

Chapter 11 Managing people in software environments

Further exercise pointers

1. *An organization has detected low job satisfaction in the following departments. How could these jobs be redesigned to give more job satisfaction?*

In a tutorial discussion, this could initiate a conversation about the typical structuring of the ICT function in an organization, and the work and data flows between the different groups within the ICT function. Job enlargement would generally involve bringing together activities that are close to one another along these flows. As is usual these pointers are speculative ones suggesting certain lines of discussion.

- *the system testing group*

The major input to the creation of test cases is having detailed requirements. One opportunity for job enlargement could be to use system testers as requirements analysts working under the overall guidance of a senior business analyst. The testers' need to produce detailed test cases with expected results should motivate them in the collection of detailed and comprehensive user requirements.

The positioning of system testing towards the end of the system development lifecycle and the way that the system testing group can act effectively as representatives of the user community suggests that extending the role of the system testing group (perhaps under a new name) to cover other user facing activities such as training and data transfer could be considered.

System testing could also be combined with some of the responsibilities usually belonging to a project support office. For example, responsibility for the administration of configuration and change management would mean that the group was always aware of changes to the requirements and thus ensure that test cases reflect these changes.

- *the computer applications help desk*

When users contact the help desk, they need to identify themselves. It is helpful for the helpdesk if they can interrogate records of the ICT equipment and the software licenses that each user can access. A natural extension of the responsibilities of the help desk could therefore be the maintenance of the assets register of ICT equipment and control of the site licenses for software. Because the help desk role is user-facing, their role could be enlarged to activities such as training and the maintenance of user guides.

- *Computer batch input*

It is envisaged that this involves processing input data that is not submitted via work station screens, for example OCR documents. This suggests a batch orientated main frame operation. The batch input group could also be responsible for other aspects of batch processing such as the scheduling of computer runs and dealing with output. For the particular applications for which they are responsible, they could have a general liaison role,

dealing with general queries from users, and perhaps acting as an initial collection point for things such as change requests, requests for user privileges and so on.

2. *In Exercise 11.1, a job specification was requested.*

(a) *Write a job holder profile of the sort of person who would be able to fulfil the specification in terms of qualities, qualifications, previous education and experience.*

(b) *For each element in the job holder profile that you have produced in (a) above describe ways of finding out whether an applicant has met the requirement.*

A discussion point would be the extent to which the employer would be willing to provide training, which could be formal, or practical on-the-job, training) to make up any shortfalls in the experience of an applicant. We could quite realistically think in terms of taking on an experienced software developer who wishes to develop into the fuller role of an analyst-programmer. The job profile might be along the lines:

Education: degree level or equivalent (The mention of a degree indicates a general expectation, the use of the phrase 'or equivalent' allows a large amount of flexibility.)

Previous experience

The successful candidate would be expected to have worked as a programmer for at least 2 years and to demonstrate practical experience of:

- The preparation of functional module specifications
- The drafting of module structure diagrams
- Coding and amending units of software
- Unit testing

This could be verified by:

- Testing the applicant's knowledge of these activities during an interview
- Explicit questions to those supplying references

Other evaluation methods could be discussed such as aptitude tests, and requesting examples of the applicant's work.

The candidate would be expected to have significant experience of the maintenance of software (We are assuming here that maintenance work often makes developers more aware of the user viewpoint and introduces them to a broader set of skills as some maintenance work consists of 'mini-projects' that go through all the waterfall phrases, but in an abbreviated form).

Verification would be as above, but with specific questions probing these topics

It would also be desirable if the candidate had been involved, at least in a supporting role, in requirements gathering, system specification and systems testing. As a minimum, the applicant should be able to demonstrate awareness of the purpose and general nature of these activities.

3. *Section 11.8 focuses on the responsibilities of management in relation to staff stress. Evaluate an alternative view that individual staff members need themselves to be responsible for reducing their own stress levels, perhaps through changes in personal working practices.*

The idea is to provoke some discussion. Here are some suggestions for getting things going:

- The argument for personal responsibility could be based on the suggestion that it is very difficult for employers to do a lot about reducing stress anyway, arguing for example:
 - Some jobs by their nature are stressful, for example, accident and emergency medical care, and employees have to accept that when accepting the job
 - The primary concern of the business is to the customer
 - Better to have a stressful job ('in times like these') than no job at all
- Stress is often to some extent self-generated
 - Stress is often caused by a mixture of work related pressures and domestic and other pressures in one's personal life
 - 'Work pressures' are often self-generated, perhaps by personal competitiveness, or to conceal feelings of personal inadequacy
- On the other hand, if staff were to pursue individual stress reduction strategies, could this cause problems? For example:
 - Personal stress reduction could involve not meeting the expectations of employers and/or customers
 - A personal stress reduction strategy could involve delegating (or 'passing the buck') to colleagues, so their stress levels are increased
 - Is 'laziness' another term for personal stress reduction strategy?

4. *Job enlargement sounds like a good thing. Explore what the possible disadvantages of job enlargement might be for both employers and staff.*

One major challenge of job enlargement is that job-holders in the new organizational structure will need to be 'up-skilled' to deal with a wider range of tasks. They might therefore expect to have higher earnings to match. Managements are usually reluctant to concede this. There is also the point that while some staff may rise to the challenge of job enlargement, others might not want the additional stress, particularly if this is no significant financial reward.