EFFECTIVENESS AND EFFICIENCY OF E-RECRUITMENT IN PUBLIC ORGANIZATIONS: A CASE OF TANZANIA NATIONAL PARKS (TANAPA)

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Abstract: **The study analyzes the effectiveness and efficiency of e-recruitment in Tanzania, a case of TANAPA HQ, Arusha. To achieve the objectives of the study, the researcher applied descriptive research design. The target population was 184 employees. The sample size of the study was 119 respondents. Data were analyzed using descriptive statistics by applying average mean scores analysis. Regarding the extent of effectiveness of e-recruitment, it was strongly agreed that e-recruitment system of TANAPA is effective. The findings also established that there is efficiency in using e-recruitment by TANAPA. Findings are supported with literature that, e-recruitment portal saves time, saves cost, large pool of applicants and easy access of information. With regards to the study findings the following recommendations are made to respective stakeholders; developing simple and user-friendly recruitment portal, making sure the system is cost effective easily accessible and time saving. Researcher doing related study are recommended to study the challenges facing the e-recruitment in Tanzania Public Sector.**

Keywords: **Efficiency, Effectiveness, Recruitment, E-recruitment.**

1. INTRODUCTION

Recruitment is an important human resource practice in the recent highly competitive labor market (Sabha, 2018 & Fred & Kinange, 2018). The methods used for recruitment include advertisements, the use of recruitment agencies and consultants, executive search consultants, internet and educational establishments (Devi & Banu, 2014; Fred & Kinange, 2018 & Stephen, 2015). The method used will depend on experience, time available, resources, nature of the organization and the job (Benson, 2020). Recently, recruitment has moved from traditional recruitment to e-recruitment (Devi and Banu, 2014 &Holm, 2012 and Casu & Lazo, 2017). E-recruitment is the process of attracting job candidates through the use of electronic resources with the aid of internet. It entails advertisement of jobs online and sourcing of job information by candidates online. E-recruitment is also termed as online recruitment, cyber or internet recruitment (Fayyazi and Afshar, 2014 and Sanga, 2015 & Fred & Kinange, 2018). In early 1990s e-recruitment emerged as a result of growth in technology which tremendously changed the traditional method mostly using organization websites (Kishura, 2020). In Europe, between 2001 and 2004, take- up of online recruitment methods substantially increased from just over 40 percent of organizations to over 70 percent (Wanjiku, 2015). In the United Kingdom (UK), specifically, take up by companies has seen the same general upward trend. In 2002, the percentage of organizations using their websites to advertise jobs was 72, increasing to 93 percent by 2005 (Urio, 2020). In early late 1990s, Europe for example in Scandinavian Countries, as noted in Danish, they started using corporate websites and internet for job advertisements. Gopalia (2012) in a study conducted in UK depicted that, e-recruitment saves time and reduces recruitment costs. According to Bett & Yuddah (2017) in a study carried in India, asserts that, E-Recruitment enables to reach a wide geographical area, attract a wide pool of qualified candidates and saves cost of advertising through newspapers by simply using corporate webs or job agents. In Nigeria e-recruitment adoption has remarkably gained popularity in both private and public sector organizations including such organizations as Nigerian Army, Nigerian Police Force, Nigerian Navy, Nigerian National Petroleum

Corporation (NNPC) and so on (Ozuru & Chikwe, 2015). In 2007 Kenya Public Sector Recruitment Commission started the online recruitment where all public jobs are advertised. Technical teams were used from various public sector organizations in Kenya (Raphael, 2018). In 2019-2024, Kenya Strategic Plan, proposed to strengthen the online public recruitment, a selection database whereby interviews were to be conducted online in order to give opportunities to mass candidates even those in the diaspora (Kenya Strategic Plan, 2019-2024). Tanzania established Public Service Recruitment Secretariat (PSRS) in 2007 (Benson, 2020). In 2014, PSRS automated its recruitment processes through the use of online recruitment portal. The portal intended to provide a single gateway that enable individuals to apply online, get access to information and knowledge dissemination for the broad community of recruitment stakeholders including job seekers, experts, Diasporas and employers. E-recruitment process was introduced, for the first time to TANAPA in 2015; where by 13 vacancies in various positions were advertised. Though theoretically and empirically has been reported that e-recruitment leads to effectiveness in recruitment process, most findings have been depicted in other parts of the world with very scanty literature in Tanzania and perhaps with no single study in TANAPA. Therefore, the current study intends to investigate the effectiveness and efficiency of E-recruitment in public organization, specifically in TANAPA in order to bridge the gap in the existing body of knowledge.

2. PURPOSE

The purpose of the study is to examine the effectiveness and efficiency of E-recruitment in public organizations, a case study TANAPA. Specifically, the study sought to determine the extent of effectiveness of e-recruitment and extent of efficiency of e-recruitment.

3. RESEARCH METHODOLOGY

The study applied descriptive research design with the use of quantitative approach. Descriptive design describes the situation, phenomena and variables (Powell and Connaway, 2014 & O'Gorman and Maclntosh, 2015). Descriptive design was used in describing the extent of effectiveness and efficiency of e-recruitment (Clarke and Brown, 2013. Data were collected using closed ended questionnaire. The study applied simple random sampling to select the 119 respondents. Validity was ensured using six expert judgement where as reliability was tested and a Cronbach alpha of 0.854 was obtained.

4. RESULTS AND DISCUSSION

The study considered effectiveness and efficiency of e-recruitment in Tanzania National Park HQ. The interpretation method used mean scores ranging from strongly disagreed denoted by 1 to strongly agree denoted by 5.

The extent of effectiveness of E-Recruitment in Public Organization

Table 1: Extent of effectiveness of e-recruitment

	Effectiveness of e-recruitment	**Mean**	**Interpretation**
1	E-recruitment portal reduces time for processing application	4.21	Strongly agree
2	The website can immediately be accessed for vacancies by job seekers	4.42	Strongly agree
3	The corporate web job application portal maintains confidentiality of information	4.30	Strongly agree
4	The website e-recruitment portal can sort applicants according to the advertisement online	4.54	Strongly agree
5	Website e-recruitment portal is simple to manage	4.57	Strongly agree
6	The website recruitment portal is user-friendly to online applicants	4.84	Strongly agree
7	The corporate web job application portal enhances easy candidate-employer interaction	4.42	Strongly agree
8	The website recruitment portal is accessible 24 hours 7 days a week	4.57	Strongly agree
9	All information needed to know about the job requirements is made available in TANAPA Portal during recruitment	4.37	Strongly agree
10	All information needed for successful shortlisting and interviewing is available in TANAPA Portal	4.68	Strongly agree
11	Information in the career portal is promptly updated	4.57	Strongly agree
	Average Mean	**4.50**	Strongly agree

Source: Field data, 2021

The results above shows that, the extent of effectiveness of e-recruitment is good with an average mean of 4.5 denoting strongly agree. This implies that, the respondents strongly agreed with the above questions that, e-recruitment is effective. Effectiveness of e-recruitment constructs are presented, interpreted and discussed. The findings are consistent with Brandao et al. (2017) study that, e-recruitment leads to effectiveness of the recruitment process. They stated that, e-recruitment leads to easy access to job opportunities to applicants, reaching a wide pool of applicants, it makes the whole application process fast and practical. It was also argued that, online recruitment is cheaper in comparison to traditional method of e-recruitment. In connection to these findings, there is implication that, e-recruitment improves the effectiveness of recruitment process of an organization and thus organizations should make efforts to apply the e-recruitment method in recruitment process. With regards to item one regarding whether E-recruitment portal reduces time for processing application, an average mean of 4.21 was attained which denotes strongly agree. This implies that, respondents agreed that, e-recruitment reduces time spent in processing application. The findings are supported by Shine (2019) study that concludes that, e-recruitment is cost effective and it saves time in the whole recruitment process. The applicants simply send applications online with no delay since the application is received instantly. Similarly, the findings are harmony with Sabha (2018) on a study that concludes that e-recruitment is cost effective and faster time to appointment due to less processes involved. The findings as supported by literature concludes that, e-recruitment saves time, it is fast in the recruitment process to appointment stage. With regards to item two on whether the website can immediately be accessed for vacancies by job seekers and average mean of 4.42 was obtained. This indicates that, the respondents of the study agreed that, e-recruitment website portal is easily accessible. The findings are supported by Sultana and Sultana (2018) that e- recruitment is easily accessible by applicants and it is cost effective. Accessibility of the website portal is important for enabling job applicants access the system easily. Concerning item three whether the corporate web job application portal maintains confidentiality of information it was strongly agreed with an average mean score of 4.3. This implies that, the respondents agreed that, the corporate web job application portal maintains confidentiality of information. The findings are consistent with Fred and Kinange (2018) who asserts that, e-recruitment portal maintains confidentiality since accessibility is limited to authorized personnel only. Concerning item four the website e-recruitment portal can sort applicants according to the advertisement online an average mean of 4.54 was attained denoting strongly agree. This means that, the respondents strongly agreed that the e-recruitment portal car sort applicants according to the advertisement online. This implies that, applicants can be sort according to advertised requirements and qualification criteria. The findings are supported by Gopalia (2012) study conducted in South Africa which found that, e-recruitment is effectively sorting the applicants according to the advertisement requirements thus lowing the time to hire, and effectively reduces the cost of saving which eventually supports the long-run performance of the organization. Moreover, the findings are consistent with Sayel (2018) study that e-recruitment to post jobs and accept resumes and correspond with the applicants have great advantages on reaching the wide pool of potential employees, facilitating the selection process in a cost- effective manner, and speed in proving customers solution and satisfaction. The supportive literature also enhances that, e-recruitment can sort applicants accordingly based on various factors and criteria. Regarding item five Website e-recruitment portal is simple to manage an average mean of 4.57 was obtained denoting strongly agree. This indicates that, the respondents strongly agreed that, the website e-recruitment portal is simple to manage. Simplicity in managing the website recruitment portal enhances the effectiveness of the system. These findings are in harmony with Kebede (2017) study findings that noted that e-recruitment is advantageous in essence that, it is easily manageable. The findings conclude that, the e-recruitment portal can be managed easily, hence confirming that the recruitment portal is effective. Similarly, the findings are further supported by Okolie and Irabor (2017) study that concluded that, *e-recruitment* can improve reduce administrative burden. This indicates that, e-recruitment can easily be managed thus reducing administrative burden. Concerning to item six on whether the website recruitment portal is user-friendly to online applicants an average mean of 4.84 was obtained denoting strongly agree. This indicates that, the respondents strongly agreed that, the website recruitment portal is user-friendly to online applicants. Findings are consistent with Mohammed (2019) that e-recruitment portals used by organizations are user-friendly. However, user-friendliness was determined by the fairness and effectiveness of the recruitment processes of the online system. Nevertheless, there is no enough literature stating the user-friendliness of e-recruitment portals. With regards item seven on whether the corporate web job application portal enhances easy candidate-employer interaction an average mean of 4.42 was obtained. This indicates that, the respondents strongly agree that, the corporate website recruitment portal enhances easy interaction between employer and job applicant. The findings are consistent with Narmadha and Nagi (2017) study findings that revealed that E-Recruitment system enhances effectiveness of recruitment processes by creating brand awareness, attracting potential candidates to the website to easily interact with the employers. This

indicates that, e-recruitment portals enhances ease interaction between employers and employees. With regards to item eight on whether the website recruitment portal is accessible 24 hours 7 days a week 4.57. This indicates that, the respondents strongly agreed that, the website recruitment portal is accessible 24 hours 7 days. The findings are in alignment with Sultana and Sultana (2018) findings that, e-recruitment portals are accessible. However, the findings do not state whether it is accessible 24/7. Item nine all information needed to know about the job requirements is made available in TANAPA Portal during recruitment an average mean of 4.37 was attained. This indicates that, the respondents strongly agreed that, all information needed to know about the job requirements is made available in the portal. The findings are consistent with Fred & Kinange (2018) who noted that e-recruitment facilitates quick and easy access to information, wide range of job opportunities, attracting passive job seekers, advertising job vacancies in both local and international labour markets. With regards to item ten regarding whether all information needed for successful shortlisting and interviewing is available in TANAPA Portal an average mean of 4.68 was obtained. This indicates that, the respondents strongly agreed that, all information needed for successful shortlisting and interviewing is available in the recruitment portal. The findings are supported by Fred & Kinange (2018) that, e-recruitment facilitates quick and easy access to information, wide range of job opportunities, attracting passive job seekers, advertising job vacancies in both local and international labour markets. This affirms that, the portals facilitates access of all information needed for shortlisting the successful applicants. With regards to item eleven on whether information in the career portal is promptly updated an average mean of 4.57 was obtained. This implies that, the respondents strongly agreed that, the information in the career portal is promptly updated. There less studies that, demonstrate whether e-recruitment portals are updated promptly. Nevertheless, Mohammed (2019) supports the findings by claim that, social media sites are updated more often. However, the argument are focused on social media sites, not on corporate website recruitment portals. This calls for further studies on whether the recruitment portals are promptly updated. The findings are also consistent with Brandao et al. (2017) findings that, e-recruitment saves time, cost and easily accessible. Also the findings are in harmony with Fred & Kinange (2018) that, e-recruitment facilitates quick and easy access to information, wide range of job opportunities, attracting passive job seekers, advertising job vacancies in both local and international labour markets. This affirms that, the portals facilitates access of all information needed for shortlisting the successful applicants.

The extent of efficiency of E-Recruitment in Public Organization

Table 2: Extent of efficiency of e-recruitment

	Extent of efficiency of e-recruitment	Mean	Interpretation
1	E-recruitment portal is reliable	4.26	Strongly agree
2	E-recruitment portal is time efficient	4.42	Strongly agree
3	E-recruitment portal is fast in processing information	4.35	Strongly agree
4	E-recruitment portal servers can receive several applications without lowering the performance of the system	4.48	Strongly agree
5	E-recruitment portal can sort applications according to the advertisement online instantly	4.57	Strongly agree
6	Maintenance of E-recruitment portal is cost effective	4.47	Strongly agree
7	The website recruitment portal online has ability to reply applicants online once application is complete without human interaction	4.61	Strongly agree
8	E-recruitment portal information is promptly updated	4.54	Strongly agree
	Average Mean	**4.46**	Strongly agree

Source: Field data, 2021

The table above presents the extent of efficiency of e-recruitment. Regarding the extent of efficiency of e-recruitment, an average mean of 4.46 was obtained. This denotes strongly agree implying that, the respondents strongly agreed that there is efficiency in use of e-recruitment by TANAPA. The finding are supported by Narmadha and Nagi (2017) study that, e-recruitment system is efficient. The study identified various contributions of e-recruitment in enhancing effectiveness of recruitment processes. It helps employers to identify potential candidates. It helps to increase brand awareness by attracting potential candidates to the website. With regards, item one regarding whether e-recruitment portal is reliable an average mean of 4.26 which denotes strongly agree. This indicates that, the respondents agreed that, the portal is reliable. The findings are consistent with Chaitra and Rajasulochana (2018) that, e-recruitment portals are reliable and have all the information required including easy accessibility and minimal cost. Concerning item two about whether e-recruitment portal is time efficient an average mean of 4.4.2 was attained which implies strongly agree. The findings are supported by

Chitra and Rajasulochana (2018) that, e-recruitment portal is efficient in terms of time spent for the overall job processes. Regarding item three whether e-recruitment portal is fast in processing information an average mean of 4.35 was obtained which indicates strongly agree. This shows that, the respondents agreed that, the e-recruitment portal is fast in processing information. The findings are in harmony with Narmadhan and Nagi (2017) findings that, e-recruitment portal processes information fast compared to those who use tradition recruitment. Regarding item four whether e-recruitment portal servers can receive several applications without lowering the performance of the system, an average mean of 4.57 was attained which implies strongly agree. The findings match with Brandao et al. (2017) findings that, e-recruitment portal servers can receive several applications at once without disturbing the performance of the system. Concerning item five on whether E-recruitment portal can sort applications according to the advertisement online instantly an average mean of 4.57 was obtained which denotes strongly agree. This implies that, the respondents agreed that e-recruitment portal can sort applications according to the advertisement online instantly. The findings are consistent with Narmadha and Nagi (2017) that, e-recruitment portals makes advertisement online using the corporate websites. Regarding item six on whether Maintenance of E-recruitment portal is cost effective an average mean of 4.47 which denotes strongly agree. This shows that, the respondents strongly agreed that, the maintenance of e-recruitment portal is cost effective. The findings are in harmony with Brandao et al. (2017) that, e-recruitment portal maintenance is cost effective. It was also argued that, online recruitment is cheaper in comparison to traditional method of e-recruitment. In connection to these findings, there is implication that, e-recruitment improves the effectiveness of recruitment process of an organization and thus organizations should make efforts to apply the e-recruitment method in recruitment process. With regards to item seven on whether the website recruitment portal online has ability to reply applicants online once application is complete without human interaction an average mean of 4.6.1 was attained indicating that, the respondents agreed that, the portal has ability to reply applicants online once application is complete without human interaction. Findings by Chaitra and Rajasulochana (2018) assert that supports that, e-recruitment portals can reply the applicants automatically once the application is complete without any human interaction. The study and literature findings conclude that, e-recruitment portals can reply job applicants without human interaction once the application is complete. With regards to item eight on whether e-recruitment portal information is promptly updated an average mean score of 4.54 was obtained indicating strongly agree. This shows that, the respondents agreed that e-recruitment portal information is promptly updated. The findings are consistent with Chaitra and Rajasulochana (2018), that recruitment portals update information with respect to company information and job vacancies. The study identified various contributions of e-recruitment in enhancing effectiveness of recruitment processes. It helps employers to identify potential candidates. It helps to increase brand awareness by attracting potential candidates to the website

5.   CONCLUSIONS AND RECOMMENDATIONS

In conclusion, given the high percentage of respondents who said the extent of effectiveness and efficiency of e-recruitment high, it is important to prioritize e-recruitment and ensure that, it is well implemented. With regards to the extent of effectiveness of e-recruitment, an average mean of 4.5 was attained denoting strongly agree. This implies that, the respondents strongly agreed with the above questions that, e-recruitment is effective. The findings conclude that, E-recruitment portal reduces time for processing application, the website can immediately be accessed for vacancies by job seekers, the corporate web job application portal maintains confidentiality of information, the website e-recruitment portal can sort applicants according to the advertisement online. Also, website E-recruitment portal is simple to manage, the website recruitment portal is user-friendly to online applicants, the corporate web job application portal enhances easy candidate-employer interaction. Furthermore, the website recruitment portal is accessible 24 hours 7 days a week, all information needed to know about the job requirements is made available in TANAPA Portal during recruitment, all information needed for successful shortlisting and interviewing is available in TANAPA Portal, information in the career portal is promptly updated. The study established that, e-recruitment process is efficient. This was confirmed by an average mean of 4.46 which showed that, extent of efficiency of e-recruitment is good. This denotes strongly agree implying that, the respondents strongly agreed that there is efficiency in use of e-recruitment by TANAPA. This indicates that, e-recruitment portal is reliable, time efficient, fast in processing information, can receive several applications without lowering the performance of the system, can sort applicants according to the advertisement online instantly. Maintenance of E-recruitment portal is cost effective, it has ability to reply applicants online once application is complete without human interaction and information is promptly updated.

The study recommends that, organizations using e-recruitment should make sure that, the e-recruitment portal is user friendly, saves time and cost incurred by both applicant and employer during recruitment process. On the other hand policy makers are recommended to make sure that, they implement e-recruitment policies that require all public organizations to use e-recruitment systems with relevant features in the portal that simplify the whole recruitment process. The study also recommends that, researchers doing related studies are recommended to focus more on assessing the challenges facing job applicants when accessing recruitment portals. Moreover, designers of e-recruitment portal and management should make sure that, the system is cost efficient, easily accessible, time saving, contains all necessary information, generates all necessary information, can sort applicants online and can reply automatically once the application is complete.

REFERENCES

[1] Benson J. M. (2020). Assessing Effectiveness of Electronic Tax payment system in Tanzania:

[2] Bett, K. B., & Yuddah, A. O. (2017). Contribution of i-Tax system as a strategy for revenue collection at Kenya Revenue Authority. *International Journal of Scientific and Research Publications*, 390-398.

[3] Brandao, C., Morais, C., Dias, S., Silva, A.R. and Mario, R. (2017) *Using Online Recruitment*: Implicit Theories and Candidates' Profile. Springer International Publishing. Retrieved: http://doi.10.1007/978-3-319-56541-5_30

[4] Brandao, C., Morais, C., Silva, R. & Mario, R. (2017). *Using Online Recruitment*: Implicit Theories and Candidates' Profile Conference Paper in Advances in Intelligent Systems and Computing. 293-300. Retrieved from: doi:10.1007/978-3-319-56541-5_30

[5] Casu, O., & Lazo, E. (2017). *Towards a New Transformation of E-Payments Paradigm.* Stockholm: Moldovan Public Services.

[6] Clarke, V. and Braun, V. (2013) *Teaching thematic analysis*: Overcoming challenges and developing strategies for effective learning. The Psychologist, 26(2), 120-123.

[7] Devi, R. and Banu, V. (2014). *Introduction to recruitment*. SSRG International of Economics and Management Studies, 1(2), 5-8. Retrieved: http://www.internationaljournalssrg.org/IJEMS/2014/Volume1-Issue2/IJMES-V102.pdf

[8] Fayyazi, M. & Afshar,Z. (2014) *E-Recruitment in Iranian Bank and Insurance Industry*. New Marketing Research Journal, Special Issue, 2014, 69-78

[9] Fred, M.O., & Kinange, U.M. (2018). Effectiveness of E-Recruitment in Organization Development. *Management and Economics Journal,* 2 (4), 294-301.

[10] Gopalia, A. (2012) *Effectiveness of Online Recruitment and Selection Process*: A Case of Tesco, 13-18. Retrieved from: https://pdf.semanticscholar.org/3a15/e347a6dbf92c44813f943dc6ef20a6f756d0.PDF

[11] Kebede, A.K. (2017). *Adoption of E-recruitment in Ethiopian Banking Industry*. IBMRD's Journal of Management and Research, 6 (2), 29-37.

[12] Kishura, D. (2020). the impact of government electronic payment gateway on revenue collection: a case of ministry of finance and planning – tanzania. a dissertation submitted for partial fulfillment of the requirements for degree of masters for information technology in project management of the college of business education Dar es salaam, (unpublished)

[13] Mohamed, S. (2019).The introduction and use of electronic recruitment (erecruitment) on the recruitment process in organizations: Benefits of this technology for recruiting organizations. Global Journal of Human Resource Management, 7(5), 45-59. Retrieved from: https://www.eajournals.org/wp-content/uploads/The-introduction-and-use-recruitment-e-recruitment-on-the-recruitment-process-in-organizations.pdf

[14] Narmadha, M.P., & Nagi, M.S. (2017). *A Conceptual Study on E-Recruitment System and Its Efficiency in Indian MNC Companies*. *Imperial Journal of Interdisciplinary Research (IJIR), 3*(8), 633-638.

[15] Powell, R. R. & Connaway, L. S. (2014). Basic research methods for librarians, fifth edition. CA: Libraries Unlimited.

[16] Raphael, G. (2018). The Influence of Perceived Usefulness of GePG on Revenue Collection in Dodoma City. *The International Journal of Business Management* , 1-12.

[17] Sabha, S. (2018*) Impact of Online recruitment on recruitment*. International Journal of Education and Research. 6(4), 47-52. Retrieved from: https://www.ijern.com/journal/2018/April-2018/04.pdf

[18] Sabha, S. (2018). *Impact of Online Recruitment on Recruitment*. *International Journal of Education and Research,* 6(4), 47-52.

[19] Sanga, D. (2015). Electronic Revenue Collection: Does it improve organization performance? a case study of Ngorongoro Conservation Area Authority. A desertation submitted in partial fulfillment of the requirements for the award of masters of science in accounting and finance of Mzumbe university, (unpublished)

[20] Urio, W. I. (2020). Assessment of Government electronic payment gateway system in revenue collection: A case of Tanzania Civil Aviation Authority (TCAA) KIA station. A dissertation submitted in partial fulfilment of the requirement for the award of the degree of Masters of Science in Finance and Investment of the Institute of Accountancy Arusha Institute of Accountancy Arusha, (Unpublished)

[21] URT. (2016). National Information and Communication Technology (ICT) Policy, (May), 1–63. Retrieved from https://tanzict.files.wordpress.com/2016/05/national-ict- policy-proofed-final-nic-review-2.pdf