Chapter 1

Evolution of Human Resource Management and Human Resource Information Systems

The Role of Information Technology

Mohan Thite, Michael J. Kavanagh, and Richard D. Johnson

EDITORS’ NOTE

The purpose of this chapter is to provide an introduction to the fields of human resource management (HRM) and information technology (IT) and to the combination of these two fields into human resource information systems (HRIS). The history of the field of HRM and the impact of computer technology on HRM will be covered, as well as the advent of using a human resource information system and the subsequent effects on both HR and IT professionals. The different types of HR activities will be discussed as well as the different types of information systems used in HRIS. A central focus of this chapter is the use in managerial decision making of results and reports from an HRIS. The development of the HRIS field has been seen to have a significant impact on the emergence of strategic human resource management (Strategic HRM), as is discussed in this chapter. This first chapter will lay the groundwork for the remainder of this book, and, consequently, it is important to understand thoroughly the concepts and ideas it presents. This chapter contains definitions for a number of terms in common use in the HRM, IT, and HRIS fields. (Note that a glossary defining these terms is also provided at the back of this book.) The central themes...
of this book in terms of the development, implementation, and use of an HRIS will also be discussed. A model of organizational functioning that shows the relationship of human resources management to the strategic planning of an organization with an emphasis on the use of an HRIS will be covered too. An overview of the entire book will be presented here as well, one discussing how each chapter is an integral part of the entire field of HRIS. Finally, you should note that the "Key Terms" used in this chapter are in bold and contained in a section after the chapter “Summary.” The pattern of sections for this chapter will be consistent for all chapters of this book.

**CHAPTER OBJECTIVES**

After completing this chapter, you should be able to

- Describe the historical evolution of HRM, including the changing role of the human resources (HR) professional
- Discuss the impact of the development of computer technology on the evolution of HRM and HRIS
- Describe the three types of HR activities
- Explain the purpose and nature of an HRIS as well as the differences between the types of information systems functionality in an HRIS
- Discuss how the information from an HRIS can assist in decision making in organizations
- Discuss how the developments in HRIS have led to HRM becoming a strategic partner in organizations and to the emergence of the field of strategic human resource management (Strategic HRM)
- Be able to define Six Sigma, balanced scorecard, and the contingency perspective and fit model of HRM
- Describe the differences between e-HRM and HRIS
- Describe the central themes of the book and how they relate to managerial decision making
- Understand how HRM and HRIS fit within a comprehensive model of organizational functioning

**HRIS IN ACTION**

**Situation Description**

To illustrate the importance and use of HRIS in contemporary HR departments, this vignette examines the typical memoranda that may appear in the in-box of HR professionals and managers. Assume you are the HR director of a medium-size organization that
primarily maintains and uses manual HR records and systems. This morning, your inbox contains the following memos that require action today.

Memo 1: A note from the legal department indicates that some female staff members have filed an employment discrimination complaint with the local government agency responsible for the enforcement of equal opportunity employment. The female staff members allege that, for the past 10 years, they have been passed over for promotion because they are women. In order to respond to this allegation, the legal department requires historical data on the promotions of both males and females for the past 10 years for all jobs in the company broken down by department. It also needs the training records for all managers involved in personnel actions, such as promotions, to ascertain whether or not they have received training in equal employment provisions, especially in terms of unfair gender discrimination.

Memo 2: The second item is a complaint from employees working in a remote location of the company, about 150 miles away. The employees are complaining that their pay slips are not reaching them on time and that they are finding it difficult to get timely and accurate information on the most recent leave and benefits policies of the company.

Memo 3: A letter from the marketing manager states that he has not received any updated information on the status of his request, made three months ago, to recruit a new salesperson. The failure to recruit and hire a new salesperson has had a negative effect on the overall sales of the company’s products over the past quarter.

Memo 4: A letter from the HR professional in charge of the southwest regional office says that she is swamped with HR administrative work, particularly personnel transactions on employees. As a result, she has not been able to meet employees in her region to describe and begin to implement the recent Employee Engagement Initiative as required by corporate headquarters.

Memo 5: A note from one of the production managers indicates that he has received a resignation letter from a highly regarded production engineer. She is resigning because she has not received the training on new technology that she was promised when hired. She notes that most of the other production engineers have attended this training program and have had very positive reactions to it.

Memo 6: A strongly worded note from the director of finance asks the HR department to justify the increasing costs associated with its operation. The note indicates that the HR director needs to develop a business plan for the overall operation of the HR department to include business plans for all of the HR programs, such as recruiting and training. Further, the finance director indicates that unless the business cases can demonstrate a positive cost-benefit ratio, the budget for the HR department will be reduced, which will lead to reductions in the HR department professional staff.

As the HR director, your first thought may be to resign since searching for the information required by these memos in the manual records on employees will require several days if not weeks to complete. However, you have just returned from a professional
conference sponsored by the Society for Human Resources Management (SHRM) and remember how an HRIS may be what you need! As this chapter and the ones that follow will illustrate, an HRIS enables an HR department to streamline its activities and the demands placed on it by automating the HR data and processes necessary for the management of the human capital of the organization. This automation helps develop the capabilities to produce information and reports on the requests contained in the memos in the vignette, and these reports will facilitate efficient and effective managerial decision making. While an HRIS cannot make the judgement calls in terms of whom to recruit or promote, it can certainly facilitate better inputting, integration, and use of employee data, which will reduce the administrative burden of keeping detailed records and should aid and enhance decisions about strategic directions.

**Need for an HRIS in Decision Situations**

If you read the above memos again, you will recognize that each one has a request for HRM information that will be used in a decision situation. The information requested in Memo 1 will help the legal department determine the company’s potential liability in a workplace gender discrimination situation. This information may help to determine whether the company should decide to rectify the situation in terms of an informal settlement with the female staff members or to defend the company’s promotion procedures as valid—in court if necessary. The information required in Memo 2 may help the HR department decide to change its payroll procedures as well as its distribution of benefits information to remote company locations. The information needed to respond to Memo 3 will impact decisions by the HR department to change recruitment and selection programs. Obviously, the response to Memo 4 would greatly support the need for the acquisition of an HRIS. The information required to answer Memo 5 may help in decisions regarding the revision of recruiting and training procedures, especially for new engineers. The information that would be provided in response to Memo 6 will help decide the future of the HR department. As you go through this book, look at information on the capabilities of various human resource information systems, trying to find an HRIS that would allow you (as the HR director) to respond to each of the six memos in one day.

**INTRODUCTION**

Leading management thinkers suggest that “it is not technology, but the art of human- and humane-management” that is the continuing challenge for executives in the 21st century (Drucker, Dyson, Handy, Saffo, & Senge, 1997). Similarly, Smith and Kelly (1997) believe that “future economic and strategic advantage will rest with the organizations that can most effectively attract, develop and retain a diverse group of the best and the brightest human talent in the market place” (p. 200).

To maintain a competitive advantage in the marketplace, firms need to balance the resources available to the firm to achieve the desired results of profitability and
survival. The resources that are available to the firm fall into three general categories: physical, organizational, and human. In discussing how to gain a competitive advantage in the global market, Porter (1990) notes that management of the human resources in the global economy is the most critical of the three. The idea of treating human resources as a means of gaining a competitive advantage in both the domestic and the global marketplace has been echoed by other authors. As Greer (1995) states,

In a growing number of organizations human resources are now viewed as a source of competitive advantage. There is greater recognition that distinctive competencies are obtained through highly developed employee skills, distinctive organizational cultures, management processes, and systems. This is in contrast to the traditional emphasis on transferable resources such as equipment. . . . Increasingly, it is being recognized that competitive advantage can be obtained with a high quality work force that enables organizations to compete on the basis of market responsiveness, product and service quality, differentiated products, and technological innovation. (p. 105)

The effective management of human resources in a firm to gain a competitive advantage in the marketplace requires *timely and accurate information* on current employees and potential employees in the labor market. With the evolution of computer technology, meeting this information requirement has been greatly enhanced through the creation of HRIS. A basic assumption behind this book is that the effective management of employee information for decision makers will be the critical process that helps a firm maximize the use of its human resources and maintain competitiveness in its market.

The first purpose of this book is to provide information on the *development, implementation, and maintenance* of an HRIS. The second purpose is to demonstrate *how an HRIS can be used in traditional HRM programs*, such as in selecting and training employees, to make these programs more efficient and effective. The final purpose is to emphasize how an HRIS can provide timely and accurate employee information to assist decision makers at both the strategic and operational levels in an organization. As a consequence, the quality of employee information will have a strong effect on the overall effectiveness of the organization.

**HISTORICAL EVOLUTION OF HRM AND HRIS**

One can analyze the historical trends of the HR function from different viewpoints: the evolution of HRM (human resources management) as a professional
and scientific discipline, as an aid to management, as a political and economic conflict between management and employees, and as a growing movement of employee involvement influenced by developments in industrial, organizational, and social psychology. The historical analysis that follows will demonstrate the growing importance of employees from being just one of the replaceable parts in organizations in the 20th-century industrial economy to being a key source of sustainable competitive advantage in the 21st-century knowledge economy.

Since this is a book on HRIS, we will examine the development of the fields of both human resources and information technology in terms of their evolution since the early 20th century. This means examining the evolution of HRM intertwined with developments in IT and describing how IT has played an increasing role in the HRM function. This historical analysis will show how the role of HRM in the firm has changed over time from primarily being concerned with routine transactional and traditional HR activities to dealing with complex transformational ones. Transactional activities are the routine bookkeeping tasks—for example, changing an employee’s home address or health care provider. Traditional HR activities are focused on HR programs like selection, compensation, and performance appraisal. However, transformational HR activities are those actions of an organization that “add value” to the consumption of the firm’s product or service. An example of a transformational HR activity would be a training program for retail clerks to improve customer service behavior, which has been identified as a strategic goal for the organization. Thus, transformational activities increase the strategic importance and visibility of the HR function in the firm. This general change over time is illustrated in Figure 1.1 and will become evident as we trace the historical evolution of HRM in terms of five broad phases of the historical development of industry in the United States. For more information on this historical development, you should consult Kavanagh, Gueutal, and Tannenbaum (1990) or Walker (1982).

---

**Figure 1.1  Historical Evolution of HRM**

| Role of HRM |  
| --- | --- |
| **Early 20th Century** | **21st Century** |
| Caretaker | Strategic partner |
| Employee focus | Cost-effectiveness |
| Records | Employee development |
Pre–World War II

In the early 20th century and prior to World War II, the personnel function (the precursor of human resources management) was primarily involved in clerical record keeping of employee information; in other words, it fulfilled a “caretaker” function. During this period, the prevailing management philosophy was called “scientific management.” The central thrust of scientific management was to maximize employee productivity. It was thought that there was one best way to do any work, and this best way was determined through time and motion studies that investigated the most efficient use of human capabilities in the production process. Then, the work could be divided into pieces, and the number of tasks to be completed by a worker during an average workday could be computed. These findings formed the basis of piece-rate pay systems, which were seen as the most efficient way to motivate employees at that time.

At this point in history, there were very few government influences in employment relations; consequently, employment terms, practices, and conditions were left to the owners of the firm. As a result, abuses such as child labor and unsafe working conditions were common. Some employers set up labor welfare and administration departments to look after the interests of workers by maintaining records on health and safety as well as recording hours worked and payroll. It is interesting to note that record keeping is one of the major functions built into the design of an HRIS today; however, there simply was no computer technology to automate the records at this time in history. Of course, paper records were kept, and we can still see paper record HR systems in many smaller firms today.

Post–World War II (1945–1960)

The mobilization and utilization of labor during the war had a great impact on the development of the personnel function. Managers realized that employee productivity and motivation had a significant impact on the profitability of the firm. The human relations movement after the war emphasized that employees were motivated not just by money but also by social and psychological factors, such as receiving recognition for work accomplished or for the achievement of work norms.

Due to the need for the classification of large numbers of individuals in military service during the war, systematic efforts began to classify workers around occupational categories in order to improve recruitment and selection procedures. The central aspect of these classification systems was the job description, which listed the tasks, duties, and responsibilities of any individual who held the job in question. These job description classification systems could also be used to design
appropriate compensation programs, evaluate individual employee performance, and provide a basis for termination.

Because of the abusive worker practices prior to the war, employees started forming trade unions, which played an important role in bargaining for better employment terms and conditions. There were significant numbers of employment laws enacted in the United States that allowed the establishment of labor unions and defined their scope in relationship with management. Thus, personnel departments had to assume considerably more record keeping and reporting to governmental agencies. Because of these trends, the personnel department had to establish specialist divisions, such as recruitment, labor relations, training and benefits, and government relations.

With its changing and expanding role, the typical personnel department started keeping increasing numbers and types of employee records, and computer technology began to emerge as a possible way to store and retrieve employee information. In some cases in the defense industry, job analysis and classification data were inputted into computers to better understand, plan, and use employee skills against needs. For example, the U.S. Air Force conducted a thorough and systematic job analysis and classification through its Air Force Human Resources Laboratory (AFHRL), which resulted in a comprehensive occupational structure. The AFHRL collected data from thousands in jobs within the Air Force, and, through the use of a computer software program called the Comprehensive Occupational Data Analysis Program (CODAP), it was able to establish more accurately a job description classification system for Air Force jobs.

Personnel departments outside the defense industry were not using computers at this time. Computers were being used for billing and inventory control, but there was very little use for them in the personnel function except for payroll. The payroll function was the first to be automated. Large firms began harvesting the benefits of new computer technology to keep track of employee compensation, but this function was usually outsourced to vendors since it was still extremely expensive for a firm to acquire or develop the necessary software for the payroll function. It was simpler to outsource this function. It is important to realize that computer technology was just beginning to be used at this time, and it was complex and costly. With increasing legislation on employment relations and employee unionization, industrial relations became one of the main foci of the personnel department. Union-management bargaining over employment contracts dominated the activity of the department, and these negotiations were not computer based. Record keeping was still done manually despite the growing use of computerized data processing in other departments, such as accounts and materials management. What resulted was an initial reluctance among personnel departments to acquire and use computer
technology for their programs. This had a long-term effect in many firms when it came to adopting advancements in computer technology, even though this technology got cheaper and easier to use.


This period witnessed an unprecedented increase in the amount of labor legislation in the United States, legislation that governed various parts of the employment relationship, such as the prohibition of discriminatory practices, the promotion of occupational health and safety, the provision of retirement benefits, and tax regulation. As a result, the personnel department was burdened with the additional responsibility of **legislative compliance** that required collection, analysis, and reporting of voluminous data to statutory authorities. For example, to demonstrate that there was no unfair discrimination in employment practices, a personnel department had to diligently collect, analyze, and store data pertaining to all employment functions, such as recruitment, training, compensation, and benefits. To avoid the threat of punitive damages for noncompliance, it had to ensure that the data were comprehensive, accurate, and up-to-date, which made it essential to automate the data collection, analysis, and report generation process. As you go through the chapters of this book, these varying laws and government guidelines will be covered within the specific HR topics.

It was about this time that personnel departments were beginning to be called human resources departments and the field of human resource management was born. The increasing need to be in compliance with numerous employee protection laws or suffer significant monetary penalties made senior managers aware of the importance of the HRM function. In other words, effective and correct practices in HRM were starting to affect the “bottom line” of the firms, so there was a significant growth of HR departments, and computer technology had advanced to the point where it was beginning to be used. As a result, there was an increasing demand for HR departments to adopt computer technology to process employee information more effectively and efficiently. This trend resulted in an explosion in the number of vendors who could assist HR departments in automating their programs in terms of both hardware and software.

Simultaneously, computer technology was evolving and delivering better productivity at lower costs. These technology developments and increased vendor activity led to the development of a comprehensive **management information system (MIS)** for HRM. The decreasing costs of computer technology versus the increasing costs of employee compensation and benefits made the acquisition of computer-based HR systems (HRIS) a necessary business decision. However, the personnel departments were still slow in adopting computer technology, even
though it was inexpensive relative to the power it could deliver for the storage and retrieval of employee information in MIS reports. So, the major issue at this time in the historical development of HRIS was not the need for or capabilities of technology but how to best implement it.

Another factor was the booming economy in most industrialized countries. As a result, employee trade unions successfully bargained for better employment terms, such as health care and retirement benefits. Consequently, labor costs increased, which put pressure on personnel managers to justify cost increases against productivity improvements. With the increased emphasis on employee participation and empowerment, the personnel function transformed into a “protector” rather than a “caretaker” function, shifting the focus away from maintenance to development of employees. Thus, the breadth and depth of HRM functions expanded, bringing about the need for strategic thinking and better delivery of HR services.

**Cost-Effectiveness Era (1980 to the Early 1990s)**

With increasing competition from emerging European and Asian economies, U.S. and other multinational firms increased their focus on cost reduction through automation and other productivity improvement measures. As regards HRM, the increased administrative burden intensified the need to fulfill a growing number of legislative requirements, while the overall functional focus shifted from employee administration to employee development and involvement. To improve effectiveness and efficiency in service delivery through cost reduction and value-added services, the HR departments came under pressure to harness technology that was becoming cheaper and more powerful.

In addition, there was a growing realization within management that people costs were a very significant part of a company’s budget. Some companies estimated that personnel costs were as high as 80% of their operating costs. As a result, there was a growing demand on the HRM function to cost justify their employee programs and services. In one of the first books to address this growing need to cost justify the HRM function, Cascio (1984) indicates that the language of business is dollars and cents, and HR managers need to realize this fact. In a later edition of his book, Cascio (1991) quotes Jacques Fitz-enz (1980), who more accurately states the need for those responsible for human resource management to cost justify their function:

> Few human resource managers—even the most energetic—take the time to analyze the return on the corporation’s personnel dollar. We feel we aren’t valued in our own organizations, that we can’t get the resources we need. We
complain that management won’t buy our proposals and wonder why our advice is so often ignored until the crisis stage. But the human resources manager seldom stands back to look at the total business and ask: Why am I at the bottom looking up? The answer is painfully apparent. We don’t act like business managers—like entrepreneurs whose business happens to be people. (Fitz-enz, 1980, p. 41)

Even small and medium firms could afford computer-based HR systems that were run by increasingly user-friendly microcomputers and could be shown to be cost-effective. The prevailing management thinking regarding the use of computers in HR was not that their use would result in a reduction in the number of employees needed in HR departments but that employee activities and time could be shifted from transactional record keeping to more transformational activities that would add value to the organization. This change in the function of HRM could then be clearly measured in terms of cost-benefit ratios to the “bottom line” of the company.

**Technological Advancement Era and the Emergence of Strategic HRM (1990 to Present)**

The economic landscape underwent radical changes throughout the 1990s with increasing globalization, technological breakthroughs (particularly **Internet-enabled Web services**), and hyper competition. Business process reengineering exercises became more common and frequent, resulting in several initiatives, such as the rightsizing of employee numbers, reducing the layers of management, reducing the bureaucracy of organizational structures, creating autonomous work teams, and outsourcing.

Firms today realize that innovative and creative employees who hold the key to organizational knowledge provide a sustainable competitive advantage because, unlike other resources, intellectual capital is difficult for competitors to imitate. Accordingly, the people management function has become strategic in its importance and outlook and is geared to attract, retain, and engage talent. These developments have led to the creation of the **HR balanced scorecard** (Becker, Huselid, & Ulrich, 2001; Huselid, Becker, & Beatty, 2005), as well as to added emphasis on the return on investment (ROI) of the HR function and its programs (Cascio, 2000; Fitz-enz, 2000, 2002).

The increased use of technology and the changed focus of the HRM function, which shifted to adding value to the organization’s product or service, led to the emergence of the HR department as a strategic partner. With the growing importance and recognition of people and people management in contemporary organizations,
strategic human resource management (Strategic HRM) has become critically important in management thinking and practice. Strategic HRM derives its theoretical significance from the resources-based view of the firm that treats human capital as a strategic asset and a competitive advantage in improving organizational performance (Becker & Huselid, 2006).

Reflecting the resource-based view, Becker and Huselid (2006) stress the importance of HR systems and structure—that is, the “systems, practices, competencies, and employee performance behaviors that reflect the development and management of the firm’s strategic human capital”—for organizational performance (p. 899). Context is a crucial element in Strategic HRM, and, therefore, researchers increasingly emphasize the “best-fit” approach to Strategic HRM as opposed to the “best-practice” approach to Strategic HRM. The success of Strategic HRM is contingent on several factors, such as national and organizational culture, size, industry type, occupational category, and business strategy. Accordingly, Becker and Huselid (2006) argue that “it is the fit between the HR architecture and the strategic capabilities and business processes that implement strategy that is the basis of HR’s contribution to competitive advantage” (p. 899).

A good example of the importance of HR and the information provided by an HRIS can be found in the human resources planning (HRP) function, which will be covered in greater detail in Chapter 11. HRP is primarily concerned with forecasting the need for additional employees in the future and the availability of those employees either inside or external to the company. Imagine, for example, that a company is considering a strategic decision to expand by establishing a production facility in a new location. Using the information recorded and analyzed in the HRIS, HRP can provide estimates of whether or not there are enough people available with the necessary skills in the external labor market of the new location to staff the new facility. Determining the availability of potential employees in the labor market may be critical to the strategic decision to build the new facility, and this, of course, could involve millions or billions of dollars.

In tracing the evolution of strategic HRM (Strategic HRM), M. L. Lengnick-Hall, C. A. Lengnick-Hall, Andrade, and Drake (2009) identify seven key themes:

- **HR contingency perspective** and fit: HR strategies are dependent on business strategies (cost reduction, quality improvement, and innovation) and business settings (manufacturing, services, public sector, and not for profit, as well as firm size)
- Shift in focus from managing people to creating strategic contributions, signifying the resource-based view of the firm and social capital
- **HR system components and structure**, focusing on HR system architecture and bundles of high-performance work practices
• Expanding the scope of HRM beyond the focal organization to include customers, suppliers, and competitors, both locally and internationally
• Achieving HR implementation and execution by translating the rhetoric into practice
• Measuring the outcomes of Strategic HRM by various means, such as the HR balanced scorecard approach
• Research methodological issues that stress the importance of evidence-based management

Another critical characteristic of Strategic HRM is the adoption and use of HR metrics (Lawler & Mohrman, 2003; also see Chapter 6). The focus on cost effectiveness, discussed in the previous section and covered in detail in Chapter 7, not only has continued to the present time but has broadened and deepened further with increasing global competitiveness. Kaplan and Norton (1996) first popularized the concept of the balanced scorecard that goes beyond traditional financial measures to assess firm performance to include customer, internal process, and learning perspectives. Lawler, Levenson, and Boudreau (2004) emphasize that three types of metrics are important to evaluate the HR function—efficiency of administrative tasks, effectiveness of HR practices, and impact in terms of the overall objective of developing and optimizing workforce capabilities and competencies. Incorporating the principles of the balanced scorecard approach, Beatty, Huselid, and Schneier (2003) developed the “HR Balanced Scorecard” that seeks to achieve the key HR deliverables (workforce mindset, technical knowledge, and workforce behavior) by aligning, integrating, and differentiating the HR systems.

The most recent development related to the role of HRM in Strategic HRM has been the application of HRIS-enabled “Six Sigma” processes to HRM. Most professionals associate Six Sigma with General Electric, as the company was the first major user of the Six Sigma approach. In general, Six Sigma refers to streamlining operations through business process reengineering and has been structured around five key processes—define, measure, analyze, improve, and control (DMAIC). The DMAIC approach uses an assortment of statistical tools to reengineer business processes, improve decision making, and improve customer service. Six Sigma will be discussed in Chapter 8.

As we will see in the ensuing chapters, information technology is a key enabler of Strategic HRM (Haines & Lafleur, 2008). However, in determining the strategic fit between technology and HR, it is not the strategy per se that leads to competitive advantage but rather how well it is “implemented,” taking into account the environmental realities that can be unique to each organization and, indeed, between units and functions of the organization. A critical aspect of an HRIS in supporting the implementation of strategic plans is using it to make decisions about
employees, human capital programs, and initiatives. All of these HRM decisions are aided by the ability of the HRIS to generate reports, for example, the number of new employees needed for a specific job. Thus, in the section entitled “A Primer on HRIS” later in this chapter, you will note the generation of reports to be a key benefit of an HRIS. HRM reports are central to decisions involving the human capital of an organization, and they enable the translation of strategic plans to operational decisions. As you go through the chapters in this book, you will see how reports are used in a variety of HRM programs and activities.

**HR ACTIVITIES**

Typical HR programs involve things such as record keeping, recruiting, selection, training, employee relations, and compensation. However, all these programs involve multiple activities, and these HR activities can be classified into three broad categories: transactional, traditional, and transformational (Wright, McMahan, Snell, & Gerhart, 1998). Transactional activities involve day-to-day transactions that have to deal mostly with record keeping—for example, entering payroll information, tracking employee status changes, and the administration of employee benefits. Traditional activities involve HR programs such as planning, recruiting, selection, training, compensation, and performance management. These activities can have strategic value for the organization if their results or outcomes are consistent with the strategic goals of the organization. Transformational activities are those activities that add value to the organization—for example, cultural or organizational change, structural realignment, strategic redirection, and increasing innovation.

Wright et al. (1998) estimate that most HR departments spend approximately 65% to 75% on transactional activities, 15% to 30% on traditional activities, and 5% to 15% on transformational activities. One of the major purposes of the design, development, and implementation of an HRIS is to reduce the amount of time HR employees have to spend on transactional activities, allowing the staff to spend more time on traditional and transformational activities. This notion of using technology to improve transactional activities and accomplish them more efficiently is the central theme of this book and provides one of the primary justifications for a computer-based system. In later chapters that discuss various HR programs such as selection and training, we will see how a computer-based system can aid in both traditional and transformational activities to make them consistent with the strategic goals of the organization.

In terms of the broad roles of HR, Ulrich (1998) identifies four main roles, namely, strategic business partner, administrative expert, employee champion, and
change agent. Ulrich, Younger, and Brockbank (2008) stress that, in the 21st century, the HR organization should function as a business within a business, shifting its focus from activities to outcomes and capabilities and its structure so that it mirrors that of the business.

INTERFACE BETWEEN HR AND TECHNOLOGY

Technology-driven automation (IT) and the redesign of work processes certainly help reduce costs and cycle times as well as improve quality. Information systems (IS) can further help decision makers to make and implement strategic decisions. However, IT is only a tool and can only complement, not substitute for, the people who use it. Often, organizations mistake IT as a message and not the messenger, so they divert time, effort, and money away from a long-term investment in people to developing and deploying information technologies (Thite, 2004). In fact, the critical success factors in information systems project implementation are non-technical and are due more to social and managerial issues (Martinsons & Chong, 1999). This topic is covered in detail in Chapters 8 and 9.

With the increasing use of information technologies in HR planning and delivery, the way people in organizations look at the nature and role of HR itself may change (Roehling et al., 2005). With HR data and reports now readily available on their desktops, will managers interact less with the HR department and see it as being less important? If that is so, how will it affect the attitude of HR professionals toward their jobs and profession? Will they resist the adoption of technology if they perceive that this technology lessens their status?

In traditional organizations with silo mentalities, turf wars between operational departments and functions acting as independent entities are common. Therefore, top management needs to be mindful of organizational politics in managing change. This awareness can be particularly important when developing and implementing an HRIS. Through most of its evolution, HRM has had an administrative and caretaker focus in its delivery, and, even today, this administrative and caretaker focus is important. But, with technology significantly decreasing the time required for administrative tasks, HR departments will begin to allocate resources to more complex, strategic, and transformative activities. Through these changes, the role of HRM is redefined and transformed through value-added, strategic initiatives and interventions. This also means that HR professionals will need to learn new skills and rethink the way the HR department is organized and delivers its services. With the improved job skills of HR professionals, technology will be seen as HR’s “partner in progress.” While having an advanced, full-fledged system will not automatically make HR a strategic business partner, this system acts as a building block and an effective aid in the process (Lawler & Mohrman, 2003).
A PRIMER ON HRIS

What Is an HRIS?

After reviewing the many definitions of an HRIS, Kavanagh et al. (1990) define it as a

system used to acquire, store, manipulate, analyze, retrieve, and distribute information regarding an organization’s human resources. An HRIS is not simply computer hardware and associated HR-related software. Although an HRIS includes hardware and software, it also includes people, forms, policies and procedures, and data. (p. 29)

It is important to note that a company that does not have a computerized system still has an HRM system on paper. The paper systems that most companies used before the development of computer technology were still comparable with an HRIS, but the management of employee information was not done as quickly as in a computerized system. If these companies had not had paper systems, the development and implementation of computerized systems would have been extremely difficult. For the purpose of this book, however, we will use the term HRIS to refer to a computerized system designed to manage the company’s HR.

The primary purpose of the HRIS is to provide service, in the form of accurate and timely information, to the “clients” of the system. There are a variety of potential clients, as HR information may be used for strategic, tactical, and operational decision making (e.g., planning for needed employees in a merger); to avoid litigation (e.g., identifying discrimination problems in hiring); to evaluate programs, policies, or practices (e.g., evaluating the effectiveness of a training program); and to support daily operations (e.g., helping managers monitor the work time and attendance of their employees). All these uses mean that there is a mandatory requirement that data and reports be accurate and timely and that the “client” can understand how to use the information.

Because of the complexity and data intensiveness of the HRM function, it is one of the last management functions to be targeted for automation (Bussler & Davis, 2001/2002). This fact does not mean that an HRIS is not important; it just indicates the difficulty of developing and implementing it compared with other business functions—for example, the billing and accounting systems. Powered by information systems and the Internet, almost every process in every function of HRM has been computerized today.

The systems and process focus helps organizations keep the customer perspective in mind, since quality is primarily defined and operationalized in terms of total customer satisfaction (Evans, 2005). Today’s competitive environment requires
organizations to integrate the activities of each functional department while keeping the customer in mind. An effective HRIS helps by providing the technology to generate accurate and timely employee information to fulfill this objective.

**e-HRM and HRIS**

Confusion can arise concerning the distinction between e-HRM and HRIS. Electronic human resource management, or e-HRM, reflects a philosophy for the delivery of HR; it uses information technology, particularly the Web, as the central component of delivering efficient and effective HR services. This philosophy can be best seen through the words of Gueutal and Stone (2005): “Things will look a bit different here. No longer will you deal with an HR professional. . . . The HR portal will take care of you” (p. xv). Essentially, technology becomes the nerve center for disseminating, connecting, and conducting human resources (Strohmeier, 2007). Organizations embracing an e-HRM approach don’t simply utilize technology in the support of human resources but instead see technology as enabling the HR function to be done differently by modifying “information flows, social interaction patterns, and communication processes” (Stone & Lukaszewski, 2009, p. 136).

Conversely, as conceptualized in this book, an HRIS comprises the technology and processes underlying this new way of conducting human resource management. An HRIS can include technologies such as databases, small functional systems focused on a single HR application (e.g., performance management), or a large-scale, integrated **enterprise resource planning (ERP) architecture** and Web-based applications. In today’s environment, it can even be devices such as smart phones and social networking sites that enable employees to access HR data remotely or to connect with others in the organization.

Another way of looking at the differences between e-HRM and HRIS is that e-HRM tends to be more application and HR-function focused (e.g., e-recruitment and e-training), and an HRIS is more focused on the systems and technology underlying the design and acquisition of systems supporting the move to e-HRM. Thus, issues such as needs analysis (Chapter 4), cost-benefit analysis (Chapter 7), and the entire cycle of HRIS implementation and post-implementation, including project management (Chapter 8) and change management (Chapter 9), should be addressed when implementing an HRIS.

**Why Do We Need HRIS?**

Using HRIS gives firms several advantages (Beckers & Bsat, 2002). They include the following:
Chapter 1  Evolution of Human Resource Management and HRIS

- Providing a comprehensive information picture as a single, integrated database; this enables organizations to provide structural connectivity across units and activities and to increase the speed of information transactions (Lengnick-Hall & Lengnick-Hall, 2006)
- Increasing competitiveness by improving HR operations and management processes
- Collecting appropriate data and converting them to information and knowledge for improved timeliness and quality of decision making
- Producing a greater number and variety of accurate and real-time HR-related reports
- Streamlining and enhancing the efficiency and effectiveness of HR administrative functions
- Shifting the focus of HR from the processing of transactions to strategic HRM
- Reengineering HR processes and functions
- Improving employee satisfaction by delivering HR services more quickly and accurately

The ability of firms to harness the potential of HRIS depends on a variety of factors, such as

- the size of the organization, with large firms generally reaping greater benefits;
- the amount of top management support and commitment;
- the availability of resources (time, money, and personnel);
- the HR philosophy of the company as well as its vision, organizational culture, structure, and systems;
- managerial competence in cross-functional decision making, employee involvement, and coaching; and
- the ability and motivation of employees in adopting change, such as increased automation across and between functions (Ngai & Wat, 2004).

In assessing the benefits and impact of an HRIS to an organization, typical accounting methods do not work with the HRM function (Becker et al., 2001; Cascio, 2000; Fitz-enz, 2000, 2002; Huselid et al., 2005; Thite, 2004; Ulrich & Smallwood, 2005). While there are several tangible benefits in implementing an HRIS, such as payroll efficiencies and a reduction in labor costs due to automation, there are several intangible or hidden benefits as well (Roberts, 1999). They include employee satisfaction with streamlined and efficient HR processes and freeing up HR from routine, administrative matters to focus on strategic goals.
Furthermore, HR practices can help organizations untangle the rigidity and inertia associated with the mechanistic, routine nature of enterprise resource planning (ERP). ERP software applications are a set of integrated database applications or modules that carry out the most common business functions, including HR, general ledger, accounts payable, accounts receivable, order management, inventory control, and customer relationship management. Obviously, HRM’s emphasis on knowledge management, human capital stewardship, and relationship building can provide considerable assistance in the implementation and use of ERPs (Lengnick-Hall & Lengnick-Hall, 2006). Therefore, active engagement of HR professionals in the introduction and ongoing functioning of an ERP is important so that organizations can realize the strategic benefits associated with these systems (Dery & Wailes, 2005).

**Different Types of HRIS**

Although there are multiple typologies for the classification of computer-based systems, we are going to define the most basic types of systems that are most readily applied to the HR context and for use within an HRIS. Although there are many ways of categorizing information systems, one of the most common ways of doing this is to focus on what level of organizational processing the system supports: daily operations, managerial functioning, executive level processes and strategies, and those that span organizational levels. Table 1.1 catalogs the major types of information systems, lists their major focus and goals, and provides examples of how they can be used to support human resources.

As seen in Table 1.1, specific computer-based systems have been created to support HRM at different organizational levels with applications for HRM. Although large, global organizations have likely implemented most, if not all, of these types of systems, it would be unusual for small to midsized organizations to have the resources to do so. Despite this, most organizations would have some of these systems in place and would depend on them to support operations and decision making. As you go through this book, these systems and their HR examples will be discussed, and you should refer back to this table as needed.

**System Development Process for an HRIS**

According to engineering and information processing literature, the formal design of any information processing system is supposed to follow a set of steps labeled the **system development life cycle (SDLC)**. However, as Sprague and Carlson (1982) and other writers (Aktas, 1987; Davis, 1983) have noted, the traditional SDLC is somewhat difficult to use as originally specified. But there is agreement...
Table 1.1 Information Systems Providing Support for HRM

<table>
<thead>
<tr>
<th>Organizational Level</th>
<th>Type of System</th>
<th>Major Goals and Focus</th>
<th>HRM Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>Transaction Processing System</td>
<td>Improved transaction speed and accuracy</td>
<td>Payroll processing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved efficiency in the processing of daily business transactions</td>
<td>Time and attendance entry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automation of routine transactions</td>
<td>Online creation and dissemination of application forms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced transaction costs</td>
<td></td>
</tr>
<tr>
<td>Managerial</td>
<td>Management Information System</td>
<td>Provides key data to managers</td>
<td>Producing EE03 reports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supports regular and ongoing decisions</td>
<td>Calculating yield ratios for recruiting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provides defined and ad-hoc reporting</td>
<td>Calculating per-capita merit increases</td>
</tr>
<tr>
<td>Executive</td>
<td>Executive Information System</td>
<td>Provides aggregate, high-level data</td>
<td>Succession planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Helps managers with long-range planning</td>
<td>Aggregate data on balanced scorecard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supports strategic direction and decisions</td>
<td></td>
</tr>
<tr>
<td>Boundary Spanning</td>
<td>Decision Support System</td>
<td>Interactive and iterative managerial decision making</td>
<td>Staffing needs assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supports forecasting and “what-if” analysis</td>
<td>Labor market analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supports business simulations</td>
<td>Employee skills assessment</td>
</tr>
<tr>
<td></td>
<td>Expert System</td>
<td>Embed human knowledge into information systems</td>
<td>Resume keyword searches</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Automate decisions with technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Office Automation Systems</td>
<td>Designing documents</td>
<td>E-mail training-room scheduling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scheduling shared resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communication</td>
<td></td>
</tr>
</tbody>
</table>
that the SDLC has five general phases: (1) planning, (2) analysis, (3) design, (4) implementation, and (5) maintenance. As will be seen, particularly in Parts I and II of this book, there are multiple references to the SDLC and its phases. Kavanagh et al. (1990), applying the main concepts and phases of the traditional SDLC to the HRM function, recommend the following system development process for an HRIS: “The HRIS development process refers to the steps taken from the time a company considers computerizing its human resources functions through the analysis, design, development, implementation, maintenance, evaluation, and improvement of the system” (pp. 92–93). This system development process is quite similar to the one proposed by Walker (1982). He indicates that development of an effective HRIS should follow seven stages: “Proposal to Management, Needs Analysis, System Specifications, System Design, System Development, Installation and Conversion, and Evaluation” (p. 38).

Although this book will cover all the phases in the development and implementation of an HRIS, there are two critical points to be emphasized from these descriptions of the phases or stages of system development. One, the system development process begins when the company first begins to consider computerizing its HR functions. It is important to document this beginning of the process so that it can be considered when the system is being evaluated and maintained. The second critical point is the importance of the evaluation and, as needed, the improvement of the system. This evaluation must be continuous and occur not only after the system has been implemented but also at every stage of the development. The quality of these evaluations of the system will depend heavily on the documentation of the stages of
the entire system development process. The documentation of the planning and development of a system is one of the most important determinants of successful system implementation, as well as of continued system improvement.

**A MODEL OF ORGANIZATIONAL FUNCTIONING**

As stated in the previous paragraph, the documentation and evaluation of HRIS development and implementation are critical since we envision the effective functioning of any organization as dependent on the effective management of its employees. The use of computer technology to improve the management of employees is centered on the creation and maintenance of an HRIS. Figure 1.2 depicts a model of an organizational system centered on an HRIS. This model shows the interrelatedness of the parts of an organization that can affect the functioning of the organization. It indicates the interrelatedness between the strategic management system, the strategic HRM system, and the performance, business, and HR goals that are generated during the strategic planning process. Note particularly how the business goals directly affect the HR goals; this relationship should be an ongoing process in an organization, with adjustments made to either set of goals as needed. The HR goals drive the HR programs that provide management the tools for the efficient and effective use of employees. As will be emphasized throughout this book, the alignment between the strategic management system, the strategic HR management system, the business goals, the HR goals, and the HR programs is critical to the organization’s maintenance of its competitiveness in the market (Evans & Davis, 2005; Huselid, Jackson, & Schuler, 1997).

There are several aspects of this model that are critical. First, this model is a framework to use in reading, organizing, and understanding the information given in this book. Second, this is a systems model; that is, it is organic and can change over time, as represented by the feedback loops from goal achievement to other parts of the model. Third, the model is centered on the use of an HRIS as critical to the efficient operation of an organization. Note that, if the HRIS were removed, it would still be a model of organizational functioning. However, it is our contention that an organization operating in accordance with this model would run more slowly and less efficiently, and this could hurt its competitiveness in the marketplace. Fourth, the HRIS and the HR program evaluation results, in terms of HR metrics and cost-benefit results (value added and return on investment—ROI), are in continual interaction. This emphasis is consistent with current thinking in the HRM field (Cascio, 2000; Fitz-enz, 2000, 2002) and has generated the HR workforce scorecard (Becker et al., 2001; Huselid et al., 2005). Finally, it is important to note that the successful design, development, and implementation of
an HRIS depend equally on IT and on HR knowledge, which is the basic philosophy of this entire book.

Other aspects of this model are important. First, all the factors in the external environment will influence the internal functioning of the organization. The most important of these factors is national culture. National culture will affect all the factors in the external environment: government regulations, the labor market, societal concerns, technology, HRM research, and competition. These factors, in turn, will have an impact on the organization. Simple comparisons across various countries—for example, the United States, Australia, Europe, and China—on most of these six external factors would discover significant differences. We feel that these differences are important and have devoted a chapter to them (Chapter 15). Second, the two-way arrow between the strategic management system and strategic HRM indicates our understanding that this interaction will improve the functioning of the organization. Finally, note that corporate culture influences the entire internal operation of the organization. In the next section, the themes of this book that are central to the operation of this model are discussed.
THEMES OF THE BOOK

The overall theme of this book is that the HR and IT functions operate separately and together in an HRIS and are focused on providing accurate and timely information for managerial decisions, both strategic and operational. There are other themes that are emphasized in this book, which can also be seen in the model of organizational functioning presented in Figure 1.2. These themes are the major factors that influence the effective operation of the organization through their impact on managerial decisions. In addition, they directly affect the success of both the HRM programs and the use of the HRIS. These factors are as follows:

1. The effective alignment between the strategy of the firm, the HR strategy, and HR programs
2. The importance of legal considerations in all HR programs and functions
3. The need for a cooperative relationship between HR and IT professionals
4. The critical need for the creation and use of HR metrics to both guide decision making and evaluate the cost-effectiveness of the HR strategy and programs

All the chapters of this book will contain some reference to some or all of these factors, and their effects will be discussed in detail in the chapters.

OVERVIEW AND STRUCTURE OF THE BOOK

This book is divided into five main parts. Part I, “Introduction to Human Resource Management and Human Resource Information Systems,” includes three chapters. In this first chapter, the evolution of human resource management (HRM) and its interface with information technology (IT) was covered to show how the field of human resource information systems (HRIS) emerged. In addition, a general introduction to the types of activities in which HRM engages was provided, as well as a brief introduction to the current interface between HRM and technology. Finally, a detailed description of an HRIS was provided, and the model of organizational functioning that incorporates an HRIS was discussed.

The second chapter, “Database Concepts and Applications in HRIS,” by Janet Marler and Barry Floyd, is focused on understanding databases and the applications of IT on the HRIS. This is an introductory chapter, which provides a solid basis for later chapters in the book. The third chapter, “Systems Considerations in the Design of an HRIS: Planning for Implementation,” by Michael Bedell, Michael Canniff, and Cheryl Wyrick, is focused on foundational knowledge that is critical
for the design and subsequent implementation of an HRIS. The different types of
information about the users or customers of the HRIS, the categorization of HRIS
data into categories of human capital, and the main concepts of hardware and data-
base security are covered. This chapter is also a good lead-in for the next part of
the book—“Part II: Determining Human Resource Information Systems Needs.”

Chapter 4, “HRIS Needs Analysis,” by Bradley Alge and Karen Upright, covers
the first formal analysis of the need for an HRIS in an organization. It should be
noted that a needs analysis can be done for an organization that only has a paper
system or for an organization that is planning to improve or update its current
HRIS. In this chapter, the steps in an HRIS needs assessment are covered—
namely, who is involved in the assessment and the deliverables from a comprehe-
sive needs assessment. In Chapter 5, “System Design and Acquisition,” by Rich-
ard Johnson and Jim Dulebohn, the fundamentals of system design based on the
needs assessment are covered. Chapter 5 also investigates the process of acquiring
a system once the design has been completed. It should be noted that the activities
described in Chapters 4 and 5 always remain focused on the implementation of the
HRIS since this is an important element in the success of the HRIS.

Chapters 6 and 7 deal with one of the most critical components of “determining
HRIS needs,” namely how to measure the effectiveness of the system after it has
been implemented and how to justify the cost of developing and implementing an
HRIS. Chapter 6, “HR Metrics and Workforce Analytics,” by Kevin Carlson and
Michael Kavanagh, covers the ways in which HRM measures its effectiveness.
The emphasis in this chapter is on the main reason to engage in assessment and
analytics—to improve organization effectiveness. The authors argue that HR pro-
fessionals and managers like to use metrics and analytics derived from an HRIS if
these result in payback, which is measured by managers making different and bet-
ter decisions. Chapter 7, “Cost Justifying HRIS Investments,” by Kevin Carlson
and Michael Kavanagh, describes one of the most important aspects of the needs
analysis, design, and development of the HRIS—cost justification of the HRIS.
Without a careful analysis of the costs and benefits of an HRIS, there should not
be any attempt to get approval for or implement the system. There are numerous
stories and examples of failed systems that were implemented without a compre-
sensive needs assessment, one that includes a cost-benefit analysis. In addition, a
comprehensive needs assessment will be very useful during the evaluation phase
after the system has been fully implemented. The needs assessment will define the
evaluative criteria by which to judge the success of the HRIS. Thus, this chapter
is a convenient introduction to Part III of the book—“Human Resource Informa-
tion Systems Implementation and Acceptance.”

Chapter 8, “Project Management and HRM Advice for HRIS Implementation,”
by Sal Belardo and Michael Kavanagh, provides a comprehensive discussion of
Chapter 1  Evolution of Human Resource Management and HRIS  27

project management techniques and their importance to the implementation and acceptance of an HRIS. Project management provides excellent tools for ensuring that the implementation of the HRIS proceeds in an orderly fashion by establishing goals and timetables for the tasks and activities during implementation. Chapter 9, “Change Management: Implementation, Integration, and Maintenance of the HRIS,” by Romuald Stone, emphasizes the people processes necessary for the successful implementation of an HRIS—a major organizational change. Although there typically will be some technical difficulties during the HRIS implementation, the major issues will be with the lack of employee and user acceptance and involvement in the implementation. Chapter 9 offers a variety of approaches to organizational change, both theoretical and practical, that can be used to focus on the behavioral aspects of the HRIS implementation.

Part IV of the book, “HRIS Applications,” provides information and guidelines for the use of an HRIS in the programs involved in the operation of the HRM function. In Chapter 10, “HR Administration and HRIS,” Linda Isenhour covers the administrative, transactional aspects of HRM. This chapter illustrates the fact that HRM is still a caretaker of employee records; however, the existence of an HRIS makes this information readily available and useful for managerial decision making. Most important, Isenhour discusses how the HRIS can cover legal compliance with government mandates much more easily than a paper system. In Chapter 11, “Talent Management,” Kevin Johns and Michael Kavanagh discuss the use of an HRIS in the human resources planning (HRP) function that provides input to the talent management process. HRP is discussed in Chapter 11 with a focus on the speed of obtaining accurate employee information when discussing potential strategic plans for the company. In Chapter 12, “Recruitment and Selection in an Internet Context,” Kimberly Lukaszewski, David Dickter, Brian Lyons, and Jerard Kehoe cover both HRIS and Internet applications within the context of a computer-based HRM function. Chapter 13, “Training and Development: Issues and HRIS Applications,” by Ralf Burbach, provides information and ideas for how to use the power of an HRIS to address important issues in training and development programs. In Chapter 14, “Performance Management, Compensation, Benefits, Payroll, and the HRIS,” Charles Fay and Ren Nardoni focus on one of the major motivational functions of the HRM system and how the existence of an HRIS can improve the operation of many aspects of the management and motivation of employees. Finally, Chapter 15, “HRIS and International Human Resource Management,” by Michael Kavanagh and John Michel, covers the complexities that are created when a company enters the international marketplace.

The last part of this book, “Part V: Special Topics in HRIS,” covers two additional topics of importance to the effective operation of an HRIS. In Chapter 16, “Information Security and Privacy in HRIS,” Yuk Kuen Wong and Mohan Thite
discuss the many legal, ethical, and moral issues that surround the use of an HRIS. In the final chapter (Chapter 17), “The Future of HRIS: Emerging Trends in HRM and IT,” Michael Kavanagh, Mohan Thite, and Richard Johnson take a look at what new developments to expect given the continuing use of an HRIS in the operation of the HRM function of an organization.

**SUMMARY**

The primary purpose of this chapter was to introduce the academic and practitioner field of human resource information systems (HRIS), emphasizing that an HRIS is at the intersection of IT and HRM. The evolution of the field of HRIS, from its initial role of a record keeper concerned with only transactional HR activities, such as changing addresses on employee records, to one of becoming a strategic partner was covered in detail. This evolution demonstrated that, as IT improved over time, so did HRM, and these improvements made their marriage into HRIS that much easier. The advances in the field of HRIS also led to a reduction in the percentage of time that HR professionals spent on routine transactional and traditional activities and an increase in the percentage of time spent on transformational ones. The increase in time spent on transformational activities improves the “value added” by HRM programs to the strategic plan of an organization.

A basic primer on HRIS was presented, and the different types of human resource information systems were discussed, showing how the different types are needed for decision making at different levels in the organization. The distinction between HRIS and e-HRM was explained to help the reader avoid confusing these terms when they appear in the remainder of the book. In addition, the chapter discussed the development of HRIS and how it has helped enable HRM to become a strategic partner in organizations, which then led to the emergence of strategic HRM (Strategic HRM) as a field of study. Various strategic approaches were discussed, such as HR in a contingency model, the HR balanced scorecard, and the use of Six Sigma in HR.

A model of organizational functioning centered on an HRIS was discussed briefly, with the discussion focusing on how the feedback from results generated by an HRIS can influence the operation of the entire organization. The central themes of this book were emphasized, and the reader was alerted to the fact that these themes will occur throughout the chapters of the book. Finally, an overview of the structure of the book was provided to demonstrate the connections between the chapters of the book.

**KEY TERMS**

“best-fit” approach to Strategic HRM          “caretaker” function
“best-practice” approach to Strategic HRM    Comprehensive Occupational Data Analysis Program (CODAP)
cost-benefit ratio
enterprise resource planning (ERP) architecture
establishment of labor unions
HR balanced scorecard
HR contingency perspective
HR metrics
HR workforce scorecard
human capital
human resource management (HRM)
human resources planning (HRP)
Internet-enabled Web services
job analysis
job description

legislative compliance
management information system (MIS)
model of organizational functioning
return on investment (ROI)
scientific management
Six Sigma
Strategic HRM—strategic human resource management
system development life cycle (SDLC)
timely and accurate employee information
traditional HR activities
transactional HR activities
transformational HR activities

DISCUSSION QUESTIONS

1. What are the factors that changed the primary role of HRM from a caretaker of records to a strategic partner?

2. Describe the historical evolution of HRM and HRIS in terms of the changing role of HRM and the influence of computer technology on HRM.

3. What is required for the effective management of human resources in a firm to gain a competitive advantage in the marketplace?

4. Describe the emergence of strategic human resources management (Strategic HRM) and the influence of computer technology. What are some of the approaches used in HRM to facilitate the use of Strategic HRM in a firm’s business strategy?

5. How does technology help deliver transactional, traditional, and transformational HR activities more efficiently and effectively?

6. Describe Six Sigma.

7. Justify the need for an HRIS.

8. Describe and differentiate the major types of information systems.

9. Using the organizational model presented in this chapter, explain why and how national culture and organizational culture influence the nature and importance of the IS function.
One way to assess the nature and importance of a particular function or position in an organization is to examine the job description and job specifications for this position, as they tell us what activities, duties, and tasks are involved in the job as well as what knowledge, skills, and abilities (KSA) are required to perform the job. The following is an actual advertisement for an HRIS administrator. A large corporation placed this ad in the “Job Central” section of the Internet site for the International Association for Human Resources Information Management\(^1\) (http://ihrim.hrdpt.com/cgi-bin/a/searchjobs_quick.cgi, accessed July 10, 2010).

**HRIS Administrator**

**Job Level:** Senior (5+ Years), Full time  
**Reports to:** Sr. Director of Human Resources Operations

**Position Summary**

MOMIRI, LLC is an Alabama Native Owned Corporation, providing shared services to the MOMIRI family of companies and planning and incubating the next generation of companies serving federal and commercial customers. MOMIRI companies offer core expertise in telecommunications, information technology, product development, major program management, open source software, construction management, facility operations, and operations support. MOMIRI companies realize that quality personnel are the key to our success. An excellent benefits package, professional working environment, and outstanding leaders are all keys to retaining top professionals.

**Primary Function**

The incumbent will serve as a key member of the HR Support Services department and provide professional human resources support in specific functions or disciplines to management and staff for the MOMIRI family of companies. This position is viewed as going to a midlevel professional who assists management and staff with HR programs at the tactical level and performs all essential duties and responsibilities at the direction of the Manager of HR Operations.

**Essential Duties and Responsibilities**

- Provides technical assistance to senior-level HR staff and management on several HR programs to include employee relations, compensation, EEO compliance,
company policies and procedures, disability programs (STD, LTD, FMLA, ADA), federal and state employment laws, and personnel actions as needed.

- Supports and maintains the Human Resources Information System (HRIS) in addition to other systems supported by the management of enterprise applications.
- Serves as technical point-of-contact for assigned functional areas and assists subject matter experts with ensuring data integrity, testing of system changes, report writing and analyzing data flows for process improvement opportunities.
- Supports HRIS and other enterprise systems’ upgrades, patches, testing and other technical projects as assigned.
- Recommends process/customer service improvements, innovative solutions, policy changes and/or major variations from established policy.
- Serves as key systems liaison with other departments and process stakeholders (e.g., Payroll).
- Writes, maintains, and supports a variety of reports or queries utilizing appropriate reporting tools. Assists in development of standard reports for ongoing customer needs.
- Maintains data integrity in ATS, HRIS, and other enterprise systems by running queries and analyzing and fully auditing data across all HR departments.
- Conducts new hire in-processing to include systems training for new employees and entering new employee information in Costpoint.
- Conducts termination out-processing to include entering employee separation information in Costpoint and reporting attrition data.
- Develops user procedures, guidelines, and documentation for HR-related systems. Trains system users on new processes/functionality.
- Provides HR tools and resources for management and staff to accomplish their goals and objectives.
- Processes personnel actions (hires, terminations, pay & title changes, promotions, employment status, etc.) to include entering data into HRIS.
- Assists with special HR-related projects and provides training to other staff members as required.
- Performs other duties as assigned.

Requirements

Specialized Knowledge and Skills

- Experience working with a multiple-site workforce.
- Working knowledge of federal and state employment laws and related acts.
- Advanced to expert level computer skills.
- Excellent verbal and written communication and presentation skills.
- Great interpersonal skills.
- Strong time-management and prioritization skills.
Qualifications

- Bachelor’s degree in HR and/or equivalent professional experience.
- 3–5 years of technical HRIS experience in professional HR environment.
- Self-directed, highly responsive, and detail oriented.
- Ability to maintain absolute confidentiality in all business matters.
- Government contracting experience is a plus.

Case Study Questions

1. How does this position help the HR function become a strategic partner of the organization?
2. From the position description, identify the traditional, transactional, and transformational HR activities that this position is involved with.
3. Using the key responsibilities identified for this position, explain why and how the HRIS function plays a pivotal role in the organizational model as described in this chapter.

NOTE

1. The name of the company in the advertisement has been changed.

REFERENCES

Chapter 1  Evolution of Human Resource Management and HRIS  33


