

# Emerging Trends in Changing HR Technology and its Landscape

Dr. N. Muthu<sup>1</sup>, K.R. Kishore Kumar<sup>2</sup>, S. MuthuKumar<sup>3</sup>

Professor, Department of management studies, Saveetha Engineering College, Chennai<sup>1</sup>

Research scholar, Department of Management Studies, St Peters University, Chennai<sup>2,3</sup>

**Abstract:** Technology is changing everything and impacting most every part of every business. Innovative human resource practices have reengineered the old process. Today human resource managers have innovated their way of hiring and recruiting employees. Innovative HR practices have overcome various human capital challenges viz. geographical limitations, mobilization etc. Human resources technology helps in all processes from recruit to retire functions and has drastically changed the way employees and managers get access to the human resource data. The past decade taught business firms everywhere a humbling lesson. Domestic companies learned that they can no longer ignore global markets and competitors. Successful firms in mature industries learned that they cannot overlook emerging markets, technologies, and management approaches. Companies of every sort learned that they cannot remain inwardly focused, ignoring the needs of customers and their environment. The key components to an effective human resource team consist of finding solutions that address their biggest challenges with respect to personnel and technology. Using the best in HR Technology to stay ahead of the curve just makes sense. This paper explores the available technology and its usefulness in executing the managerial functions and challenges faced by them. Indeed technology rules the world and HR people enjoy the fruits of benefits and one can not wish away the organizational which can accommodate with caution and human touch. No one can deny the fact that no doubt that technology has made it easier and faster to gather, collate, and deliver information and communicate with employees. More importantly, it has the potential to reduce the administrative burden on the HR department so it is better able to focus on more meaningful HR activities, such as providing managers with the expertise they need to make more effective HR related decisions. Mobile technology adds values to the HR and presents numerous web based applications to HR people.

**Keywords:** HR technology, technology tools, competitive advantage, M commerce

## INTRODUCTION

*'Innovation is the ability to see change as an opportunity, not a threat'*-- Steve Jobs

Web-based technology has been an important development in enabling HR to reduce transactional activities and increase customer and strategic services. In today's environment multinational organizations have to manage a global workforce to achieve sustainable growth. The people in the organization are the most important component to sustain business results. 2014 was the year that cloud went mainstream, especially in HR. As the economic downturn leveled out, and some regions saw

signs of growth or at least a form of stabilization, HR departments everywhere came to realize that technology support has fundamentally changed and it's time to act. What's different this time is that new HR technology is not meant to make the HR department more efficient, but focuses beyond HR, to increase the user experience, to add value across the business, and to improve competitiveness. The role of the HR professional has changed fundamentally as a result of technology. The core competencies that have developed are mastery of HR technology, strategic contribution, personal credibility, HR delivery, and business knowledge.

Figure No. 1. Major HR components



(Source : [www.4.bp.blogspot.com](http://www.4.bp.blogspot.com))

Today's HR practices has broken the geographical and cultural barriers and helped the human resources to move worldwide and to choose the best job according to their talent. This innovative and technological advent in HR practices has benefited both the recruiter and the job seekers and ultimately the corporate world. Introducing new technologies does not guarantee positive outcomes. Simultaneous developments in leadership, financial resources, personal and organisational relationships, engagement with workers and families, care coordination and staff development are needed. The most important question to address may not be how are staff currently being reorganised in the wake of new technologies, but rather how should staff best be deployed to take full advantage of the potential available.

**THE ROLE OF HR IN AN IT-ENABLED ORGANIZATION** The impact of technology has fundamentally changed the HR role. It has enabled HR to (1) decrease its involvement in transactional activities, (2) increase its focus on the customer, and (3) increase its delivery of strategic services. As a result, several core competencies have emerged that are critical to the development of the HR professional.

#### REVIEW OF LITERATURE

Stavrou-Costea (2005), We must first examine the influence an HR division has in a business arena. HR units are established to systematically supply and monitor intelligence on a regular basis to produce effective strategic systems. These strategies contribute to an organization's culture and performance by managing personnel conflicts and challenges. For example, an HR management team typically provides the following organizational functions with respect to personnel: (a) training, (b) development, (c) efficiency, (d) flexibility, (e) compensation, (f) employee turnover, (g) the cost per hire, (h) job satisfaction, and (i) performance evaluation.

According to a survey by Towers Watson 'One-third (31%) of organizations intend to increase their spending on HR technology in the next year in order to boost growth and improve efficiency.

According to Calhoun et al., IT is an important component of the organizational decision process. The use of IT is always based on the needs of an organization and the nature of information systems varies depending on the particular form taken by the organization. Some researchers investigated the relationship between organization characteristics and the use of IT, and factors influencing the use of IT in organizations.

According to Laursen, it is unlikely that new innovative HRM practices will be equally effective across different sectors. On the other hand, Budhwar and Boyne compared HRM practices in public and private sector organizations and their results showed a number of differences in the HRM systems in these sectors. The key areas of their analysis include recruitment and selection, pay and benefits, training and development, employee relations with emphasis on key HRM strategies. These may be

taken as evidence of the fact that the impact of IT on HRM functions may show differences between sectors.

According to their website, "Twitter is a simple tool that helps connect businesses more meaningfully with the right audience at the right time." Twitter can be powerful for small companies or a recruiter who wants to get an edge over the competition. The easiest way to recruit is to tweet jobs you have available.

Appelbaum (2001), Human resource management practices is the management of people within the internal environment of organizations, comprises the activities, policies, and practices involved in planning, obtaining, developing, utilizing, evaluating, maintaining, and retaining the appropriate numbers and skill mix of employees to achieve the organization's objectives.

Calhoun et al, studied the impact of national culture on information technology usage in organizations and reported the association between some organizational characteristics and use of IT.

Khan (2010), revealed that in energetic business atmosphere, there is a need of an approach to achieve better performance, to originate and implement HRM practices. In considerable and insubstantial extent the organizations need to invest in such practices to get a competitive advantage.

Stahl et al., (2012), examined the extent of use of IT in various small and medium business organizations in Brunei Darussalam. Their study attempted to assess the depth and breadth of IT usage in business. They concluded that the chief executive's computer knowledge is positively associated with the use of IT and that businesses in different sectors have different information processing needs.

#### SPREADING HR TECHNOLOGY WINGS

*"It's not so much that we're afraid of change, or so in love with the old ways, but it's the place in between that we fear... it's like being between trapezes. It's Linus when his blanket is in the dryer. There's nothing to hold on to."--M. Ferguson Gen-Y technology use*

This generation uses technology at greater rates and in different ways than those from other generations: 97% own a computer, 4% own a cell phone, 76% use Instant Messaging, 15% of IM users are logged on 24 hours a day/7 days a week, 34% use websites as their primary source of news, 28% own a blog and 44% read blogs, 49% download music using peer-to-peer file sharing, 69% of students have a Facebook account (Source: Connecting to the Net.Generation) *"We've seen the first wave of technology enter the workplace and HR department. Today, companies have automated many processes and eliminated unnecessary work."--Larry Dunivan, VP, Global HR solutions for Lawson Software.* According to a new report by the Society for Human Resource Management (SHRM), Globalization, demographic changes, heightened regulatory compliance and emerging technologies are all key developments set to transform the practice of global HR. HR will need to respond accordingly. HR managers are incorporating technology as management resource. For example, technology tools like (a) automated manufacturing processes, (b) personnel

software packages, intellectual property rights (c) measure strengths and weaknesses in performance and communication, (d) collaboration, and (e) internet and intranet systems can help HR management teams to progress outcomes (Seyed-Mahmoud, 1999).

Table No.1 Technology Spheres

TECHNOLOGY : GLOBAL VS INDIAN SCENARIO	
<p><b>GLOBAL SCENARIO</b></p> <ul style="list-style-type: none"> <li>IT's advancement is beyond imagination.</li> <li>Integrate the world economy through removal of barriers.</li> <li>Global sourcing of technology related services have grown.</li> <li>There is growth in spending on technology products &amp; related services sector.</li> <li>Global IT spends projected to grow at steady rate.</li> </ul>	<p><b>INDIAN SCENARIO</b></p> <ul style="list-style-type: none"> <li>Creating opportunities for the 'out-of-the-mainstream' candidates.</li> <li>India is a popular choice for outsourced services because it offers 24*7 services by reduction in costs while maintaining quality.</li> <li>Every job created in IT-ITeS sector accounts for creation of four jobs in rest of the economy.</li> <li>Some flagship companies that are providing good career in IT-ITES sector are - Infosys technologies, TCS, Wipro Technologies, Tech Mahindra, Persistent, Cognizant, Amdocs, Cybage, Castech, HCL technologies, Satyam Computers etc.</li> </ul>

“The ability to learn faster than your competitors may be the only sustainable advantage” – Arie De Geus, former head of planning at Royal Dutch Shell Innovations and technology has also grappled the HR recruitment practices. HR has adopted a new, varied and dynamic recruitment processes by using social media and mobile applications as a tool of recruitment. This has not only helped in absorbing the right candidate at right position in an organization but have also benefited in employees growth by mobilizing the talents.

Figure No.4 HRM in dynamic environment



Technology and HRM have a broad range of influences upon each other, and HR professionals should be able to adopt technologies that allow the reengineering of the HR function, be prepared to support organizational and work-design changes caused by technology, and be able to support a proper managerial climate for innovative and knowledge-based organizations. In addition, the effective use of technology can enable organizations to track employees and reach out when required. Today the social networking sites viz. facebook, twitter, LinkedIn etc. are used as an innovative tool to recruit the capable and efficient human resources in any organization. Technology is moving beyond its role as a business enabler and become further ingrained in the life and work styles of the future workforce, while also changing employee and

business expectations and interactions with one another and the world around them.

**APPLICATION AREAS OF TECHNOLOGY IN HRM-FEW EXAMPLES**

- Application tracking system
- ASM- a web based employee assessment tool (application server model).
- CPM- computerized performance monitoring
- E- Recruitment software.
- Executive & key people management software
- Internal mobility software
- Performance management software
- Vendor management system
- Virtual office system
- Workflow technology

## TECHNOLOGY IN HR MANAGEMENT-HRIT LANDSCAPE

Human resource information technology = an integrated computer system designed to provide data and information used in HR planning and decision making. Some organizations are close to a paperless HRM system – saves time, money, frees staff. Technology is a key driver of organizational change. The world has never before seen technological changes occur as rapidly as they are today. There is a fast-growing interest in another way of working which combines changes, in technical and organisational systems of choice. This is virtual working and by extension virtual teams. Traditional HR to e-HR significantly affected every area of human resource management. Understanding how to grow requires an in-depth understanding and clarification of the external environment in which the organization exists. Today's organizations must keep themselves open to continuous innovation to survive.

As quoted by McKinsey Global Institute's The Social Economy 2012 report "... twice as much potential value in using social tools to enhance communications, knowledge sharing, and collaboration within and across enterprises" SMAC-Social, Media, Analytics and Cloud or SMAC in short is fast becoming a priority among the HR functions

in organizations. The convergence of HR and social technology over the last couple of years has resulted in several social technology companies being spawned providing a range of services in HR management such as recruitment, talent management, analytics, social recruiting etc. There are many new digital recruitment companies mushrooming around the globe and they seem to be focused on passive candidates (i.e.) mining social networks for such candidates who are not actively thinking about a new job and engaging with talent communities. Most of the new HR applications are developed to be in compatible with Smartphone and Tablets taking the usability to a whole new level.

## CHANGING HR APPROACHES

The impact of computers and the Internet is seen in nearly all areas of business, including human resources, where technology continues to have a significant impact on HR practices. "We are drowning in information but starved for knowledge. This level of information is clearly impossible to be handled by present means. Uncontrolled and unorganized information is no longer a resource in an information society, instead it becomes the enemy." -John Naisbitt, author of 1982 bestseller Megatrends. Extrapolating trends mobile devices will play a major role in HR in future from recruitment to retirement.

## TRENDS THAT WILL RESHAPE THE FUTURE OF HR

Tremendous forces are radically reshaping work. Research by Accenture has identified 10 business trends that will radically reshape HR in the next five years:

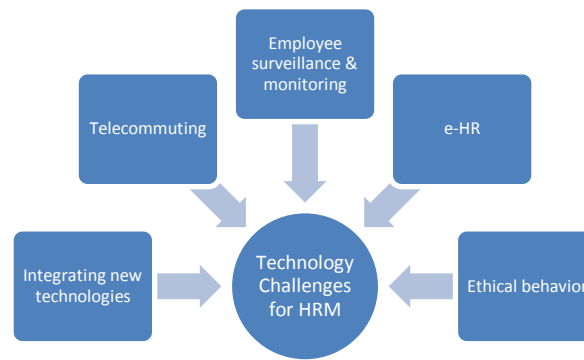
1. The rise of the extended workforce.
2. Managing individuals.
3. Technology advances radically disrupt HR.
4. The global talent map loses its borders.
5. HR drives the agile organisation.
6. Talent management meets the science of human behaviour.
7. Social media drives the democratisation of work.
8. HR must navigate risk and privacy in a more complex world.
9. HR expands its reach to deliver seamless employee experiences.
10. Tapping skills anywhere, anytime.

*Source: <http://www.hrmagazine.co.uk>*

In today's workplace recruiting; selection; talent management and development; employee loyalty and engagement; as well as secure HR data maintenance; all go hand-in-hand with the best in HR technology. In current era of highly volatile business environment organizations are facing emerging challenges in form of acquisition and optimization of human resource. Being valuable and scarce capabilities, human resources are considered as a source of sustainable competitive advantage. The success of an organization depends upon several factors but the most crucial factor that affects the

organization performance is its employee. Human resources play an integral role in achieving an innovative and high-quality product/ service. If the employees of an organization are satisfied with their jobs, the organization can achieve its goals very straightforwardly.

In any organization HRM practices focuses on optimal utilization and management of their human resource effectively in order to achieve maximum output. Managing people is concerned with deciding approaches and strategies to find alternatives of how to achieve organization goals.



**FORECAST OF PAST- REALITY TODAY**

- Advances in voice recognition, wireless technology, real time video conferencing made online interview a reality without location constraint and cost.
- Corporate career websites will have the ability to "morph," so that the information provided to different candidates changes to fit their unique needs.
- HR will take on activities such as internet research, desktop publishing, web page development, help desk and computer training.
- Mobile Workforce will depend on HR assistants to act as ground control ensuring a smooth flow of information.
- More sophisticated fuzzy logic systems will, once you identify your skills and interests, select an initial job automatically and then "find" other "similar jobs" using the same process that Amazon.com currently utilizes to refer other relevant books to clients.
- Smart Phones will store massive amounts of information, music, phone numbers and will access the internet and aid performing official functions i.e employees would use multi-functional, wireless technology to do their jobs from virtually anywhere.

**POINTS TO PONDER**

1. HR Data is Secure in the Cloud
2. Gamification is Not Child’s Play
3. Integrating Social Media into HR Technology Boosts Collaboration.
4. Remote Work Arrangements are Transforming the Workplace
5. HR Technology Supports Cross-functional Teams
6. Cloud-based Business Processes Leave More Internal Resources for HR Strategy
7. Mobile Removes Obstacles
8. Technology Helps HR Professionals Drive Performance
9. Technology is Collaborating More Too
10. HR is moving towards Global Standards

**CONCLUSION**

*“Our assets walk out of the door each evening. We have to make sure that they come back the next morning” -- Narayana Murthy, Former CEO Infosys*  
Definitely, technology is revolutionizing the way we are managing our resources Humans have an unlimited capacity to learn. We only use about 10% of the capacity of existing technology available in a typical organization. Imagine the unleashed potential! David Ulrich, one of the most influential leaders in Human Resources, highlights the following: HR’s role needs to be articulated in terms of value added. HR professionals must be able to partner

with managers on strategy – move from activity-focused to results-focused. The strategic partner role demands a degree of knowledge about strategy and the organization. Results-based HR organizations are automating the transactional work, and innovating transformational work. Using the best in HR Technology to stay ahead of the curve just makes sense. As HR Professionals share information on a global scale, and companies manage increasingly dispersed workforces, technology will provide the necessary platform to develop consistent terminology, metrics, and data models to support a global HR standard. The nature of hierarchy, status, authority, responsibility and similar other concepts vary widely across the nations synergizing system maintenance. Organisational performance and personal success are critical in the new era. The HR Professional MUST Master the competencies listed in figure 1. Focus of the modern HR has changed from execution, order and control in to adaption, Innovation and speed with focus on customers. Hence the job of HR is to implement programmes, systems, strategies which foster experience, collaboration and decision making.

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