

Personnel today

Trade secrets: Psychometric testing

22 May 2007 08:00 This article first appeared in Personnel Today magazine. [Subscribe online](#) and save 20%.

Is psychometric testing just a nice-to-have optional extra, or can it be a real business driver?

Return on investment analyses (such as the work carried out by the [performance assessment specialist Pan](#) on large-scale testing exercises) show that good psychometric tests, particularly delivered online, can cut recruitment costs by 30% to 40%, and reduce the time a new recruit takes to become fully effective. In other words, testing offers hard, bottom-line organisational value.

Contemporary business testing

About 70% of UK companies with more than 50 employees use psychometric tests, according to the annual recruitment and retention survey by the [Chartered Institute of Personnel and Development](#).

Test use is growing outside its European and North American heartland: major Chinese banks use tests to employ senior managers, and Indian call centres use them to reduce staff turnover. This suggests that worldwide spend on tests is well above the last reliable estimate of between £1bn and £1.5bn.

As the international economy grows, people become an increasingly important and costly organisational resource. People - not systems - deliver high service standards, drive up customer satisfaction, and create successful relationships with suppliers and partners. Tests are diagnostics for people in the same way that other technologies run diagnostics on delivery and production systems.

Where are tests used?

Psychometric tests are used in all aspects of HR work, although they are not a 'magic bullet'. They are part of a menu of information sources, such as structured interviews, CVs, supervisor ratings and appraisal results which, combined in the right way, provide insights into how people work. They can improve the accuracy of processes that predict a person's future behaviour, success in a job or learning a new skill.

Psychometric testing's scientific approach to prediction is one of its main contributions to business planning. Tests also create shared understanding and language to discuss HR issues in a team or organisation.

Some of the most common uses are:

Recruitment: Recruiting the wrong person for a key job may be one of the most expensive decisions any organisation makes. On the other hand, recruiting the right person can transform your organisation for the better.

It has been estimated that it costs organisations the equivalent of the whole of the first year's costs (salary and any other benefits) to put right a wrong recruitment decision. Research reported in a number of test manuals shows that using good assessments professionally as part of the recruitment process dramatically increases the number of right decisions you make.

Typically, firms create job and people specifications, and use personality and ability tests on shortlists or, increasingly, to create candidate shortlists in the first place.

Individual development: Developing existing employees is less risky and less expensive than recruiting new ones. Assessments help focus any training or development programme, finding out levels of knowledge, preferred ways of learning or motivations for learning. They can also create levels of self-insight into respective strengths and weaknesses and set goals as part of effective development plans.

Where interpersonal issues are key to underperformance, test results provide a platform for discussion: they take the heat out of addressing tricky personnel issues.

Team and organisational development: Tests can be used to gauge attitudes, look at the spread of characteristics and skills in a workforce and create the best organisational structure to deliver objectives. International research constantly replicates the finding that diverse teams always outperform a team made up of similar people. Tests identify individual differences - the diversity that fuels a high-performing group of people.

Quite apart from the hard business benefits mentioned above, there are some more subtle, less well-known benefits of using tests. Marketing and branding is one: using good tests makes you look good. It shows you are serious about people issues, and it has even been shown to have a positive effect on how unsuccessful candidates view you.

Education: Psychology - understanding yourself and other people - is a key knowledge area for managers and executives. Learning about tests increases your knowledge while at the same time providing you with tools to apply it in your organisation.

Challenges and future developments

One of the basic principles of psychometrics is freedom from bias. The true situation is the reverse of what many people believe: techniques such as unstructured interviewing are shot through with bias and subjectivity, while good psychometric tests, used professionally, are designed to correct for bias and leave a statistical audit trail, which can be used to constantly improve HR processes. This is crucial at a time of equal opportunities legislation.

The current research and development agenda focuses on creating instruments that are sensitive to cultural differences, but which can be used throughout multinational organisations.

Work on advanced statistical techniques and developments in information technology will also improve tests' sensitivity and predictive robustness.

You can soon expect to see most 'paper and pencil' tests replaced by powerful online systems offering multi-language, but equivalent, assessments producing very subtle analyses automatically. This is exactly what the Psychometrics Centre www.thepsychometricscentre.org.uk is working towards in its new venture in Dubai and in other planned ventures outside the UK.

The centre is also seeking to address some of the other issues facing testing, such as: linking academic research to practical solutions training measurement experts who are going to create the next generation of tests and ensuring that quality of tests is matched by quality of user training.

To test or not to test

First-time users sometimes get carried away by tests: they want to test everyone about everything. Like any technology, testing isn't about that. It's more a question of using the appropriate test in the right way for each task. The first thing to do is to decide why you're testing in the first place - and if you can't decide, don't use tests.

But good tests used well are no longer seen as a specialist side issue they are a core business resource driving performance.

Using an integrity test for managers

Integrity tests are a relatively new and controversial form of work assessment. If you think that integrity tests are only for identifying thieves and delinquents among your staff, think again - they are also effective as a staff selection and development tool.

The Psychometrics Centre at the University of Cambridge was recently commissioned to assess managers in a UK organisation, which had never used any sort of testing, to identify senior management potential among staff.

Taking a triangulated approach of assessing managers with the Giotto system - an integrity measure - and a new assessment of personal styles called 'Wave', the results were corroborated with bespoke semi-structured interviews.

The exercise set out to answer the following questions:

- What personal characteristics do these managers have and how do they typically behave?
- Is there any evidence that these preferred behaviours make them effective in their roles?
- How do these profiles map against the organisation's strategic vision?
- Are any of these managers suitable for promotion to very senior level?

The centre based the choice of instruments and the overall assessment model after consulting with relevant experts in the organisation, to elicit information not only about current behaviour, but also what is needed for the future.

The assessment phase was revealing. While the personal styles assessments revealed that most managers had weaknesses in terms of communication and supporting others, the centre was able to point to the underlying reasons using the Giotto profiles.

There was a lack of trust, hence there was a reluctance to communicate. Everyone was relying solely on their own judgement. This, in turn, resulted in a marked reluctance to delegate work. As the profiles showed, this could have a negative impact on people's work quality.

The centre had excellent feedback for the client and, as a result of its assessment, the organisation is now reviewing its HR processes. It plans to establish a clearer internal capability model and recruitment policies to ensure strategic succession planning and talent management.

Our expert

Professor John Rust is director of the Psychometrics Centre at Cambridge Assessment a member of the Faculty of Social and Political Sciences at the University of Cambridge, and visiting professor at City University, London. His textbook *Modern Psychometrics* is a standard text. He is also the author of a number of widely used assessments, including Giotto.