

The Role of Administrative Systems Application in Developing Government Performance

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I. Introduction

Technology has permeated many facets of the public and private sectors. Organizations find many benefits of technology as it contributes to efficiency and productivity in many operations. Developed rapidly in recent years, human resource technology is one technology designed to automate human resource functions. Small to large organizations now adopt HR technology systems, particularly those that are cloud-based, increasing accessibility (Muzyka, 2021; Tech Target, 2022). Software applications are available for many aspects of the human resource function. These functions include benefits administration, employee payroll and compensation, performance management, talent acquisition, and management and workforce analytics. More comprehensive systems have been developed to include Human Capital Management, Human Resources Information Systems, and Human Resource Management Systems. There is also software that centralizes work in the department. Human resource employees use this modern technology as it leads them to develop skills and complete tasks efficiently, ultimately contributing to the achievement of organizational goals.

The automation of tasks in human resource management provides many benefits. Technology in HR systems provides strategic alignment with organizational objectives, business intelligence, and effectiveness and efficiency (Team Synerion, 2011). It contributes to faster and cheaper work processes and more creative use of the time of HR personnel. Specifically, it frees up time for HR personnel from redundant tasks, which time they can use for more critical aspects of their jobs. Aside from spending less time in administrative redundancies, they can use technology to speed up information dissemination among organization members and simplify payroll processing. Software systems can also help managers with decision-making since there are tools that provide intelligence gathering and analysis. There is a multitude of benefits derived from human resource technology. Technology helps reduce the risk of human errors in data input processes and decreases overhead costs for handling everyday assignments. It is also flexible and easier to update. It also fosters interdependence in teams and promotes collaboration. The following section details the various functions and applications of HR software applications.

Applications of technology in specific HR functions

Over the past decade, many applications have been developed to cater to specific HR functions. This software contributes to the efficiency and accomplishment of tasks for HR personnel. This section describes the different software and trends developed. Martin (2021) identifies the technology under an umbrella term – employee management, an HR function that helps employees attain their full potential and subsequently contribute to achieving organizational goals. This concept involves payroll management, recruitment, and talent management. Technology for these functions provides organizations with a more formal, standardized, and systematic evaluation process. These inclusions are discussed separately here, aside from other HR technology. The discussion also elaborates on how these techniques to aid in efficiently accomplishing HR tasks.

Technology such as Artificial Intelligence (AI) has helped to streamline employee management processes (Ramey, 2022). It is considered one of the most influential HR technology trends today. It helps automate monitoring operations, allowing managers more time to plan, learn, strategize, and work on personal development. AI tools can help in the actual screening process, which can efficiently boost the recruitment process. This software can help reduce hundreds of applicants to a shortlist of five individuals most suitable for the open position. It can ensure an unbiased interview and treatment for job candidates and employees. The technology can also provide automation of routine tasks, intelligent employee scheduling, prediction of last-minute changes in the planning, and reduction of bottlenecks.

Benefits administration

HR Technology includes the digitization of benefits. Information about employee benefits is now provided to employees online. They can now access this information anytime, anywhere. The information enables employees to make decisions concerning benefits more efficiently. Employees can enter their information, enroll for benefits, make updates, and review their information on their own without the involvement of an HR representative. They can even be automatically prompted with reminders or notifications, relieving the HR staff of such tasks. Software development has expanded benefits administration more than a vacation, sick days, and health and disability insurance. New technology offers analytics for insurance claims and tailored benefits packages for workers. It has now included online or app-based corporate wellness and well-being programs. Organization and administration of such benefits are not just within easy access of employees but are also cheaper for the organization. Using this technology eases the organization of administrative burden (HR Tech, 2021).

Blockchain integration

This new development in HR technology helps tackle access management and data security as this advancement helps ensure workplace transparency and data integrity. Through blockchain integration, HR managers can achieve standardization and build better trust in the organization. Martin (2021) indicates an increasingly difficult condition for unifying data storage and sharing standard in HR. Employees store information in various formats and values. Using electronic distributed ledger technologies, HR managers can improve collaboration and create and share development practices that increase the quality of organization systems in HR. Blockchain ledgers are tamper-proof, which can significantly impact access management. Only trusted people have access to data. Data privacy and confidentiality on employee records shall be provided. This technology can provide increased data security with the increase in cyber threats. HR personnel may need training in implementing security and better data management systems in the organization.

Documentation

With cloud-based technology, HR department employees now have timely access to information. Employees can use documents, handbooks, and training manuals easily. This feature also reduces the need for office furniture, such as filing cabinets and office space, reducing allocations for these resources. Paperwork is also kept to a minimum, which helps in reducing office supply costs. The reduction of paperwork helps in the preservation of trees and forests. Since the information is accessible to many employees in cloud-based technology, the information increases transparency within the organization. It also fosters a culture of trust, which contributes to employee productivity. Although online information may be subject to cybersecurity, information is secure from a physical disasters such as fire or calamities.

Employee engagement

Trends in HR technology have surged in this aspect of HR functions. Mobile apps are now available, which provide different approaches to keeping workers interested and enthusiastic about their jobs. Some apps integrate commenting capabilities, gamification techniques, and social media-like posting. Employers can use these features to disseminate information, which allows workers to respond. These apps also allow sharing of information. These features facilitate communication faster and reduce costs and time for printing and routing memos. Employers can also offer other engagement strategies through contest platforms, volunteer civic projects, and employee recognition programs (Martin, 2021; Tech Target, 2022).

Employee self-service tools

Employees may often be overloaded with assignments and tasks. They may need data gathering or workplace updates. With the advancements in HR technology, communication platforms are available to keep the team updated to answer employees' inquiries. Employees need not constantly come to their manager's places and seek information as they are already accessible on the platform. The update is real-time, and workers may act upon them as soon as they are received. Team members see what tasks are assigned, what is being done, by whom, and when they are due. Project management and execution are easier with collaboration or project team software. This technology provides higher administrative task efficiency, a boost in team morale, and a reduction of burnout.

Payroll and compensation

Payroll clerks now find tracking and paying employees' wages and salaries more accessible through payroll systems. They can easily withhold taxes and identify and calculate other deductions. The database contains salaries, wages, and other additions or deductions to determine net take-home pay. Information is already stored in the database. Calculations are also automated. These mechanical and redundant tasks relieve the payroll clerk of attending to the details. However, the clerk must ensure that accurate inputs are provided to get the correct amount. Since these are repetitive, considering the regular pay cycles and dates, the database provides the items

determining the employee's net pay. Redundant inputs are no longer conducted, which allows the payroll time and effort to attend to other HR tasks (HR Tech, 2021).

There are also time and attendance software for tracking working hours. Tools such as biometric time tracking systems present hacker-proof settings and data storage. These devices eliminate time theft and help avoid buddies from punching in. Some setup is also available for remote workers. For large organizations with hundreds or even thousands of employees, monitoring and computing is tedious and may be subject to errors. With payroll software, employee hours are monitored and totaled without manually counting the hours through time-record systems. The software already accumulates the time reported by employees. Employee scheduling and tracking are more accessible than traditional systems, which let HR personnel determine employee availability (Martin, 2021).

Beyond this, payroll software can also help determine an organization's turnover rate and how much overtime is rendered during a given period (HR Tech, 2021). This information can help in facilitating recruitment and hiring and employee morale programs. Overtime data can be communicated easily with the finance departments and help program budgets or expenses. More integrated management systems are now developed to collaborate with other departments. Sharing information and resources speeds up processes and reduces operational costs.

Performance management

Technology systems provide performance management platforms that offer interactive features enabling employee feedback (Martin, 2021). Technology-assisted appraisals can keep track of information about employees. Managers can quickly and easily monitor their staff's strengths and weaknesses. They can also identify employees' areas for improvement. Based on the appraisal results, the data can guide managers in creating suitable employee learning programs. The outcomes can assist employees in developing their skills effectively and planning their career paths. These systems also present workforce analytics on individual performance. Tools like Computerized Performance Monitoring (CPM) can help managers know how much work has been completed by each employee during a given period (Ramey, 2022). This tool helps in the flow of information about employee performance across the organization. Information becomes transparent. Performance outcome is guaranteed since workers are monitored and will likely do their best to look good. Managers can use these data to optimize the allocation and development of human resources. They can also quickly identify the need for new positions. These systems can significantly improve productivity and employee retention.

The feedback-driven systems in these tools show their efficiency in different industries. Government institutions can benefit from the same feature. The real-time performance management system allows for adjustments in employee performance as soon as they get feedback. They do not have to wait for their superiors to finish the performance appraisal reports. Employees can easily access their assessments through these tools. The feedback system also motivates employees as they can track their accomplishments and improve their competencies' utility. The feedback mechanism also fosters learning and development in the working environment. The system also provides department heads with the overall team performance. Managers can determine which employees struggle to contribute and find ways to improve their performance.

Talent acquisition and management

Applications are available, integrating recruitment, onboarding, succession planning, and other HR functions such as learning and development and performance management (Martin, 2021). Platforms help recruit and evaluate candidates. Reviewing applications is easier and faster. E-recruitment web portals also allow employers to post positions and qualifications quickly (Ramey, 2022). Aside from the ease and cost-friendly system, organizations have become more social and accessible. The strategic process of finding and hiring the most suitable employees for the job is closely linked to talent acquisition. Available tools include applicant tracking systems (ATS), candidate relationship management, employee referral software, and employee assessment software. Without these systems, organizations spend more months acquiring talent (HR Tech, 2021). ATS helps post job openings on the organization's website or job boards. It assists in screening resumes and generating interview requests and schedules for potential job candidates. These systems also provide automated resume tracking, multilingual capabilities, pre-screening questions, and response tracking. Candidate relationship management features allow employers to retain candidates for future consideration. Employee referral software helps in collecting recommendations from current employees about potential candidates for positions. Employee assessment software helps in determining the candidate's cultural fit based on personality, aside from knowledge and skills.

Onboarding platforms also help manage processes, which makes all documents, forms, and guides accessible online to all employees. Training can also be facilitated through these tools. Software for these purposes helps eliminate back-and-forth communication between the HR office and the new hire. HR personnel can also easily keep track of the new employee's progress in the onboarding process.

Training and development

Many training nowadays are conducted digitally (Martin, 2022; Ramey, 2022). Keeping track of progress and evaluating the effectiveness of training objectives are accomplished with ease. Online training sessions and webinars can be provided for employees. The delivery reduces time and costs for the venue and assembling people. Webinars are convenient for teams that may be spread out across a locale. HR can provide real-time or asynchronous training depending on the availability of workers. Employees can choose more convenient times to allow work and personal schedules to continue.

The Internet of Things (IoT) offers a range of learning and training possibilities. Employees can get access to learning materials on-demand while they continue the completion of specific tasks.

Work communication

Employees spend more than 60 percent of their time communicating and collaborating internally, gathering and searching for information, and reading and answering emails (HR Tech, 2021). They spend only 39 percent on role-specific tasks. With project management software, it is easier to track everyone else. Sending emails and asking for updates is no longer necessary. Less time and effort are consumed in writing, sending, and reading emails. Employees feel more engaged and connected within the organization with a single communication platform for work. The platform becomes a central hub for all organizational or departmental information. There is no need to email anyone in HR in case they need to access some policy or refer to a procedure.

Work conditions

Under COVID-19, people found technology to allow them to continue work. Remote work has become a saving grace during the pandemic (Muzyka, 2022). As government employees can work from home, the government continues to provide its services for the community. The trend for remote work has continued to peak, which offers work opportunities for more people, including people with disabilities and stay-at-home mothers.

Workforce analytics

Government institutions can obtain data analytics insights and make corresponding HR decisions. With more informed decisions, HR managers can formulate better strategies and make timely decisions. The time, cost, and effort needed to research, collect and process data are reduced through data analytic tools. Managers can discern patterns from the data, guiding their workforce plans. They can map out employee engagement levels and determine the factors contributing to fluctuations. They can also identify ways to use the internal workforce to avoid hiring new employees. They can also obtain insights about employees' preferred learning styles and ambitions, which can be used as inputs for training programs.

II. Conclusion

Technology has provided many beneficial organizational changes, particularly in human resource management functions. With its capabilities, technology has changed how people work and systems function. The technological breakthroughs in various aspects of the HR function make HR personnel jobs more meaningful as they reduce repetitive and redundant tasks. Organizations realize savings in time and costs, resulting in better efficiencies and productivity.

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