# The Future ?

How often do we hear the cry “There’s a shortage of Engineers”? Unfortunately, what many people ignore is that several definitions are required to properly understand this statement. For example, is the alleged shortage in the public, the private sector, or both? Is it supposed to be in all Engineering disciplines or just one. Finally, who is it that is claiming there is a shortage of Engineers ? Is it the employers or the employed ? Looking around at the mature Engineers I know personally, who cannot get a job in spite of all their experience and qualifications, I can confidently say that it is not the employees. Therefore it must be the employers.

Human Resource departments probably think there is a shortage if fewer than ten people apply for a given post. I remember an article in a technical magazine bemoaning the fact that too few people were entering the Rubber and Plastics Industry, and, try as he might, the author could not understand why this should be. In the same magazine, another article decried the poaching that was going on in the same industry to attract experienced staff. Indeed, horror of horrors, there were parts of the country where salaries were having to rise to either retain, or recruit, staff. This was viewed as a heinous crime. Unbelievably, the publishers of the magazine appeared to be incapable of linking the two articles as cause and effect.

At this point I have to hold up my hand and say that it would be unwise of me to speak of anything other than manufacturing in private industry, because that is the only subject of which I have had any experience. Therefore it is in this particular vein that I shall continue and leave it up to you to decide whether what I have to say is applicable in your own case

Certainly in Private Industry employers think it is good business practice (i.e. cheaper) to employ students with all the latest technical gizmos and software at their fingertips, rather than retrain experienced Engineers. However right or wrong this approach may be, I know from personal experience that it does happen. Moreover once Engineers have specialised in a particular discipline, recruiting agents who receive their CVs tend to pigeonhole them in the section reserved for that branch of engineering, and they rarely get out.

Another problem in recruitment lies in the geographical location of the work. For those of us who are married, it is more common than not for both partners to need to work to support their common objectives. In this case, if one partner wants to move to the other end of the country in order to advance their career or, in the case of redundancy, even to maintain an income, their partner will also need to find work in the same area. At the risk of being accused of sexism, it was simpler in the days when the husband was the main breadwinner. He would go where he could earn the most money and the family would follow. It is far more complicated now and is made worse if the wife is an Engineer. The chances of two Engineers simultaneously finding jobs in the same town or city must be very slim indeed. Yet again this is a case of there not being an actual shortage of Engineers, but, for financial reasons, they are not all available at the same time.

Finally, if it can be shown that there is a genuine shortage in a particular sector, what is to be done about it ? The obvious solution is to increase the salaries, but the effect of this can only last for a short time. Eventually so many people will join that supply will exceed demand and salary levels will fall, according to ‘best’ business practice.

A revolutionary solution to this problem would be for us all to work for the same organisation, and be hired out by it to individual companies as and when we are needed. That way, redundancy would be avoided and any necessary retraining can be done between jobs while the individual is still on the payroll. The benefits would be to make Engineering a much safer profession than it is at the moment and therefore more attractive to the next generation. In addition, the overall balance of supply and demand could be kept in our favour, thus ensuring higher salaries.

All Engineers employed by this hypothetical organisation would automatically be licensed. Therefore its existence would benefit the general public because only licensed Engineers would be able to work on safety critical applications.

Whether this organisation is a private company or the Government, is immaterial. After all, nearly every GP works for the Government and that has done their negotiating power, and job security, no harm whatsoever. Unlike the Medical Profession, it is the principle of divide and rule that governs Engineering, and will continue to do so until we do something about it.

Whatever the benefits of the solution I have outlined, I am, if nothing else, a realist, and appreciate that it is unlikely to happen. However something needs to be done to improve the Engineering Profession not only for the benefit of the individuals concerned, but also the country as a whole. One of my aims is to have it analysed and compared with other professions to determine what we need to change to make it a well rewarded career for the brighter students to compete with each other to join.

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