**EMPLOYEE PERFORMANCE MANAGEMENT SYSTEMS IN BELGIAN
ORGANISATIONS:**

PURPOSE, CONTEXTUAL DEPENDENCE AND EFFECTIVENESS

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ABSTRACT

In this study, employee performance management (PM) systems are investigated. It is proposed that a PM system's purpose can be positioned on a bipolar continuum from a strong performance orientation to a strong development orientation. Further, it is suggested that PM system purpose relates to industry characteristics but also to PM system's effectiveness in terms of (1) increasing performance and (2) fostering employee development and motivation. Analyses based on data from 319 Belgian organisations reveal that organisations operating in more competitive markets tend to have a PM system with a stronger performance oriented purpose, at the expense of a stronger development oriented purpose. Relating PM system purpose to PM system effectiveness, our study indicates that PM systems with a stronger development oriented purpose are more effective in fostering employee development and motivation. In contrast, the strength of a PM system's performance oriented purpose did not relate to higher effectiveness in terms of increasing performance at various levels.

Keywords: human resource management; employee performance; performance management

INTRODUCTION

Increasing the effective use of human capital in organisations is an important challenge for the HR function. Employee performance management (PM), referring to a range of activities engaged in by an organisation to enhance the performance of a target person or group (Denisi, 2000) is an important organisational process to deal with this challenge and has become a core theme within strategic HRM (Boselie, Paauwe & Den Hartog, 2004). While the importance of PM is uncontested, several investigations indicate that putting PM into practice is a challenging endeavour (see e.g. Armstrong & Baron, 2004; Latham, Almost, Mann, & Moore, 2005; Latham & Locke, 2006). Latham, Almost, Mann and Moore (2005), in their review of recent developments in performance management, argue that:

> *"The primary purpose of appraising and coaching employees is to instil in them the desire for continuous improvement. Yet the outcome of many performance appraisals is frequently a decrease rather than an increase in performance"*. (Latham et al., 2005, p. 77)

Their conclusion at least suggests that making PM (performance management) systems effective in organisations is a challenge and that, though the past decades of research have led to improvement suggestions, there is still a lot to learn and understand on how PM takes shape in organisations and how it impacts performance at the individual, team and organisational level.

Recently, several scholars have made suggestions on promising routes for such further research. Fletcher (2001) identified several themes in the developing research agenda for the PM field: the nature of appraisal, focusing on the appraisal content and the process, and the context in which appraisal takes shape. Den Hartog, Boselie and Paauwe (2004), in their PM model, link performance management related HRM practices to organisational performance, emphasising the mediating role of line-management's involvement and employee perceptions. They also stress the importance of contingencies, such as organisational contextual factors, on how PM takes shape and affects performance in organisations. Finally, Levy and Williams (2004), based on a review of more than 300 articles from this field, argue that there appears to be a reasonably large set of distal variables such as technology, HR strategies, and economic conditions that are potentially important for understanding the appraisal process, but which have received little research attention.

The aim of this study is to respond to the call for further research on the PM context and its relationship with PM effectiveness. More specifically, this study builds on and contributes to the existing body of knowledge on employee performance management in several ways. First, a model is proposed in which PM system effectiveness (in terms of the ability to increase performance levels and employee motivation levels) is linked to the purpose of PM systems, which in turn is assumed to be influenced by contingencies in the economic environment. Furthermore, the model is empirically tested based on extensive industry and PM-related data from more than 300 organisations.

Before elaborating on the design of the study and presenting and discussing the empirical findings, the central variables in the model and the hypothesised relationships between them are defined.

PM SYSTEM PURPOSE AS CENTRAL CONSTRUCT

Before elaborating on the concept of PM system purpose, it is necessary to first define performance management. Several definitions of performance management exist. This is not surprising because performance management relates to distinct management domains such as strategic management, management control and human resources management.

This study focuses on performance management systems that primarily aim to influence performance levels at the employee level. While the ultimate aim is to improve organisational effectiveness by managing performance at the employee level (Heinrich, 2002), the focus is not on systems for managing organisational performance as such (Williams, 1998). This approach is in line with DeNisi's (2000) notion of performance management. He links performance management to a range of activities, engaged in by an organisation to enhance the performance of a target person or group, with the ultimate purpose of improving organisational effectiveness. Processes that fit within this definition are for example policy deployment (i.e. setting of corporate, departmental, team, and individual objectives); the use of performance appraisal systems, appropriate reward strategies and schemes; training and development strategies; feedback, communication and coaching; individual career planning; etc. (Roberts, 2001).

The notion of PM system purpose refers to the intentions, the underlying objectives of introducing a PM system as a whole, rather than reflecting specific PM related practices and policies. The notion of purpose draws on what Colbert (2004) and Becker & Gerhart (1996) refer to as guiding principles. Such guiding principles characterise systems at a higher level of abstraction than policies and practices do. Colbert (2004) argues that principles are especially useful to describe complex systems. Complex systems, such as performance management systems, are generally characterised by two features: (1) a large number of interacting agents and (2) the presence of stable, observable emergent properties (Morel & Ramunujam, 1999).

PM systems get introduced in organisations for various reasons and with different ultimate objectives in mind. Armstrong and Baron's (1998) findings on PM practices in the UK suggest that some systems emphasise a development oriented guiding principle and that other systems emphasise a performance oriented guiding principle. This distinction reflects a wider debate between what Guest (1987), Storey (1992) and Truss et al. (1997) called the 'soft' and the 'hard' approach to HRM. The 'soft' approach to HRM emphasises the employee and stands in the tradition of the human relations school (Brewster, 1994). In this high-commitment approach, high-quality training and development are emphasised because the human resources and their competency development are considered key to organisational success (Bach, 2000; Druker, White, Hegewisch & Mayne, 1996). The 'hard' approach puts the main emphasis on strategic business objectives, and treats 'human resources' like any other factor of production without according it an a priori central status in achieving competitive advantage (Druker et al., 1996). Brewster (1994) observed that, in the 'hard' version of HRM, the word 'people' is often substituted for 'employee' to reflect the fact that relationships may be based on outsourcing, subcontracting and franchising. The two approaches are of course not necessarily contradictory. As Legge (1989, 1995) indicated, in high value-added industries a strategic approach to employment might very well resemble the 'soft' approaches of high commitment and high development.

Transferring this broader HRM debate to the performance management area, we propose that PM systems, as they take shape in an organisation, can be characterised on a bipolar continuum from a strong performance oriented purpose (the hard approach) to a strong development oriented purpose (the soft approach). Thus, reflecting the underlying guiding principles, our concept of PM purpose characterises PM systems on a bipolar scale with a strong performance oriented purpose and a strong development oriented purpose on the extremes of the scale and a balance between the two purposes in the middle position. Systems with a strong performance oriented purpose put a strong emphasis on objectives and results to

obtain, while systems with a strong development oriented purpose put a strong emphasis on employee and competency development.

CONCEPTUAL FRAMEWORK AND RESEARCH QUESTIONS

Figure 1 shows the conceptual framework that guided this research. The central box refers to PM system purpose. Colbert (2004), in discussing the use of principles in describing complex systems, argued that systems, including their guiding principles, evolve and adapt with its contextual environment.

Insert Figure 1 about here

Among the contextual variables that may influence an organisation's HRM strategy and consequently PM system purpose, several authors identified industry characteristics as one of the relevant elements within the business environment (Fields, Chan, & Akhtar, 2000; Hendry & Pettigrew, 1990; Jackson & Schuler; 1995). Focusing on PM systems, Boselie et al. (2004) suggest that PM purpose might relate to the specific organisational context. Three such industry characteristics are competitive pressure (see e.g. Armstrong, 2006; Fields, Chan & Akhtar, 2000), technological turbulence (Jaworski & Kohli, 1993; Song, Droge, Hanvanich, & Calantone, 2005) and market turbulence (Dobni & Luffman, 2003; Segarra & Callejon, 2002).

Specific insights on how PM systems are influenced by such industry characteristics are however very scarce. Considering the competitive pressure dimension, Stace and Dunphy (1991) found that level of competition in the environment relates to the use of different types of human resource practices. Looking at PM orientations, Boselie et al. (2004) suggest that hard performance management orientations might be more used in industries with fiercer competition where the pressure to increase productivity or quality are high. Because our model contrasts between performance and development oriented purposes, this proposition also implies that stronger competition would weaken the development oriented purpose. One argument could be that stronger competitive pressure would force organisations to improve performance in the short term, putting less emphasis on employee development, which seems beneficial to company performance only in the long term. Though contrary to their expectation, Fields, Chan and Akhtar (2000) found support for such a relationship in their study on the relationship between organisational context and human resource management

strategy in Hong Kong firms. Based on this argumentation and preliminary empirical findings, the following hypothesis is proposed:

Hypothesis 1: Organisations active in more competitive industries will have a stronger performance oriented PM system purpose than organisations in less competitive industries.

Other important industry characteristics are technological and market turbulence. While the first refers to the rate of technological change, the latter refers to the rate of change in the composition of customers and their preferences (Hanvanich, Sivakumar, & Hult, 2006). Both imply a less predictable environment in which the agility of the organisation and the workforce (Paauwe, 2004) becomes more important. To survive in such an environment, organisations need to adapt to and to embrace environmental changes through a continuous learning approach (Moorman & Miner, 1997). An agile organisation (see Dyer & Shafer, 2003) implies a very fast and efficient adaptive learning organisation, encouraging multi-skilling, empowerment and reconfigurable teams and work designs. Under such a system, Paauwe (2004) argues, HRM practices focus particularly on employee development, the encouragement of learning and knowledge management. Consequently, the following hypothesis is proposed:

Hypothesis 2: Organisations active in industries characterised by stronger market and technological turbulence will have a stronger development oriented PM system purpose than organisations active in industries characterised by weaker market and technological turbulence.

A final box in the conceptual model is called PM effectiveness. It refers to the effectiveness of several PM system objectives as evaluated by HR professionals. Next to assessing how well different aspects of PM are evaluated, another objective is to exploring the relationship between PM effectiveness and PM system purpose. The two aspects of PM effectiveness that were investigated reflect again the fundamental distinction between the hard and soft HRM approach. The effectiveness dimension that taps into the hard approach assesses the extent to which the system has improved performance at the employee and organisational level and the extent to which the system has strengthened a performance and result driven culture. The second dimension taps into the soft effectiveness and assesses the

extent to which the system has contributed in stimulating employee development by strengthening employee competencies, enhancing employee support and in fostering employee motivation.

These two effectiveness dimensions are expected to be differently related to PM system purpose. More specifically, PM systems with a strong performance oriented purpose (low scores on the PM purpose construct) are expected be more effective in terms of improving performance at various levels and in strengthening a performance and result driven culture. In contrast, PM systems with a strong development oriented purpose (high scores on the PM purpose construct) are expected to be more effective in terms of strengthening employee competencies and fostering employee motivation, i.e. the soft effectiveness dimension. Consequently, the following two hypotheses are proposed:

Hypothesis 3: A stronger performance oriented PM system purpose will be positively related to hard PM system effectiveness, i.e. the PM system's ability to improve performance at various levels and to strengthen a performance oriented culture.

Hypothesis 4: A stronger development oriented PM system purpose will be positively related to soft PM system effectiveness, i.e. the PM system's ability to improve employee motivation and competency levels.

METHOD

Data collection and sample characteristics

HR practitioners from 1,500 Belgian organizations were contacted using a list of HR professionals who subscribe to the leading Belgian HR related professional magazine. Respondents were encouraged to fill out the survey by promising them a benchmark report based on the study results. After deletion of received surveys with substantial missing values, 319 cases were used in the analysis. This represents a response rate of 21%. The largest proportion of the sample is made up of private organisations (85.1% of the sample), while 10.7% of the responses came from public companies. Mixed organisations provided 2.6% of the sample and 1.6% described themselves as being in some other category. From the private companies, 37.2% are quoted on the stock exchange. The majority of the sample is active in the services industry (76%), while 24% is mainly engaged in production activities. Looking at the headquarters of the organisations involved, 56.2% reported their headquarters to be in

Belgium. 26.1% have headquarters in another European country (other than Belgium). Of the other continents, North-America ranks highest (12.4%).

The sample also shows quite some variance in number of employees. Ten per cent of the responses were received from companies with more than 5000 employees, 15.4% has between 1000 and 5000 employees and 29% between 250 and 1000 employees. 16.3% were medium-sized organisations (50-250 employees) and 21.7% were small companies.

The sample also covers a fair distribution of industries. There are however some industries more present than others. The highest ranked are: Business services (28.3%); Telecommunication, ICT and internet (9.1%); Metal and mechanics (5.3%); Public administration (5%); and Chemistry (5%).

Measures

An eight page survey was developed mapping employee performance management practices and processes, including sections on organisational and industry characteristics, PM system purpose; the performance review process, the performance appraisal process, appraisal implications, evaluation of various components of the system and future challenges. As suggested by Wright & Boswell (2002), in the design of this study, a lot of attention was devoted towards measuring the relevant constructs in a reliable way. Below, the different scales that were used to measure the constructs that are included in our model are presented.

Industry characteristics. An eleven-item scale, developed by Jaworski and Kohli (1993) was used to assess industry characteristics. A five-point Likert scale was used with scale points ranging from 'strongly agree' to 'strongly disagree'. Factor analysis confirmed the three underlying factors proposed by Jaworski and Kohli (1993). *Competitive pressure* was measured by four items (e.g. 'Competition in our industry is cutthroat') of which one has been reverse coded. Reliability for the scale (Cronbach's alpha) was .63. *Market turbulence* was measured by three items (e.g. 'Our customers tend to look for new products all the time') and reliability for the scale (Cronbach alpha) was .69. *Technological turbulence* was measured by three items (e.g. 'A large number of new product ideas have been made possible through technological breakthroughs in our industry') of which one has been reverse coded. Reliability for the scale (Cronbach alpha) was .84.

PM purpose. In order to get an insight into the underlying purposed of various PM systems, five bipolar items were developed that indicate whether the PM system mainly intended to increasing performance and result orientation versus increasing employee motivation and development or both to the same degree (rated on a five point scale). These items were partly based on questions developed by Baron and Armstrong (1998). Reliability (Cronbach alpha) for this scale is .73. The items of these scales are provided in Table A-1 in the appendix.

PM practices. Several descriptive measures were developed to map the actual use of certain PM practices. The measures were developed in collaboration with eleven HR professionals from various industries and five performance management experts to ensure that major PM topics were included, taking into account new developments within this domain. Table A-2 in the appendix shows a sample of those descriptive measures. Respondents were asked to indicate whether they used a certain practice or not. For some questions respondents were asked to give percentages.

PM system effectiveness. A ten item scale was developed to assess the effectiveness of the PM system. The items reflect several PM system effectiveness criteria and were derived from interviews with HR professionals from eleven companies that have a strong interest in employee performance management issues. Five point rating scales ranging from 'strongly agree' to 'strongly disagree' were used. Exploratory factor analyses showed two main underlying factors, namely the effectiveness to increase an organisation's result orientation and performance at various levels (five items, Cronbach alpha reliability = .91) and the effectiveness to improve employee motivation, development and collaboration (5 items, Cronbach alpha reliability = .88). The items of these scales are provided in Table A-3 in the appendix.

Analyses

In order to test the hypotheses presented before, regression analyses with standardised variables entered into the regression were used. The first two hypotheses were simultaneously tested by regressing PM system purpose on the three industry characteristics. The last two hypotheses were tested using regression analyses with respectively the hard and soft effectiveness criterion as dependent variables and PM purpose as independent variable. Next to the regression weights, the squared correlations between constructs were investigated to assess the strength of the found relationships.

RESULTS

Table 1 provides the basic statistics and inter-correlations between the different constructs in the model.

Insert Table 1 about here

The table indicates that the independent variables are correlated, varying from .25 to .46, but not to such a degree that multicollinearity risks to bias the regression analyses findings. The two outcome variables show to be strongly and significantly correlated ($r = .60$; $p < .01$), suggesting that hard and soft PM system effectiveness go hand in hand. The mean scores also indicate that current PM systems in Belgian organisations are not considered to be very effective in terms of increasing performance levels (MS = 3.50) and employee motivation and development levels (MS = 3.29). The latter is even scored considerably less favourable than the first.

Table 2 shows the results of the regression analyses that were executed to explain the impact of industry characteristics on PM system purpose and the relationship between PM system purpose and PM system effectiveness.

Insert Table 2 about here

Looking at the results of the first regression analysis with PM system purpose as dependent variable, the relationship between industry characteristics and PM system purpose generally shows to be not strong. Only 3% of the variance in PM system purpose is explained by differences in industry characteristics. Still, there is a negative and significant relationship between competitive pressure and PM system purpose (B = -.16, p < .05), providing confirmation for Hypothesis 1. Organisations that are active in more competitive markets seem to implement PM systems that have a more performance oriented purpose rather than a development oriented one. Hypothesis 2 is however not supported, indicating that technological (B = -.04; p > .05) and market turbulence (B = .08; p > .05) do not show to have any impact on PM system purpose.

Although this was not an explicit objective of this study, some exploratory analysis were executed to find out how a different PM system purpose reflects into different PM practices such as characteristics of the performance review process (what is discussed between supervisors and employees and how often) and its implications. To do so, PM practices between companies with a strong performance oriented purpose and a strong development oriented purpose (based on 40 and 60 percentile scorings) were compared.

Table 3 about here

Some noteworthy differences appeared and are presented in Table 3. In strong development oriented PM systems, formal intermediate performance feedback conversations between supervisor and employees are foreseen substantially more and competencies (both job specific and generic) are more used as performance evaluation criteria. In strong performance oriented PM systems, performance is measured and evaluated more in terms of quantitative targets and systems to formally cascade objectives down through the organisation are more in place. Incentive systems that reward both individual and collective performance are also more frequently used. Another findings is that variable pay systems are frequently used both in performance and development oriented systems, but the bases on which variable pay decisions are taken are clearly different. In performance oriented systems, variable pay mainly reflects differences in individual performance. In development oriented systems, variable pay decisions reflects differences in competencies and skills.

The results of the other regression analyses (see again Table 2) with hard and soft PM effectiveness as dependent variables indicate that a performance oriented PM system purpose does not relate at all to the PM system's ability to improve performance at various levels in the organisation. Thus, Hypothesis 3 is not supported. The final regression analysis shows however that a development oriented PM system purpose is strongly related to soft PM system effectiveness (B = .39; p < .01), providing support for Hypothesis 4. This finding suggests that a development orientation increased the PM system's ability to improve employee motivation and competency levels.

DISCUSSION

The objective of this study was to examine the relationship between PM system purpose and organisational context factors and to investigate the effectiveness of PM systems in terms of their ability to increase performance levels and employee development and motivation levels. Below, the major conclusions drawn from this study are discussed and some potentially fruitful avenues for further research are depicted.

A first research objective was to examine PM purpose and its relationship with organisational context factors. By doing so, this study builds on Boselie's et al.'s (2004) suggestion to collect further empirical data on the appearance and underlying objectives of PM systems and how these are influenced by the environment organisations are operating in. Regarding PM purpose as such, Armstrong and Baron (1998) found that the emphasis in UK PM systems is more on the soft side rather than on the hard side. In this study, although not exactly the same items to tap into this issue were used, a different picture emerges. It seems that in Belgian companies or Belgian subsidiaries of multinationals, PM's performance oriented purpose is more emphasised than the development oriented purpose. This is also reflected in the PM effectiveness evaluation. PM is better evaluated in terms of increasing performance levels, rather than in terms of enhancing employee development and motivation. Still, both effectiveness dimensions are scored quite moderately by HR professionals, indeed indicating that making performance management systems effective in organisations shows to be a challenge.

Assuming that strengthening competency and motivation levels would increase performance in the longer term, this study suggests that current systems are more effective in realising short term gains (increases in short term performance), but are less successful in increasing performance in the long run. Organisations that focus more on the development side (and that also show to be more successful in that respect) show to pay more attention to the intermediate feedback process between supervisors and managers and also formally consider employee competency levels and skills in evaluating and guiding people. For organisations that seek to rebalance their PM system orientation, introducing such practices or putting more emphasis on them might be useful.

Our findings also indicate that organisations respond to competitive market pressure by emphasising a performance oriented PM system purpose. Surprisingly however, this study does not indicate that applying such a performance orientation actually helps in increasing performance levels. Strong development oriented PM systems showed however to be more

effective in increasing employee motivation and development levels. Since this soft effectiveness is also related to hard effectiveness, this study suggests that most opportunities to improve the effectiveness of current PM systems lay on the soft side. This finding is in line with other authors suggestions about improving PM systems' effectiveness (see e.g. Latham & Locke, 2006). It also indirectly confirms the central role of intermediate feedback between supervisors and employees in motivating people, as proposed in Goal Setting Theory (Locke & Latham, 1980).

Though this study provides some useful insights into how performance management takes shape in a Belgian (Western European) context and triggers some further questions about the effectiveness of such systems, it is important to consider the limitations of our study design. First, a single source cross-sectional research design was used and conclusions were drawn based on the input of HR professionals. Because most of the respondents are directly involved in the development and implementation of PM systems in their organisation, this research's findings may be biased. It is therefore important that future research also collects data from other sources such as management (the appraisers in the PM process) and employees (appraisees in the PM process). Such studies may shed another and richer light on how PM is actually perceived and received in organisations. Secondly, because of the cross-sectional nature of our study, this investigation is not giving any further insights into how PM practices and processes evolve over time. Longitudinal research would therefore enable to extend the current body of knowledge on PM systems and more specifically on the issue of how PM systems unfold over time in organisations. Finally, as proposed by DeNisi (2000), both theory development and empirical research may benefit from multi-level analyses, where information at different levels (such as organisational, management, individual employee) is combined to get a broader and more reliable picture of PM systems.

Next to these methodological suggestions, this study provides some findings that raise interesting questions about the way PM takes shape and has effect in organisations. The most important one relates to the important issue of pay for performance. In this study, it showed that organisations with a strong performance oriented PM system make more use of performance related variable pay systems and individual and collective incentive systems. However, these organisations did not rate their PM systems effectiveness in terms of increasing performance more positively. Though further investigations are clearly needed, this finding at least indicates that linking performance management and performance evaluation to variable reward systems shows not to be the most important driver of PM system's effectiveness. Gaining further insights on this specific issue and more generally on drivers of

PM system effectiveness clearly deserve a place on the emerging research agenda on performance management. Such further studies might help organisations in creating agile and high performing organisations and it might help the HR profession in gaining credibility as a strategic business partner.

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TABLE 1:

Means, standard deviations and correlations among constructs[a].

Variable	M	SD	1	2	3	4	5	6
1. Competitive pressure	3.32	0.82	*0.63[b]*					
2. Market turbulence	3.62	0.80	0.31[c]	*.69*				
3. Technological turbulence	3.36	1.00	0.25	0.46	*0.84*			
4. PM purpose	2.81	0.71	-0.14	-0.05	0.04	*0.73*		
5. Hard PM effectiveness	3.50	0.77	0.07	0.15	0.09	-0.05	*0.91*	
6. Soft PM effectiveness	3.29	0.78	-0.04	0.08	0.12	0.32	0.60	*0.88*

[a] = $N = 319$

[b] = Entries on the diagonal are Cronbach's alphas.

[c] = Correlations > .11, $p < .05$; correlations > .14, $p < .01$; correlations > .15, $p < .001$

TABLE 2:

Integrated regression analyses results

Independent Variable	Dependent Variable					
	PM purpose		Hard PM effectiveness		Soft PM effectiveness	
	B (S.E.)	t-value	B (S.E.)	t-value	B (S.E.)	t-value
Competitive pressure	**-.16 (.06)**	**-2.67***	**---**	**---**	**---**	**---**
Market turbulence	.08 (.05)	1.60	**---**	**---**	**---**	**---**
Technological turbulence	-.04 (.06)	0.67	**---**	**---**	**---**	**---**
PM purpose	**---**	**---**	-.06 (.08)	0.75	**.39 (.07)**	**5.57***
	$R^2 = .03$		$R^2 = .00$		$R^2 = .11$	

--- = relationship not hypothesised

$N = 319$

TABLE 3:

PM characteristics for performance and development oriented systems

PM SYSTEM CHARACTERISTICS*	Performance purpose	Development purpose
PM system origin		
PM system adopted from mother company	48.3 %	26.6 %
Formal performance related interviews		
Intermediate performance follow-up interview for professional workers	30.0 %	43.6 %
Intermediate performance follow-up interview for blue collar workers	17.9 %	33.7 %
2nd intermediate performance follow-up interview for blue collar workers	4.9 %	12.9 %
Performance evaluation criteria		
Objectives cascaded down through the organisation	60.8 %	46.8 %
Quantitative business targets for managers	63.3 %	36.7 %
Quantitative business targets for professionals	65.3 %	34.7 %
Generic-competencies for blue collar workers	43.0 %	57.0 %
Job-specific competencies for administrative workers	43.7 %	56.3 %
Job-specific competencies for blue collar workers	42.6 %	57.4 %
Performance related pay implications		
Variable pay based on individual performance for managers	62.7 %	37.3 %
Variable pay based on competencies and skills for professional workers	41.7 %	58.3 %
Incentives based on individual performance (for managers, professionals and admin. workers)	64.0 %	33.0 %
Incentives based on collective performance (for managers and admin. Workers)	64.0 %	36.0 %

* PM system characteristics for which we found statistically significant differences (based on χ^2-statistic) between the 40 % organisations with the strongest performance purpose and the 40 % organisations with the strongest development purpose.

FIGURE 1:

Research framework

```
┌──────────────────────────┐
│ Industry                 │
│ characteristics          │
│                          │        ┌────────────┐        ┌──────────────────┐
│ • Competitive pressure   │───────▶│ PM         │        │ PM               │
│ • Market turbulence      │        │ purpose    │───────▶│ Effectiveness    │
│ • Technological turbulence│       │            │        │ - Performance    │
│                          │        └────────────┘        │ - Development    │
└──────────────────────────┘                              └──────────────────┘
```
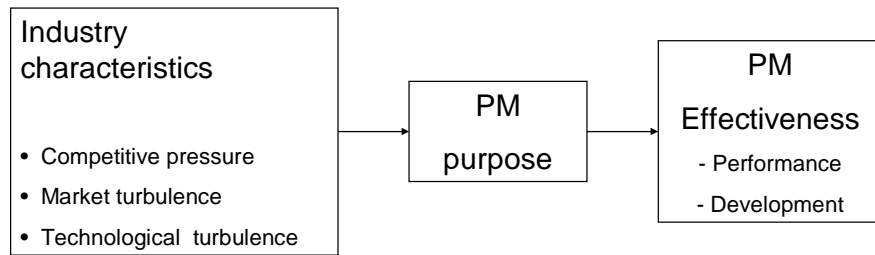
APPENDIX

Tabel A-1: PM purpose

The emphasis in our PM system's purpose is on

Emphasis on…			Equally important			Emphasis on…
Improving result orientation	☐	☐	☐	☐	☐	Improving employee development
Focus on results to obtain	☐	☐	☐	☐	☐	Focus on competencies to develop
Info relevant for management / HR	☐	☐	☐	☐	☐	Info relevant for employees
What employees should do	☐	☐	☐	☐	☐	How employees do their jobs
Stimulating (internal) competition	☐	☐	☐	☐	☐	Stimulating collaboration

Table A-2: Sample items PM practices and processes

Please state which of the following conversations between employees and managers are organised with regard to PM systems

Mgt	Prof	Adm.	Blue	
□	□	□	□	- Goal setting
□	□	□	□	- Performance review
□	□	□	□	- First intermediate follow-up objectives
□	□	□	□	- Second intermediate follow-up objectives
□	□	□	□	- Formal evaluation review
□	□	□	□	- Other…

Please indicate which elements are covered in PM related conversations and documents

Mgt	Prof	Adm.	Blue	
□	□	□	□	- Values
□	□	□	□	- Formal generic competencies
□	□	□	□	- Formal job specific competencies
□	□	□	□	- Quantitative business targets
□	□	□	□	- Objectives on a team-level
□	□	□	□	- Result-based objectives
□	□	□	□	- Job description based objectives
□	□	□	□	- KPI's
□	□	□	□	- Training and development arrangements
□	□	□	□	- Career expectations
□	□	□	□	- Other…

Is your PM system systematically used as input for the following?

yes	no	
□	□	- Analysis of training and development needs
□	□	- Individual development plans (12-18 months)
□	□	- Individual career plans (2-5 years)
□	□	- Salary increases
□	□	- Bonus
□	□	- Other…

Table A-3: Effectiveness to increase performance and employee development

To what extent do you believe that your PM system succeeds in…	
Performance	- Enhancing the performance culture within the organisation
	- Improving result orientation
	- Improving individual performance
	- Improving organisational performance
	- Improving company strategy realisation
Development	- Stimulating employee development
	- Strengthening employee competencies
	- Stimulating collaboration
	- Enhancing employee support
	- Motivating employees