



## Squaring the circle

This year a record breaking 340 000 students will start full-time courses at UK Universities, leading to a surge of graduates onto the jobs market in a few years time. Even just two years ago, 250 000 graduated with a first degree, a figure that is **ten times** as many as the early 1970's. The Higher Education 'business' really is going through a period of massive expansion. However, while the figures may be large there are still underlying weaknesses in the system - some of the more obvious being in the engineering specialities, and applied commercial disciplines. So what is an employer to do if large numbers of such graduates are required?

### A case in point

As business psychologists we were recently retained by one of the UKs largest construction and engineering groups to find, assess and select up to 40 graduates. The only catch being that the graduates were to be drawn from civil, mechanical and electrical engineering and quantity surveying. The client, a firm with an annual turnover of £800 million and a pay roll running to some 6500 employees, had had mixed success in previous years. Indeed in the Year 2000 they had only taken 10 recruits onto their graduate trainee scheme.

After a detailed period of consultation we recommended an approach that coupled a robust assessment and selection system to an active process of **customer relationship management** (CRM) - the customer in this case being the potential recruit.

### Analysing roles

At the core of the selection process were a series of detailed job profiles conducted with managers throughout the organisation. Particular care was given to the identification of core graduate competencies and the **cultural factors** that seemed to help or hinder staff retention. The final list of competencies, excluding those of a technical nature, included:

- Leadership
- Team working
  
- Communication
- Numeracy
  
- Problem solving
- Self-organisation

- Self-development
- Commitment
  
- Flexibility
- Resilience

Nothing particularly surprising in the list but it is worth pointing out that self-development and commitment are particularly important when graduates are recruited onto professional training schemes. Enlightened employers recognise that these two competencies equate to **willingness to learn**: a key success factor.

As regards culture, employees of the business in question usually operate in small teams in difficult and dangerous working conditions, frequently during the night or over the weekend. This breeds a characteristically **male-orientated environment**, in many ways similar to that still found in the Armed Forces; further complicated by the episodic or project-based nature of the work. All this goes to make for a cultural that is difficult to penetrate, especially by those who are not familiar with the enduring traditions of the construction and engineering industries.

We were also conscious that despite the best preparatory work we were unlikely to attract enough quantity surveyors as there is a shortage of places on courses in the UK, and those that do graduate often make straight for jobs with consultancies. As a result we were particularly interested in exploring those competencies that were genuinely **transferable** between different numerate disciplines.

### **Under the spotlight**

Before moving on to the mechanics of CRM, the job analyses were used to generate a pro-forma for first round interviews and to inform the way in which subsequent assessment days were designed.

In fact the assessment days, or mini-assessment centres, were based around two carefully structured interviews and three psychometric measures. The Rapid Personality Questionnaire (RPQ) was used to generate a brief personality profile, and a numerical critical reasoning test from SHL's management and graduate item bank (MGIB), to check numerical ability. We also used one of OPP's ABLE series tests to look at aptitude in a broader context, in particular at a candidate's ability to reason with, and integrate different sorts of information.

All candidates for engineering positions were also screened with the Ishihara **colour-blindness** test. Being colour-blind is not necessarily a bar to doing many of the jobs required of an engineer, but it does have profound implications for safety.

Naturally the assessment days included presentations from the HR department, talks by recent graduates, and the usual paraphernalia associated with the early stages of 'employee' induction.

## Finding the 'touch points'

Assessment processes usually run smoothly, as long as sufficient work has been done in identifying and describing, in behavioural terms, the competencies and other attributes required by candidates. From this point the selection and use of the appropriate assessment tools, be they interviews or psychometric tests, is a matter of correct administration and interpretation. What is difficult is getting enough of the 'right' sort of candidates to assess in the first place!

The approach taken to recruit candidates incorporated both traditional and contemporary methods. Adverts were placed in a range of media, including websites; and this was supplemented by e-mail campaigns direct to prospective recruits via their universities. Elements of **viral marketing** were also employed: viral marketing is a technical term for getting people to recommend their friends and to pass on information using their own personal network of contacts.

In a marketing and psychological sense, all these methods represent potential **touch points**, or ways of reaching and communicating with the target audience. The trick is to manage each point and to convert the communication into the desired form of action, in this case the submission of a CV or application form. Incidentally a mechanism was put in place so that applications could be processed from whatever source, be they paper based or via the Internet.

The thing about touch points, whether they be adverts, posters, e-mails, university visits, recruitment fairs, initial interviews or whatever is that they are all opportunities to sell the organisation to graduates and to ensure that applicants know what they are doing. The last point should not be underestimated as it is in the interests of the recruiter to keep all applicants engaged with the process – for reasons both of efficiency and cost. This means talking to them by whatever means and providing a service that they feel is personal to them.

By using a **multi-layered** approach to the recruitment phase of the project, incorporating both direct (eg: e-mail's to named individuals) and indirect (eg: adverts) methods, the number of applications received topped 500. The level of communication was such that it was also possible to cope with students seeking placements, rather than full-time jobs; and to identify patterns of competencies that matched the requirements for the commercial positions available.

To back track a little, the large number of carefully targeted applicants allowed us to select most of the engineers required by our client, albeit that civil engineering is an area in which demand will outstrip supply for some time to come. This solved the first part of the assignment. But moving back to the commercial issue, we were able to focus on numerate disciplines plus a number of other less obvious degree subjects. In many ways this is where it was possible to 'square the circle' because we were able to draw from the sciences, business, economics and mathematics, plus interesting enough, subjects such as design.

**Why design?** Graduates from design and other courses that span the Arts-Technology divide are used to organising quite complex assignments and have often picked up many of the project management skills that are important in commercial activities such as quantity surveying. They also tend to be skilled at preparing and

presenting pieces of work. Assuming that the other requirements are met it is then just a question of grafting on the necessary engineering and construction knowledge – a matter that can be dealt with through an appropriate conversion course. From the individuals perspective this leads to a highly desirable professional qualification that they often wouldn't have achieved if other options had been pursued.

## **Conclusions**

The exercise described highlights the importance of a good assessment methodology and a broadly based, and 'customer focussed', recruitment strategy.

The **candidate as customer** is an important concept for employers and candidates alike. Employers need to realise that an on-going relationship with a pool of potential employees which keeps them properly informed about the progress of their application, and for example also provides guidance on how to prepare for interviews, actually starts the process of **bonding**. This is an important factor in a market where employment packages, and often the work itself, varies little between competing employers.

As for candidates, they benefit from being kept fully informed and from learning what they have to offer employers. Indeed, in shortage areas, students may learn for the first time that they have skills that are in demand. Advice and guidance provided on route also makes them much better employment prospects and increases their chances of securing a good training position.

*And our client?* We eventually ran eight one-day assessment centres, with an average of 8 candidates attending each centre. By the end of the process offers had been accepted by 32 graduates. This represented a three-fold increase in acceptances over the previous year, against a background of fierce competition from other employers.

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