Insights and Outcomes

Case study: the case of the light machine shop

This is an account of why the bonus scheme failed and the lessons that were learned.

This case study is based on events that happened over thirty years ago, in an economic environment in which manufacturing and engineering were prominent sectors of the UK economy. Clearly, the industrial map of the UK has changed dramatically since the 1970s, but the principles which underpin the scheme and the lessons that were learned from it are still pertinent today.

The shop stewards in the light machine shop (LMS) had asked for a wage increase, but at that time, increases in pay were linked to improvements in productivity, hence the growth in productivity bargaining and productivity-based deals. Other and much bigger departments in the steel and engineering complex had their own schemes and the men in the LMS wanted theirs.

Designing the scheme was not particularly difficult because it was based on tried-and-tested principles and beliefs, the most important one being that people working in engineering had two levels of effort or performance, incentivized and non-incentivized. The only way, it was believed at the time, to achieve higher levels of effort/performance was to link this to some kind of bonus payment. It was also believed that workers had between 25 per cent and 33 per cent of what would now be termed 'discretionary effort' in reserve. So the scheme that was designed was meant to get the workers to increase their effort and in so doing increase the amount of work they did measured in terms of job hours over a given period.

With such schemes, it is important to ensure that the base line is as accurate as it can be. Otherwise, increase in the productivity index may reflect a somewhat indulgent and loose approach to work standards. The six-month period over which job cards were analysed was considered sufficient to iron out any more recent fluctuations in effort levels.

Thirteen weeks after the commencement of the scheme, when the first set of results was published, the personnel team that had been involved in designing it had a shock; the bonus payments were much higher than had been anticipated. The productivity index, which had a base line of 111, had shot up to well over 130 and had triggered bonus payments well in excess of what other productivity schemes in other parts of the site were already paying. The problem wasn't simply one of high payments to the LMS staff, but the wider effects on other groups of workers whose bonus payments were considerably lower.

The question on everyone's mind was, what had caused the productivity index to rise so sharply over a short period of time. The answer was a combination of factors but the most important one, and one which the personnel team had not thought about, related to the way the index was calculated. The index could change as a result of changes in either of the two factors—the time taken to carry out a particular job or the time allocated for such jobs. Productivity schemes are based on management keeping control over allocated times, which would be seen as a constant relative to the work content of jobs while the actual time taken would fall as the workers worked harder, smarter, or more efficiently. In this particular case, the process of establishing allocated job times, based on time study or estimating, had been compromised. The two experienced shop stewards realized that if they put pressure on the LMS manager to be more generous with his job times, then the index would improve in their favour, irrespective of changes in the workers' own efforts. When this happened as well, the effect was to accelerate the direction of change. What the productivity index measured was a genuine increase in productivity but it also expressed the bargaining power the workers enjoyed in the department, alternatively expressed as a loss of managerial control.

The enduring lesson from this scheme is that measures of productivity or performance can express other things which often reflect more complex issues of power, worker initiative, and sometimes collusion between workers and management.