

## **A BIBLIOMETRIC META ANALYTICAL LITERATURE EVALUATION ON CHANGING HR PRACTICES: A HR LEADERSHIP PERSPECTIVE**

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**Abstract:** Since Hamurabi Code, to Kautilya's arthshashtra to post modernism era of eHR practices, Human Resource Management is still viewed low intensive and yet a reactive norm of any organisation existing around the world. The historionomics of HRM dates back from personnel function to Human Resource Development due to intervening associated functional components has tremendously contributed to the growth of considering HR factor as the most indispensable factor of production, and since then this HRM has metamorphosed to a split second click of mouse function and every human element is now able to reflect what is expected out of them and can exchange what they expect in a very transparent and professional manner.

**Key Words:** Human Resource Management; Practices; HRM Technology; Talent Management; Human Capital; Factor; Challenges; Analytics; Functional Modules

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**Objectives of the Study:**

- (i) **To understand the Technological Developments in HRM process.**
- (ii) **To evaluate and understand the Evolving Trends of HR Technology**
- (iii) **To examine from the literature study the evolving eHR practices**
- (iv) **To analyse the challenges of Machine Communication and Its impact on HR functions; HRM professionals need to turn into Change Agent.**
- (v) **To understand the transition of HRM function to HRM technology:**

**Methodology: A systematic Meta Analysis using bibliographical Literature review and analysis on the research done earlier.**

**Data Used: Secondary Data done with literature reviews**

**Review of Literature:** Many practitioners and scholars within human resource development (HRD) field have claimed that the utmost crucial aspect of the practices is career development (McLagan, 1989; Weinberger, 1998; Swanson & Holton, 2001). However, this area of studies has been given little attention (Upton, Egan & Lynham, 2003). With the intense competition in the 21 century, many organisations have realised that in order for them to stay competition they have to improve their employees and enhance their career development (Boudreaux, 2001); rather than individual career development (Swanson & Holton, Upton, Egan & Lynham, 2003). Therefore, many organisations are now taking a proactive measures towards equipping their staffs and educationally (Leana, 2002) or create a climate that supports their staffs at all levels of the organisation to be more resultant and productive (Sullivan, 1999); which Boudreaux, (2001); **Lado and Wilson (1994, p 701)** studied on the separate interconnected activities, roles, processes and other aspects that are aimed to attracting, maintaining, and developing the firm HR activities in contemporary organisations, such as: 1) planning; 2) recruitment and selection 3) training; 4) performance management; 5) benefits and rewards; 6) compensation; 7) and 8) career **development (Banhegyi et al., (2008) and (Robbins & Coulter, (2002).**

**Wren, (1994).** HR planning was initially an important aspect of job analyses and was often used as bases for determining strengths and weaknesses among the employees and to develop the skills and competences they needed (**Gallagher, 2000**). As individual career plans started to gain

more popularity, companies gradually started to pay more attention to the certain skills and competences among individual employees as a way of aligning and dealing with the companies' succession **planning (Kuratko and Morris (2002)).**

**In 1978, McBeath** addressed his view of HR planning by highlighting a set of issues that he regarded as being important with respect to the HR planning. These were; An estimation of how many people the organization needed for the future A determination of what ability, skills, and knowledge requires to compete.

**Storey (1995)** argues that HR planning today is a very important task of every contemporary organization's HR department. According to him, HR planning mainly involves the identification of skills and competence within the organization, the filling of identified competence gaps, and the facilitation of movements of employees within the organisation. An essential part of the HR planning is the succession planning which aims to ensure the supply of individuals and filling of gaps on senior key positions when they become vacant and replenish competences to areas where they are most valued (Wolfe, 1996).

**Price (2007)** inferred that recruitment strategies can be divided in three significant approaches: suitability – the most qualified applicant for the position, malleability – moulded within the cultural norms, and flexibility – the most reliable and versatility employee. These factors are quite complicating and can be easily mistaken during the process of hiring employees. Suitability is a critical aspect hence it mainly concerned with the process of hiring the most suitable applicant for the position.

**Russo et al., (1995) cascaded** channels of recruitment into external and internal recruitment, and formal and informal channels. *Internal recruitment channels* mainly involve the use of intercommunication between other strategic areas of the organisation and the entire HR department. This approach enhances the firm to prioritise and target in-house or current employees (Russo et al., 1995; Analoui, 2007). Internal recruitment can be fully considered when it is fair and transparent, since favouritism might occur; while external channel of recruitment base on the contrary.

In today's contemporary organisation, employees 'skills and knowledge can make a positive impact on the firm's productivity (**Guzzo, Jette & Katzell, 1985**). Organisations have to counter some difficulties while training a single or more employees (Ostroff & Kozlowski, 1992). Previous literatures argue the affordability of some organisations that deprive themselves for a single individual employee particularly when human resources are limited: this can hinder the productivity on the short term and destabilize the organization (Bishop, 2003).

The concept of measuring performance or managing performance within organisations is to strategize how firms can get the utmost benefits from their **employees (Dransfield, 2000)**. The approach to measuring performance can be classified as a three-step approach that composed by objectives, appraisal and feedback. The first step is the setting of performance objectives that are quantifiable, easy to measure and simple to communicate throughout the organisation (Dransfield, 2000).

**Bredin, (2008)**. The management of performance includes design of work systems, facilitation of knowledge utilisation, sharing and creation, and appraisal and reward systems (Cardon & Stevens, 2004). However, this phenomenon has been supported by different researchers claiming that performance management/appraisal is an outstanding process to determine and supervise employees output within the firm, so as it would be less complicating to assess and achieve maximum performance (Zhu & Dowling, 1997).

**McKenna & Beech, (2008)** found job satisfaction, employee turnover, absenteeism (Dyer and Reeves, 1995); motivation and commitment (Seibert, Silver, & Randolph, 2004), are proximal hence human resource processes are interconnected. In as much that the human resource practices are intended to achieve result in this area; there effect can also have a tremendous influence on the aforementioned outcomes (Bloom, 1999).

Eliciting high contributions within an organisational environment is highly essential for the firm as well as the employees (Appleby and Mavin, 2000). For instance, expectancy theories have explicated aspects of anticipated rewards in line with employee's motivations. This indicated that

every employee will have to face with a logical decision in accordance to the present economical circumstance (**Tannenbaum and Dupuree-Bruno, 1994**).

As a result to that employee considerable effort will manifests into an intended realisations and fulfillment of a specific desire outcome. Such manifestation enhances the explanation of the crucial aspect of organisational reward system and how it can be sustain and elicit the firm human capital investment **Tannenbaum and Dupuree-Bruno (1994)**.

**Baldrige and Brunham, (1975) and Moch and Morse, (1977)** conception has locus the local firms at greater disadvantage in-terms of retaining or recruiting top-notch talent (Tannenbaum and Dupuree-Bruno, 1994).

**Patel & Cardon (2010)** compensation is vital for contemporary organisation as it contributes to attract and retain high skilled workers with superior salaries, and it encourages a desired stakeholder behavior regarding recognition and legitimacy. Minbaeva *et al.* (2003) inferred that compensation would enhance motivation among personnel too.

**Balkin and Swift (2006)** suggest a more flexible approach toward the payment issue. They proposed to relate it to the life stage of the organisation with a higher rate of non-monetary benefits during the first years of activity, and a re-equilibration whenever the company enters the mature stage. Non-monetary paybacks are represented by stock options, stocks or other form of equity sharing that enhance the participation and the motivation of employees, while spreading the risks over a larger number of people (Graham *et al.*, 2002).

**Brown, (1997)** referred to as “shared responsibility”. However, learning within an organisation is quite critical and expensive; (McDonald, Hite & Gilbreath, 2002). The most common learning methods within organisations are informal (i.e. on-the-job coaching, sessions, lesson learned, development assignment) Power, Hubschman, & Doran, (2001) and formal learning (i.e. as training/workshop and other forms of professional training conducted by professional bodies internally or externally (McDonald, Hite & Gilbreath, 2002).

**Nadeem Moiden, (2003) and Gilley and Gilley, (2007).** Therefore, the philosophy of empowering employee's capabilities is coined to the conception that HR is extremely crucial for sustainable competitive advantage and organisational success (Koch & McGrath, 2003). HR in organisation is also crucial because it assists managers and employees through a change process (Hendry, Jones, Arthur & Pettigrew, 1991).

Businesses can gain enormous competitive advantages when their employees are used effectively to drawing on their expertise and ingenuity to meet clearly defined objectives. When an organisation recruits the most effective, capable, committed and flexible people; and manages and rewards them accordingly to their performances, competencies and efficiency would help the firm's productivity immensely (Price A., 2007). Managers that tactfully execute organisational goals depend on the HR practices to deliver excellence so that they can achieve the utmost business performance (**Becker, B. and Gerhart, B., 1996**).

However, the HRM field has been isolated and misunderstood by many researchers and practitioners, failing to realise that without employees there would be no functioning organisation (Argote, McEvily and Reagans (2003). As employees remain the most expensive and reliable asset of the organisation, the practices of HR will remain a vital area of discussion (**Becker, B. and Gerhart, B., 1996**).

**Dessler, (2008)** outlined four strategic tools that could be used to enhance employees' abilities and proficiencies, such as employees' satisfaction, loyalty, motivation and satisfactions. Employee satisfaction is the individual's satisfaction as a professional person, that is, the individual has an effect on his attitude. An organisation member's operating characteristic is the cognitive evaluation; employees get through the more realistic values and expectations of the gap between the value obtained after the meeting whether or not all aspects of work attitudes and emotional responses. It involves the work of the degree of organisational commitment and work motivation is closely related (Saari, L. M., & Judge, T. A., 2004).

**Pinnignton and Edwards (2000)** divided motivational incentives into two parts: motivating individuals and motivating groups. The former one pays the attention on individual needs and the later one highlight the equity principia.

**Lambert, Hogan and Barton (2001)** pointed out that job satisfaction is a key mediating variable between the work environment and turnover intent, and suggested that managers take the focus on the work environment to improve employee's job satisfaction, and ultimately lower turnover intent. Carpenter and Sanders (2004) opined that the investment in TMT (Top Management Team) could be way for attracting and retain talent for organization. Thus, it is required, and should be considered into the HRM process too.

**Burgoon, Buller, & Woodall, (1996)** one of the most suitable means of influencing employees satisfaction is the manners at which superior relate and communicate with subordinators. The meshing and mashing of interpersonal relationships between the two distinctive groups or status plays a significant roles in terms of respect, attractions, formative impression or emotional expression, deceptions and social influences (Burgoon, Buller, & Woodall, 1996). Weiss and Cropanzano, (1996) inferred that such immediacy and friendliness will cumulate the essential elements of job satisfaction (Weiss and Cropanzano, 1996).

**Introduction:** From a non-innovative salary decisions to getting hired or fired, core aspects of team building are dictated by technology , with a pace, that is sometimes incomprehensible and yet unavoidable. HRM functions are synchronised into employee engagement, talent retention, competitive compensation, and talent management fucntions of creating organizational leaders for tomorrows human capital challenges. The enormous and every increaseing challenges sparks HR departments even into recruitment, from traditional activity of calling for recruitment the futuristic requirements are predicted by the machines with HCM functional modules cutting across human thinking, and proactively are moving beyond LinkedIn, Facebook and Twitter and are piloting Snapchat as a recruitment tool. The humand resource management function is metamorphising into human resource technology with still more innovative trends in the future, are awaiting, and is posing lot of challenges for HR functions.



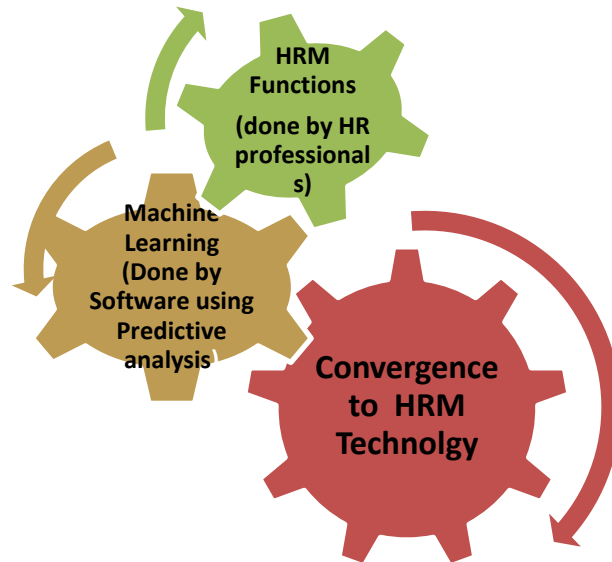
**Figure I: Metamorphosis of HRM Recruitment function Simple to Multiple: Concept Designed by Prof Dr.C.Karthikeyan**

**Objective: (i) To understand the Technological Developments in HRM process**

**The Convergence HRM function to HRM Technology:** The reality now is some of the well known sought after companies in the world like Microsoft is in the verge of launching **Hololensheadset** which is likely to be accepted by human resource professionals, as it is believed to be primed for disrupting talent management and productivity. Hololensheadset might be used from off-site assignments to corporate training, and the industries trying enhancement tasks on the job, will be a new normal, as digital information will be superimposed on the physical reality. Onboarding and training in industrial environments will be technology supported by adding virtual instructions on top of machinery and tools, while employees engage with the environment. Machine learning is now a new normal and it comes out with automated data analysis through algorithms that automatically create analytical models. Using algorithms, machine learning programs iteratively does data-building patterns and identify insights without being explicitly instructed and programmed to look for answers. The collection of information to identification of data sets to learning from the data gathered the technology improves the efficiency of the initial analysis that humans were doing, which now leaves only HR professionals to look at higher level results and focus on more complex analysis as a result. Till now the machine learning applications in HR are mainly focused on predictive analysis and talent relationship, and the recruitment process, now with PhenomPeople.com, marketing personalization practices and data analysis is made in a click, the machine does the recruitment



process. Employee engagement is now the next target, with KPMG in the final phase of going for a model for enterprise engagement, with machine learning as the advancement.



**Figure II: Convergence of HRM process to HRM Technology : Designed by Prof Dr.C.Karthikeyan**

**Age of Machine Learning: Human Control to Autonomous Agents and Things;** The autonomous agents are increasing phenomenally from robotics application is growing in leaps and bounds and to the extent of even hospital uses it for routine surgeries and doctors stand to just supervise the operation, like wise the task diversity and capacity, and autonomy is increasing so as to HRM also. Like that of autonomous driving car, human resource management, professionals survival depends on new skills like, machine learning streamlining communication and increasing efficiency of organizations through access to the right data, at the right time with application of technology to recruitment to employee engagement, with organizational transparency to boardroom meetings.**The Internet of Things: One of the** Gartner studies states Internet of Things platforms suffer fragmentation, leading to inefficiencies in terms of data access. With accessibility to increased availability of data, companies are continuing to adopt cloud computing and Human Resource Function is advancing with more time being spent on using cloud solutions to workforce productivity. Significant part of HR's functions are taken over by line managers, and the shift to business performance and

execution is already visible. The time-consuming tasks of track of employees' time, preferences and work patterns are automated, relieving HR to concentrate on engagement challenges, increasing productivity and aligning the human side of the organization with business goals. HR leaders from boardroom level, are metamorphising from cost centers to revenue centers with making HR to manage performance religiously. **Wearables:** The enterprise wearables market is closing in on to 18Bn, and by 2019, will impact heavily on the human resources department as tracking workplace wellness through wearables will most be application of technology rather than human with Stress management and monitoring is only to check on retention. Apart from health, wearable devices the impact on employee communication and collaboration and notifications sequences can be improved based on focus on patterns where employees can be notified of required actions based on real-time needs: alert cashiers when to switch turns, customer-facing personnel on where help is needed, etc. The time has come for human resource managers and their departments to being strategic data managers, guiding and managing the information flow to ensure that employees have access to the right data at the right time, and that disturbance is minimal. The role human resources will now be data driven, technology and new interaction models, it is shifting from managing bureaucracy to managing business assets and talent management, and information is the key resource inside this New Age HR. The influence of self-charging technology in the way HR operates impact on work patterns and and it changes the workplace environment and the growing design and planning of a new office, is power pack based on access to electricity and electric cables. The disposition of desks, meeting rooms and work areas is dependent on the availability of electric plugs. Likewise the future of any human resource team offers room for innovators inside and outside the industry to adapt new developments to create and redesign the workplace and employee experience.

**Objective (ii) : To evaluate and understand the Evolving Trends of HR Technology**

**The dynamic trends in HR Technology: HRM is now moving from Quantity To Quality:**

Employee engagement is now the challenge as well as most interesting contributory part of HR teams, the approaches usually in organisations were asking people to appraise on half yearly basis about what they value and what is being offered, whether that's pay and benefits, work-life balance or the opportunities their work offers them. The evolving tend is creating personalised communications for each participant keeping a very clear scope across on their preferences. The

employees are rather given chance to express what they actually seek from work and how they plan to contribute and are assessed on that than, the traditional method of evaluating periodically after every term. Reducing administrative work of HR function leader and business leaders. The specifics of this role vary widely. HR focused organisations uses tools like above with thrust on decision support system, workforce planning, leadership development and executive coaching. By enlisting the right person, HR improves its credibility across the enterprise, improve working relationships with business leaders, cultivate mutual understanding and gain influence. This enables organisations to translate company-wide talent, business data and external workforce segment data into workable insights that they can use and share with business leaders. Employees desire to maintain a balance between their work and personal lives, is increasing seen as important variable to join an organisation by the people with advent of technology, and this is a challenging HR concern as it may not be always possible.

To make work easy and to avert family conflict can be possible only with flexible working hours. With the advent of rapidly changing technology adequate control on stress and pressure that individual's face is feasible and reasonable work life balance to enjoy personal lives are becoming possible with flexiwork, working offline work from home and as part time professionalsetc. Workers today move very frequently and despite that are able to be in touch with smartphones and tablets to do their work at the office, at home, and while traveling. Mobile applications and services companies are broadening their solutions to address the needs of line-of-business workers in particular roles such as sales, marketing, customer service, and support. The mobility applications is increasing employee responsiveness and decision-making speed, resolves internal issues faster, and increases worker productivity. Social media supports as a public relations tool and allows expression of transparency of their company through posts, blogs and pictures and makes the company easier to relate to for the average consumer. Companies use social media for a wide audience communication anywhere in the world, instantly and at no cost. The world of work is facing fastest of the changes since 30 years and it will continue to change for an augmented reality which will become still uncontrollable and inexhaustible network along with the bandwidth increase. Innovation in the form of smart watch (Apple and Samsung), Fit bits and even the Microsoft Hololen are seen as experiments with

hologram-like technology in the entertainment business and spreads into office life, allowing replicas into virtual business meetings.

**Objective (iii) : To examine from the literature study the evolving eHR practices:**

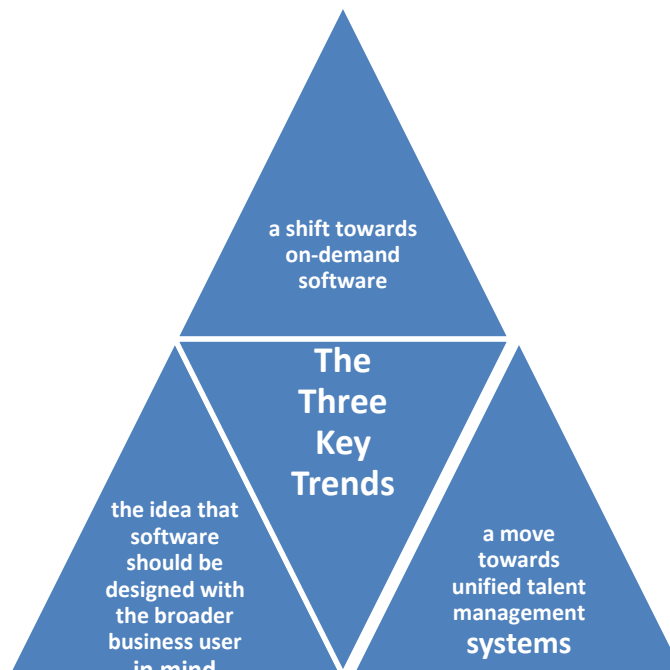
Technology--cell phones, the Internet, and wireless services, is irrevocably changing every facet of life from the home to the workplace with the global economy encapsulates the “e” attached to words like e-commerce, e-business and e-learning and unabatedly eHR. The dynamism in technology oriented workplace visualizes and explores the technological revolution. **The Positive outlook:** Emergence of Virtual Reality Technology into HRM. Futuristic views on technology confirms five to ten years from now, every employed person will carry a voice-activated computer that will connect a vast database of information and as well provide accurate, real-time answers to almost every question, spurring historically high productivity rates. Ray Kurzweil, stated in the book of “The Age of Intelligent Machines”, predicts that within the next ten years, computer screens will be placed directly on the retina, on eyeglasses, or on clothing. Web sites and chat rooms, will become three-dimensional meeting places, rich in detail and accessible at the speed of thought. He also predicts that telephones that can simultaneously translate languages (for example from Japanese to English and back) will be perfected, allowing two different language-speakers to communicate instantly, greatly enhancing global communications. Creation of technology oriented job titles of the future include “chief marketing officer,” “chief knowledge officer” and “business etiquette advisor , will be to create policies and procedures on the use technologies such as e-mail and cell phones. Telecommuting for work/life issues, and with rising real estate costs the corporate will require less office space. In a matter of time human resource professionals will grapple with more than just what is (or will soon be) available in terms of hardware and software.**Increasing Privacy Issues:**Employee access to such technology as e-mail and the Internet raise mutual worker-employer concerns. Who owns an employee’s e-mail? What are the ethical implications for surfing the web at work? What kinds of websites are appropriate to view? Burger King has a corporate policy that allows some personal use of company e-mail and the Internet, providing the employee uses the technology on company time and ensures that it does not interfere with business or job performance. Employees must sign the policy and accessing pornographic or hate sites is prohibited. The survey of more than 300 companies also found that 20 percent of

respondents said they filter sites based on the user's job and 13 percent based on the time of day. There may be good reason for employers to be concerned about employees' use of the Internet and e-mail for personal use. Active Research, Inc., a San Francisco Web-based market research company, reports that "retail clicks"---the number of people logging on to Internet shopping sites---start to gain steam about 9:00 a.m. on weekdays and peak at lunchtime. Gamedealer.com, an Internet games sit, estimates that 65 percent of its orders are placed during the week between 9:00 a.m. and 5:00 p.m. **The Telecommuting Explosion:** Telecommuting reduces real estate costs and employees seek to strike a better balance between their work and home lives. Labour shortages in developed countries will employ skilled workers from all over the world to meet their goals and objectives. The employees need not relocate to corporate headquarters but shall remain in their own countries and work virtually through wireless technologies and videoconferences. For workers who crave a more social atmosphere, shared community work places will be built, allowing telecommuters to rent space as needed. The telecommuting workers has hovered at 8 percent and telecommuting will explode as technology becomes more sophisticated, allowing workers access to the Internet at home as quickly as at the office. The challenges that HR professionals face are workers who have tried to telecommute have returned to the office, saying that they felt disconnected from their colleagues and were losing out on promotions. Despite these challenges, telecommuting is potentially a win-win situation for organizations, offering increased productivity, higher job satisfaction, lower overhead costs, and better retention rates.

**Objective (iv) : To analyze the challenges of Machine Communication and Its impact on HR functions; HRM professionals need to turn into Change Agent:** The key words to keep in mind, according to Wright, Dyer, and the high-tech and human resource leaders they interviewed, are "faster, better, smarter." Technology, according to Scott Pitasky, director of strategic growth for Amazon.com, will change the face of human resources entirely. "We can't do HR the traditional way. We have to blow it up and entirely reinvent the way we do HR here." Technology will require human resource professionals to stop thinking in terms of months and years and start thinking in terms of weeks and days. This will require human resource managers to change their mindsets from being a strategic partner within an organization to being a change agent. According to Wright and Dyer, focus on the higher human resource

functions, knowledge management, strategic redirection, managing cultural change, and developing employees should speed up to keep up with corporate pace. While HR professionals benefit from new software developments, there's clearly the potential that increased automation could lead to some uncertainty about the 'human' element of their job "Talent management was very much seen to be the exclusive preserve of HR in the past, but now it is becoming very much more of a business priority," comments Chris Phillips, vice-president of international marketing at talent management solutions provider Taleo. Denis Barnard, CEO of predicts that the remit of HR professionals will change, and thinks focus will move towards getting in place and maintaining technology to understand and work with on information.

**The Machine Communication: Paradox of communicating;** The technological tools for line managers to control their talent, HR are actually increasing communication. "What you are doing is you are making discussion more informed and fact based and it is likely that you are encouraging more dialogue rather than removing human dialogue from the situation." **The three key trends** emerging in the HR software space at present: **a shift towards on-demand software; a move towards unified talent management systems; and the idea that software should be designed with the broader business user in mind.**



**Figure III: The Three Key Trends in HR: Graphically designed by Prof Dr.C.Karthikeyan**

HR software needs transition from being built and designed for the needs of HR specialists only - mired somewhat in the past by ERP-style systems designed to manage things with a number - to

being focused on broader general users such as line managers and employees within the organisation.” Social media as a catalyst for HRM functions: **Networking in HR today are regularly using Facebook ,LinkedIn external on line recruitment sources company doing it. The modern HR departments run their own social networking sites,** allows their technology to serve up employee profiles or resumes – instead of recreating it in a corporate application.

**Objective (v): To understand the transition of HRM function to HRM technology:**

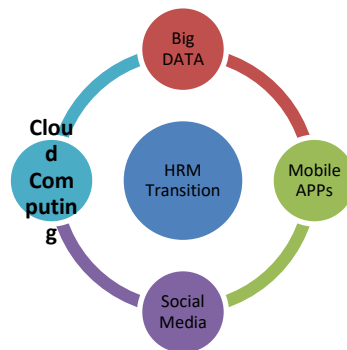
Redefining Human Resource Management with HRM Technology.

The technology 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.

- **Big Data: The companies are** transforming HR platforms, and digitize the information to have a deeper meaning of its function and allows HR professionals to get a fact-based view of the current workforce, and identify emerging trends as well. Big data 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 Computing 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.



**Figure IV: The transition Process (uncontrollable) from HR process to HRM Technology: Concept Designed by Prof Dr.C.Karthikeyan**



Developments in Software as a Service Applications for Advanced HR Practices: LinkedIn Recruiting Service: LinkedIn is termed as a professionals network and helps recruiting departments by providing the resources required to find and recruit candidates. In this way, a recruiter can easily find candidates with relevant profiles. Lucidchart: Lucidchart is a SaaS application that allows users to draw flowcharts and diagrams. It is mainly used to create organizational chart and mind-mapping. Google Docs: Google Docs allows you to share information easily across businesses. Google Docs help you streamline the process and make data collection much easier. One area where Google Docs play a key role in HR is performance evaluation. Google Forms: Google Forms allows HR departments to send every employee a question and response form with questions. When employees submit their responses, the results will be saved in Google Doc template. The Google doc will be emailed to the respective manager for further review. In this way, a performance review process can be made more efficient and paperless. This is just a case, and there are thousands of other options where Google Docs can streamline HR processes. Innovative Process in HRM technologies : Bring Your Own Technology (BYOT): Companies have started to innovate their products work smarter. BYOT is a new trend today, and companies are improving the concept of BYOT with policies and guidelines for protecting confidential data and nothing is stolen including the technology. Wearable Technology: International giants such as Google, Apple, and Microsoft have started introducing wearable technology in all the devices. It improves time management by keeping employees connected always. Infact, wearable technologies including increased productivity, benefit incentives and security enhance operational efficiencies. Implications of Technological Disruption: Digital drives many significant implications for both business and human resource department. Take a look at few advantages: **For business:**HR department takes more strategic role, Employees will become the decision makers, Eliminate silos, bridge gaps, Talent management process becomes better, Talent practices will play a key role. **For Human resource:** Almost every aspect of the HR will be streamlined, Collaboration and new organization structure will be evolved, HR can analyze employee data, and create customized talent offerings, Evaluating external technologies and making businesses more strategic, 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.

### **Conclusions;**

The HRM decision always runs with Biases and Decisions, with critical factors influencing our decision making is our own biases. The number of biases are especially troublesome when making HCM decisions, including the following: Confirmation bias: This bias causes us to ignore evidence that undermines a preconceived idea. For instance, we may be convinced that someone is the person for the job even after much evidence to the contrary. Anchoring: We have a tendency to focus on data points that we consider to be especially telling. For instance, when making hiring decisions, college grade point average may weigh heavily, even though it has not been shown to be a good predictor of job performance. Anchoring refers to our tendency to weigh this one data point too greatly when making decisions. Loss aversion: This bias refers to our tendency to weigh potential losses greater than potential gains. We come by this bias honestly; there is an evolutionary advantage to focus on potential threats (hungry predators) rather than focusing on long term planning. **Advent of Advanced Analytics for HR Management Decisions:** Advanced Analytics spares no one and never spares even those in authority. It is detrimental to HR people who propogate their own agenda rather than dealing with actual facts. The unique advantage of advanced analytics is that it is entirely immune to egos, group think, and advancing an argument, it delivers honestly. The challenge arises when the focus shifts from getting to the truth of the matter to winning the argument instead. Those skilled at winning arguments and“cherry picking” of the facts are now a farce and now only the sophisticated analytical models play a critical role. Philip Tetlock convincingly advises that we should consider expert advice with caution. **The Decision Making Rationality Changes :** The normative approach holds, for example, that we would be better served by making decisions based on rationality. • Descriptive: The descriptive level describes what we actually observe

about how decisions are made. • Prescriptive: Prescriptive recommendations focus on improving decision making. The advanced analysis of structured and content (such as text, images, video, voice) data using sophisticated quantitative methods (such as statistics, descriptive and predictive data mining, simulation, and optimization) to produce insights that traditional approaches to BI such as query and reporting are unlikely to discover. It is frequently applied to make decisions, solve business problems and identify opportunities by providing better forecasts, causal understanding, pattern identification, process and resource optimization, and assisting with scenario planning process. The challenge is that although substantial gains wait, very few firms actually utilize advanced analytics. Only 13% of organizations utilize predictive analytics, and only 3% use prescriptive analytics, such as optimization and simulation. **Advanced Analytics to Predicting and Prescribing Optimal Course of Action:** All Pervasive, advanced analytics is the need of the hour to gain competitive advantage in this highly competitive world. The data volume explosion, variety ,velocity, high-value advanced analytic insights are embedding collaboration and social capabilities in advanced analytic applications. This decision making will be of higher quality and more transparent with ever-increasing need for data scientists for statistics, computer science, and data modeling and analysis. The optimal HR decisions can be made when these skills are used to assist with the full spectrum of HR tools. Advanced analytics aid in establishing causation, which is generally impacts the bottom line and new compensation approach increase employee productivity, reduce employee turnover, and ultimately impact sales and profitability. It can be used to justify expenditures but also to make determinations about what policy, practice, or intervention is advantageous to use in the future. Advanced analytics are in two parts. Part one attempts to predict what will occur. this requires a broad understanding of how individuals and groups will react. Part two, and the primary focus is about optimization. Technology aided recommendation. For example, who is the best C-suite candidate? How shall we compensate people? And so on. Use of techniques to make predictions regarding future outcomes and establishing causal relationships.

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