Human Resource Information Systems (HRIS) have become one of the most important tools for many businesses. Even the small, twenty-person office needs to realize the benefits of using HRIS to be more efficient. Many firms do not realize how much time and money they are wasting on manual human resource management (HRM) tasks until they sit down and inventory their time. HRIS is advancing to become its own information technology (IT) field. It allows companies to cut costs and offer more information to employees in a faster and more efficient way. Especially in difficult economic times, it is critical for companies to become more efficient in every sector of their business; human resources (HR) is no exception.

In his 2008 book, *The New Human Capital Strategy*, Bradley Hall defines human resources management as watching over and growing human capital, one of the greatest aids businesses have in gaining competitive advantage. The modern human resource concept is based on four integrated parts: skills, structure, systems, and shared values. Skills are the abilities and knowledge that people bring to an organization. Structure refers to the communication channels within the human resource department, who manages and who is accountable. Systems are the tools used to make human resource decisions, the reviews and measures HR managers control. Shared values are the less tangible beliefs and cultural strengths an organization possesses. This four-part concept has been used since the 1960s and still functions as a basic understanding of human resources in the business world.

Although the basic components of the modern human resource system have stayed relatively unchanged since their inception, HR operations are still subject to flaws. According to a study cited by Hall, 75 percent of

studied companies attempt to bend prefabricated HR plans to their particular needs without considering a more integrated, top-down strategy. In many cases, lower-level managers were involved neither in creating the HR processes nor in implementing them. Others chose to focus more on assumed HR positions such as compensation director and staffing director, rather than overall business strategy. Few implemented third-party regular reports and accountability standards. There are, then, many opportunities available for companies to improve their existing HR systems.

**ETHICS IN HUMAN RESOURCE MANAGEMENT**

Ethical considerations are becoming increasingly important to HR departments in American industries. A tension often exists between a company's financial goals and strategies to improve profits, and ethical considerations with right-behavior concerns. Since human resources departments are often most focused on employees and employee behavior, it falls to them to define ethical behavior, communicate specialized ethical codes, and update or elaborate on existing right-behavior expectations. Human resource management systems are expected to communicate ethical values and so improve company performance.

In the absence of a fully separate ethics department, HR departments can struggle with this ethical burden. A 2008 study done by SHRM, the Society for Human Resource Management, showed that over 50 percent of employers did not make ethical considerations part of their employee evaluations. About half of employees did not think they had means to find ethical advice within their company, and even 19 percent of human resources professionals felt pressure to compromise their ethical standards, coming from multiple directions within their companies, though the HR department was the primary resource for ethical information in 80 percent of studied companies.

One of the ways the HR department can support ethics management for their company is through the maintenance of a code of ethics. Briefly, an ethical code for a business should help employees build trust with each other and their company, while clarifying any uncertain or gray areas that may exist in the company's ethical considerations. Instead of only supporting existing ethical standards, a proper code of ethics should seek to raise the standard and improve employee behavior. The code should show members of the company how to make judgment decisions and encourage such proper decision making, while at the same time providing enforcement protocols to prevent misconduct. When writing the code of ethics, an HR department should be sure to do the following:

* Create clear objectives for the code and other ethical endeavors to accomplish within the organization.
* Bring all levels of the organization into the process of creating the code, gaining support throughout the company.
* Check on all the latest legislation, both national and state, that may affect the company's ethical processes, expectations, and requirements, so that the ethical code can be as current as possible.
* Use the clearest language possible, making the code accessible and simple to understand.
* Willingly answer realistic problems and address real-life scenarios so that employees will have clear answers to their questions.
* List several resources for employees to seek continuing ethical education, from other reports by the HR department to helpful Web sites that can provide guidance.
* Keep in mind that the code of ethics is meant to be used, making sure that it is communicated to all levels of the organization and readily available to any employee who may need aid making judgment calls.

A code of ethics is only one part of the entire ethical system in an organization. The HR department should also make use of several other ethical tools to ensure employees are practicing right-behaviors and fully understand their ethical requirements.

**MERGING AND HR**

Whenever there is merger activity, the HR department often has a large responsibility to make sure that employee transitions go smoothly. When companies merge, some of the most significant changes occur in number and treatment of employees. If human resources can successfully deal with these important issues, they can have enormous impact on the success of the transition.

First, the HR department should ascertain the precise number of companies and company subsidiaries involved in the merger. This will give a clear idea of how many employees will be involved in the transition. Some of these employees may work in different businesses or on different products than the HR department has previous experience in, requiring new protocols. Employees across all companies involved will have a variety of reactions to the merger, raising both ethical and temperamental issues for the HR department to solve. To prepare for these issues, HR should pinpoint the managers involved in the

company integration, and gain their assistance throughout the merging of the business lines.

In certain mergers there will be an excess of employees, requiring multiple layoffs. The HR department should ascertain how many excess positions there are and how they will communicate the layoff information to employees and managers alike. Legal issues should also be dealt with; a legal consult with someone who has experience in mergers can be an excellent asset. If employees will be terminated in the merger, it is also up to HR to find out how severance pay and extended benefits will be distributed. Will the company provide assistance for employees seeking new jobs? The HR department will be in charge of such out-placement assistance, and the protocols for who gets such assistance and what qualities (experience, position, etc.) extended benefits will be based on.

While layoff deadlines are being established and employee benefits managed, the HR department should also perform a careful internal audit. The companies merging will have differing employee handbooks offering two sets of employee instructions regarding training and expected behavior. Most will also have different instructions for managers and their treatment of personnel, including chains of communication and conflict resolution. The HR department should be sure to review these separate manuals and create one unifying handbook for the merged procedures. Other plans requiring combination by HR include compensation plans, employee benefits, and ethical standards.

**EMPLOYEE SEPARATION AND TURNOVER**

One of the most important functions of HRM is to oversee smooth and successful employee separations and turnover. There is always a certain amount of employee turnover at any company, with people voluntarily quitting their jobs for a host of different reasons. These employee separations differ from normal personnel losses resulting from acquisitions, in which employees are laid off and not replaced. For every separation, HR must use recruitment strategies to find a new employee and make sure that the company workforce does not suffer through less skilled workers or workers who are more likely to quit.

There are three types of external employee movement that concern HR departments. The first consists of pure growth, or acquisitions where the company only gains employees without having an excess to lay off, usually involving the annexation of a department or production line. The second type is pure reduction, or movement that only loses employees, such as a series of layoffs to cut costs. Third is all the possible combinations of the first two.

When HR needs to manage such employee separation (and the collective efforts to replace them with other talented workers), separation is divided into three different components, from which policies toward the change can be formed. The first component is quantity: how many employees are leaving the company? These leaving employees, once quantified, are sometimes separated further into categories based on company branches or position. The second component is the quality of employees leaving the organizations. This can refer to the positions they held, the particular talents they possessed (which may be hard to replace), and how they fit into the company's strategies. The third component consists of the costs to the company (costs involved in losing employees, recruiting new ones, and/or training those acquired during a merger).

**Succession Planning.** Succession planning is another vital part of the HR planning process. It refers to the way in which a company forms policies for replacing key members of its organization, shifting transfer of authority and responsibility carefully from a leaving member to a new member. Often, this means making sure that an arriving employee has the necessary training and experience to fulfill their functions.

**RECORDKEEPING IN HR**

Another major concern of the HR department are employee personnel records. These records are filed, maintained, and updated through HRM processes. A good HRM system will allow access to files both by the employee they belong to and the managers who require them. Among the informational data kept in employee files, HR should make sure the files include names, addresses, telephone numbers, marital status, dependents, and beneficiaries.

Most HRM strategies have policies established regarding treatment of personnel information. Companies usually collect information that is required only for legal reasons, or reasons necessary to that business. Employees are given chances to read and correct their files, and files are kept strictly by the company, with rules in place for viewing, maintenance, and outside transfer.

Certain pieces of legislation passed affect the storage and retrieval of personnel records. The Sarbanes-Oxley Act requires that every company has some confidential system in place for the communication of fraud-related activities and malfeasance. The Securities and Exchange Commission (SEC) has recently begun to penalize brokers who do not keep complete and detailed records of all their transactions, and the Health Insurance Portability and Accountability Act (HIPAA) requires that all

electronic records concerning patients be put into an easy-transfer format.

**BACKGROUND CHECKS**

HR departments also manage background checks for potential employees, an increasingly important job as the risk of hiring a misrepresenting employee rises. USA Fact, a provider of screening services for recruiting departments, recently conducted a survey of over 300,000 background checks, and found that among the potential employees, 5 percent had criminal histories, more than a third had motor vehicle violations, 18 percent had employment histories that could not be verified, and approximately 11 percent had been falsifying their education experience. By catching fraudulent records such as these, human resources departments can significantly reduce employee theft, turnover, and even workplace violence.

The sorts of background checks companies can perform include criminal background reviews, Social Security number verification, employment history and education verifications, professional license verification, credit history reviews, and motor vehicle record checks.

There are several guidelines that can be used when HR departments form policies on conducting background checks. First, all inquiries should be strictly related to the position HR is trying to fulfill. Second, all background checks should first be agreed upon by the employee—formal consent in writing is the best way. This gives employees a chance to rethink their applications, especially if they realize a background check would disqualify them for the position. Third, employers should be reasonable. If background checks become over-extensive, they could cost the company too much money and the organization could risk invasion of privacy charges.

**HUMAN RESOURCE PLANNING**

HR planning attempts to connect employees to the vision, needs, and strategic plans of the company, including management of all aspects of human resources. Essentially, good HR planning will ensure that the best possible employees (with the right talents, ambitions, and personalities) will find the best possible positions within the organization. HR planning can be done in both the short and long term, although long-term strategies are the most common for HR planning purposes.

When HR planning, the company should tie in all of its HR processes to the company's goal and objectives. If HR planning does not exist to further specific objectives of the country, it is not fulfilling its purpose. This can lead to very wide parameters in HR planning, which can include most activities involving connections between employees and the structure of the business itself. There

| **Exhibit 1 HR Trend Analysis for a Manufacturing Firm** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | **2006** | **2007** | **2008** | **2009** | **2010** |
| **Projected sales**  **(thousands of dollars)** | 10,200 | 8,700 | 7,800 | 9,500 | 10,000 |
| **Number of employees** | 240 | 200 | 165 | 215 | ? |

are many types of analysis HR planning can use, including the following:

* *Workforce analysis* judges the future trends of specific jobs in the company and how they will change, such as technological trends, expected surpluses or layoffs, and needed skill sets.
* *Internal scans* are used to identify key movements and patterns within the organization which may affect HR operations.
* *External scans* look at outside factors which affect employment, such as economic conditions and the need for certain skills.
* *Gap analysis* is used to plot where the HR policies currently are, where they will need to be to meet future goals, and how a company can move ahead in its human resources strategy.
* *Priority setting* allows HR managers to set HR priorities and form strategies for reaching them, based on information previously gathered through other scans.

**Demand Forecasting.** Demand forecasting is the process of judging future trends in the employment market so that good HR recruitment decisions can be made. It involves analysis of such factors as competition, international movements, legislation, and changes in both technology and society. With proper demand forecasting, employers will be able to tell what skill sets their new employees will need and what positions will become more necessary to business. They will also be able to accurately budget for recruitment endeavors.

There are many different techniques used in demand forecasting, including those listed here:

* Managerial judgment is a type of brainstorming that involves a meeting of managers who gather to diagnose and predict the future job market. These can generally be either top-down or bottom-up, with either the executives forming their plans and trend analysis for discussion, or the mid-level managers bringing their forecasts to the meeting. The best   
    
  types of managerial judgment will combine forecasts from many sources, including HRM.
* Ratio-trend analysis involves researching past trends in organizational employment, with an eye on current changes the organization is going through, to come up with reliable projections concerning future activity. This usually involves ratios, such as that between the number of workers and the revenue of the company. An example of a trend analysis is illustrated in Exhibit 1, which depicts the relationship between a business factor (namely, sales volume) and workforce size. As one can see from the exhibit, if the company expects its 2010 sales to be $10 million, it will need to increase its workforce to a size of nearly 240, which is the number of employees it had in 2006 when sales were $10.2 million.
* Regression analysis is a more advanced version of ratio-trend analysis, involving the plotting of past relationships so that regression lines can be drawn and trends planned out. An example of how regression analysis can be used to project HR demand is shown in Exhibit 2. In this example, the figures used in the trend analysis (Exhibit 1) are now depicted in the form of a scatter diagram. The line running through the center of the points plotted on the scatter diagram is the regression line. To determine the number of employees needed when the sales volume is $10 million, one would follow the path indicated by the dashed line. One would start at the point on the X axis reading “10,000” and then move up vertically until reaching the regression line. The value on the Y axis corresponding to that point (i.e., 230) reflects the needed workforce size.
* The Delphi technique involves recruiting experts on employees and employee trends, and gathering their various forecasts concerning job markets. The resulting statistics are then combined and recombined until the final result is a usable forecast.
* Structured analogies are similar to regression analyses, but they are more creative-oriented, comparing past scenarios involving employment trends and looking at examples from similar situations in the past.
* Judgmental decomposition tries to break a forecasting situation down into smaller parts, which are then separately analyzed and recombined to form a complete view.

These are just some of the techniques used in demand forecasting—what other techniques a company decides to use are based on its HRM strategy.

**Judgmental Approaches.** Judgmental approaches to demand forecasting involve the use of human judgment, rather than a manipulation of numbers. Two of the most commonly used judgmental techniques are group brainstorming and sales force estimates. The group brainstorming technique of demand forecasting uses a panel of experts (i.e., people within the organization who collectively understand the market, the industry, and the technological developments bearing on HRM needs). These experts are asked to generate a forecast through the process of brainstorming. A variety of brainstorming techniques exist. Most involve a face-to-face discussion among group members, who are asked to reach a consensus.

When using a *group brainstorming* technique to forecast human resources demand, participants must make certain assumptions regarding the future. That is, they must examine the firm's strategic plans for developing new products or services, expanding to new markets, and so forth, and then try to predict such things as:

* Future marketplace demands for the organization's products and services
* The percentage of the market that the organization will serve
* The availability and nature of new technologies that may affect the amounts and types of products or services that can be offered

The accuracy of the forecasts depends on the correctness of these assumptions. Of course, the future is very difficult to predict because it is subject to many uncertainties. Therefore, the organization must continually monitor its demand forecasts in light of any unexpected

changes. HRMS packages facilitate the calculation and monitoring of demand forecasts.

The use of *sales force* estimates represents another judgmental approach for forecasting HR demand. This approach is most appropriately used when the need for additional employees arises from the introduction of new products. When a new product is launched, sales personnel are asked to estimate the demand for the product (i.e., expected sales volume) based on their knowledge of customer needs and interests. The organization then uses this information to estimate how many employees will be needed to meet this demand. One drawback of this approach is the possibility of bias. Some sales personnel may purposely underestimate product demands so they will look good when their own sales exceed the forecasts. Others may overestimate demand because they are overly optimistic about their sales potential.

**SUPPLY FORECASTING**

Once a demand forecast has been made, an organization has a relatively good idea of the number and nature of positions it will need to carry out its work at a particular point in time. It then estimates which of these positions will be filled at that time by individuals who already are employed by the company. The process used to make this estimation is called supply forecasting.

Supply forecasting is a two-step process. HRMS packages provide the employer with the means to automate much of these two steps. In the first step, the organization groups its positions by title, function, and responsibility level. These groupings should reflect levels of positions across which employees may be expected to advance. For instance, the HRM group might include the job titles of HR assistant, HR manager, and HR director. The secretarial group might include secretarial clerk, principal secretary, senior secretary, and administrative assistant.

The second step of supply forecasting is to estimate, within each job group, how many current employees will remain in their positions during the planning period, how many will move to another position (e.g., through transfer, promotion, or demotion), and how many will leave the organization. These predictions are partially based on past mobility trends (e.g., turnover and promotion rates). The organization also should consider any plans for mergers, acquisitions, unit or division divestitures, layoffs, retrenchments and downsizing, and even hostile takeovers. When making its supply forecast, the organization also should look at specific individuals. Some may have already announced, for instance, that they are retiring at the end of the year, returning to school in the fall, or getting married and planning on moving to a different part of the country.

Computerized statistical packages are available to help estimate the flow of employees through an organization. The estimates generated by these packages can be fairly accurate in stable environments. When the environment is unstable, of course, these estimates are suspect. For instance, an organization may base its estimates on past turnover rates, which have been about 10 percent during each of the past five years. If the turnover rate were to change drastically because of factors such as job dissatisfaction or downsizing, the organization would severely underestimate its future staffing needs.

**OUTCOMES OF THE HR PLANNING PROCESS**

When the HR planning process is completed, a firm must establish and implement HRM practices in order to meet its human resource needs. Following is a brief overview of how HRM practices can help organizations deal with anticipated oversupplies and undersupplies of personnel.

The trend toward organizational restructuring usually results in a smaller workforce. Therefore, when an organization's strategic plan calls for restructuring, the HRM response usually is one of downsizing. Downsizing usually results in layoffs. Because of the negative outcomes that are often associated with layoffs, employers are encouraged to seek alternatives, such as hiring freezes, early retirements, restricted overtime, job sharing, and pay reductions.

When the results of demand and supply forecasting project an undersupply of personnel at some future point in time, the organization must decide how to resolve this problem. The solution may involve hiring additional staff, but there are other options. When HR plans indicate an undersupply of employees, firms can recruit personnel to staff jobs with anticipated vacancies. HRMS packages provide employers with capabilities to carry out recruitment in all of its steps. The first step is to conduct a job analysis to determine the qualifications needed for each vacant job.

The next step is to determine where and how to recruit the needed individuals. For instance, a company must decide whether to fill its vacancies externally (i.e., from the external labor market) or internally (i.e., from its own current workforce). When recruiting externally, an organization should first assess its attractiveness in the eyes of potential applicants; unattractive employers may have trouble generating a sufficiently large applicant pool. Such employers should attempt to increase the number of people who are attracted to the organization and thus interested in applying for a job there. This may be accomplished by increasing starting pay levels and/or improving benefit packages. Another option is to target certain protected groups whose members may be

Underemployed in the local labor market, such as older, disabled, or foreign-born individuals.

Internal recruitment efforts can be improved through the use of career development programs. When designing such a program, the organization should collect work history and skill-level information on each of its employees. Such information would include age, education level, training, special skills (e.g., foreign language spoken), and promotion record, and should be stored on a computer. This employee information allows the organization to identify current employees who are qualified to assume jobs with greater responsibility levels. For instance, in departments where skilled managers are in short supply, a management replacement chart can be prepared that lists present managers, proposes likely replacements, and gives an estimate of when the replacement candidate will be trained and available to fill an open position.

Instead of hiring new workers to meet increasing demands, an organization may decide to improve the productivity of the existing workforce through additional training. Other options include the use of overtime, additional shifts, job reassignments, and temporary workers. Another option is to improve retention rates. When this aim is met, firms will have fewer job vacancies to fill.

Retention rates can be improved at the outset of the employer/employee relationship, when applicants are first recruited. Retention rates are likely to improve when applicants are given a realistic preview of what their jobs would actually be like (warts and all), rather than an overly glowing one.

Workers want to feel valued and needed by their organization. In a climate characterized by mergers, acquisitions, and layoffs, many workers feel very insecure about their jobs. Employees with such feelings often begin shopping around for other jobs. These fears can be eased by implementing HR plans for training and cross-training. Such plans allow workers to perform a variety of functions, thus ensuring that they have the necessary skills to continue making contributions to the firm. Management training also is crucial in this regard. Organizations must train managers to be good supervisors. Poor “people management” is a primary cause of voluntary turnover. Managers at all levels should know what is expected of them, in terms of managing people instead of just managing budgets.

**HUMAN RESOURCE MANAGEMENT SYSTEMS**

Several major software companies provide HRMS packages. SAP, PeopleSoft, Oracle, and ADP are the largest. Depending on the company's needs and size, package options may include some or all of the following services:

* Employee career cycle management
* 24/7 data access to authorized managers
* Customized levels of access to confidential data
* Pre-populated forms and templates
* Access to real-time data—with instantaneous updates
* Employee administration
* Benefits administration
* Compliance
* Recruitment
* Performance and development
* Safety and health
* Succession planning
* Time-off management
* Organization management
* Payroll
* Training
* 401(k) plan administration

The opportunities to add more services are endless and continue to improve.

For most companies, the hardware and software needed to run these programs are fairly standard. Hardware and software is dependent on the complexity of the HRMS package; more complex HRMS packages require more hardware (e.g., server space and speed).

Another benefit of HRMS includes allowing HR to transition from an administrative department to a strategic management department. The strategic value aspect of the HRMS investment focuses on managing human capital by supporting functions such as recruitment, performance/competency management, employee development, and employee customer service. By executing well in these areas, companies can reduce employee turnover, reduce hiring costs, and improve individual performance.

Another HRMS trend is the use of online surveys. This allows companies to get fast information on their employees, policies, procedures, competition, and anything else they decide to survey. This also gives employees a sense of belonging and contributing to their company. Online employee surveys usually have an 80 percent return ratio, which is much higher than paper surveys.

Employees are becoming more self sufficient in the workplace because of HRMS and the growth of technology. They are able to answer questions, download forms, enroll in benefits, change payroll options, and complete training on their own. This saves both time and money. An employee does not have to make several phone calls in order to speak with the one person who knows the answer

to their questions. Answers are readily available, usually on the company intranet. This also frees up HR to focus on more profitable activities for the company, such as recruiting and employee development.

Another growing trend includes improved methods for monitoring and managing employees' use of the Internet. This helps management to improve productivity, reduce legal liabilities, and control IT costs. Companies are blocking e-mail that may be offensive in order to reduce legal liabilities. They also are blocking Web sites that are inappropriate for workplace viewing. This has improved productivity by reducing nonproductive activities.

HRMS providers have products for companies of all sizes. These providers profit by maximizing the services they offer. Therefore, they are going to target large companies that need more support. However, providers are still interested in small companies, and those that will need more support as they grow.

**SOFTWARE EXAMPLES**

There are many software programs designed to help in HRIS process. The following are only a few of the companies currently providing HRIS software:

* *Ascentis* offers payroll and HRM programs for small- to mid-level organizations, software that tracks many traditional employee benefits and several nontraditional such as paid parking and club memberships.
* *Apex Business Software* offers HR programs to meet company objectives and manage many facets of the HR process, including employee leave and benefit tracking. They also offer instant access to employee attendance information that can be made available even to customers, thereby enforcing accountability.
* *People Trak* has a wide variety of HR software, including personnel, compensation, safety, applicant, and position management. They also have programs for COBRA and benefit administration, for both simple tasks and strategic planning of HRM.
* *ManagerAssistant* offers software with many different modules developed to assist HR employees in each stage of HR analysis.
* *Atlas Business Solutions* creates programs that allow easy filing and retrieval of employee information, including vacation accruals and performance evaluations, in their software package called Staff Files.

As the need for corporate cost-cutting, efficiency, and productivity becomes more important, the HRMS industry is going to continue to have strong growth potential. Not only can HRMS help with employee administration from recruiting to benefits, it can save companies thousands of dollars by lowering workforce and employee turnover levels. By 2005, the corporate world had only seen the beginning potential of HRMS.