# The Workforce and Productivity: People Management is the Key to Closing the Productivity Gap

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Employee satisfaction with their work and a positive view of the organization, combined with relatively extensive and sophisticated people management practices are the most important predictors of the future productivity of companies, according to the findings from our eight year study. Moreover, these factors seem much more important in predicting subsequent productivity than competitive strategy, managerial emphasis on quality, technological sophistication, or emphasis on research and development. 'People are our most important asset' is not just a management platitude. It is an urgent polemic which managers ignore to the costs of their shareholders and stakeholders. Our research suggests that, in order to close the productivity gap, policy makers and managers have to focus their efforts on the management of people and be vigilant about employee attitudes and satisfaction (Patterson, West, Lawthom & Nickell, 1997).

We began our research effort with the intent to answer a clear question: 'What makes companies effective?' After cajoling over 100 UK manufacturing companies to join us in this voyage of discovery, we explored almost all aspects of their functioning, by interviewing their senior managers over the course of a day or more. These interviews probed many aspects of company strategy, structure, production technology, production processes, job design, HRM practices, management of quality, use of Just-In-Time practices, equal opportunities, industrial relations, and payment systems.

In order to provide a check on the sometimes rose-coloured perspectives of managers (whose views of organizational practices such as appraisal tended to be inflated compared to those of others in the organization), we eschewed the common research practice of relying only on the reports of managers gathered via survey data. We sought documentation from them to substantiate their claims of (for example) the existence of a well-developed and widely applied appraisal system. We toured the factories to observe the emphasis on quality or safety and to judge for ourselves the richness and responsibility of production workers' jobs.

We went further still in our quest to discover which factors determined company performance and sought the views of employees in more than half of the companies about how innovative, flexible and committed to the welfare of employees their companies were. We also asked them to rate the companies in terms of their customer focus, their efficiency, their commitment to training, their pressure to produce and their effectiveness in communicating the organization's vision or goals (see Figure 1).

## Figure 1: Organizational culture: definitions and examples

**Communication**: the openness and effectiveness of communications systems within and between levels
*e.g. 'Important information is often not communicated to people'.*

**Performance feedback**: the extent to which information about job performance is fed back to employees

*e.g. 'People usually receive feedback on the quality of work they have done'.*

**Concern for employee welfare**: the extent to which employees feel valued and trusted *e.g. 'This company is considerate towards its employees'.*

**Supervisory support**: the extent to which employees experience support and understanding from their immediate supervisor or manager

*e.g. 'Supervisors show an understanding of the people who work for them').*

**Formalisation**: the degree to which rules and formal procedures govern the way things are done

*e.g. 'Everything has to be done according to the book'.*

**Autonomy**: the degree of autonomy employees are given to do their jobs

*e.g. 'People are given adequate scope to do their jobs properly'.*

**Quality**: the level of importance placed on producing quality products and services

*e.g. 'Quality is taken very seriously here'.*

**Effort**: the degree of effort and enthusiasm employees put into their work

*e.g. 'People are prepared to make a special effort to do a good job'.*

**Pressure**: the extent to which there is pressure on employees to produce

*e.g. 'People here are under pressure to meet targets'.*

**Vision**: the extent to which employees understand the company vision and long-term aims

*e.g. 'People have a good understanding of what the organization is trying to do'.*

**Efficiency**: the degree of importance placed on efficiency and productivity at work

*e.g. 'Poor scheduling and planning often results in targets not being met'.*

**Tradition**: the extent to which traditional, established ways of doing things are valued

*e.g. 'The way this organization does things has never changed very much'.*

**Innovation**: the level of interest in new ideas and innovative approaches

*e.g. 'There is a lot of support for new ideas here'.*

**Flexibility**: the extent to which the company can adapt to change

*e.g. 'Management here are quick to spot the need to do things differently'.*

**Skill Development**: the extent to which employees are encouraged and supported in learning new job-relevant skills

*e.g. 'People are strongly encouraged to develop their skills'.*

**Outward Focus**: the degree to which management looks outside for market opportunities and the degree of importance placed on providing a high level of service for the customer

e.*g. 'This organization is quite inward looking; it does not concern itself with what is happening in the market place'.*

**Reviewing Objectives**: the extent to which organizational members take action in changing objectives, strategies or team processes in order to achieve successful outcomes
*e.g. 'In this organization, time is taken to review organizational objectives'.*

One of our key research questions was whether the satisfaction of employees with their jobs and work predicted the future productivity of the company. So we also asked employees (more than 5000 of them) to rate their satisfaction in each of 15 areas (see Figure 2).

**Figure 2: Satisfaction of employees with aspects of their work**

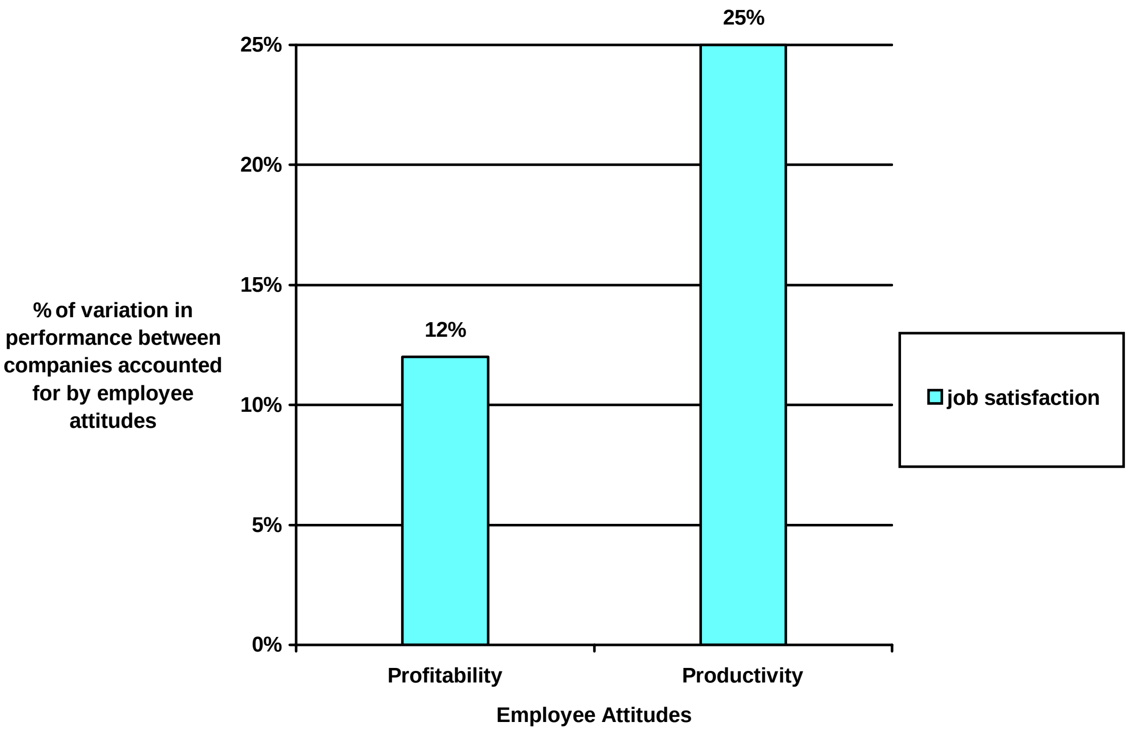
1. Your fellow workers
2. Freedom to choose own method of working
3. Your immediate boss
4. The amount of variety in your job
5. Amount of responsibility
6. Your hours of work
7. Opportunitites to use your abilities
8. Physical working conditions
9. Your job security
10. Attention paid to your suggestions
11. The way the organization is managed
12. Management/worker relations in the company
13. Recognition you get for good work
14. Your chance of promotion
15. Your rate of pay

Finally, we gathered data on the economic performance of these companies every year for the three years prior to when we began the research and each year subsequently, focusing particularly on labour productivity (measured as labour productivity in the firm relative to the industry to which the firm belongs which is defined as the ratio of sales over employment in the firm, divided by the ratio of sales over employment in the industry).

**The findings:**

First we examined whether employee satisfaction predicted subsequent productivity, expecting not to find a strong relationship. In studies of individual employee satisfaction and their job performance, results have repeatedly revealed that there is only a very weak relationship. Although the two tend (weakly) to go together, there are clearly many excellent performers who are not very satisfied with their work and jobs, and plenty who are content who are doing a very poor job! But, we reasoned, perhaps these relationships are different when we aggregate employee satisfaction across an entire company and examine the relationship with overall company productivity and profitability? And so they proved to be. Using the statistical technique of regression analysis (which enables us to determine how much of the variation between companies in productivity can be accounted for by factors such as managerial practices or employee satisfaction), we found that some 25% of the variation in company performance was associated with employee satisfaction, measured 18 months earlier (see figure 3).

**Figure 3: Do employee attitudes predict change in company performance?**




Our immediate surprise at such a 'big hit' was swiftly overtaken by a recognition that this was probably a false relationship, due to the effects of historical factors. Company performance tends to be rather stable, so if a company was doing well in (say) 1992, then its employees would probably be quite positive about their work as a consequence when we surveyed in 1994. Then when we measured productivity and profitability in 1996 it would still be high . The results of comparing attitudes in 1994 with productivity in 1996 would then lead us to the spurious conclusion that attitudes predicted productivity. To test for this we carefully took out (statistically) the variation in company productivity between 1991 and 1994, to see whether (in effect) employee attitudes in 1994 predicted change in company productivity in the subsequent 18 month period. The results were still highly statistically significant. Employee attitudes are good predictors of productivity and are not simply a consequence of company performance. It makes sense too that we find that employee attitudes are better predictors of productivity than profitability, since the latter is less under the control of employees than productivity. However, we did find that managers' ratings of the effectiveness with which the company strategy was being implemented was highly coloured by the prior performance of the organisation. When previous productivity was high, managers took a much less critical perspective in viewing how well they were implementing all aspects of company strategy.

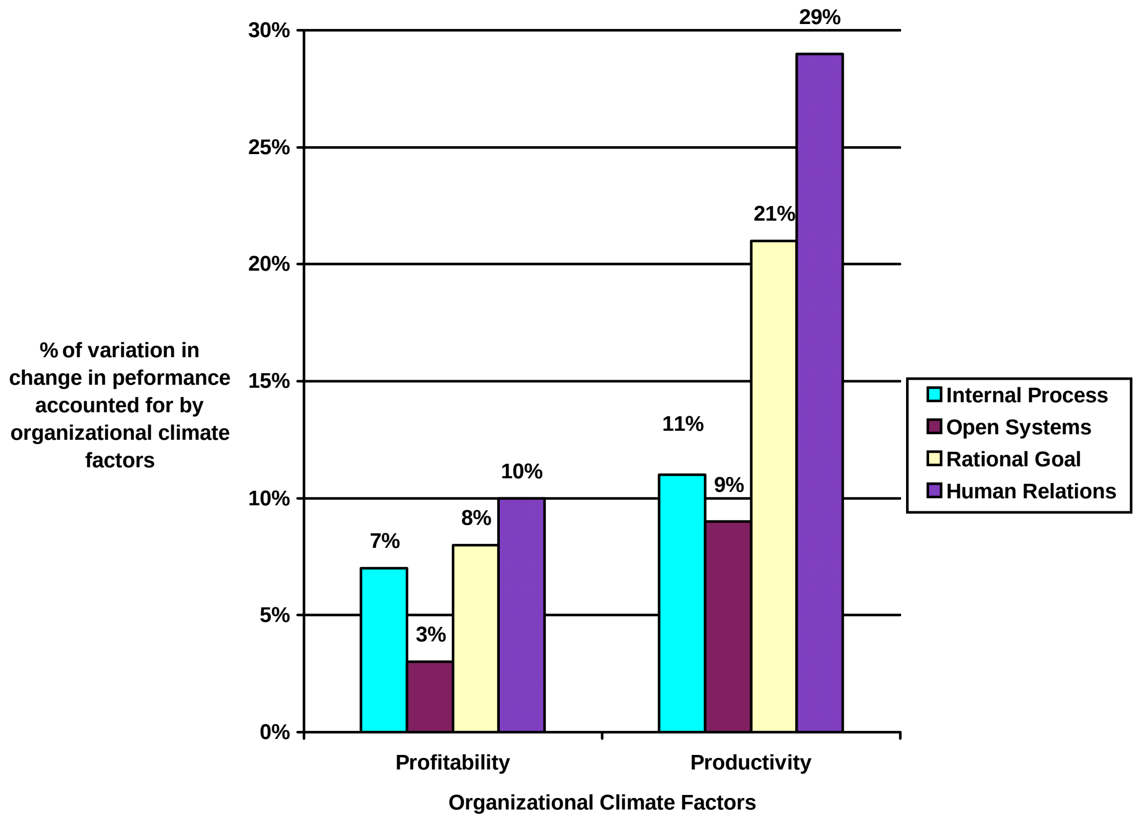
We must address the question of why we should find such powerful relationships between employee satisfaction and performance at the firm level when we do not find them at the individual level. Our current thinking, based on what we have observed in these organizations, is that a community of satisfied employees is likely to have positive attitudes towards the organization and towards work colleagues. As a consequence, people may well cooperate more in the workplace, both on tasks for which they are directly responsible and on tasks which are not part of their job description. Thus we expect that requests for assistance from another department or function might be met more positively in a firm where people feel generally relatively satisfied with their lot than in one where employees feel aggrieved or exploited. In the firms with more satisfied workers too, social norms may be more likely to develop which encourage good performance, thus reinforcing both satisfaction and good performance.

Next we turned to explore whether employees' perceptions of the culture or climate of the organization predicted company performance, and, if so, which aspects. The questionnaire we employed for this purpose tapped four main domains of culture:

- *Human relations* is the emphasis on employee well-being, training, morale, participation and supervisory support.
- *Rational goal* is the concern with external goals such as meeting customer requirements, pressure to produce, and long term organizational goals and objectives.
- *Internal control* is the focus on rules, regulations, efficiency, bureaucracy, and safety.
- *Open systems* emphases the external scanning of the environment and innovation in response to perceived needs; resource acquisition, customer focus and knowledge of competitors are also important emphases in this domain.

All organizations include these cultural emphases, but their relative strength varies. To test which of these domains of cultural emphasis, if any, predicted company performance, we entered all the data into regression analyses. We found that how employees described their companies was very highly related to their job satisfaction, but we also discovered that two domains were particularly important in predicting company performance. Emphasis on human relations and on goal achievement accounted for a very large part of the variation in productivity and profitability, even controlling for company performance in the three years prior to the measurement of attitudes (figure 4). These results confirmed that an emphasis on the welfare and development of employees was an important indicator of performance, along with a sharp focus on goals, objectives and performance. Further analysis of the data showed that cultural emphasis was not a direct predictor of profitability independent of relationships with productivity. In other words, cultural emphasis predicts productivity which in turn predicts profitability.

**Figure 4: Does organizational culture predict change in company performance?**

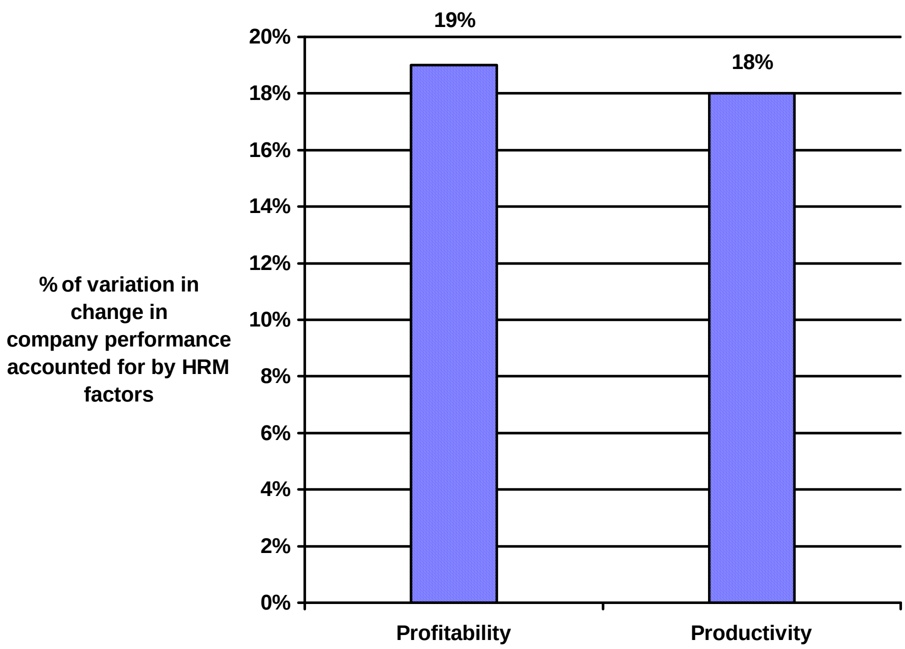



One of the key questions we wished to address in our research was ‘do people management practices affect company productivity and profitability?’ In order to answer this question we asked managers for detailed information about their management of people in relation to 13 areas:

- Selection and recruitment
- Induction
- Training
- Appraisal
- Skill flexibility
- Job variety
- Job responsibility
- Teamworking
- Communication
- Quality improvement teams
- Harmonisation
- Comparative pay
- Incentive compensation systems

Figure 5 shows that human resource management practices (HRM) accounted for 18 and 19% of the variation between companies in the change in productivity and profitability respectively, in the 18 month period subsequent to our interviews. How people were managed in these manufacturing companies predicted how the companies subsequently performed. Moreover, we did not simply rely on managers' accounts of their HRM practices to discover this association (as most previous studies have done); we made our own assessments of the sophistication and coverage (the number of employees affected by them) of HRM practices and used these data in our analyses. But it is insufficient merely to point to some overall assessment of people management practices and say HRM is a predictor of performance without also addressing the question which springs to most managers' lips -- 'But which people management practices make the difference?'

**Figure 5: Do HRM practices predict change in company performance?**




We therefore clustered the practices together statistically and again investigated the relationships between people management and company performance. Two clusters emerged as significant. The first was a combination of practices associated with the acquisition and development of employee skills. Where companies had in place relatively sophisticated and widely applied people management systems in relation to recruitment, selection, induction, appraisal and training, their productivity 18 months later was markedly better than those companies which had not developed these practices to the same extent. The second cluster of practices related to the design of jobs and work. Where employees were encouraged to use a wide range of skills in jobs which offered a relatively high degree of richness and responsibility, and/or where there was a relatively high use of teams to do work, companies tended to perform better.

It is no surprise that employees in companies which had sophisticated HRM practices in these areas were more satisfied with their working conditions than others, so we wondered whether the effects of HRM practices on performance might simply reflect the impact of satisfaction on productivity.  By statistically removing the effects of satisfaction and prior company performance on productivity and profitability 18 months after our initial measurement points, we were able to show convincingly that there were still highly significant direct effects of people management practices on company performance.  In other words, independent of how they affected the satisfaction levels of employees, sophisticated people management practices applied to ensure the effective acquisition and development of people’s skills, and the design of work so that those skills could be effectively deployed, also directly and substantially predicted the subsequent performance of the companies.

This finding is encouraging for those whose business is people management, but it is also important for those concerned with improving business performance. The research challenges created by these findings are to identify the precise pathways from particular people management practices through to individual job performance, and, in aggregate, to organizational performance.  What particular people management practices, alone or in combination, lever improvements in what aspects of people’s job performance (working harder, being more co-operative, encouraging others in their work)? And to what extent does the sum of these efforts lead to improvements in company productivity and profitability?

One thing we do know already from the data is that there is a strong relationship between people management practices and employee satisfaction.  Although it could be that satisfied workers prompt more effective people management practices from their employees, our data on HRM practices were gathered prior to our measurements of satisfaction and the results suggest that some HRM practices are particularly potent in predicting job satisfaction.  They are principally those which cluster together as skill acquisition and development -- selection, induction, appraisal and training.  This makes sense.  For productivity to be relatively high and growing, we need to select people with a high level of skill, teach them about their jobs and the organization, make sure that they have clear goals and get good feedback via the appraisal process, and ensure their continuing skill development in line with the needs of the business through well-designed and delivered training.

There is more understanding about the factors influencing productivity to be gleaned from our data, but the strong message which has so far emerged is that the management and attitudes of people in organizations is of major importance in predicting ( and therefore we surmise perhaps causing) changes in productivity.

We have investigated how important are other factors in predicting productivity including the sophistication and extent of quality management systems; the sophistication of production technologies (hand tool through to robots and CNC/DNC technologies) and the extent to which each is used in the production process; managers’ ratings of the effectiveness of their implementation of the various elements of their competitive strategy; and the sophistication of, commitment to and emphasis on R & D strategy.  Only the latter came close to being a significant predictor, suggesting that, at least in the short (18 months) term, people management is the key lever of productivity. This should not be taken to imply that these other factors are unimportant. The productivity pay-offs of new production technology may not be observable in such a short period and may begin to appear as we analyse productivity data for these companies over the ensuing years. Competitive strategy has been a central concern of theorists and business school gurus for many years and we do not believe their theorising is in vain. Undoubtedly strategy affects profitability but the effects may be less apparent in the short term than the rude impact of people management on productivity. Also we have some concerns that our measurement of people management may be more accurate than the rather amorphous concept of strategy implementation. We know from our data that quality emphasis is related to subsequent levels of organizational innovation, which other research has shown is related to profitability. In the short term however, the influence of these factors on productivity is not apparent.

What is hardest to understand, given the pattern of findings created by our data is why managers in the companies we visited tended to so neglect people issues; why the average job cycle time of operators (the time taken to start and complete their task before beginning it over again) in the factories and firms we visited was less than 10 minutes in 55% of the companies and less than one minute in 25%; why training needs were described as well planned and organized by only 6% of the managers we interviewed; and why over half of the companies we visited (and we are confident they are representative of their size, type and industry) had no-one responsible for personnel or HRM. Is it lack of managerial training; a fascination with 'hard' topics such as technology, finances, strategy and sales; anxiety about the uncertainty and woolliness of people management; or a lack of belief in the value of pouring energy, time and intelligence into the management of the people who constitute the organization?

These are further questions for researchers to address, but if we are to improve productivity, our research shows that managers must begin to make the welfare and management of employees in organizations an absolutely central and pervasive concern. Organizations are not simply buildings or products or cultures or traditions. They are all of those things of course. But most fundamentally they are groupings of human beings working together (more or less) to achieve often overlapping and sometimes shared goals. It is the management of their human needs, the release of their creativity, the co-ordination of their efforts and the creation of co-operative and effective communities which determines the productivity of organizations.

## References

Patterson, M., West, M. A., Lawthom, R., Nickell, S. (1997). *Impact of People Management Practices on Business Performance.* London: Institute of Personnel and Development, Issues in People Management No. 22.