Challenges facing local government authorities in the use of electronic record keeping for human resource management: a case of Morogoro Municipal Council, Tanzania

Jackson Emmanuel Payowela

Abstract

This study determines the challenges faced by Local Government Authorities in the use of e-record keeping for Human Resource Management (HRM). The study was conducted at Morogoro Municipal Council (MMC) as among the Local Government Authorities (LGAs) which continue to use paper-based record keeping in Tanzania. A case study design was employed to ensure an in-depth understanding of the phenomenon. A questionnaire and interviews were used in collecting data from 107 respondents. Data from the questionnaire were analysed descriptively through the Statistical Package for Social Sciences (SPSS) whereby means and standard deviations were calculated. On the other hand, data from interviews were analysed through content analysis. The study was guided by two models, which are Kurt Lewin’s Change Management Model, as the guiding model, and ADKAR Change Management Model, as the supporting model. The study revealed lack of reliable internet service, lack of top management support, inadequate IT experts, staff resistance, and inadequate funds as the main challenges facing MMC in the use of electronic record (e-record) keeping for HRM. This implies that, in some cases, the government formulates good policies without ensuring a conducive environment for their implementation. In the light of the revealed challenges, the study recommends that LGAs especially MMC should take initiatives to develop and implement a comprehensive e-governance programme that, among other things, will address the revealed challenges. In addition, the government should create environments that support implementation of its policies particularly those related to ICT and e-governance.

Introduction

Electronic records (e-records) refer to the records created electronically and stored by means of computer technology with related accessing devices. Different from paper-based, e-records are easy in updating, deleting, altering and manipulating. All records in organisations that exist in electronic formats constitute e-records (Oyewumi et al., 2015). The need to improve productivity, services and to reduce costs along with advancement of technology has necessitated electronic service (e-service) delivery. Majority of governments all around the world are implementing electronic government (e-government) initiatives. The foundation of e-government initiatives is the creation of e-records with electronic records management system (ERMS) which will facilitate their effective management, usage, storage and preservation (Shonhe, 2017).

On the basis of their importance in increasing efficiency in business processes, e-records have been gradually taking a centre stage in both private and public sectors all over the world owing to the role of information and communication technology which replaces traditional work processes in organisations. That means both private and public sectors have been taking initiatives to move from the use of paper-based record keeping to e-records (Oyewumi et al., 2015). For instance, in Malaysia, the government adopted e-Strategy for Preservation of Government Records and Archives. This became a catalyst and turning point for initiation of e-records. Also, in
Yemen, the Public Telecommunication Corporation started implementation of e-governmment in 2009 with inclusion of ERMS (Mukred et al., 2019; Hawash et al., 2020).

In Africa, different states have also been taking initiatives to adopt e-records usage. For instance, the Ghanaian public sector has been undergoing radical changes as a result of technological innovations, including the deployment of ICT in the public sector. This deployment has been adopted to increase client base, to facilitate self-service, to reduce cost, and to improve the quality and timeliness of response (Yinimi and Akanpaadgi, 2015).

In Tanzania, various initiatives have been taken to shift from paper-based to e-record keeping. For instance, in 2023, the government adopted the National Information and Communication Technology Policy (NICTP 2023), which resulted from revision of NICTP of 2003. The main objective of this policy was to accelerate socio-economic development with potential transformation of Tanzania into ICT-driven middle income economy (URT, 2023). Also, in 2013, the government adopted the E-Government Strategy whose objectives included to ensure development of Government-wide electronic infrastructure in public institutions, including LGAs (URT, 2013). Another initiative was the Amendment of National Records and Archives Management Act of 2002 which aimed to incorporate e-records management (Newa and Mwantimwa, 2019).

The use of electronic record keeping in Tanzania has been very important for efficient running of Government activities, including Human Resource Management (HRM). For instance, electronic record keeping has led to efficiency in addressing different employees demands like training, development, promotion and arrears. Despite these efforts, there are still complaints regarding the practice of human resource record keeping among many local authorities in Tanzania as revealed by the Chief Auditor General Reports of 2018, 2019 and 2022. The reports revealed existence of poor human resource record keeping in many local authorities in Tanzania including MMC. This has resulted into complaints from employees who have been denied their rights of annual leave payments, promotion and arrears. This triggers the need to examine the challenges that face the use of e-record keeping for HRM in LGAs. This study determines the challenges facing LGAs in the use of electronic record keeping for HRM drawing experiences from MMC as a case study.

**Literature Review**

**Theoretical Framework**

The models underlying this study include Kurt Lewin’s Change Management Model, as the main guiding model, and ADKAR Change Management Model, as the supporting model. The former was developed by Kurt Lewin (1947), who is considered to be the father of change management. It is a three-phase model which resulted from his research on group dynamics and changing group life. The basis of this model is the premise that individuals must be prepared and motivated before introduction of any change in an organisation. The three phases suggested by Lewin when introducing any change include unfreezing, movement to a desired position or change and refreezing.

The unfreezing phase involves dissolving the status quo, and starts with recognition of the need for change and improvement. It is a very important step that requires managers and leaders to educate and motivate their subordinates so that they can support the idea of change. At this point, it is important for change agents to identify two types of forces which emerge during the introduction of any change. These are the driving force, which is in favour of the change implementation, and restraining force, which is against change implementation. Movement to a desired position or change phase is associated with development of new behaviour and attitudes and change in programme execution. It is a very important stage, and in order to ensure its success, continuous education on the need for change should be provided. Moreover, comprehensive support should be provided to individuals particularly those who are resistant; and clear communication flow with the subordinates on change process especially the expected benefits should be maintained.

The refreezing phase involves stabilization of change intervention by achieving a balance between the driving and restraining forces. This is done by developing policies, structures, procedures and norms. In order for this stage to be a success, the staff should not be rushed; instead, they must be offered enough time to adjust themselves to the change. Also the benefits to be derived from the change initiative should be emphasized (Odor, 2018; Olalekan et al., 2021). This model has implications for this study. Record keeping at MMC is mainly paper-based. The use of e-record keeping means changing from paper-based record keeping. Therefore in order for such process to be a success, the phases suggested by Lewin’s Change Management theory should be well-adhered to.

On the other hand, the ADKAR Change Management Model was introduced by Jeffrey Hiatt (2006), the founder of Prosci Learning Centre and successful entrepreneur. According to Hiatt, there are five stages that can be used to handle individuals’ resistance to change. The first stage is Awareness, which involves developing awareness on the inevitability of change and its importance through communication. The second stage is Desire, which involves developing individuals’ desire for change with reference to the benefits to be derived from its implementation or harm that could result from ignoring its implementation. The third stage is Knowledge; which is achieved through provision of training on how to change. The fourth stage has to do with Ability, which involves equipping individuals with required skills for change implementation through training. The fifth stage is Reinforcement, which involves stabilization of change through communication of the success derived from it (Odor, 2018; Olalekan et al., 2021).
The implications of the model for the study is clear; as revealed before, majority of staff at MMC have been using paper-based record keeping for decades. As a result, they are likely to wage resistance against the use of e-record keeping. Therefore, application of the stages outlined in Hiatt’s ADKAR model may assist in handling such resistance. For instance, MMC’s staff should be trained on the use of computer and e-records management so as to promote their awareness and equip them with important skills for successful use of e-record keeping. This is implied in Hiatt’s ‘knowledge’ and ‘ability’ stages respectively.

Empirical Review

Literature has identified various challenges that must be addressed as a requirement for efficient management of electronic records. For example, reliable internet service is a must, and lack of reliable internet service is a challenge for any organisation in the adoption and usage of e-records keeping. This was revealed in a study by Ouheda (2019), who determined factors influencing adoption of electronic health records in Australia.

Again, nothing can be well-implemented in any organisation without adequate budget. Specifically, the use of e-records keeping requires enough fund so as to cater for important requirements like payment of internet service providers, training of staff and purchase of electronic devices. Evidence shows that inadequate fund is among the challenges facing most organisations in the management of e-records. This was revealed by Pessa (2019) in a study that intended to assess the challenges faced by LGAs in Tanzania in the management of e-records.

Employees constitute the most important stakeholders in the implementation of any change as they are the ones who execute organisational activities. On the basis of their importance, it is compulsory to ensure that they agree and support any change that is about to be introduced in an organisation. The use of e-record keeping in Tanzania means a change from the paper based-record keeping which has been there for decades. Evidence has shown that employees’ resistance towards the use of ICT is among the challenges facing organisations in the use of e-records for HRM. This has been revealed in the study by Shonhe (2017), who found that introduction of a number of changes including e-records keeping was affected by issues like resistance from employees. Likewise, a study by Mukred et al. (2019) revealed positive individuals’ attitude towards ERMS as among the factors influencing its adoption in Higher Professional Education Institutions.

Top managers are the ones who pass major decisions affecting organisations including setting of budget. Therefore, their support in any thing which is about to be implemented in an organisation is a must. Evidence shows that lack of top management support is one of the challenges facing the use of e-records keeping. This has been revealed in the study by Abdullah and Yusof (2020) whereby lack of top management support was seen as the factor influencing implementation of electronic records and information management in military service in Malaysia. Likewise, a study by Hawash et al. (2020) revealed lack of top management support to be the critical factor influencing adoption of electronic records management systems (ERMS) in Yemeni Oil and Gas Sector. Efficiency in the use of e-records keeping also depends on the presence of adequate ICT experts. ICT experts are the ones who are responsible for installation, operation, and maintenance of ERMS. Failure to have adequate ICT experts creates a challenge in the use of e-records keeping. This has been revealed in a study by Ouheda (2019) where it was found that availability of ICT experts is among the factors influencing adoption of electronic health records in Australia.

Conceptual Framework

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
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<tr>
<td>Challenges</td>
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<tr>
<td>1. Lack of reliable internet service</td>
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<td>2. Inadequate funds</td>
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<td>3. Employees’ resistance towards the use of ICT</td>
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<td>4. Lack of top management support</td>
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<tr>
<td>5. Inadequate ICT experts</td>
<td>The use of electronic record keeping for Human Resource Management in LGAs</td>
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Figure 1: Conceptual Framework; Source: Literature Review (2024)

Research & Methodology

A case study design was employed to allow an in-depth understanding of the phenomenon under investigation. As stated by Yin (2003) and Crasewell (2008), a case study design is mostly used so as to earn clarity and comprehensiveness in understanding a phenomenon in its real setting. The present study was conducted at Morogoro Municipal Council (MMC) as one of the LGAs in Tanzania that continue to use paper-based record keeping for HRM. A questionnaire was employed to collect data from 100
respondents, who were randomly selected from MMC’s staff. Similarly, interviews were employed to collect data from seven (7) respondents, who were purposively selected from the MMC’s management team. With the questionnaire, respondents were provided with a list of possible alternative challenges facing MCC in the use of e-records keeping for them to tick the correct alternatives. Descriptive data analysis was performed whereby means and standard deviations were calculated by using the Statistical Package for Social Sciences (SPSS), and presented in tables. On the other hand, content analysis was used to analyse the data collected from interviews through focusing on emerging themes. Ethical issues were adhered to as the researcher got permission from the management of MMC to access data from its staff. Additionally, data collection based on free assent, anonymity and confidentiality.

Findings and Discussion

The purpose of this study was to determine the challenges facing LGAs in the use of e-records keeping for HRM at MMC. The study found that a number of challenges were associated with the use of e-record keeping in LGAs. The challenges included lack of reliable internet service, lack of top management support, inadequate ICT experts, staff resistance towards the use of ICT, and inadequate funds.

Lack of reliable internet service

The findings revealed lack of reliable internet service to be one of the challenges facing MMC in the use of e-record keeping for HRM. Accordingly, the mean score was 4.7900 with standard deviation of 0.74257. This implies that the internet service provided at MMC is not enough to support efficient operation of ERMS used in e-record keeping for HRM. Table 1 is illustrative.

Table 1: Lack of Reliable Internet Service

<table>
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<tr>
<th>Challenges</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Lack of reliable internet service: Unreliable internet connectivity leads to inefficient operation of ERMS used in e-record keeping for HRM at MMC</td>
<td>4.7900</td>
<td>0.74257</td>
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</table>

Source: Field Data (2023)

These findings are well supported by the findings from interviews whereby, respondents revealed unreliability of internet service at MMC. When responding to the question on the challenges facing MMC in the use of e-record keeping, one respondent had the following to say:

“….The present internet connectivity is too weak to support e-record keeping especially during day time, when majority of the staff are at work. This leads to negative attitude among majority of staff on the issue of using e-record keeping…”

These findings concur with a study by Ouheda (2019), where it was found that adoption of electronic health records keeping require good national infrastructure like internet connectivity.

Inadequate funds

The findings revealed inadequate fund to be among the challenges facing MMC in the use of e-record keeping for HRM whereby, the mean score was 4.1600 with standard deviation of 1.30050. This implies that the budget set to facilitate e-record keeping for HRM at MMC is inadequate. As a result, it becomes difficult to cater for important items needed like payment for reliable internet service providers, construction of ICT infrastructure, purchase of equipment and training of staff and ICT experts. This is further depicted in Table 2.

Table 2: Inadequate Funds

<table>
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<tr>
<th>Challenge</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Inadequate funds: Inadequate budget set decreases the organisation’s ability to cater for important requirements for the use of e-record keeping for HRM at MMC</td>
<td>4.1600</td>
<td>1.30050</td>
</tr>
</tbody>
</table>

Source: Field Data (2023)

The findings from interviews support those from the questionnaire as respondents revealed inadequate funds to be one of the major challenges facing the use of e-records for HRM at MMC. One respondent had the following to say:

“…Money is the first and foremost challenge. The budget set to facilitate e-record keeping is very low. It seems like it is not one of the management’s priorities as in most cases, the budget proposed by ICT department is highly reduced…..”

These findings concur with the study by Pessa (2019) whereby budgetary constraints were revealed to be among the factors limiting management of e-records in LGAs.

Staff resistance towards the use of ICT

The findings revealed staff resistance towards the use of ICT to be another challenge facing MMC in the use of e-record keeping for HRM whereby, the mean score was 3.3700 with standard deviation of 1.26854. This implies that the employees have been used to
paper-based work for decades. E-record keeping is achieved through the use of ICT but some employees resist the use of ICT due to different factors like fear resulting from lack of training and skills. Table 3 presents the findings.

Table 3: Staff Resistance towards the Use of E-record Keeping

<table>
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<tr>
<th>Challenge</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Staff resistance towards the use of ICT: The employees at MMC have negative attitude towards the use of ICT</td>
<td>3.3700</td>
<td>1.26854</td>
</tr>
</tbody>
</table>

Source: Field Data (2023)

These findings are well-supported by the findings from interviews whereby, respondents revealed the presence of employees’ resistance towards the use of e-record keeping for HRM. When responding to the question on the challenges facing MMC in the use of e-record keeping for HRM, one respondent asserted that:

“....Majority of employees particularity those who have been used to paper-based record keeping for decades are not ready to opt for e-record keeping Sir. Their negative attitude is partly attributed to the management itself. For example, there is no training provided to staff on ICT and e-record keeping....”

These findings concur with the study by Shonhe (2017), which revealed the introduction of change like electronic record keeping to be affected by employees’ resistance. These findings also relate with what has been stated by Jeffrey Hiatt in his ADKAR model. The model suggests five stages to be followed so as to handle individual resistance towards change. Therefore, for successful introduction of e-record keeping, MMC is supposed to adhere to the proposed stages. Also, these findings confirm what has been proposed in Kurt Lewin’s model of change management. Lewin suggests that for successful introduction of change like the use of e-record keeping at MMC, it is compulsory for managers and leaders to overcome employees’ resistance through education and motivation.

Lack of top management support

The study revealed lack of top management support to be among the challenges facing MMC in the use of e-records keeping for HRM. The mean score was 3.9500 with standard deviation of 1.25025 as presented in Table 4. This implies that the top management as the main change agent does not take enough initiatives to ensure full use of e-records for HRM at MMC. The top management is responsible for making major decisions affecting organisations including decisions on budget setting and systems usage.

Table 4: Lack of Top Management Support

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Lack of top management support: The top management does not take enough initiative to ensure full use of e-record keeping for HRM at MMC</td>
<td>3.9500</td>
<td>1.25025</td>
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</table>

Source: Field Data (2023)

The findings from questionnaire are supported by the findings from interviews, which also revealed poor top management support on the use of e-record keeping particularly for HRM. One of the respondents uttered thus:

“....It is quite clear that the use of e-record keeping fails to reach a milestone as a result of poor support from the top management. They are the ones responsible for efficient introduction of any change within an organisation. However, I have not seen any thing big from them in favour of e-record keeping especially for HRM....”

These findings concur with a study by Abdullah and Yusof (2020) and Hawash et al. (2020), which revealed top management support to be among the factor affecting the implementation and adoption of e-records management and ERMS. Also, these findings confirm what has been proposed in Kurt Lewin’s Model of Change; that when an organisation moves to a desired position or change, comprehensive support should be provided to individuals particularly those who are resistant.

Inadequate ICT experts

The findings revealed inadequate ICT experts as constituting the challenges facing LGAs in the use of e-record keeping for HRM. The mean score was 3.7500 with the standard deviation of 1.14040 as presented in Table 5. This implies that the number of ICT experts at MMC is lower than the demand. Inadequacy of ICT experts hinders efficiency in the use of e-record keeping as they are the ones who develop and operate ERMS and aso are responsible for assisting the staff in e-record keeping processes.

Table 5: Inadequate ICT Experts

<table>
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<tr>
<th>Challenge</th>
<th>Mean</th>
<th>SD</th>
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<tbody>
<tr>
<td>Inadequate ICT experts: Low number of ICT experts hinders efficiency in the use of e-record keeping for HRM at MMC</td>
<td>3.7500</td>
<td>1.14040</td>
</tr>
</tbody>
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Source: Field Data (2023)
These findings are well supported by the findings from interviews whereby, respondents revealed a shortage of ICT experts at MMC. When responding to the question on whether there were enough ICT experts at MMC, one respondent had the following to reveal:

“... They are not enough at all. The ICT department is staffed by few experts compared to other departments. Therefore, it becomes difficult for them to cater for the demands of both the management and staff in the course of using e-record keeping especially for HRM.....”

These findings concur with the study by Ouheda (2019), which revealed lack of IT experts to be one of the factors influencing the adoption of electronic health records in Australia.

Conclusions

Technological advancement has undoubtly transformed the way governments operate all over the world. One of the areas which technological advancement has impacted is human resource record keeping where there is a shift from paper to e-records. In line with this transformation, this study sought to determine the challenges facing Local Government Authorities (LGAs) in the use of e-record keeping for Human Resource Management (HRM). From the findings, it has been revealed that, despite the use of electronic records keeping system in managing human resource records, there are a number of challenges which impede the efficiency of e-records. Such challenges include lack of reliable internet service, lack of top management support, inadequate ICT experts, staff resistance, and inadequate funds. These findings provide a clear understanding of what hinders successful use of electronic records system in managing human resources in most local government authorities in developing countries.

This study has revealed what hinders full utilization of electronic records keeping in the management of human resources in Tanzanian Local Government Authorities. The study sheds light on the challenges facing efficient use of e-record keeping for HRM especially amidst growing incidences of complaints from retiring employees who do not receive their retirement benefits on time due to misplacement of some records by the respective authorities.

It is the time the government should ensure that local government authorities have conducive environment which will foster efficient utilization of electronic record keeping in human resource management. This can be achieved by providing all the necessary facilities and resources needed to make e-records keeping work so as to improve the practices in human resource management. Furthermore, and particularly for MMC, there is a need to develop and implement a comprehensive e-governance programme that will act as a pillar in enhancing smooth application of electronic records keeping in human resource management.

Despite its contributions, this study is not free from limitations. The major limitation of this study is that, it was conducted mainly in a single local government authority, MMC. Therefore, the findings cannot easily be generalized. Therefore, there is a need for other similar research in other local government authorities especially those at the periphery to assess the use of electronic records keeping in the management of human resources.

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References


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