Human Resources Management and Technology

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Abstract: *At the time of recruitment it is necessary to complete forms so that we can become an "official" employee. There are data and the human resources (HR) department has always been the custodian of employee data. The type of data collected, where the data are stored, how the data are used, and the type of system used for these purposes has changed over time, but the need to collect information relating to hiring, promoting, and firing employees has not changed.HR technology is increasingly being used by small, medium, and large employers to meet the needs of its stakeholders. What sets high-performing organizations apart from others is how they use technology to deliver HR services.*

Keywords*: Human resource information systems (HRIS), HRM, Employee self-service (ESS), Manager self-service (MSS), e- HR.*

I.   INTRODUCTION

HR technology can be defined as any technology that is used to attract, hire, retain, and maintain human resources, support HR administration, and optimize HRM. This technology can used in different types of human resource information systems (HRIS) and by various stakeholders, such as managers, employees, and HR professionals. This technology can be accessed in different ways. There is no doubt that technology has made it easier and faster to gather, collate, and deliver information and communicate with employees. More importantly, it has the potential to reduce the administrative burden on the HR department so it is better able to focus on more meaningful HR activities, such as providing managers with the expertise they need to make more effective HR related decisions. Research has indicated that companies who effectively use technology to manage their HR functions will have a significant advantage over those that do not. However, not all companies have the latest and greatest technology, nor do all companies need the most advanced technology, but all companies do have HR-related information needs. Consider the information needs of a small company as opposed to a large organization of 3000 employees. A small company may use a simple Microsoft Word or Microsoft Excel file to keep basic employee data, whereas a company with 3000 employees manages a greater volume of data. This activity can be daunting without a more sophisticated tool to store and retrieve data. We can reflect on the various levels of sophistication by examining the evolutionary aspects of HR technology. These aspects can be characterized into four stages of development: (1) paper-based systems, (2) early personal computer (PC) technology, (3) electronic databases, and (4) Web-based technology.

The technology of the future will be about speedy access to accurate current information, and the ability to access this information via multiple systems will give organizations a strategic edge. HR is expected to relinquish its role as sole owner of HR information, so that managers and employees can use this information to solve their own problems using Web-based systems. This new system will not necessarily mean a reduction in HR staff. The new system will enable HR professionals to focus on transforming information into knowledge that can be used by the organization for decision making; it will be about HR and IT working together to leverage this technology.

II.   THE RELATIONSHIP OF HRM TO HRIS

Human resources information systems (HRIS) can be defined as integrated systems used to gather, store, and analyze information regarding an organization's human resources. Using HRIS technology can help HR automate and simplify tasks, reduce administration and record keeping, and provide management with HR-related information when required.

HRIS is the composite of databases, computer applications, and hardware and software necessary to collect, record, store, manage, deliver, manipulate, and present data for human resources. It is important to note that the term "systems" does not just refer to hardware and software. Systems also include the people, policies, procedures, and data required to manage the HR function. In reality, computer technology is not the key to being successful at managing human resource information, but what it does do well is provide a powerful tool for "operational zing" the information—making it easier to obtain and disseminate and ensuring that it is specific to

the organization's HR policies and practices. A sound HRIS must allow for the assimilation and integration of HR policies and procedures with an organization's computer hardware and its software applications.

2.1 Key Functions of an HRIS

The HRIS is made up of a number of subsystems, and data can be stored, maintained, and generated from the system. These data can be used to create information that will serve different purposes for many different stakeholders.

The HRIS can do the following:
1. Create and maintain employee records
2. Ensure legal compliance
3. Enable managers to forecast and plan future HR requirements
4. Provide information to managers and HR so they can manage knowledge and manage talent (career and succession planning)
5. Provide information to enable HR plans and activities to align more effectively with the organization's strategic plan
6. Assist managers with decision making by providing relevant data so they can make more effective and informed decisions.

III.   ELECTRONIC HUMAN RESOURCES

Electronic HR (e-HR) is a term that identifies a form of technology that enables HR professionals to integrate an organization's human resources strategies and processes in order to improve overall HR service delivery. Since the mid-1990s organizations have been embracing ways to incorporate electronic and computer functions into their HR strategies. Companies are always looking for better ways to manage costs, provide better service, and effectively manage human capital, and e-HR has become integral to helping organizations achieve these goals. One of the most successful innovations is the migration of HRIS applications onto an intranet. An intranet is a network that is interconnected within one organization, using Web technologies for sharing information internally. The Internet has enabled organizations to harness Web-based technology and use Web-based applications to enhance HR services. More than 90 percent of companies are currently using the Web for HR purposes.

IV.   E-HR AND HUMAN CAPITAL MANAGEMENT

The management of human capital is critical and the ability to be able to attract, retain, and develop employees will continue to be a major challenge for HR professionals. The use of e-HR systems, including Web-based job sites, portals, and kiosks, to attract job applicants is becoming a necessity. Two technologies have made e-recruiting a reality—Internet job boards, such as Monster.com, and the Internet applications that allow companies to screen candidates from those boards has facilitate the process. Research has shown that companies can reduce hiring cycle times by as much as 25 percent when using online recruitment tools. The use of these tools has transitioned HR from hiring faster to hiring "better." The most common practices used for online recruiting are adding recruitment pages to the Web site of the organization, using specialty recruitment Web sites (job portals and online job boards), developing tools that are interactive so applications can be processed (auto-responding), and adopting online screening tools (e.g., personality assessments and interviews). Some advantages of online recruiting are reduced time for management of the recruiting process, communication of the company brand, access to a larger number of qualified candidates, reduced recruitment costs from using a standard process, reduced hiring cycle times, and use of the system's reporting functions to analyze the effectiveness of the recruitment strategy. Some disadvantages can be loss of face-to-face contact and discrimination against people who do not have access to the Internet or to information about privacy regarding personal information submitted over the Internet.

V.   TRENDS IN HR AND TECHNOLOGY

Technology is moving at "warp speed" and HR must keep up. Technology will continue to be integral to all business functions and HR must use technology to continually redefine their services toward driving productivity. Some of the emerging trends that will have a significant impact on HR and on its ability to deliver strategic HR services are emerging technologies, the influence of out sourcing and the increased focus on determining HR's effectiveness. Several major technology trends that will influence HR management are as follows:

1. The increased use of portals and intranets and a greater focus on the use of virtual tools. HR will be required to ensure that the organization is aware of the advantages of these tools and provide training and

education to ease the transition. These new tools will enable employees to access their own information as opposed to going to HR. So a manager who has a problem first will try and solve it using the tools available on his or her desktop before calling HR.

2. Greater access to technology: This increase will require HR to ensure that the appropriate security measures are in place and to be highly diligent in terms of the types of access and who gets access.

3. Contingency planning: HR will be involved in ensuring that plans are in place to deal with disasters, including getting employees back to work and providing them with the appropriate emotional support.

4. Heightened awareness of HR data privacy: Government privacy legislation will continue to increase. Ongoing legal changes will require HR to stay current with respect to legislation and utilize systems to ensure compliance.

The HR function, with its newly developed strategic focus, is expected to demonstrate a measurable impact on business results. The expectation is that HR is transforming data into insights and the ability to provide "quality" data that will transcend the need for information and focus key decision makers on relevant information that is meaningful to the business. Today's HR professionals must be technically savvy and be able to speak the language of business. They must understand the business environment and the major drivers relating to workforce productivity as determined by management. Such techniques as benchmarking and the use of balanced scorecards will be increasingly important for HR. These tools will provide HR with feedback as to whether they are truly listening to the organization and providing customer focused services. Finally, how HR utilizes technology to evaluate its own effectiveness and how HR decides to leverage emerging technologies to drive productivity and the management of human capital will make the difference between a mediocre HR department and one that is truly a business partner.

VI.   CONCLUSION

The role of the HR professional has changed fundamentally as a result of technology. The core competencies that have developed are mastery of HR technology, strategic contribution, personal credibility, HR delivery, and business knowledge. To choose an HRIS, organizations engage in a three-step process. The first step is the adoption phase, whereby organizations carry out a needs analysis to determine requirements. The second step is the implementation phase, where project teams are created, the software is tested, and privacy and security concerns are addressed. The third step is the institutionalization phase, where training and change management activities are highlighted. The more popular Web-based self-service applications are employee self-service (ESS) and manager self-service (MSS). Some benefits derived from these applications are a reduction in administrative costs, reduction in process steps, enhanced HR service delivery, and increased employee satisfaction. Current technology trends that will impact HR are outsourcing, advances in technology, and a continued focus on measuring the value that HR brings to the organization.

REFERENCES

[1].   G. Dessler, J. Griffiths, and B. Lloyd-Walker, Human Resources Management, 2nd ed. Frenchs Forest.
[2].   Article by Julie Bulmash
[3].   Software and Information Industry Associations, www.siia.com