



## UNIT 4

## Demand Forecasting in Human Resources Management

### Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Discuss current issues in the human resource field and the changing role of supervisors and managers in terms of HR functions.
- ✓ Write job specifications and identify core competencies.



## Unit 4

### Demand Forecasting in Human Resources Management

#### Performing a Skills Inventory

##### The Role of Emotional Intelligence

One of the difficult topics that supervisors and managers need to learn about is emotional intelligence, sometimes called EI or EQ. Emotional intelligence is not the same as overall intelligence, or IQ. In simple terms, emotional intelligence means applying skill in perceiving, understanding, and managing emotions and feelings within an atmosphere that is very high in trust. It is a way of understanding and making the most of the knowledge, skills, and abilities of your employees.

##### Skills Inventory Checklist

How do we know what our staff has to offer? We start out by completing a skills inventory. A skills inventory evaluates an employee's:

- Knowledge
- Skills
- Abilities
- Qualifications
- Interests
- Motivation to learn new skills
- Future plans (such as retirement or advancement)



## Sample Skills Inventory Form

<b>Identification</b>			
Name:			
Job Title:			
<b>Experience</b>			
Years with Company:			
Years on Current Job:			
Years on Similar Jobs in Other Companies:			
<b>Education Type</b>	<b>Yes</b>	<b>No</b>	<b>Level Achieved/Type of Course</b>
High School			
Vocational School			
University			
Job Training			
<b>List Skills Used on Present Job</b>			
<b>List Skills Possessed But Not Used on Present Job</b>			
<b>Readiness For Promotion</b>			
To What Job(s):			
Current Deficiencies:			
Actions Needed to Correct Deficiencies:			



## Forecasting Techniques

Forecasting is an important function within human resources as we try to predict the organization's demand for employees. If you know your department is going to grow, you'll want to pay attention to these tools and learn how they work.

Forecasting techniques can vary from an informal review of the existing situation and some interviews with hiring managers, to sophisticated use of metrics, data analysis, and demographics. Neither approach is ideal or gives all information required, but both and everything in between can provide you with decent approximations.

One helpful forecasting technique is to look back at past trends, where you can apply the methods of extrapolation and indexation.

### Extrapolation

For this technique, you must have data for the same time period that you're forecasting. Let's say we want to predict how much our company is going to grow over the next four years. We'll say our current year is Year 4.

Year	Revenue	Employees
1	\$10,000	10
2	\$15,000	10
3	\$30,000	20
4	\$90,000	20

We can easily see a trend: revenue grew by 50% in Year 2 and employees stayed the same, while revenue and staff doubled in Year 3. From Year 3 to Year 4, revenue tripled but staff stayed the same.



Let's use the same chart and fill in the known data for the current year, Year 4.

Year	Revenue	Employees
4	\$90,000	20
5		
6		
7		

If we look at the first table of actual data, you can see that from Year 1 to Year 2, our revenue increased by 50%, but our employees stayed the same. If we presume that the same thing will happen in the next four year period, we can apply that formula to Year 4 to come up with figures for Year 5.

Year	Revenue	Employees
4	\$90,000	20
5	\$135,000	20
6		
7		

If we continue applying the trend, we can extrapolate the remaining years.

Year	Revenue	Employees
4	\$90,000	20
5	\$135,000	20
6	\$270,000	40
7	\$810,000	40

This shows us how our staff should develop (if the past trends continue) and how the revenue stream should also flow. Of course, this isn't guaranteed to be accurate, but it may help you plan for the future.

### Indexation

Indexation matches employee growth with another factor (such as sales or revenue). Let's say that the Acme Widget Company indexes its employees by sales: they know that they need ten employees for every hundred



thousand widgets sold. So, if they forecast that they are going to sell 400,000 widgets next year, they know that they will need 40 employees. Then, you can look at that number and determine what hiring and recruitment processes need to be put into place.

### Making Connections

**Do you know what is expected of your company in the next 12 months?**

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**Are you growing, downsizing, or expecting to stay the same?**

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**What will you do in order to meet your objectives?**

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## Job Analysis

### Understanding Job Analysis

#### What is a Job Analysis?

A job consists of a group of tasks that must be performed if an organization is to meet its goals. A job may be held by only one person or by many people.

A job analysis is the process of systematically determining the skills, knowledge, and duties required to perform jobs in an organization. It is performed by obtaining answers to six questions:

- What physical and mental tasks does the worker accomplish?
- When is the job to be completed?
- Where is the work to be accomplished?
- How do the workers do the job?
- Why is the job done?
- What qualifications are needed to perform the job?

#### When Should Job Analysis Be Performed?

There are at least three different times when a job analysis should be performed:

- When new jobs are created
- When jobs have changed because of new technology, methods, etc.
- When they have not been analyzed for a period of time and a new worker is required for the job

The information from a job analysis is used to identify competencies, prepare position descriptions, and develop job specifications.

#### Who Should Be Consulted in Job Analysis?

Who should you go to if you are doing a job analysis? Who do you think will give you the most accurate description of the job?

- The incumbent?
- Their supervisor?
- Senior management?

The answer is the supervisor. Depending on the size of your organization, the supervisor may be assisted by someone from human resources. The incumbent may know what the job is, but that may not be precisely what the supervisor wants done. It is not senior management's job to get into the specific details of a job, just the purpose for which that job was created.

This means you need to know the ins and outs of the positions you supervise. Managers who understand what a job involves do a much better job and have a much lower rate of hiring error than those who are not well

prepared for the interviewing process.

## The Purpose of Job Analysis

An occasional job analysis can serve another very useful purpose. Sometimes we don't really stop long enough to take stock of a position, especially if it's a position that has been in place for a long period of time. Occasional job analyses will help you evaluate positions and any new tasks or requirements that have come into play.

Hiring the best person for an open position takes a lot of work, including a solid application of planning and preparation. You'll need to:

- Understand what tasks and duties take the majority of time (job skills)
- Know the technical and performance skills required to do the job
- Understand the circumstances (are they working under stress, deadlines, problem solving, dealing with frequent change, having trouble anticipating next steps, etc.)
- Describe skills in objective, behavioral terms

## Job Analysis Methods

There are several ways of doing a job analysis.

### **Direct Observation**

Often used by a first line supervisor or manager. However, this method has serious limitations, particularly if the job requires mental effort or specialized skills/knowledge, so is best supplemented by additional methods.

### **Interviews**

A step beyond observation, as there is an exchange of information.

### **Combined Observation and Interview**

This can make for a complicated process, but depending on the job it can be quite effective, even if it's time consuming.

### **Questionnaires**

They can be customized to the job and they are relatively inexpensive to do.

## Performing an Analysis

This form is designed to help define the qualities and talents needed for a particular job. The questions are designed to give data useful not only to determine technical requirements (can do), but also the motivational factors (will do) and the interpersonal/environmental factors (fit).

Use this form to analyze a job prior to an interview by completing it yourself or use it as a guide when gathering job information from others.



Basic Information

**Job Title:** \_\_\_\_\_

**Grade/Salary Level:** \_\_\_\_\_

**Position Reports To (Title):** \_\_\_\_\_

Job Information

**List the most important duties and responsibilities.**

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**Describe key involvement with others; superiors, subordinates, peers, vendors, customers, or other contacts.**

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**What are the potential sources of satisfaction? (List up to 5.)**

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**What are the potential sources of dissatisfaction? (List up to five.)**

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**What jobs or career opportunities might be available? (Indicate even if limited.)**

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**What education and prior experience is necessary to perform the job?**

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**What physical and environmental factors impact the job? (Examples: Physical working conditions, levels of fitness, material such as chemicals, medications, use of vehicles, and equipment required.)**

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**What are the reporting relationships (direct and indirect) for the person in this position? Where does the job fit on the company's organizational charts? What positions report directly or indirectly to this job?**

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**Is there travel? If so, how much?**

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**What is the work schedule (days, hours, shifts, etc.)?**

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**Is this a unionized position?**

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### Fit To the Job

**Can the individual do the job? Do they have the combined specific experiences, skills, equipment knowledge, abilities, prior training or education, physical requirements, etc., required or desired for successful job performance?**

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**What specific behaviors are required or desired in order to be sure that individuals will apply themselves and behave in ways that are associated with success on the job?**

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**Will the person fit into the specific environmental circumstances of the job? Include information about the type of industry or business, atmosphere of your organization, circumstances of work at department or area level and the circumstances of the specific job.**

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**Knockout items: What specific situational factors such as long hours, overtime, shift work, weekend work, travel, relocation, physical demands, are required on this job? What circumstances would eliminate the person from consideration?**

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## Job Analysis Formats

There are many variations of the basic job analysis format that we just looked at. Here are a few of the most popular.

### Functional Job Analysis (FJA)

This involves analyzing the functions of the job. There are many versions of FJA, but they generally rely upon the following elements:

- Things to do
- Data to use
- People
- Worker instructions
- Reasoning skills
- Math skills
- Language skills

Although there is a formal system involving weighing factors for each area, you can also develop your own informal Functional Job Analysis by evaluating the criteria that apply to your employee.

### Factor Evaluation System

In this system, points are assigned for various areas of the job:

- Knowledge
- Supervisory controls
- Guidelines
- Complexity
- Scope and effect



- Personal work contacts
- Physical demands
- Work environment

This makes the job analysis a more uniform process, and makes it easy to compare two positions that may appear very different.

### Critical Incident Technique

This system uses a more practical approach. Critical incidents for the position are identified, allowing the analyzer to identify skills and knowledge that would be needed to resolve that incident. This could be a helpful format for staff in emergency response services.

## Identifying Job Competencies

You have done the job analysis, in some form. Now, armed with that information, you can identify competencies (knowledge, skills, and abilities) that will be required to do the job. Once we have identified those competencies, you can start writing the position profile or job description.

Let's break them down into technical and performance skills.

### Technical Skills

These are skills that call upon specific technical knowledge or experience. They will help you answer the question, "Can the individual do the job?"

How do you determine technical skills? Ask yourself these questions:

- What specific kinds of machines will the employee use?
- What specific kinds of computer hardware/software will they use?
- Is there a certain specific and prescribed way they must manipulate tools?

What do you really need? You'll have to decide if previous experience in these technical skills is important or if you will train the successful candidate. Though technical skills are often more easily learned than performance skills, many jobs demand that a person arrive with their technical skills already in place.

Technical qualifications, while not specifically a part of the technical requirements of a position, can be considered here. If candidates must have a driver's license, a degree in civil engineering, or a diploma from a recognized IT training program, these are not considered performance skills and therefore fall under this category.



**Think of a position that you need to fill in the near future. Write down the technical skills needed for this job.**

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### Performance Skills

These are the tasks and responsibilities assigned to the position, and reflect a person's ability or desire to do something rather than something they know technically. Performance skills can include being able to meet deadlines, adapt to change, anticipate problems and solve them. They can also include working with or managing other people, making decisions, following guidelines, or dealing with the public.

A customer service supervisor, for example, might need to supervise three customer service representatives, apply established guidelines to specific customer inquiries, and solve work unit problems. These are all performance skills.

At the same time, you may expect this employee to be skilled in using Microsoft Word, have some knowledge of database management (including designing and maintaining a database), and know how to set up spreadsheets. These are considered technical skills.

### Competence Factors

We aren't quite done here yet, though. Before we go on to the job description, think about the work environment. When you understand the work environment, then you can find the "fit" that is required, to make sure the person you have in that job is the right person for the job. We'll talk more about this later, but in today's world, fit isn't an instinct in your gut. Fit is identifying the culture in which the person works, and then looking for candidates who will fit with that culture. These items are also called competence factors.



Things that you may want in this area include:

- Attention to detail
- Career interest
- Commitment to organization
- Creativity
- Decision making
- Human relations skills
- Independent work/initiative
- Leadership
- Learning ability
- Motivation
- Planning and organizing
- Problem analysis
- Stress tolerance
- Technical ability
- Turnover risk
- Adaptability
- Mathematical skills
- Written communication
- Oral/verbal communication

When you identify a competency, your job isn't done until you also define what you mean by that competency. The easiest way to do this is to think of someone you know who you would say has that competency. What does this person do to make you think they have that competency? Your answer is your definition.

Example: One competency is a "customer service focus." How would you define a customer service focus? Perhaps Susan comes to mind when you think of that competency. She is always thinking of the customer first. Her first response is always, "Is this best for the customer?"

Here are a couple of concrete examples:

- Susan called a customer back to see if he had received a parcel that was late being delivered.
- She put herself in the customer's shoes when we were developing a policy on compensation for late delivery.

From this, our definition of "customer service focus" might be: An employee who puts the customer first, and who always asks "Is this good for the customer?" This employee will check for customer feedback and maintain empathy with customer needs.

## Position Profiles and Job Descriptions

### Preparing a Profile

People don't always like preparing position profiles. They feel they have just given their employee the perfect excuse to say, "That's not part of my job." On the other hand, we have organizations that take to position profiles with a vengeance. They have pages of descriptions, and the actual details are lost in mountains of words, so the employee still doesn't know what they're supposed to do!

### Job Descriptions

A job description is a written record of the responsibilities of a particular job. It indicates the qualifications for the job and outlines how that job relates to others in the company. Even if your company has determined it is not going to have job descriptions, writing a job description will help you clarify what the position entails and its necessary qualifications.

Things to include:

- Position title
- Salary or pay grade
- Department
- To whom the position is accountable
- Hours required (environment)
- Job purpose
- Summary of job
- Major KRA's (Key Results Areas) and sample tasks to fulfill (not only the responsibilities but the relative importance of these responsibilities)
- Extent of authority
- Level of complexity of duties
- Amount of internal/external contact
- Amount of access to confidential information
- Amount of independent judgment required
- Amount of pressure involved in the job
- Type of machinery/equipment used
- Working conditions
- Terms of employment

There are three important categories in a job description:

- Purpose: Not what they do, but why they are there, the reason the job was created.
- Key Responsibilities: What you are paying them to accomplish.
- Typical Activities: The things they are expected to do in order to accomplish these responsibilities.

For example: "Make clients feel welcome" might be a key responsibility of a receptionist. Typical activities could



be: smile and greet customers by name as they come in door, keep coffee/tea ready for customers at all times, keep plants in reception area watered and tended, and keep magazines neatly stacked.

## Job Specifications

Often, job descriptions and job specifications get rolled into the same document. However, job specifications should include:

- Day-to-day duties
- Other duties
- How is the position supervised
- What other positions receive supervision from this position
- What type of records must be kept
- To what extent is this position involved in analysis and planning
- What verbal/numerical/mechanical aptitudes are required

## Things to Consider

If 1 was a “No position profile organization,” and 10 were a “Detailed position profile organization,” where would your organization fit?

The position profile we suggest rates about a five on the above scale. The profile can be expanded, perhaps even contracted, but it gives the recruiter something that tells them what kind of person they are looking for, without too many restrictions.

One of the biggest problems identified in the workplace right now is that employees don’t know what their role is. They go into work and do things every day, but they are not sure if they are focused on the right things, or they work in a place where priorities change regularly and so they are not sure if they should also be changing what they do.

The position profile needs to be accurate, up to date, and it needs to be shared with the employee who fills the position. It also helps the supervisor to refer to the profiles regularly and make sure that staff are focused on priorities, and fulfilling their roles to the organization.



# My Position Profile

Fill in this worksheet for your current position.

## Job Description

**Job Title:** \_\_\_\_\_

**Position Reports To (Title):** \_\_\_\_\_

Key Result Areas	Activities Required

## Key Contacts

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## Decision-Making Authority

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**Problem-Solving Responsibilities**

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**Education and Training Requirements**

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**Experience Requirements**

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**Performance Measurement**

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## Job Specifications

### Day-To-Day Duties

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### Other Duties

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### Direct/Indirect Supervisory Responsibility

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## Do You Really Need to Hire?

### Evaluate All Options

Now you are ready to recruit candidates for a position. However, before you do so, you've got to analyze whether you really need to hire a new person. Maybe options other than hiring make more sense, and maybe they don't.

What are some of your options?

- Review work processes. Is everyone working smart? Are people able to contribute their best, or is this a good time to make some changes? Employees, supervisors, and managers should be involved to determine if the work currently being done is what’s supposed to be completed, and if it is being done efficiently.
- Shift some or all the available work to one or more people who aren’t working at top capacity, if possible.
- Hire temporary workers; maybe this is a short-term need.
- Work with freelancers or contract workers.
- Be aware that a habit of not filling positions has the potential to backfire on us. When someone leaves the organization and has to be replaced by two people, that’s a clear sign that we have been working our existing people far harder than we ought to be.

If your organization has ascertained there is a genuine need, you may still have to convince them there is true value in taking time to fill this position properly.

Do you have any idea of what it costs to hire a new employee? Sometimes when we see all the people coming to the door looking for jobs, we think employees are like potatoes on a conveyer belt: toss out the reject and select another one. But employee turnover costs money, usually a lot more than we realize. Costs include everything from preparing and posting or running an ad to screening and interviewing the candidates to the time and money to train these new people. Some companies have identified costs ranging from 35% to as much as 100% of an employee’s annual salary.

We can do a lot to minimize employee turnover and reduce our recruiting costs by making sure that we hire the right person in the first place.

## The Real Cost of Employee Turnover

**Use the worksheet below to calculate the cost of replacing one employee.**

### Cost Analysis Worksheet

Task	Description	Cost
Lost productivity while the job is vacant	Make sure to include primary and secondary costs.	
Recruiting costs	Don’t forget somebody’s time to prepare and place a posting (check what the organization is looking for; prepare information; verify copy; and send to newspaper or websites) and handle phone calls, inquiries, and resumes.	



Task	Description	Cost
Screening costs	This includes reviewing resumes based on a resume short-listing guide that has been prepared by someone (we hope!). Also included is the cost of responding to directed inquiries, requests for information, etc. Don't forget any letters of regret you send out, including paper, postage, and time to type and sign.	
Interviewing costs	This includes time spent contacting candidates, arranging interviews, preparing for the interviews, and conducting them. Don't forget any letters of regret you send out, including paper, postage, and time to prepare and sign.	
Testing costs	If you do testing, there is a cost associated with monitoring and rating the tests. Do you use group testing? Online testing? Divide total cost by number of candidates who will be interviewed.	
Evaluating costs	This includes time spent evaluating candidates, checking references, and making the selection.	
The cost of making the job offer	Figure in time spent negotiating with the candidate, arranging start date, and other arrangements that must be made before the candidate arrives. (Business cards? Supplies? Locker and keys?)	
Training costs	Think about the money associated with taking the time to meet the candidate, introduce them to others, provide an orientation, and providing training.	
The cost of reduced efficiency as the new employee learns the job	Include time spent by someone answering questions and showing them the ropes.	
Other employee turnover costs associated with your organization		
<b>Total Cost Of Replacing One Employee</b>		



### Further Reading:

- ✓ Armstrong, Michael. *Armstrong's Handbook of Human Resource Management Practice*. Kogan Page, 2012.
- ✓ Armstrong, Sharon. *The Essential Performance Review Handbook*. Career Press, 2010.