

The Role of Behavioral Factors and National Cultures in Creating Effective Performance Management Systems

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Many organizations install performance management systems (PMS), based on critical success factors, key performance indicators and the balanced scorecard, to improve their results. In practice many organizations have difficulty implementing a PMS because the influence of behavioral factors and national cultures is not taken into account enough. This article describes the findings of a study into the role of behavior and national culture in setting up an effective PMS at a multinational.

KEY WORDS: performance management; behavior; competitive performance; culture.

INTRODUCTION

Performance management systems (PMS) are defined as ‘the formal, information-based routines and procedures which managers use to maintain or alter patterns in organizational activities’ (adapted from Simons, 2000). These systems focus on conveying financial and non-financial information that influences decision-making and managerial action. An increasing number of profit and non-profit organizations are implementing a PMS in order to achieve better organizational results in a changing and dynamic environment (Azofra et al., 2003; Propper and Wilson, 2003; Said et al., 2003; Bititci et al., 2004; Davis and Albright, 2004; Epstein et al., 2004; Marr, 2004). Despite these positive effects, many organizations have difficulty implementing a PMS (Franco and Bourne, 2003). Simons (2000) states that a PMS cannot be effectively designed and implemented without taking into account human behavior. Holloway et al. (1995) remark that the successful implementation of a PMS depends on understanding and accommodating the behavioral factors of performance management. Merchant and van der Stede

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(2003) argue that national culture has a direct effect on the design of a PMS. It seems that behavior and culture need to be incorporated into the design and implementation of an effective PMS.

This article describes the findings of a study into the role of behavioral factors and national culture in setting up an effective PMS at a multinational called UVD.³ “Effective” is in this context defined as “contributing to the achievement of the organization’s objectives.”

At the beginning of the study, UVD had recently implemented a new PMS. Yet UVD’s management had some doubts about whether behavioral and cultural factors had been sufficiently taken into account to make sure that organizational members were actually going to use the PMS. UVD therefore initiated a study into the effectiveness of its PMS with the aim to identify improvement opportunities for the firm’s use of performance management. This article first provides a short introduction to performance management and the influence of behavioral factors and national culture on performance-driven behavior (Sections 2 and 3). Second it describes the study, which was performed at the multinational UVD, followed by an analysis of the research findings (Sections 4 and 5). The article concludes by making a number of recommendations and suggestions for future research (Section 6).

BEHAVIORAL FACTORS IN PERFORMANCE MANAGEMENT

The goal of a PMS is to steer the behavior of people in the organization towards achieving the results desired by the organization. A PMS should therefore foster performance-driven behavior. The factors that influence this behavior are (de Waal, 2003): structural factors which affect the structure and content of the PMS; behavioral factors which affect the actual use of the PMS by people in the organization; systems related to a PMS such as evaluation and reward systems (Spangenberg and Theron, 2001); and cultural factors (both organizational and national). To find out why organizational members do not demonstrate performance-driven behavior, one should look at the factors (structural, behavioral, cultural) that are influencing the PMS (Fig. 1). An organization should study these factors to determine in which areas it needs to improve to become more performance-driven.

A method, which can be used to assess the degree of performance-driven behavior in an organization, taking into account structural factors, behavioral factors, related systems, and organizational culture, is the performance management analysis (PMA; de Waal, 2004). The PMA makes a distinction between the

³The name of the multinational is fictitious as the company wishes to remain anonymous. The author gratefully acknowledges the contribution of one of his students who did a large part of the research, but who also has to stay anonymous as he works for the case company.

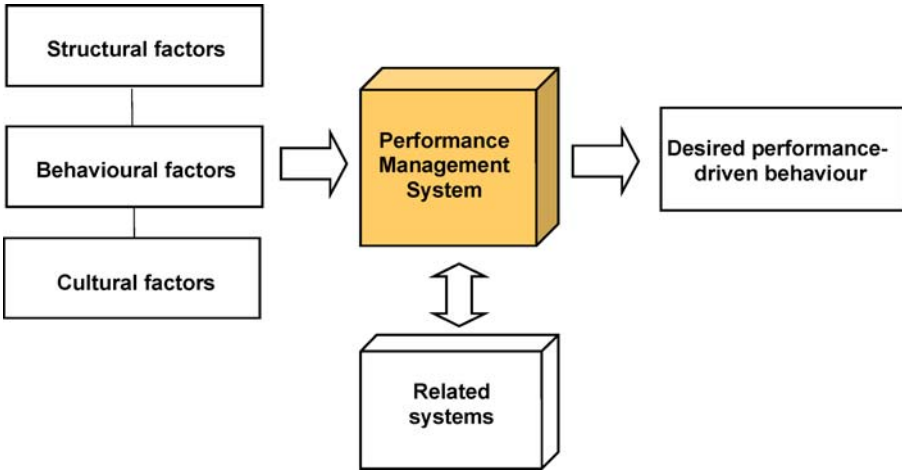


Fig. 1 Factors that influence performance-driven behavior.

structural and the behavioral side of performance management. The “structural side” deals with the systems’ architecture which needs to be in place to be able to use performance management. This usually involves determining critical success factors (CSFs) and key performance indicators (KPIs), and designing a balanced scorecard (BSC). The “behavioral side” deals with the organizational members and their use of the PMS, and includes cultural factors. The PMA is based on the principle that the two sides need to be given equal attention in order to establish a performance-driven organization (de Waal et al., 2004). There are many things that can be measured and reported in an organization, but they will be of little value if organizational members do not use this performance information. Conversely, goodwill of organizational members does not account for much when they cannot access the performance information needed to display performance-driven behavior. Kaplan and Norton (1996) introduced the notion of balance being important for a successful PMS, referring to the balance between financial and non-financial information and between leading and lagging indicators. The PMA enables an organization to actually assess the degree of performance-driven behavior. This is done by means of a questionnaire which covers nine dimensions, which are either structural or behavioral (Table I).

The procedure of the PMA is as follows. The managers of an organization rate the nine dimensions of the PMA on a scale of 1–10. After all of the participants in the PMA have completed the questionnaire (see Appendix), the scores are averaged for each dimension and the results are represented in a so-called PMA radar diagram (Fig. 2). The more attention an organization pays to the criteria belonging to a certain dimension, the higher the score for that dimension will be.

Table I. The Nine Dimensions of the Performance Management Analysis (de Waal, 2004)

Dimension	Side	Description
Responsibility structure	Structural	A clear parenting style and tasks and responsibilities have been defined and these are applied consistently at all management levels
Content	Structural	Organizational members use a set of financial and non-financial performance information, which has a strategic focus through the use of CSFs and KPIs
Integrity	Structural	The performance information is reliable, timely and consistent
Manageability	Structural	Management reports and performance management systems are user-friendly and more detailed performance information is easily accessible through ICT systems
Accountability	Behavioral	Organizational members feel responsible for the results of the KPIs of both their own responsibility areas and the organization as a whole
Management style	Behavioral	Senior management is visibly interested and involved in the performance of organizational members and stimulates an improvement culture and proactive behavior. At the same time, it consistently confronts organizational members with lagging results
Action orientation	Behavioral	Performance information is integrated in the daily activities of organizational members in such a way that problems are immediately addressed and (corrective or preventive) actions taken
Communication	Behavioral	Communication about the results (top-down and bottom-up) takes place at regular intervals as well as the sharing of knowledge and performance information between organizational units
Alignment	—	Other management systems in the organization such as the human resource management system, are aligned with performance management, so what is important to the organization is regularly evaluated and rewarded

The structural dimensions are shown on the right-hand side of the radar diagram, the behavioral dimensions on the left. The radar diagram clearly indicates which side of the diagram and also which specific dimensions need to be addressed to improve the organization's performance drive (see the "dents" in the PMA diagram of Fig. 2). The 'ideal' performance is 10 for each of the dimensions, however, it is up to the organization to decide on how many dimensions and how much it can and wants to improve.

In addition to scoring the organization along nine dimensions, the PMA identifies the relative competitive performance. This is done by asking the respondents to compare the performance of their organization to that of competitors and of organizations with similar services (in the case of public sector organizations) and subsequently calculating its position on a scale of 1–10. Such self-assessment of performance is generally accepted as a reliable method to measure the performance of an organization, because managers are considered capable of judging whether the use of the PMS has influenced their performance favorably (Dollinger and Golden, 1992; Glaister, 1998; Dawes, 1999; Heap and Bolton, 2004). According

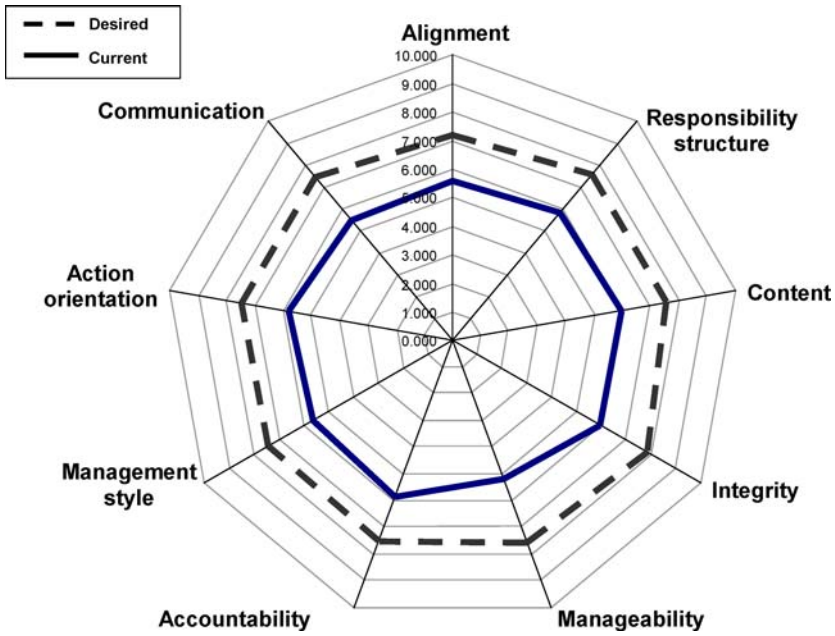


Fig. 2 PMA radar diagram for the current and desired situations of a UVD division.

to the expectancy theory, managers are willing to use a PMS if they think that using that system will be to their and the organization’s advantage. The more they expect benefits from using the system, the more willing they are to use it. This will lead to the actual use of the PMS, and eventually improved organizational performance.

INFLUENCE OF NATIONAL CULTURE

One factor which is not explicitly included in the PMA, is the influence national cultures can have on performance-driven behavior (Lee and Yu, 2004). Culture has been described as “something to do with the people and the unique quality and style of organization” (Kilmann et al., 1985) or “the way we do things around here” (Deal and Kennedy, 1982). A frequently used definition is that of Hofstede (2001): “the collective programming of the mind that distinguishes one group or category of people from another.” Hoecklin (1995) states there is an intimate relationship between national culture and organizational culture; companies cannot develop an organizational culture that differs substantially from the prevailing cultural factors of the country in which it operates. Merchant and van der Stede (2003) argue that national culture has a direct effect on the PMS

because it can cause organizational members to react differently on similar performance information. Therefore, national culture is a relevant factor for the use of performance information in a multinational, and its influence should be taken into account during the design and implementation of a PMS. In this respect, national culture can be regarded as a behavioral factor: it influences the use of the PMS which in turn influences the performance-driven behavior of people in the organization.

To distinguish between national cultures, Hofstede initially formulated four dimensions or distinguishing characteristics, and later added a fifth (Hofstede et al., 2002):

1. *Uncertainty avoidance*—The extent to which people in a society feel comfortable with ambiguity and uncertainty. In cultures with high uncertainty avoidance, people tend to show their “fear” of the unknown through expressive behavior. In cultures with low uncertainty avoidance, people tend to be less expressive: they don’t show their emotions or aggression easily. The core value associated with high uncertainty avoidance is certainty. Rules and clarity are highly appreciated, whereas things that are different or not “normal” are seen as dangerous.
2. *Individualism versus collectivism*—The extent to which one’s identity is derived from one’s self as opposed to the group of which the individual is a member. A society is individualistic if the mutual ties between individuals are loose. Everybody is expected to take care of him or herself and next of kin. In a collectivist society, individuals are institutionalized in strong, tight groups that offer the individual lifelong protection in return for unconditional loyalty to the group.
3. *Power distance*—The extent to which members of a society accept that institutional power is distributed unequally. In a country where a large power distance prevails, few think that people are or should be created equal. Respect for status and power are core values, and “subordinates” expect to be given orders or directions rather than act on their own. In contrast, in low power distance societies equality between people is stressed. Subordinates expect to be consulted, i.e., their opinions matter.
4. *Masculinity versus femininity*—A society is masculine if social gender-roles are clearly separated: men are expected to be assertive and hard, aiming at material success; women are supposed to be modest and tender, aiming at quality of life. In contrast, in a feminine society social gender-roles are blurred: men as well as women are supposed to be modest, aiming at quality of life. The core value in strongly masculine societies is winning. In strongly feminine societies caring for others, most notably the weak, is the core value. A low masculinity (or high femininity) in the workplace implies an emphasis on equality, solidarity, and consensus.

Table II. National Culture Dimensions for the Netherlands and the United Kingdom (Hofstede, 2001)

Dimension	Netherlands	United Kingdom
Uncertainty avoidance	53	35
Individualism versus collectivism	80	89
Power distance	38	35
Masculinity versus femininity	14	66

- 5. *Time orientation*—Long-term orientation stresses persistence, thrift, shame and status in the long run. Short-term orientation emphasizes calm, protection of face, respect for tradition and rituals.

There has been a fair amount of criticism on the fifth dimension, as a result of which the number of studies that include this dimension is limited (Fang, 2003). For the study described in this article, only the first four dimensions of Hofstede have been used. Table II shows an excerpt of the results of Hofstede’s research, which includes only the two main countries in which the case company UVD operates: the Netherlands and the United Kingdom.

The Netherlands score significantly lower than the U.K. on the *masculinity versus femininity* dimension. In relation to a PMS this means that a focus on evaluation of performance without taking into account the well-being of the persons concerned can work counter-productive. The Netherlands score higher than the United Kingdom on the *uncertainty avoidance* dimension. This means that, according to Merchant and van der Stede (2003) and Chong and Park (2003), a PMS should contain an elaborate formal planning system with many procedures, rituals and targets, in order to diminish the uncertainty level of organizational members. It also means that employees should be evaluated objectively, because subjectivity raises the level of uncertainty.

van der Stede (2003) found that although national cultures influence the use of a PMS, this influence is considerably less than the effect of formal procedures and processes (as prescribed by the parent company) on the system. This supports, according to van der Stede (2003) and Zagersek et al. (2004), the recent theory that management accounting practices and methods and leadership styles within multinationals converge, regardless of the countries in which these organizations operate.

RESEARCH AT UVD

Because the company that was studied, UVD, wishes to remain anonymous, its company description is kept brief and does not contain specific

information. UVD is a multinational which is the product of several mergers that took place in the past two decades, and consists of four divisions. The organization has an annual turnover of more than 2 billion euros and employs over 1200 people. Each division has multiple business units (BUs), each of which consists of several profit centers. In addition, support units like Finance & Control (F&C) and HR are present. The organization has a mission and a strategy which is supported by its core values: performance orientation, innovation, and progressiveness.

Recently the company set up a new and elaborate PMS, which required a large investment. The performance management process starts with the long term strategic planning process which is carried out in the first half of the year, followed by the budgeting process in the second year-half. The budget forms the basis of the performance contract between each profit center and the BU it belongs to. This contract contains the KPIs on which the profit center will be evaluated at the end of the year. Some of the KPIs are company-wide, such as production volumes, cost efficiency and cost reduction. Others are center specific and depend on local circumstances. In the latter case, there is no direct link between many of the indicators and the company's strategy. The performance contract is laid down in the form of a BSC. The scorecard is an obligatory tool used during the quarterly performance review meetings between BU-management and division. Between profit center management and line management these meetings take place monthly. During the meetings not only actuals versus budget are discussed but also the rolling forecasts for the following quarters. The process is supported by a range of performance information reports. The goal of these reports is twofold: to give information for internal control purposes, and to be the basis for external stock market reports. Performance rewards are a form of group reward, i.e. they are linked to the overall results of the profit center and the BU. Because the process through the years has become more and more formalized, with a strong emphasis on 'no surprises', many profit centers stage a mock quarterly review in order to be fully prepared for every possible question from higher management. In summary, it can be stated that the performance management process of UVD is a formal, detailed and cumbersome process which takes a lot of time and effort. Despite the fact that the PMS, which supports the process, is relatively new, management has decided to look at the possibility of redesigning the system.

By applying the PMA, UVD wanted to learn about the effectiveness of its current PMS with regard to initiating and fostering performance-driven behavior among employees. The PMA questionnaire was sent to 50 people (including managers and employees from the F&C unit) of the division which has operations both in the Netherlands and in the United Kingdom. Thirty-three valid questionnaires were returned within the period of one month, which yielded a response rate of 66%. Table III gives some characteristics of the respondents.

Table III. Characteristics of the Respondents

Organizational unit	Nationality	Management	Employees	Subtotal	Total
Line Business	British	4	2	6	23
	Dutch	10	7	17	
F&C unit	British	2	2	4	10
	Dutch	3	3	6	
Total respondents		19	14	33	

RESEARCH RESULTS AND ANALYSIS

Table IV gives the average scores for each PMA dimension, for the current situation at one of UVD’s divisions.

The PMA radar diagram for both the current and the desired scores is given in Fig. 2. The PMA radar diagram for the UVD division examined is nearly balanced: all dimensions score in the range of 5.2–6.0 and there are no major “peaks” or “dents.”

Table V illustrates that the scores on structural dimensions are on average the same as those on behavioral dimensions, implying that the organization has paid equal attention to both types of dimensions. However, the average standard deviation, a measure for the spread around the scores indicating whether respondents agree (low spread) or disagree (high spread) with each other, is higher for the behavioral dimensions (1.4) than for the structural dimensions (1.1). This indicates that the respondents agree more on the quality of the structural side of the organization’s PMS than on the degree of performance-driven behavior in the division. A possible explanation for this is that historically, most organizational members mainly discussed the structure and the content of the PMS. Discussions focused on what to report, how to report it, which format to use, how often to report, whether to concentrate on financials or non-financials, and so on. The use

Table IV. PMA Scores for the Current Situation of a UVD Division

Dimension	N	Minimum	Maximum	Average score	Standard deviation
Responsibility structure	33	2.8	8.8	5.8	1.4
Content	33	2.8	9.0	6.0	1.4
Integrity	33	3.0	8.6	6.0	1.3
Manageability	33	2.2	8.6	5.2	1.3
Accountability	33	2.4	8.8	5.8	1.6
Management style	33	2.6	8.8	5.6	1.6
Action orientation	33	2.2	8.6	5.8	1.5
Communication	33	1.8	8.6	5.5	1.5
Alignment	33	3.2	8.4	5.6	1.3

Table V. Average PMA Scores for the Structural and Behavioral Dimensions, in the Current Situation of a UVD Division

Type of dimension	<i>N</i>	Minimum	Maximum	Average score	Standard deviation
Structural	33	3.0	8.5	5.7	1.1
Behavioral	33	2.7	8.7	5.7	1.4

of the PMS, or the ‘behavioral side,’ had gotten considerably less attention and was hardly ever explicitly discussed, as a result of which people were unable to reach consensus.

Score Comparison: F&C versus Line Businesses

UVD’s PMS is predominantly used by the line businesses but it is maintained by the supporting unit F&C, which also uses the system. The employee satisfaction survey that was carried out at UVD, in the year before the PMA research, showed that the opinion of the F&C unit with respect to the quality of divisional management was significantly more negative than that of the line businesses. For instance, only 60% of the F&C employees thought they were treated fairly by management, as opposed to 80% of the line-businesses’ employees. Against this background it is to be expected that the PMA scores of F&C will be lower than those of the line businesses, especially for the “management style” dimension. Table VI shows that in the PMA most scores of the F&C unit are lower than those of the line businesses, but this time the differences are not significant. The

Table VI. Comparing Mean Scores for All Current PMA Dimensions for F&C and the Line Businesses of a UVD Division

PMA dimension	F&C (<i>N</i> = 10)	Line businesses		Sign (two-tailed)	Mean difference	Standard error difference
		(<i>N</i> = 23)	<i>T</i> -test			
Responsibility structure	5.9	5.7	0.226	0.822	0.122	0.540
Content	6.0	6.0	0.017	0.987	0.009	0.524
Integrity	5.8	6.0	-0.427	0.673	-0.217	0.509
Manageability	4.8	5.3	-1.081	0.288	-0.528	0.488
Accountability	5.5	6.0	-0.731	0.470	-0.434	0.594
Management style	5.0	5.9	-1.451	0.157	-0.887	0.612
Action orientation	5.5	5.9	-0.665	0.511	-0.390	0.587
Communication	5.3	5.6	-0.533	0.598	-0.303	0.568
Alignment	5.3	5.7	-0.886	0.383	-0.444	0.502

only exception is the significant difference for the “management style” dimension, which is in accordance with expectations. Looking at this in more detail reveals that most F&C employees think that performance information in the PMS is used by management for settling accounts and immediately punishing lagging results. Conversely, the line businesses employees think performance information is predominantly used by management to continuously encourage the organization in order to improve itself and its results.

Score Comparison: Management versus Employees

Previous PMA research shows that management generally rates higher on the PMA dimensions than employees (de Waal et al., 2004). When looking at the scores of management and employees of UVD’s division, a similar difference can be noticed (Table VII).

A closer look at the two dimensions “management style” and “communication” reveals some interesting facts. In the case of “management style,” management thinks that it frequently and visibly uses the performance information in the PMS, while the employees think that management hardly ever uses the performance information. Given the fact that the organization has made use of the PMS obligatory, it is virtually impossible for management to not use performance information. A plausible explanation seems to be that employees do not actually see that management is using the PMS; management uses the system “invisibly” and not in their dealings with employees. Employees also feel, just like in the F&C unit, that performance information is mainly used by management for settling accounts, while management sees just the opposite; they think it is used for continuous improvement. In addition, management clearly

Table VII. Comparing Mean Scores for All Current PMA Dimensions for Management and Employees of a UVD Division

PMA dimension	Management (N = 19)	Employees (N = 14)	T-test	Sign (two-tailed)	Mean difference	Standard error difference
Responsibility structure	6.0	5.5	1.079	0.289	0.532	0.493
Content	6.2	5.7	0.907	0.371	0.436	0.481
Integrity	6.5	5.2	3.159	0.004	1.305	0.413
Manageability	5.5	4.8	1.630	0.113	0.723	0.444
Accountability	6.1	5.5	1.088	0.285	0.595	0.547
Management style	6.2	4.9	2.350	0.025	1.272	0.541
Action orientation	6.2	5.3	1.847	0.074	0.964	0.522
Communication	6.0	4.9	2.234	0.033	1.101	0.493
Alignment	5.9	5.1	1.940	0.062	0.865	0.446

states that it uses performance information to stimulate and coach employees, while employees feel that the information is used by management to check up on them. The scores on the “communication” dimension continue the trend of differing opinions. Managers feel there is two-way open communication in the organization, which is opposed to what the employees think, namely that the company has a communication problem. Kaplan and Norton (1996) state that in a modern enterprise in a dynamic environment the mutual communication lines between management and employees are of the utmost importance to validate, communicate and implement the strategy throughout the organization. It seems that UVD’s PMS does satisfy the needs of management in this respect. UVD’s employees however are clearly less content with it. The differing views are all the more remarkable because the organization propagates a leadership model of result-oriented coaching, in which special emphasis is put on training managers in coaching and communication techniques. Obviously, either the model does not work properly or it is not being perceived as working properly by employees.

Score Comparison: British versus Dutch Respondents

Because research shows that the Dutch national culture scores lower on the *masculinity versus femininity* dimension and higher on the *uncertainty avoidance* dimension than the British national culture (Hofstede, 2001), it is likely that in the PMA at UVD the Dutch respondents will score higher than the British respondents on the “management style” dimension. It can also be expected that in the Dutch branch of UVD performance management is used less for settling accounts and more for continuous improvement than in its British counterpart. On the other

Table VIII. Comparing Mean Scores for All Current PMA Dimensions for British and Dutch Respondents of a UVD Division

PMA dimension	U.K. (N = 10)	Netherlands (N = 23)	T-test	Sign (two-tailed)	Mean difference	Standard error difference
Responsibility structure	6.4	5.5	2.187	0.868	0.868	0.868
Content	6.5	5.8	1.371	0.697	0.697	0.697
Integrity	6.5	5.7	1.477	0.730	0.730	0.730
Manageability	5.4	5.1	0.734	0.362	0.362	0.362
Accountability	6.6	5.5	1.920	1.087	1.087	1.087
Management style	6.6	5.2	2.868	1.351	1.351	1.351
Action orientation	6.1	5.7	0.804	0.470	0.470	0.470
Communication	5.7	5.4	0.564	0.243	0.243	0.243
Alignment	5.9	5.4	1.065	0.531	0.531	0.531

hand, on the basis of the findings by van der Stede (2003) and Zagersek et al. (2004), it can be expected there will only be minor differences in the scores of British and Dutch respondents, because they all belong to the same multinational organization. Table VIII, which shows the PMA scores for the two groups of respondents, seems to concur with the views of van der Stede and Zagersek et al. as the British respondents score higher than the Dutch but the differences are not significant.

Correlation Between PMA Scores and Organizational Performance

Previous PMA research indicates that there is a strong correlation between the scores on the PMA dimensions and the relative competitive performance of organizations: a higher score on the PMA dimensions seems to be related to better organizational performance (de Waal et al., 2004). PMA research also shows that none of the PMA dimensions is more important than the other; all the dimensions have the same strong relation with organizational performance. The research concludes that it pays for companies to not only improve the PMA dimensions but also to do this equally for both the structural and behavioral sides of performance management.

With respect to UVD’s division it can be expected that the same strong relation between the PMA dimensions and organizational performance will be found, especially because this relation was identified for both United Kingdom and Dutch organizations in the study of de Waal et al. (2004). However, the correlation matrix of the division (Table IX) shows no statistically significant correlations for any of the PMA dimensions with organizational performance. A

Table IX. Correlation between Scores on PMA Dimensions and Organizational Performance of a UVD Division

Organizational environment			
PMA dimension	<i>N</i>	Pearson correlation	Sign (two-tailed)
Responsibility structure	33	0.092	0.611
Content	33	0.256	0.150
Integrity	33	−0.020	0.913
Manageability	33	0.171	0.342
Accountability	33	0.191	0.287
Management style	33	0.058	0.747
Action orientation	33	0.145	0.421
Communication	33	−0.096	0.596
Alignment	33	0.078	0.667

possible explanation for the missing correlation is that the PMA goes from the assumption that a PMS is used for internal control purposes (Simons, 2000), which is one of the behavioral factors important for a successful PMS as research by De Waal (2003) indicates. In that situation, a correlation between the PMA scores and organizational performance can be found. However, UVD's division uses the PMS for two conflicting purposes (Spangenberg and Theron, 2001): internal control and external accountability, with a strong emphasis on the latter. A study performed by Scapens (1995) shows that external reporting requirements, expressing itself in an abundance of financial performance indicators of interest to banks, stock analysts and other investors, has an indirect influence on reporting by management teams. Consequences of certain organizational decisions that could show up unfavorably in external reporting were managed by managers in such a way that the internal reporting was changed so that favorable external reporting could be derived from it. This made the internal reports less relevant to managers. As a consequence, the correlation between PMA dimensions and organizational performance may also be valid for UVD's division but it is more likely that it is overshadowed by the external character of the PMS.

The "overshadowing" effect may be reinforced by the many non-financial indicators in the PMS that do not have a clear and direct relation with UVD's strategy. Even for the indicators that do have a link with the strategy, organizational members often do not comprehend the causality of these links. Many of the financial and non-financial indicators of UVD's division have purely been selected because the data to calculate them was already present, or because they had been measured before. A clear (causal) model for the development of KPIs had not been used, rendering the PMS less effective than it could have been (Ittner and Larcker, 2003).

CONCLUSION AND RECOMMENDATIONS

The study at UVD's division is subject to a number of limitations. First, the research population is not necessarily representative of the overall UVD organization as the study was carried out at only one of UVD's divisions. Secondly, the respondents of the questionnaire may have rated their own unit more favorably than an outsider—and thus a more objective researcher—would have done. Thirdly, there may well be other dimensions that influence performance-driven behavior, which have not been included in the design of the PMA.

Regardless of these limitations, the research provides an interesting picture of the quality of the PMS of UVD's division. It can be concluded that there are many indications that the current PMS is well-balanced and of a good quality. However the performance management process is by many organizational members

regarded as an elaborate, formal and over-detailed process which requires a lot of time and effort without it offering sufficient benefits. A key reason for this may be that the PMS has been designed to serve two conflicting purposes: internal control and external accountability. Considering that one of the major determinants of an effective PMS is its relevance to organizational members—in the sense of offering internal control and management of organizational activities (de Waal, 2003)—it can be concluded that the inferior role of this relevance in UVD's PMS may be a fatal flaw in the design of the system. It is therefore recommended to split the current PMS in a PMS for purely internal control and a PMS for external reporting requirements. These two systems can feed from each other but they should never be integrated because that would produce conflicting and confusing performance information.

As there are indications that the result-oriented coaching program of UVD's division has turned into a culture of settling scores, particularly in the United Kingdom, and that the Dutch organizational members may be less experienced in performance management, a second recommendation is to retrain organizational members to understand the purpose and use of the PMS. The re-training programme should emphasize the main goal of performance management: to instill a culture of continuous improvement in the organization. In this way organizational members will learn to work differently with performance information (Franco and Bourne, 2003) and also with each other and their subordinates (Randolph and Sashkin, 2002). This is especially important as UVD is planning to update and re-implement its PMS worldwide in all its divisions, including in emerging markets. Despite the fact that organizational cultures seem to be converging in many countries—something which this research also points out—it is still advisable to take into account Hofstede's national culture dimensions, to tailor the PMS to local needs and national cultural peculiarities.

The results of the study described in this article also have consequences for the PMA itself. As this analysis tool does not explicitly examine the purpose of a PMS—it implicitly assumes that a PMS is primarily used for internal control purposes—an update of the PMA questionnaire seems to be in order. Further research opportunities include getting more respondents in both countries, and duplicating the study at the other divisions of UVD. In addition, it would be interesting if similar comparative analyses were carried out in other organizations in other countries to see if the relation between behavioral factors, national culture, organizational performance and effective performance management systems also holds true for these companies. This is especially interesting with regard to a trend that management accounting practices and methods and leadership styles within multinationals seem to converge regardless of the countries in which these organizations operate.

APPENDIX: THE PMA QUESTIONNAIRE

This appendix lists the criteria of the Performance Management Analysis for each dimension. For research purposes, the detailed PMA questionnaire can be obtained from the author (www.andredewaal.nl).

Structural dimension: Responsibility structure of the organization		
Criteria	Unclear and inconsistent (1–5)	Clear and consistent (6–10)
Parenting style	Not clear	Clear
Tasks and responsibilities	Not clear	Clear
Guidelines for planning and targets	None	Strategic
Application of parenting style	Inconsistent	Consistent
Structural dimension: Content of the performance information		
Criteria	Low-quality information (1–5)	High-quality information (6–10)
Balance of information	Financial	Financial and non-financial
Strategic focus through CSFs and KPIs	Lacking	In place
Strategic alignment in the company	Hardly	Structured
Targets	Incremental and fixed	Ambitious and relative
Ranking between organizational units	Not applied	Applied
Structural dimension: Integrity of the performance information		
Criteria	Low-quality information (1–5)	High-quality information (6–10)
Reliability of information	Low	High
Inventory of user needs	Ad hoc	Regularly
Information on time	No	Yes
Consistency between data elements	Low	High
Standardisation of data elements	Limited or not	For relevant elements
Structural dimension: Manageability of the performance information		
Criteria	Difficult to access (1–5)	User-friendly (6–10)
User-friendliness of information	Low	High
Volume of information	Large	Limited
Exception reporting	Not used	Used
Accessibility of underlying data	Low	High
Tools for information presentation	Stand-alone	Integrated
Behavioral dimension: Accountability		
Criteria	Discouraged (1–5)	Fostered and stimulated (6–10)
Relevance of information to users	Low	High
Managers usage of KPIs	Limited	Continuously
Influence on KPI results	Low	High
Commitment to results	Low	High
User involvement in changing KPIs	No involvement	High involvement
Behavioral dimension: Management style		
Criteria	Distant (1–5)	Committed (6–10)

Commitment to results	Not visible	Very visible
Managers' interest in employees' results	Limited	Continuously
Type of organizational culture	Settling accounts	Continuous improvement
Coaching by management	Limited	Frequent
Consistency in management behavior	Low	High
Behavioral dimension: Action-orientation of the organization		
Criteria	Inactive (1–5)	Proactive (6–10)
Analysis of results	Limited	Frequent
Daily use of performance information	Limited	Continuously
Corrective action taken	Limited	Always
Prognosis made	Limited	Frequent
Decision-making based on information	Limited	Always
Behavioral dimension: Communication about performance		
Criteria	Ad hoc (1–5)	Open and continuously (6–10)
Top-down communication about results	Limited	Frequent
Bottom-up communication about results	Limited	Frequent
Communication structure in place	Closed	Open
Knowledge sharing between units	Limited	Frequent
Strategy formulation together with units	Limited	Always
Alignment		
Criteria	Stand-alone systems (1–5)	Aligned systems (6–10)
Evaluation system linked with PMS	No	Yes
Reward system linked with PMS	No	Yes
Training system linked with PMS	No	Yes
Improved results through the PMS	No	Yes
Attitude of people towards performance management	Negative	Positive

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