

INFORMATION TECHNOLOGY AND HUMAN RESOURCE MANAGEMENT

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Abstract: The influence of information technology in human resource management cannot be over emphasized. Though, there have been a lot of substantial growth in the application of information technology in human resource development and management (HRM) over the years, yet, it seems the level of the information technology and its impact on human resource management has not been fully explored or researched. The objective of the study is to investigate the impact of information technology in human resource management. The research employed inferential statistics such as Chi-squared to analyze the important aspect of information technology in human resource management. Data was generated through the means of a questionnaire, which was questionnaire was distributed within random north Cyprus university students. Research observations, discovered that, improvement in information technology at any level or organization, and would have an enormous influence on the growth of the human resource of such organization or institution and help in achieving the stated organizational goals and objectives.

Keywords: Human resource, Technology, management, Chi- squared

INTRODUCTION

In the 21st century, digital age and its features has become essential part of the synchronic world. On the other hand, human resource management has globally affected both the individuals, firms, public and private enterprises, etc. in numerous ways through its affectation and implementation. The important aspect of information technology in human resource management cannot be overemphasized. Though, there have been a lot of substantial growth in the application of information technology in human resource development and management (HRM) over the years, yet, it seems the level of the information technology and its impact on human resource management has not been fully explored or researched (Adewoye,2012).

One of the basic expectations of information technology is to help in enhancing the performance and operation of human resource management, by repositioning its concentration from personnel or administrative management to a more strategic and improved human resource management. The strategic responsibility and role of human resource management is expected to add value to human resource function, and geared these human resource functions towards transformation (Yu, 2009).

In the study by Grensing, (2008) he affirmed that, human resource management through the information, the provider makes available holistic view of the entire process, which helps in evaluating most of the crucial knowledge and asset of any organization. However, information technology has recently been playing a crucial role in sorting, compiling, etc., adequate use of such information that was gathered, are used in making vital decisions in the day-to-day activities of any organization. Therefore, the systems of information are needed to communicate very well, and as well as work efficiently in any organization.

It became expedient to put into consideration organizational desires, goals, and needs and how to make it achievable, since changes in information system have a great influence on organizational operation, production and decision making. Therefore, firms must evaluate and find out any problem arising from their operations, and most importantly, those that affect the human resource management functions (Chambers, 2013).

LITERATURE REVIEW

A. *Conceptual Framework of Human Management Resources*

Liu et al. (2007) proposed that, right from 1970s to the late part of 1980s, there has been a tremendous movement which led to the birth of human resource department, which was formally known to be 'Corporation Personnel Department'. It was a movement which repositions employees as an integral aspect or part of an organization, rather than been seen or treated as a cost. There are important assets in which without them organizational

objectives cannot be achieved.

Hills and Jones (2004) argued that, human resource management of any organization could help to create and generate more value. Priti (2004) was also of the opinion that, these outcomes are feasible, when there is a proper management and development of human resource management efficiently and effectively in any organization. Noted by Werner and Desimone (2006) in their word, described human resource management as the utilization and effective selection of workforce to enhance the achievement of organization strategies, goals, and objectives, while on the other hand, needs and goals of the employees.

Human resource management in any organization have responsibilities of managing, recruiting, directing, organizing and controlling the workforce to perform according to prescription and organization structure in an organization. These functions could possibly be carried out by the line manager by performing personnel duties. An example of such could be, hiring, compensating, managing, monitoring performance, organization development, wellness, safety, benefits, communication, employee motivation, training and development and other administrative functions (Werner and Desimone, 2006).

Human resource management is a vital asset that can generate a continuous competitive merit for organization. The advantage of an organization stand to gain in HRM efficiency has been confirmed. The frequent deviations in an environment of business within the effect of globalizing enhanced focus on profitability through sustained growth, replacing demographic/population of workforce, technological advancement, never ending development/changes coupled with intellectual capital that organization nowadays are experiencing (Manjuri et al.,2006).

According to Schuler and Dowling (1990) in their research came up with a model, the kind of policy of workers that is suitable to gear actions necessary to reach the goals of the competition of strategic. Following them, the competition of strategic can be put to three basic groups. This are, creative strategy, reduction, and lastly strategy to enhance the quality

IMPORTANT ASPECT OF INFORMATION TECHNOLOGY IN HUMAN RESOURCE MANAGEMENT

The correlation that exists between human resource management and information technology cannot be over emphasized. Technology which is the fundamental of know- how helps managers and employee at large to have control over their benefits and training enrollment. The birth of a computerized employment office has been enhanced by technology. It streamlines the human resource management functions and responsibilities. It provides an information based foundation for make a decision (Cieri et al.2005).

According to Rowen et al (2002), the unique database introductions are an indicator of a prosperous human resource method application bundle.

There are pertinent problems, which any organization might have to face, especially as it is related to human resource management in the aspect of hiring, retaining and control of benefits, which includes:

- Hardship in making reference to the human resource records to pick good and efficient candidates needed to open job opportunities in the company.
- The desire of employing additional administrative workforce to update and maintain staff and history data for salary of the job, by not using the crude paperwork which seems to grow on a daily basis.
- The desire to acquire a sound data on the current and useful remuneration packages for difficult job description.
- The desire for an efficient information system through which cost and benefits associated with a product, educational program or early retirement plan reimbursement (Summer 2005).

Apart from keeping records on employees, skills, performance, applications and positions, human resource information system make available information that is in confronting with the style of managing the employee characteristics. The main goal of an efficient human resource strategy is mainly to obtain, train, place, and develop or build the employee in line with the needs of the organization. The managerial decision making needs are usually supported by the human resource management system, by offering report and query platform (Rowen et al 2002).

They also ensure simplification towards performance appraisal. Several software applications are employed to track basic competencies and make available to managers tips for staffs that need to be trained or improved. These systems can also serve as a means to update the superior in such a way that the need for management attention or training to serve the objectives or goals of the organization. These performance appraisal systems are

one tool that organization with several branches employs to install consistency over their operations (Davis, 2002).

RESEARCH DESIGN AND METHODOLOGY

This research employed the use of inferential statistics to analyze the important aspect of information technology in human resource management. To present a vivid conceptualization of issues raised in the work, the researcher will employ quantitative analytical methods for the purpose of clarity. Data will be generated through the means of questionnaires. The use of Chi-squared will be undertaken.

In the quest to investigate the important aspect of information technology in human resource management, it becomes expedient to come up with a model that will create a link between the variables in question, in order to justify the influence that exists between information technology and human resource management. Therefore, a research questionnaire was distributed within random north Cyprus university students with a good knowledge of English language. For purposes of research, questionnaires of about 15 research questions were formulated and distributed to 100 respondents.

A. Data Collection

Using probability theory, statisticians have devised a way to determine if a frequency distribution differs from the expected distribution. To use this chi-square test, we first have to calculate chi-squared. It is one of the major items in any research work that help us to establish the efficiency of the research questions and hypothesis earlier stated at the beginning of this research work. Since the data are non-parametric, the Chi-square (χ^2) test of independence will be used in analyzing the data. The Chi-square (χ^2) for each table will be calculated with respect to the hypothesis after presenting the data on a contingency table. To test the hypothesis, we are to compare the frequencies that were actually observed in the field with the frequencies that we think should have been observed (expected frequencies).

Therefore, the Chi-square test of independence is represented by a formula

$$\chi^2 = \sum \frac{(O - E)^2}{E} \text{-----(1)}$$

Where,

χ^2 = Chi-square

O = Observed frequency E = Expected frequency

Σ = Summation.

The expected frequency is given by the formula

$$E = \frac{RT \times CT}{GT} \text{----- (2)}$$

Where,

E = Expected frequency

RT = Row Total

CT = Column Total

GT = Grand Total

Method of Data Collection

The primary sources of data collection were adopted in this research work. Data in different category were gathered mainly through administration of questionnaires to the students. Caution was taken in building the questionnaire to reduce the incidence of bias (i.e. going out of the research objectives) or subjective views about the subject matter.

Other information for the research study has gathered within the review of associated literature; the related literatures had got from books, journals, and associated articles in this major. More so, in this era of globalization, information from the internet was also valuable.

DATA ANALYSIS AND FINDINGS

The data presentation of this research was based on the responds generated and collated from 100 respondents through the means of questionnaires. The research questionnaires were made up of 15 questions. All the questions were attended to and all the questionnaires were retrieved from the respondents.

The tables below were prepared based on each question and their responses.

Table 1: Organizational relationship between IT and HRM

Options	No of Respondents	Percentage of Respondents
Yes	80	80%
No	16	16%
Not sure	4	4%
Total	100	100%

Table 2: Impact of IT on HRM

Options	No of Respondents	Percentage of Respondents
Yes	78	78%
No	20	20%
Not sure	2	2%
Total	100	100%

Table 3: Improvement in IT has positive impact on HRM

Options	No of Respondents	Percentage of Respondents
Yes	82	82%
No	16	16%
Not sure	2	2%
Total	100	100%

Table 4: IT and its sizeable and magnitude influence on HRM

Options	No of Respondents	Percentage of Respondents
Yes	84	84%
No	13	13%
Not sure	3	3%
Total	100	100%

Table 5: Updating the level of IT capacity and its impact on HRM

Options	No of Respondents	Percentage of Respondent
Yes	96	96%
No	1	1%
Not sure	3	3%
Total	100	100%

Table 6: HRM influence on organization productivity and profitability

Options	No of Respondents	Percentage of Respondent
Yes	89	89%
No	5	5%
Not sure	6	6%
Total	100	100%

Table 7: Importance of IT in business world of today

Options	No of Respondents	Percentage of Respondents
Yes	77	77%
No	20	20%
Not sure	3	3%
Total	100	100%

Table 8: Long-run impact of IT on the organizational objectives.

Options	No of Respondents	Percentage of Respondents
Yes	93	93%
No	5	5%
Not sure	2	2%
Total	100	100%

Table 9: HRM and its impact on improving IT

Options	No of Respondents	Percentage of Respondents
Yes	80	80%
No	18	18%
Not sure	2	2%
Total	100	100%

Table 10: IT and its impact on Educational Career?

Option	No of Respondents	Percentage of Respondents
Yes	78	78%
No	20	20%
Not sure	2	2%
Total	100	100%

Table 11: IT and its impact on sound educational system

Option	No of Respondents	Percentage of Respondents
Yes	89	89%
No	7	7%
Not sure	4	4%
Total	100	100%

Table12: Improvement in Educational system and efficient HRM

Option	No of Respondents	Percentage of Respondents
Yes	94	94%
No	3	3%
Not sure	3	3%
Total	100	100%

Table 13: Improvement in HRM means better and reliable information Technology

Option	No of Respondents	Percentage of Respondents
Yes	78	78%
No	20	20%
Not sure	2	2%
Total	100	100%

Table 14: IT attract competent employee and retain them in an organization

Option	No of Respondents	Percentage of Respondents
Yes	86	86%
No	11	11%
Not sure	3	3%
Total	100	100%

Table 15: IT and its impact of Turnover and Productivities

Option	No of Respondents	Percentage of Respondents
Yes	88	88%
No	10	10%
Not sure	2	2%
Total	100	100%

In the Table 1, question one, 80 respondents stated that a relationship exists between information technology and the human resource management of an organization, 16 respondents disagree with it and 4 respondents were not sure of their relationship.

In Table 2, question 2, 78 respondents were of the opinion that information technology has impact on human resource management while 20 respondents disagree and 2 respondents were not sure of this possibility.

In Table 3, question 3, 82 respondents also agreed that improvement in information technology can affect human resource management positively while 16 respondents disagree and 2 respondents were not sure.

In Table 4, question 4, 84 respondents was of the opinions that, information technology so far have a sizeable and magnitude influence on human resource management while 13 respondents disagree and 3 respondents was not sure.

In Table 5, question 5, 96 respondents agreed that updating the level of information technology capacity of an organization would have a proportional effect on the human resource management while 1 percent or 1 respondent disagree and 3 respondents were not sure.

In Table 6, question 6, 89 respondents accepted the fact that human resource management of any organization have influence on an organization productivity and profitability while 5 respondents disagree and 6 respondents were not sure.

In Table 7, question seven, 77 respondents agreed that information technology is relevant in the business world of today while 20 respondents disagreed and 3 respondents were not sure.

In Table 8 question eight, 93 respondents agreed to the fact that information technology has a long-run impact on the organizational objectives and achievement or 5 respondents disagree while 2 respondents were not sure.

In Table 9, question nine, 80 respondents agreed that human resource management can be better by improving the level of information technology while or 18 respondents disagree and 2 respondents were not sure.

In Table 10, question ten, 78 respondents agreed that information technology has impacted on their career, while 20 respondents disagree and 2 respondents were not sure.

In Table 11, question eleven, 89 respondents agreed that improvement of information technology would help in delivery of sound educational system, while 7 respondents disagree and 4 respondents were not sure.

In Table 12, question twelve, 94 respondents agreed that improvement in educational system would produce better and efficient human resource managers while 3 respondents disagree and 3 respondents were not sure.

In Table 13, question thirteen, 78 respondents agreed that improvement in human resource management means better and reliable information system while 20 respondents disagree and 2 respondents were not sure.

In Table 14, question fourteen, 86 respondents agreed information technology would help to attract competent employee and retain them in an organization while 11 respondents disagree and 3 respondents were not sure.

In Table 15, question fifteen, 88 respondents agreed that information technology has impacted on their career, while 10 respondents disagree and 2 respondents were not sure.

A. Findings

Consequently, from the research findings above, it was discovered that information technology in one way or another has a direct and positive impact on human resource management. From the researcher observations, it is obvious and glaring that improvement in information technology at any level or organization, would have enormous influence on the growth of the human resource of such organization or institution and the help in achieving the stated organizational goals and objectives.

CONCLUSION

One of the basic expectations of information technology is to help in enhancing the performance and operation of human resource management, by repositioning its concentration from personnel or administrative management to a more strategic and improved human resource management. The strategic responsibility and role of human resource management is expected to add value to human resource function, and geared these human resource functions towards transformation (Yu 2009).

Human resource management is the basic and fundamental component of every organization that has succeeded in achieving their organizational goals, thus, there should be a frequent follow-up procedure to any information gathered and received, and such information should be well monitored, filtered and evaluated for an effective and profitable decision making. Nevertheless, there is a need to manage the information emanating from these many organizational activities, but this seems to be somehow difficult, and this is due to its volume.

The main aim of this research is to evaluate, if any, the role and influence of information technology in human resource management system. From the above finding, it was discovered that the information technology has a direct and Positive impact on human resource management. Therefore, it becomes expedient from the research to input the following recommendations for policy makers and future researchers in this field.

In order to achieve organizational goals and objectives through efficient human resource management, sound and efficient information technology should be put in place.

Information technology should be enhanced in such a way that it will stimulate changes in the societies and world economies by creating more ground to generate more income, enhances work, and permits access to vital information and making the world a global village.

The information technology industry such as electronics, broadcast, media, print, computer, e-commerce, telecommunication etc. should be more developed and updated with the latest technology to enhance effective delivery of the human resource management responsibilities.

REFERENCES

- Adewoye J. O., Obasan, Kehinde, A, 2012. 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. *European Journal of Business and Management* www.iiste.org. ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol 4, No.6, 2012
- Ashbaugh, Sam, and Miranda Rowen (2002), "Technology for human resources management: Seven questions and answers", *Public Personnel Management*, 31: 7-20.
- Anne S. Tsui and Joshua B. WU, 'The New Employment Relationship Versus the Mutual Investment Approach: Implications for Human Resource Management', *Human Resource Management* 44, NO. 2 (Summer 2005): 115-121.
- Bussler, L., & C E. Davis, (2002). Information systems: The Quiet Revolution in Human Resource Management. *The Journal of Computer information Systems*, 42:2, 17-2
- Chambers, M.S. (2013), —An Exploration into the Challenges Facing Practitioners of International Human Resource Management: A Literature Review, *International Journal of Business and Social Science*, Vol.4(6),pp.21-27.
- De Cieri, H., Kramar, R., Noe, R. A., Hollenbeck, J. R., Gerhart, B. and Wright, P. M.(2005a), *Human Resource Management in Australia: Strategy People Performance*, Boston: McGraw-Hill Irwin
- Grensing-Pophal, L. (2008). Mission: organized HR! *Credit Union Management*, 31(10), 36-39.
- Hill, C. W. L., & Jones, G. R. (2004). *Strategic management theory: an integrated approach*. 6th ed. Boston: Houghton Mifflin.

- Werner, J. & DeSimone, R. (2006). Human resource development. Mason, Ohio: Thompson . South-Western, TheThompsonCorporation.
- Yu Long, 2009. The impact of information technology on the HR function. http://essay.utwente.nl/59968/1/MSc_Yu_Long.pdf