# Analysing roles, competencies and skills

Role analysis is a fundamental HR process. It provides the information needed to produce role profiles and for use in recruitment, learning and development, performance management and job evaluation. For reasons given below, the terms 'role analysis' and 'role profile' are rapidly replacing the terms 'job analysis' and 'job description'. However, role analysis uses basically the same techniques as job analysis and many features of role profiles are found in more traditional job descriptions. Job analysis is also still used to provide the data for job evaluation, as explained in Chapter 44.

In this chapter, role analysis is covered first and the chapter continues with descriptions of the associated techniques of competency and skills analysis.

## **ROLE ANALYSIS**

# Role analysis defined

Role analysis is the process of finding out what people are expected to achieve when carrying out their work and the competencies and skills they need to meet these expectations.

# Role profiles

The result of role analysis is a role profile, which defines the outcomes role holders are expected to deliver in terms of key result areas or accountabilities. It also lists the competencies required to perform effectively in the role – what role holders need to know and be able to do. Profiles can be individual or generic (covering similar roles).

# Roles and jobs

If it is used in its strictest sense, the term 'role' refers to the part people play in their work – the emphasis is on their behaviour. For example, a role profile may stress the need for flexibility. In this sense, a role can be distinguished from a job, which consists of a group of prescribed tasks/activities to be carried out or duties to be performed.

Job analysis defines those tasks or duties in order to produce a job description. This is usually prescriptive and inflexible. It spells out exactly what job holders are required to do. It gives people the opportunity to say: 'It's not in my job description', meaning that they only feel they have to do the tasks listed there.

Increasingly, the practice is to refer to roles, role analysis and role profiles rather than to jobs, job analysis and job descriptions. The latter are no longer in favour because they tend to be prescriptive, restrict flexibility and do not focus on outcomes or the competencies needed to achieve them. Role profiles are preferred because they are concerned with performance, results, and knowledge and skill requirements and are therefore in accord with the present-day emphasis on high-performance working, outcomes and competencies.

# Purpose of role analysis

Role analysis aims to produce the following information about a role for use in recruitment, performance management and learning and development evaluation:

- Overall purpose why the role exists and, in essence, what the role holder is expected to contribute.
- *Organization* to whom the role holder reports and who reports to the role holder.
- Key result areas or accountabilities what the role holder is required to achieve in each of the main elements of the role.
- Competency requirements the specific technical competencies attached to the role; what the role holder is expected to know and to be able to do.

For job evaluation purposes, the role will also be analysed in terms of the factors used in the job evaluation scheme.

Role analysis may be carried out by HR or other trained people acting as role analysts. But line managers can also carry out role analysis in conjunction with individual members of their teams as an important part of their performance management responsibilities (see Chapter 33).

# Approach to role analysis by specialized role analysts

The essence of role analysis is the application of systematic methods to the collection of the information required to produce a role profile under the headings set out above. The steps required to collect this information are:

- Obtain documents such as the organization structure, existing job descriptions (treat these with caution, they are likely to be out of date), and procedure or training manuals that give information about the job.
- Ask managers for fundamental information concerning the overall purpose of the role, the key result areas and the technical competencies required.
- 3. Ask the role holders similar questions about their roles.

The methods that can be used are interviews, questionnaires or observation.

#### **Interviews**

To obtain the full flavour of a role, it is best to interview role holders and check the findings with their managers or team leaders. The aim of the interview is to obtain all the relevant facts about the role to provide the information required for a role profile. It is helpful to use a checklist when conducting the interview. Elaborate checklists are not necessary; they only confuse people. The basic questions to be answered are:

- 1. What is the title of your role?
- 2. To whom are you responsible?
- Who is responsible to you? (An organization chart is helpful.)
- What is the main purpose of your role, ie in overall terms, what are you expected to do?
- What are the key activities you have to carry out in your role? Try to group them under no more than 10 headings.
- What are the results you are expected to achieve in each of those key activities?
- 7. What are you expected to know to be able to carry out your role?
- What skills should you have to carry out your role?

The answers to these questions may need to be sorted out – they can often result in a mass of jumbled information that has to be analysed so that the various activities can be distinguished and refined to seven or eight key areas.

The advantages of the interviewing method are that it is flexible, can provide indepth information and is easy to organize and prepare. It is therefore the most common approach. But interviewing can be time-consuming, which is why in large role analysis exercises, questionnaires as described below may be used to provide advance information about the job. This speeds up the interviewing process or even replaces the interview altogether, although this means that much of the 'flavour' of the job – ie what it is really like – may be lost.

## Questionnaire

Questionnaires about their roles can be completed by role holders and approved by the role holder's manager or team leader. They are helpful when a large number of roles have to be covered. They can also save interviewing time by recording purely factual information and by enabling the analyst to structure questions in advance to cover areas that need to be explored in greater depth. The simpler the questionnaire the better. It need only cover the eight questions listed above.

The advantage of questionnaires is that they can produce information quickly and cheaply for a large number of jobs. But a substantial sample is needed, and the construction of a questionnaire is a skilled job that should only be carried out on the basis of some preliminary fieldwork. It is highly advisable to pilot test questionnaires before launching into a full-scale exercise. The accuracy of the results also depends on the willingness and ability of job holders to complete questionnaires. Many people find it difficult to express themselves in writing about their work.

#### Observation

Observation means studying role holders at work, noting what they do, how they do it, and how much time it takes. This method is most appropriate for routine administrative or manual roles, but it is seldom used because of the time it takes.

# Role analysis as part of a performance management process

As explained in more detail in Chapter 33, the basis of performance planning and review processes is provided by a role profile. To develop a role profile it is necessary for the line manager and the individual to get together and agree the key result areas and competencies. The questions are similar to those that would be put by a role analyst, but for line managers can be limited to the following:

- What do you think are the most important things you have to do?
- What do you believe you are expected to achieve in each of these areas?
- How will you or anyone else know whether or not you have achieved them?
- What do you have to know and be able to do to perform effectively in these areas?
- What knowledge and skills in terms of qualifications, technical and procedural knowledge, problem-solving, planning and communication skills, etc do role holders need to carry out the role effectively?

This process requires some skill, which needs to be developed by training followed by practice. It is an area in which HR specialists can usefully coach and follow-up on a one-to-one basis after an initial training session.

# Role profile content

Role profiles are set out under the following headings:

- Role title.
- Department.
- Responsible to.
- Responsible to role holder.
- Purpose of the role defined in one reasonably succinct sentence that defines why the role exists in terms of the overall contribution the role holder makes.
- Key result areas if at all possible these should be limited to seven or eight, certainly not more than 10. Each key result area should be defined in a single sentence beginning with an active verb (eg, identify, develop, support), which provides a positive indication of what has to be done and eliminates unnecessary wording. Describe the object of the verb (what is done) as succinctly as possible, for example: test new systems, post cash to the nominal and sales ledgers, schedule production, ensure that management accounts are produced, prepare marketing plans. State briefly the purpose of the activity in terms of outputs or standards to be achieved, for example: test new systems to ensure they meet agreed systems specifications, post cash to the nominal and sales ledgers in order to provide up-to-date and accurate financial information, schedule production in order to meet output and delivery targets, ensure that management accounts are produced that provide the required level of information to management and individual managers on financial performance against budget and on any variances, prepare marketing plans that support the achievement of the marketing strategies of the enterprise, are realistic, and provide clear guidance on the actions to be taken by the development, production, marketing and sales departments.

- Need to know the knowledge required overall or in specific key result areas of the business and its competitors and customers, techniques, processes, procedures or products.
- *Need to be able to do* the skills required in each area of activity.
- Expected behaviour the behaviours particularly expected of the role holder (behavioural competencies), which may be extracted from the organization's competency framework.

An example of a role profile is given in Figure 13.1.

Role title: Database administrator

Department: Information systems

Purpose of role: Responsible for the development and support of databases and their underlying environment.

#### Key result areas

- Identify database requirements for all projects that require data management in order to meet the needs of internal customers.
- > Develop project plans collaboratively with colleagues to deliver against their database needs.
- Support underlying database infrastructure.
- > Liaise with system and software providers to obtain product information and support.
- > Manage project resources (people and equipment) within predefined budget and criteria, as agreed with line manager and originating department.
- > Allocate work to and supervise contractors on day-to-day basis.
- Ensure security of the underlying database infrastructure through adherence to established protocols and to develop additional security protocols where needed.

#### Need to know

- Oracle database administration.
- > Operation of Designer 2000 and oracle forms SQL/PLSQL, Unix administration, shell programming.

#### Able to:

- Analyse and choose between options where the solution is not always obvious.
- > Develop project plans and organize own workload on a timescale of 1–2 months.
- > Adapt to rapidly changing needs and priorities without losing sight of overall plans and priorities.
- > Interpret budgets in order to manage resources effectively within them.
- Negotiate with suppliers.
- Keep abreast of technical developments and trends, bring these into day-to-day work when feasible and build them into new project developments.

#### Behavioural competencies

- Aim to get things done well and set and meet challenging goals, create own measures of excellence and constantly seek ways of improving performance.
- > Analyse information from range of sources and develop effective solutions/recommendations.
- Communicate clearly and persuasively, orally or in writing, dealing with technical issues in a non-technical manner.
- > Work participatively on projects with technical and non-technical colleagues.
- > Develop positive relationships with colleagues as the supplier of an internal service.

**Figure 13.1** Example of a role profile

## **COMPETENCY ANALYSIS**

Competency analysis uses behavioural analysis to establish the behavioural dimensions that affect role performance and produce competency frameworks. Functional analysis or a version of it can be used to define technical competencies.

# Analysing behavioural competencies

There are six approaches to behavioural competency analysis. In ascending order of complexity these are:

- 1. expert opinion;
- structured interview;
- workshops;
- critical-incident technique;
- 5. repertory grid analysis;
- job competency assessment.

## **Expert opinion**

The basic, crudest and least satisfactory method is for an 'expert' member of the HR department, possibly in discussion with other 'experts' from the same department, to draw up a list from their own understanding of 'what counts' coupled with an analysis of other published lists, such as those given in Chapter 11.

This is unsatisfactory because the likelihood of the competencies being appropriate, realistic and measurable in the absence of detailed analysis, is fairly remote. The list tends to be bland and, because line managers and job holders have not been involved, unacceptable.

#### Structured interview

This method begins with a list of competencies drawn up by 'experts' and proceeds by subjecting a number of role holders to a structured interview. The interviewer starts by identifying the key result areas of the role and goes on to analyse the behavioural characteristics that distinguish performers at different levels of competence.

The basic question is: What are the positive or negative indicators of behaviour that are conducive or non-conducive to achieving high levels of performance?' These may be analysed under such headings as:

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- personal drive (achievement motivation);
- impact on results;
- analytical power;
- strategic thinking;
- creative thinking (ability to innovate);
- decisiveness;
- commercial judgement;
- team management and leadership;
- interpersonal relationships;
- ability to communicate;
- ability to adapt and cope with change and pressure;
- ability to plan and control projects.

In each area instances will be sought which illustrate effective or less effective behaviour.

One of the problems with this approach is that it relies too much on the ability of the expert to draw out information from interviewees. It is also undesirable to use a deductive approach, which pre-empts the analysis with a prepared list of competency headings. It is far better to do this by means of an inductive approach that starts from specific types of behaviour and then groups them under competence headings. This can be done in a workshop by analysing positive and negative indicators to gain an understanding of the competence dimensions of an occupation or job, as described below.

# Workshops

Workshops bring a group of people together who have 'expert' knowledge or experience of the role – managers and role holders as appropriate – with a facilitator, usually but not necessarily a member of the HR department or an outside consultant.

The members of the workshop begin by getting agreement to the overall purpose of the role and its key result areas. They then develop examples of effective and less effective behaviour for each area, which are recorded on flipcharts. For example, one of the key result areas for a divisional HR director might be human resource planning, defined as: *Prepares forecasts of human resource requirements and plans for the acquisition, retention and effective utilization of employees, which ensure that the company's needs for people are met*.

The positive indicators for this competence area could include:

seeks involvement in business strategy formulation;

- contributes to business planning by taking a strategic view of longer-term human resource issues that are likely to affect business strategy;
- networks with senior management colleagues to understand and respond to the human resource planning issues they raise;
- suggests practical ways to improve the use of human resources, for example the introduction of annual hours.

### Negative indicators could include:

- takes a narrow view of HR planning does not seem to be interested in or understand the wider business context;
- lacks the determination to overcome problems and deliver forecasts;
- fails to anticipate skills shortages, for example unable to meet the multiskilling requirements implicit in the new computer integrated manufacturing system;
- does not seem to talk the same language as line management colleagues fails to understand their requirements;
- slow in responding to requests for help.

When the positive and negative indicators have been agreed the next step is to distil the competency dimensions that can be inferred from the lists. In this example they could be:

- strategic capability;
- business understanding;
- achievement motivation;
- interpersonal skills;
- communication skills;
- consultancy skills.

These dimensions might also be reflected in the analysis of other areas of competency so that, progressively, a picture of the competencies is built up that is linked to actual behaviour in the workplace.

The facilitator's job is to prompt, help the group to analyse its findings and assist generally in the production of a set of competence dimensions that can be illustrated by behaviour-based examples. The facilitator may have some ideas about the sort of headings that may emerge from this process, but should not try to influence the group to come to a conclusion that it has not worked out for itself, albeit with some assistance from the facilitator.

Workshops can use the critical incident or repertory grid techniques, as described below.

## **Critical-incident technique**

The critical-incident technique is a means of eliciting data about effective or less effective behaviour that is related to examples of actual events – critical incidents. The technique is used with groups of job holders and/or their managers or other 'experts' (sometimes, less effectively, with individuals) as follows:

- Explain what the technique is and what it is used for, ie, 'to assess what constitutes good or poor performance by analysing events that have been observed to have a noticeably successful or unsuccessful outcome, thus providing more factual and "real" information than by simply listing tasks and guessing performance requirements'.
- Agree and list the key result in the role to be analysed. To save time, the analyst
  can establish these prior to the meeting but it is necessary to ensure that they are
  agreed provisionally by the group, which can be told that the list may well be
  amended in the light of the forthcoming analysis.
- Take each area of the role in turn and ask the group for examples of critical incidents. If, for instance, one of the job responsibilities is dealing with customers, the following request could be made: 'I want you to tell me about a particular occasion at work which involved you or that you observed in dealing with a customer. Think about what the circumstances were, for example who took part, what the customer asked for, what you or the other member of the staff did and what the outcome was.'
- Collect information about the critical incident under the following headings: what the circumstances were; what the individual did; the outcome of what the individual did.
- Record this information on a flipchart.
- Continue this process for each key result area.
- Refer to the flipchart and analyse each incident by obtaining ratings of the recorded behaviour on a scale such as 1 for least effective to 5 for most effective.
- Discuss these ratings to get initial definitions of effective and ineffective performance for each of the key result areas.
- Refine these definitions as necessary after the meeting it can be difficult to get a
  group to produce finished definitions.
- Produce the final analysis, which can list the competencies required and include performance indicators or standards of performance for each key result area.

## Repertory grid

Like the critical incident technique, the repertory grid can be used to identify the

dimensions that distinguish good from poor standards of performance. The technique is based on Kelly's (1955) personal construct theory. Personal constructs are the ways in which we view the world. They are personal because they are highly individual and they influence the way we behave or view other people's behaviour. The aspects of the role to which these 'constructs' or judgements apply are called 'elements'.

To elicit judgements, a group of people are asked to concentrate on certain elements, which are the tasks carried out by role holders, and develop constructs about these elements. This enables them to define the qualities that indicate the essential requirements for successful performance.

The procedure followed by the analyst is known as the 'triadic method of elicitation' (a sort of three-card trick) and involves the following steps:

- Identify the tasks or elements of the role to be subjected to repertory grid analysis. This is done by one of the other forms of job analysis, eg interviewing.
- 2. List the tasks on cards.
- Draw three cards at random from the pack and ask the members of the group to nominate which of the three tasks is the odd one out from the point of view of the qualities and characteristics needed to perform it.
- Probe to obtain more specific definitions of these qualities or characteristics in the form of expected behaviour. If, for example, a characteristic has been described as the 'ability to plan and organize', ask questions such as: 'What sort of behaviour or actions indicate that someone is planning effectively?' or, 'How can we tell if someone is not organizing his or her work particularly well?'
- Draw three more cards from the pack and repeat steps 3 and 4.
- Repeat this process until all the cards have been analysed and there do not appear to be any more constructs left to be identified.
- 7. List the constructs and ask the group members to rate each task on every quality, using a six or seven point scale.
- 8. Collect and analyse the scores in order to assess their relative importance. This can be done statistically, as described by Markham (1987).

Like the critical-incident technique, repertory grid analysis helps people to articulate their views by reference to specific examples. An additional advantage is that the repertory grid makes it easier for them to identify the behavioural characteristics or competencies required in a job by limiting the area of comparison through the triadic technique.

Although a full statistical analysis of the outcome of a repertory grid exercise is helpful, the most important results that can be obtained are the descriptions of what constitute good or poor performance in each element of the job.

Both the repertory grid and the critical incident techniques require a skilled analyst who can probe and draw out the descriptions of job characteristics. They are quite detailed and time-consuming, but even if the full process is not followed, much of the methodology is of use in a less elaborate approach to competency analysis.

## Choice of approach

Workshops are probably the best approach. They get people involved and do not rely on 'expert' opinion. Critical incident or repertory grid techniques are more sophisticated but they take more time and expertise to run.

# Analysing technical competencies (functional analysis)

The approach to the definition of technical competencies differs from that used for behavioural competencies. As technical competencies are in effect competences, a functional analysis process can be used. This methodology was originally developed by Mansfield and Mitchell (1986) and Fine (1988). In essence, functional analysis focuses on the *outcomes* of work performance. Note that the analysis is not simply concerned with *outputs* in the form of quantifiable results but deals with the broader results that have to be achieved by role holders. An outcome could be a satisfied customer, a more highly motivated subordinate or a better-functioning team. Functional analysis deals with processes such as developing staff, providing feedback and monitoring performance as well as tasks. As described by Miller *et al* (2001) it starts with an analysis of the roles fulfilled by an individual in order to arrive at a description of the separate components or 'units' of performance that make up that role. The resulting units consist of performance criteria, described in terms of outcomes, and a description of the knowledge and skill requirements that underpin successful performance.

Functional analysis is the method used to define competence-based standards for NVQs/SNVQs.

# **SKILLS ANALYSIS**

Skills analysis determines the skills required to achieve an acceptable standard of performance. It is mainly used for technical, craft, manual and office jobs to provide the basis for devising learning and training programmes. Skills analysis starts from a broad job analysis but goes into details of not only what job holders have to do but also the particular abilities and skills they need to do it. Skills analysis techniques are described below.

## Iob breakdown

The job breakdown technique analyses a job into separate operations, processes, or tasks, which can be used as the elements of an instruction sequence. A job breakdown analysis is recorded in a standard format of three columns:

- The stage column in which the different steps in the job are described most semiskilled jobs can easily be broken down into their constituent parts.
- The instruction column in which a note is made against each step of how the task should be done. This, in effect, describes what has to be learnt by the trainee.
- The key points column in which any special points such as quality standards or 3. safety instructions are noted against each step so that they can be emphasized to a trainee learning the job.

# Manual skills analysis

Manual skills analysis is a technique developed from work study. It isolates for instructional purposes the skills and knowledge employed by experienced workers in performing tasks that require manual dexterity. It is used to analyse short-cycle, repetitive operations such as assembly tasks and other similar factory work.

The hand, finger and other body movements of experienced operatives are observed and recorded in detail as they carry out their work. The analysis concentrates on the tricky parts of the job which, while presenting no difficulty to the experienced operative, have to be analysed in depth before they can be taught to trainees. Not only are the hand movements recorded, but particulars are also noted of the cues (visual and other senses) that the operative absorbs when performing the tasks. Explanatory comments are added when necessary.

# Task analysis

Task analysis is a systematic analysis of the behaviour required to carry out a task with a view to identifying areas of difficulty and the appropriate training techniques and learning aids necessary for successful instruction. It can be used for all types of jobs but is specifically relevant to administrative tasks.

The analytical approach used in task analysis is similar to those adopted in the job breakdown and manual skills analysis techniques. The results of the analysis are usually recorded in a standard format of four columns as follows:

- 1. *Task* – a brief description of each element.
- Level of importance the relative significance of each task to the successful performance of the role.

- 3. *Degree of difficulty* the level of skill or knowledge required to perform each task.
- 4. *Training method* the instructional techniques, practice and experience required.

# Faults analysis

Faults analysis is the process of analysing the typical faults that occur when performing a task, especially the more costly faults. It is carried out when the incidence of faults is high. A study is made of the job and, by questioning workers and team leaders, the most commonly occurring faults are identified. A faults specification is then produced, which provides trainees with information on what faults can be made, how they can be recognized, what causes them, what effect they have, who is responsible for them, what action the trainees should take when a particular fault occurs, and how a fault can be prevented from recurring.

# Job learning analysis

Job learning analysis, as described by Pearn and Kandola (1993), concentrates on the inputs and process rather than the content of the job. It analyses nine learning skills that contribute to satisfactory performance. A learning skill is one used to increase other skills or knowledge and represents broad categories of job behaviour that need to be learnt. The learning skills are the following:

- 1. physical skills requiring practice and repetition to get right;
- 2. complex procedures or sequences of activity that are memorized or followed with the aid of written material such as manuals;
- non-verbal information such as sight, sound, smell, taste and touch, which is used to check, assess or discriminate, and which usually takes practice to get right;
- 4. memorizing facts or information;
- ordering, prioritizing and planning, which refer to the degree to which a role holder has any responsibility for and flexibility in determining the way a particular activity is performed;
- 6. looking ahead and anticipating;
- 7. diagnosing, analysing and problem-solving, with or without help;
- 8. interpreting or using written manuals and other sources of information such as diagrams or charts;
- 9. adapting to new ideas and systems.

In conducting a job learning analysis interview, the interviewer obtains information on the main aims and principal activities of the job and then, using question cards for each of the nine learning skills, analyses each activity in more depth, recording responses and obtaining as many examples as possible under each heading.