Productivity: Where HR Fears to Tread?

Dilys Robinson, Senior Research Fellow, IES

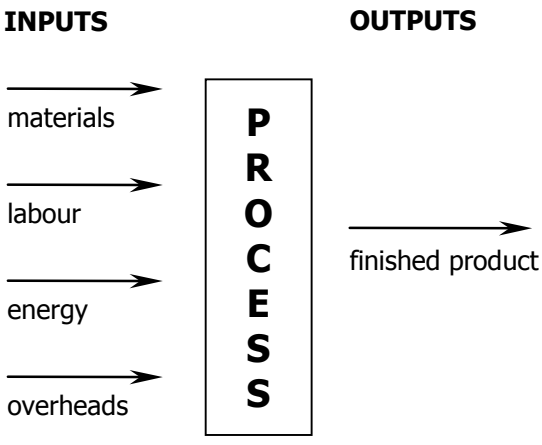
This article discusses productivity from several angles — how it is measured, the history of the concept, some 'productivity problems', the relationship of productivity to the various initiatives designed to improve organisational performance, and the role played by HR.

Productivity is not a comfortable concept for many HR practitioners. It seems hard-edged, mechanistic, perhaps even exploitative. Today's fast moving and fiercely competitive environment, however, means that the focus on employee productivity remains. To keep up, companies need to do more with less input. Organisations that embrace quality initiatives, or opt for a major process overhaul, are often driven by the desire to increase productivity and make an impact on the 'bottom line'. However, it is often operational managers who take charge of the productivity concept, and HR practitioners who are left behind to pick up the resultant pieces — disputes about bonuses, targets, penalties, *etc.*

How is productivity measured?

There seem to be two main methods of measuring productivity within an organisation. The first is an input:output ratio, as illustrated in a very basic way in Figure 1. This method allows the

Figure 1: Productivity - the input:output ratio

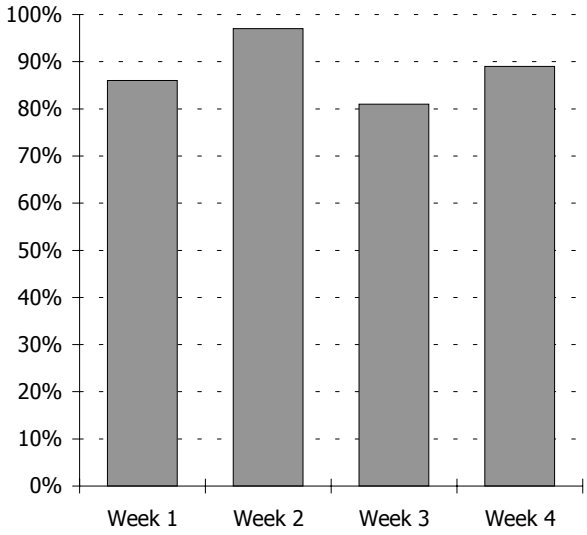


Source: IES, 2001

total effort of producing a given amount of output to be broken down into its component parts, typically labour and materials, although overheads and energy inputs are sometimes incorporated. In employee productivity terms, an input:output ratio approach leads to measures such as 'x man hours per 1,000 widgets' and '£ labour costs per finished unit'. Input:output ratios are a very well established and — superficially, at least — easily understood way of measuring productivity. They lend themselves to monitoring and comparisons. Anyone visiting the Body Shop at Littlehampton, for example, will see a large display, above each production line, so that employees can see how their line is doing in comparison with others.

The second method of measuring productivity is as a percentage of full capacity. This is illustrated in Figure 2. Using this method, a production line capable, at full speed, of turning out 1,000 widgets an hour, might be assessed at 95 per cent productivity if it turned out only 950 in any particular hour. Again, comparisons are possible between similar units of production. When applied to employees, the concept of a 'standard worker' is often used. A new call centre operator, for example, might be expected to work at only 50 per cent capacity for the first few days or week, building up to, say, 90 per cent by the end of a probationary period. A highly experienced and efficient operator, however, might consistently perform at 110 or 120 per cent in comparison with a 'standard' counterpart. The obvious difficulty here is how to arrive at appropriate and fair 'full capacity' or 'standard' measures.

Figure 2: Productivity - expressed as a percentage of capacity



Source: IES, 2001

Some history

Productivity surfaces in earnest

The Industrial Revolution brought about a huge interest in productivity by employers. **Adam Smith**, writing in *The Wealth of Nations* (1776), illustrated the need to break down production into its constituent parts by using the example of a pin-maker. Creating and packing pins required, he observed, no fewer than 18 distinct operations; the factory owner who separated these processes, and gave each process to an individual worker, brought about huge advances in productivity. Ten men could produce around 48,000 pins in one day — whereas a man working on his own, and doing every part of the process himself, could produce no more than 20 in the same time period. Unsurprisingly, factory owners embraced the idea of the separation and simplification of tasks with enthusiasm. Limiting labour costs ensured that profits were maximised, and the unscrupulous used every possible means within their grasp — even using children. The less attractive aspects of driving down labour costs gradually disappeared (at least in the Western world) but intense interest in limiting the labour costs part of the productivity equation lingered. The best known, and much admired, of all assembly lines is probably the **Model T Ford** factory in the States, which relied very heavily on reducing all operations into their constituent parts. It produced more than 15 million cars between 1908 and 1927, and did this so cheaply that ordinary families were able to afford to buy a car for the first time.

Enter Scientific Management

The focus on employee productivity received a boost with the publication of **F W Taylor**'s *The Principles of Scientific Management* (1911). Taylor's obsessive analysis of jobs, and his insistence that every task was dictated by management, could be seen as reducing workers to the status of machine parts — incapable of independent thought, existing only to do what, and how, they were told. The slight feeling of distaste some HR professionals have for the concept of productivity may perhaps be linked to a reluctance to engage in the methods of scientific management. It is much more comfortable to focus on motivation and commitment, and hope that productivity will improve as motivation and commitment levels go up.

Some problems about productivity

The quality dimension

An obvious problem with productivity in its most basic form is that it fails to recognise the importance of quality. Few people would argue, however, that production line A, which makes 950

perfect widgets per hour, is more productive than production line B, which turns out 1,000, ten per cent of which are faulty and have to be scrapped or reworked. Early forays into quality — quality control and quality assurance — sat quite well alongside productivity. **Quality control** monitored error rates, and enabled productivity calculations to be based only on products that fell within acceptable tolerance limits. **Quality assurance** took a different approach, in that it assumed that a correctly designed system is incapable of producing faulty products. What came out at the end, however, still needed to be monitored, counted and incorporated into productivity statistics.

Total quality management (TQM) shifts the focus away from the end product, and towards meeting customers' needs. TQM puts the customer at the centre, and makes everyone in the organisation responsible for the quality of the products bought, or used, by the customer. In organisations that espouse TQM, therefore, measuring productivity could take a back seat, while measuring customer satisfaction assumes a much greater prominence.

How about difficult to measure outputs?

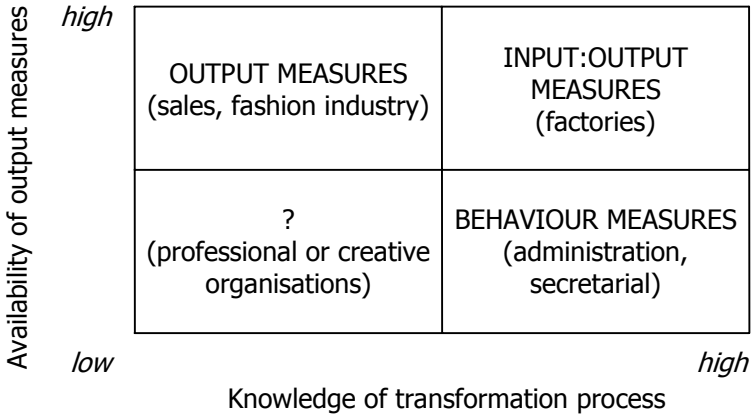
It is relatively straightforward to measure productivity in manufacturing industries, especially those based on mass production. In the non-manufacturing world, however, input and/or output can be harder to define. What, for example, defines productivity in unpredictable industries like the fashion industry? And how about service industries, and companies that rely on generating ideas? What productivity measure does a research institute adopt? Is a school more productive if all its pupils pass five or more GCSEs, or if all its pupils learn how to become good citizens?

In such situations, the relationship between inputs and outputs is not always easy to measure. In a call centre, for example, two different operatives could spend the same amount of time to call the same number of people, using the same standard script, but get very different results. In this and similar situations, it is often the manner, persuasiveness, persistence *etc.* of the operative that gets a result, so it is more useful to measure and monitor behaviour than inputs. Ouchi (1977) argues that the focus of measurement is dependent on two things: the availability of output measures, and the degree to which the transformation process is understood. Figure 3 presents the argument in diagrammatic terms, and illustrates why it is so difficult to find appropriate productivity measures in situations where output measures are hard to define, and the understanding of the transformation process is low.

The stakeholder approach

Most organisations today accept that they have several stakeholders, and that all are important to achieve success. Private sector companies will typically try to satisfy customers, shareholders

Figure 3: Productivity measures for different circumstances



Source: Based on Ouchi, 1977

and employees. Public sector organisations may not have to worry about shareholders, but often have enormous difficulty in balancing the needs of their many and disparate customers; they also have a political dimension to grapple with. A **balanced scorecard** approach to assessing an organisation's health and performance usually relegates productivity to a small corner of the 'internal business processes' quadrant — far less important than customer satisfaction levels, or market share, or employee commitment. Does this mean that productivity is no longer a key indicator, or is barely relevant?

New organisational forms

Even manufacturing industries are no longer necessarily organised along traditional assembly lines. The trend towards less standardised, more customised products has encouraged new ways of organising work. Cells and self-organising teams mean that similar pieces of work are not always tackled in the same way; people are not machine parts, but multi-skilled operatives who might choose to tackle a task differently today from the way they did it yesterday. It becomes much harder, in these conditions, to monitor productivity closely. Hourly productivity monitoring is no longer appropriate, and gives way to measures that monitor productivity over a much longer time period.

Productivity levels

Another reason why productivity can be hard to pin down is that it is measured at different levels, but the measures used vary depending on the level.

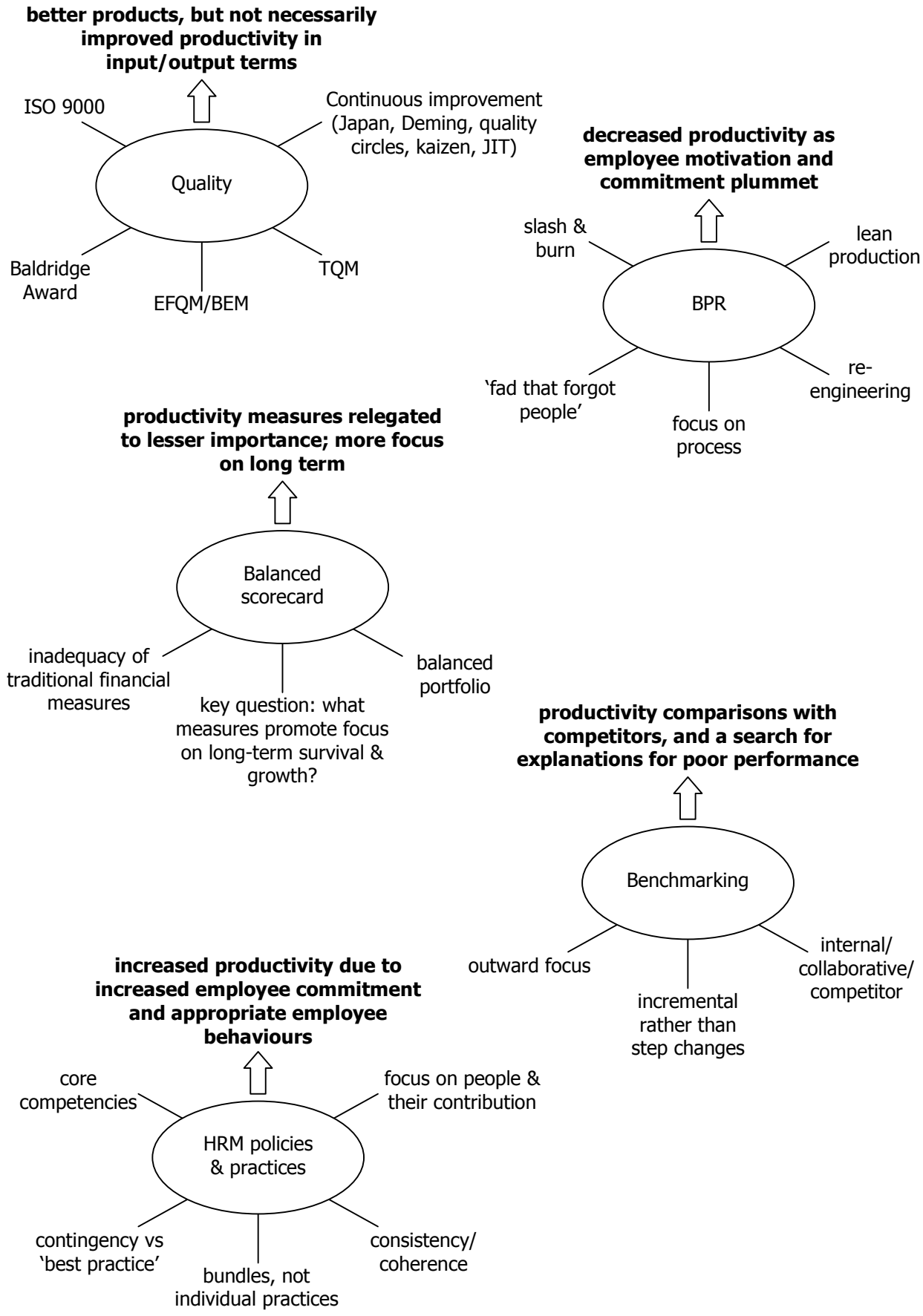
- At national level, comparisons between countries and over time typically focus on gross domestic product per worker (people in the labour force), or per hour worked.

- At corporate level, the focus is usually on financial output measures — sales, dividends, return on capital employed — with comparison made to competitors. Organisations will usually also monitor broad input:output productivity ratios, too, such as revenue per employee. Public sector organisations often struggle to find a single measure, or a simple set of measures, that represents their activity.
- When at departmental/functional level, the measures become more detailed and appropriate to the activity being undertaken — number of cars sold per car showroom per quarter, number of patients seen per outpatient clinic, number of widgets produced per hour, number of arrests made per police force per month, *etc.*
- Team productivity measures are often related to departmental or organisational measures, with an attempt being made to focus on those aspects where the team is making a contribution to overall activity. In an outpatient clinic, for example, administrative staff might want to focus on efficient appointments and processing of patients' notes, nursing staff will be more interested in the well-being and appropriate treatment of patients, while medical staff will probably focus on the extent to which their diagnoses and prognoses are accurate.
- When the level drops as far down as the individual, it can be very difficult to define precise output measures, or attribute changes in productivity to one employee rather than another. If this is the case, the focus often shifts away from output measures, towards behaviours: does the individual have the right attitudes, team spirit, interpersonal/communication/ motivational skills, *etc*?

The tricky issue of causality

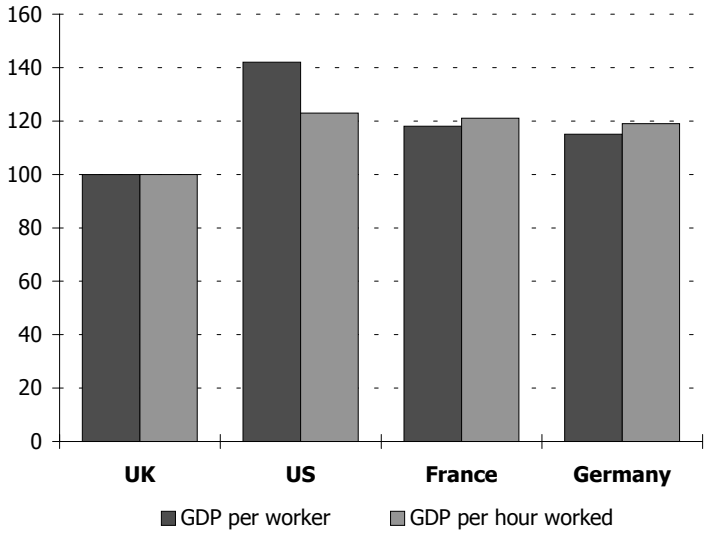
Over the past 20 years or so, HR practitioners have seen many initiatives come and go, each one promising to transform the organisation, engage employees, delight the customer, and — almost as an afterthought — of course increase productivity dramatically. Some of these are mentioned above. Although some of these initiatives have brought some benefits to organisations (though rarely as many as they hoped for), others may have proved ineffective or even disastrous. An extensive literature search at IES has failed to produce any research showing **convincingly** that there is a causal relationship between any of these initiatives and increased productivity, although there is plenty of anecdotal evidence, perceptions and beliefs. The main initiatives, with their features and possible links to productivity, are shown in Figure 4. It appears, however, that there is no magic wand that can be waved to improve employee productivity.

Figure 4: The productivity link?



Source:

Figure 5: The productivity gap (1999)



Source: OECD, UK=100

So, why worry about productivity?

Recent Treasury reports show that, despite encouraging progress, the UK is lagging behind its competitors abroad. In 1999, for example, the labour productivity gap between the UK and the US was 45 per cent, with France 18 per cent, and with Germany 11 per cent (see Figure 5). The Treasury analysis indicates that this productivity gap exists partly due to under-investment in physical capital, but it is also due to **under-investment in human capital**. Compared to the US, for example, the UK has a shortage of highly skilled workers; compared to Germany, the UK has a much higher percentage of low skilled workers, and a much lower percentage of workers with intermediate skills. In addition, the UK invests less in technology and in research and development, so has lower levels of innovation than competitor countries. Clearly, the UK needs its HR practitioners to emphasise the importance in investing in its employees — especially as the national evidence is backed up by firm-level data. The most productive manufacturing plants in the UK are five and a half times more productive than the least productive plants, and in the service sector the gap is even wider (Barnes and Haskel, 2000).

HR's role

HR's role in relation to productivity is somewhat ambiguous. Traditionally, industrial relations experts often had to negotiate with trade unions over incentive bonus schemes, which used some form of productivity measure as a standard to be achieved or surpassed. HR professionals, however, are often uncomfortable about relating people to numbers, or valuing individuals in output terms. But does this attitude mean that HR misses an opportunity

to engage more with line or operational managers? Does it lead to a lack of understanding of the fundamental (and often very basic) things the organisation does? Could it place HR at a disadvantage? Could it mean that employees are being given conflicting messages about what is important, and how they are to behave?

Perhaps the main message to HR practitioners is that it is not necessary to understand financial indicators and production ratios in detail in order to get stuck into the employee productivity increases. HR practitioners understand a lot of things that are needed if organisations are to improve employee productivity:

- what motivates people, and how to pass this knowledge on to line managers (who think they know, but often do not)
- how to highlight training and development needs, and use the training budget to increase employees' skills
- how to involve employees, and encourage them to make suggestions about improving the ways in which the organisation works
- how to ensure that required employee behaviours are incorporated into competency frameworks and imparted through training courses, and how to recruit people with the potential to demonstrate these competencies.

Two subsidiary messages are worth repeating. Firstly, it is probably a waste of time trying to devise productivity metrics for activities that cannot easily be measured. Secondly, given the somewhat dubious evidence on causality, it is probably not a very good idea to put all the organisation's productivity eggs in a single management initiative basket.

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Also at: www.employment-studies.co.uk/networks