



## THE VALUE OF AN EMPLOYEE - THE COST OF NOT KNOWING

WHAT IS AN EMPLOYEE WORTH? SHOULD WE MEASURE IT? CAN WE MEASURE IT? NIKOS BOZIOVELOU PHD, PROFESSOR IN ORGANISATIONAL AND HR MANAGEMENT, AT DURHAM BUSINESS SCHOOL, ARGUES THAT MANAGERS MUST KNOW BOTH THE PRICE AND THE VALUE OF THEIR EMPLOYEES OR THE EFFECTS ON THEIR BUSINESS COULD BE NOTHING SHORT OF DISASTROUS.

It is said of Philistines that they know the price of everything, and the value of nothing. Instead of asking *"Can/should we measure an employee's worth?"* it may be more appropriate to consider *"Can we afford not to know what our employees cost and what the value of their contribution is?"* A rigorous analysis of both can reveal massive financial losses or gains that depend upon employee performance.

One way of considering the matter is to ask what monetary value an employee should add, directly or indirectly, in order to ensure that the organisation is not losing money by employing that individual.

The obvious answer would be for the individual to produce as much as he or she costs in gross income plus other benefits. But this approach is completely incorrect! Payroll is only one of the many costs that an organisation has to meet. Other costs must be added such as those of purchasing and maintenance of equipment, telecommunications, utilities, transport, real estate, raw material, and so on. As such, no business whose employees produce monetary value that equals on average their gross salaries would be able to survive for a significant amount of time, let alone be profitable.

If the employee has to add more in value than the cost of his or her gross salary in order to be considered an asset, how much more exactly does this value need to be? Extensive research, mostly from the field of organisational psychology, has indicated that the income an employee must generate to make their employment marginally profitable is double that of his or her gross salary. This is commonly referred to as the 'rule of double'.

However, this is only a general rule of thumb that refers to the minimum average productivity of employees where they are deemed to add value – or at least are not detrimental. In certain industries or types of businesses the multiple can be even greater. For example, in the design and production of cutting-edge electronic products or in companies that operate exclusively within the web, the multiple can even reach values that are well above five.

### **"what is the cost to a company of employing individuals who under-perform"**

At this point we can return to the initial question we posed, of what is the cost to a company of employing individuals who under-perform, and what is the value of those who perform well? Both are the outcomes of a complex life-cycle starting with selection, and followed by training and development, leadership and motivation throughout the employee's time with the company.

So how can we measure the value of people to the bottom-line?

Organisational scientists have concluded that the monetary difference for the employer between an employee who has average performance and an employee who has good but not 'outstanding' performance equals one half of their gross salary. So the value added by a good performer, compared

to an average performer, is half the amount that the employer is paying them. Additionally, the monetary difference for the employer between an employee who has poor but not 'outrageously bad' performance and an employee who has good performance equals their gross salary.

For example, let us assume that the gross annual salary of a junior administrator is £25,000. The annual monetary difference for the employer between a junior administrator with average performance (or as some may describe 'mediocre' or 'just satisfactory' performance) and a junior administrator with good performance is £12,500 (that is half their annual salary). And the annual monetary difference for this company between a junior administrator with poor performance and a junior administrator with good performance is £25,000 - that is their gross annual salary.

These differences become even greater for the cases of employees at the extremes of the performance continuum. Hence, the monetary difference for the employer between an employee with outstanding performance (or in scientific terms an employee who is found within the top five per cent of the performance distribution within the company) and an extremely, or 'outrageously, poor' employee (or in scientific terms an employee who is found within the bottom five per cent of the performance distribution) equals twice their annual salary. Returning to our example of the junior administrator, the annual monetary difference for the employer between a junior administrator with extremely poor performance and his or her counterpart who performs at an outstanding level equals £50,000. This is a significant difference on the bottom line even for a relatively junior employee.

As we mentioned at the beginning, the 'rule of double' has been developed with reference to traditional industries and occupations. As we also noted, in certain industries or types of businesses that reflect the modern economy and where skill levels and margins are high, such as e-businesses, the multiplier can reach the order of five or even 10. Hence, in the above illustrative cases the monetary amounts become £125,000, £250,000 and £500,000! These are simply the monetary differences in income for the employer for differences in performance between junior managers.

As levels of skill and accountability increase, the numbers become more impressive still. Applying our formula, the annual monetary difference for an organisation between a good (but not outstanding) and a poor (but not outrageously bad) middle manager whose gross annual salary is £50,000 ranges from a minimum of £50,000 to a maximum of £500,000... and the annual monetary difference between a good and a poor senior manager whose annual compensation is £100,000 ranges from a minimum of £100,000 to a maximum of £1 million.

At such senior levels, we enter the realms where the difference in skill and performance can mean the difference between success or failure for the entire organisation. This is the reason that the selection of individuals for senior organisational positions is seen, or must be seen, as critical.

Nevertheless, we should keep in mind that, even at the lowest organisational level, and however menial the job, performance differences between employees are translated into significant amounts. For example, organisational scientists in the USA estimated some years ago that the average annual monetary difference for organisations between a good and a poor window

## PREDICTING FUTURE VALUE

DEPENDING ON THE CONTEXT, WORK SAMPLES CAN BE A VERY COST-EFFECTIVE MEANS OF IDENTIFYING A CANDIDATE'S POTENTIAL VALUE TO A COMPANY.

### EXAMPLE ONE

A very large British company asked three of its IT consultants to devise a work sample test for possible recruits to the IT department.

The development of the test took one week of full-time work by three senior consultants (who were taken away from their other duties). Once they finished, they piloted the work sample test to a job candidate. The candidate began the test relatively well, but did not finish it. The three consultants advised against the hire, on the basis that the test indicated he may not be reliable as an employee. But the senior manager said he preferred to trust "*his guts*" and that "*I liked the sound of him from the interview; therefore, I'll hire him.*"

Sure enough, the individual under-performed, and displayed a tendency to leave tasks unfinished. As a result, he never finished his probation.

Interestingly, the company actually abandoned the work sample test, as they felt it had been unsuccessful as a selection technique, and thus the expensive value-adding contribution of three senior consultants and a perfectly good work sample test were thrown away! Considering the size of the company, the actual loss (taking into account the cost of poor selection decisions) was probably in the region of millions of pounds.

### EXAMPLE TWO

In contrast, a small web-design company finds testing people in relation to what they will actually be doing on a day-to-day basis with the work sample technique, to be a highly pragmatic and effective means of identifying competence and predicting performance.

Candidates are given a web-based problem to deal with in two hours on the computer. Their performance (e.g. amount of progress, feasibility of proposed solutions, etc.) is judged and used to provide the hiring manager with a very good idea of what each of these candidates will do in a typical job requirement.

cleaner was US\$5,800 (around £3,000). Obviously, while the cost or value added per single employee may not be impressive in the case of cleaning jobs, losses or gains can be very substantial if the number employed in such jobs is large.

Given that many services such as cleaning, catering and back-office services are typically outsourced by larger organisations, this raises the important question of the extent to which the value added by the specialist outsource provider is fully taken into account when deciding to outsource. We know that such a 'balanced scorecard' exercise is not carried out universally. But it is impossible to know if an outsourcing decision is correct by looking only at direct costs such as wages or the contract fee.

### "how do we assess employee performance"

By this point we are, hopefully, convinced that having higher-performing employees adds significantly to the bottom line, and we can even quantify what return we are receiving for our outlay on wages and other costs. But how do we assess employee performance? And how can we be certain that the people we are hiring will be high performers?

Questions of performance can be broken down into two types: task performance and contextual performance. Task performance relates to technical skills, such as how good an accountant or software engineer is at accountancy and software engineering, respectively. Contextual performance relates more to issues such as: Does the employee go the extra mile? Do they say 'yes' to additional duties to help the team out? Do they promote the organisational image to outsiders? And so on. The figures that I quoted earlier in the article, showing the monetary returns for higher performance, are based on performance judged in both these areas.

Scientific research has shown that a supervisor's judgement is generally a good indicator of actual workplace performance, and this can be used to produce the traditional bell-curve distribution of poor, average and superior performers. Such judgement, however, is very poor at the hiring stage. A traditional, unstructured interview, the selection method that most organisations still use, has been shown to be not substantially better than hiring people at random from the pool of applicants as a means of ensuring superior performance.

When assessing one's own staff, a supervisor has the accumulated wisdom from overseeing and assessing his or her team's output, receiving feedback about his or her employees from internal and external customers, and seeing the links with the unit's output. None of this is available at the stage of selection. Here, a host of irrelevant factors may unconsciously be taken into account. For example, what a candidate is wearing on the day, how tall or how good-looking the candidate is, and so on. Such factors have been shown to have a significant influence on hiring decisions, but absolutely no impact upon performance.

Research carried out in the US Federal Government a few years ago showed that if it had utilised scientifically endorsed hiring techniques, such as cognitive ability tests, instead of relying on informal interviews, it would have saved itself \$600 million a year as a result of better selection decisions... the figures would obviously be even greater now.

There are many reasons why employers are not rigorous in applying proven methods to selecting the best candidates, and for measuring of their performance and monetary worth. Complacency and lack of awareness seem to be two of the main culprits.

Structured interviews, work samples and systematic testing can involve considerable outlay, but such is the failure rate of most alternative unscientific selection methods that there will almost certainly be a return on this investment, if planned well. One reason why the calculation of the monetary worth of employees is so important is that it can illustrate the value of such investment – and the cost of failing to make such investments.

Furthermore, rigorous hiring practices need not be expensive.

It is also the case that without diligent maintenance of procedures, standards can slip. Structured interviews, for example, have a tendency to become gradually unstructured over time. Lack of top management support, dedication and awareness are also common problems in the proper implementation of scientifically proven selection systems.

Hiring and employing people are endeavours that need to be treated for what they are: major investment decisions that have a great bearing on whether or not the business succeeds. The rigour has to be applied consistently throughout the process: from the original hire, to the management and measurement of performance, and to the deployment of proven methods to assess return on investment. Precision cannot be guaranteed, but the scope to reduce guesswork and waste is considerable.

For the Rational Estimates research, which focuses on the monetary returns for the employer of various performance levels of employees, the seminal work was Schmidt, F. L., Hunter, J. E., McKenzie, R. C., & Muldrow, T. W. (1979). Impact of valid selection procedures on work-force productivity. *Journal of Applied Psychology*, 64, 609-626.

Since then, there has been substantial research, representative pieces of which are the following:  
Bobko, P., Shetzer, L., & Russell, C. (1991). Estimating the standard deviation of professors' worth: The effects of frame of reference and presentation order in utility analysis. *Journal of Psychology*, 56, 179-188.  
Yoo, T.-Y., & Michinsky, P. M. (1998). Utility estimates of job performance as related to data, people and things parameters of work. *Journal of Occupational Behavior*, 19, 353-370.

The most important writers on the distinction between Task and Contextual performance, who demonstrated that these are independent components of Overall performance, are Professors Borman and Motowidlo. A representative reference to their work, that also pertains to human resources selection is: Borman W.C., & Motowidlo S.J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10, 99-109.

