

Administrative and Strategic Advantages of HRIS

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When reference is made to human resource information systems (HRIS) in today's environment of high-tech wizardry, it is often thought of as a business tool that allows for standardization in the gathering of information about and for a company's employees. Although this was the original purpose of HRIS, many additional uses are beginning to emerge. As technological advancements reshape the workplace, the meaningful use of data as information is becoming more and more critical. As early as the mid-1990s, the focus had begun to shift to HRIS as an information resource because of their usefulness not only in HR decision making, but in strategic decision making as well.¹ By looking at a brief evolution of the HRIS process and current capabilities, it is easier to see how a successfully implemented HRIS is moving away from a data input and storage device toward a fully operative decision-analysis tool.

THE HRIS PROCESS

Historically, human resource information has largely been seen as a necessary tool in the hiring, administration, and, ultimately, separation of employees. Over the years, these processes have not changed dramatically, but the way the information is gathered and stored has.

Going back to a time prior to the proliferation of technology in the workplace, an

employee would submit a paper application to a prospective employer. There would be general information about the employee, including name, sex, age, social security number, employee's address, education, marital status (in some cases), employment history, and so on. This information would be stored in a folder for the HR department to access as necessary.

Once the employee was hired and placed on the payroll, the application could be used to provide some information to the finance department for pay purposes, while other information could be used internally by the HR department to track hiring practices and recruitment. Over time, additional information about the employee would be placed in the folder, including benefits, performance reviews, promotions, discipline, and training. Generally, employees were responsible for updating their own records, while the employer was the primary custodian of all such employee-related information.

Most employers viewed this information as necessary but not particularly valuable from a strategic viewpoint. After all, each employee came into the company at a different time, progressed through his or her career at a different pace, and left the company for differing reasons, under differing terms, and at different times.

In the 1980s, office automation began to appear on the landscape, and HRIS were developed as a special category of office automation systems (OAS). At first, according to an article by Patrick Totty,² the emphasis was on developing systems as cheaply as possible. The replacement of people with software was seen as the main advantage. Rather than have HR clerks maintain extensive employee records, data-entry technicians would enter data once into a system and update records as necessary.

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Today, however, HRIS would be more accurately viewed as a hybrid of several classical types of information systems. Along with OAS capabilities, current HRIS include features of transaction processing systems (TPS), decision support systems (DSS), communication systems, and systems with elements of artificial intelligence. HRIS may comprise stand-alone software for any of the primary areas of use for information systems in HR management. These areas include employee record management, compensation and benefits, recruitment and retention, training and development, performance appraisal, and promotion and succession planning.

It became evident as HRIS took hold in the corporate culture that a quality HRIS could provide valuable information to the organization in managing one of its most valuable assets: the organization's human resources. As top management began to put pressure on HR directors to use HRIS, it was becoming clear that by collecting and processing more and more information in a timely manner, the value added was in the

use of the data in decision making and not in the actual system used for collection and storage.

It was also becoming apparent that there were advantages to having these capabilities in an integrated package rather than as stand-alone applications, and further advantages to incorporating those packages as a module to an enterprise resource planning (ERP) system. As part of an ERP system, the HR department would have access to corporate-wide data, and, likewise, other functional areas would have access to the HR department's files. This evolution has resulted in firms being able to leverage HRIS for administrative and strategic competitive advantage.

ADMINISTRATIVE ADVANTAGE

Today the focus of HRIS is moving to the next logical step: employee self-service (ESS). In an article in *HR Focus*,³ it is reported that nearly half of the companies surveyed support using self-service interfaces as a means for collecting and disseminating HR data. Employee self-service, as the name implies, further reduces the administrative workload in HR departments by allowing employees to have updated access to their records. One of the most common methods of granting this access has been by moving HRIS from client server architecture to a Web-based environment.

Interactive voice response (IVR) is the latest method being adopted by many firms to allow employees to update their HR information. This includes such common tasks as updating address information, planning for retirement, updating health-plan information, reporting on life events such as the birth of a child, changing beneficiaries on life insurance, and managing 401(k) retirement annuities.

Some larger employers also offer self-service through corporate call centers. Although this is usually a more expensive undertaking, employees respond positively to the fact that the information they are providing is being inputted instantly, and the HR staff is free to do other things. Often, the administrative benefits cited include relieving HR personnel of clerical transaction duties so that they can perform strategic functions. Such benefits are acknowledged, but often difficult to quantify. Merck & Co. has estimated a cost reduction of 86 percent per HR transaction when performed by the employee. That is, transaction costs were estimated to be \$16.96 when performed by HR staff, compared with \$2.32 when performed by the affected employee.⁴ An unforeseen benefit has been fewer transcription errors made when employees entered such data as address changes directly into the HRIS.⁵

Other current HR self-service initiatives include the use of HR portals, which provide employees with information as well as the ability to complete HR-related transactions. By using these portals, employees are able to communicate to one another via e-mail, read company news and policies, link to Web sites with relevant job-related or company-related information, and perform HR calculations for retirement scenarios or cost-benefit analysis for insurance options. Cisco Systems of San Jose expanded its HRIS so that employees could monitor their children in the company-operated day-care center over the Web.⁶

Companies are also realizing the benefit of linking HR data with other related systems. The most obvious link is to automated payroll systems. In the previously mentioned *HR Focus* survey, nearly two-thirds of the firms surveyed saw integrating these two systems

as a critical factor in extending the functionality of HRIS.

HRIS have evolved from tactical and operational applications to also encompass strategic applications, emphasizing the growing trend to incorporate HRIS as modules to ERP systems.

BUILDING STRATEGY FROM DATA

By the time HRIS started reaching maturity from an administrative perspective, companies had begun to recognize their value in providing management with strategic data not only in recruitment and retention strategies, but also in merging HRIS data into larger-scale corporate strategy.

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The data collected from HRIS now provide management with a decision-analysis tool rather than just a robust database. Even the most basic commercial off-the-shelf (COTS) HR software applications are able to provide detailed information in a variety of areas.

Through the proper management of HR data, firms are now able to perform calculations that have effects on the business as a whole.⁷ A partial list of such calculations includes health-care costs per employee, pay benefits as a percentage of operating expense, cost per hire, return on training, turnover rates and costs, time required to fill certain jobs, return on human capital invested, and human value added. It is worth noting that none of these calculations result in cost reductions in the HR function. The aforementioned areas will, however, realize significant savings through the use of more

complete and current data made available to the appropriate decision makers.

Scott Engle is manager of Solutions Consulting at Ortho Biotech Products, a division of Johnson and Johnson. He views HR at Ortho Biotech as a vast storehouse of relatively static but important information. Mr. Engle believes that HRIS have not only allowed employees useful access to information, but have also enabled managers throughout the organization to tap into this storehouse and use it for a variety of administrative as well as strategic purposes.⁸

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Human resources professionals see an expanding opportunity for HRIS in the future. Jim Spoor, CEO and president of Spectrum Human Resources Corporation, believes that HRIS will not benefit employees and managers, but also suppliers, consultants, benefit providers, and others, as more and more users become connected wirelessly. According to Spoor, easy access to vital information will become an integrated part of many strategic decision-making processes.⁹

DIFFICULTIES IN TRANSITIONING TO HRIS

Transitioning to the more advanced forms of HRIS is not without growing pains. As with any information system development project, care must be taken to ensure that the system is built properly. Typically, decisions must be made regarding development and design strategy, implementation, and operation and maintenance. System development methods

include a comprehensive system development life cycle (SDLC), prototyping, end-user development, COTS, and outsourcing. These approaches are not necessarily distinct and mutually exclusive choices. For example, the HR department of a small company may find it necessary to depend on consultants and outsource all aspects of design, implementation, and operation, whereas larger organizations would likely want their IT departments to develop the systems in-house. In either case, development and design may proceed by SDLC, prototyping, or folding prototyping into an SDLC approach.

One of the most overlooked implementation issues is organizational inertia: getting the staff to adopt and adapt to a new system, which is actually a new business process for them. Getting HR staff and employee end-user involvement early in the HRIS development process is essential to successful implementation. Operation and maintenance are long-term issues to ensure that the system is used consistently and effectively. Training and help-desk capabilities may be better outsourced to application service providers (ASP), although such an approach would likely mean the use of a system that is less customized for the specific needs of the company.

LSI Logic, a manufacturer of customized semiconductors located in Milpitas, California, has had success in transitioning to SAP's R/3 ERP system and incorporating self-service. LSI's manager of HR automation, Debby Love-Suddeth, credits their success with careful selection of a third-party vendor, detailed requirements analysis, and thorough planning for implementation. LSI's self-service module is available to 6,500 employees in 16 countries. In addition, the HR department has access to aggregated data for trend

analysis and needs forecasting for compensation and benefits planning.¹⁰

CONCLUSIONS

It is obvious as we move into the 21st century that data will drive an increasing number of business decisions and strategies. HRIS is an excellent example of an area where businesses can capitalize not only on administrative cost savings, but also on leveraging a strategic advantage through information gathering, processing, and sharing.

The next logical step is for HRIS to become the mechanism for sharing information across an organization's functional areas. Future HRIS portals can be the one-stop shopping for most company-related transactions between employers and employees. This would enable employees in different cities or even countries to have access to the same information. It would also allow for a scalable information system that would link employees to not only their own information, but relevant corporate information as well. However, security and privacy are a concern as ERP systems open corporate databases to access from outside and within the corporation. Care must be taken to ensure access privileges to an employee's records are allowed to only authorized personnel.

Organizations in general and HR professionals in particular must contemplate what HRIS can mean to them. However, they should proceed carefully, as a realization of the associated costs as well as the obvious benefits is necessary. In a recent press release, Hawthorne Benefit Technologies, a provider of Internet-based HR tools, provided a checklist of items managers should consider before establishing HRIS. Scalability, set-up, functionality, and compatibility are among the most

important of those items deserving attention and forethought. The authors would add cost and security as other serious considerations.¹¹

Ortho Biotech's Engle adds that security is of grave concern to the organization. He maintains that one of the difficulties in implementing HRIS is accounting for all the ancillary databases throughout the company and making sure that the data is secure yet available to those who need it. These issues are of particular concern because of the nature of human resources. Unlike financial data, HR is not reconciled, and rarely is an audit trail of any type available. Mr. Engle's department took several months to identify ad hoc databases and subsystems and actively encourages employees to use Ortho Biotech's core platform.¹²

Despite these potential pitfalls, it appears that HRIS now bear the same relationship to what they will be in ten years as BASIC did to today's cutting-edge software. We are only now beginning to realize the potential not only within the HR function, but organizationwide. What was once a future vision is reality, and HR managers should jump on board now. If they do not, the train is about to pick up speed rapidly, and they will be left behind.

NOTES

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