

Human Resource Planning and Recruiting

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1. The HR Planning Process

While these and other factors influence the specifics of an HR plan, all effective HR planning shares certain features. It is generally agreed that HR planning involves four distinct phases or stages.

- Situation analysis or environmental scanning
- Forecasting demand for human resources
- Analysis of the supply of human resources
- Development of plans for action

Situation Analysis and Environmental Scanning

The first stage of HR planning is the point at which HRM and strategic planning initially interact. The strategic plan must adapt to environmental circumstances, and HRM is one of the primary mechanisms that an organization can use during the adaptation process. For example, rapid technological changes in the environment can force an organization to quickly identify and hire employees with new skills that previously weren't needed by the organization. Without an effective HR plan to support the recruitment and selection functions in the organization, it would be impossible to move fast enough to stay competitive.

The problems associated with changing environments are greater today than ever before because success now depends on an ability to be a "global scanner". Global scanning is, in fact, considered one of the essential skills for managers of the 1990s.

Forecasting Demand for Employees

The next phase of an effective HR planning process is estimating not only how many but also what kinds of employees will be needed. Forecasting yields advance estimates or calculations of the organization's staffing requirements. Although many quantitative tools can help with forecasting, it involves a great deal of human judgment. In addition, many successful HR planners rely heavily on their "gut instincts" about future conditions. For example, planners at Unilever attribute much of their global success to such instincts.

It should be apparent that HR planning requires the co-

operation of many people in the organization. A strategic plan must be communicated to operational managers and HR professionals, who must in turn provide higher levels of management with data about their human resource needs. The planners are major sources of data and information for development of strategy. Thus, the HR planning function plays a critical role in making sure that strategy implementation is effective throughout the organization.

Analyzing the Current Supply of Employees

The third phase of HR planning is designed to answer the question, "How many and what kinds of employees do I currently have in terms of the skill and training necessary for the future?" It should be obvious that this phase of HR planning involves much more than simply counting the number of current employees in the organization.

The skills inventory The major tool used to assess the current supply of employees is the skills inventory. In some organizations, there will also be a separate inventory just for managers called a management inventory. Both of these serve the same purpose, to note what kinds of skills, abilities, experiences, and training the employees currently have. By keeping track of these, the organization can quickly determine whether a particular skill is available when it is needed. Skills inventories are also useful in career planning, management development, and related activities. A skills inventory in its simplest form is a list of names, characteristics, and skills of the people working for the organization. It provides a way to acquire these data and makes them available where needed in an efficient manner.

Skills inventories vary greatly in their sophistication. Some are as simple as a file drawer containing index cards with relevant information typed on them. Others are tied into extremely expensive and complex computer databases.

Contents of the skills inventory Once the decision has been made to create a skills inventory, the HR man-

ager must determine what information will be contained in the system. The only data available to the organization for later use will be whatever has been designed into the system.

The list of data that might be coded into skills inventories is almost endless, and it must be tailored to the needs of each organization. Some of the more common items include name, employee number, present location, date of birth, date of employment, job classification, specific skills and knowledge, education, field of education (formal education and courses taken since leaving school), knowledge of a foreign language, professional qualifications, publications, licenses, patents, hobbies, a supervisory evaluation of the employee's capabilities, and salary range. Items often omitted, but becoming increasingly important, are the employee's own stated career goals and objectives, including geographical preferences and intended retirement date.

Maintaining the skills inventory While designing the system is the most difficult part of developing a skills inventory, planning for the gathering, maintaining, handling, and updating of data is also important. The two principal methods for gathering data are the interview and the questionnaire. The questionnaire is faster and less expensive when many employees are involved, but inaccuracies often prevail. People often do not spend enough time on a questionnaire. Therefore, some experts contend that a trained interviewer can complete the reports more quickly and accurately a procedure which in the long and more than offsets the costs of the interviewer.

A procedure for keeping the files updated must also be planned. For some organizations, an annual update is adequate. In others, where changes are made often and use is frequent, shorter update periods may be necessary. Some organizations update changeable data monthly and less changeable data annually.

Finally, a decision whether to store the data manually or on the computer must be made. This decision is based on the cost of the computer and frequency of use of the data. The computer also provides the possibility of using comparative analyses of employment over a period of time.

Skills inventories are useful only if management uses the data in making significant decisions. Top-management support is necessary here. Before a manager uses the skills inventory as an aid in selection decisions, he or she must be

trained to avoid abuse of the system.

Action Decisions in Human Resource Planning

After the HR planning system has analyzed both the supply of and the demand for future workers, these two forecasts are compared to determine what, if any, action should be taken. Whenever there is a discrepancy between these two estimates, the organization needs to choose a course of action to eliminate the gap.

Action decisions with a shortage of employees When employment specialists comparing demand with supply find that the supply of workers is less than the demand, several possibilities are open to the organization. If the shortage is small and employees are willing to work overtime, it can be filled with present employees. If there is a shortage of highly skilled employees, training and promotions of present employees, together with the recruitment of less-skilled employees, are possibilities. This decision can also include recalling employees who were previously laid off.

Intense global competition, rapid technological change, and fears caused by recent workforce reductions have also led many organizations to increase their use of part-time workers, subcontractors, and independent professionals in response to changing demands. Some experts estimate that by the year 2000, nearly half of all people working in the United States will be part of this growing trend. Using these kinds of employees gives an organization far more flexibility in dealing with temporary shortages or surpluses of labor than does maintaining more traditional fulltime employees for all jobs

Action decisions in surplus conditions When comparison of demand for and supply of employees indicates a surplus, the alternative solutions include attrition, early retirements, demotions, layoffs, and terminations. Decisions in surplus conditions are some of the most difficult that managers must make, because the employees who are considered surplus are seldom responsible for the conditions leading to the surplus. A shortage of a raw material such as fuel or a poorly designed or poorly marketed product can cause an organization to have a surplus of employees.

As a first approach to dealing with a surplus, most organizations avoid layoffs by relying on attrition, early retirement, and creation of work, and the like. Many organizations can reduce their workforce simply by not replacing

those who retire or quit (attrition). Sometimes this approach is accelerated by encouraging employees close to retirement to leave early, but there are drawbacks to this approach if the early retirement program is not carefully planned. First, statistics indicate that workers over 50 tend to be healthier, have fewer work-related injuries, and are less likely to change jobs than their younger counterparts. Thus without planning, an organization may be losing some of its best employees. Second, many organizations were offering higher pension benefits to employees who would sign a waiver of their right to sue the organization for wrongful discharge or age discrimination. However, these waivers are now being viewed by courts with skepticism and may not be legal. Third, care must be taken not to offer promises that won't be kept. Once certain benefits are promised, it may be illegal to change them without approval of the early retirees.

If voluntary reductions in force such as early retirement programs don't eliminate the gap between forecasted supplies of and demand for human resources, an organization might contemplate temporary or permanent layoffs. Statistics indicate that in 1995, for example, over 400,000 workers were permanently laid off (terminated) in the United States. Clearly, with this many people being affected, considerable input from the HR planning process is necessary if the organization is going to survive and prosper—especially since there does not yet seem to be an end to the trend toward downsizing in American businesses, which began in the mid-1980s.

Some experts believe that in recent years, American corporations have turned to permanent layoffs too quickly and have failed to fully plan for and evaluate the consequences of their actions. For example, data suggest that profits don't necessarily increase after layoffs; the layoffs frequently don't cut operating costs as much as had been anticipated; and the long-term effects that layoffs have on employees who survive the cuts may create even bigger productivity problems for the organization. Although no one can accurately forecast how a layoff will ultimately affect an organization, one thing is certain. A poorly planned restructuring program that doesn't fully utilize the HR planning process will probably fall short of expectations and unnecessarily disrupt many employees' lives.

How does a manager decide whom to lay off? Two criteria have been used, merit and seniority. In the past, the

most senior employee was laid off last. A second approach now is to lay off those with lower merit ratings. Merit means that those who do the job the best are kept; those who perform poorly are laid off. If merit ratings are not precise, unions may fight their exclusive use as a reason for laying off particular employees.

2. The Recruitment and Selection Process

The recruiting and selecting process can best be envisioned as a series of hurdles. Specifically, recruiting and selecting require:

- Doing employment planning and forecasting to determine the duties of the positions to be filled.
- Building a pool of candidates for these jobs by recruiting internal or external candidates.
- Having the applicants fill out application forms and perhaps undergo an initial screening interview
- Utilizing various selection techniques such as tests, background investigations, and physical exams to identify viable job candidates
- Sending to the supervisor responsible for the job one or more viable job candidates
- Having the candidate(s) go through one or more selection interviews with the supervisor and other relevant parties for the purpose of finally determining to which candidate(s) an offer should be made.

Recruiting and selecting is the subject of this chapter. In this chapter we'll focus on employment planning and forecasting (in other words, on how to determine what positions are to be filled) and on recruiting techniques.

Employment Planning and Forecasting

Employment planning is the process of formulating plans to fill future openings based on an analysis of the positions that are expected to be open and whether these will be filled by inside or outside candidates. Employment planning, therefore, refers to planning to fill any or the entire firm's future positions, from maintenance clerk to CEO. However, we'll see in this chapter that most firms use the term succession planning to refer to the process of planning how the company's most important executive positions will be filled.

In any case, employment planning is best thought of as an integral part of the firm's strategic and HR planning processes. For example, plans to enter new businesses, to build new plants, or to reduce the level of activities all influ-

ence the number of and types of positions to be filled. At the same time decisions regarding how to fill these positions will have to be integrated with other aspects of the firm's HR plans, for instance, with plans for appraising and training current and new employees.

The fundamental employment planning decision will be whether projected positions will be filled internally or externally. In other words, should the projected open positions be filled by current employees? Or is the situation such that all or some of the openings must or should be filled by recruiting outside candidates?

Like any good plans, employment plans are built on premises—basic assumptions about the future. The purpose of forecasting is to develop these basic premises. If you are planning for employment requirements, you'll usually need three sets of forecasts: one for personnel needs, one for the supply of inside candidates, and one for the supply of outside candidates.

Factors in Forecasting Personnel Needs

Managers should consider several factors when forecasting personnel needs. From a practical point of view, the demand for your product or service is paramount. Thus, in a manufacture firm, sales are projected first. Then the volume of production required to meet these sales requirements is determined. Finally, the staff needed to maintain this volume of output is estimated. In addition to production or sales demand, you will also have to consider several other factors:

- Projected turnover (as a result of resignations or terminations).
- Quality and nature of your employees (in relation to what you see as the changing needs of your organization).
- Decisions to upgrade the quality of products or services or enter into new markets.
- Technological and administrative changes resulting in increased productivity.
- The financial resources available to /our department.

Specific techniques for determining human resource requirements include trend analysis, ratio analysis, scatter plot analysis, and computerized forecasting.

Trend Analysis Trend analysis means studying your firm's employment levels over the last five years or so to predict future needs. For example, you might compute the number of employees in your firm at the end of each of the last five years, or perhaps the number in each subgroup

(like salespeople, production people, secretarial, and administrative) at the end of each of those years. The purpose is to identify employment trends that you think might continue into the future.

Trend analysis is valuable as an initial estimate, but employment levels rarely depend solely on the passage of time. Other factors (like changes in sales volume and productivity) will also affect your future staffing needs.

Ratio Analysis Another forecasting approach, ratio analysis, means making estimates based on the ratio between (1) some casual factor (like sales volume) and (2) number of employees required (for instance, number of salespeople). For example, suppose you find that a salesperson traditionally generates \$500,000 in sales and that in each of the last two years you required ten salespeople to generate \$5 million in sales. Also assume that your plans call for increasing your firm's sales to \$8 million next year and to \$10 million two years hence. Then, if the sales revenue-salespeople ratio remains the same, you would require six new salespeople next year (each of whom produces an extra \$500,000 in sales). In the following year, you would need an additional four salespeople to generate the extra \$2 million in sales (between next year's \$8 million and the following year's \$10 million in sales).

Ratio analysis can also be used to help forecast your other employee requirements. For example, you can compute a salesperson-secretary ratio and thereby determine how many new secretaries will be needed to support the extra sales staff.

Like trend analysis, ratio analysis assumes that productivity remains about the same—for instance, that each salesperson can't be motivated to produce much more than \$500,000 in sales each. If sales productivity were to increase or decrease, then the ratio of sales to salespeople would change. A forecast based on historical ratios would then no longer be as accurate.

The Scatter Plot A scatter plot is another option. You can use scatter plots to determine whether two factors—a measure of business activity and your staffing levels—are related. If they are, then if you can forecast the measure of business activity, you should also be able to estimate your personnel requirements.

Here is an example. A 500-bed hospital in Chicago expects to expand to 1,200 beds over the next five years.

The director of nursing and the human resource director want to forecast the requirement for registered nurses. The human resource director therefore decides to determine the relationship between size of hospital (in terms of number of beds) and number of nurses required. She calls five similar hospitals of various sizes and gets the following figures:

Size of Hospital (Number of Beds)	Number of Registered Nurses
200	240
300	260
400	470
500	500
600	620
700	660
800	820
900	860

One way to determine the relationship between size of hospital and number of nurses is to draw a scatter plot. Hospital size is shown on the horizontal axis. Number of nurses is shown on the vertical axis. If the two factors are related, then the points will tend to fall along a straight line, as they do here. If you then carefully draw in a line to minimize the distances between the line and each one of the plotted points, you will be able to estimate the number of nurses that will be needed for each given hospital size. Thus, for a 1, 200-bed hospital, the human resource director would assume she needs about 1,210 nurses.

Using Computers to Forecast Personnel Requirements

Employers also use computerized systems to forecast personnel requirements. With such a system, a personnel specialist, working with line managers, compiles the information needed to develop a computerized forecast of personnel requirements. Typical data needed include direct labor hours to produce one unit of product (a measure of productivity) and three sales projections — minimum, maximum, and probable—for the product 'me in question. Based on such data, a typical program generates figures on "average staff levels required to meet product demands", as well as separate forecasts for direct labor (such as assembly workers), indirect staff (such as secretaries), and exempt staff (such as executives).

With such a system, an employer can quickly translate estimates of projected productivity and sales levels into

forecasts of personnel needs and can estimate the effects of various levels of productivity and sales on personnel requirements.

Managerial Judgment

Whichever forecasting approach you use, managerial judgment will play a big role. It's rare that any historical trend, ratio, or relationship will continue unchanged into the future. Judgment is thus needed to modify the forecast based on factors you believe will change in the future. Important factors that may modify your initial forecast of personnel requirements include the following¹

- Decisions to upgrade the quality of products or services or enter into new markets. There have implications for the nature of the employees you'll require. Ask, for instance, whether the skills of current employees fit with your organization's new products or services.

- Technological and administrative changes resulting in increased productivity. Increased efficiency (in terms of output per hour) could reduce personnel needs. It might come about through installing new equipment or a new financial incentive plan, for instance

- The financial resources available. For example, a larger budget lets you hire more people and pay higher wages. Conversely, a projected budget crunch could mean fewer positions and lower salary offers.

3. Promotion from Within

Employees tend to be committed to firms that are committed to them. We'll see that two way communications, guaranteed fair treatment, and job security are some of the things a firm's HR system can provide to show that the firm is indeed committed to its employees. But many employees will ultimately measure their firm's commitment by the degree to which they were able to achieve their career goals. However, at this point it's useful to emphasize the fact that internal recruiting and promotion from within can be central to boosting employee commitment.

To build commitment, the promotion from within program should be comprehensive. Certainly, firms often associated with committed employees — for example, Delta Airlines and Federal Express—have promotion from within policies. At Federal Express, for instance, open positions are filled, whenever possible, by qualified candidates from within the existing work force. But there's more to a successful

promotion from within program than just a strong policy statement, promotion from within is aided first by careful employee selection. As one Delta manager explained: "First of all, we hire for the future "the employment process favors applicants who have the potential for promotion". That helps explain how Chairman R. W. Allen climbed the ranks at Delta from an entry-level position to head of personnel and then to CEO and Chairman.

Effective promotion from within also depends on other HR actions. It depends on providing the education and training needed to help employees identify and develop their promotion potential. It also requires career-oriented appraisals: The supervisor and the employee are charged with linking the latter's past performance, career preferences, and developmental needs in a formal career plan. Finally, it requires a coordinated system for accessing career records and posting job openings, one that, guarantees all eligible employees will be informed of openings and considered for them. For example, Federal Express has a job posting/career coordination system called JCATS (Job Change Applicant Tracking System). Announcements of new job openings via this electronic system usually take place each Friday. All employees applying for the position get numerical scores based on job performance and length of service. They are then advised as to whether they were chosen as candidates. Internal recruiting and promotion from within can thus be a force for creating employee commitment. However, a job posting policy alone will not do it.

4. Forecasting the Supply of Outside Candidates

If there are not enough inside candidates to fill anticipated openings, you will probably focus next on projecting supplies of outside candidates — those not currently employed by your organization. This may require forecasting general economic conditions, local market conditions, and occupational market conditions.

General Economic Conditions

The first step is to forecast general economic conditions and the expected prevailing rate of unemployment. Usually, the lower the rate of unemployment, the lower the labor supply and the more difficult it will be to recruit personnel.

There is a wealth of published information you can use to develop economic forecasts. In December of each year, Business Week magazine presents its economic forecast for

the following year; each week it presents a snapshot of the economy on its outlook page. Fortune magazine has a monthly forecast of the business outlook that is usually buttressed in its January issue with a forecast for the coming year. Forbes magazine has regular articles on both domestic and foreign business trends. Many banks, such as New York's Citibank, publish periodic analyses and forecasts of the economy. Each December the Prudential Insurance Company publishes an economic forecast for the coming year.

Several federal-government agencies also provide economic forecasts. The U S Council of Economic Advisors prepares Economic Indicators each month showing the trend to date of various economic indicators. The regional branches of the Federal Reserve also publish economic reports monthly. The Federal Reserve Bank of St. Louis publishes a monthly summary that reports on various economic indicators.

Local Market Conditions

Local labor market conditions are also important. For example, the build up of computer and semiconductor programs resulted in relatively low unemployment recently in cities like Seattle, quite aside from general economic conditions in the country

Occupational Market Conditions

Finally, you may want to forecast the availability of potential job candidates in specific occupations (engineers, drill press operators, accountants, and so on) for which you will be recruiting. Recently, for instance, there has been an undersupply of computer systems specialists and nurses.

Forecasts for various occupations are available from many sources. For example, the Bureau of Labor Statistics of the U.S. Department of Labor publishes annual projections in the Monthly Labor Review. The National Science Foundation regularly forecasts labor market conditions in the science and technology fields. Other agencies providing occupational forecasts include the Public Health Service, the U. S. Employment Service, and the Office of Education.

Recruiting on the Internet

Computers are playing a bigger and bigger role in helping employers recruit employees today. Computer applications range from recruiting on the Internet to automatically scanning and storing applicants resumes.

A growing number of firms as well as many universities

and the federal government are already recruiting using the Internet, the World Wide Web, and commercial on-line services like CompuServe. For example Winter & Wyman Co, a Boston-based recruiting firm posts job descriptions on its World Wide Web page. Similarly, Honeywell uses America Online's E-Span service to recruit for applicants for jobs such as UNIX Client/ Server Applications Programmers, and the firm is considering creating a World Wide Web home page that would include employment listings. Another firm—American Contract Services—spend; about \$3, 500 a year to run ads on the Internet, ads that "give us unlimited access, full descriptions of jobs, and no limit to how long the ad can appear." That compares to a typical two column Sunday ad in a major city's newspaper which could cost between \$1, 500 and \$2, 000. Job hunters might use an Internet search aid like Career Mosaic to find jobs. For example, one such position-open ad was placed by a recruiting firm seeking a senior programmer for a position in California.

For firms recruiting for employees who are not already on a service like Prodigy, America Online, or CompuServe the Internet's On-line Career Center is an alternative.

Corporate recruiters can use the career center to review resumes that have been deposited at the center and to

place job openings by job title, key work, company name, and geographical region.

Employers are using information technology as an aid in recruiting in various other ways, too. For example, NEC Electronics, Inc., Unisys Corp, and LSI Logic Corp. have all hosted Internet-based "CyberFairs" to recruit for applicants. The date and time of the fair along with detailed job descriptions, are advertised in advance by the employers and by the firm organizing the CyberFairs, Hart Advertising network, an advertising and recruiting firm in Los Altos, California. This advertising is done via newspaper ads as well as via Hart's World Wide Web page. On the day of the fair ... Applicants log on and complete a prequalifying questionnaire before participating in a private online interview, during which candidates, recruiters and managers exchange typed messages on-line. "

Other firms like Cray Research, Inc., use their computers to process applicant resumes. Cray, for instance, receives about 200 resumes each week for positions in their four locations. Using special software these resumes are scanned into Cray's HR databases where its managers can have instant access to the 14, 000 or so resumes in Cray's HR database system.