

High Performance Work Practices

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Published by:

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Contents

High Performance Work Practices	1
Summary	1
What are they?	2
How do they work?	3
Link with business strategy	5
What are the practices?	6
What is the impact?	8
The size of the effect	9
Method issues	10
Conclusion	11
How might these practices make a difference?	11
Why a growth in HPWPs?	11
Bibliography	14

High Performance Work Practices

Summary

The question of whether the way people are managed and treated at work contributes to the overall performance of the enterprise, has been much debated. The focus of this debate has tended to be on formal processes and procedures within organisations. These high performance working practices (HPWPs) have been the subject of a wide range of studies designed to test their impact.

The literature has shown that such practices tend to be part and parcel of an approach that emphasises high quality goods and services, and engaged and empowered workforces. Practices studied include those related to training and skills, participation, empowerment, and communication and compensation. The practices themselves are believed by some to be additive *ie* 'the more the better' but by others to work more effectively in combination. Some see these combinations as grouped into coherent 'bundles' of practices *eg* practices that act together to enhance employee skill or involvement, and others have suggested that practices need to 'fit' with the business strategy of the firm *eg* skill enhancement practices are best considered in an environment with high skill demands.

There is now considerable evidence across a wide range of studies that adoption of these practices is associated with good business performance. Interpretation of the size of the effect is difficult as different studies link different combinations of practices and different measures of performance, but they suggest that as much as 20-40 per cent of productivity differences between firms may be accounted for by differences in HR practices. Despite these strong associations with performance, estimates of uptake suggest that less than a quarter of organisations adopt such practices to any significant extent.

Discussions of impact suggest that HPWPs act to improve the self-confidence and flexibility of the workforce and contribute to improved motivation, morale and commitment which in turn are related to enhanced individual performance.

What are they?

High performance work places or organisations (HPWOs) have been described in various ways, but there is a general emphasis on engaged and empowered workforces, and on high quality goods and services. For example the OECD has defined them as those organisations that are moving towards a flatter and less hierarchical structure, where people work in teams with greater autonomy, based on higher levels of trust and communication. HPWPs are similarly defined as those practices which contribute to HPWOs. In this paper we briefly examine the literature on HPWPs to answer five questions:

- What are they?
- How do they work?
- How do they link with business strategy?
- What practices are used?
- What is the impact?

The CIPD has defined the component parts of high performance working as:

- A vision based on increasing customer value by differentiating an organisation's products or services and moving towards the customisation of its offering to the needs of individual customers
- Leadership from the top and throughout the organisation to create momentum
- Decentralised, devolved decision making by those closest to the customer, to constantly renew and improve the offer to customers; development of people capabilities at all levels with emphasis on self-management, team capabilities and project-based activity
- Support systems and culture which include performance operations and people management processes, aligned to organisational objectives to build trust, enthusiasm and commitment to the direction taken by the organisation
- Fair treatment for those who leave the organisation and engagement with the needs of the community outside the organisation – an important component of trust and commitment-based relationships both within and outside the organisation.

Ashton and Sung (2002) suggest that HPWOs are unique in that:

'the organisation of production is based on the assumption that competition is based not just on cost, but on incremental improvements in the quality of the goods or services produced... the division of labour is organised to ensure that all employees are in a position to contribute towards the overall performance of the organisation...management is

no longer the sole repository of knowledge... and also means that they [the workers] must acquire the social and problem-solving skills required for the management of production, in addition to the technical skill required for their immediate work tasks. This generates the conditions not just for higher levels of learning and skill formation, but for learning to become a continuous process.'

These various definitions, while covering some common ground, are also clearly very different. Undoubtedly, clarity has not been assisted by the shifts in terminology that have taken place. Wood (1999) for example, has traced the debate from the use of the term 'high commitment management' by Walton in 1985 through 'high involvement management' in 1986, to the current debate around 'high performance management', or 'high performance organisations'. The use of the term 'high performance' has been seen to suggest that the link with performance is a causal one and has been proven in practice. Those who are not convinced still prefer the term 'high involvement management'.

The interest in the involvement of HR practices and individual and organisational performance has been noted in other studies. For example, several earlier studies designed to investigate skills noted a relationship between levels of training and other HR practices¹ Such studies have suggested that the full benefits of workforce development and raising skill levels are realised only when bundled together within a wider array or package of workplace changes, re-organisation and human resources practices to form systems. Mirroring the debate on wider terminology, these systems of HR practice have been given various terms, ranging from good people management systems, through high performance working practices and high involvement management practices to strategic HRM. For simplicity we use the term HPWPs throughout this paper.

How do they work?

High performance working can be considered as an emerging organisational model² and there is still a lively debate in the literature between competing perspectives of how it operates in practice.

Some commentators have suggested that certain practices always bring benefits whereas others have suggested that they need to be fitted to the organisation – the universalist and contingent views respectively (see Guest *et al.* 2004). A universalist perspective argues that there are a number of HR practices which, if adopted, will always result in superior performance whatever the context (*ie* some have concluded that it is the intensity with which HR practices are adopted that has greater effect on performance than

¹ eg Lynch L M, Black S E (1995)

² Strategy Unit (2001)

organisational fit – Huselid and Becker 1997). Thompson (2000) found that both the number of HR practices adopted and the percentage of the workforce covered were differentiating factors in terms of performance.

The contingency model, on the other hand, argues that a distinct combination will work only under specified conditions or with specific groups of staff. Complementing the contingency view are other concepts such as the resource-based view of the firm (Barney 1991), which argues that resources internal to the organisation are a source of competitive advantage to the extent that they are rare, inimitable and difficult to substitute. HPWPs have two attributes associated with inimitability -- path dependency (developed over time rather than acquired off the shelf) and causal ambiguity (easily understood in concept but requiring subtle and numerous inter-relationships which are less easy to see in practice – Collis and Montgomery, 1997). This perspective can be seen to be compatible with the concept of core competence (Hamel and Prahalad, 1994) *ie* what are the unique abilities that differentiate an organisation from its competitors?

An element of the contingency model argues for internal contingency, and suggests that practices need to be 'bundled' into meaningful groups of practices. There is some evidence in support of this bundling view *ie* that it is not practices *per se* that make the difference but the degree to which they align with each other to create meaningful 'bundles' of practice (*eg* Huselid, Jackson and Schuler, 1997). A recent study of HPWP in the Netherlands (Den Hartog and Verburg, 2004) found a bundle of practices labelled 'employee skill and direction', were related positively to perceptions of employees' willingness to go beyond contract, negatively to employee absence, and positively to the perceived economic performance of the firm.

Various studies have found that adoption of single practices do not deliver the same improvement of results. For example Katz, Kochan and Keefe (1987) reported that plants which adopted team-based working without implementing other changes performed worse than those which had not. Ichniowski and Shaw (1995) also found that the adoption of single practices did not improve productivity and was sometimes associated with decline, as did Wood (1999).

Jackson *et al.* (1989) developed a model of HRM as a function of organisational characteristics. They focused on practices designed to influence attitudes and behaviour and found their adoption varied by firms grouped by strategy, sector *etc.* Osterman (1994) found that management values favouring employee welfare, the degree of international competition and employee skill requirements have an influence on the adoption of innovative forms of work organisation in manufacturing. Arthur's (1992)

study of steel 'mini-mills' found two overarching strategic approaches: cost reduction and enhanced employee commitment.

HRM systems were adopted that were consistent with these two strategic approaches but no association was found between the systems adopted and other variables *eg* firm age, size, union coverage, location and local labour market. There was a positive correlation between the strategy of the firm and labour turnover, with turnover lower in those plants with commitment systems.

Link with business strategy

Whereas some have sought to align practices into internally coherent bundles, others have looked to external alignment with business strategy. Various studies have failed to find support for the external fit argument (Huselid, 1995; Huselid and Becker 1995, 1996) whilst MacDuffie (1995) found some evidence of positive results related to fit with business strategy. In a review of British aerospace companies, Thompson (2000) found that establishments with high skill densities use HPWP more widely which may be evidence of 'fit'. Those firms which were following a high skill, high HPWP route also spent a high percentage of their non-management training budget on behavioural skills training.

Pil and MacDuffie (1996) hypothesised that firms with poor performance relative to competitors, those with longer serving employees, those with little organisational change and those undergoing significant environmental disruption would be more likely to adopt innovative work systems. A two year study found a general trend towards adoption of HPWP but these were not linked to firm performance, or organisational change. They concluded that economic imperatives might be the key driver. Huselid and Rau (1997) found that progression of HPWPs over a three-year period was associated with the following characteristics:

- Firms in more profitable industries were more likely to adopt incentive and performance management dimensions of HPWS.
- Those in more volatile or dynamic environments were more likely to shift risk on to employees through variable compensation systems (where they are least attractive to employees).
- Adoption of performance management and incentive systems is negatively correlated with unionisation and a unionised workforce is associated with the adoption of staffing development practices.
- There was some support for an association between HPWPs and business strategies. Those firms pursuing a differentiation strategy were more likely to adopt HPWPs than those

pursuing a cost leadership strategy. However, there was little evidence of the kinds of HRM policies and practices that might be appropriate.

- External factors have a greater impact on reward management factors than others.

What are the practices?

Reviews of 'bundles' of practices have sought to find which practices are most often included. It has been argued (Bosalie and Dietz, 2003) that practices relating to employee development and training, participation and empowerment, information sharing, and compensation systems are most often combined. An evolving understanding of high performance work systems suggests that they generally focus on high skill requirements, discretion at work, team working and incentives enhancing organisational commitment (Batt, 2002; Delaney and Huselid, 1996). Guest, in work for the CIPD identifies 18 key practices associated with high performance or high commitment HRM:

- Realistic job previews
- Use of psychometric tests for selection
- Well developed induction training
- Provision of extensive training for experienced employees
- Regular appraisals
- Regular multi-source feedback on performance
- Individual performance-related pay
- Profit related bonuses
- Flexible job descriptions
- Multi-skilling
- Presence of work-improvement teams
- Presence of problem-solving groups
- Information provided on the business plan
- Information provided on the firm's performance targets
- No compulsory redundancies
- Avoidance of voluntary redundancies
- Commitment to single status
- Harmonised holiday entitlement

Thompson's work (2000) in aerospace identifies over 30 practices which fall into three distinct clusters:

- High involvement practices that aim to create opportunities for engagement (eg semi-autonomous teams, problem-solving

teams, continuous-improvement teams, responsibility for own work quality, job rotation within and/or between teams, team briefings, staff suggestion schemes, attitude surveys)

- Human resource practices to build skill levels, motivation and ability (eg formal recruitment interviews, performance or competency tests, psychometric tests, share ownership schemes, personal development plans, training, competence-based pay, team rewards, incentive pay)
- Employee relations practices that help build trust, loyalty and identity with the organisation (eg single status, formal grievance procedures, formal salary reviews, social gatherings).

Pfeffer (1998) describes seven practices of successful organisations: employment security, selective hiring, self-managed teams and decentralisation of authority, comparatively high compensation; extensive training, minimal status distinctions, and extensive sharing of financial and performance information. Pil and MacDuffie (1996) suggest five key practices arising from their work on car manufacturing: on line work teams, employee involvement practices, problem-solving groups, job rotation, suggestion programmes and decentralisation of quality efforts. Huselid¹ also maintains a very comprehensive online list of studies linking HRM systems with firm performance, but does not give any details of the practices included.

Ashton and Sung (2002) sift all of these various lists down to four dimensions:

- Employee involvement and autonomy in decision making (the use of self-managed work teams and multi skilling which provide the employee with the opportunity of developing teamworking and decision-making skills)
- Support for employee performance (appraisal systems, mentoring, coaching)
- Rewards for performance (individual and group-based performance pay)
- Sharing of information and knowledge (communication of information to all employees)

Bosworth (forthcoming) refers to a meta-analysis by Kling (1995) which considered the impact of three specific working practices -- training, compensation linked to worker or firm performance, and employee involvement in decision making -- across a number of predominately US studies. Kling concluded that all three practices seemed to improve labour productivity and were complementary in their effects - that is, that systems of interrelated practices had

¹ Huselid M, internet page <http://www.rci.rutgers.edu/~huselid>

greater impact than the sum of practices adopted independently. Table 1 is reproduced from Bosworth.

What is the impact?

Whilst there may be disagreement about what combination of practices constitutes a 'perfect system' and how this should be defined, the evidence commonly highlights positive improvements to organisational performance. For instance, Wood *et al.* (2001), using the UK Workplace Employee Relations Survey (WERS) data, found that the implementation of high involvement management raised the rate of productivity growth. Patterson *et al.* (1998) found that nearly one-fifth of variations in productivity and profitability were associated with differences in HR practices. Guest (2000) also identified a link between high commitment practices and financial performance. Guest *et al.* (2003) failed to find a link with profitability once the previous year's profit was controlled for. However, the consensus from these studies was that high performance HR systems had economic benefits for firms' financial performance.

The Work Foundation (2003) developed a high performance index which measures performance on five categories, based on interviews with 1,000 UK chief executives:

- Customers and markets
- Shareholders
- Stakeholders
- Employees
- Creativity and innovation.

Firms scoring highest on the index were found to be over 40 per cent more productive than those at the bottom, with the average UK business around 25 per cent less productive than those at the top. A one per cent increase in the index score simulates two and a half per cent extra sales per employee and a one per cent increase in profitability.

Huselid and Becker (1995) have found that there are greater gains from adopting HPWP at both the low and high end of the performance distribution but not so much in the middle. Using various measures of an HR system they find a seven to nine per cent effect on market value for a narrow measure of HPWPs, and 11-13 per cent for a broader measure, when either is changed by one standard deviation. Based on average employment costs these effects are equivalent, they suggest, to a cash value of from \$38,000 to \$73,000. They suggest that achieving such benefits takes some time and effort.

A recent study published by the CIPD (Purcell *et al.* 2003) examines the ways in which HR practices may impact on performance. The authors seek to move the debate on, from whether HR practices do have an impact, to understanding *how* they have an impact. The researchers assert that for people to perform above minimal requirements they must:

- have the *ability*, ie the requisite knowledge and skills.
- be *motivated* to work well.
- be given the *opportunity* to deploy their skills and contribute.

HR practices serve to turn these three elements into action, and managers have a key role in implementing policy and practice. The importance of employee attitudes to business performance is another layer of complexity in seeking to understanding the skills-performance link. The body of research on engagement has shown that employee motivation is a key intervening variable in producing higher performance (eg Barber *et al.* 1999).

There have been criticisms, raising the point that association does not prove causality, but the few studies that have included a longitudinal element have also tended to support the view that the practices impact on performance rather than the other way round eg in the UK, Patterson *et al.* (1995) using the WERS data set found that implementation of HPWPs was followed by improvements in performance, a finding echoed in the US by Ichniowski *et al.* (2004). These longitudinal studies also suggest that there is a lagged effect with the implementation of the practices taking some time to filter through to performance improvement.

The size of the effect

Patterson *et al.* identified two dimensions which were linked to performance: 'the acquisition and development of employee skills' and 'job design'. These two factors accounted for 19 per cent of the variation in the change in profitability and 18 per cent of the variation in productivity. Huselid, in the US, used a one standard deviation shift in HRM practices as a benchmark and found that sales per employee rose by \$27,000 and market value per employee by \$18,000.

Huselid and Becker (1997) found that there were consistently strong associations between the presence of a HPWPs (measured by the intensity of adoption of 24 practices) and firm performance. A one standard deviation improvement in HR system index was associated with an increase in shareholder wealth of \$41,000 per employee. The impact of HR alignment was less clear and the statistical association with business performance disappeared once management quality was taken into account.

Method issues

Across this very broad literature there have been a range of methodologies used. While some see this as a weakness, others believe that the range of methodologies strengthens the argument in favour of HPWPs, because the findings have much in common, despite the different measures used. In looking at effect, some have used management perceptions, and some hard measures of performance derived from published data on companies' results or stock market valuations. Some are studies of a single firm (eg Ichniowski's, 1990, study of a paper mill), some of industries (eg Berg *et al.*'s study of the apparel industry and Ichniowski *et al.*'s study of the steel industry), whilst others are cross sectoral (Huselid, 1995; Ichniowski, 1990; Ichniowski and Shaw, 1995; Huselid and Becker, 2000 in Ichniowski *et al.* 2000; all in the US, and Wood S (1999) in the UK).

Because of this lack of consistency, there is some confusion about which HR practices are the important ones in raising performance. There has also been debate about how practices should be combined (Delery, 1998). Some suggest that practices might be additive (combinations may produce additional and non-overlapping benefits), or substitutable (*ie* either on or off the job training will do and there may be no additional benefits in either), synergistic (more than the sum of the parts) or negatively synergistic (where certain combinations may be worse than no practice at all). It has been suggested that the positive results associated with much of the research on individual HR practices may be related to the underlying HR systems (Becker and Huselid, 1998).

Even where the focus was on more systematic elements of HR *eg* employee involvement, the exclusion of other elements affecting performance such as training, appraisal or compensation may lead to rather narrow conclusions. It is also not always clear when an HR policy or practice becomes a system or a bundle (eg Bosalie and Dietz, 2003). For example, training and development might be considered a single practice but may be expressed through management development, internal labour markets, succession planning processes, or training. These kinds of practices have also appeared as a development bundle. Some researchers have focused on related concepts such as a high involvement system (Lawler *et al.* 1995) or a high commitment system (Wood and Albanese, 1995). There is also an absence of consensus over which aspects of firm performance it is that work practices are proposed to affect (Den Hartog and Verburg, 2004), with measures ranging from financial performance, productivity, employee commitment, absenteeism and customer satisfaction. Some studies have looked at hard data, others have focused on managerial perceptions of performance.

In the UK, studies using the WERS dataset have arrived at different conclusions about the penetration of the high performance model, ranging from two per cent to 26 per cent of companies (see Keep *et al.* 2002). Other datasets have suggested lower results; Guest *et al.* (2000) found only one per cent of companies in the Future of Work survey use three quarters of 18 progressive practices. Thompson (2000) found generally higher results for aerospace with some 20 per cent of UK aerospace establishments using high performance HR practices to a significant degree. This would indicate that despite strong evidence of positive effects, employers are either not necessarily convinced that adoption of such processes will work for them or find the process of adopting them too difficult. It is also likely that there are sectoral variations in uptake.

Conclusion

How might these practices make a difference?

Kohn *et al.* (1983) have been researching the impact of work on personalities of the worker using longitudinal data and comparing the personalities of workers ten years apart. Those working in jobs free from close supervision where complex operations and independent judgement demonstrated a lasting impact on their personalities. They became self confident and showed greater flexibility in handling ideas. Those in more routine jobs had lower levels of self confidence, were more fatalistic, more likely to experience psychological distress, and were less flexible in dealing with ideas.

The resource-based view of the firm (Barney 1991), posits that the internal resources of the firm are a source of competitive advantage to the extent that they are rare, inimitable, valuable and causally ambiguous. There is an assumption that firms compete on assets and capabilities that are unique and inherently internal to the firm. It is the bundle of resources that enable a firm to gain and sustain superior performance. Key concepts include resource heterogeneity *ie* competing firms possess different bundles of resources which are scarce and non-substitutable, and resource immobility *ie* resources are difficult to move across firms. The resources enable the firm to develop and implement strategies that have the effect of lowering a firm's net costs or increasing net revenues beyond what would have been the case if the resources had not been used to develop and implement these strategies.

Why a growth in HPWPs?

The ILO (2002) describes how globalisation has provided an enormous impetus to the growth of HPWPs. The movement of goods and the factors of production between countries has been the result of the increasingly open markets to world trade. The

impact has been a succession of countries offering cheap goods as they take advantage of their supplies of cheap labour. The tendency is for these countries to move up the value chain and to be replaced by others *eg* East Asia countries were followed by Thailand and Indonesia and now replaced by China and Eastern Europe. So the intensification of competition can be seen to be one factor influencing the spread of HPWPs.

The other driver is the changing form of production introduced by the Japanese through TQM and 'just in time' manufacturing. The success of Japan sent shockwaves through the US and European manufacturers who responded with their own attempts to introduce quality programmes and reduce costs through shedding labour and de-layering. One consequence of this reduction in headcount was that responsibilities tended to be pushed further down the line. Having fewer employees encourages multi skilling.

ICT has also played a part in reducing transaction costs and enabling much greater information gathering and transmission which, in turn, facilitates local-level decision making. Organisations have responded to market changes by introducing differentiated goods and services with shorter product life-cycles this again relies on the tacit knowledge of workers to secure advantage. However, not all adopting organisations can be seen to have stuck with these new practices and some have abandoned them.

Despite these methodological questions and concerns, the weight of evidence and the consistency of the general direction of results – even if not the finer detail – presents a strong and persuasive case that HR practices do make a difference to business performance. The critical value of the research in high performance work practices is in highlighting the importance of considering investment in the workforce in the context of the broader company structure, practices and company strategy. It is likely that practices act to improve skills and increase motivation within the context of a philosophy of work that emphasises employee engagement and promotes work systems, allowing involvement and the freedom to make decisions. Under such conditions people can make a decisive difference to organisational performance.

Table 1: Summary of HPWP Literature

Author (date)	Type/ coverage	Work practice	Performance measure	Results
Bartel (1994)	All industries	Training	Net sale per employee	Productivity increased by 19% over 3 years in the firms with training
Holzer et al. (1993)	Michigan manufacturing	Training	Scrap rate	A doubling of training resulted in a 7% decrease in the scrap rate
Bishop (1994)	Literature review	Training	Wage	Wages of trainees rose between 0 and 12%
Kruse (1993)		Profit sharing	Various	Resulted in 3-5% increase in productivity
Kaufman (1992)	Manufacturing	Gain sharing	Relative labour productivity	15% increase in productivity over 3 years
Cooke (1994)	Michigan manufacturing	Profit/gain sharing teams	Value added per employee	5-25% increase in value added in establishments with incentive pay
Levine and Tyson (1990)	Literature review	Participation in decision making	Various	Majority of studies showed that participation was positively correlated with productivity
Macy and Izumi (1993)	Meta-analysis	Various: job design, team work, training, communication, etc.	Various	Changes in work practices were associated with productivity improvements of up to 40%
Kelly and Emison (1995)	Metalworking and machinery	De-centralised responsibility, problem-solving teams	Machining time per unit of output	Production time decreased with worker participation
Ichniowski et al. (1994)	Steel	Team incentives, training, communication, etc.	Up-time, prime yield	Changes in work practices associated with productivity gains of up to 40%
Arthur (1994)	Steel	Employee involvement, team working, others	Labour hours per ton	Lines with most progressive practices had 7% higher up-time
MacDuffie (1995)	Automobiles	System: teams, training, rotation, others	Standardised production time per vehicle	'Commitment' system had 12% higher productivity
Cutcher-Gershenfeld (1991)	Components manufacturing	System: problem solving, worker autonomy, others	Labour hours per standardised task	Non-traditional work groups had 17% higher productivity
Huselid (1995)	All industries	System: skills motivation, others	Sales per worker	System associated with 16% higher productivity
Ichniowski (1990)	Manufacturing	System: job design, training, others	Sales per worker	System associated with higher productivity
Hendricks and Singhai (1994)	All industries	Quality award recipient	Daily stock price	Quality award announcement coincided with 0.6% jump in share price
Easton and Jarrell (1994)	All industries	System: training, team work, organisational structure, others	Share price, accounting profit	Firms implementing the system had 20% higher share price after 6 years

Source: Kling (1995); from Bosworth (forthcoming)

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