*, APQC Report
2. As quoted in: Shapiro, C. and H.R. Varian (1999), *Information rules, a strategic guide to the network economy*, Harvard Business School Press, Boston
3. Marchand, D.A., T.H. Davenport and T. Dickson (ed.) (2000), *Mastering information management, complete MBA companion in information management*, Prentice Hall Financial Times, Harlow
4. American Productivity & Quality Center (1999), *Performance management: tapping your organization's people potential*, APQC Report
5. Hofstede, G. (1984), *Culture's consequences, international differences in work-related values*, Sage, Newbury Park
6. Kerklaan, L.A.F.M., J. Kingman and F.P.J. van Kleef (1994), *De cockpit van de organisatie* (transl.: The cockpit of the organization), Kluwer Bedrijfswetenschappen, Deventer
7. See the appendix in: Kaplan, R. S. and D.P. Norton (1996), *The balanced scorecard, translating strategy into action*, Harvard Business School Press, Boston
8. The questions were distributed over the three sources of information collection which were used during the case studies: a questionnaire, an interview protocol and a document research list.