

# Digitization of Human Resource Practices: The Realities in the New Normal

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Abstract: Globally, companies of varying sizes are bolstering their efforts to adopt business automation strategies with particular concentration on robotics thereby reducing the number of staff that have to physically come to work facilitating social/physical distancing as recommended by the World Health Organisation (2020). Robots are also being used to perform roles workers cannot carry out remotely from home. Rapid technological advancement particularly with reference to globalization has shifted the organizations to knowledge-oriented units. With the advent of the twenty-first century came the ever increasing effect of globalization and technology. There is, therefore, a tremendous surge in the implementation of new technology and organizations have amplified the use of information systems in various functions and departments for organizational competitive advantage and success. This paper examines the use of Digitalized (IT) devices in HR practice that is employing human resource information system in to improve HR functions and position the organization to be competitive especially in the post Covid-19 era. It is a conceptual paper and largely employs a desk research methodology in the review of relevant literature.

**Keywords:** Human Resource Information System, E- Recruitment, E-Payroll Management, E-Performance Management, E-Training, Realities of the New Normal

#### **INTRODUCTION**

In late December 2019, the new and widespread COVID-19 disease started in China and spread rapidly worldwide, and on March 11, 2020, the World Health Organization declared it a pandemic. As of August 25, 2020, there were more than 23.3 million confirmed cases of COVID-19, and more than 800,000 deaths were reported globally (Abbas, 202; Madero Gomez, Ortiz Mendoza, Ramírez & Olivas-Lujan, 2020). According to a joint statement by the World Health Organization and the International Chamber of Commerce, COVID-19, with its dual impact on health and the economy, requires immediate action by governments to minimize its transmission. These early and effective measures can reduce short-term risks of infection for employees and reduce long-term costs for trade and the economy of countries (Yoosefi Lebni, Irandoost, Mehedi, Sedighi & Ziapour, 2021). COVID-19 is currently the biggest global health challenge, and because of its widespread and constant mutation, it has left organizations with volatility, uncertainty, complexity, and ambiguity. This pandemic has created many challenges for organizations, including business continuity, low employees' motivation, distance working,

unemployment (Abbas, Mubeen, Iorember, Raza, & Mamirkulova, 2021; Nangia & Mohsin, 2020).

Employees are one of the main factors in the formation, development, and implementation of organizational operations in any organization. The effective performance and interaction of employees ensure efficiency, which ultimately promotes productivity, sales growth, and profitability and reduces employees' turnover (Yoosefi Lebni, A. Ziapour, N. Mehedi, S.F. Irandoost, 2021; Risley, 2020; Davidescu, Apostu, Paul, Casuneanu, 2020). Therefore, in the current post covid-19 crisis, the safety, health, and well-being of employees are considered by many organizations (Dennerlein, Burke, Sabbath, Williams, Peters & Wallace, 2020). Human resource managers who are in charge of hiring people, managing employees' performance, salaries and benefits, and also developing and revising employees' classifications are looking for innovative, creative, and effective ways to solve the problems of employees, maintain their health (De Leon, 2020) and support them by creating a reliable management strategy (Roggeveen, Chen, River Harmony, Ma & Qiao, 2020). The historical challenge of COVID-19, given the exceptional and uncertain circumstances and changing economic landscape, requires deep thinking and flexibility to manage human resources properly (Risley, 2020). In response to this crisis, organizations are digitizing their human resource practices to mitigate the effect of the covid-19 pandemic.

With the advancement in technology the internet is acting like the principle driver of change in the organizations. As it acts as a better approach to exchange information more efficiently and to approach larger audiences than any time in recent memory. Today, HR professional needs to respond to increased competition for all-inclusive digitalized change and quick advances in HR technology. New sort of technical knowledge, aptitudes and abilities would be required by HR practitioners in future who are flexible and willing to deal with the ever-accelerating pace and often unpredictable changes in the worldwide workplace. The HR professionals need to assess the ramifications of a movement into an era of decentralization, which if used properly, can lead to emancipation. The era will require a new sort of association, based on a different system that can unite the commitment of independent people in a socially sustainable manner. It is consequently clear that a better approach to manage HR as a system is emerging, and new HR managers ought to manage themselves (Anyim et al, 2011).

Digital technologies play an increasingly influential role in both the working lives of employees and human resource management (HRM), which is to be affected in multiple ways (Parry & Strohmeier, 2014). Digital transformation has revolutionized the way companies relate to their customers, how companies run their operations, how they conceive of their business model and how they organize themselves (Westerman & Bonnet, 2015). It is about integrating digital technologies, such as social, mobile, analytics and cloud, in the service of transforming how businesses work (Kane et al., 2015). The integration of digital technology into business processes has become very important for the survival and competitive advantage of contemporary organizations (Bharadwaj, 2000).

Palmer, Dunford and Buchanan (2017) claimed that human resource management in a digital age is as a result more varied, more people-oriented with the responsibility of designing diverse, challenging jobs to keep the young employees more engaged in their work. Digital transformation puts into questions the traditional ways the HR functions are carried out in organisations. Bell et al. (2006) state that the digital transformation has resulted in further implications for the role of HR, its capabilities and competencies. Furthermore, Larkin (2017) argues the change to the HR department that digital technology will bring will be all pervasive and omni-directional throughout every company. Consequently, digitalization affects HRM more than just through facilitating daily administrative work. The use of technology facilitates the actual HR functions (functions addressed in this study are: HR planning; recruitment and selection; performance management; reward management; health and safety; employee relations; work design) however has also added new demands on the HR function as the latter ensures that the human capital in the organization is one that is aligned with the strategic needs of a digital era.

Hays and Kearney (2001) posit that HRM is a field that is very sensitive to changes in the broad environment. Technological innovations push mainstream personnel techniques to their expiration date. HR Managers in an era of digitalization are loyal to traditional values however dedicate more time to managing information and mastering software (Human Resource Information Systems - HRIS). Technology is changing the way HR accesses, manipulates, transmits and store massive amounts of data. Human Resource Information System (HRIS) is an important Management Information System which contributes to the human resource functions of an organization. HRIS is a computer system used to acquire, store, manipulate, analyse, retrieve and distribute information related to human resources. Modern HRIS can help organizations by automating most HR functions. HRIS becomes an important strategic tool since it collects, manages and reports information for decision-making (Nagendra & Deshpande, 2014).

#### LITERATURE REVIEW

## Digitization of Human Resource Management

The nature of HR has evolved to a strategic function of an organization. The role of HR leaders in attracting, developing and enabling talent is critical to the success of any business. For this, it was inevitable for the HRM (Human Resources Management) to get transformed into Digital, which radically altered the way the employees and the businesses work. Digital Technology has entirely reinvented and enhanced the processes and systems in various functions across the industries, and the HR function is no exception. In the last two decades, digital tools like online job boards, applicant tracking systems (ATS), professional networking sites viz. LinkedIn, Facebook, Twitter have significantly changed the HR-dispensation right from a job posting or job application to recruitment and onboarding, employee engagement, performance management, and finally employee separation - capturing valuable insights during exit interview.HR started replacing manual processes which are of repetitive in nature, with automations. The need is to connect all HR processes across the organization over a period of time for greater transparency

and efficiency. However, digitalization of HRM should not simply be looked at only a makeover process. HR leaders must be sensitive to the fact that it entails a huge change, and employees must be hand-held throughout this change failing which it is like a broken chain. Let us not forget that Digital HR journey too has its own challenges. It requires a considerable bandwidth of team members and has lot of potential to impact the organization's overall productivity. As per report of the World Economic Forum, diversified workplaces would emerge in the industry due to mobile, cloud technology, big data and computing power. In another two years, it predicts, that AI (Artificial Intelligence), ML (Machine Learning), and advanced robotics drive the workforce increasingly. The role of electronic management in human resource is important for enhancing organizational performance. This was concluded by Rawash and Seydan in their study on impact of e-HRM on organizational market share (Rawash & Seydan, 2012). Similarly the researcher reviewed these empirical literature to be able to analyse, compare and make assumptions on the influence of e-recruitment, e-training, e-payroll and e-performance management.

### HR Digitization: The Role of Human Resource Information System

Globalization has greatly contributed to enabling human resources to expand its prospects, perspectives and use of technology. As more companies become globalized, the need for an integrated system where they would manage their human resource functions emerged hence creating a greater need for. The expansion has led to the introduction of global HRIS in various multinational organizations resulting to the emergence of different HRIS opportunities, benefits and challenges (Opiyo, 2015). HRIS offers HR the opportunity to become a more efficient and strategic function by standardizing the majority of the organization's HR processes, improving the quality and speed of available information and improving services to employees (Ball, 2011). These changes form the basis of a highly competitive organization (Gatewood, 2008). If designed correctly the system manages employee data in line with how the organization is managed; hence the need for a multinational organization to implement a global HRIS (Troshani, Jerram & Rao, 2011).

Human Resource Information System refers to a systematic procedure for collecting, storing, maintaining, retrieving, validating and disseminating relevant information needed by an organization about its human resources, personnel activities, and organization unit characteristics (Lippert & Swiercz, 2005). Human Resource Information System help human resource professionals achieve human resource objectives. At the functional level, Human Resource Information System can keep track of employees, applicants, and contingent workers qualifications, demographics, performance evaluation, professional development, payroll, recruitment, and retention (Harris & Desimone, 2005). The computerization of Human Resource Information System function enabled faster decision making in the development, planning, and administration of Human Resource because data became much easier to store, retrieve, update, classify, and analyze. In addition, Human Resource Information System can strengthen the performance or employees and the general outlook of an organization. this can be achieved through tracking information concerning an applicant's or an employee's qualifications and

demographics, recruitment, professional development, performance evaluation, payroll, retention, and attrition are essential for success at the Human Resource functional level (Harris & Desimone, 2005). Perry (2010), adds that in order for an organization to increase its employee's performance they need to rely increasingly on Human Resource Information System henceforth HRIS.

## **Digitization of Recruitment (E-recruitment)**

E - recruitment function is a sub process such as long and short-term candidate attraction, the generation, pre-screening, and processing of applications or the contracting and on boarding of new hires. Online job advertisements on corporate web sites and internet job boards, online Curriculum Vitae databases, different forms of electronic applications, applicant management systems, corporate skill databases, and IS supported workflows for the contracting phase are only few examples of the various ways by which information systems today support recruitment processes (Gurol, Wolf & Ertemsir, 2010). In HR planning process it is easier to follow workforce gaps, the quantity and quality of the labour force and to plan future workforce requirements with the help of HR knowledge systems (Dessler, 2005). Human resource information systems can support long range planning with information for labor force planning and supply and demand forecast; staffing with information on equal employment, separations and applicant qualifications; and development with information on training programs, salary forecasts, pay budgets and labor or employee relations with information on contract negotiations and employee assistance needs (Shibly, 2011).

Dery, Grant and Wiben (2009) argue that many companies have seen a need to transform the way human resource operations are performed in order to keep up with new technology and reducing the number of employees. The internet has therefore become an increasingly popular way to recruit applicants. Delivering human resource services online supports more efficient collection, storage, distribution and exchange of data. Again this is corroborated by Lengnick-Hall and Lengnick-Hall (2007), who attest that human resource information system provides a comprehensive database; which enables organizations to provide structural connectivity across units and activities and increase the speed of information transactions more particularly in recruitment processes. They observe that in so applying information system in recruitment makes the whole process easy and reducing of recruitment coats.

According to Ruel, Bondarouk and Looise (2004) the importance of records systems is increasingly being recognized in organizations. Employees require information in order to carry out their official duties and responsibilities effectively and efficiently in a transparent manner. According to Northwest Territories (2002) the role of records system is to ensure that members of staff involved in different operations have the information they need when necessary. Several studies on e-recruitment analysed online recruitment in which most of the firms were using and also to provide appropriate selection of the employees through the module this is in firms in Belgium, United Kingdom and Netherlands. Studies done by Fayyazi and Afshar (2013) on e-recruitment in Iran firms concluded that e-recruitment was mainly about cultural and behavioural

change which viewed it as end to end process which required updated networks and advertisements. The studies by Kar and Bhattacharya (2009) where they were able to assess relationship between e-recruitment and job satisfaction which they found out that the job portals had been very efficient for applying jobs for candidates and provided adequate customer satisfaction. The HRIS automation has helped the corporate human resource departments to facilitate the outsourcing of human resources (Barron, Chhabra, Hanscome & Henson, 2004).

The e-staffing systems contain an e-recruitment portal which is a subset of the HRIS system for applications for the recruiting and hiring functions. A good system will mainly automate the majority (70-80%) of the recruiting process. Companies usually used job boards like Monster.com or CareerBuilder and found large increases in applicant numbers, but many are unqualified for the positions due to the mass application being sent by the public. HRIS performs a record-keeping function. In this HRIS system, applicants' information and employees' data can be stored, retrieved and added to whenever the need arises. For example, if an HRM employee is asked to provide information on the academic documents of an applicant or employee, then he or she can quickly and efficiently search for this information in the data directory which contains details of thousands of employees (Kovach & Cathcart, 1999). This module necessarily holds the following types of data about the employees: wage history, emergency and regular contact details, education records, training and certificates, disciplinary actions, injuries or illness data, and so forth. With the introduction of HRIS human resource management functions and processes are conducted electronically. The adoption of technology has allowed human resource managers not only to focus on administrative work but also develop well researched strategies and plans, enabling human resource planning to be aligned directly with overall business objectives. According to (Cheruto, 2005) in her study she was able to established that an effective e-recruitment model in a HRIS reduce hiring costs by 90% in organizations

Empirical evidence showed that generally e-recruitment occurs at all levels of a job hierarchy but the prevalence of internal recruitment increases at higher levels though the online hires have more experience and education. The empirical evidence is consistent with using internal recruitment to create strong incentive for the firms workers, an internal recruitment policy may complement other human resource practices in particular those associated with encouraging long worker tenure. Internally hired workers have accumulated knowledge and skills that are particularly valued in the firm (Dess & Jason, 2010). The human resource information systems helped in job rotation which entailed the lateral movements of employees between jobs in the organization. It involved change in job assignment but not necessarily more responsibility or money. The HRIS provided an overview of the departments therefore reducing the boredom and fatigue for the employees. It also helped in increasing the job and career prospects. The job rotation example is where the accountant rotates through both human resource department and operations in preparation for management positions since it helps in increasing the employee knowledge and skills.

According to (Gamage, 2015) the objectives of recruitment is to get the right person to the right job, establish and maintain a good image as a good employer and maintain the recruitment process as cost effective as possible. The recruitment practices will determine who is to hired and when properly designed will identify competent candidates and accurately match them to the job. Similarly, (Rauf, 2007) discovered that e-recruitment procedures are positively related to the performance of organizations. According to (Huselid, 2011) recruitment procedures that gave a large pool of qualified applicants, pared with a valid and reliable recruitment regime. This implied that an organizations policy, human resource policies and practices represent vital elements for shaping employee behavior and attitudes. (De Varo, 2012) demonstrated that e-recruitment can lead to positive organization outcome and help the firms to grow as they have been able to get the right people for their vacancies. The self-service in human resource information systems is a technology platform that enabled employees and managers to access and modify their personal data via web browser from a desktop or centralized kiosk. The managers may use the self-service to access authorized information about the employees, their supervisors and also be able to fill up an open position.

The managers may use the HRIS to compile employee absenteeism and turnover data, to forecast human resource demand and also to manage annual employee review and compensation planning. This enables the human resource consumers to no longer interact directly with the service providers. The employee profile may include the employee name, classifications, work status, work history, jobs held in the firm, education level, training, skills competence, areas of expertise, talents, history of performance appraisals, future jobs desired, hobbies and interests which may be used for organizational planning. There are two main types of e-recruiting systems. An organization applicant tracking system is able to track demographic information, as well as the skills and competence of applicants and those in -Reviewed by the firm. The search major feature of applicant tracking systems could be screen out the qualified resumes based on certain established criteria, resulting in time saving for HR staff. Letters or e-mails can be automatically sent by the organization system to un-qualified applicants. The second major system is called a hiring management system (HMS). The primary difference between this and the applicant tracking system is that the HMS utilizes job boards and corporate websites to establish a match from a pool of applicants. An e- mail is sent to the firm when the system receives a resume that clearly matches the recruiter's desired qualifications. This means a quicker interview, which truly reduces time to hire. The major prospects can receive an offer more quickly, so a talented applicant does not go to another company.

The importance of e- recruitment is discussed hereunder:

#### **Timely Access to information**

Kovach and Cathcart, (2005); Ngai and Wat (2006), in their study on effects of e-recruitment on performance of public universities establish and are in agreement as to the timely access of information and saving administrative costs by recruiting online. Averbrook (2012) claims that

recruitment procedure is one of the last activities most organizations consider important for integration with performance, but it really is one of the most important. As talent becomes harder to find, recruiters look within their own house for the next applicant for that all-important job. Averbrook (202) further argues that recruiters want the ability to understand internal applicants in greater detail than the external candidates, including a performance history and learning details to assess their fit for open positions. The integration of performance into the HRIS, where recruiting data often is housed, would open a new door for continued focus on internal mobility. E-recruitment also would allow Kenyan public universities to profile candidate information on their qualifications and only be able to select the most qualified candidate and have access to this information in a timely span of time.

The realization that every organization faces the need to invest in its existing workforce - during the late 1990s and early 2000s, recruiting from the outside was the path organizations used to fill the need for talent. With the approach of the talent deficit of 2010, which will mean a shortage of more than 10 million knowledge workers in the United States alone, companies and institutions of all types realized that they must do a better job of re-skilling and retraining their existing labor. Cost reduction is amongst the major benefits of human resource information systems. According to Rangriz, Mehrabi and Azadegan (2011) in their study titled the impact of HRIS on strategic decisions in Iran, in which they concluded that it's time the public sector catches the wave of technological changes. These researchers observed that on-line recruiting dramatically increases exposure of an organization to applicants at a fraction of the cost of traditional job advertising methods. This response can further be corroborated by early advocates of the use of human resource information systems in the recruitment process. Johan (2014) proposes that use of e-recruitment saves on time and reduces the cost of recruitment process. Labor turnover trends can indicate particular problem areas that need to be corrected before further recruitment takes place. Alternatively if the problems are unavoidable the recruitment campaign can be modified to make allowance for them. Information such as job descriptions and person specifications is readily accessible for recruiters who need such, for example when preparing advertisements and interviewing applicants. Accordingly, human resource information systems can provide both background info to assist attraction, recruitment and selection and analytical information to evaluate its effectiveness.

#### **Applicant Tracking**

Applicant tracking is intended to identify the most qualified candidates, reduce paperwork, automate, manage workflows and tap into public to efficiently build your talent pool. It is also meant to monitor reports like time to fill a position and cost per hire with reporting capabilities that are tailored to organizational recruiting process. Besides it can enable candidates to search and apply for jobs online. Applicant-tracking systems may also include many features and capabilities, such as CV scanning and grading capabilities, profiles of job candidates schedule of duty, letter generation tools, interview-scheduling tools, cost-analysis reports, applicant demographic and equal employment opportunity information (Midiwo, 2015). Generally human

resource information systems makes provision for recording of details of recruitment activities such as cost, application tracking and evaluation, resume management, method of recruitment, interviewing and selection and time to fill the positions (Midiwo, 2015).

## **Digitization of Payroll Management (E- Payroll Management)**

In the organizational context, performance is usually defined as the extent to which an organization member contributes to the achieving of organizational objectives. Employees are a primary source of competitive advantage in service-oriented organizations (Luthans & Stajkovic 1999). In addition, commitment performance approach views employees as resources or assets, and values their voice. Employee performance plays an important role for organization performance. The performance appraisal is a procedure which involved setting work related standard while assess the employee actual performance and providing feedback to the employee in order to remove performance deficiencies. The performance need to be clear for all so that the performance management process can be understood by both the management and the employees. Most of the studies have indicated that private and government sector firms use IT for activities related to the performance appraisal of employees and benefit administration. The benefit administration provided the administration of employee participation in the dimensions of benefits. This can be illustrated in case where the retired public servants would find it hard to claim pension payments due to lack of adequate records to show what they are entitled to in the ministries.

Hegel argues that salary administration, salary review procedure are important functions of HRM. The beginnings of human resource technology arose with the need to process large numbers of employee pay-slips which prior to 1960s was predominantly a manual or clerical exercise. The advent of use of technology to manage payroll signified the first major application of technology to an HR related problem. At the same time it was recognized that such payroll systems often held a useful repository of employee information, including data about jobs, pay, cost, absence levels and personal data. When integrated with payroll management, HRIS payroll interface can calculate salaries and provide a range of supporting functions such as preparing pay-slips and payroll reports. A HRIS may be closely linked to or even a component of an integrated financial management system (IFMIS). With a comprehensive payroll pay card, an organization can offer its employees 24/7 access to funds and on-time pay no matter what, for instance employees on vacation or sick leave and the like), elimination of time-consuming trips to the bank, and more (Hagel, 2012).

#### **Salary Reports**

A survey by Blair, Morgan, Spero and de Vries (2009) on addressing problems of Human Resource Information System in Swaziland, Uganda and Rwandan government departments revealed that due to poor payroll management, newly recruited staff were often not paid for three to four months and in a few extreme cases staff were not paid for an entire year. Some retired

staff died without receiving a pension. Several respondents noted that the process for identifying ghost workers-workers who remained on the payroll but were no longer active in the workforce due to retirement, termination, death and the like and stopping their salaries often took an average of six months, with some cases taking nearly two years. As concerns

As concerns compensation, for years, the purpose of the performance review has been to allocate annual salary increases. While this process has generally been handled manually, it also has seen a great deal of controversy and change. Compensation is truly the biggest driver of certain types of behavior and works differently for various job groups. Incentive compensation is a great tool to drive sales and specific performance targets, whereas base compensation is a great tool for driving overall employee satisfaction and improving performance. What has been missing in all links from compensation to performance is measurement of year-over-year increases in performance and the impact that compensation has on performance. Organizations that take an interactive view of the performance management process and ensure that compensation is just one of many outcomes, which might also include promotion, new opportunities for learning and development, and other forms of recognition, understand the importance of integrating performance and HRIS to measure total compensation and rewards. Organizations that still rely on a manual, semi-automated process as a once-a year, meet-the-requirement tool will soon realize that the war for talent and staffing shortages will make it necessary to approach pay-for-performance as an integrated process (Avebrok, 2012).

When a company invests in an affordable HRIS, it suddenly becomes capable of handling its workforce by looking at two of the primary components: that of payroll and that of HR. Beyond these software solutions, companies also invest in HRIS modules that help them put the full productivity of their workforce to use, including the varied experiences, talents, and skills of all staff within the enterprise (Rietsema, 2015).

## **Digitization of Performance Management (E-Performance Management)**

Performance management (PM) is a process where the manager and employee create goals and plan to be achieved and the goals must be based on the operational plan of the organization together with the employee development path. The performance management system included with the performance appraisal and the employee development are said to be one of human resource management's risk or issues. The web-based performance system allows the managers to access extract and assess their employee faster and smoothly. It also helps a lot when the performance appraisals need to be calculated empirically. This is because, the system can help them to calculate and extract the percentage for them instead of the managers needed to calculate it manually. Other than that, the performance management system also can be categorized either as preformatted appraisal systems (a systems that allow the developmental of customized appraisals) or as a systems that diagnose performance problems. Web-based system also provides a calibration tool for the employee performance ratings that allows for visual inspection of the distribution of ratings for a population (Teotia, 2012).

Averbrook in his study of performance management defines it as an integral part of HRIS and that it allows managers and employees to monitor, schedule and complete the review process online. As a process it is a natural outshoot of all of the work that surrounds the human resource information systems. Whether the actual performance management solution exists within the same human resource information systems or in a separate application is not the issue. The issue is what the process means to the organization, what outcomes the organization desires, and that HR and human resource information systems professionals have an amazing opportunity to leverage their experience to make the performance management process a truly strategic tool to prove the value that HR brings to the organization (Averbook, 2012).

Recent human Resource information system simulations have also been used to even predict future performances of employees (Harris, Pargett, Sutcliffe, Umulis, Ashe, 2011). The strategic role that learning functions play within organizations today demands that performance management, learning management and other strategic components of human capital management (HCM) become integrated and work together as a seamless process, instead of the silted approach that HR has taken for the past 60 years. Many organizations feel that they have an integrated process today, but what they actually have is an interface; a point at which independent systems interact. In the recently published IHRIM and Knowledge Infusion Workforce Performance survey, more than 95 percent of respondents said that their workforce performance processes are either somewhat or very limited. Organizations finally see the need to bring the two important processes of performance and learning together. The question is how to accomplish this initiative (Averbrook 2012).

### **Performance Appraisal**

Human resource information systems can be integrated to the ERP solutions, which can enable companies to enjoy the ultimate benefit of an all-in-one system that can decrease errors, lower cycle times, reduces turnaround time, and support management decisions. Performance management is an integral part of this capability and allows managers and employees to monitor, schedule and complete the review process on line.

Again advances in technology over the past decade make it possible to deploy performance management tools to the workforce—including employees, managers and executives—with little to no infrastructure or training. Technologies such as on-demand, XML integration and hosted solutions allow HRIS professionals the opportunity to roll out new productivity measurements faster, better and cheaper than ever. Also, reporting technology, including data marts, data warehouses and executive dashboards, brings the results of these tools directly to those who make decisions about how the workforce impacts the business like never before. The performance evaluation subset of HRIS includes information regarding performance ratings, the date these ratings are received, type of appraisals that were used, comments therein and performance objectives and goals. Recent human Resource information system simulations have also been used to even predict future performances of employees (Harris, Pargett, Sutcliffe,

Umulis, Ashe, 2011). The strategic role that learning functions play within organizations today demands that performance management, learning management and other strategic components of human capital management (HCM) become integrated and work together as a seamless process, instead of the siloed approach that HR has taken for the past 60 years. Many organizations feel that they have an integrated process today, but what they actually have is an interface; a point at which independent systems interact. In the recently published IHRIM and Knowledge Infusion Workforce Performance survey, more than 95 percent of respondents said that their workforce performance processes are either somewhat or very limited. Organizations finally see the need to bring the two important processes of performance and learning together. The question is how to accomplish this initiative (Averbrook 2012).

#### **HR Score Card**

The HR score card is one of the strategies that come into focus when clarifying HR impact on organizational performance. Operational outcomes of the score card process may include customer satisfaction, service quality, speed of delivery and productivity; doing more with less (Hagood and Friedman, 2002). Further HR should improve on its score keeping process; measuring HR's impact on organizational performance as well as alternate HR roles in the score keeping process.

## **Employee Turn- over Record**

Employee turnover, which is the total of the number of employees who resign for whatever reason, plus the number of employees terminated for performance reasons, and that total divided by the number of employees at the beginning of the year. This may be measured by analyzing the records that human resource information systems contain of each employee. The separation section lists reason and date of separation for each employee; monthly or when requested; the HRIS group will query the database and provide Departmental Heads with Turnover Reports by posting graphs of each report on the Intranet. It is only a handful of firms which have embraced this level of HRIS such as that the workforce analytics module in Human Resource Information Systems can be used to give crucial information about return on investment on employees. All this information allows for proper decision making in an organization. Furthermore recent human Resource information system simulations have also been used to even predict future performance of employees (Muriithi, Gachunga & Mburugu, 2014). All this information allows for proper decision making in an organization. As talent becomes harder to find, recruiters look within their own house for the next applicant for that all-important job. Recruiters want the ability to understand internal applicants in greater detail than the external candidates, including a performance history and learning details to assess their fit for open positions. The integration of performance into the HRIS, where recruiting data often is housed, would open a new door for continued focus on internal mobility. Also through competency management - understanding the skills and abilities of the workforce continues to baffle most executives. What has been missing in all links from compensation to performance is measurement of year-over-year increases in performance and the impact that compensation has on performance. Organizations that take an interactive view of the performance management process and ensure that compensation is just one of many outcomes, which might also include promotion, new opportunities for learning and development, and other forms of recognition, understand the importance of integrating performance and human resource information systems to measure total compensation and rewards. Organizations that still rely on a manual, semi-automated process as a once-a-year, meet-the-requirement tool will soon realize that the war for talent and staffing shortages will make it necessary to approach pay-for performance as an integrated process (Midiwo, 2015).

## **Digitization of Training and Development (E-Training)**

The study by Lin (1997) posited concerning e-training that the training software gives provisions for skills inventory. Lin further observes that the e-training software is used to store record of acquired skills and monitor the skill data base, at both employee and organizational levels. The system can equally be used by managers, employees and training staff to plan and administer all types of training interventions. Typically such systems will hold a range of data: a catalogue of learning options, course dates, HR skills inventory, record of training expenses incurred; competency or training requirements associated with positions/jobs, employee training data (learning plan, training history competencies, qualifications and so on).

#### **HR Skills Inventory**

The HR skills inventory capability provides succession planning tools needed to implement and maintain comprehensive talent management, and identify high potential employees as part of an organization wide succession planning process. This capability allows for the establishment of core competency requirements against roles, at all levels within the organization. Appointee's capability is then measured against the roles competencies and supports employee progress towards acquisition of competencies, through training and professional development. With regard to training and development work focus has been through human resource information systems. The system helps track training, skills and competencies. Human resource information systems can be used to manage human capital and maximize talent. The system stores electronic resumes for each current employee, which gives the company an electronic inventory of its human capital. It can track where skills are in short supply and HR can develop appropriate training; training needs analysis, training cost benefit analysis, promotion analysis; this supports decision on career management, simulation, training evaluation and decisions (Lin & Lee, 2006). De vries et al, (2008) argues that accuracy in data provides for a qualified workforce hence organization performance.

Further studies by Shibly on effects of e-recruitment on organization performance shows that for better tracking and management of employee training, specific training often is required by regulators, and documenting successful course completion can be a major burden for organizations. Employees may be required by law to complete Occupational Safety and Health Act training, sexual harassment courses or patient care procedures. An HRIS can help employees

track which courses have been successfully completed and what upcoming training opportunities may fit their needs. Managers can track the training as well as reducing redundancy and training costs. In one option, a Learning Management System (LMS) can be used to manage the administration, tracking and reporting of training in the organization. By allowing the organization and employees to develop talent and skill profiles, sign up form courses, and register course attendance, an LMS can cut costs, streamline training and empower employees to manage their own skill development more effectively-training capability provides employee engagement survey and succession planning tools, needed to implement and maintain comprehensive talent management, and identify high potential employees as part of an organization wide succession planning process. This capability allows for the establishment of core competency requirements against roles, at all levels within the organization (Shibly, 2011).

Generally HRIS is configured to evaluate programs, policies or practices, for instance to evaluate the effectiveness of a training program. The training and development sub system of HRIS includes data on an employee's skills and competencies, training courses taken, costs of courses, developmental activities and career planning in terms of which positions might be most ;appropriate for an employee based on skills and competencies. Human resource information systems must now be judged on whether it enhances the firm's competitive advantage by adding real value, measurable economic value for instance shortened training circle time, not merely on its perceived value like training builds skills (Huselid, Becker & Beatty, 2005).

### **Track and Administer Interventions**

In most situations, human resource information systems will also lead to increases in efficiency when it comes to making decisions in e-training. The decisions made should also increase in quality training as a result, the productivity of both employees and manages should increase and become more effective. These systems enable employees to manage much of their own HR administrative work. They can take care of many routine transactions whenever they wish. In addition to their former operational role, HR professionals can also act as a competency manager by arranging the right people to the right positions in the right time with their new skills.

According to El – kot and Leat (2011) in their study on e-training observe that career and succession plans - most existing HR solutions provide tools and technologies to store career and succession plans for the workforce. Integrating these plans with performance management processes is crucial to support employee growth and job satisfaction. Executives have requested this data for years, as retention is a top metric within most companies. Today, this data is not a request, but a requirement, and the need to automate a very manual process is crucial for success and keeping a competitive edge. They further observe that competency management: - understanding the skills and abilities of the workforce continues to baffle most executives. Many organizations know more about their IT investments and expenses than about their people. On average, companies spend 8 percent of their total expense line on IT and 70% on labor. The fact that a company would know more about how much memory is in a computer, who sends email to whom and what Web sites get visited most frequently than what their —most important asset

knows illustrates the need for a renewed critical focus on assessing the true value of the workforce.

#### **CONCLUSION**

These days, the digitization is transforming the traditional style business model. Among all functions human resources management (HRM) is largely affected by the digitization because of increasing usage of employee related software, IT enabled HR functions, Social networks, and mobile solutions. The organizations are infusing digital approach in handling their human resources (HR). There is a need to persistently develop and innovate the human resource practices to remain competitive in the business. To deliver the best results and face the competitive market the upgrading of HR is inevitable. Therefore, technical advances are being made in the field of human resource with time and gradually the customary HRM is being replaced by new and technically advanced HRM.

#### RECOMMENDATIONS

- i. Organizational management and HR managers need to continue investing towards improvement of the human resource information systems with a view to enhancing their service delivery. The use of recruiting software packages that can be customized to meet organization's specific needs for each job is recommended.
- ii. Organizational management should identify the aspects of e-payroll that affects their operations. Furthered-payroll management will help the organization perform calculations that have effects on the universities as a whole including reduction of costs in HR functions thereby enhancing the overall performance.
- iii. Organizational management should establish reasons why their e-performance management fail to enhance real time communication and find practical ways to improving them.

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