Generating organisational performance
The contributing effects of performance measurement and human resource management practices

Mike Bourne, Andrey Pavlov and Monica Franco-Santos
Centre for Business Performance, Cranfield School of Management, Cranfield University, Cranfield, UK

Lorenzo Lucianetti
Department of Management and Business Administration, University of Chieti and Pescara, Pescara, Italy, and

Matteo Mura
Department of Management, University of Bologna, Bologna, Italy

Abstract
Purpose – This paper aims to advance the current debates on the effect of performance measurement (PM) in the operations management domain. In order to accomplish that, it investigates the contribution of business PM and human resource management (HRM) practices to business performance.

Design/methodology/approach – The paper is based on ten case studies conducted across both manufacturing and service organisations capturing evidence from both the human resource function and line management.

Findings – In the PM and HRM literatures, there is a debate about the contribution these practices make to the overall performance of the organisation. In particular, the results from the PM literature are inconclusive. This paper argues that performance is a result of employee engagement and that the PM system is a communication and guiding mechanism, which if implemented well and used appropriately, can channel the efforts of employees striving to perform.

Originality/value – This paper contradicts the performance drivers approach to PM by providing new insights into the roles PM and HRM practices play in delivering business performance. Additionally, the paper develops a set of propositions as a means of clearly stating the findings and for encouraging future research in this area.

Keywords Performance management, Performance measurement systems, HRM practices, Impact on performance

Paper type Research paper

Introduction
The problem of performance measurement in modern operations research
The current interest in performance measurement (PM) originated in operations (Hayes and Abernathy, 1980), focusing on the unintentional and destructive consequences of the over use of financial measures. This was taken up from a management accounting perspective (Kaplan, 1984; Johnson and Kaplan, 1987), creating a widespread dissatisfaction with accounting measures, and directly led to the
multi-dimensional PM frameworks developed from practice, such as the SMART pyramid (Lynch and Cross, 1991), the results determinants matrix (Fitzgerald et al., 1991) and the balanced scorecard (Stata, 1989; Kaplan and Norton, 1992). The operations management literature contributed to this debate by creating tools and processes that answered the question “how should PM systems be designed, implemented and used?” (Bourne et al., 2000; Neely et al., 2000).

PM is at the centre of the operations management literature with Neely et al.’s (1995) paper being the most cited in IJOPM at the time of the 2005 special issue on the trends in the field. Within this literature “How?” questions are at the core of operations management. Neely’s (2005, p. 1273) review of past trends identified future research opportunities concluding with five “How?” questions for his PM research agenda. But, this research has importance beyond academia as from a practitioner perspective there is evidence of a continuing trend of PM use in the UK (Franco-Santos et al., 2007) and other countries, including the USA, Japan, Australia and Germany (Neely et al., 2008).

More recently research has focused on another pressing challenge in the field; the question of whether PM does indeed have a positive impact on organisational performance (Franco and Bourne, 2004). As we will show in our summary of the literature, this research has occurred predominantly outside the operations management literature and producing inconclusive and some time contradictory results. We believe that this is because we do not understand the fundamental mechanisms and processes that explain how PM works. We need to focus on understanding how (Martinez and Kennerley, 2005; Pavlov and Bourne, 2011) and under what circumstances PM makes a difference (Braam and Nijssen, 2004; Bourne et al., 2005; Griffith and Neely, 2009).

Research has demonstrated that PM efforts are deeply embedded in organisational processes (Pavlov and Bourne, 2011) which invariably affect the success of PM initiatives (Kennerley and Neely, 2003). People and culture appeared to be among the most significant factors contributing to the successful outcome of PM (Bourne et al., 2003; Kennerley and Neely, 2003) and this has informed our research.

Given the inconclusive nature of the impact studies and the insights from research into the organisational embeddedness of PM, it is useful to investigate further the contextual and processual factors which may account for the link between PM and organisational performance. Following this line of reasoning, we became interested in the organizational factors that contribute to the effect of PM on performance, particularly how human resource management (HRM) affected the link between PM and organisational performance. More specifically, the question that drove our inquiry was: “How do HRM and PM practices interact to generate organisational performance?” In order to answer this question, we examined the documented effects of PM through the lens provided by the HRM literature. Our research led us to a startling and powerful conclusion: neither the HRM nor the PM literature alone succeed in capturing the entire picture of how organisational performance is generated. However, combined, they offer a more sophisticated understanding of this process – organisations use a range of PM practices to communicate direction combined with a variety of HRM practices to encourage engagement with the organisation’s goals; and it is the skilful management of these processes simultaneously that generates performance. Herein lies the contribution of this paper. More specifically, we:

- examine and document the effects of PM on organisational performance through the lens of HRM;
identify empirically and describe a set of practices that generate organisational performance;
• using the HRM lens, separate the practices for directing and the practices for engaging employees within generic performance-generating practices; and
• explain how the balanced interaction between the directing and the engaging practices leads to generating organisational performance.

Although earlier work in the operations management literature has hinted at the importance of HRM and PM working in tandem (De Toni and Tonchia, 2001), to our knowledge, this paper is the first study that makes these hunches explicit, providing the first specific insights into how HRM and PM interact to produce organisational performance.

The structure of this paper
We have structured the rest of this paper as follows. In the next section we will examine the literature to:
• demonstrate the continuing relevance of research into PM;
• identify the evidence of the effects of PM and the support for the choice of HRM literature as the analytical lens for examining these effects;
• review the research on organisational performance provided by the HRM literature; and
• derive our overarching research question.

We then outline the methods for conducting the research, before presenting and discussing our findings. In the discussion section we develop a set of propositions with two aims: first as a means of clearly stating our findings and, second, to provide a focus for future research. A brief summary concludes our paper.

Background literature
The development of current issues in PM
PM systems can be seen as setting “the rules of the game” in organisational life. The measures used in organisations highlight what is important as they report performance against the target to management. Operational managers have been very sensitive to these systems as they influence behaviour towards delivery of the measures and not necessarily the strategy of the organisation. How can an operation create the slack resources to allow it to respond rapidly and flexibly to a customer need if all senior management see is the utilisation levels of the plant and equipment?

In this respect, financial and accounting based PM systems have been criticised for encouraging short-termism (Banks and Wheelwright, 1979; Hayes and Garvin, 1982), lacking strategic focus (Skinner, 1974), encouraging local optimisation (Hall, 1983; Fry and Cox, 1989), encouraging minimisation of variance rather than continuous improvement (Johnson and Kaplan, 1987; Lynch and Cross, 1991), not being externally focused (Kaplan and Norton, 1992) and even for destroying the competitiveness of US manufacturing industry (Hayes and Abernathy, 1980). These criticisms were the catalyst for the development of multi-dimension measurement frameworks cited above, enabling goals and measures to be aligned strategy. However, the creation
of such a set of measures is not a trivial task, so considerable academic and practitioner
effort went into the processes for designing and implementing PM systems. These took
different approaches; some were based on informational models (Bitton, 1990), audit
techniques (Dixon et al., 1990; Bititci et al., 1997; Medori and Steeple, 2000), consultancy
interventions (Kaplan and Norton, 1993) and facilitated processes (Eccles and Pyburn,
1992; Neely et al., 1996).

If in the 1990s we developed an understanding of how to create and implement
multidimensional PM systems, the first decade of the twenty-first century has focused
on the use of PM and the impact on business performance. Researchers have studied
the operational consequences of PM – that is to say the impact that PM has on
management processes – as well as the impact on the performance of the organisation
as a whole. We will briefly summarise this research next.

The effects of PM
One effect of PM that is consistently reported in the literature is the role it plays in
improving strategic alignment. For example, Lillis (2002) examined how the use of
multiple performance measures in manufacturing profit centres improved the
implementation of their strategy. Malina and Selto (2001) found positive results at the
business unit level as PM enhanced strategic alignment and Ukko et al. (2007) identified
improvements in the performance management processes across the organisation
following implementation of a PM system. When PM is combined with techniques such
as linked cause-and-effect models (Eccles and Pyburn, 1992), strategy maps (Kaplan and
Norton, 1996) or success maps (Neely et al., 2002), one would expect improved strategic
alignment and there is evidence to support this. Chenhall (2005) suggests this approach
improved the organization’s strategic alignment and Ahn (2001) found the approach
facilitated communication and strategy implementation. Similarly, Papalexandris et al.
(2004) and Sandstrom and Toivanen (2002) show evidence of improvements in the
management of performance. However, both Ahn (2001) and Papalexandris et al. (2004)
highlighted that these approaches are costly and consume management time.

Besides, the impact on alignment, studies have focused on the impact PM has on
people management processes. For example, Butler et al. (1997) showed how PM
improved employees’ participation. Malina and Selto (2001) and Godener and
Soderquist (2004) investigated the effects on communication finding improved
communications at both the organisational and at the business unit level (although for
Malina and Selto (2001) the communication was only one way, increasing tension in the
organisation). Bititci et al. (2006) showed how the implementation and use of PM
systems across manufacturing companies was influenced by culture and management
style and how the management style and culture influenced the PM system
implementation and use.

Turning now to the impact of PM on performance itself, it has been found that PM
contributes to multiple facets of organisational performance. In terms of operational
performance, existing evidence documents the positive impact of PM systems on such
aspects as process re-design (Malina and Selto, 2001) flexibility, delivery, cost efficiency
(Chenhall, 2005), workforce productivity, number of errors, and inventory turns
(de Leeuw and van de Berg, 2011). Other types of performance affected by PM include
performance improvement (Godener and Soderquist, 2004; Johnston et al., 2002);
team performance (Scott and Tiessen, 1999); project performance in R&D contexts
(Davila, 2000); customer performance (Hyvonen, 2007); and market performance (Ittner et al., 2003). Studies also find that PM positively affects perceived financial and non-financial performance (De Geuser et al., 2009; Chenhall and Langfield-Smith, 1998; Evans, 2004; Hoque, 2004; Hoque and James, 2000; Van der Stede et al., 2006). However, when one tries to link the effects of PM to externally reported financial performance, the results are less clear. Ittner and Larcker (1998) showed that the use of multi-criteria performance measures positively affect future accounting financial performance, but in a later study Ittner et al. (2003) found that the use of multi-criteria performance measures had no association with accounting financial performance. DeBusk and Crabtree (2006) found companies using PM as part of a balanced scorecard outperformed the control group in terms of stock market and accounting performance in the first three years of adoption, but Braam and Nijssen (2004) found that unless the balanced scorecards in use are well aligned with business strategy, there will be a deterioration in the financial performance of the business. Similarly, Davis and Albright (2004) showed that business units that adopted BSC outperformed other business units, whilst Griffith and Neely (2009), using the same research design, failed to demonstrate this effect conclusively.

In summary, directors and managers can choose their PM framework and approach to design and implementation. There is also guidance on how performance measures should be used to manage, but despite the widespread adoption (Neely et al., 2008), the evidence that links PM with business performance is far from conclusive. The immediate impact on strategic alignment and PM is clear and there is good evidence that PM has a positive impact on perceived non-financial and financial performance, but the final linkage to financial results is ambiguous. This suggest that there may be contextual factors which have been overlooked, or that the way PM systems are implemented and used is much more important than it was previously thought.

The interaction of PM with organisational HRM practices
A key contextual factor, previously highlighted in the operations literature, is the HRM approach, that is to say, the type of HRM practices organisations use. For instance, Goodridge (1986) discovered that the way in which people are managed is critical to the adoption of advance manufacturing systems. Kinnie and Staughton (1991) found that HRM practices are a key factor in the development and realisation of a new manufacturing strategy. More recently, Sila and Ebrahimpour (2005) found that HRM related issues (employee satisfaction, work systems and training) were crucial for the success of total quality management (TQM) implementations. These studies suggest that the use of PM interacts with HRM practices, and so does not operate in isolation, highlighting the importance of the softer organisational factors emphasised by Kennerley and Neely (2003). In order to understand this interaction further we turn to the HRM literature to inform our research.

The effects of HRM practices on organisational performance
In the last two decades HRM scholars have extensively explored the relationship between HRM practices and organizational performance. Seminal sound evidence has been provided by Arthur (1994), Huselid (1995) and Delery and Doty (1996), which empirically explored the effect of HRM practices on manufacturing, productivity, turnover and financial performance. Subsequently the number of empirical studies on this topic has grown (Boselie et al. 2005 detailed review of the literature) and there
is consistent meta-analytic evidence that high-performance HRM systems, broadly defined, might positively affect firm financial performance (Combs et al., 2006).

In this debate, a particular emphasis has been given to the type of HRM practices that a firm implements. Specifically, two typologies of HRM practices have emerged. Transaction-based HRM practices, which emphasise individual short-term exchange relationships, and commitment-based HRM practices, which emphasise mutual long-term exchange relationships (Arthur, 1992; Collins and Smith, 2006; Tsui et al., 1995). A central issue for organisations is the choice of the type of HRM practices that will facilitate better organisational performance. A growing body of empirical evidence addresses this issue suggesting that organisations implementing commitment-based HRM practices perform better than organisations implementing transaction-based HRM practices (Arthur, 1992, 1994; Batt, 2002; Collins and Smith, 2006; Youndt et al., 1996). Although the individual HRM practices that encourage long-term exchange relationships differ across organisations studied, three HRM practices appear to be critical for creating a commitment-based setting (Collins and Smith, 2006), these are:

- recruitment and selection practices;
- reward and motivation; and
- training and appraisals.

Despite the relevance and consistency of these findings, scholars have argued that the link between HRM and performance has not been proved yet (Hesketh and Fleetwood, 2006; Fleetwood and Hesketh, 2006; Guest et al., 2003) and that it is premature to coincide that such a link is properly established (Wood, 1999; Wall and Wood, 2005). Fleetwood and Hesketh (2008, p. 141) also highlight that much of the HRM-performance research uses simplified and over arching HR structures that ignore the enabling mechanisms and social processes that make the difference.

Yet the lack of proof does not mean that the link does not exist, leading to arguments for more theorising and exploratory research. Calls to “peel the onion” have been made, along with pleas to explore intermediate variables in the HRM-performance link in order to explain how HRM practices cause better performance (Becker and Huselid, 1998, 2006; Fleetwood and Hesketh, 2006). Some evidence has already been produced (Collins and Smith, 2006) around the role played by organization social climate and knowledge exchange capabilities. Nonetheless, HR scholars propose that strategic HRM theory should be extended to effective strategy implementation (Becker and Huselid, 2006) and strategic alignment (Huselid and Becker, 2011) as focal mediating constructs in the HRM-performance relationship. They suggest that future research should focus on the integration of high performance work systems and balanced scorecards and the effect on implementation of strategy (Becker and Huselid, 1998).

Additionally, the importance of a contingency perspective has been underscored. Since HR architectures may differ across firms and within firms, it is important to identify contextual factors or “features of the organizational environment” (Becker and Huselid, 2006, p. 916) that make the HRM-performance link more effective (Lepak and Snell, 1999, 2002). Therefore, there is a need for empirical evidence from qualitative research, such as case studies, that precisely captures the effect of context-specific variables (Becker and Huselid, 2006, p. 910; Guest, 2011, p. 6).
The research question
We conclude there is evidence that PM improves strategic alignment and interacts with communications and employee commitment practices. However, these improvements may not lead directly to improved organisational performance. This may be the result of various contextual factors, of which HRM practices appear to be key. The HRM literature suggests that identifying multiple contextual variables and demonstrating a clear chain of cause-and-effect relationships between HRM practices and organisational performance has been difficult. However, our review shows that performance is affected by a set of commitment-based practices and that this set only partially overlaps with the corresponding set documented in PM research. This has led us to believe that the HRM and the PM practices interact to generate organisational performance and that we needed to adopt an exploratory research design to identify the practices and their effect. So in designing the empirical part of our study, we asked:

RQ. How do HRM and PM practices interact to generate organisational performance?

It is important to note that this research question does not imply or seek to discover causality in the sense of demonstrating the link between individual practices and organisational performance. Rather, its focus is the nature, dynamics, and complexity of interaction between an organisation’s HRM and PM practices that are perceived to be performance-generating.

Methodology
Research strategy
Given the inconclusive evidence produced by prior research into the impact of PM on performance and the exploratory nature of our investigation, we adopted a case study strategy. We conducted the research in 13 UK companies including both private and not-for-profit organisations. The research comprised two phases. First, during a small pilot study we examined three cases with single respondents. This allowed us to refine the case study protocol, sharpen the interview questions, and make the final decision as to the rationale for the selection of cases in the main study. Second, the main study included ten cases with multiple respondents. In this paper, we report the results of the main study only.

Case selection and data collection methods
A case study protocol was developed to guide this process. The case selection was driven by theoretical sampling (Yin, 1994), reflecting our research question and the results of the pilot cases. More specifically, the aim of the study was not to determine whether particular practices generate organizational performance – as the discussion above demonstrates, this has been done by prior research. Rather, our goal was to understand how this process takes place. Therefore, in the process of case selection, we looked for high-performing organizations where we could study this question. Thus, all organisations in the final set of cases were successful organisations judged by meeting at least two out of the three success criteria – profitable, growing, business award winners. Furthermore, we aimed to obtain a mixture of both manufacturing and service companies. Finally, as Table I demonstrates, the selected cases were categorised
by size (small, medium and large measured by number of employees). The company names have been changed to preserve confidentiality.

We personally visited all of the organisations studied and collected the data through face-to-face interviews, observations, and documents. We deliberately targeted senior HRM personnel as well as multiple levels of line management. This was a key element of our research design as our intention was to understand how HRM policies and practices contributed to the link between PM and organisational performance. Through semi-structured interviews and examination of documents we collected information about the policies and practices that were believed to be the most important for managing people and elicited the individuals’ beliefs about the organisations’ people management philosophies and the key practices (both PM and HRM) that affected business performance. We used multiple respondents across several organisational levels so that we could build a rich picture of practices and beliefs in the organisations studied and triangulate our findings, cross-checking the views of the respondents against documentation and against each other.

In total we interviewed 62 people with each interview lasting for approximately 1 hour. The majority of interviews were conducted by two researchers simultaneously and were recorded. Where recording was not possible or allowed by the interviewees, we took notes and wrote them up immediately following the interview. The interview questions were aimed at eliciting specific PM and HRM practices as well as the perceived mechanism of their interaction and respective contribution to organisational performance. Specifically, we explored which policies had the biggest impact on organisational climate and on company performance, whether they have been successfully implemented, and how they supported or conflicted with each other (see the Appendix for details).

**Data analysis**

The interview transcripts provided the main dataset for the analysis, whilst observations and documents were treated as secondary data sources (Robson, 2002). Therefore, we used the interview data to develop emergent categories and relied on observation notes and company documents only to clarify issues or confirm our conclusions. The analysis took the form of thematic analysis using the constant comparative method (Glaser and Strauss, 1967) to identify and refine emergent categories. The validity of the data was assured by comparing statements across the interviewees in the same organisation and with multiple data sources. The reliability of the conclusions was aided by having the researchers involved in the data collection analyse the data independently before comparing their interpretations. We brought together a member of each company to two half day review meetings to review and discuss the findings in detail as a final validation.

<table>
<thead>
<tr>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC (business services)</td>
<td>MC (manufacturing)</td>
<td>LC (financial services)</td>
</tr>
<tr>
<td>SA (manufacturing)</td>
<td>MA (building industry)</td>
<td>ML (engineering)</td>
</tr>
<tr>
<td>US (software)</td>
<td>NM (consulting services)</td>
<td>NL (housing)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>UL (repair organisation)</td>
</tr>
</tbody>
</table>

**Table I.** Summary of case study organisations by size
Findings
As we stated above, we collected information about the policies and practices that were believed to be the most important for managing people and delivering business performance. We will present our findings about the key policies and practices for managing people first and then present our findings concerning the policies and practices that the individuals believed delivered performance.

From the within-case and cross-case analyses we identified eight categories that were recurring themes across more than one organisation. However, only six distinct categories were identified in at least half the case study companies. These six categories were seen by the companies as performance-generating practices and thus represented the broad approaches to managing organisational performance:

1. Goal deployment – rolling out corporate objectives to individuals.
2. Communications – both ways between the organisation and its employees.
3. Leadership role models – the management style projected in the organization.
4. Incentive systems – rewarding team and individual performance.
5. Recognition systems – recognising performance and values.
6. Training – opportunities for training and development.

Each of these categories, however, contained specific PM and HRM practices that interacted with each other, shaping and giving strength to each individual category. As such, these categories provided the window into the nature, dynamics, and complexity of HRM and PM practices, allowing us to answer the question of how such practices interact. The next seven sections describe the findings with respect to our research question within each category and end with a summary of our observations.

Goal deployment
Goal deployment took two distinct forms. In the larger organisations, this was based on rolling out the strategy to all the departments and eventually to individual staff. Predominantly this was achieved through presentations, the development and deployment of key performance indicators (KPIs) and a structure of reinforcement through team briefings.

In the medium sized and smaller organisations, the predominant approach was to involve all the staff in the strategy process. These companies ran off site away days for all their staff, in which, as a minimum, the strategy for the coming year was presented and discussed in open. However, three companies also had mechanisms for involving everyone in strategy development. In one organisation (case MC, a manufacturing company employing 150 people) they used a strengths, weaknesses, opportunities and threats (SWOT) analysis on an annual basis to assess the health of the organisation. This was initially conducted at team level, before being rolled up to departmental and organisational levels. This process raised issues from the bottom of the organisation and there was evidence that the issues raised during the process significantly informed strategy. A second example (case SC, a service company with twelve employees) involved its staff in the development of their own “one page plan”. This document summarised for each staff member on one sheet of A4, the mission and vision of the company, the company’s top level goals, together with indicators of how this is to be measured. The plan continued to record the individual’s goals that supported the
organisation’s performance and the individual’s own measures of achievement. This document clearly linked in a simple format individual performance with that of the company as a whole, emphasising the strategy and how it was to be delivered.

In terms of answering our question, the data showed that goal deployment was often a recursive and collaborative process and was thus intertwined with engagement practices. However, we observed that larger organisations adopted approaches in line with those prescribed in much of the PM literature, whilst the medium sized and smaller organisations adopted more innovative and engaging approaches.

**Communication**

Communication with staff started with the annual communication of the business objectives. This was done in all ten companies. In the larger organisations, these are broken down by function and regular feedback occurs through briefing sessions and quarterly progress days (LC, NL, UL). Individual communication occurs through regular one-to-one (SC, MC, LC, MA, NM, NL, UL) and the achievement of goals is communicated through the reward systems (MC) or through formal recognition systems (SC, LC, ML, NM, UL) with monthly recognition days. Weekly team meetings and cross-functional team meetings support the process, with intranet, staff notice boards, in-house magazines and posters providing alternative media. Besides, communicating performance, many of the organisations we visited espoused and communicated company-wide values (SC, LC, SA, NM, NL, UL) using most of the same communication channels.

But communication is not simply from management to the employees, employee feedback is also important. The organisations studied used staff surveys (SC, MC, LC, SA, ML, NM, NL, US, UL), consultative committees (SC, MC, NM, NL), roundtables and managing director’s staff forum (NL, NM, UL), open door policies and open plan offices (MA, UL), job swapping (NM) and managing by walking about (SC, LC, SA, MA, NL, UL) to facilitate both formal and informal feedback from staff. What was so striking in these examples was the frequency and extent of the communication.

In terms of answering our question, we observed that in these organisations, although communication was associated with ensuring the consistency of action across organisational levels, it was a bi-directional process that was also aimed at engaging the employees in the wider task of generating organisational performance.

**Leadership role models**

Managing staff is an important attribute of management. The quote that “people leave their boss and not the organisation” was used more than once in our interviews and for many firms the role of senior management in creating the right working environment was highlighted. A number of organisations were focused on ensuring that line management had at least a minimum management ability in managing people (LC, NL, UL) but some of the best line managers appeared to be naturally undertaking the role (specifically in SC, NM, MA). Line management’s commitment to listen and act when appropriate was regularly highlighted as a strength. In three of the organisations we studied (MC, LC, UL), the recognition and reward processes underpinned the achievement of goals requiring low levels of input from line management, but some of the best line management was observed when these processes were much less formal and left largely to the discretion of the line managers (cases SC and MA).

In relation to our research question, the discussion of leadership highlighted the ability of the leaders to engage those at the lower levels as the task was almost
as important as that of outlining the vision and providing the overall strategic direction. The discussion of leadership was one of the clearest examples of the inextricable connections between directing and engaging the employees.

**Reward systems**

Five of the organisations studied had a business related reward system usually related to achievement of an overarching profit objective (MC, LC, SA, MA NL). Staff saw these as giving a “thank you” rather than driving performance *per se*, but three companies (LC, ML, UL) were using individually based performance rewards to drive individual performance and a fourth organisation was looking to introduce such a scheme (US).

In the three organisations using reward systems to drive performance, the primary mechanism was through individuals achieving their appraisal objectives. However, in job roles where an individual could be easily measured and targets set, such as sales staff and operator productivity, these appraisal objectives became much more quantifiable and rewards were based on delivering specific performance targets (such as sales achieved or output produced).

Many organisations rely on team performance, but there was only one real example (MC) of a company endeavouring to drive team behaviour and performance through the reward system by using a closely designed and interlocking set of measures and rewards. These paid weekly and monthly bonuses on a team basis for achieving attendance, delivery, quality, productivity and house keeping standards.

In terms of the focus of our study, the discussion of reward systems highlighted the expected emphasis on the link between individual performance on the one hand and organisational goals on the other hand. Encompassing both the motivational and the organisational functions, reward systems were seen as playing the dual role of engaging the employees and ensuring the strategic direction.

**Recognition systems**

We differentiate recognition systems from reward systems. Reward systems pay financial rewards through the payroll, whilst recognition systems are prize-based, providing staff with gift vouchers, holidays and other rewards, typically of lower value than the financial payment made through the reward systems. They also involve personal public recognition of “recognised individuals” and their achievements. Six of the companies studied identified recognition as an important people management practice (SC, LC, SA, MA, NM, UL). Four of these companies (SC, LC, NM, UL) had formal systems that were run systematically by designated staff. These involved formal systems for nominating staff for awards based on management recognition, team recommendation or customer comment. Recognition was provided both for performance and “living the organisation’s values”. All the companies had formal groups for managing the recognition, but one specially (NM) constituted a committee of employees and previous award winners to judge the next month’s awards. The culmination of this activity was the monthly reward ceremony where individuals were presented with their prizes in front of management and their peers. In two companies, these were rolled up to create an annual award final to create additional incentive and motivation.

Employee recognition was seen as an important part of good management and the formal systems were one approach to ensuring that this happened. However, one case company (MA) had a very effective informal recognition system leaving the practice
to managers’ discretion. For example, in this company, managers would quietly take individuals to one side and thank them for their additional contribution. They might then suggest that they took their partner out for dinner with the company paying the bill. Another would buy small thank you gifts or arrange team evenings, involving the manager personally in the recognition process.

In terms of answering our question, the discussion of recognition systems highlighted the same issues as that of the reward systems. However, we observed that in most instances, the formal recognition system promoted communication of organisational values and goals, but the informal management recognition generated performance directly, by having a strong motivational effect – a point to which we return later.

### Training

Five of the organisations were very reliant on staff having the necessary technical skills to do their job (MC, LC, MA, ML, UL) and there was significant support to ensure that this happened. Two organisations had developed their own internal training centres (ML, UL) and one had web-based training available (LC). The other two invested both in on the job training and specific off-site courses where necessary. All the medium and large sized organisations were investing in management training in some form or another. Most of this training was focused on developing line management skills and capability, but higher-level leadership training was rarely mentioned during the interviews.

We have interpreted this as meaning that training was most probably an enabler of performance rather than a direct driver, as it was not cited as making a direct impact on business performance. However, line management and staff discussed the availability of training in terms of perceiving the company was investing in them. This was believed to have a positive impact on staff morale and commitment to the business.

Again, in terms of the focus our research, the discussion of training demonstrated its dual role as ensuring the ability of the organisation to perform required tasks (and thus being developed and offered in accordance with the organisational priorities) and as stimulating employees’ commitment.

### Summarising practices

Summarising these findings, there were two observations that we found striking. First, within all six categories, the interaction of the HRM and PM practices seemed to fall into two broader types of practices – engaging the employees in the company’s operations and providing direction for channelling their efforts. Second, we were surprised that in our cases we found that recruitment was mentioned infrequently. It is possible that recruitment, like training, was seen as an enabler rather than a driver of performance. However, the relative lack of emphasis was a surprise. Also, basic HRM practices and procedures were mentioned, but were only once cited as making a positive impact on performance. In one situation (MA), the business saw the basic practices and policies providing a consistent base for managing people allowing them to concentrate on the more important aspect of managing the business. If one takes a systems view of management, this is exactly what one would expect to find.

As the focus of this study is the interaction of the HRM and PM practices, the following section examines these findings in more detail.
How HRM and PM practices interact

What we saw in our findings was that the HRM and PM practices within organizations were inextricably linked. Therefore, their interaction could no longer be described by focusing either exclusively on the HRM practices or on their PM counterparts. Rather, this interaction was better described by two new types of practices. Table II makes a distinction between these types of practices that were seen as generating performance. Following the coding procedure described above, we labelled these practices as “engaging” and “directing”. These types of practices were related, but distinct. The first is around the issue of generating additional discretionary effort from staff. The second is related to focusing staff effort to deliver business performance. We labelled these “engaging” and “directing” and will elaborate on them in turn.

The directing practices are clear from all the activity focused towards aligning objectives with strategy, cascading of goals and key performance indicators to an individual level in the organisation. The communication of objectives, performance feedback, performance agreements, one page plans, appraisal systems and one-to-ones, are all practices designed to meet these ends.

Having aligned the staff with these objectives, the focus is on engaging the staff to deliver additional discretionary effort. The recognition and reward systems were examples of how this was achieved, but the importance of good line management supporting this process should not be overlooked. All the organisations visited had a strong belief in people delivering the business performance and structured performance management is a key factor. There was also recognition that staff morale is an important
intermediate goal in delivering business performance. The examples of communication, listening to staff feedback, leadership role models, values and treating staff well are all examples of commitment-based HRM practices that, as we showed earlier, contribute to the commitment-based organisational setting, making up organisational social climate and leading ultimately to improved organisational performance.

Discussion

The contributing effects of PM and HRM practices on organizational performance

In the PM literature reviewed above, we identified that the PM and business performance link had not been convincingly demonstrated, whilst the empirical evidence linking commitment-based HRM practices to performance was more compelling (Arthur, 1992, 1994; Batt, 2002; Collins and Smith, 2006; Youndt et al., 1996). The identification of three HRM practices critical for generating a commitment-based setting (Collins and Smith, 2006) develops this position, but our case studies emphasise some important differences.

If we now turn to the three practices, namely, recruitment and selection practices, reward and motivation, and training and appraisals, two are found in our study and one is not. In our study, rewards and recognition were practices designed to deliver motivation and additional discretionary effort from employees. Here, our findings are partly in agreement with the HRM literature, but the HRM emphasis was on developing commitment-based HRM practices, whilst our case studies linked these activities directly with generating business performance. Training and appraisals were identified in our study, but training was seen as an enabler of performance rather than a direct driver creating the organisational social climate (Collins and Smith, 2006; Rousseau, 1995; Tsui et al., 1995), which is in line with the HRM literature’s comments on commitment-based settings. Recruitment and selection practices were conspicuous by their absence in our study. Again these are probably more instrumental in developing commitment-based settings, but we are still surprised not to find them mentioned during our research.

In summary, our findings do not disagree with the body of research found in the HRM literature. Building a social organisational culture that is conducive to commitment and performance was found to be important. However, setting direction, through communicating strategy, cascading objectives and performance indicators to staff were also important elements perceived to impact on the business performance, and this was the aspect most readily emphasised during the case studies. It could be argued that being PM researchers we were looking for this aspect during our cases, however, we were aware of our natural bias in this direction and took steps to counter this. Despite these endeavours the direction setting emphasis was still prominent in our findings.

If we now turn to the PM literature, there has been considerable focus on how PM can be used to clarify strategy and align employees’ efforts with the goals of the organisation. In this respect, the creation of visual cause-and-effect relationships has been proposed (Eccles and Pyburn, 1992; Kaplan and Norton, 2000; Neely et al., 2002) and shown to be beneficial (Ahn, 2001; Chenhall, 2005) as well as the importance of the appropriate definition of the performance measures themselves is understood (Neely et al., 1997). But we would argue that these approaches are being taken a little too mechanistically. The importance of PM for influencing behaviour and communicating direction cannot be denied but these need to be supported by the
engagement practices, which provide the fuel for striving for better performance. Balanced scorecards are often seen as “performance drivers” (Olve et al., 1999; Aziza and Fitts, 2008), but in our interpretation of this research we suggest that this approach could be incorrect. Our research is leading us to believe that in the main, PM is a communication and guiding mechanism, which, if implemented well and used appropriately, can channel the efforts of employees striving to perform.

The interaction of the PM and HRM practices

As we have shown in the preceding section, the practices falling under the “engaging” category parallel closely the three commitment-based HRM practices that make up the commitment-based organisational setting (Collins and Smith, 2006). As also shown earlier, this setting can be described as the organisational social climate. The practices comprising the organisational social climate, from our study and the literature, lead to better performance, whilst PM cannot be reliably shown to have the same effect. Our research leads us to believe that this may depend on the organisational social climate in which the PM system operates.

PM can be extremely effective in identifying what success looks like and communicating this throughout the organisation. However, as we stated earlier, in many circumstances this creates the “rules of the game”. This may suggest that in some circumstances, such as situations with well-motivated and engaged employees, PM will be viewed positively and embraced as a means of delivering organisational success. In these circumstances, PM systems can “channel” the engagement and motivation of employees into the direction desired by the organization, thereby leading to organizational performance. On the other hand, in circumstances where the employees are disengaged and de-motivated, employees will not embrace the measurement system. In these circumstances, they will deliver improvements in the performance measures through “work arounds” creating the perception of improved performance that does not translate into true performance. These “work arounds” might be so severe in some circumstances that the PM system reduces real performance.

To put our position more concretely, we have developed the following proposition:

P1. The relationship between PM and organisational performance is positively moderated by the organisational social climate.

P1.1. In organisations with a good organisational social climate, PM will make a positive contribution to performance.

P1.2. In organisations with a neutral organisational social climate, PM will have no effect on performance.

P1.3. In organisations with a bad organisational social climate, PM will have a negative effect on performance.

To take this line of argument further, future research will need to identify and isolate the moderation effect of social climate on the relationship between PM and performance. This would need to be accomplished through a large-scale cross-sectional survey. Doing so would improve the understanding of a critical component of the interaction between HRM and PM practices and test the emergent link between such interaction and organisational performance. However, as our study demonstrated, the HRM and PM practices within organizations are in fact intertwined and inseparable,
isolating the effect of individual PM practices is practically meaningless. It is much more important to distinguish and quantify the contribution of the directing practices to the effect of the interaction between HRM and PM practices on performance.

Therefore, our second proposition has to do with distinguishing the contributing effect of directing practices in this process. The HRM literature demonstrates that in situations where there is a good organisational social climate –, i.e. an organizational social climate that stimulates engagement – performance is better. However, given that there is strong evidence that PM is an effective mechanism for communicating strategy and supporting strategy implementation, we would suggest that PM would be an effective way of directing employees’ efforts to good effect. For instance, MacLeod and Clarke (2009) highlight the importance of providing the employees with the strategic “line of sight” for engagement to realise its full value. Effectiveness of PM here means the ability of PM systems to ensure the alignment of objectives throughout the organisation and a system of indicators to support this. Hence:

**P2.** Organisations with good organisational social climate and effective PM systems perform better than organisations with good organisational social climate and ineffective PM system.

As in the case of **P1**, the empirical work required by **P2** would involve a large-scale survey that would allow the researchers to establish and isolate the desired effects.

Summing up the discussion, we suggest that neither the HRM nor the PM literature provides a complete description of how performance is generated. Rather, both HRM and PM practices contribute to the process of generating organisational performance, where the efforts and engagement of the employees are stimulated by a set of HRM practices and channelled into the strategic direction by the PM practices. Moreover, the HRM and the PM practices can be separated only analytically; in real organisations they are intertwined, and it is their interaction that shapes the process of generating organisational performance.

**Conclusions**
The PM literature has focused on the impact of objectives, targets and feedback on business performance in the setting of multidimensional PM systems. Lingle and Schiemann’s (1996) study and findings typify this approach. However, although the issue of incentives and rewards has been raised, much of the PM and management literature ignores the other HRM factors that are found in a commitment-based setting. On the other hand, the HRM literature’s focus on the impact of practices on creating a commitment-based setting is understandable, but one has to question the value of commitment without direction, as one would also have to question the value of direction without commitment.

The research presented here has yielded two key findings. First, it has shown that it is not HRM or PM practices alone that are responsible for generating performance, but rather it is their interaction that determines the process of generating organisational performance. Second, the research was able to identify the specific contributing effects that HRM and PM practices make to this process – it demonstrates that the organizational social climate stimulates the employees’ efforts which are subsequently channelled towards strategic priorities by the goal-setting, communications, and control practices of PM.
This paper makes a step towards a more sophisticated understanding of the process through which organisational performance is generated, and in so doing, it advances our understanding of the effect of PM on performance.

In light of this study, we propose two avenues for future research. A limitation of this paper is that the findings are drawn from studying ten organisations. So our first proposal is to encourage further empirical research to validate the findings in a wider setting including the testing of our propositions through quantitative data analysis from survey results. We would recommend that such a survey should also be linked to reported financial data, so that the impact of and interaction between PM and HRM practices can be related to published financial performance. Our second proposal is much wider in nature. For the operations management literature to continue to make a contribution to the study of organisations to inform the development of practice, there needs to be a new trend in research. We need to understand how the practices, mechanisms, processes and routines in an organisation deliver performance. Of necessity, this research will be close to practice and dealing with the fundamental building blocks of operations management. However, this will be aided by the long awaited realisation in the wider management literature of the importance of practice in developing academic theory and insight (Corley and Gioia, 2011; Sandberg and Tsoukas, 2011).

References


Further reading
Appendix

The interview questions

In each of the organisations we studied, we interviewed multiple respondents across several organisational levels. Therefore, the precise questions in the interview protocol were tailored to the position and function of the interviewee, yielding four versions of the protocol – for the chief executive, HR managers, functional managers, and front-line staff. For practical interests, instead of listing four separate protocols here, we show the representative questions that remained constant across all versions of the questionnaire and made up the core of the protocol.

The core of the protocol consisted of four key questions that focused on organizational:

- policies;
- programmes; and
- practices.

The reason for this was that we wanted to capture practices of all levels of complexity – from formalised organisational policies to localised practices:

1. Which policies (programmes, practices) have the biggest impact?
   - What is that impact?
   - On climate:
     - NB: prompt for evidence.
   - On organisational performance:
     - NB: prompt for evidence.
   - On departmental performance:
     - NB: prompt for evidence.


(2) Have they been successfully implemented?
  • If successful, describe it in more detail. What makes it successful?
  • What are some of the problems?
(3) Are these policies (programmes, practices) aligned with each other?
  • If so, in what way?
  • If not, what are the consequences?
(4) Do these policies (programmes, practices) support the delivery of organisational goals?
  • If so, in what way?
  • If not, what are the consequences?

**Corresponding author**
Mike Bourne can be contacted at: m.bourne@cranfield.ac.uk