

TECHNOLOGY IN HUMAN RESOURCE MANAGEMENT – A REVIEW

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Abstract: The world of technology and mobile computing has made the concept of “traditional workspace” a thing of past. Today, employees can work from anywhere at any time. Technology has completely redefined the role of human resources all over the world. Recent advances in technology have transformed nearly every aspect of HR, right from sourcing to performance management. Technology is one factor that is impacting the HR department to a great extent. The wave of technological transformation impacts the organizations in two ways- Firstly, it would offer numerous tools to better manage and engage the talent in organizations. Secondly, it is helping HR managers to shift their focus from managing workforce to driving profits to the company. This paper examines the role of technology directly on one central aspect of work in the twenty-first century, its impact on HRM itself. On the basis of that analysis it is found that Technology changes the life of business and it enhanced the status of HRM. The HR Management Trends is the one who is concerned with focusing on the system and policies. It is essential that Human Resource Management is operating appropriately and in accordance with the latest trends and technology to be able to deal with the business life challenges.

Keywords: Human Resource Management, Human Resource Technology, Recent trends of Human Resource Management Technology, HR Tech, E-HRM, Information Technology.

Background

Production of every service or product is managed with efforts, working and the human mind. A number of activities related to the organization are carried out by the HR. Irrespective of the size of the organization the HR is essential for the appropriate functioning of the firm. The overall management of the firm is looked after by the HRM. The process of utilization of available workforce in a proper and maximized manner is done under the human resource management. HR is also concerned with the relations of industry and the balance in the practice carried out in the organization and its requirements.

Given the unlimited uses of technology, it is used in almost every department in an organization. When it comes to human resource, technology helps in the all process from recruiting to retire functions and it has greatly changed the way managers and employees gain access to human resource data. However, it is quite a challenge to use technology as a human resource tool because of its complex, but if it is well applied, the organization will save time and money during the process.

Technology Impact HR Practices

Technology has changed the business world many times over. In the Information Age, the advent of computers and the Internet has increased that impact significantly. Many businesses cannot even function without the use of computer technology. This impact is seen in nearly all areas of business, including human resources, where technology continues to have a significant impact on HR practices. Information technology has improved HR practices in the following areas:

E-Recruiting

Recruiting has mostly been influenced by information technology. In the past, recruiters had relied on printing in publications and word of mouth to fill open positions. HR professionals were not able to post a job in more than one location and did not have access to millions of people, causing the lead time of new hires to be drawn out and tiresome. With the use of e-recruiting tools, HR professionals can post jobs and track applicants for thousands of jobs in various locations all in one place. Interview feedback, background and drug tests, and on boarding can all be viewed online. This helps the HR professionals keep track of all of their open jobs and applicants in a way that is faster and easier than before. E-recruiting also helps eliminate limitations of geographic location. Jobs can be posted and seen by anyone with internet access. In addition to recruiting portals, HR professionals have a social media presence that allows them to attract employees through the World Wide Web. On social media they can build the company's brand by posting news about the company and photos of fun company events.

Training

Information technology makes it possible for human resources professionals to train new staff members in a more efficient manner as well. The ability to access company information and training programs from remote locations eliminates the need for trainers to work directly with new hires on all training. Some interaction will always be necessary on some level, of course, but training in virtual

classrooms makes it possible for the HR professionals to train a large number of employees quickly and to assess their progress through computerized testing programs.

Human Resources Information Systems (HRIS)

Human resources professionals generally process a considerable amount of paperwork on a daily basis. This paperwork could be anything from a department transfer request to an employee's confidential tax form. In addition to processing this paperwork, it has to be on file for a considerable period of time. The use of Human Resources Information Systems (HRIS) has made it possible for companies to store and retrieve files in an electronic format for people within the organization to access when needed. This eliminates thousands of files and frees up space within the office. Another benefit of HRIS is that it allows for information to be accessed in a timelier manner. Instead of HR professionals having to dig through files to gain information, it is accessible in seconds via the HRIS. Having all of the information in one place also allows for professionals to analyze data quicker and across multiple locations because the information is in a centralized location.

Performance Management

Enhanced performance management is another byproduct of technological improvement. Human resources professionals can use computer technology to assess employee performance and also to get employee feedback to be used for the betterment of the organization. Various software programs make it possible for human resources professionals to examine employee performance using metrics to ensure that employees are meeting performance standards.

Use of Technology in Human Resources Management

Human resources management is among those professional occupation segments that technological changes had influenced. Technology has transformed the role of human resources management professionals to a large extent. More and more human resources management functions within the human resource department are being performed electronically to improve the administrative efficiency and responsiveness of human resources management to their internal clients, employees and managers. Web-based technology is also being used extensively for almost all key human resource activities. Due to the above mentioned automation of human resource activities the human resource professionals are getting more time for other aspects of their jobs. In this way technology is assisting organizations in amending the time management practices of their human resource department and subsequently enhancing their efficiency.

Impact of Technology on Human Resource

The following are a few technological trends that bring a major change in human resources management software and industry:

Big Data Powers Organization

Ensuring compliance and avoiding risk are the two key underlying aspects for every function and task. However, technology has transformed the monotony through HR platforms that digitize the information human resource needs. One such technological trend is Big Data, which is helping HR professionals to understand their customers, market to target audience group and communicate with prospective customers. When integrated with other technologies, Big Data helps to gain a deep insight and allows HR professionals to make decisions powered by vital information.

Big Data gives HR managers a fact-based view of the current workforce, and helps them to identify emerging trends. Moreover, analytics helps recruiters assess potential employees and let you make better risk management decisions.

Mobile Apps are the Future

Smartphone is likely to dominate the HR landscape this year. As the workforce across various operations seeking access to applications via mobile devices, companies are considering to adapt their HR systems. Delivering this kind of functionality implies that organizations will consider HR applications with mobilization process and the interface that employees are looking for. More on, the trend of creating applications that streamlines the basic HR functionality continues to evolve. Today, mobile apps have become essential for every application that a company develops.

Social Media – A powerful tool

Social media plays an active in HR today, especially when it comes to recruitment. Around a quarter of employers are using social media channels like Facebook and LinkedIn to recruit staff. HR departments can use social media not only for recruitment and also for employee engagement. It is considered as a prime source for companies to reach their HR goals. Enterprises can use social media channels to reach target audience with job postings and other company related information. Few organizations use social media to tell their organization's success story through photos, blog posts, Tumblr and Pinterest pages. And, job seekers are using these social networks to find about the company. It's a good source to know what current and potential employees are saying about your company. Social media offers countless benefits to HR professionals and lets them to keep up with the news, technology and trends. You can nurture relationships by sharing the industry knowledge. All these reasons have made it an ideal platform to engage employees, build relationships and bolster communications in the workspace. More companies will consider integrating applications with LinkedIn or Facebook instead of developing corporate applications in the future.

Cloud Changes the Game

Be it a web application or a native application, SaaS apps play a key role in every sector including the Human Resource Department. Cloud-based applications are inevitable in today's business environment. Collection and data storage have been so difficult until the evolution of cloud. With the advent of cloud technologies, all the information such as documents and other pertinent information can be easily accessed online. Employee information can be archived and organized in a secure location.

However, before deploying cloud based solutions, it is required to understand whether the technology fits well for your current requirement and if it can add a real value to your business. One needs to weigh potential challenges against the benefits to understand whether cloud can overcome the business risks. Also, it is important to consider whether the business procedures can migrate with the cloud applications. By centralizing the data, the workflow and operations can be streamlined across the enterprise. Implementing cloud solutions can have a positive impact on various streams of operations ranging from product development, workforce management and business integration. This is why most enterprises are switching to cloud based applications.

Keeping Pace with Business Evolution

While technology plays a crucial role in transforming human resources management software and operations from personnel management to business execution, technology itself does not create this change. HR managers must leverage technology to drive a real value to the business.

Digital technologies facilitate greater integration and flexibility, thus allowing employees to have great voice and share their work experience. Technology is poised to disrupt HR and redefine the future of human resource department. As HR continues to adopt the change, the enterprise will become smarter. Employee engagement and culture management drives HR in ever-changing landscape.

Business mainly depends on three things-defining strategy, asset management and driving business execution. By the virtue of technology, HR for the first time in the history is playing a true leadership role in business execution.

HR Management Trends 2017

Technology and demographic developments are some common trends. General trends along with recruitment, performance management, talent management. The important points in the latest trends are the HR system, HR function, HR analytics, and tools.

HR Technology for 2018

HR Tech market for almost 20 years now, and this year things are changing faster than ever. "HR Technology Disruptions for 2018," Ten big changes going on.

1. A Massive Shift from "Automation" To "Productivity."

For many years the focus on HR technology was to automate and integrate HR practices. This meant online payroll, record-keeping, learning management, resume capture, interview and hiring, assessment, performance appraisals, compensation, management, resume capture, interview and hiring, assessment, performance appraisals, compensation, etc.

A wide range of cloud-based HRMS and payroll vendors are now in the market, and you get very little credit for "automating" HR. Our new High-Impact HR (HIHR) research shows that about 45% of companies are still focused on basic process automation, so this is still top on your list.

The big topic in business today is *productivity*. We are now working on agile, team-centric organizations, and we are overwhelmed with too much to do. Burnout, focus, and employee engagement are all issues, and we are now dealing with email, messaging from many different systems, and a plethora of communication tools that overwhelm most of us. Can we build HR software that really improves productivity and helps teams work better together? That's the next challenge.

2. Acceleration of HRMS and HCM cloud solutions but not the center of everything

In the last five years, cloud-based HR has become the rage. More than two dozen highly successful vendors that offer HRMS, payroll, and many talent management services in the cloud. And in most cases they are offering financials and other ERP solutions as well. So the question for most companies is no longer "if" you go to the cloud, but rather "when" and "how."

Only about 40% of companies' today use cloud HCM solutions and large companies is that the migration often takes 2-3 years or longer. (There is a lot of customized HR software out there.) So we are going to be "moving to the cloud" for a while yet, and the decision of which vendor to select looms large. In fact most companies ponder their vendor decision for months (or years), and feel the decision will have radical impact on their entire employee population.

Well despite strong marketing from the HCM companies, this worry is misplaced. While the cloud HR and payroll system is a critical system for any business, it can be replaced. And the more important technology is the talent and team management software. So your architecture looks more like a "set of services" all focused on making employees' lives easier... not a single cloud vendor.

A new "breed" of HCM software is emerging, and it looks more like "team management" and less like "talent management" every day.

3. Continuous Performance Management

Continuous performance management is possible, it works, and it can transform your company. We are not talking about doing away with ratings; rather we are talking about building a new, ongoing process for goal setting, coaching, evaluation, and feedback.

One big finding: despite the tremendous success of the cloud HCM vendors in the market, most do not have a total solution for this problem. New "team-centric" tools are likely to become the future leaders in the HCM market of the future.

4. Feedback, Engagement and Analytics Tools Reign

Only a few years ago the engagement survey market was a robust but sleepy place. Today it has become a dynamic world of real-time survey systems, sentiment analysis software, organizational network analysis (ONA) tools, and products that actually automatically ask your peers for feedback to give you real-time coaching.

And open feedback tools are growing again, giving employees many new places to comment on the workplace. A new area of growth is the explosion of systems to offer pay transparency and are now crowd sourcing and providing benchmarking tools to help you "find your worth" through open feedback and benchmarking.

A few years ago "Feedback is the Killer App," this explosion of transparency has been very healthy for business, and it has spawned a new set of pulse surveys, AI-based analysis and recommendation systems, and culture assessments throughout the marketplace. You can get this technology from startups, ERP vendors, talent management systems, and embedded in the new performance management systems. Companies have to think about this as an overall architecture, but this is still a new world.

5. Reinvention of Corporate Learning

A new breed of corporate learning tools has finally arrived, and companies are snapping them up quickly. These include the "experience platforms," a new breed of "micro-learning platforms," modernized LMS systems, and new AI-based systems to recommend learning, find learning, and deliver learning. Virtual Reality-based learning is now alive and well, smarter and smarter technologies to help us find "just what we need" along the lines of performance support. And we can now buy systems that let employees publish and share content without any major effort on your part.

6. The Recruiting Market

Recruitment is the largest marketplaces in HR. Companies spend billions each year on recruiting and it has become an escalating war for employment brand, candidates, candidate experience, and strategic sourcing. High volume recruitment (hospitality, services, healthcare, retail) is being automated by chatbots and other new tools; skilled job recruitment is being revolutionized by open sourcing tools, more automated applicant tracking systems (now called recruitment management systems), and better assessments. And video assessment and culture assessment tools have matured so far that everyone can use them.

This part of HR technology the most dynamic and innovative, primarily because every major company has to buy a whole tapestry of tools to compete. Recruiters are like the finished carpenters of the trade: they become better and better over time, and suddenly you find out your competition is stealing your people and you don't know what hit you.

The market has gotten hotter than ever, with unemployment rate near record lows. We are back into the "war for talent" (a 15 year old phrase) and this time "the talent is leading the charge." In other words, all the new technologies are making recruiters smarter about candidates, just as candidates are getting smarter about your companies.

Remember also that the old fashioned "job description" is really going the way of the dinosaur. More and more jobs are "hybrid" and rapidly changing, so the new world of tools has to help us find people with the right capabilities and learning skills, not just technical or cognitive abilities. And diversity is now a core part of recruiting; with new technology to help remove bias from job descriptions and reduce bias in interviewing.

7. The Wellbeing Market

HR technology, content, and tools for wellbeing may likely be the next "big thing" in business. Not only do we need tools to improve productivity and reduce cognitive overload, but we also need "nudges" and data to help us exercise, stay mindful, and learn how to sleep and eat better. Some of the most innovative new solutions in the market. Most of them are driving tremendous value for their customers, and rapid adoption of these tools (especially among younger workers) and great improvements in engagement, health, and mental wellbeing.

The wellbeing initiative moved from a focus on "health" to a focus on "reducing burnout" to a new focus on "human performance." This is the journey most HR departments are going through and the vendor market is moving fast.

8. People Analytics Matures and Grows

New maturity model on People Analytics and what you'll see is a tremendous shift from companies "playing with models" to companies "seriously investing in infrastructure" to bring all their people data together. Employee-related data (and all the aspects it includes) is just as important as or more important than customer data, because it tells you the secrets of how to manage your business better.

The marketplace is now rich with embedded solutions (nearly every HCM vendor has embedded analytics, many with prediction engines), and all the new vendors are starting to apply AI to their offerings. While this market has been very long in coming, the growth of cloud platforms is now making it explode, and it's easier than ever to build a manager-level dashboard that helps your teams understand what they can do to make the work experience better.

At the corporate level, the ONA software market is now growing (organizational network analytics) so a new world of "relationship analytics" is taking hold. We can now look at core HRMS data (turnover, tenure, performance rating), relationship data (who you know, who you spend time with, what teams you are part of), wellbeing data (your activity, location, energy, wellbeing), and your sentiment data (feedback, mood, and sense of belonging). All this data is falling into the laps of HR departments and they are now starting to grapple with the issues of ethics, privacy, and becoming more transparent about what analytics they are doing.

There is a fundamental shift away from "PhD People Analytics Projects" to more business-oriented programs that help study sales performance, team performance, and other business critical issues. Companies at Level 4 in our new model are delivering real-time dashboards to managers to make this all actionable. People Analytics as the lynchpin of success for HR in the next few years, as all these other technologies throw off data at an ever-increasing rate.

9. Intelligent Self-Service Tools

In today's HR technology environment perhaps the most important new market is the fast-growing need for self-service, employee experience platforms. These are fast-changing systems that bring case management, document management, employee communications, and help-desk interactions into one integrated architecture. They sit between employee apps and back end applications, and they serve as the lifeblood of your employee service centers (which are going to be more automated every day).

Vendors offer smart chatbots (focused on a single domain), intelligent agents, and amazingly fun games that make training, expense reporting, time tracking, and almost every other HR function easy. One vendor showed off a voice application which lets you query the system for vacation balance, performance tips, and even compliance training. This is a huge new market, and not even sure what to call it yet.

10. Innovation within HR Itself

The tenth disruption is the incredibly rapid growth in innovation projects within HR teams. Now HR departments are experimenting with new performance management models, new learning strategies, new ways to reduce bias, and new techniques to recruit and coach people. Then they go into the market and see if vendors are available.

Conclusion

Technology has a significant impact on Human Resource Management. The annual aspirations of comprehending the important HR topics, insights and issues in the upcoming months are the points to look up to in this year. The year 2017 is predicted to be the most complex year globally in the HR world. Today, HR is not treated as a single function. It's a collection of highly specialized capabilities - each with distinct objectives, tasks and needs. There is an ever-increasing pressure on Human Resource function to support strategic goals and to focus on value adding activities. Organizations have realized the growing importance of using Technology and always try to use the new trends of the Human Resource Management Technology.

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