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Abstract

Role of Technology in Managing HR

Rapid changes in technology have affected businesses in many ways, due to globalization and organizational adjustments to managing workforce need and retention of talented employees, human resources has to adapt swiftly. If HR needs to continue to play a critical role in helping businesses anticipate and manage organizational change, it must have technology at its core, to implement his functional alignment with organizational objectives. Human resources management is thus among those professional occupation segment 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. Some of them are employment application creation, employee benefits enrollments and training using e-learning based resources (Mathis and Jackson, 2010). This study emphasizes on the importance, use and adaption of organizations to technology in streamlining Human Resource functions in the organizations.

Key Words: Human resources, technology, functions, organizations.

Introduction:

HR technology has evolved from paper and pencil to PCs to electronic databases to being integrated with company-wide enterprise systems. Web-based technology has been an important development in enabling HR to reduce transactional activities and increase customer and strategic services. Human resources information systems (HRIS) can be defined as integrated systems used to gather, store, and analyze information regarding an organization's human resources. Using

HRIS technology can help HR automate and simplify tasks, reduce administration and record keeping, and provide management with HR-related information when required. These systems provide a repository for information/data to be stored and maintained, and they possess varying degrees of reporting capability. However, for the data to be useful, they need to be transformed into information that is meaningful to managers. This is the challenge facing HR departments today and what will ultimately determine whether HR is able to deliver strategic HR services.

HRIS is the composite of databases, computer applications, and hardware and software necessary to collect, record, store, manage, deliver, manipulate, and present data for human resources. It is important to note that the term "systems" does not just refer to hardware and software. Systems also include the people, policies, procedures, and data required to manage the HR function. In reality, computer technology is not the key to being successful at managing human resource information, but what it does do well is provide a powerful tool for "operationalizing" the information—making it easier to obtain and disseminate and ensuring that it is specific to the organization's HR policies and practices. A sound HRIS must allow for the assimilation and integration of HR policies and procedures with an organization's computer hardware and its software applications. For example, a simple business rule (e.g., promotions are not to exceed 8 percent of salary) could easily be programmed into the system, and errors could be flagged when they occur.

Information technology comes to the aid of the HR managers who are planning to manage their employees' performance. Right from hiring to induction, training, performance management and retention at every stage Information technology can be a big aid at helping HR managers understand the needs of their employees and provide them with the best.

Take the example of Google. However, despite this being the era of machines, AI, Data and analytics, the importance of human resources has not declined. Skilled human resources are still highly in demand. It is because things will not run by themselves and businesses will always need

people to run them. The best players value their people and instead of using them or abusing them work to nurture talent and grow their skills.

Literature Review:

Studies have been made and many books have been written regarding the role of IT on Human Resource Management. The use of information technology in HR has grown considerably in recent years. A review of literature reveals that: The role of IT in HRM can be traced back in the last decade of 20th century.

Technological changes are producing changes in the nature of jobs and work. Technological changes including fax machines, information technology and personal computers have allowed companies to relocate operations to locations with lower wages. An enormous change from manufacturing jobs to service jobs is taking place in the world. The percentage of work force in the field of producing and delivering services is increasing. The production is limited now to certain types of industries such as heavy industries and food industries and most of the industries will be in such service industries as fast food, retailing, consulting, teaching and legal work. These jobs, in turn, will demand new types of workers and new human resources management methods to manage them (SHRM, 2014).

According to DeSanctis (1986), HRIS was first defined as "a specialized information system within traditional functional areas of the organization, designed to support the planning, administration, decision-making, and control activities of human resource management". Years later, Haines and Petit (1997) considered HRIS as a system applied within an organization to obtain, store, manage, analyze, search and distribute human resource information.

Ruel et al. (2008) have explored that the term e-HRM was first used in the late 1990's when e-commerce was sweeping the business world and e-HRM is internal application of e-business techniques. It helps the management in more effective and efficient flow of information and method of doing HRM. Organizations could manage an increasing number of HRM processes in an effective manner with the improved information technology, thereby contributing to the availability of information and knowledge. This in turn helped HRM professionals to play a strategic role in attaining improved competitive advantage.

Attracting, retaining, and motivating employees, meeting the demands for a more strategic HR function, and managing the "human element" of technological change in the future has been enabled by advancements in IT to meet the challenges of HRM (Ashbaugh and Miranda, 2002).

HRM can meet the challenge of simultaneously becoming more strategic, flexible, cost-efficient, and customer-oriented by leveraging information technology (Snell, Stueber, and Lepak, 2002). Adewoye, 2012 in his paper "The Impact of Information Technology (IT) on Human Resource Management (HRM): Empirical evidence from Nigeria Banking Sector - Case Study of Selected Banks from Lagos State and Oyo State in South-West Nigeria" has mentioned that the interaction and intersection between IT and HRM lead to the emergence of HRMS. It merged all HRM

activities and processes with the information technology field while the programming of data processing systems evolved into standardized routines and packages of enterprise resource planning software.

Research Methodology

Secondary data has been used for the present study. The secondary data has been collected from extensive desk research through library, different published materials and the world-wide web. The study has been made to examine the IT tools used for HR Planning, Recruitment, training, use of technology and softwares used for HR.

Objectives of the Study:

The study is about the use of technology in HR functional operations.

Significance of the Study:

The study is of great significance to the business organizations as it studies the importance of technological tools applied by HR professionals, the changing role of HR and likely impact of technology on HR.

Findings of application of Technology in HR functions:

The main components of HRIS systems are employee administration, recruitment, time and attendance, training and development, pension administration, employment equity, performance evaluation, compensation and benefits administration, organizational management, health and safety, labour relations, and payroll interface.

To choose an HRIS, organizations engage in a three-step process.

The first step is the adoption phase, whereby organizations carry out a needs analysis to determine requirements.

The second step is the implementation phase, where project teams are created, the software is tested, and privacy and security concerns are addressed.

The third step is the institutionalization phase, where training and change management activities are highlighted.

The Human Resource Information Systems (HRIS) provide overall:

a) Management of all employee information.

b) Reporting and analysis of employee information.

c) Company-related documents such as employee hand book, emergency evacuation procedures and safety guidelines.

d) Benefits administration including enrollment, status changes and personal information updating.

e) Complete integration with payroll and other company financial software and accounting systems.

f) Application tracking and resume management (Sharma, 2012).

Hiring Through Technology:

Information technology starts playing the role of the saviour right from the beginning when organizations are going for hiring. From posting jobs to analysing applications and everything including tests and screening, information technology can help HR managers reduce their workload. Internet is enabling performance worldwide and a very large part of the world's business goes on online. It is easier to reach wider pool of talent using online tools. There are so many tools and websites that an HR manager can use to find and select the right applicants for a job. The hiring websites can be a major help when companies are trying to find the right candidate. Linked in is such a website where they can easily find suitable people for a job without any major expenditure. HR managers would not like to waste their time on people who do not match their expectations or the requirements of the job. So, these websites like Linked In and Monster can help organizations to target only the right people. In this way, organizations can make hiring process more targeted and effective.

Training through Technology

Training the new employees can be a major task and while some of them may have the all the needed skills and experience, they too may need some training to adjust in the new environment. It can be easier if organisations use web based tools for training. These tools make training easier in several ways. Lessons and training material can be easily delivered over the web and by using IT tools and software. Software like powerpoint and excel make it easy to deliver presentations and analyse data. Line managers and HR managers can use these tools to make engaging presentations and to train their new employees. Managers can also upload training material online that the new employees can use for self training. Email based and web based training material can help the employees learn faster. This will make training process effective and the employees will get ready faster for their jobs. It is also why IT skills have become a must have for the HR managers.

Performance Management and Technology

Performance assessment and managing feedback, Information technology can be used to set performance standards and to evaluate employee performance. It becomes easier to compare the performance of the employees against the set standards, from getting feedback from the line managers and colleagues to assessing all the gathered data and checking it against the metrics, it all gets simple when by using the right tools. There are many software available in the market to help evaluate performance management. Performance management is not just the task of evaluating employees' performance and telling them where they are missing but also of grooming them for better performance. Human resources development is also an important part of performance management.

Various software using HRIS (Human Resource Information System) like ClearCompany, Halogen Performance, PerformancePro, High Ground, Lattice, and Big Data Analytics have made performance management of employees more accurate and helped in giving suitable rewards to the personnel. This has resulted in increased employee satisfaction and loyalty towards the work and organization.

Payroll and compensation management:

Perrin (2001) pointed out that a number of companies have been moving their HRM activities to the web in order to improve HR efficiency, including the pay and benefits service, such as record keeping, salary calculation, etc. Organizations can streamline the data on wages, salaries and other benefits to online payroll and compensation application, through which salary calculations, statistics, distribution and queries can be achieved. Web technology provides employees a real-time self-check function to understand monthly and historically details of pay, benefits (Payton, 2003).

The HRIS is made up of a number of subsystems, and data can be stored, maintained, and generated from the system. These data can be used to create information that will serve different purposes for many different stakeholders. The HRIS can do the following:

1. create and maintain employee records

2. ensure legal compliance

3. enable managers to forecast and plan future HR requirements

4. provide information to managers and HR so they can manage knowledge and manage talent (career and succession planning)

5. provide information to enable HR plans and activities to align more effectively with the organization's strategic plan

6. assist managers with decision making by providing relevant data so they can make more effective and informed decisions.

Usage of Cloud Data Storage

The introduction and increased use of cloud storage services have indeed changed many aspects of the corporate world including HR processes. Considering the huge volume of data HR teams handles, data storage has always been a concern. The cloud has replaced the traditional use of bulky hard drives and high piles of paperwork. It is now easier for HR to manage data better and more securely.

The cloud provides a medium where important information and data can be securely stored for very long periods. A significant advantage of this system is that stored information can be accessed through the internet via automated processes. Now it is easier to have access to tax documentation, employee information very quickly from the secure remote locations they have been stored.

The cloud storage mediums also complement the use of Big Data. The value of HR has been enhanced by accessing important information which provides useful insight into company operations. We expect that in the coming years, there will be modifications made to the cloud-based systems and Big Data to accommodate demands from HR for more advanced interpretation and access to execute broader applications.

Use of HR Analytics :

What HR analytics does is correlate business data and people data with the use of technology, which can help establish important connections later on. The key aspect of HR analytics is to conclusively show the impact the HR department has on the organization as a whole. Establishing a cause-and-effect relationship between what HR does and business outcomes and then creating strategies based on that information , is what HR analytics is all about.

Real world case studies Starbucks, Limited Brands, and Best Buy, can precisely identify the value of a 0.1% increase in employee engagement among employees at a particular store. At Best Buy, for example, that value is more than $100,000 in the store's annual operating income. Many companies favor job candidates with stellar academic records from prestigious schools but AT&T and Google have established through quantitative analysis that a demonstrated ability to take initiative is a far better predictor of high performance on the job. Employee attrition can be less of a problem when managers see it coming. Sprint has identified the factors that best foretell which employees will leave after a relatively short time. In 3 weeks Oracle was able to predict which top performers were predicted to leave the organization and why, this information is now driving global policy changes in retaining key performers and has provided the approved business case to expand the scope to predicting high performer flight .

Benefits of the workforce automated solution

Currently, we have access to unique platforms such as Ximble that have a wide range of features such as:

• A personalized software based organizer which can be used to access locations, availability, and enhance the labor costs in line with the budget.

• A universal dashboard platform which facilitates easy scheduling and roster management through real-time logins and accurate updates indicating availability.

• Convenient chat portals to facilitate bi-directional communication with the employees.

• The use of mobile time clocking and time clock applications or GPS tags/Geo fence to facilitate monitoring of employees via text messages or the internet.

• The use of timesheet to run payroll quickly and effectively.

• Effective monitoring of employee hours, absenteeism, punctuality, and lateness to work.

Conclusions:

Today's HR professionals must be technically savvy and be able to speak the language of business. They must understand the business environment and the major drivers relating to workforce productivity as determined by management. Such techniques as benchmarking and the use of balanced scorecards will be increasingly important for HR. These tools will provide HR with feedback as to whether they are truly listening to the organization and providing customer focused services. Finally, how HR utilizes technology to evaluate its own effectiveness and how HR decides to leverage emerging technologies to drive productivity and the management of human capital will make the difference between a mediocre HR department and one that is truly a business partner.

Despite the potential impact, many companies still haven't made the switch to modern HR systems , but it's only a matter of time. As we barrel into the future of technology in the workplace, HR has a lot to look forward to; cloud computing, easier storage, better insights, and greater transparency are only the beginning. Because of efficiencies, cost savings, employee expectations, and the power of Big Data for HR and organizations as a whole technology is just too business critical ignore.

Thus people are vital to the success of any company. There's no doubt that any business which can attract the right competencies, manage talent effectively, utilize capacity efficiently, and retain employees is setting itself up for long-term success. HR departments with the use of technology and software, are generating more data than ever before but at the same time they often struggle

to turn their data into valuable insights thus use of analytics makes them easier to understand the performance capability of employees.

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