# A STUDY ON IMPLICATIONS OF DIGITAL REVOLUTION IN THE FIELD OF HR

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### ABSTRACT

Liberalization and industrialization have paved an increasing pressure on organizations to implement digitalization. The response to liberalization has created opportunities for technology upgrading and sophistication, resource mobilization from new sources, highly competitive input/output market, high growth and buoyant environment. 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. The Digital Revolution refers to the advancement of technology from analog electronic and mechanical devices to the digital technology available today. The era started to during the 1980s and is ongoing. The Digital Revolution also marks the beginning of the Information Era.

Key words: Digital Revolution, HRIS, Technology, HR Transformation.

#### **INTRODUCTION**

Liberalization and industrialization have paved an increasing pressure on organizations to implement digitalization. The response to liberalization has created opportunities for technology upgrading and sophistication, resource mobilization from new sources, highly competitive input/output market, high growth and buoyant environment. 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.

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We have entered a new Digital World of Work, a world which will dramatically change the way we manage. Digital technologies have radically changed our lives, our societies and our experiences at work. These changes, which impact organizations in every country, are coupled with a new workforce which is increasingly diverse (in gender, age, culture and nationality), demanding and mobile. The result: the way we manage, lead, and organize ourselves is undergoing a radical change.

#### LITERATURE REVIEW

Camilla Bengtsson (2017) studied how digitalization has implications for HR managers beyond merely reducing and automating administrative tasks. Digitalization demands HRM to evolve, as it requires new HR competencies, new employment forms and agile HR processes. The objective of this thesis was to delve deeper into human resource management in a digital era. More specifically, the aim was to get a deeper understanding of how digitalization has implications for HR managers.

Dr. Betchoo Nirmal Kumar (2017) this research paper analysed the importance of digital revolution in the Mauritian public service and its impact on relating HR factors like HRD, talent and performance management. science these dependent variables affect the human resource process in todayorganizations, it is seen that the independent variable-digital transformation has a positive effect on the variable measured.

Sweta Jain (2017) found that HR should inculcate required digital skills among employees at all levels of the organization to fully achieve the organizational goals of high productivity and employee satisfaction. The pace of technological change is so rapid that we have to make an incremental change in our HR processes and functions at a much faster rate so as to achieve business excellence.

# Research Design

### Significance of the Study

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.

## Objectives

- To study and impact of IT on HRM
- To know the HR roles in digital era
- To know the Technologies affecting HRM

### Scope of the Study

The study covers how Digital Revolution impact on HR. It also shows Digitalization demands HRM to evolve, as it requires new HR competencies, new employment forms and agile HR processes. The objective of this paperto study and impact of IT on HRM. To know the HR roles in the digital era. To know the Technologies affecting HRM.

### Methodology

This is an "Exploratory research" in which information' is collected from the different sources to find out the Implications of Digital Revolution in the field of HR. This research is based on secondary sources of data.

### Impact of IT on HRM

Technology has played a vital role in transforming HR. shows how HR has been transformed due to the impact of technology. Most HR activities that were routine have now become automated. Technology has helped to customize HR according to the needs of the employees.

#### **Technologies Affecting HRM**

New technologies have made a majority of HR functions simpler and more effective. Jobs that were previously handled by the human resource executives have been taken over by systems and equipment specifically designed for the job. For example, scanners are now being used to store employee data as a scanned image in the computers. Other technologies that have changed the way activities related to human resources are performed are:

- 1) Interactive Voice Technology (IVT)
- 2) CD-ROM and laser Disc Technology
- 3) Networks and client server Technology
- 4) Internet
- 5) World Wide Web
- 6) Relational Database Management Systems
- 7) Imaging Technology
- 8) groupware

## Interactive Voice Technology

Also known as interactive voice response systems, it is installed it is installed primarily to provide employees relevant information pertaining to retirement benefits and other general information. The Voice response systems inbuilt personal computer answers employee queries when they make a call to the company. Interactive Voice Response (IVR), is a technology that helps employees access information regarding account balances, benefit plans and retirement plans. An IVR application provides pre-recorded voice responses for specific information needed by the employees. Using Computer Technology Integration (CTI), IVRapplications give messages to an employee who can view data related to the caller at a display screen. IVRcombines the power of the Internet, wired and wireless techno and natural language voice command to promote anytime, anywhere communication between an enterprise and its customers, employees, suppliers, partners, and investors.

## **CD-ROM and Laser Disc Technologies**

Compact Disk Read Only Memory (CD-ROMs), are synthetic discs which can store data in the form of textgraphics, videos, etc, training is one area resources which have benefited immensely from the CD-ROM technology. Training modules in the form of (computer-based Testing), CDs can be provided to employees for education, training and development.

#### **Network and Client Server Technology**

In many companies, data is stored in computers on their fixed memory disks called hard disks. Stand-alone systems are of little use as there cannot be any exchange of information between systems. This problem has been solved by the developments of network and client server technology. Network systems and client server technology have made information exchange within a company and outside possible.

#### Internet

The internet is a network of networks. A large number of computers are interconnected for the purpose of communicating and sharing data. The internet has not just revolutionized communication but it has also led to the development of e-business. (Doing business over the Internet). It has imparted an element of virtuality to the whole process of doing and conducting business. The Internet is the driving force behind organizations decisions to move towards virtual HR. HR stores, HR service centers, etc. are all internet dependent.

#### World Wide Web

The World Wide Web is a major source of information on the Internet. It consists of a number of websites hosted by web servers all over the world. The websites contain web pages which store texts, images, videos, etc. the websites can be accessed using a web address or a universal resource locator. We will learn more about the effect of World Wide Web on HR.

### **Relational Database Management System (RDBMS)**

Data storage has been a major problem for organizations. Before RDBMS, files and folders were difficult to manage. Relational database use tables for storing a variety of information. These tables collectively constitute database files. It is easy to store and retrieve data in an RDBMS. Data redundancy is also minimized. Examples the way data is stored in an RDBMS. The figure shows that employee data is stored in two database files called personal information and salary file. In RDBMS, an element within one file (personal information file) can be linked with another element in another file (salary information file), in this case, since employee ID is common to the two files, data from both personal information file and salary file are linked with the employee ID.

#### **Imaging Technology**

This technology helps in scanning documents and storing them electronically in the form of an image. These images can be stored and retrieved from a computer. The Optical scanner is a device which reads the data using a high-intensity light beam(LASER) in a research conducted by human-resource. Org, an HR portal, resume scanning was reported as a HR best practice. For ex: the use of optical scanners for scanning documents has rendered the data entry job obsolete and reduced the amount of paperwork.

#### Groupware

Groupware is an application software that help employees in an organization to communicate and share information. A data file saved using a groupware can be used and updated by different people at the different place, simultaneously. Lotus notes from IBM is an example of groupware software which many companies use for internal communication and information sharing, Monsanto, the leader in agro-based products uses Lotus notes to helps its salespersons communicate over the companies intranet.

#### HUMAN RESOURCE INNOVATIONS

Information technology has made a major impact on the way human resource function is viewed and managed in today's businesses. The impact of technology has led to the development of various HR innovations. These emerging customized innovations have madegreat difference to the way human resources services are administered. Some of these HR innovations are:

- Human Resource Information Systems(HRIS)
- HR web-based applications
- HR service centers
- Employee self-service system and
- HR Data-Marts

#### Human Resource Information Systems (HRIS)

There, are three levels of decision-making in an organization-strategic, tactical and operational. The information needs of the manager depend on the level at which they work. Therefore information systems are also categorized into three types.

Science human resource activities have become complex they require a professional approach. This is where Human Resource Information System(HRIS), has come to the resource of hr professionals. HRIS is a computer-based system which helps managers take decisions pertaining to various aspects of human resource management.

HRIS can be divided into three types:

- Operational HRIS
- Tactical HRIS
- Strategic HRIS

# **Operational HRIS**

Operational HR information systems are also called transaction processing systems. Operational HRIS is designed to provide information that is frequently used by the human resource department. Some examples of operational human resource information systems within the preview of HR are:

- Position control system
- Employee information system(EIS)
- Performance management system
- Government reporting system
- Training systems

# **Position Control System**

Performance management system helps the HR manager during performance appraisal by providing information system (EIS), maintain employee profiles, which contains both personal as well as professional information. EIS also contains details of the employee's previous job experience, interests, skills and proficiencies.

## Performance Management System

Performance management system helps the HR manager during performance appraisal by providing information pertaining to the employee's performance. This information provides insights into the employee's productivity in the current job and inputs needed to perform better. The manager can use this information to make the decision regarding pay hikes, promotion and transfer.

## **Government Reporting System**

Organization need to provide the Government information pertaining to employee salaries, benefits, taxes, etc. they also need to keep details of the rules and regulations regarding the employment and termination of the employee's with the help of Government reporting systems.

## **Applicant Selection and Placement System**

The application selection and placement system contain information relating to selection process such as resume scanning, group discussions, preliminary and final interview, etc.

## **Training System**

Training systems help HR managers identify the training needs of employees, provide them with required training and monitor their performance. Organizations are beginning to rely on computer-based training for the employees which is more effective and cheaper than conventional methods of training. It is also simple and can be customized.

## TACTICAL HRIS

The huge amount of money spent on human resource in the form os salaries, perks, bonuses is the financial implication for management of human resources in an organization. On the other hand, employees use their skills and knowledge for achieving organizational goals and targets. Hence, the HR manager has the dual responsibility of reducing HR costs and managing human capital. The tactical human resource information system helps the manager reduce the hiring, maintaining costs of employees and take decisions regarding investment in employee training and development. The components of tactical human resource information systems are:

- Job analysis and design system
- Compensation and benefits system
- Succession planning system

## Job Analysis and Design System

The job analysis and design system is an information system that provides the information regarding the job description and job specification. Job description details the various activities that constitute the job and job specification describes the type of person needed by the job i.e., the person's qualification, skills and experience.

#### **Compensation and Benefits System**

This system provides information pertaining to salaries and benefits. Organizations have different salary systems and benefit plans such as health plans, insurance plane, etc. as the pay is closely related to the performance of the employee, it is important to maintain all the relevant data in a detailed and structured format.

#### **Succession Planning System**

The succession planning system is a database of the accession plans of all the employees of an organization. Succession plans are a source of motivation for employees as they can see they will progress in the organization over a period of time.

#### CONCLUSION

Digital Revolution technology has affected almost all HR activities. It has automated the routine HR activities and reduced the burden on the HR departments. Human Resource departments can now have a more strategic role to lay in the growth of the company. Various technological innovations like Interactive Voice technology, CD-ROM and Laser Disc technology, networks, client server technology, Internet, World Wide Web, Relational Database Management System, Imaging technology, groupware, etc. have changed the face of HRM.

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