



**A LITERATURE REVIEW ON THE IMPACT OF INFORMATION
TECHNOLOGY TO THE ROLE OF HUMAN RESOURCE AS
CHANGE AGENT**

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ABSTRACT

The aim of this literature review is to compile, synthesize and analyze the creation of The Impact of Information Technology to the Role of Human Resource as Change Agent. The Internet has changed our lives and how we interact with others, how we work, how we learn and spend free time, in short human culture has changed. Information technology (IT) as a collection of schemes offered is accessible via the hardware process to people and company and plays a major role in human resource development. It was also explained in previous research, the Information Technology (IT) position has a direct impact on HRM itself. The study uses Human Resource's long-established 'Harvard' model, providing a more contextualized view of Human Resource a broader stakeholder perspective and a broader and longer-term approach to outcomes. The application of these concepts to the IT and Human Resource literature allows one to understand both the advantages and disadvantages of the intersection between Human Resource and technology for various stakeholders. Show that rapid technological advances provide a fresh, smart, digital background for Human Resource practices with better quality Human Resource data and allow all stakeholders to have a clear ownership of Human Resource. In order for companies to retain their market place or gain competitive advantage they must continuously adjust. Continuing need for reform is foreseen by increasing global competition and the pace of technological advancement. A company may need a change agent's services to assist in its positive change efforts. This research explores the role of Human Resource as a change agent in different fields, such as organizational change management, HR change agent skills and competencies.

Keywords : *Information Technology, Human Resource, Change Agent*

TABLE OF CONTENT

ABSTRACT	i
TABLE OF CONTENT	ii
CHAPTER I. INTRODUCTION.....	1
1.1. Purpose of the Study and Review Questions.....	2
1.2. Methods of Literature Review	2
CHAPTER II. LITERATURE REVIEW.....	4
2.1. The Concept of Information Technology.....	4
2.2. Organizational Change Management.....	4
2.3. New Technology in Human Resource Management	5
2.4. New Technology and HRM.....	6
2.5. Definition Change Agent.....	6
CHAPTER III. ANALYSIS AND DISCUSSION	7
3.1. Role of Information Technology (IT) on Human Resource Function	7
3.2. Role of Information Technology on Human Resource Information System (Data Storage).....	7
3.3. Change Agent Role	7
CHAPTER IV. CONCLUSION	10
REFERENCES	iii

CHAPTER I. INTRODUCTION

This literature review is dedicated to enrich the discussions of the effects information technology to the role of human resource as change agent. According study by Dianna stone (2011), Information Technology has widespread effects on almost every aspect of our society from the invention of the telegraph to the creation of smartphones, it has changed the way we live our lives and do our jobs. For example, technology has altered the way we purchase products, communicate with others, receive health care services, manage our finances, and educate our students. This study is also strengthened from the research by Ashutosh Jani; Ashutosh Muduli (2016), global organizations made the unexpected, unpersuaded business challenges. Highly competitive environment demands that organizations should be ready to respond to change rapidly in order to remain in healthy business and meeting the expectations of all stakeholders. The capability of organization to respond to change has many factors where one of the key important factor is ability of employees to meet the challenge. It is an important aspect of Human Resources department to work towards developing and enhancing the capability of human resources in the organization.

According study by Jyoti Rohiila (2015), the process of growth and development without human involvement is meaningless because human is the target and also means of achieving progress. The bases of human resources development are the presence of new and experimental information and the information is a rational process called information technology (IT) that can help to create and build up new strength in human resources. One of the main factors affecting company and worker is changing according to new technology. Technology and HRM have a wide range of impact upon each other and therefore human resource professional should be eligible to adopt technologies that allow the re-engineering of the HR action, be prepared to maintain organizationally and work project changes caused by technology, and be able to maintain a proper managerial climate for innovative and knowledge-based organizations.

According Study by Tanya Bondarouka & Chris Brewster (2015), learning from running an HRM course at Harvard and offered what is frequently called the Harvard map of the territory a view of HRM as being moulded by its different contexts, defined (sometimes differently) by its varied stakeholders, and having long-term outcomes that impact all of the potential stakeholders. In information technology (hereinafter referred to as technology) we start from observations that technologies have changed (through enabling and/or constraining)

HRM practices by introducing for example, e-recruitment, e-training, or e-competence management.

Organizations that want to go global are likely to seek Human Resource Development (HRD) professionals for support and advice. Employees are the implementers/drivers of any desired change in an organization and should therefore be involved in the planning for change. The responsibility of Human Resource (HR) professionals to protect the employees against the side effects of inevitable changes and to ease the effect of changes in the organizations change agents. Vital role of maximizing organization's human resource is played by the HR practitioners as it is critical for accomplishing key organizational process through the support of employee behaviour and accordingly proceed to have a successful organization (Nel, Werner, Poisat, Sono, Du Plessis, & Nqalo; Stone; Rennie; Wright & Boswell, 2011). HR Practitioners have been assigned many roles such as specialists in service provision, provision of guidance and advice, business partner, a strategist as well as change agent (Armstrong 2006). The change agent comes in handy because they facilitates this change through the personnel. They are able to gain commitment from the employees, to facilitate change by having a potential impact on employees in all major projects.

1.1. Purpose of the Study and Review Questions

The literature review is written to contribute the impact of Information Technology to the Role of Human Resource developed based on two fundamental inquiries, as mentioned below:

1. What is the Influences Information technology (IT) to the HRM Function?
2. What is role of Human Resource as Change Agent?

1.2. Methods of Literature Review

To answer two fundamental inquiries, this article will conduct an integrative literature review on the articles, journals, and books related to Information Technology in Human Resource. To have a more extensive understanding about the development on research concerning this topic, this literature will include publications from year 2000 until 2020. The review will utilize Google Database and Google Scholars, Research Gate, Ijariit, Science Publishing Group, BMC Health Service Research, Routledge, Journal of Economic. The

keyword used for the search criteria is *Information Technology, Role Human Resource and Change Agent*. The searching process focuses on publications within the scope of Human Resource, Management and Technology. In total, 12 articles were reviewed and synthesized.

CHAPTER II. LITERATURE REVIEW

2.1. The Concept of Information Technology

According to study by Jyoti Rohilla (2015), technology is a set of processes, techniques, method, equipment, tool, machinery and skills that a product or services are offered by them. Technology is the application of science to industry, using regular and directional practices and research. Information technology also a set of the instrument which is created with the goal of renovative information systems and disadvantage of information technology are usually caused by the undue use of this system, incorrect and incomplete design of information systems. Undue use of the users (designers and IT engineers) of these systems mostly creates problems and disorders. Information technology is more a type of idea, strategy, thought and an instrument with innovation in human areas. Implementation, growth, and protection of information system are as one of the most necessary business evaluation in IT orientation and managers and company are faced with new challenges in this area. Information technology is a set of intellectual and cultural system and it can be called a culture of information construction. Without creating a culture of information construction, therefore, what is information in IT is an information-oriented consideration. Information technology formed from combination and connection of series of useful produced schemes and supercomputers, computers, cables and wires. Information technology means the system of origination and collection of information using society and organization. IT made it feasible to have reached to information from anywhere by making computer programs cheaper, easier and smaller.

2.2. Organizational Change Management

According to study by Teresia Njoki Muchira; Kellen Kiambati (2015) organizational change management as the transformation and modification of whole organizations, or parts, in an effort to maintain or improve upon the effectiveness in productivity, revenue, market competitiveness and internal alignment. Change management is an approach to transitioning individuals, teams and organizations to a desired future state and the utilization of basic structures and tools to control any organizational change effort. It is an organizational process aimed at helping employees to accept and embrace changes in their current business

environment as they are the lifeblood of a company. The environment of the 21st century is turbulent and uncertain and organizations which manage change effectively by continuously adapting their systems, strategies, cultures, products and bureaucracies are branded as masters of renewal. Century is moving forward at a rapid pace; people are becoming more technologically advanced, have higher expectations, open to globalization and growing more innovative with each passing day.

Change as value adding companies due to their consistently emerging needs to keep up with customer's needs. Business should continuously reframe their strategies, corporate culture, technologies, training and deployment and their leadership or leadership styles to remain relevant. HR can play a most important part in change as Human Resource Management strategies are concerned with the future, the unknown, thinking of and learning how to do things differently, performing things differently and handling its implementation. Organizations that have integrated their human resource management policies with the strategies and the strategic change process, training, and employee relations manage their change successfully (Armstrong, 2006)

2.3. New Technology in Human Resource Management

According study by Tanya Bondarouk & Chris Brewster (2016), the integration of Information Technologies and HRM has been called electronic HRM (e-HRM). Attempts to define e-HRM have varied since its inception, at around the time of the Beer et al. book, and have different connotations. IT-oriented researchers called e-HRM. It was defined as conducting HRM transactions using the internet or intranet and even as the administrative support of the HR function in organisations by using internet technology. E-HRM as way of implementing HRM strategies, policies, and practices in organisations through the conscious and direct support with the full use of channels based on web-technologies. The e-HRM territory focuses on all integration mechanisms and all HRM content shared via IT that aim to make HRM processes distinctive and consistent, more efficient, high in quality and which create long-term opportunities within and across organisations for targeted users. Therefore, the HRM research should aim to improve the understanding of this phenomenon and to contribute to its progress in terms of its (1) content, (2) design, (3) implementation, (4) its interaction with the organisational context, and (5) its short and long term consequences for multiple stakeholders.

2.4. New Technology and HRM

According to study by Tanya Bondarouk & Chris Brewster (2016), there are three areas in which e-HRM needs to develop over the next few years: by taking account of context, multiple stakeholders and long-term outcomes. It calls for the plurality of political, behavioural, institutional, economic, sociological, design and cultural conceptual lenses. Each of them brings its own specific set of research questions. A political lens questions the role of power and how it is exercised in e-HRM projects and rollouts, and how power plays a role in the standardisation and localisation of e-HRM. A behavioural lens focuses on the role of individual actions and interpersonal interactions. An economic lens focuses on quantifying the costs and benefits of standardisation and localisation of e-HRM. An institutional lens deals with social construction, and a cultural lens helps to clarify how the cultural background of factors involved in e-HRM projects play a role in shaping e-HRM. Experts in design science could enrich the e-HRM research by opening up the black box of IT for HRM specialists (Beer, et.al, 1984).

2.5. Definition Change Agent

According to study by Harsh Pathak (2020), change agent is a person who acts as catalyst and assumes the responsibility for managing change activities in the organization. The initiator of changed behavior is known as a change agent. Change agents can be managers or non-managers, employees of the organization or outside consultants. With change agent can change that is a representative who brings change or introduces change. The one who works for the accomplishment of the goals or objectives of the organization, conflict resolution, increased understanding, and more leadership. This means the change agent can work with the internal executives of any organization as a consultant for the establishment of a collaborative relationship.

CHAPTER III. ANALYSIS AND DISCUSSION

3.1. Role of Information Technology (IT) on Human Resource Function

According to study by Jyoti Rohilla (2015), every organization uses information systems and computer technology to discuss everything everywhere. Information Technology and the internet are very impressive in organizational learning, effective communication with the employees, for the impressive organizational learning process and the availability of information anytime and anywhere as managers require this to use their skills and abilities in organizations and to timely decrease their weaknesses and other aspects. Information technology has changed the organization including human resources following functions such as recruiting, training, performance management, human resource management, idea management tools.

3.2. Role of Information Technology on Human Resource Information System (Data Storage)

According to study by Jyoti Rohilla (2015), Human Resources Information System (HRIS) is an integrated system acquiring and storing data to make analysis, make decisions in the field of HR. Technology makes human resource work simple and easier. HRIS provides information about employee's data, job characteristics, employment application requirements, selection and staffing, the procedure of employment, professional and individual improvement, corporate structure, educational costs, performance appraisal, organizing, personal planning, etc.

3.3. Change Agent Role

According to study by Teresia Njoki Muchira; Kellen Kiambati (2015), there are three distinct roles of any change agent, consulting role where the agent assists employees to generate data from within the firm or from external sources, and through analysis of valid data helps the workers to solve problems. Training role in which the agent trains organizational members to learn new methods by providing them with new skills.

3.4. The Human Resource Development Change Agent's Role

According to study by Teresia Njoki Muchira; Kellen Kiambati (2015), change agents are the persons who initiate change and manage change in the organizations. They are specialized in theory and practice of managing changes. HRD can support the introduction of new technology through staff training of the operations of the new technology. A person who is responsible for organizing and coordinating the overall change effort can be a change agent. The role of HRD as a change agent might fail if it does not strongly define the process and priorities of change effort as the role of HR in driving changes varies among different organizations.

In a study by Teresia Njoki Muchira; Kellen Kiambati (2015) also explain that the role played by the HRD professional has equally changed with the change in the organizational environment. In the past the prime responsibility of HRD professionals was to identify, select and evaluate training programmes which could be external or internal and deal with the performance of the employees through designing or customizing training interventions (Gilley et al., 2003). Therefore, training intervention was the main focus of HRD (Gilley, et al., 2003). At present HRD Professionals act as strategic advisers to help the decision makers on issues related with HRD. HRD also play the role of an HR systems designer and developer by assisting the HR management in designing and developing HR systems in an organization to increase its performance. According to Ulrich and Brockbank (2005) the advances of HR practitioners comprises both strategic partner and change agent roles. HRD Professionals may perform a proactive role in change management as they are in a good position. HRD professionals are uniquely positioned to take responsibility for this role in the organization as it deals with the culture of a firm. HRD roles have been transformed to strategic business partner, internal consultant and change agent.

3.5. The Human Resource Development Specialist as Change Agent

According to study by Teresia Njoki Muchira; Kellen Kiambati (2015); Armstrong, (2006) made categories Human Resource Development change agents in four dimensions which are transformational, incremental, Human Resource vision and Human Resource expertise. Transformational change is a major change that has a dramatic effect on HR policy and practice across the whole organization. Incremental change is gradual adjustments of Human Resource policy and practices that affect single activities or multiple functions. HR

vision is a set of values and beliefs that affirm the legitimacy of the Human Resource function as strategic business partner. Human Resource Development expertise is the knowledge and skills that define the unique contribution the Human Resource professional can make to effective people management (Caldwell, 2001). According Caldwell the change agent roles that can be carried out by Human Resource Development professional are change champions, change adapters, change consultants and change synergists.

3.6. HR as Change Agent

According study by K. Raghavi and N. Gopinathan (2013), organizations of all kinds face unrelenting changes in their environment, need for individuals are capable of turning strategy into reality has created a new legitimacy for the change agent role. Creating a renewed organization is the deliverable expected from the change agent role in Human Resources and four distinct roles are identified that Human Resources staff must assume - Strategic Player, Administrative Expert, Employee Champion, and Change Agent that provides hands-on tools in showing the HR professionals how it can operate in all four areas simultaneously and also offer specific recommendations for partnering with line managers to deliver value and make their organizations more competitive. Effectiveness as HR change agents; communication ability, knowledge of the business; products/services and core work processes, keeping a business perspective – both macro (mission/vision) and micro (what line managers cope with), planning and project management skills, ability to tolerate ambiguity, managing resistance, risk taking, managing conflict.

CHAPTER IV. CONCLUSION

The reviews on impact Information Technology to the role of Human Resource as Change Agent, literature suggested that technology makes the human resource work simple and easier. IT internet are very impressive in organizational learning, effective communication with the employees, for the impressive organizational learning process and of the availability of information anytime and anywhere as manager required this to use their skills and abilities in organization and for timely decrease their weakness and other aspects and has changed the organization including human resources following function such as recruiting, training, performance management, human resource management, idea management tools. HRIS provides information about employee's data, job characteristics, employment application requirement, selection and staffing, the procedure of employment, professional and individual improvement, corporate structure, educational costs, performance appraisal, organizing, personal planning, etc.

HRD as a person responsible for organizing and coordinating the overall change, can support the introduction of new technology through staff training of the operations of the new technology. Human Resource Development as change agents has four dimensions which are transformational, incremental, Human Resource vision and Human Resource expertise. Effectiveness as HR change agents; communication ability, knowledge of the business; products/services and core work processes, keeping a business perspective – both macro (mission/vision) and micro (what line managers cope with), planning and project management skills, ability to tolerate ambiguity, managing resistance, risk taking, managing conflict.

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