

The A&DC Thought Leadership Series

Making the Business Case

Demonstrating Return on Investment in Selection



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In today's increasingly competitive marketplace, there is mounting evidence of a powerful relationship between human capital and business results. For example, Microsoft believes that 78% of its value is down to its people. It is not uncommon for organisations to have market valuations well above the value of their tangible assets. This 'hidden value' is attributed to the intellectual capital of the organisation. It is therefore true to say that people are an organisations most important resource and that talent is responsible for leveraging competitive advantage. Competition to secure the best talent is however fierce. This is set to increase given changes in employee demographics, the ease and speed of switching employers and the differing expectations of the 'Generation Y' workforce. To remain competitive, it is ever more important for organisations to secure talented individuals. Proper selection is therefore of critical importance to effective talent management. This is one of the areas where HR can add enormous value to the business. Demonstrating the Return on Investment (ROI) is increasingly required in order to secure shareholders, investors and CEO commitment and buy-in to investing in selection processes.

Calculating ROI might seem like a daunting task - It needn't be. This article firstly highlights the potential costs that can result from having poor selection systems in place. It then gives readers step by step guidance on how to calculate the ROI of their own selection improvements using a case study example to illustrate. The article concludes by providing recommendations about how to improve selection processes to ensure maximum ROI. It is hoped that this will equip readers with the practical tools necessary to enable them to demonstrate the value of investments in selection to the bottom line within their own organisation.

Making the business case for improving your selection process

The case for investing in selection is strong. The costs of selecting the wrong people are significant. Not only are large amounts of money and time spent on the actual selection process and subsequent training of new recruits, making poor selection decisions can have costly consequences. This section focuses on outlining some of the most significant risks related to having poor selection processes in place.

The cost of litigation

It is critical to ensure that any selection process is fair to all applicants, regardless of factors such as age, gender, disability, sexual orientation, ethnicity or religion/belief. Legislation is in place to protect against discrimination on these grounds. It is important that selection processes do not unfairly discriminate against particular groups or individuals and that they are free from **Adverse Impact**. Adverse Impact occurs when members of one sub-group are selected disproportionately more or less often than members of another subgroup. Certain kinds of selection tools are more prone to Adverse Impact than others. For example, ability tests can frequently create adverse impact, whereas others such as behavioural assessment measures are less prone (Bobko, Roth &



Potosky 1999). The presence of Adverse Impact within a selection process may result in legal action being taken against the organisation. Instances of legal action against employers are becoming more and more common. Approximately 64% of legal challenges made in relation to employment are made by “new hires” rather than current employees (Robertson & Smith 2001). This should therefore be a signal to organisations that they need to ensure fairness in their selection procedures or risk legal action.

The cost of underperformance

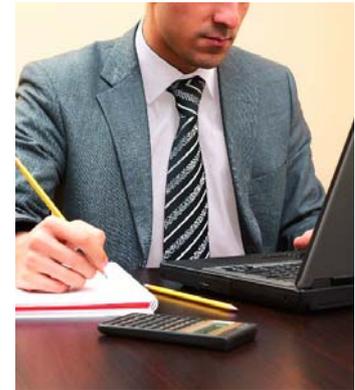
The indirect costs of poor selection are often overlooked by organisations. The costs associated with underperformance, incompetence and missed opportunities can be significant. Performance variability between employees in most jobs can be very large. The variability is typically measured by looking at the £/\$/€ value of an employee’s contribution to the organisation. Research shows that the variation across individuals of the £/\$/€ value generated is at a minimum 40% of the average salary of the job and possibly higher (Schmidt, Mack, & Hunter, 1984). With this in mind, for a job with an average salary of £40,000, an ‘above average’ employee would be likely to generate £16,000 more value for the organisation per annum than the ‘average employee.’ Conversely, a ‘below average’ employee would be likely to generate £16,000 less value for the organisation than the ‘average employee.’ There is a difference therefore of £32,000 per annum in the value generated by an ‘above average’ employee compared to one who is ‘below average.’ If you multiply this out to a workforce of 250 employees, having a workforce comprised of ‘below average’ employees would result in costs of £8,000,000 per year, when compared to the possible value that could have been generated by an ‘above average’ workforce. Clearly, such differences are large enough to have a critical impact on the economic health of an organisation and add significant weight to the argument for investing in appropriate selection processes. Research also shows that the impact of an employee’s contribution varies according to their seniority within the organisation. An ‘above average’ employee working in an unskilled or semi-skilled job produces 19% more value than an ‘average employee.’ This increases to 32% for skilled employees and 48% for managerial level employees, meaning that an ‘above average’ Manager will be almost twice as productive as an ‘average’ Manager, (Schmidt and Hunter 1998). Again, this research adds significant weight to the argument for investing in appropriate selection processes which can accurately predict future job performance, ie whether or not someone will be effective in the role. Such tools are said to have high validity.

Calculating ROI – It needn’t be daunting

There are many different ways of calculating ROI. The following section focuses on simplifying the concept of ROI to make it accessible. The key question that we need to ask ourselves is ‘what are we trying to achieve when we calculate ROI in relation to selection processes?’ We may be asking ourselves questions such as ‘what benefits will this new process bring?’ ‘How can I convince the key stakeholders that this process is worth investing in?’ These are questions that the business expects answers to, and rightly so. By calculating ROI, we are trying to demonstrate that the proposed investment in a new selection process is worthwhile because it adds more value to the organisation than does the current process. In simple terms, ROI can be calculated as a percentage by using the following formula;

$$\frac{(\text{Productivity Benefits} + \text{Efficiency Benefits}) - \text{Intervention Cost}}{\text{Intervention Cost}} \times 100 = \% \text{ ROI}$$

When calculating ROI, it is necessary to assign a £/\$/€ value to processes and outputs. Some processes and outputs may be easier to put a value on than others and inevitably a degree of estimation is required. **‘Intervention Cost’** refers to the actual money spent on putting in place the new intervention. For example if a new selection tool is purchased costing £50,000, the Intervention Cost is £50,000. **‘Productivity Benefits’** are those benefits associated with increased productivity, such as an increase in the £/\$/€ contribution of employees selected through the new process. **‘Efficiency Benefits’** are those benefits associated with improving the efficiency of selection systems. Efficiency Benefits can be calculated by comparing the difference between the cost of implementing and administering the existing process with the cost of implementing and administering the new process. The difference between the two would be the efficiency benefit. Factors contributing to efficiency benefits may be ‘direct factors’ associated with the selection process, eg advertising, employment agency fees, recruitment event costs, screening and assessment process costs etc or ‘indirect factors’ which are those associated with positions being vacant eg exit interviews, redundancy pay, productivity losses due to vacant positions etc. By assigning £/\$/€ values to these factors, it is possible to calculate the £/\$/€ value associated with the existing selection process compared to the new selection process.



An example case study

The following case study is used to guide readers through a step by step process of calculating ROI.

A leading UK insurance provider is reviewing their selection process for Client Service Managers, who manage call centre staff in their 5 regional call centres. Client Service Managers earn on average £26,000 per year. The organisation needs to recruit around 25 Client Service Managers per year. The existing selection process consists of a CV screen and a biographical interview. The average time to hire for the existing process is 8 weeks. There have been concerns within the organisation that this process has not been as effective as hoped. The HR Director has been asked by the CEO to put together a business case to redesign the selection process for these Client Service Managers. The HR Director is proposing to implement a revised process using more valid selection methods to increase selection accuracy and online sifting technology to increase selection efficiency. The proposed new process involves using an online Situational Judgement Test to screen applicants rather than the manual CV screen and a structured Competency Based Interview rather than the biographical interview. The increase in the validity of the selection process will increase the quality of the candidates selected. The HR Director has estimated that this improvement will translate into a 10% increase in performance. The new process will also be quicker to administer with the average time to hire being 4 weeks. The cost of implementing these changes to the selection process is £100,000.

The £/\$/€ values assigned to the existing and proposed selection processes and outputs are detailed below. When calculating these estimates, it is necessary to take into account how many candidates the organisation needs to process to get to the number who are actually hired. For example, an organisation may need to process 500 applications and conduct 100 interviews to find 25 suitable candidates to hire. The £/\$/€ values involved in processing these 500 applications and 100 interviews should therefore be reflected in the ROI calculations. For the purposes of this example, it has been estimated that the HR personnel time is charged at £25 per hour.

Factors associated with implementing and administering the existing and new processes are detailed overleaf.

Existing Process	Cost
Advertising	£10,000
CV Screening - This task takes 1 HR professional 10 hours for each of the final 25 Candidates selected. This is the time involved in receiving, logging, screening and tracking applications as well as time communicating with Candidates. (10 hours x 25 Final Candidates) x £25	£6,250
Biographical Interview - This task takes 1 HR employee 5 hours for each of the final 25 Candidates selected. This is the time involved in preparing, conducting, assessing and providing Candidate feedback. (5 hours x 25 Final Candidates) x £25	£3,125
Candidate and Assessor Expenses for each of the final 25 Candidates selected	£2,000
Exit interviews for leaving employees - This task takes 1 HR professional 1 hour per employee (1 hour x 25 employees) x £25	£625
Productivity loss – Time to hire is 8 weeks therefore there is an 8 week loss in productivity. The productivity loss is estimated on the basis of the weekly salary, (£26,000/52 weeks) = £500 per week. (25 vacant positions x £500 revenue loss) x 8 weeks	£100,000
TOTAL	£122,000
New process	
Advertising	£10,000
Automated online screening tool - This task takes 1 HR professional 0.5 hours for each of the final 25 Candidates selected. Using this system, all Candidate applications are automatically received, logged, screened, tracked and selection decisions communicated to Candidates. (0.5 hours x 25 Candidates) x £25	£312.50
Competency Based Interview This task takes 1 HR employee 3 hours for each of the final 25 Candidates selected. This is the time involved in preparing, conducting, assessing and providing Candidate feedback. (3 hours x 25 Candidates) x £25	£1,875
Candidate and Assessor Expenses for each of the final 25 Candidates selected	£2,000
Exit interviews for leaving employees - This task takes 1 HR professional 1 hour per employee (1 hour x 25 employees) x £25	£625
Productivity loss – Time to hire is 4 weeks therefore there is a 4 week loss in productivity. The productivity loss is estimated on the basis of the weekly salary, (£26,000/52 weeks) = £500 per week. (25 vacant positions x £500 revenue loss) x 4 weeks	£50,000
TOTAL	£64,812.50

Calculating productivity benefit - The new process has increased validity and is therefore able to select employees who are 10% better than previous employees. It is assumed that productivity can be reflected in terms of an employee's average salary. The productivity benefit can be calculated as follows;

$$\begin{aligned} &(\text{Average Salary} \times 10\%) \times \text{Number of new employees} = \text{Productivity Benefit} \\ &(\pounds 26,000.00 \times 10\%) \times 25 \text{ new employees} = \pounds 65,000 \end{aligned}$$

Due to the increases in the validity of the selection process, the employees recruited using the new selection process will on average produce £2,600 more value per year for the organisation, amounting to £65,000 for all 25 new recruits.

Calculating efficiency benefits - The new process is more efficient. More Candidates can be processed by fewer resources due to the use of the online sifting tool. Additionally, because the process is quicker, time to hire is reduced and therefore the productivity losses are diminished. The efficiency benefit can be calculated as follows;

$$\begin{aligned} &\text{Costs associated with old process} - \text{Costs associated with new process} = \text{Efficiency Benefit} \\ &\pounds 122,000 - \pounds 64,812.50 = \pounds 57,187.50 \end{aligned}$$

The cost of recruiting 25 new recruits using the new selection process costs the organisation £57,187.50 less than undertaking the same task using the old selection process. This means that the average cost of recruiting one Client Service Manager is £2,592.50 per recruit using the new process, compared to £4,880 per recruit using the old process.

Calculating ROI

$$\frac{(\text{Productivity Benefits} + \text{Efficiency Benefits}) - \text{Intervention Cost}}{\text{Intervention Cost}} \times 100 = \% \text{ ROI}$$

$$\frac{(\pounds 65,000.00 + \pounds 57,187.50) - \pounds 100,000.00}{\pounds 100,000.00} \times 100 = \text{22\% increase in ROI}$$

The above calculations demonstrate that the proposed new selection process will increase the % ROI by 22%, demonstrating that ROI can be improved through efficiency and/or productivity gains. This shows how relatively simple changes to the selection process can result in significant benefits to the business.

Optimising your own selection processes

The research outlined in this article demonstrates the significant risks associated with inadequate investment in selection. To protect against this, organisations can attempt to optimise their selection process in two main ways; by improving selection accuracy and/or improving selection efficiency. The following section discusses each of these in turn and demonstrates how improving the accuracy and/or efficiency of selection process can deliver ROI.

Improving selection accuracy

One of the most significant ways of optimising your selection process is to ensure that you have tools in place which enable you to accurately select the best qualified person for the job, regardless of other factors.

Tools which can accurately predict future job performance are said to have high '**predictive validity**'. Predictive validity is usually expressed as a validity coefficient, which is a value from 0-1 whereby 0 represents chance prediction and 1 represents perfect prediction. The diagram below indicates the validity coefficients for a range of typical selection measures. Despite decades of research into the effectiveness of various selection processes, many organisations continue to rely on ineffective selection methods. For example, many still rely on unstructured interviews which have limited predictive validity and are therefore not likely to accurately predict whether or not someone will be effective within the role. Selection methods which have poor validity will be unable to accurately and fairly discriminate between good and poor candidates. Therefore, the selection decisions made will be flawed and may result in organisations recruiting the wrong people, the costs of which have been highlighted.

Selection Tool	Validity Coefficient
	1.00 ← Perfect Prediction
Work Sample Tests	0.54
Cognitive Ability Tests	0.51
Structured Interviews	0.51
Personality Tests	0.40
Assessment Centres	0.37
Bio Data	0.35
References	0.26
Unstructured Interviews	0.20
Graphology	0.02
	0.00 ← Chance Prediction

Schmidt and Hunter (1998)

By using more valid selection methods organisations will benefit from;

- **Increased quality of hires:** If the selection system is more rigorous and valid, the organisation will select better quality employees who are more productive and add more value to the organisation.
- **Reduced Turnover:** By reducing turnover through more rigorous and valid selection methods, the organisation conducts fewer exit interviews and experience fewer days of lost productivity.

Improving selection efficiency

As demonstrated above, improvements in the validity of a selection process can clearly be advantageous in helping to select the most suitable candidate(s) for the role. Organisations can also optimise their selection processes by making systems more efficient so that the same output can be achieved with less input, ultimately saving time and costs. The growing number of electronic and online selection tools available in the marketplace means that organisations can now process more applicants through their selection processes with fewer resources, creating efficiency savings. While making processes more efficient, organisations should be careful to consider the impact that this could have on the accuracy and validity of the selection process.



Selection processes can therefore be optimised by designing systems that are better at predicting future job **performance**, resulting in more qualified employees and increased productivity. Additionally, selection systems can be optimised by increasing the **efficiency** of the processes to process more applicants with fewer resources. These benefits contribute to ensuring that investments made in optimising selection processes can and do result in an increased ROI.

Conclusion

There clearly appears to be a strong argument for organisations to invest in proper selection processes to ensure that they are able to secure the best talent and that they do so in a way that is fair and therefore not open to legal challenges. Despite this strong argument, when making decisions about investing in selection, many organisations still focus only on the visible up-front costs of implementing the selection process and totally forget about the hidden/less visible costs associated with getting it wrong! In putting together a business case for investing in selection, it is advised that individuals consider the financial implications associated with selection decisions. All too often organisations fail to properly articulate the benefits that new selection processes may bring, choosing instead to focus on the more tangible implementation costs. It is hoped that this article gives readers the tools to enable them to calculate the ROI of their own proposed selection improvements. Organisations that analyse and improve their selection systems can quickly realise a high positive ROI. In a competitive world, organisations who choose not to invest in developing proper selection processes are unnecessarily creating a competitive disadvantage for themselves (Schmidt, 1993). By adopting more valid hiring procedures, they could turn this competitive disadvantage into a competitive advantage, demonstrating a clear ROI.

For more information about updating your selection processes, please visit www.adc.uk.com or email info@adc.uk.com

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About A&DC

Founded in 1988 by Nigel Povah, author of 'Assessment and Development Centres', A&DC is one of the leading experts in the Assessment and Development field. We combine our expertise in business psychology and behavioural change to create and deliver end-to-end solutions to HR issues across the talent management spectrum.

We work in partnership with our clients to unlock human potential, using best of breed processes to enable them to select, promote and develop talented people who can contribute effectively to business growth and cultural enhancement. Always, we apply recognised best practice, putting our clients in a position where they can minimise risk and optimise return on investment in these critical areas of people strategy.

Based in Surrey, our Consultants operate across the UK. Through our international partners, we ensure that our comprehensive portfolio of products and services is delivered through specialists with a high degree of local cultural and business insight.

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