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# Increasing the effectiveness of reward management: an evidence-based approach

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#### Abstract

**Purpose** – This paper seeks to explore the reasons why many organisations do not evaluate the effectiveness of their reward policies and practices, examines the approaches used by those organizations which do evaluate, and develops a model of evidence-based reward management which describes how evaluation can take place.

**Design/methodology/approach** – The paper draws on a study of why organisations do or do not evaluate reward and an examination of what organizations taking evaluation seriously were doing about it. The study was based on a survey of 173 reward and HR practitioners and 13 case studies.

**Findings** – The survey found that only 46 per cent of respondents carried out a full evaluation. Other surveys have established that an even lower proportion evaluated. Those organisations which evaluate reward do so because they recognise that it is necessary to obtain value for money from their considerable expenditure on pay. Those who do not evaluate offer a number of reasons, but the most important was lack of resources or time. It was established that while an evidence-based approach was desirable there was no set pattern of conducting an evaluation.

**Practical implications** – Information about the evaluation practices of the case study organisations and the concept of evidence-based reward management as an approach to evaluation provide guidance to practitioners on how they can measure the effectiveness of their reward policies and practices.

Originality/value – The paper extends the pioneering research of Corby et al. to develop new insights into the process of reward evaluation.

Keywords Loyalty schemes, Pay policies, Evidence-based practice

Paper type Research paper

# Introduction

A failure to evaluate pay and reward practices is a critical blind-spot for many of those involved in reward management. This was noted by Pfeffer (1998, p. 213) who wrote that: "Little evidence demonstrates the efficacy of rewards, although much evidence indicates that rewards and their design loom large in management attention". Gerhart and Rynes (2003, p. 1) commented that:

Compensation is a complex and often confusing topic. Although compensation costs comprise, on average, 65% to 70% of total costs in the US economy and are likewise substantial elsewhere, most managers are not sure of the likely consequences of spending either more, or less on employees or of paying employees in different ways.

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Employee Relations Vol. 33 No. 2, 2011 pp. 106-120 © Emerald Group Publishing Limited 0142-5455 DOI 10.1108/01425451111096668 The research evidence set out in this paper indicates that managers in the UK appear to be reluctant to evaluate reward. This holds back advances in the field and creates a harmful rhetoric/reality gap. Bevan (2006, p. 3) suggested that this is "widest in the area of reward management which is heavily driven by fads, me-tooism and history". We could find only two research studies that systematically addressed this issue (Corby *et al.*, 2005; Scott *et al.*, 2006).

The evaluation of training has received much more attention; for example, among others, Aragon-Sanchez *et al.*, 2003; Warr *et al.*, 1999; Yang *et al.*, 1996) and the industrial training boards in the 1960s (Kenney and Reid, 1986). A staged approach to evaluation was advocated by Hamblin (1974) and developed by Kirkpatrick (1994). The significance of return on investment as a means of evaluating training was highlighted by Kearns (2005). A more general "return on expectations" method which assesses the extent to which the anticipated benefits of any learning investment have been realised was advocated by Sloman (2007).

The lack of interest in the evaluation of reward contrasted with the considerable and continuing focus on training evaluation indicated that further research on reward evaluation was required. Our research question was: to what extent and why is reward evaluation carried out? On the basis of the research evidence available, we also wanted to investigate the possibility of constructing a model illustrating how the effectiveness of reward policies and practices might be assessed. This article is in four main parts:

- (1) methodology;
- (2) research perspectives;
- (3) findings; and
- (4) discussion and conclusions.

### Methodology

We started out with no preconceived hypothesis concerning reward evaluation except that it was "a good thing" about which little seemed to be known. A literature review was conducted to establish what was known about the topic, identify existing theoretical frameworks and find out what other relevant research had been carried out. On the basis of this it was clear that, as noted by Corby *et al.* (2005), evaluation occurs in the context of pay systems whose characteristics vary considerably from organisation to organisation. Although some information on the incidence of evaluation and the methods used could be obtained by a survey, the research would have to rely largely on qualitative evidence obtained from case studies which could, however, be triangulated to a degree with the survey evidence.

A grounded theory approach which could be strengthened by this triangulation and used to develop common themes and patterns from the data provided by the survey and the case studies was therefore appropriate. As originally described by Glaser and Strauss (1967) this is an inductive method of developing the general features of a theory by grounding the account in empirical observations or evidence. We took note of comments made by Glaser (1978, p.2) who wrote that: "Grounded theory is based on the systematic generating of theory from data" and advised researchers to enter their research with "as few preconceived ideas as possible . . . the researcher's mandate is to remain open to what is actually happening". He also remarked (Glaser, 1978, p. 142) that the process "generates theory that fits the real world . . . and is readily modifiable".

Turner (1983, p. 1) pointed out that: "It offers a way of attending in detail to qualitative material in order to develop systematically theories about the phenomena which have been observed".

A survey of 173 HR and reward practitioners was conducted in 2009 by e-reward. The questionnaire covered the extent to which evaluation took place, why evaluation did or did not take place, the evaluation methods used and how effective they were.

In planning the case studies we took into account the comment made by Eisenhardt (1989) that the case study is a research strategy which focuses on understanding the dynamics present within single settings. The dynamics we wanted to examine were how and why evaluative data was collected and analysed by reward or HR practitioners and the ways in which this data was used. We also bore in mind the remark made by Mintzberg (1979, p. 585) that: "No matter how small our sample or what our interest, we have always tried to go into organizations with a well-defined focus – to collect specific kinds of data systematically". In the words of Eisenhardt (1989, p. 533) we wanted to "focus efforts on theoretically useful cases". When identifying the 13 case study organisations listed in Table I we noted the comment made by Pettigrew (1990, p. 275) that, given the limited number of cases which can usually be studied, it makes sense to choose ones where the processes involved are "transparently observable". Our aim was to achieve a reasonable balance between the sectors and to choose organizations which were either known to adopt sophisticated HR and reward practices (seven organizations with which the IES was familiar), or those which had indicated in the survey that they were involved in evaluating reward or at least planning to do so (the six organisations dealt with by e-reward). Face-to-face interviews were used in the IES organizations and telephone interviews in the e-reward case studies. The interviews were structured around the questions used in the survey.

Organisation	Main activity	Number of employees	Basic characteristics of reward system	
ABCInt <sup>a</sup>	Electrical retailing	40,000	Broad-banded structure	
AcServ <sup>a</sup>	Accountancy	11,000	Total rewards strategy	
Childcare <sup>a</sup>	Children's charity	2,000	New job family pay structure	
CountyCn <sup>a</sup>	Local authority	46,000	Six pay grades with "total contribution pay"	
EnginEquip <sup>b</sup>	Engineering	10,000	Wide variety of locations and terms and conditions	
FinServ <sup>b</sup>	Financial services	12,000	Broad banded structure	
HotelCo <sup>b</sup>	Hotel group	4,000	Graded structure	
IntbankCo <sup>a</sup>	International bank	70,000	Total rewards approach	
PoliceAuth <sup>b</sup>	Police force	9,000	Five broad pay bands	
RegCom <sup>b</sup>	Regulatory body	3,000	Four indicative incentive ranges	
RestCoa	Restaurant chain	70,000	Total rewards approach	
SM&D Co <sup>b</sup>	Manufacture, of office	6,000	Currently implementing global broad-	
	products		banded structure	
TechCo <sup>a</sup>	Technology company	1,500	Developing new pay structure	
<b>Notes:</b> <sup>a</sup> IES case study; <sup>b</sup> e-reward case study				

Table I. Case study organizations

The literature review covered the research on evaluating reward in the two studies we identified. In the absence of other evaluation studies, more general research on the relationship between reward and performance was reviewed to provide some insight into methods of evaluation. Comment and research on the notions of evidence-based management and human capital management was also examined on the grounds that they were both about the gathering and analysis of data and therefore relevant to the process of measuring reward effectiveness.

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# Research on evaluating reward

Corby et al. (2005) conducted face-to-face interviews in 15 large, unionised organisations in England between 2000 and 2002. The study found that little formal evaluation of changes in pay and grading systems had been carried out and that managers expressed considerable scepticism about the evaluation process. Managers relied heavily on informal feedback and appeared to have little psychological incentive to evaluate. When they introduced new pay systems limited and piecemeal evaluation took place, despite the urgings of the prescriptive literature. Only two organisations evaluated the effects of the pay system on business performance. It was found that evaluations related primarily to the HR impact. Rather than spending time and incurring the cost of carrying out detailed monitoring, which would not provide conclusive results, managers often relied on anecdotal evidence. In terms of the typology set out by Kearns (1995), the main type of measure adopted for pay system evaluation was "we think it worked".

Scott *et al.* (2006) conducted a survey covering over 600 US respondents to establish if and how pay programme effectiveness was evaluated and what impact evaluation had. The most common practice was to calculate the costs associated with the programme and to discuss informally the impacts on bottom-line performance. The relatively small proportion of organisations which did evaluate base or variable pay specifically used attracting new employees, time to fill positions or impact on employee retention as criteria for base pay, and impact on revenues, profits and net worth and impact on productivity or cost savings for variable pay. Scott *et al.* (2006) concluded that the evaluation processes used by most organizations were inadequate and that the most powerful evaluation methods were seldom used.

# Relating reward to performance

The literature on the impact of reward is extensive. Many of the studies, for example those referred to in the meta-analyses conducted by Guzzo *et al.* (1985) and Jenkins *et al.* (1998), were based on experiments. These often demonstrated a positive link between a reward practice and performance but the methodology was not one that could easily be replicated by practitioners on a regular basis. Other studies, such as those conducted by Hansen (1997) and Stajkovic and Luthans (2001), consisted of in-depth examinations of the relationship between reward and performance, but again, the methodology was beyond the scope of a typical practitioner. Such studies can demonstrate that reward practices have a relationship with organisational performance but they do not provide much guidance to reward specialists on which practices are likely to be effective in their context.

Two British studies illustrated methods of evaluation that can be used by practitioners. In their examination of the impact of performance-related pay in the

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Inland Revenue, Marsden and Richardson (1994) used an attitude survey, and Kessler and Purcell (1992) relied on interviews in their review of performance-related pay. But the latter commented (Kessler and Purcell, 1992, p. 24) that:

The complex range of factors interacting to determine organizational performance makes it difficult to isolate the impact of a payment system alone.

However, as Lazear (2000) showed, it is possible to evaluate the impact of an incentive plan when the outcome in terms of units produced can be easily measured.

# Evidence-based management

It was assumed that an evidence-based management approach would provide a systematic basis for evaluating reward. As Pfeffer (1998, p. 196) pointed out; "Thinking about pay ought to be based on logic and evidence, not on belief or ideology". Rousseau (2006, p. 256) explained that: "Evidence-based management means translating principles based on best evidence into organizational practices". But she also pointed out that: "Evidence-based practice is not one size-fits-all; it's the best current evidence coupled with informed expert judgment".

The concept of evidence-based management was defined by Briner et al. (2009, p. 19) in more detail as follows:

Evidence-based management is about making decisions through the conscientious, explicit and judicious use of four sources of information: practitioner expertise and judgment, evidence from the local context, a critical evaluation of the best research evidence and the perspectives of those people who might be affected by the decision.

Pfeffer and Sutton (2006) recommended the collection of external evidence from benchmarking (as long as this is not "casual") and the internal analysis and evaluation of relevant data, including information from pilot tests and experiments. Pfeffer and Sutton (2006, p. 70) remarked that evidence-based management:

... features a willingness to put aside belief and conventional wisdom – the dangerous half-truths that many embrace – and replace these with an unrelenting commitment to gather the necessary facts to make more intelligent and informed decisions.

An evidence-based approach as described above is clearly appropriate when evaluating reward. We describe its application to reward as evidence-based reward management.

#### Human capital management

Consideration was given to the extent to which human capital management techniques of measurement were part of reward evaluation in association with an evidence-based management approach. As defined by Baron and Armstrong (2007, p. 20):

Human capital management (HCM) is concerned with obtaining, analysing and reporting on data which informs the direction of value-adding people management strategic, investment and operational decisions at corporate level and at the level of front line management.

Interest has increased recently in methods of measuring human capital and more organisations now have data which they can potentially use to evaluate HR initiatives. Indeed many may now have too much rather than too little data which could prevent them from evaluating reward effectively. Baron and Armstrong (2007, p. 62) stated that measures are not an end in themselves although they can "inform and test strategy,"

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There is, however, some consensus on what should be measured. The Accounting for People Task Force (2003, p. 32) identified six key measures which seem to be used most frequently by companies. These are:

- (1) The profile of the workforce.
- (2) Workforce turnover.
- (3) Retention rates.
- (4) Workforce absenteeism.
- (5) Performance and productivity.
- (6) Engagement.

Another typology produced by Kearns (1995) consisted of four levels:

- (1) an act of faith "we think it worked" which, as Corby *et al.* (2005) commented, amounts to no measurement at all;
- (2) subjective/qualitative measures;
- (3) objective measures of cost, quality and quantity; and
- (4) objective "bottom-line" measures of profitability.

# **Findings**

Our findings are described below under the following headings: the incidence of reward evaluation, why organizations do or do not evaluate, evaluation criteria, and the approaches used by case study organisations to assess reward effectiveness.

### Incidence of reward evaluation

A number of surveys have shown that the extent to which reward evaluation takes place is limited. Our 2009 survey found that the proportion of the respondents who conducted a full and systematic evaluation of their reward practices was 46 per cent while a further 36 per cent claimed that they had carried out a part-review (this means that they focused on one or two approaches such as market rate surveys or equal pay reviews). Of those who had conducted a full or part-review just 54 per cent were satisfied with the results.

The CIPD (2009) reward management survey (520 respondents) established that only 32 per cent of them assessed the impact of their reward practices (this is a considerably lower percentage than in our survey which may be attributable to the fact that the CIPD survey covered reward management generally while our survey focused on reward effectiveness). The survey conducted in the US by Scott *et al.* (2006) found that 13 per cent evaluated base pay and 18 per cent evaluated variable pay programmes. The e-reward, 2009 survey of contingent pay revealed that a surprisingly small proportion of only 12 per cent of respondents evaluated the effectiveness of their individual performance-related pay schemes. The research conducted by Corby *et al.* 

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**Table II.**Reasons for not conducting reward evaluations

(2005) indicated that when they introduced new pay systems, managers on the whole conducted limited and piecemeal evaluation.

# Why organizations evaluate

Our survey elicited a variety of reasons why those who evaluated reward did so. One respondent advised that it was essential to establish a direct link between reward spend and benefit to the organisation. Another respondent wondered why a company spending thousands or millions of pounds on reward would not try to understand the effect of such a large investment. Some respondents simply maintained that every organisation needs to know what is going on and should "give it a try", while others said that it at least provides a starting point to build from. Another respondent made the point that the process helps highlight the links between rewards and business performance and once this is clear, particularly for others in the organisation, much progress can be made. As a respondent explained:

By building on a reward evaluation process, a company gains more tools to improve understanding of what is going on in order to enhance its contextual as well as empirical analysis capabilities.

The case studies revealed that the organizations most likely to conduct comprehensive reward evaluations were those in which a powerful tradition of human capital measurement existed (IntbankCo), or those with a highly disciplined and performance-orientated approach to measurement (RestCo) where, as the compensation and benefits manager put it: "If it moves, we measure it".

We also gathered some evidence that the recession and resulting cost issues had increased the pressure to demonstrate the return on reward spend.

#### Why organisations do not evaluate

The reasons for not evaluating given by respondents to our survey are shown in Table II.

Research carried out by Thompson (1992) into the impact of performance-related pay schemes identified another reason for a failure to evaluate, namely, that most employers did not have clearly articulated objectives for introducing such schemes against which they could measure subsequent success or failure. Corby *et al.* (2005, p. 21) noted that:

Managers, having spent considerable time, energy and resources in developing and implementing a new pay system, are likely to have a psychological investment in its success and thus have little inclination to carry out any rigorous evaluation.

Reasons given for not evaluating	Percentage of respondents
Lack of resources or time	48
Lack of information or data	19
Senior management indifference	15
Organization changes	10
Lack of analytical skills	8

# **Evaluation** criteria

The criteria used by the 142 respondents to our survey who evaluated reward effectiveness fully or partly are given in Table III.

On average, respondents used either three or four methods of assessment, with a range of between one and 14.

The criteria used in four of the case study organizations which carried out evaluation formally are summarised in Table IV.

Three of the other case study organisations have a particularly thorough approach to measurement and evaluation. RestCo operates with a clear corporate dashboard of key measures related to people. The measures are regularly reviewed and refined, focusing more recently on 90 day rather than total staff turnover once this had been highlighted as a key issue and cost for the business. At IntbankCo the group head of reward feels that it is necessary to have a balance of measures and believes that it is the overall strength of their systematic approach which ensures that employees behave appropriately, manage risk properly and achieve the expected levels of performance. AcServe monitors a set of 13 key performance indicators based on each of its reward strategy principles.

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Criteria	Proportion using (%)	
Employee attitudes	75	
Analysis of pay market positioning	72	
Employee turnover	62	
Assessment against reward strategy objectives	42	
Financial costs	41	
Business financial performance	40	
Impact on employee performance/productivity	30	
Length of service	29	
Absenteeism	29	Table III.
Other business metrics, e.g. sales; customer service	27	Criteria for evaluating
Vacancy rates	26	reward effectiveness used
Job retention rates	12	by survey respondents

Organisation	Evaluation criteria	
FinServ	Appraisal results, staff turnover, customer feedback and employee attitude surveys. Merger preparation also involved consultation and engagement with key stakeholders	
Hotelco	Customer satisfaction, staff attitude surveys, financial performance, appraisal data versus rewards received, external market pay, assessment against reward strategy objectives, appraisal results, impact of rewards on employee performance and productivity, career progression, reward spend, recruitment and retention rates, length of service, exit interviews, and sales	
PoliceAuth	Staff attitude surveys, salary surveys, staff progression, career progression, skill sets of beneficiaries of promotion, appraisal results, distribution of ex-gratia payments and reward spend	Table IV.
RegCom	Equal pay audits, salary surveys, staff attitude surveys, length of service, "rookie" rates, reward spend, appraisal results, staff skills and competencies, exit interviews, career progression and staff performance	Evaluation criteria used in four case study organisations

Corby et al. (2005) found that 13 of the 15 organisations they studied carried out staff attitude surveys. None of these organisations, however, specifically used that information to evaluate their pay system. Although labour turnover statistics were collected, managers seldom analysed them for the purpose of evaluation. No organisation used quantitative measures to evaluate the impact of the new pay system on employee behaviour, such as absenteeism rates, number of grievances, frequency/severity of accidents or number of employment tribunal claims, although they all collected statistics on at least some of these matters. Only two organisations sought to evaluate the impact of their new pay system on performance.

# How reward effectiveness is assessed by case study organisations

A number of case study organisations provided insights on the overall approaches used by organizations to evaluate reward effectiveness and the issues they faced when they did so.

# Overall approaches

The head of reward at RegCom believes that although metrics are important, it is the qualitative data that is the most constructive. The best way to understand what is going on is to get feedback from line managers. This information is gathered by surveying managers and asking them questions about various aspects of reward, while day-to-day interaction is also valuable. In particular, if there is a new reward initiative, the organisation wants to know what effect, if any, it has had, whether this has been positive and whether it has changed employee behaviour. Following the initiative the reward team will go directly to line managers in different parts of the business to ask if there are aspects of reward that are missing or inhibiting the performance of staff. In each case the team asks: "Where are we now? Where do we want to be?"

The head of reward and development in TechCo considers that reward system development is an evolutionary process that cannot just be determined on the basis of abstract reward principles nor by solely using "hard" quantitative measures of effectiveness. A subtler understanding of culture and change processes is at least as important as the technical design of reward plans if improvements are to be put into practice.

In FinServe the reward review includes consultation and engagement with key stakeholders – executives, senior managers, employees and the trade unions – to determine their views on the effectiveness of the existing reward packages. Specifically, what they value and what they do not value, what they would like and what they may have seen in other organisations that they think would be good. This is considered an important part of the review process to ensure that those affected both appreciate and understand any new reward arrangements. Further discussions via focus groups give the company a better idea of the potential options available, the impact on business areas and the implementation approach.

The following advice on reward evaluation was given by the head of reward at RegCom:

 The best starting point before setting any targets or measuring anything is to decide what the organisation wants to achieve.

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- Once this has been decided, you should use as much data as you can and benchmark this against the market, before deciding where the company should be positioned.
- Take care when interpreting data such as high staff satisfaction scores and other perception-related measures – they could simply be reflecting generous, rather than effective, rewards.
- In some cases evaluation is not necessary it is plain to see when certain elements of the reward system are working or not.
- It is your job to place evidence in context and try to interpret what is really happening and why.
- Some of the reward evaluation software packages available, although clever, tend only to use quantitative measures, so they do not take account of some of the other factors that might be at work. This is where you come in to interpret and make sense of the grey as well as black and white areas.

#### Evaluation issues

One of the main issues facing organizations attempting to evaluate reward is the problem of linking cause and effect. Boselie *et al.* (2005, p. 75) referred to the causal distance between an HRM input and an output such as financial performance: "Put simply, so many other variables and 'events', both internal and external, affect organisations that this direct linkage rather strains credibility". Corby *et al.* (2005, p. 20) commented that:

Managers were sceptical about the process of pay system evaluation. They were of the view that the link between a pay system and a given outcome – e.g. staff attitudes or service/product delivery – is well nigh impossible to prove.

Overall, the views of six of the case study organisations as set out in Table V were that it is difficult if not impossible to identify precise cause-effect relationships through evaluation. However, in two cases it was contended that a process of formal evaluation did bring them closer to understanding the impact of the rewards they offer.

Another issue mentioned by the head of reward at RegCom was the inevitable time lag between implementing a new reward programme and when the evaluation of its effect can take place. This means that it is not always clear whether the policy has been successful, as many other factors may have come into play, diluting or distorting the overall impact of the reward change. Furthermore, the interest from other involved groups in the new initiative may have faded or even disappeared as their attention moves on to other priorities. All too often results are not clear-cut and may be open to misinterpretation, especially given that staff feedback can be skewed negatively because generally people are quicker to complain about something they perceive as a problem than praise something they feel is working well.

#### Discussion

Our research has shown that while many organisations do not seem to be interested in formally assessing the effectiveness of their reward systems, or at least do not feel able to do so, a number are making the attempt using a range of criteria. But there are difficulties. Justifiable doubts can be expressed about the feasibility of linking cause to effect. For example, it may not be too difficult to measure increases in levels of

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33,2	Organisation	Views on cause and effect
00,2	EnginEquip	While there is no guaranteed way to isolate the effects of various aspects of reward, evaluation is still a worthwhile process as it provides a closer understanding of what's going on. In fact, the numbers alone simply provide the
116	- FinServ	starting point for analysis and it's from this point that the real conversations should begin While there are models that claim to measure the direct impact of key reward metrics on financial performance, it's doubtful if this is actually achievable. But if data illustrates improvements in employee engagement and customer service levels it would be reasonable to assume that this would help to improve results in terms of sales, profits and costs
	Hotelco	There are many other factors that come into play, so it is not possible to truly isolate the connection
	PoliceAuth	A link is not 100 per cent possible, but as our evaluation process has developed we have come closer to reaching this goal
Table V. Views of case study organizations on cause	RegCom SM&D Co	As a not-for-profit organisation, we cannot refer to some of the financial outcomes others are able to. A great deal of information comes from measures based around opinion, such as satisfaction, and when interpreting this sort of data it is necessary to take a step back and ask what it means. As a result, the belief is that a direct cause-effect relationship is not possible to discern, but the process is still valuable because it provides a lot of useful information that would not otherwise be known  There are many other factors coming into play between the rewards provided
and effect		and their effects

engagement following a reward innovation, and it may be reasonable to assume that higher levels of engagement were caused, or at least strongly influenced, by a change to the reward system. But it is an act of faith to link this to a performance improvement.

The research revealed other difficulties, particularly perceived lack of resources or time to evaluate, lack of data, and management indifference – a belief that the benefits of evaluation are not justified by the effort and cost involved.

Nevertheless, the arguments for a rational evidence-based approach to reward management seem to be powerful. It appears to be self-evident that reward systems will be better managed if decisions are based on fact rather than opinion, on understanding rather than assumptions, on grounded theory rather than dogma. But Corby *et al.* (2005) referred to the limitations of the rational managerial decision-making perspective. They cited Buchanan and Badham (1999) who argued that most significant decisions are the outcome of a social and political process only partly shaped by the evidence, which, they add, may be lacking – at least in part.

These difficulties and limitations mean that it is hard to construct a model which convincingly prescribes the direction reward evaluation should take. It is tempting to believe that it is possible to develop one which consists of a succession of logical steps beginning at A and continuing through B, C, D etc. to the inevitable conclusion of a well-constructed reward system. The reality is that a process of evidence-based reward management is a much more varied and fluid affair. Our case studies showed that while the organizations concerned generally shared a belief in the importance of reviewing and assessing the effectiveness of their reward practices and most operated or are planning to introduce the processes involved, they use different criteria and measures of reward success, as well as different reward approaches.

However, based on the case studies, we have concluded that there are a number of common components to a process of evidence-based reward management, although these are applied in all sorts of ways; sometimes sequentially, sometimes not, depending on the needs of the situation. That is why we call them components rather than stages. The components we have identified are setting strategic objectives, conducting reward reviews of current policies and practices, measuring reward effectiveness, and using the data generated by reviews and measurements to evaluate reward outcomes as a basis for introducing new or improved reward practices.

Our model of how the components function in practice is shown in Figure 1. It appears to describe a sequential progress in the form of a continuous cycle from setting objectives and success criteria, through review, measurement, evaluation, and development activities to implementation and further review. This can happen in some circumstances, for example a review by outside consultants. But, as we established from the case studies, in practice the components are not necessarily specified or managed in an orderly sequence. They are closely interlinked and they may overlap. Objective setting, review and measurement affect all the other components, as does evaluation. They can take place at any time (or all at once) and they all directly influence the ultimate activities of development and implementation.

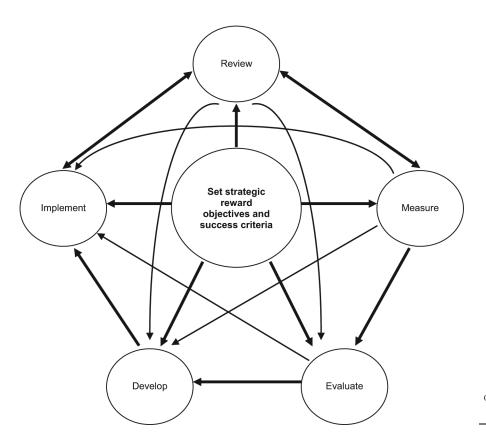


Figure 1.
A model of the inter-relationships between the components of evidence-based reward management

The model illustrates the complex and varied ways in which evidence-based reward management works. But we contend that an approach which makes appropriate use of these components will be helpful on many occasions. Using them appropriately means applying and linking the components in ways which fit the demands of the situation. It becomes a way of thinking that reward practitioners can apply by asking themselves:

- What are we trying to do here, what is important to this organization, how do we measure that?
- How are current reward practices helping or hindering what we are trying to do and what evidence do we have of this?
- · How might reward changes improve the delivery of the desired outcomes?
- How can we best implement improvements and how can we show ourselves that they are working?

#### Conclusions

Bloom and Milkovich (1995, pp. 18-19) noted that:

A blend of theory, research, and practice holds the promise of expanding knowledge about the forces and processes that shape compensation systems and their links with managers and organizations.

We accept the difficulties involved and the influence of social and political pressures n reward practices. But despite these difficulties, many of our case study organizations had found that the process of trying to improve evaluation had generated significant improvements in the understanding of what pay and reward practices are designed to achieve and the extent to which they are delivering this. It is certain that reward management practices would improve if they were more strongly rooted in evidence on what works and why. Our model of evidence-based reward is intended to provide a framework for doing this. It describes rather than prescribes. It is concerned with how the process of thinking about the review and evaluation of reward policy and practice is carried out but does not propose a universally applicable method of doing so. We are well aware from our experience and research that all organizations are different and that in each case approaches which fit their circumstances are required.

## Limitations and further research

We recognise that our case studies did not involve in-depth analysis of the evaluation practices used by the organizations concerned although, coupled with the survey results, they generated sufficient information to provide a reasonably sound base for our conclusions on the process of evidence-based reward management as set out in the model. Further research is required in order to test the model in a range of employers. It might include pilot tests in which a reward initiative is developed and evaluated using the approach.

#### References

Accounting for People Task Force (2003), Accounting for People Report, DTI, London.

Aragon-Sanchez, A., Barba-Aragon, I. and Sanz-Valle, R. (2003), "Effects of training on business results", *International Journal of Human Resource Management*, Vol. 23 No. 6, pp. 956-80.

Baron, A. and Armstrong, M. (2007), Human Capital Management: Achieving Added Value Through People, Kogan Page, London.

Effectiveness of

- Bevan, S. (2006), New Realism in Reward Strategy, e-reward, Stockport.
- Bloom, M.C. and Milkovich, G.T. (1995), *Issues in Managerial Compensation Research*, Centre for Advanced Human Resources Studies, Working Paper, Series 95-24.
- Boselie, P., Dietz, G. and Boon, C. (2005), "Commonalities and contradictions in HRM and performance research", *Human Resource Management Journal*, Vol. 15 No. 3, pp. 67-94.
- Briner, R.B., Denyer, D. and Rousseau, D.M. (2009), "Evidence-based management: concept clean-up time?", *Academy of Management Perspectives*, Vol. 23 No. 4, pp. 19-32.
- Buchanan, D. and Badham, R. (1999), Power, Politics and Organizational Change: Winning the Turf Game, Sage, London.
- Chartered Institute of Personnel and Development (2009), Chartered Institute of Personnel and Development Reward Management Survey, CIPD, London.
- Corby, S., White, G. and Stanworth, C. (2005), "No news is good news? Evaluating new pay systems", *Human Resource Management Journal*, Vol. 15 No. 1, pp. 4-24.
- Eisenhardt, K.M. (1989), "Building theories from case study research", *Academy of Management Review*, Vol. 14 No. 4, pp. 532-50.
- e-reward (2009), Survey of Contingent Pay, e-reward, Stockport.
- Gerhart, B. and Rynes, S.L. (2003), Compensation: Theory, Evidence and Strategic Implications, Sage, Thousand Oaks, CA.
- Glaser, D.G. (1978), Theoretical Sensitivity, The Sociology Press, Mill Valley, CA.
- Glaser, D.G. and Strauss, A.L. (1967), The Discovery of Grounded Theory: Strategies for Qualitative Research, Aldine, New York, NY.
- Guzzo, R.A., Jette, R.D. and Katzell, R.A. (1985), "The effects of psychologically based intervention programs on worker productivity: a meta-analysis", *Personnel Psychology*, Vol. 38 No. 2, pp. 275-91.
- Hamblin, A.C. (1974), Evaluation and Control of Training, McGraw-Hill, Maidenhead.
- Hansen, D.G. (1997), "Worker performance and group incentives: a case study", *Industrial and Labor Relations Review*, Vol. 51, pp. 37-49.
- Jenkins, D.G., Mitra, A., Gupta, N. and Shaw, J.D. (1998), "Are financial incentives related to performance? A meta-analytic review of empirical research", *Journal of Applied Psychology*, Vol. 3, pp. 777-87.
- Kearns, P. (1995), Measuring Human Resources and the Impact on Bottom Line Improvements, Technical Communications (Publishing) Ltd, Hitchin.
- Kearns, P. (2005), Evaluating the ROI From Learning, CIPD, London.
- Kenney, J. and Reid, M. (1986), Training Interventions, CIPD, London.
- Kessler, I. and Purcell, J. (1992), "Performance-related pay: objectives and application", *Human Resource Management Journal*, Vol. 2 No. 3, pp. 16-33.
- Kirkpatrick, D.L. (1994), Evaluating Training Programmes, Berret-Koehler, San Francisco, CA.
- Lazear, E.P. (2000), "Performance pay and productivity", American Economic Review, Vol. 90 No. 5, pp. 1346-61.
- Marsden, D. and Richardson, R. (1994), "Performing for pay? The effects of 'merit pay' on motivation in a public service", *British Journal of Industrial Relations*, Vol. 32 No. 2, pp. 243-61.
- Mintzberg, H. (1979), "An emerging strategy of 'direct' research", *Administrative Science Quarterly*, Vol. 24 No. 4, pp. 580-9.

- Pettigrew, A.M. (1990), "Longitudinal field research on change: theory and practice", Organization Science, Vol. 1 No. 3, pp. 267-92.
- Pfeffer, J. (1998), The Human Equation: Building Profits by Putting People First, Harvard Business School, Boston, MA.
- Pfeffer, J. and Sutton, R.I. (2006), "Evidence-based management", *Harvard Business Review*, *January*, January, pp. 62-74.
- Rousseau, D.M. (2006), "Is there such a thing as evidence-based management?", Academy of Management Review, Vol. 31 No. 2, pp. 256-69.
- Scarborough, H. and Elias, J. (2002), Evaluating Human Capital, CIPD, London.
- Scott, D., McMullen, T.D. and Sperling, R.S. (2006), "Evaluating pay program effectiveness: a national survey of compensation professionals", Worldat Work, Vol. 15 No. 3, pp. 47-53.
- Sloman, M. (2007), "Thanks it's just what I wanted", People Management, Vol. 29, November, pp. 32-4.
- Stajkovic, A.D. and Luthans, F. (2001), "Differential effects of incentive motivators on work performance", *Academy of Management Journal*, Vol. 4 No. 3, pp. 580-90.
- Thompson, M. (1992), Pay and Performance: The Employer Experience, IMS, Brighton.
- Turner, B.A. (1983), "The use of grounded theory for the qualitative analysis of organisational behaviour", *Journal of Management Studies*, Vol. 20 No. 3, pp. 333-48.
- Warr, P., Allan, C. and Birdi, K. (1999), "Predicting three levels of training outcome", *Journal of Occupational and Organizational Psychology*, Vol. 72 No. 3, pp. 351-75.
- Yang, H., Sackett, P.R. and Arvey, R.D. (1996), "Statistical power and cost in training evaluation: some considerations", *Personnel Psychology*, Vol. 49 No. 3, pp. 651-68.

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