# Assessing the Influence Information Management on Human Resource Decision-

## Making in Ruvuma Regional Secretariat, Tanzania

## Authors

## Walumbe Joseph Komba

and

## Allan Msolla

## Abstract

This study focused on assessing the impact of information management on human resource decision-making in Ruvuma Regional Secretariat. An explanatory research design and a qualitative research approach were used in this study. The study population included heads of departments, managers and staffs in Ruvuma Regional Secretariat. The sample size was 58 who were selected using purposive and convenience sampling techniques. The interviews were used to collect data. Content analysis was used to analyse the qualitative data collected from participants to decode their meaning. The qualitative discoveries of this study obtained from individual interviews, discovered three (3) influences of information management on human resource decision-making namely; increased competitiveness of managers in the decision-making process, increased effectiveness of managers in the decision-making process and solving different problems that appear in the organisation. Henceforward, this research recommends that to enhance the effectiveness of human resources decision-making in organisations, there is a need to ensure that there is adequate data, an effective communication network, accessibility of data and data quality.

Key words: Information management, human resources, decision-making, staffing, performance management

### **1.0 Introduction**

Information management (IM) is the process of collecting, storing, managing and maintaining information in all its forms. Information management is a broad term that incorporates policies and procedures for centrally managing and sharing information among different individuals, organisations and/or information throughout the information life cycle (Whyte and Levitt 2011). Moreover, it involves the whole process of gathering, processing, storing, and disseminating

relevant information which aims to enhance efficient management operations, planning and decision-making processes of the complex organisational decisions geared to enhance productivity. Hence, the extent of the success of an effective decision-making process on various complex organisational matters depends on the availability of adequate and relevant information which acts as a catalyst to reach appropriate resolutions (Al-Mamary, Shamsuddin & Aziati 2014).

The introduction of information management in organisations is based on the fact that, today's organisational environment is extremely unpredictable, risky, dynamic and unstable which poses the need for the availability and access to relevant information that is accurate, complete, and timely which assist the smooth organisational operations specifically the decision-making process (Mukhopadhyay & Cooper 2019). The recent rapid developments on information technology specifically in telecommunications technologies, have resulted in the modernization of all areas of organisations, business and human activities. Whereas, in today's organisations, there are different types of information systems that are currently used, and each plays a unique role in enhancing a manager in human resource management roles such as decision-making process, performance appraisal, staffing and planning (Mukhopadhyay & Cooper 2019). McLeod and Schell (2007) argues that, information management usually provides information in the form of pre-specified reports and displays to assist decision-making processes in an organisation. It involves transforming data into information and summarizing the collected information into meaningful and useful forms such as management reports that can be used in human resource decision-making.

Globally, evidence shows a significant role of information management on human resource decision-making in contemporary organisations (Neziraj & Berisha-Shaqiri, 2018). In Europe, a report from Albania reports that information management is widely used in Albanian organisations and it has received significant attention among managers in complex organisations as it helps to provide adequate and reliable data that helps to make effective organisational decisions and staffing needs assessment (Neziraj & Berisha-Shaqiri, 2018).

In Asia, Islam (2018) reported from India that, information management plays a vital role to decide on the organisation by providing needed information, analysing and understanding the situation, identifying the problems and supporting the management team. Similarly, (Aziati & Hasan, Y., & Shamsuddin, A , 2013) argues that information management improves information quality and subsequently affect managerial decision-making and performance appraisal in India. In Bangladesh, Hasan et al (2013) argued that information management has a great contribution to increased competitiveness and effectiveness of managers in the decision-making process and solve different problems that appeared in managing an organisation. Moreover, it produces information products that support many of the day-to-day planning and decision-making needs of managers and business professionals. O'Brien and Marakas (2006) reported from India that, reports, displays, and responses produced by information

management systems provide information that these decision-makers have specified in advance as adequately meeting their information needs.

In Africa, the practice of information management in human resource decision-making has received popularity among managers in contemporary organisations. A study done in five countries in Sub – Saharan Africa (Ghana, Mozambique, Rwanda, Tanzania, and Zambia) reported that, despite the vast application of information management systems particularly in the health sector, there are some challenges which hampers effective human resource management especially decision-making processes (Mutale et al., 2013). Moreover, weak information management systems are a critical challenge to reaching the health-related Millennium Development Goals because health systems performance cannot be adequately assessed or monitored where HIS data are incomplete, inaccurate, or untimely (Mutale et al., 2013).

Effective implementation of information management in human resource decision-making is still a global challenge especially in Tanzanian organisations, as it needs excessive mobilization and utilization of resources to achieve desired organisational productivity (McLeod, 2010). Organisational performance and productivity depend on the extent to which information management systems are being used in carrying out various organisational decisions and plans. However, despite its significant role in enhancing organisational performance and productivity, not much attention has been paid to information management as manifested by several challenges during its implementation such as inadequate budgets, lack of information of the managers, lack of understanding of the managers on information management, poor participation of the managers to information management activities and users as well as lack of suitable consultants for designing the system and software which escalates the problem of poor productivity in organisations (McLeod 2010).

Some literatures have been conducted about to information management and human resource decision-making processes. Some studies assessed factors affecting the successful adoption of management information systems in organisations towards enhancing organisational performance (Al-Mamary, Shamsuddin & Aziati 2014). While others assessed the impact of management information systems on decisions (Cooper, McLeod & Schell 2007; Mukhopadhyay, 2019). However, little is known about the impact of information management on human resource management in Tanzania, specifically in Ruvuma Regional Secretariat because I have not come across studies that have been conducted in the respective area of study. Moreover, various challenges have been observed to hinder effective implementation of information management in Tanzania. Henceforth, this study was worth to be carried out and it focused on examining the impact of information management on human resource management in Tanzania.

#### 2.0 Literature Review

Nath and Badgujar (2013) conducted a study based on the impact of management information in an organisation for decision-making in India. Findings revealed that, information management has great contribution to increased competitiveness and effectiveness of managers in the decision-making process and solving different problems that appeared in managing an organisation. Similarly, McLeod and Schell, (2007) found that information management produces information products that support many of the day-to-day decision-making needs of managers and business professionals. This is presented in terms of reports, displays, and responses which provide information that these decision-makers have specified in advance as adequately meeting their information needs.

Livari (2005) investigated an empirical test of the DeLone-McLean model of information system success. Findings from this study revealed that, the quality of information management is a very significant predictor of user satisfaction. Similarly, Hussein, Karim and Selamat (2007), supported the above findings by reporting that a higher level of information management competency leads to higher degree of satisfaction in system quality, information quality, system quality and overall user satisfaction. More studies have shown a significant association between information management and effective human resource decision-making in (Chen & Hsiao 2012; Halawi, McCarthy & Aronson 2008; Hwang et al 2008; Landrum et al 2008; Park et al 2011).

#### 3.0 Methodology

#### 3.1 Research Approach

The study employed a qualitative research approach in order to gain deep understanding of impact of information management in Tanzania. Astin et al (2014) argues that, a qualitative research approach is characterized with naturalistic inquiry, inductive and holistic and uses multiple methods such as interviews, documents and focus group discussions in uncovering the hidden information and the complex relationship existing between variables of the study.

#### 3.2 Research Design

This study used an explanatory study design. Explanatory study design allows a researcher to investigate in deep a phenomenon that was not previously studied in depth (Boru 2018). Researchers chose this research design in order to obtain in-depth information and experiences about the impact of information management on human resource management in Tanzania

#### 3.3 Population and Sample Size

The population for this study were ICT officers, also heads of departments, Assistant Administrative Secretary, Human Resource Managers and staffs. The sample size consisted of 58 (85.3%) among 68 members of the total population in Ruvuma Regional Secretariat. The selection criterion of sample size was based on getting the sample, which was based on the representativeness and consistent with the nature of information needed for this study.

#### 3.4 Data Collection

This study employed interviews data collection method so as to get first-hand information. The reasons for employing interviews data as a data collection method was to broaden the scope and gather much information that cannot be obtained by using a questionnaire (Davis et al 2010).

#### 3.5 Data Analysis

Content analysis was employed to analyse data collected from individual interviews on the influence of information management on human resource decision-making in order to get a comprehensive interpretation of the information. Moreover, a narrative/textual form was used to present the data analysed from individual interviews.

#### 3.6 Validity and Reliability

To enhance validity, the data collection tool was refined by a researcher in the field as well as the supervisor comments, so as to ensure the data collection tools are consistent with the statement of the problem and objectives of the study.

In this study, rreliability was attained through pilot testing of the interview guide in order to find out if they are well understood in Ruvuma Regional Secretariat. The responses derived from the pilot study enabled the researcher to redesign some of the research questions for ambiguity clarification and made necessary adjustments. Also, actual quotations from the participants were also used so as to ensure reliability of this study.

#### 4.0 Findings

The qualitative discoveries of this study obtained from individual interviews, discovered three (3) influences of information management on human resource decision-making namely; increased competitiveness of managers in the decision-making process, increased effectiveness of managers in the decision-making process and solving different problems that appears in the organisation.

#### 4.1 Increased competitiveness

Results of the data collected from individual interviews with study participants in the Ruvuma secretariat revealed that, Increased competitiveness is the major influence of information management on human resource decision-making. For instance, one participant reported,

"... I support the notion that information management plays a crucial role towards increased competitiveness of managers in decision-making processes. For instance, decisions relating to the fulfillment of personnel policies of the organisation. But also, decisions based to improve organisational internal process, competencies and organisations structure as a whole ..." (Assistant Administrative Secretary – 1) Moreover, another participant highlighted that,

"...information management influences decision-making, particularly when management handles day-to-day decision-making needs of the organisation. This is presented in terms of reports, displays, and responses which deliver evidence for decision makers..." (Assistant Administrative Secretary – 2).

#### 4.2 Increased effectiveness

Findings of this study, report on the influence of information management on the increased effectiveness of the decision-making process in Ruvuma secretariat. Data collected through individual interviews exposed that, the effectiveness of the decision-making process depends on the extent of the availability of information. This was reported by one participant who said,

" .... I concur with the argument that, information management plays an appositive influence on the increased effectiveness of decision-making processes. Because, relevant information provided helps to make decisions about maximizing human resources productivity and employee's communication. ..." (Head of Department -2)

This was also reported by another participant who insisted that;

"... information management plays a crucial influence. For example, the influence of information management on human resources decision-making processes is to help the management to make correct decision towards achieving organisational goals, for example, both long-term goals and short-term goals ..." (Head of Department – 1).

Lastly, another study participant said;

"... the positive influence of information management on increased effectiveness of decision-making process is manifested in various dimensions such as; the information helps to make decisions whereby the organisation is assured to have competences and experienced staffs and it enable accuracy reliable correct and timely decision-making ..." (Human Resource Manager – 3)

#### 4.3 Effective problem-solving process

Verdicts of this study report on the influence of information management on the decision-making process in Ruvuma secretariat. Data collected through individual interviews exposed that, information management plays a substantial role in enhancing the effectiveness of problem-solving processes in the organisation. This was testified by one contributor who alleged that,

"... information management helps to solve problems in the organisations because the information is useful in defining a problem; determining the cause of the problem; identifying, prioritizing, and selecting alternatives for a solution; and implementing a solution ... (ICT Officer – 1)

Moreover, another study participant added;

"... I concur with you, the information is very useful, particularly in achieving a goal by overcoming obstacles, a frequent part of most activities. Problems in need of solutions range from simple personal tasks to complex issues in business and technical fields. All these can be addressed if the information management is effective ..." (Employee -1)

Lastly, another study participant claimed;

"... information management helps managers for understanding and define the problem, brainstorm a solution, find alternatives, implement the best solution, and make adjustments based on the outcome. Moreover, helps develop abilities to evaluate causation, analyse alternatives, and select and execute solutions ..." (Human Resource Manager – 3)

#### 4.1 Discussion

The qualitative discoveries of this study obtained from individual interviews, discovered three (3) influences of information management on human resource decision-making namely; increased competitiveness of managers in the decision-making process, increased effectiveness of managers in the decision-making process and solving different problems that appears in the organisation. These findings are similar to the study of Livari (2005) who revealed that, the quality of information management is a very significant predictor of user satisfaction. Similarly, Hussein, Karim and Selamat (2007) supported the above findings by reporting that s higher level of information management competency leads to a higher degree of satisfaction in system quality, information quality, system quality and overall user satisfaction

Moreover, Nath and Badgujar (2013) support the above-mentioned findings as they report that information management has great contribution to increased competitiveness and effectiveness of managers in the decision-making process and solving different problems that appeared in managing an organisation. Similarly, McLeod and Schell, (2007) found that information management produces information products that support many of the day-to-day decision-making needs of managers and business professionals. This is presented in terms of reports, displays, and responses which provide information that these decision-makers have specified in advance as adequately meeting their information needs. More studies support the findings of this study by indicating the potential influence information management with effective human resource decision-making (Halawi, McCarthy and Aronson 2008; Hwang et al 2008; Landrum et al 2008; Park et al 2011; Chen and Hsiao 2012)

#### **5.0 Conclusion and Recommendations**

The wide-ranging scrutiny of this study and the discoveries of other literature shows a scarcity of literature on the influence of information management on human resource management in Tanzania, Ruvuma Regional Secretariat in particular. Likewise, information management has received a significant attention among managers in contemporary organisations as a catalyst to enhance the effectiveness of human resources management. Henceforward, this research provides information that, to enhance the effectiveness of human resources management functions in organisations, there is a need to ensure that there is adequate data, an effective communication network,

accessibility of data and data quality. This will lead to positive human resource management impacts such as effective decision-making, performance management, human resources planning and staffing.

Researchers recommend the Ruvuma Regional Secretariat provide managers with adequate data to enhance human resource decision-making which implies increased competitiveness of managers in the decision-making process, increased effectiveness of managers in the decision-making process and solving different problems that appears in the organisation.

#### References

- Al-Mamary, Y. H., Shamsuddin, A., & Aziati, N. (2014). Factors Affecting Successful Adoption of Management Information Systems in Organisations towards Enhancing Organisational Performance. *American Journal of Systems and Software*, 2(5), 121–126. https://doi.org/10.12691/ajss-2-5-2
- Chen, R.-F., & Hsiao, J.-L. (2012). An investigation on physicians' acceptance of hospital information systems: a case study. *International Journal of Medical Informatics*, 81(12), 810–820. https://www.sciencedirect.com/science/article/pii/S1386505612000895
- Halawi, L. A., McCarthy, R. V, & Aronson, J. E. (2008). An empirical investigation of knowledge management systems' success. *Journal of Computer Information Systems*, 48(2), 121–135. https://www.tandfonline.com/doi/abs/10.1080/08874417.2008.11646014
- Hasan, Y., & Shamsuddin, A., & Aziati, N. (2013). The Impact of Management Information Systems adoption in Managerial Decision Making : A Review, The International Scientific Journal of Management Information Systems. 1989.
  https://www.researchgate.net/publication/263158897\_The\_Impact\_of\_Management\_Information\_Systems\_Adoption\_in\_Managerial\_Decision\_Making\_A\_Review
- Hasan, Y., Shamsuddin, A., & Aziati, N. (2013). The impact of management information systems adoption in managerial decision making: A review. *The International Scientific Journal of Management Information Systems*, 8(4), 10–17. https://core.ac.uk/download/pdf/25754993.pdf
- Hussein, R., Karim, N. S. A., & Selamat, M. H. (2007). The impact of technological factors on information systems success in the electronic-government context. *Business Process Management Journal*. https://www.emerald.com/insight/content/doi/10.1108/14637150710823110/full/html

- Hwang, H.-G., Chang, I.-C., Chen, F.-J., & Wu, S.-Y. (2008). Investigation of the application of KMS for diseases classifications: A study in a Taiwanese hospital. *Expert Systems with Applications*, 34(1), 725–733. https://www.sciencedirect.com/science/article/pii/S095741740600323X
- Iivari, J. (2005). An empirical test of the DeLone-McLean model of information system success. ACM SIGMIS Database: The DATABASE for Advances in Information Systems, 36(2), 8–27. https://dl.acm.org/doi/abs/10.1145/1066149.1066152
- Islam, M. R. (2018). Impacts of Management Information System on Decision Making of the Organisation. 56–61. https://www.researchgate.net/publication/344457995\_Impacts\_of\_Management\_Information\_System \_on\_Decision\_Making\_of\_the\_Organisation
- Landrum, H. T., Prybutok, V. R., Strutton, D., & Zhang, X. (2008). Examining the merits of usefulness versus use in an information service quality and information system success web-based model. *Information Resources Management Journal (IRMJ)*, 21(2), 1–17. https://www.igiglobal.com/article/examining-merits-usefulness-versus-use/1336
- McLeod, R., & Schell, G. (2007). Management Information Systems, 10/e. *E Prentice Hall*. http://myunanto.staff.gunadarma.ac.id/Downloads/files/20692/Slide-2 Security System.pdf
- Mukhopadhyay, T., & Cooper, R. B. (2019). Impact of management information systems on decisions. *Omega*, 20(1), 37–49. https://doi.org/10.1016/0305-0483(92)90054-B
- Mutale, W., Chintu, N., Amoroso, C., Awoonor-Williams, K., Phillips, J., Baynes, C., Michel, C., Taylor, A., Sherr, K., & Collaborative, with input from the P. H. I. and T. – A. H. I. D. (2013). Improving health information systems for decision making across five sub-Saharan African countries: Implementation strategies from the African Health Initiative. *BMC Health Services Research*, *13*(2), S9. https://doi.org/10.1186/1472-6963-13-S2-S9
- Nath, R. P., & Badgujar, M. (2013). Use of management information system in an organisation for decision making. ASM's International E-Journal of Ongoing Research in Management And IT.

Neziraj, E. Q., & Berisha-Shaqiri, A. (2018). The impact of information systems in the decision-making of

the pharmaceutical industry. *Journal of Pharmaceutical Sciences and Research*, *10*(6), 1332–1335. https://www.jpsr.pharmainfo.in/Documents/Volumes/vol10Issue06/jpsr10061805.pdf

- O'Brien, J. A., & Marakas, G. M. (2006). *Management information systems* (Vol. 6). McGraw-Hill Irwin. https://dias.ac.in/wp-content/uploads/2020/06/102-112-Pages-of-DTR-8th-issue.pdf
- Park, S., Zo, H., Ciganek, A. P., & Lim, G. G. (2011). Examining success factors in the adoption of digital object identifier systems. *Electronic Commerce Research and Applications*, *10*(6), 626–636. https://www.sciencedirect.com/science/article/pii/S1567422311000251
- Whyte, J., & Levitt, R. (2011). Information Management and the Management of Projects. *The Oxford Handbook of Project Management*. https://doi.org/10.1093/oxfordhb/9780199563142.003.0016