



# Changing Role of Human Resource Management through Technological Advancements

**Geetanjali**

Lecturer in Management Department, Dezyne E'cole College, Ajmer, Rajasthan, India

**Abstract :** In recent years, information technology has had a profound effect on human resources (HR) processes and practices. The focus of this research is to know the changing role of HR professional through technological advancements. In recent years, information technology has had a profound effect on human resources (HR) processes and practices. However, relatively little research has examined its effectiveness, and most of the prevailing studies haven't assessed the degree to which these new systems enable organizations to succeed in their HR goals of attracting, motivating and retaining employees.

The focus of this research is to know the changing role of HR professional through technological advancements. This includes looking into recruitment technologies which reduce the quantity of your time it takes recruiters to travel through every application. The research shows that the role of HR will shift towards training, development and strategic roles for the foremost part, while also concentrating on reward systems and benefits for the workers . The use of HR technologies is vital in helping to shift these new roles of HR professionals, within the advantage of them but also for the organization and employees.

Given the rapid changes in technology in the past decades, we believe that it will influence the nature of HR processes in the future. Thus, the primary purposes of this paper are to (a) contains the introduction about HR and technology, (b) review the current effects of technology on HR processes, (c) emerging HR trends in future with technological advancement, (d) discussion on recent types of HR technology, (e) how technology may affect the HR process, (f) major ten technology trends in the human resources management, and in last we conclude the paper along with the references.

**Keywords :** Human resource management; Technology advancement; Electronic human resource management; Virtual and Augmented Reality; Artificial Intelligence.

## I. INTRODUCTION

Employees are considered to be a company's greatest strength. Without dedicated and motivated employees, a corporation or organization can never reach its goals and objectives. The main tactic for each company or organization to succeed in their goals and objectives is to possess dedicated and motivated employees. However, companies had no way of understanding this correlation before, and therefore, might have mistreated their employees because they knew that there was no one to protect them. As company's productivity began to decrease alongside employee's motivation, employees began to realize their power during this positive correlation , they began to form unions. Before the development of Human Resource Management as a field of study, little to no importance was given to an employee's well-being and fair treatment in the workplace. The idea of what we consider now as Human Resource Management (HRM) was initially known as the 'Personnel' function prior to the 1960s, and the focus set mainly with the administration of core activities such as payroll or timesheets. Later on, enter a wave of union movements, where employee needs are set at a higher priority. With the impact of unions in determining company policies, we also have the development of Human Resource Management in which HR Managers are worked as professionals.

Human Resource Management is currently an important function of every company, since it improves the working environment and relationships of its employees with the company. It does this through professional development, fair treatment, appraising, and safety, making sure employees are happy with their jobs, hence, providing the company motivated and hardworking employees. Human Resource Departments are almost never present in small to medium-sized businesses.

In recent years, technology has had a profound effect on human resources management (HRM). Technology has widespread effects on almost every aspect of our society. From the invention of the telegraph to the creation of smartphones, it has changed the way we live our lives and do our jobs. For example, technology has altered the way we purchase products, communicate with others, receive health care services, manage our finances, and educate our students. It has also a profound impact on organizational processes,

including those in Human Resource Management and transformed the way that organizations recruit, select, motivate, and retain employees. Continuous innovations in technology will fundamentally change the way HR work is accomplished.

## II. WHAT CURRENT HR TRENDS?

Technologies like the cloud, social media, big data, and even gamification, is transforming how HR professionals work, allow us to see how

### 1. Managing a “Workforce of One”

There's a lot of noise going on about customization, the optimal combination of mass production and customization, and it's said to change the very methods by which organizations manage their employees. HR departments of large corporations have already begun treating employees as a “workforce of one,” instead of a single entity.

### 2. The Rise of the Contracted Workforce

After the rise and fall of outsourcing, organizations are now leveraging a new kind of workforce, the extended kind. This is workforce is an ecosystem of independent contractors, and outsourcing partners that provide businesses need-based HR functions. HR departments across the planet are redefining the mandate of contractual employees, giving them more strategic value.

### 3. HR is Driving Today's Organizations

Unlike the “advisory” role played by HRs, many organizations are being spearheaded by the HR function. In a world of increasingly unpredictable trend sand outcomes, organizations that adapt to the changing landscape will emerge victorious. The HR function is currently reinventing itself to become that critical driver.

### 4. Tapping Skills Anytime, Anywhere

Earlier, recruitment and HR was limited to telephone calls, or writing . But today's HRs are engaging every means necessary to source the right kind of talent, both online and offline. With the internet at their finger-tips, HR can now source talent quickly, from multiple avenues.

## III. EMERGING HR TRENDS IN FUTURE WITH TECHNOLOGICAL ADVANCEMENT

### 1. Artificial Intelligence (AI)

The influence of AI should come as no surprise — it's been a hot topic for several years now, making regular appearances in predictions about future HR trends. In coming years, AI-driven solutions will provide immense innovation in industries including Banking, Finance, Manufacturing, Retail, Healthcare, Transportation, Social Media, etc. Organizations will adopt AI and use it in recruitment, hiring, selection and every one other processes and practices. AI-powered solutions will rule out the year ahead with the subsequent advantages.

**(i) Time saving :** AI is streamlining redundant, time-heavy tasks. Chatbots, considered because the dream assistant, are the conversational interface platforms that save time and speed up the recruitment process by answering the foremost common questions of the applicants. AI will minimize repetitive tasks, hence enabling organizations to form hiring decisions faster and improve candidate experience.

Instead of counting on an HR professional to pour over many resumes and canopy letters or compile and analyze survey data, businesses can use an AI system to finish the task quickly.

**(ii) Faster candidate screening :** Screening an outsized pool of applicants requires time and energy . For one hire, candidate shortlisting and screening take up almost 23 hours of a recruiter's time. AI powered recruitment solutions will help in filtering high volume of resumes and pre-qualifying candidates supported the work description and skills. Such solutions are going to be more in demand within the coming year as recruiters would be ready to identify candidate's personality traits and predict their suitability for employment role. this is able to not only reduce the hiring efforts but also encourage unbiased candidate assessment.

**(iii) Quality hiring :** With unbiased screening and selection of candidates through AI, the standard of hires will improve and organizations would see a more productive and talented workforce within the coming year.

**(iv) Unbiased :** Another advantage of using AI for such tasks is removing human bias or error from the candidate evaluation process and approach quality HR practices for the advantage of the corporate and their employees.

## 2. Robotic Process Automation

Robotic process automation (RPA) may be a catchall that encompasses robotic skills like chatbots, tongue processing (NPL) and machine learning, also as AI. It can speed up communications and increase productivity by providing access to the proper data at the proper times.

When watching future trends in human resource management, chatbots are certainly a frontrunner. Many vendors are already incorporating chatbots into their HR systems to supply answers to employee inquiries. Common queries for chatbots include questions associated with payment, holiday leaves, social benefits and their employees general rights. Having a chatbot to answer simple questions alleviates the burden on HR departments. Other potential uses for chatbots within the HR sphere include assistance with learning initiatives.

## 3. Virtual and Augmented Reality

The term “virtual reality” probably brings some common images to mind: hard-core gamers, futuristic headsets, and fantasy creations just like the Holodeck from the Star Trek series.

While it's easy to assume that human resources may be a world aside from the normal computer game domain, the reality is that VR is one among the newest trends in HR technology.

Both VR and its cousin augmented reality (AR) are gaining traction as viable tools within the HR practitioner's toolbox. They aid front-end processes like recruiting and onboarding, with numerous HR work. For example:

- Setting up a simulated environment that tests a candidate's job-specific skills
- Sharing a virtual tour of your office space
- Using VR to bolster recruiting efforts

Virtual and augmented reality also extends to training scenarios, either as a part of the onboarding process or to supply current employees with additional training. Benefits of virtual environments for corporate training include much higher cost efficiency and better safety for high-risk industries like construction. Partial or fully virtual environments can combine real-world tasks with virtual instruction. this enables employees to look at learning prompts as they engage in hands-on activities.

Though VR and AR haven't seen widespread adoption yet, the many implications for recruiting and on-the-job learning make them one among the highest HR technology trends to concentrate to over subsequent few years.

## 4. Data Analytics Transforming HR

Data analytics will still be adopted rapidly within the year ahead. Using analytics, data driven decisions are often made by HR professionals to draw in and retain top talent.

The coming year will provide endless possibilities to use analytics in identifying trends and patterns on employee absenteeism, leave frequency, turnover rate rate, engagement level etc. Data analytics will play a prominent role in:

- Implementing best, proven recruiting practices
- Reducing turnover rate
- Increasing employee experience and satisfaction
- Managing task automation and process improvement
- Increasing workforce productivity and engagement
- Improving workforce planning and talent development

## 5. Real-Time Performance Feedback

In today's fast-paced world, the normal performance review cycle is outdated. Organizations will move forward with well-thought strategies to enhance workforce engagement through HR technology innovations. The emerging HR trends in future will encourage use of employee engagement tools and survey platforms to capture employee opinions and feedback.

Employee satisfaction surveys would assist you to attach together with your employees and promote engagement and profitability. because of tools like pulse surveys and real-time feedback channels, managers not got to schedule time-consuming meetings or evaluate performance just one occasion a year. this may help management in understanding the worker concerns and take corrective action plans to retain the simplest talent.

With HRMS (Human Resource Management System) solutions, employees can receive regular, consistent feedback. Beyond the logistical benefits, real-time feedback which provides ample opportunity for managers to possess meaningful and forward-looking conversations about personal and professional development with the worker , leading to better engagement and improved productivity.

## 6. The New Way to Work

One of the foremost widespread HR trends happening is that the shift faraway from the normal work model toward one that's more flexible and worker-centric. This new framework consists of two main trends:

**1. The Gig Economy :** Employees are no longer merely 9-5 workers. Some have side hustles in addition to day jobs. Others, like freelancers and consultants, work for themselves 100% of the time. The faster that companies acknowledge this shift and align themselves with it, the more they stand to realize .

Millennials and Gen Zs are particularly open to working in the gig economy according to Deloitte data, mainly to earn extra income, gain more control over work hours and strike a healthy work/life balance.

This “alternative workforce,” as Deloitte terms it, can bring a lot to the table for organizations as well. Freelancers, for example, are often experts in their field, allowing companies to access top talent without the geographic limitations, costs and time of hiring another employee.

**2. Remote Work :** Another trend is that the growing popularity and acceptance of remote work. Many companies offer flexible work from home days as a benefit. And some, like social media giant Buffer, run an entirely remote team. Consider whether your company has policies in situ that support remote workers. It's not feasible for a few positions and corporations , but offering remote work options comes with many benefits, including higher productivity and increased employee satisfaction.

## 7. Generational Shifts

Millennials and Gen Zs are entering the workforce while more baby boomers retire, causing disruption as companies seek to adjust to a new normal. The new generations have their own unique values and expectations when it comes to how their employers operate, the technology they use and the impact their jobs have. Understanding this new paradigm will help companies successfully navigate the shifting worker landscape.

Knowledge retention is another key aspect companies must consider. With numerous workforce veterans phasing out of the workplace, it's critical that companies have a process in situ to capture this information to scale back potentially crippling skills gaps.

Evaluate your HR system to work out if you've got the tools necessary to manage the ebb and flow of workers. This applies to knowledge retention also as other business strategies like talent development and succession planning.

## 8. Worktask Planning

Another trend is all about a shift away from the more traditional practice of workforce planning, into what he calls “worktask planning.”

The impetus behind this trend, is the transformation in how companies accomplish work. Compared to the workplace of previous decades, a wealth of options are available today:

- Full-time employees
- Part-time employees
- Contract workers
- AI (including machine learning and robots)

Because of this diversity, the focus of talent management is less on planning a workforce than on accomplishing worktasks. In other words, how the work gets done has taken precedence over who does it. Decomposing tasks and adding AI as a possible provider of the work changes workforce planning (people) to worktask planning (task accomplishment).

## 9. Wearable Tech

The expectation is that wearable devices are getting to be used, increasingly, to watch workplace health. For high-pressure environments, this might have an enormous impact.

A study from 2018 by Dr. Candice Lanius of The University of Alabama in Huntsville (UAH) researched speechmaking anxiety with the assistance of wearable biometric technology. Dr. Lanius recorded over 140 student speeches while simultaneously measuring their pulse variability.

Based on the heart rate data in conjunction with the recordings, Dr. Lanius observed student stress levels in reference to their speeches. With this information, she worked to adjust curriculums to better prepare students to combat public speaking anxiety.

A similar approach can be implemented in workplaces. Wearable systems that track pulse , blood heat , pupil dilation and other factors can provide insight into employee stressors or pain points, and management can change processes accordingly.

For instance, the ideal workplace wearable would be one that could identify the optimal time to send a notification. It would study the behavior and routines of the user so as to find out the difference between an honest moment (setting up or preparing a task) and a nasty moment (operating a machine).

## 10. Greater Integration Capabilities

Perhaps not as exciting as some of these other futuristic trends, integration still plays a key role. And it's possible via middleware, which Microsoft defines as "software that lies between an operating system and the applications running on it, enabling communication and data management for distributed applications." Why does integration matter? Because of the number of HR applications in use

The average HR function uses 11 different systems just for recruiting, that means there's no ability to do data warehousing, federated search or any meaningful analytics, as these don't talk to each other. With most major HCM (Human Capital Management) providers already offering some sort of marketplace for vendors using custom APIs, we are seeing an industry that's tried to own all parts of the method finally start to collaborate with other technologies.

As human resource management becomes increasingly automated, integration becomes an even more essential function. Your HR software should be ready to easily connect with third-party systems to facilitate a simpler mixture of capabilities. This includes other tools within the HR sphere, like payroll software, also as outside platforms sort of a business intelligence solution.

## 11. Employee Experience

Today, employees expect tons quite just good pay and a perfect work environment. Employees don't hesitate to review and rate their company culture, work policies, growth opportunities, compensation and more on employment review websites like Glassdoor, Indeed, etc. Focusing on the experience that employees have with the corporate , very much like a brand focuses on the customer experience, can:

- Boost productivity
- Improve satisfaction
- Lead to greater employee loyalty
- Encourage investment in the company's vision

A positive employee experience extends far beyond having a stocked kitchen and gym membership. Company culture plays a major role in creating a positive experience for employees and employees rate workplace culture as more important to job satisfaction than their salary.

The push for enhanced employee experiences has resulted in companies becoming the new brand and employees becoming the new consumer. This role shift will lead organizations to invest more thought and resources into branding and catering to employees' needs. For example:

- Incorporating video content in recruiting efforts to drive more interest
- Using their employee value proposition (EVP) to differentiate from competitors
- Focusing on personalized experiences that acknowledge each individual's unique workplace needs

Employees share their experiences on these platforms publicly that can impact the reputation of their company.

## 12. Continuous Performance Management

The approach of once-in-a-year feedback and reviews is long gone. Organizations have skilled an enormous transformation in performance management hoping to realize high productivity, improved employee engagement and talent retention.

Now, organizations are investing in Continuous Performance Management (CPM) tools to streamline their company processes in a better way and empower employees. Continuous Performance Management encourages periodic interaction between the worker and therefore the manager allowing course-correction, timely feedback, coaching and development opportunities supported business needs.

In upcoming years, adoption of CPM processes is expected to grow expansively. HR software vendors, like Empxtrack, are already offering CPM tools to encourage a piece culture where continuous coaching and mentoring, constructive feedback, holistic reviews, skill development plans, unbiased praise and recognition are prevalent.

## 13. On the Job Training

Employees require continuous mentoring, training and skill development to perform well in their jobs. Continuous learning improves employee skills, making employees more adaptive to the work environment and preparing them to require up different roles in their company.

The coming year, will see organizations investing in Virtual and augmented reality, gamification, geofencing, and other techniques to impart on-the-job training to their workforce.

## IV. RECENT TYPES OF HR TECHNOLOGY

### 1. Human Resource Information Systems (HRIS)

As we enter this new business environment, managers and CEOs need to understand the way to use their workforce to form the simplest business decisions possible, which can only be through with the involvement of HR departments through human resource information systems and electronic human resources. the normal role of HR managers within the procurement, deployment, development, appraisal and reward management of the workers has also changed to an excellent extend in its approach with the paradigm shift within the people management. New HR technologies have also helped managers and CEOs to work out the turnover, skill inventories, or performance ratings affect their units or business objectives. Nevertheless, the adequate use of those technologies has got to be aligned with the business objectives and strengthen the importance HR managers have during a company. In establishing a successful human resource data system , we've to everything regarding that company, from its objectives, organization structure, and workforce to even incentivizing changes within the organizational culture itself. Therefore, to further understand the establishment of a successful HRIS we'll be watching these aspects which structure an HRIS in greater detail.

**Firstly**, we must have a transparent understanding of the company's organizational structure, workforce, planning models and general personnel administration knowledge. A company's organizational structure is that the foundation that supports critical business processes by defining the organizational setup and workforce deployment. The HRIS should function a sort of following chain of command so as to ease the workflow, access of knowledge , plan costs, and also function a template for future restructuring of the organization. with regard to the workforce it's crucial to varied sorts of employees, like full-time, part-time, temporary then forth, in order that through the HRIS the corporate can organize its workload and workforce within the most effective way possible. Additionally, due to the changing business environment, companies even have to think about flexibility within the workplace like telecommuting, flexible time schedules, virtual office, alternative workweek, work on home, compressed workweek, voluntary reduced hours, and contractual work have started taking a concrete shape within the new economic environment. With this HR managers, alongside line managers, need to come up with a productive workforce during the day, while considering these flexibilities, which in one hand might hinder the corporate from being highly effective but within the other hand will ensure their employee satisfaction within the corporate and a positive organizational commitment towards the corporate . Organizational Commitment is a crucial theme that continues to seem within the individual's psychological attachment to a corporation and consistent with many studies, HR departments have an important role in increasing an employee's commitments towards a firm. that's why, having a well-developed HR department which works with these HRIS for more flexibility within the workplace, will ensure a more committed workforce.

**Secondly**, one among the good functions an HRIS does is additionally with personnel administration, which incorporates information on payroll, promotions, vacations and more. Currently, most companies which don't have HRIS use Microsoft Excel for storing employee data which isn't always very easy to use and doesn't have an equivalent impact as HRIS databases on personnel administration. Through databases, HR managers can believe these information to assist managers make better decisions. As far because the database goes, maintenance of knowledge should be designed on a user-friendly online-navigation platform, including a process-oriented data entry to facilitate speedy and efficient data maintenance. Of course, of these databases should be designed consistent with the preferences and wishes of every company and their relevant functions. Additionally, this technique must also consider in factors like benefits, payroll, compensation and travelling for business et al. , which should all take an important a part of the system but also of the personnel administration, and HR role generally . As management of compensation and payroll are a number of the foremost crucial functions on this database, it's important for this module "to provide users with fixed and variable compensation data to plan and implement a competitive and motivating reward system. With this, question arises about the role of an HR manager. Of course, the role of HR managers will always remain very important; however, it's the tasks and duties which will change this role to something that deals more specifically with motivation and team building. like every other job, we are moving towards more innovative ways of getting that job done, that's why, companies need to move alongside technological advances and HR managers need to push for these new technologies within the field of HR to be implemented within their respective organizations.

### 2. Electronic Human Resource Management (E-HRM)

A big a part of HR technologies is additionally e-HRM, which focuses on HR functions which will be done through the web . Both the terms HRIS and e-HRM are significantly different from one another , since HRIS focuses on improving the processes of HRM, therefore making the target the HR staff, whereas for e-HRM, besides the main target of the business, it also focuses on the workers , and the way to assist them keep track of their performance and integration within the corporate . Electronic Human Resource Management may be a way of implementing HR strategies, policies, and practices in organizations through a conscious and directed support of and/or with the complete use of web-technology-based channels. Electronic Human Resource Management as a sort of offering, technological support for access to information on HR services to people outside the HR department, it allows the flow of data and data transactions between relevant stakeholders so as to enhance HR practices, reduce costs, and enhance services. Recognizing this, through the implementation of e-HRM, HR managers and departments should expect less administrative work, and help HR managers specialise in strategic goals instead of administrative ones. Inevitably, this may cause for fewer position for the executive aspect in HR departments. However, many other jobs within the current globalization and industrial era are getting to be reduced, therefore, arguing whether HR technologies should be applicable isn't even an issue we will ask. Next, a bit like with every market, to know the kinds of e-HRM, a corporation even have to know their own needs and needs which fit best for his or her companies. Majorly three sorts of e-HRM:

- Operational e-HRM deals with the executive aspect like payroll.
- Relational type helps with more advanced activities like recruitment, training and rewards.
- Transformational type cares with the strategic aspect of the business, in deciding and management techniques.

Another important characteristic of those e-HRMs are the outcomes that they produce for his or her respective companies. There are majorly four characteristics:

- Commitment is taken into account to be the aspect of getting motivated employees who are willing to attach with higher levels of management for the advantage of the corporate but also for his or her fellow workers.
- Competence provides the thought of learning new tasks and identifying new opportunities within certain circumstances.
- Cost effectiveness we are looking into the consequences of turnover and actions like strikes.
- Congruence refers to a structure within the organization which is of interest to all or any stakeholders, an example of which might be reward systems for workers .

Recognizing this, we will observe how these four elements are according to the characteristics of e-HRM, within the sense that the main target remains the worker and therefore the interest of the workforce, for the betterment of the corporate as an entire . As businesses and organizations still use web based HRM functions, and even human resource information systems, we discover HR departments being affected the foremost , giving HR managers longer to consider strategic decision-making.

There also are a couple of online databases which are worth mentioning and analyzing how they assist companies with their HR functions. Most of those systems, since online, provide services for little to medium size businesses and corporations . one among the foremost famous online HR databases is BambooHR, referred to as the amount one HR software for little and medium businesses. BambooHR allows its users, rather than using spreadsheet, to make a connection between employee and company through the web platform, by helping employees keep track of their performance, time off, and satisfaction, which simultaneously helps the worker also . Their slogan concentrates on the very fact that HR isn't about paperwork but rather about the people. Additionally, BambooHR helps companies and HR managers with recruitment through their online database applicant tracking system and HR reporting for better insight on the applicants but also on other employees.

Another great online HR database is additionally NaturalHR, which almost like BambooHR, helps small to medium size companies. Online HR databases like NaturalHR and BambooHR are certainly important for little to medium size businesses due to their inability to rent an HR manager for such alittle number of employees, which is typically the excuse. However, as businesses still grow, online HR databases because the previously mentioned, aren't an answer . albeit an excellent solution for little and medium size businesses, having an HR manager in bigger companies is crucial for the functions of the corporate , since, as was mentioned before, it helps the corporate reach its goals and objectives with the assistance of motivated employees, who are satisfied with their employer and therefore the work that they are doing .

## V. AFFECTS OF TECHNOLOGY ON HR PROCESSES

### 1. e-Recruiting

The web-based technology employed by e-recruiting helps organizations attract a stronger and more diverse applicant pool. The choice to maneuver to an e-recruiting model is driven by several business objectives, including the necessity to:

- Improve recruiting efficiency and reduce costs: Online recruiting can cut cycle times by 25 percent and reduce recruitment costs.
- Increase quality and quantity of applicants: E-recruiting allows organizations to conveniently reach applicants across the country or around the globe.
- Establish, communicate and expand brand identity
- Increase the objectiveness of, and standardize, recruiting practices
- Increase applicant convenience

Organizations are rapidly adopting e-recruiting tools.. The use of technological tools to target top candidates who are not necessarily “looking” to change employers is an emerging use of e-recruiting technology. Clearly, e-recruiting has become a central aspect of successful recruiting strategies.

- E-Recruiting and Website Design : Design Plus Content Many researchers have focused on how companies can more effectively manage the e-recruiting process and have found organization and navigability of the recruitment website to be critically important. Applicants search for efficiency and ease in navigation, and their experiences influence perceptions about the firm's image and attractiveness.
- Applicant expectations are shaped by a minimum of a decade's worth of experience using the online. They expect highly sophisticated and interactive social and consumer websites, subsequently raising the bar for all sites.
- Organizations that make interactive and aesthetically pleasing, user-friendly websites are going to be far more likely to convert passive lookers into active applicants. And applicants are going to be more likely to recommend

the firm to others. The impact of website design is magnified for recent college graduates et al. who have less work experience. The bottom line is that your firm shouldn't underestimate what proportion the planning of the recruitment website can affect brand image and attractiveness for potential employees. But it's not only about the aesthetics of your site.

- The quality of the knowledge provided to applicants is also critically important. Recruitment websites should include information regarding corporate culture, organizational support for professional development, job descriptions and work expectations. Each of these factors has been linked to the organization's level of attractiveness to job candidates, which, in turn, was related to their intentions to apply for a job. The five most vital factors applicants consider when making a choice to hitch a firm are base pay, the challenge of the work, the convenience of the work location, opportunities for career advancement, and vacations and paid day off . These key employment factors so applicants can quickly access the knowledge . In addition, applicants are less likely to be interested in organizations that take more of a selection-oriented versus a recruitment-oriented approach to designing the web site .
- Although the recruiting website are often used for selection, its primary purpose should be to expand and enhance the pool of qualified applicants, instead of to form selection decisions. One of the main challenges in managing a web recruiting effort is that the large volume of applications. In addition to receiving more quality applications, e-recruiting often results in more unqualified applicants. A well-designed website can reduce the amount of applicants who are a poor fit the corporate culture or job.

## Potential Pitfalls in E-Recruiting

Clearly, e-recruiting has dramatically improved efficiency, reduced costs and transformed the management of recruiting in organizations. What about some of the pitfalls?

1. Increase in application quantity, but not application quality.
2. The company was unprepared for the volume and was unable to process this large number of applicants in a timely way. Preparations for high volume should include updating job analyses, revising workflows, eliminating unnecessary or redundant reviews, and considering the use of screening software to identify more attractive applicants. Remember that although e-recruiting expands the reach of recruiting initiatives, the general quality and fit of applicants could also be less than is found in traditional recruiting methods, due to the ease of submission. It may well be that a slightly more complex application process will yield more committed and more highly qualified applicants.
3. Loss of personal relationships with applicants. Recruiting are often perceived as more impersonal when it's conducted via the online .
4. Technology can be a barrier to communication and relationship building. Online systems are sometimes viewed by applicants as rigid and impersonal, and such reactions can reduce overall satisfaction with the recruiting process. One of the most important factors in the recruiting process is developing a relationship with the candidate and ensuring that communication sends appropriate signals about the culture of the organization. Social networking initiatives, online webcasts and other targeted communications can help minimize this loss of "high touch" in the recruiting process.
5. Diversity issues and risk of adverse impact. The implementation of e-recruiting brings with it the need to assess the diversity of the applicant pool and the risk for adverse impact. There is a risk that those from lower socio-economic backgrounds and minorities will be underrepresented in applicant pools generated via web based applications, as compared with traditional recruiting methods.
6. Additionally , because the incremental cost for submitting online applications is so low, multiple applications from a little group of unqualified individuals—from either a majority or minority group—have the potential to mask or create the mistaken appearance of adverse impact.
7. E-recruiting applications also can blur the definition of the relevant labor market for specific positions and make government reporting more complex. Organizations should closely compare the pre-e-recruiting compliance numbers with those calculated after the implementation of online systems. Be sure to actively monitor talent acquisition processes, to assess the potential of disparate impact and to encourage applications from a diverse group of applicants.

## 2. e-Selection :

E-selection uses technology to assist organizations more efficiently manage the method of identifying the simplest job candidates—those who have the proper knowledge, skills and abilities for every job and who may best fit the organization. Faced with pressures to continually improve on the accuracy of selection methods and to meet legal requirements, organizations view technology as a way to manage the selection process more actively and to supply more evidence of the effectiveness of the chosen selection method. The business drivers behind the adoption of e-selection technology include:

- Reducing the time and resources required to manage the choice process.
- Increasing flexibility in selection test administration.
- Improving the utility of selection tests.
- Enhancing an organization's ability to supply adaptive testing of applicants.

**Job Candidate Responses to E-Selection** Organizations must ensure equivalency between paper-pencil tests and computer/web-based tests. The good news is that a decade's worth of research on this topic has found computer-based, web-based and paper-pencil based testing to have comparable reliability and validity for many selection tests. In other words, your firm can anticipate that an equivalent candidate taking an equivalent test using different methods should score similarly on each. However, a firm shouldn't assume that simply putting a variety test online will provide an equivalent results as a paper-pencil version. Limited computer experience could cause lower scores on online tests. It is important to verify whether a lower score actually reflects lower ability instead of poor computer skills or poorly designed software. In addition, technological glitches and delays can affect how quickly employees are able to access and complete online tests. The layout and design of online tests may need to be different—and a variety of other factors should be considered when moving selection tests online.

Job candidates generally respond favorably to computer and web based selection testing. Most of today's applicants are web-savvy and expect technology to mediate many business transactions, including job search and selection. Computer based selection methods will still grow in attractiveness to candidates and organizations.

**Potential Pitfalls in E-Selection**, although e-selection has the potential to improve selection accuracy and efficiency dramatically, there are some potential pitfalls to consider before moving to an e-selection strategy.

**1. Security of content :** With the use of anytime/anyplace testing, there is a risk that materials can be copied, screenshots taken and content leaked. When selection procedures and items are known and may be studied beforehand, the choice test will subsided effective at differentiating among job candidates, and therefore the utility of the test will be reduced. Organizations need to balance the convenience of web-based selection with the need to control the security of information on the test.

**2.Cheating :** Even the most effective selection test can lose its effectiveness if the person taking the test isn't the actual job candidate, has the answers to the test in advance or has an unfair advantage as a results of materials delivered to the testing situation, like a sensible phone, calculator or web access. Although this may be of less concern for tests without objectively correct answers, the issue is especially relevant for ability and knowledge tests. Therefore, firms should manage the choice process carefully and make available online only those tests during which cheating won't be a problem , or during which it are often effectively controlled.

**3. Privacy and security of responses :** Another pitfall with online testing is that candidates may be concerned about the security and privacy of their responses. When respondents are concerned about how their data are stored, protected and used, they may be more guarded in their responses, which can reduce the accuracy of those responses. Organizations can address these concerns by making it clear that the information only will be used internally and, where possible, by allowing applicants to opt out of responding to noncritical questions.

**4. Legality of screening and selection tests :** As with traditional selection tests, it is essential to ensure that any web-based screening technique or selection test is legal. Many online vendors offer various selection tests, but these tests might not withstand legal scrutiny if they can't be associated with the roles during a particular organization.

## 3. e-Learning

When training materials, course interactions and course delivery are enabled by and mediated through technology, your firm is engaging in e-learning or e-teaching. The business drivers behind e-learning include:

- Reducing training costs : Organizations implementing e-learning can realize dramatic savings.
- Increasing employee flexibility and control over learning : Employees value the pliability e-learning provides, because it can reduce travel and time faraway from the office and family. additionally , employees are ready to take hold of their own learning and have interaction in training at a time and place of their choice, helping them manage their work/life balance.

- Better tracking and management of employee training : Specific training often is required by regulators, and documenting successful course completion are often a serious burden for organizations.

Employees could also be required by law to finish OSHA training, harassment courses or patient care procedures. An HRIS can help employees track which courses are successfully completed and what upcoming training opportunities may fit their needs. Managers can track the training also , reducing redundancy and training costs. Small businesses can enjoy the utilization of out of doors e-learning providers. Many vendors offer online training modules on topics like technical certifications, health and safety, and leadership skills. By using such resources, alittle business offers employees training and development opportunities like those of larger competitors. this will assist in recruiting and retention of high potential employees.

**Current and Future Options in E-Learning** The technology of e-learning provides today's organizations with a spread of options.

In one option, a Learning Management System (LMS) are often wont to manage the administration, tracking and reporting of coaching within the organization. By allowing the organization and employees to develop talent and skill profiles, check in for courses, and register course attendance, an LMS can cut costs, streamline training and empower employees to manage their own skill development more effectively.

A second option is that the potential use of a Learning Content System (LCS), which manages the delivery and content of courses for workers . Together, these systems help the organization control content, organizational learning processes, and delivery of online material.

### **Advantages of E-Learning**

1. One among the main advantages of e-learning is that it can put learning within the hands of employees. By allowing increased learner control, trainees are ready to modify the pacing, sequencing and timing of learning.
2. Delivering information at the pace and in amounts best suited to the individual is extremely important to the quantity of learning and retention that happens .

### **Potential Pitfalls in E-Learning:** Like other sorts of technology, the utilization of e-learning isn't without its disadvantages.

1. It's important to avoid the straightforward assumption that good technology will produce effective learning. When e-learning initiatives are successful, it's not just the utilization of advanced technology that results in better learning outcomes, but the appliance of sound training design and learning principles.
2. Not most are ready for e-learning. If employees aren't confident and experienced in their use of technology, their performance in an e-learning environment will suffer.
3. E-learning emphasizes that the worker is liable for his or her own learning. Not all employees will have the discipline necessary to finish online coursework.
4. If employees find the technology doesn't fit their preferred way of learning, they're going to engage less, find less value in it and be less satisfied with it.
5. Organizations must apply sound, scientifically supported training principles to e-learning, even as with traditional, classroom-based training.
6. Before implementing e-learning, organizations got to prepare employees not only in terms of technology, but also in terms of the differences to expect between traditional classroom learning and e-learning. Organizations might need to think about running dual training tracks until employees are often fully transitioned to a web learning environment.
7. E-learning are often isolating. Organizations should recognize that e-learning is inherently isolating. material experts suggest that one among the most important concerns is that the lack of interaction among peers. Nearly all employees like better to learn with others and perform better when a part of a gaggle .
8. E-learning can reduce career enhancing networking. When training is conducted during a classroom, employees are ready to engage with one another within the classroom and out of doors of it. These informal conversations and interactions can help employees broaden their personal networks and reinforce corporate culture. Such opportunities are often lost when a classroom course goes online. Organizations should implement new information-sharing technologies, like wikis, chat rooms and topic-specific social media sites to assist buffer this loss.
9. Typical reasons employees fail to end e-training include feelings of isolation and lack of reference to the fabric .
10. Not all training should be online. Although e-learning are often effective for explicit and fact based knowledge, there's some concern about its effectiveness in training employees in soft skills, like teamwork, leadership and interpersonal skills, which require trainees to interpret facial expressions, visual communication and other visual cues. the shortage of visual cues available in a web environment would scale back training effectiveness. In those situations, some sort of blended learning, during which basic information is learned online but practice is conducted face to face , would improve effectiveness.
11. E-learning doesn't mean simply putting existing materials online. Well-designed online courseware is critical for fulfillment in e-learning. Organizations should resist simply taking the fabric in existing courses and putting it on the online . Training materials designed for a classroom setting don't necessarily add a web setting.
12. within the online version, it's unlikely the learner will have access thereto equipment. a web version of that course might require high-resolution photographs, video demonstrations of kit showing safe and unsafe actions, and 3-D visual models of the equipment the learner can manipulate. within the design of all e-learning, firms should ensure they incorporate the cognitive and motivational processes underlying sound training.

#### 4. e-Performance Management :

e-Performance management uses technology to automate the gathering of performance data, monitor employee work and support the event and delivery of performance appraisals. Organizations have many motivations for implementing e-performance management, including:

- Improving access to performance data. One of the challenges in most performance appraisal systems is that the lag between work activities and performance feedback. With the availability of real-time data, managers can provide more timely feedback and employees can see a closer link between their behavior and their performance appraisals (PA).
- Providing data that can make PAs more objective and valuable. Automatic system capture of performance data can reduce the propensity of managers to focus on behaviors or attitudes unrelated to the job. In addition, when performance data are often collected by the HRIS and performance averages calculated, then, using pre-determined metrics and measures, a basic template of performance feedback are often generated for the employee. Managerial time are often spent on the “value added” portions of performance management, like mentoring and training employees, instead of on collecting information and completing forms.
- Reducing biases in appraisals. A manager’s evaluations often are unduly influenced by his or her most up-to-date observations of the worker. This can be mitigated by having performance data for the complete evaluation period readily available for managers.
- Linking performance information to other HR data, such as individual developmental plans, compensation and bonuses, job assignments, and training opportunities.

#### Self-Assessment, Monitoring and Work Ethic in E-Performance Management

As noted above, e-performance management can provide workers with detailed descriptions of competencies to be included within the evaluation system. Managers and employees can view data on their performance on a daily basis, rather than only at the time of a performance appraisal. Although employees view this electronically captured performance feedback as more objective than feedback from a supervisor, they’re likely to perceive the supervisor’s feedback as fairer. Individuals are less likely to distort negative information, and apt to be more accurate in providing feedback when the information is electronically communicated.

However, when employees are asked to assess their own performance over a computer, there could also be a risk that they inflate their performance levels quite if they were to assess their performance in person. Organizations got to understand these complex relationships and plan to balance the varied benefits and costs of using different approaches as they impact performance, accuracy and employee reactions. Even the simplest technology can’t fix a nasty performance management process. The major focus of research on e-performance management, though, has been on computer based performance monitoring. Organizations use video and computer-based monitoring of employee behavior, like keystrokes made, e-mails sent, websites visited, time to finish a customer trip and repair time. It seems employees will work faster when electronically monitored—not only on monitored tasks, but also on non monitored tasks—but organizations should not assume monitoring is appropriate for all situations. For example, although performance monitoring does increase speed, this increase in speed might not work for complex tasks.

Some hospitals have experimented with “smart” badges on nurses to closely monitor their speed of service and the time spent with each patient or procedure. Although these systems may sound appealing to administrators looking to extend productivity by rewarding speed, few patients are very happy with having the fastest nurses. It also is important to communicate the purpose of the monitoring and the fact that it will be used as a developmental tool rather than as a control mechanism. Employees will react more favorably and perceive the monitoring as fairer when its purpose is communicated and it’s used developmentally. And, of course, employees who view the method as fair are more likely to demonstrate higher job performance, work satisfaction and commitment to the organization. Finally, organizations should consider trying to spot candidates with a robust work ethic. Research has consistently found certain personality characteristics, like conscientiousness, to be associated with employee productivity and performance.

Employees with a strong work ethic also are more likely to work effectively without substantial monitoring, so firms can avoid expensive monitoring systems, yet still have a productive workforce.

#### Potential Pitfalls in E-Performance Management

There certainly are some drawbacks to using e-performance management, and that they should tend consideration.

1. Production increases, but quality decreases. Employees naturally tend to specialize in behaviors that are rewarded. Although the intention of performance monitoring is to enhance performance, a possible side effect is that other important, but unmeasured, work can suffer. For example, when employees are monitored on the speed of task completion, they likely will spend less time on non-performance-based criteria, like customer service or quality. “
2. Objectiveness” can outweigh importance. One of the tenets of e-performance management is that objectiveness of performance appraisals should increase with increased data capture. Unfortunately, while using such data, managers may miss, or fail to think about , non-objective measures, such as customer service. Once again, employees’ performance can become a mirrored image of the info the system collects. And employees are less likely to specialize in more “subjective” behaviors if those aren’t being considered by managers.
3. Myopic focus. Often, a computer based system encourages less effort by employees in decision-making, rather than taking advantage of computers for more effective decisions.
4. Managers may rely on summary data, rather than fully participating in the appraisal process. In today’s time pressured workplace, making sure computer-generated reports don’t replace managerial judgment and personal interaction is important.

5. Job complexity versus performance expectations. Computer-based performance management can help organizations benchmark performance expectations; can more accurately schedule employees for work related activities such as service or repair calls; and can sometimes raise awareness about performance levels. But always remember that the time and expertise required for tasks varies greatly, and if the complexity of a task isn't accounted for within the system, employees working on more complex tasks risk poor evaluations that do not accurately assess their skills and value.

## 5. e-Compensation

One of the earliest areas of HR to be automated was compensation, and today, virtually all organizations use technology to automate payroll processes. Today's e-compensation systems provide much more value than the simple automation of payroll processes. E-compensation uses web enabled technology to help managers design, implement and administer compensation policies. An HRIS allows organizations to streamline and automate the compensation planning process, to model proposed changes in compensation plans, to trace employee compensation history, to allocate incentive pay and bonuses, and to supply higher quality information to decision makers. Multiple business drivers support the expansion of e-compensation technology:

- Pressure to contain labor costs. E-compensation systems can help increase access to both internal and external salary and compensation information. Data can then be incorporated into sophisticated compensation models and metrics, which can help managers better plan and model the costs associated with various incentive programs. Through better access to information and better compensation models, organizations are ready to gain tighter control over compensation costs.
- Increasing employee knowledge of external market salary data. Perceptions of unfairness or inequity in pay will negatively impact productivity and morale. Because employees now have quick access to web-based salary information, they're better informed on how their salaries fit within the local marketplace. This knowledge may function a stimulus for the organization to stay its compensation structure up-to-date and internally equitable.
- More rapid identification of inadequate pay structures. Organizations can quickly take action to switch compensation packages, so as to draw in high potential applicants and retain top performers. Organizations are increasingly using technology to link their compensation systems with other components of their HRIS, like performance management systems, training systems and succession planning. By tying information within the compensation decide to a variety of HR practices and organizational data, the corporate can demonstrate the contribution of its compensation strategy to organizational success.

As noted above, one of the most important aspects of any pay or compensation system is the employees' perception of the fairness of the system. Employees want to be fairly compensated for the worth of the work they complete, also as in reference to others within the organization (internal equity). They also want to be fairly compensated in relation to others in the marketplace (external equity). An HRIS can help organizations develop a compensation strategy that supports perceptions of fairness, both internally and externally. Some things to keep in mind related to fairness:

- **Internal equity :** The goal of internal equity is to make sure that every job reflects the complexity and value of that job within the organization. Thus, e-compensation systems should link to job evaluations. Organizations want employee pay to reflect the worth of the work to the firm, both from a managerial and a legal point of view. E-compensation applications can help compensation managers score or value work to enable them to line pay rates that are equitable within the organization's compensation structure. A comprehensive e-compensation application can help managers collect and document the rationale for pay differences.
- **External equity :** What about the local labor market? For large cities, where the incremental cost of switching employees is somewhat small, this becomes important. Organizations unable to develop effective compensation plans are going to be at an obstacle within the marketplace. An HRIS can help by summarizing data from external salary sources and using that data to tell the salary planning process. This can help ensure that top employees are being adequately compensated and thereby less apt to be lured away by competitors.
- **Individual equity :** Employees want to know they are being compensated fairly relative to others in the same job in the organization. E-compensation systems give managers the tools to model different compensation structures and to assess the costs and the fit with employee performance data of various pay structures. For example, will a proposed bonus or raise place an individual out of the pay range for his or her position? Managers can use all this information to help them award raises and bonuses consistent with the desired pay structure of the firm. Managers can integrate performance data, internal salary data and external data to form compensation decisions more effectively and thus ensure salary increases are going to be supported performance.

## Streamlining, Performance and Sharing Information in E-Compensation

1. E-compensation streamlines the salary planning process, reducing both time and costs. Dell was ready to reduce time spent on the salary planning process by nearly 65 percent (eight weeks to 3 weeks).<sup>46</sup> Another company reported that its salary survey process was reduced from six months to six weeks.<sup>47</sup> In addition, a major financial services company was able to achieve more than \$10 million in savings by implementing e-compensation.

2. Organizations with e-compensation systems outperform those without them. A recent survey found that companies with e-compensation systems achieved an average of 10.1-percent sales growth, versus 8.8-percent growth for companies that did not have such systems.

3. Organizations should use the HRIS to share compensation information with their employees. Companies sharing details about compensation with their employees are higher performing than people who don't.

4. Companies often suffer from the illusion that pay information is secret, but in most cases, very little about pay decisions and levels remains truly confidential. Transparency in compensation plans and policies can cause increased employee trust and confidence that the employer truly values and rewards performance. E-compensation applications can help organizations share this information with employees in an efficient and price effective manner.

5. The e-performance management system should be integrated with the e-compensation system. Data regarding performance can seamlessly flow to the compensation system for use by managers as they make compensation decisions. Organizations linking these functions together effectively in an HRIS are ready to achieve quite 3 times better sales growth than organizations simply that specialize in the automation of HR transactions.

### Potential Pitfalls in e-Compensation

1. One of the major challenges for organizations designing an e-compensation system is accessing the most current information about employee salaries and current data on the external market. Externally, many salary surveys are often dated by the maximum amount together to 2 years. Internally, it's often time-consuming to trace and capture salary information for all individuals within the company. This reinforces the importance of ensuring that the e-compensation solution is able to access, collect and summarize the latest wage and benefits data for both internal and external labor markets.
2. Substituting technology for judgment. Compensation is as much art as science. HR technology can provide a useful gizmo for supporting compensation decisions, but the knowledge provided should be considered advisory to managers. Systems can reduce the computational burden for managers and provide comparative data to aid decision making, but managers still need to make the final judgment and often need to include factors not necessarily captured by the compensation system.
3. A manager might be aware that an employee is at risk of leaving for a competitor and may use discretion to award a pay raise beyond that recommended by the system. Blind compliance with compensation software is an abdication of the role of the manager and ineffective for the firm in the long run. Letting the system or vendor determine your compensation strategy.
4. Any compensation system is based on assumptions about what is valued by the organization. These factors and therefore the weight placed on them are vital HR strategy decisions. The mix and sort of incentives must fit the organization's business model. When implementing a compensation system, make sure the vendor's product supports your firm's compensation strategy and is flexible enough to reflect the organization's values and approach to incentive compensation.

### 6. e-Benefits

Benefits are a growing and expensive component of every employee's total compensation. A recent government survey suggests benefits costs now average 43.6 percent of wages and salaries. Given the continued growth within the expense related to health care and pension plans, the prices of employee benefits likely will still grow also. An e-benefits approach uses the web to communicate information on benefits to employees and allows them to elect and manage their benefits online. A recent survey suggests nearly all organizations are using technology to support benefits administration.

#### Motivations for using e-benefits include:

- Reducing the costs for delivering benefits.
- Improving employee access to benefits information.
- Streamlining benefits administration.
- Empowering employees to manage their own benefits.

Although there are multiple ways that an organization can pursue an e-benefits approach, underlying each of these is the use of employee self service (ESS). Most organizations now make benefits information available via the HR portal, providing details ranging from health benefits to pension contributions and planning calculators, EAP program offerings, educational benefits, leave information, vacation scheduling, and many others.

### Outsourcing, Timeliness and Employee Management of E-Benefits

1. Implementing e-benefits does not mean simply replicating paper-based forms online. Employees will only access the web site once they need information, therefore the website should provide employees the knowledge they have as quickly and clearly as possible. If employees are unable to find the information in a timely manner, they are likely to call the HR department. When this happens, the goal of reducing the time and expense related to benefits administration won't be achieved. The most effective e-benefits websites are organized by life events such as marriage, birth and death, or by changes in work status, such as layoff and promotion. Many organizations now link or outsource many of their benefits information support. Employees are empowered and encouraged to require more responsibility for his or her financial and physical well-being. The importance of timely information increases dramatically when benefits go online. Indeed, if an employee makes a choice supported inaccurate information from the employer's website, the employer could also be held legally liable. If timely and accurate information is not available via the website, employees will be less likely to use it and will continue to call HR for assistance. It is now a best practice to push the management of advantages to employees.

2. By using employee self-service (ESS), organizations encourage employees to sign up for benefits online and manage their profiles and benefits online. Each vendor's website should accurately reflect your firm's policies, and organizations also should ensure their systems interface seamlessly with vendor systems to make sure information accuracy and user-friendliness. HR professionals make intensive use of e-benefits systems for a spread of activities, like controlling workers' compensation costs or monitoring unemployment claims for ineligible former employees. Managers responsible for compliance with legal mandates (such as COBRA or the Family and Medical Leave Act) use systems to monitor employee status, payment and eligibility for health care benefits.

3. Many mandated benefits programs carry significant financial penalties for noncompliance. E-benefits applications often can have a positive ROI during a relatively short time, not only by reducing transaction costs, but also by avoiding fines and penalties.

## Potential Pitfalls in E-Benefits

1. Websites cannot replace skilled staff members. there's a temptation for HR policy makers to look at the web site as how to scale back or eliminate HR personnel from all aspects of advantages administration.
2. The HRIS can automate basic transactions, educate employees and make efficiencies in benefits administration. At the same time, the HRIS isn't as effective in handling the inevitable exceptions to policy that HR experts will need to be available. Consider the spouse who is inquiring about the advantages due him or her after a death, or about the company's options for accommodating someone with a disability.
3. Systems aren't good at being empathetic, and an internet site can never completely replace a talented HR professional. a corporation cannot depend exclusively on the web site to speak complex benefits information. the advantages website are often an upscale source of data for workers , but it shouldn't be the sole source.
4. Benefits are more complicated today than ever before, and pending changes in health care and pension benefits will only make the potential for confusion worse.
5. Employees might not be ready to add up of choices and rules from the web site and should got to speak with benefits experts to help them in understanding the alternatives they're going to face.

## VI. TEN TECHNOLOGY TRENDS IN THE HUMAN RESOURCES MANAGEMENT

### 1. HR Innovation

Innovation within the Human Resources industry are often seen with HR professionals setting the pace with new performance management models, new learning methods, new ways to scale back bias, and new approaches to recruit and train people.

### 2. Surge of People Analytics

With its ability to supply insights into the workforce, help companies retain talents and spot employees who are likely to go away , the utilization of individuals Analytics is becoming prevalent in 2018. Data provided allows HR professionals to possess a deep understanding of employee's needs, concerns then on.

### 3. Changes in Talent Sourcing

The norm is shifting from full time employment trends to a mix of increasingly hiring remote workers, workers on flexible schedule, part time workers and consultants. This type of approach is changing the way HR professionals recruit candidates with technology leading the charge.

### 4. Popularity of Wellness Apps

With the understanding that employees must be emotionally and physically well so as to perform at their maximum levels, HR managers are taking the steps to make sure that workers are monitored and empowered to take care of themselves. Health and wellness apps are rapidly being adopted to live individual performance, activity and fitness levels, with great improvements in engagement, health, and mental wellbeing.

### 5. Increased Migration to the Cloud

With cloud-based HRMS, payroll, and talent management services, also as financials and other ERP solutions offerings within the cloud, the question is not any longer “if” a corporation will move to the cloud, but rather “when” and “how.”

### 6. Rise of Intelligent Self-Service Tools

There is a fast-growing shift towards more data-driven, intelligent digital organizations and more self-sufficient/analytical employees. This is increasing the necessity for tools that integrate case management, document management, employee communications, and help-desk interactions. Self-service and employee experience platforms are the backbone of employee service centers and are simplifying training, expense reporting, time tracking, and almost every other HR function.

### 7. New Breed of Corporate Learning Tools

Companies are modernizing learning and development to be more democratic, self-directed and appealing to younger workers by making greater use of video and other new breed of micro-learning platforms including virtual reality, augmented reality, experience platforms, modernized learning management systems, and AI-based systems for learning and training.

### 8. Smarter Recruitment

The marketplace for recruitment tools is flourishing with innovation, as HR needs tools to assist find people with the proper capabilities and learning skills, not just technical or cognitive abilities. High volume recruitment is being automated, skilled job hiring is being transformed by open sourcing tools, recruitment management systems, and improved assessments.

### 9. Blockchain

Also called distributed ledger technology, blockchain is essentially a database that keeps an ever-growing list of records. It allows digital information to be distributed but not copied. In HR, potential uses for blockchain include digital process management,

solve certification issues, increase transparency, improve overseas electronic payroll, automate routine and data-heavy processes, cybersecurity and fraud prevention.

## 10. Intelligent Apps and Analytics

Machine learning HR applications is changing the character of labor and therefore the structure of the workplace. Apps for attracting talent, worker performance analysis, applicant tracking and assessment, enterprise management, internal management, etc. are enhancing better deciding with the utilization of machines as a tool and collaborator.

## VII. CONCLUSION

Each year, global HR leaders come up with predictions on emerging HR trends. Their predictions are supported a whole year's study and analysis on human resource practices and evolving technology. Though trends may come and go, don't make an uninformed decision to follow these blindly. Experts suggest that HR should study yearly predictions, analyze what works best for his or her organization, then implement these during a phased manner.

In recent years, technology has had a dramatic impact on the sector of HR, and as technology evolves it's likely to maneuver the sector in some very new directions within the future. Despite the widespread adoption of eHR practices, there are still variety of questions on whether these new systems enable organizations to realize their primary HR goals. additionally , the present systems have variety of limitations including the very fact that they (a) employ one-way communication systems, (b) are impersonal, (c) passive, and (d) may preclude individuals with low computer skills from gaining access to jobs.

The "electronic revolution" has been happening for quite 20 years, it's surprising to seek out so few studies on the varied HR topics and processes. Most of the HR research has been on technology advancement. the overall take-away from this research is that a lot of the normal HR research findings also apply to eHR. during this sense, albeit the technologies used could also be new, the essential HR goals still hold true; e.g., the goal of recruitment is to form successful placement, the goal of selection is to rent the foremost talented and diverse employees, and therefore the goal of coaching is to reinforce the knowledge and skills of the workforce.

The findings summarized here suggest that employees prefer more interactive, interpersonal, information-rich approaches to all or any of the areas of HR management. Although eHR doesn't preclude that, the stress so far has been on using technology to expedite HR "transactions." almost like the above concern, the difficulty here is whether or not the implicit, or maybe explicit, goal is speed and efficiency of implementation more so than the character of, and impact on, employee perceptions of organizational climate and culture. To the extent that eHR processes are perceived as impersonal, HR effectiveness will likely decline also as overall organizational effectiveness

As with e-recruiting, firms should still consider candidate comfort and knowledge with technology as they implement e-selection, and supply alternatives for those for whom technology could create a barrier. What about differing types of media: face-to-face interviews, videoconference interviews and phone-based interviews? Research on the differences among these formats shows that those interviewed via videoconferencing tend to possess a plus over those that interview face-to-face, and people interviewed by phone tend to be at an obstacle within the interview process. Interviewers tend to attenuate candidates' mistakes made in technology-enabled interviews, ascribing them to the challenge of interviewing via this new method. Conversely, interviewers tend to not minimize problems occurring via phone interviews, albeit these interviews present an equivalent , if less , challenges for interviewees trying to speak their qualifications for the work . To complicate matters, since candidates typically haven't any choice over the sort of technology employed in an interview, and since certain sorts of candidates do better with one interviewing method than another, the organization's choice of technology may place some candidates at an obstacle . Finally, what about computer based in-basket and situational judgment tests (SJT)? generally , job candidates view such tests positively. With 2018 predicted to be a year of more transformative development and increasingly disruptive technology advancement, HR professionals got to get on the lookout for the newest trends, and adapt them quickly to stay their companies at the forefront of innovation.

The movement toward technology advancement based HR is predicted to grow within the future. As we undergo this shift in technology, HR process became simpler and price full. Electronic HR also shows there impact on learning, compensation and training process. To support the management process, firms can use learning games, multimedia projects requiring trainee interaction and smaller chunks of learning which will be quickly shared.

**VIII. REFERENCES**

1. Johnson, R. D., & Yanson, R.C. (2010). E-learning research:Integrating findings from human resources, management information systems, and education. In K.Lukaszewski & D. L. Stone (Chairs),“Emerging Issues in Research on Electronic Human Resource Management Systems.” Symposium at the 70th Annual Meeting of the Academy of Management, Montreal.
2. Hornik, S., Johnson, R. D., & Wu, Y. (2007). When technology does not support learning: Conflicts between epistemological beliefs and technology support in virtual learning environments. *Journal of Organizational and End User Computing*.
3. Dulebohn, J. H., & Marler, J.H. (2005). E-compensation: The potential to transform practice? In H. G. Gueutal & D. L. Stone (Eds.), *The brave new world of eHR: Human resources management in the digital age*. San Francisco, CA: Jossey Bass.
4. Gherson, D., & Jackson, A. P. (2001). Web-based compensation planning. In A. J. Walker (Ed.), *Web based human resources*, New York, NY: McGraw-Hill.
5. Huang, F., & Cappelli, P.(2010). Applicant screening and performance-related outcomes.*American Economic Review*.
6. Ang, S., & Cummings, L. L. (1994). Panel analysis of feedback-seeking patterns in face-to-face, computer-mediated, and computer-generated communication environments. *Perceptual and Motor Skills*.
7. Cappelli, P. (2001). Making the most of on-line recruiting. *Harvard Business Review*.
8. Cardy, R. L., & Miller, J. S. (2005) eHR and performance management: A consideration of positive potential and the dark side. In H. G. Gueutal & D. L. Stone (Eds.). *The Brave New World of eHR: Human Resources Management in the Digital Age*.San Francisco: Jossey Bass.
9. Gueutal, H. G., & Falbe, C. M. (2005). eHR: Trends in delivery methods. In H. G. Gueutal & D. L. Stone (Eds.) *The Brave New World of eHR: Human Resources Management in the Digital Age*. San Francisco, CA: Jossey Bass.
10. Tucker, M.A. (2005). E-learning evolves. *HR Magazine*
11. <https://empxtrack.com/blog/hr-trends-2020/>
12. <https://www.selecthub.com/hris/future-of-hr-software-trends/amp/>
13. <https://www.netatwork.com/ten-hr-technology-trends-2018/>
14. <https://www.unleashgroup.io/news/what-does-the-future-of-human-resource-management-look-like>.
15. Boudreau, J., Gibson, C., & Ziskin, I. (2014).What is the future of HR? Retrieved August 10, 2014 from <http://www.workforce.com/articles/20179-what-is-the-future-of-hr>
16. Bronfenbrenner, U. (1994). Ecologicalmodels of human developments. (2nd ed.). In T. Husen, & T. N. Postlethwaite (Eds.), *International encyclopedia of education*, Oxford, England: Pergamon Press/Elsevier Science.
17. Cleveland, J. N., Zinta, S. B., & Cavanagh, T. (2015s). The future of HR is RH: Respect for humanity at work. *Human Resource Management Review*.
18. Cohen, D. J. (2015). HR past, present and future: A call for consistent practices and a focus on competencies. *Human Resource Management Review*.
19. Joshi, A., & Martocchio, J. J. (2008). Compensation and reward systems in a multicultural context. In D. L. Stone, & E. F. Stone-Romero (Eds.), *The influence of culture on human resource processes and practices* (pp. 181–205). New York: Taylor and Francis.
20. Stone, D. L., Deadrick, D. L., Lukaszewski, K. M., & Johnson, R. J. (2015). The influence of technology on the future of human resource management. *Human Resource Management Review*.
21. Yu, H. (2009). Human Resource Information Systems and E-HR Systems. In Tsui A. & Lai K. (Eds.), *Professional Practices of Human Resource Management in Hong Kong: Linking HRM to Organizational Success*. Aberdeen, Hong Kong: Hong Kong University Press. Retrieved from <http://www.jstor.org.ezproxy.rit.edu/stable/j.ctt1xw9>.