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Electronic Compensation Management (E-CM) and Service Quality: The Interaction Role of Organization Factors

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Abstract:
Automating Human Resource (HR) tasks and practices is transforming the traditional paper-and-pencil, labor-intensive HR tasks, into efficient, fast-response activities that enable organizations to anticipate and break even. Even though the e-CM concept is widely used today, there is a missing link between the e-compensation management practices and service quality delivery in public universities in Western Region of Kenya. This study examined the influence of electronic compensation on service quality delivery. The study used mixed methods research design which included exploratory, correlational and survey research designs. The target population of this study comprised of 5,467 staff and student leaders drawn from the six (6) public universities. Accessible population comprised of 360 respondents drawn from teaching and administrative staffs. The study used structured questionnaire for data collection from the teaching and administrative staff; interview schedules for collecting data from HROs, while nominal group discussions were used on student leaders.The results indicated that electronic compensation had a significant positive influence on service quality delivery (ß = 0.0469; p < 0.05). On moderation, the results indicated that organizational factors had a negative significant effect on the relationship between electronic compensation and service quality delivery (ß = -0.101; p < 0.05). The study recommends that management of public universities in Kenya upgrade their commitment towards supporting implementation of e-compensation management practices; review policies so as to align them with the changing technological environment to realize better quality service delivery and also create supportive organizational environment to enhance use of e-compensation management.

Keywords: Organizational factors, e-compensation, service quality

1. Background

Wright and Dyer, (2000) described e-compensation as the usage of intranet and internet for compensation planning. He further observed that a growing number of Organizations are turning to technology to facilitate their task and have started enhancing their compensation systems through the usage of intranet and internet. Further Marler and Dulebohn (2005) described e-compensation as web-enabled approach to an array of compensation tools that enable an Organization to gather, store, manipulate, analyze, utilize, and distribute compensation data and information.

Marler and Dulebohn (2006) described e-compensation as web-based software tools that enable managers to effectively design, administer, and communicate compensation programs. E-compensation systems also allow managers to develop budgets, model the impact of incentive systems, and ensure the fairness of salary allocation decisions. According to Gueutal& Stone, (2006), e-Compensation software and systems provide HR professionals with the ability to manage their compensation systems in order to meet the traditional compensation objectives of internal equity, external competitiveness, individual equity and administration. Similarly, Marler & Dulebohn (2005); Stone et al., (2013) observed that e-compensation represents a web-enabled approach to an array of compensation tools that enable an organization to gather, store, manipulate, analyze, utilize and distribute compensation.

E-compensation tools allow HR managers to effectively adapt compensation systems to deal with the current challenges, manage and maintain all aspects of equity in pay plan design, and to align the compensation systems with the strategic management of the Organization. Marler, (2009) observed that an e-compensation system cannot be underestimated as it consists of making more efficient HR practices by increasing efficiency through streamlining HRM operations by involving mechanisms that facilitate among other things: employee information, attendance record, leave record, generation of pay slips; submission of annual returns, training and induction programmes among many other operations. HR managers use the e-compensation system to make appropriate decisions in terms of salary administration or changes, bonuses and rewards for both employees and leaders (Panayotopoulou et al. 2007).

In traditional HRM, Ramus (2002) observed that compensation and reward management could be actualized through many forms such as tailoring packages to reward skills acquisition; use of monetary-based employee management

rewards for instance bonuses, cash, premiums); Use of non-monetary based electronic HRM rewards such as sabbaticals, leave, gifts; use of recognition-based management rewards such as awards, dinners, publicity, external roles, daily praise; development and adoption of negative reinforcements in employee management such criticism, warnings, suspensions for lapses. Similarly, some of these forms could also be applied in e-HRM. For instance reward management could be actualized through forms such as tailoring packages to reward electronic skills acquisition, development or adoption of positive rewards in electronic management such as feedback; Linking participation in initiatives to promotion/career gains, for instance, managers advancing through supporting staff in e-HRM. Compensation and reward are the major elements of HRM process for maintaining employee interest to that of the organization. Reward polices should be focused on attracting, retaining and motivating the employee, which in turn will lead to the achievement of organizational goal (Teixeira et al., 2013) and improvement of the organizational commitment (Daily and Hang, 2001).

E-Compensation systems are used for such purposes as developing and implementing pay systems, providing benefits, and evaluating the effectiveness of compensation systems. E- Compensation systems are also used to communicate data about benefits options to employees, and give them the opportunity to select benefit plans online (Gueutal & Falbe, 2005).

The term 'Service Quality' is an association of two different words; 'service' and 'quality'. Service means 'any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Gefen (2002) defined service quality as the subjective comparison that customers make between the quality of service that they receive and the one they get. In another definition, Kalidas (2007) defined service quality as the ability of a service provider to satisfy a customer in an efficient manner through which he can better the performance of business.

Service quality delivery has widely been discussed since 20th century and its idea is still relevant to help today organizations in creating differentiation and gaining competitive advantage in an era of borderless world and globalization (Ismail, et al. (2016). In a quality management literature, quality service delivery is often seen as a multi-dimensional construct as illustrated in the following research studies:

The seminal work on service quality by Parasuraman et al., (1985), identified ten dimensions of service quality from 97 items which were considered important in assessing customer's expectations and perceptions on delivered service. The ten dimensions were; tangibles, reliability, responsiveness, communication, credibility, security, competence, courtesy, understanding, knowing, customers, and access. Later in 1991, Parasuraman and his associates through an empirical test developed five dimensions of service quality based on the ten dimensions he developed in 1985. Factor analysis on a data set of 22 attributes revealed five dimensions which include tangibles, reliability, responsiveness, assurance and empathy. Tangibles include aspects such as the physical facilities, equipment, and appearance of personnel. Reliability is the ability to perform the desired service dependably, accurately, and consistently while responsiveness is the willingness to provide prompt service and help customers. Assurance concerns employees' knowledge, courtesy, and ability to convey trust and confidence to the customers while empathy entails the provision of caring, individualized attention to customers (Parasuraman et al., 1991).

Gronroos (1990), and Lehtinen and Lehtinen (1991) conceptualized three similar classification of service quality. Gronroos (1990), classified quality dimensions as technical quality, functional quality and corporate image while Lehtinen and Lehtinen (1991) conceptualized service quality as physical quality, interactive quality and corporate quality. The technical and functional dimensions by Gronroos and Lehtinen are consistent withNordic school of thought which holds the view that, effective quality service delivery should have two important dimensions, namely technical and functional quality. Technical quality is what customers receive from services provided by an organization and functional quality is about how an organization delivers its services to customers (Brady & Cronin, 2001). Later, the quality service delivery construct has been modified and simplified by US school of thought where it proposes that effective quality service delivery should have five specific dimensions, namely tangible (physical facilities, equipment, and appearance of workers), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customer and provide prompt service), assurance (knowledge and courtesy of workers and their abilities to inspire trust and confidence), and empathy (caring, individualized attention the organization provides its customers) (Ismail and Yunan, 2016).

Owlia and Aspinwall, (1996) conducted a factor analysis of 30 items on service quality and extracted 7 dimensions of academic resources, support services, competence, attitude, delivery, content and reliability. The researchers later regrouped the seven dimensions into four dimensions after conducting three validity tests. The four dimensions are of academic resources, competence, attitude and content. The three constructs of support services, delivery and reliability were not valid and were dropped from the service quality measurement framework.

Carney (1994) proposed nineteen attributes of measuring service quality in a college. These attributes are student academic qualification, student personal qualities, interaction between faculty and students, quality of instruction, availability of varied courses, academic reputation, class size, career preparation, athletic programs, student social life activities, service rendered to community, facilities and equipment, location, physical appearance of the campus, on campus residence, friendly, caring atmosphere, religious atmosphere, safety on campus and financial costs and aid available. Researchers have acknowledged that most of these variables are highly relevant to the measurement of service quality in university context. Some of these attributes by Carney are similar with Athiyaman (1997), who adopted eight attributes to examine university education services namely; availability of library services, computing facilities, recreational facilities, teaching the students well by faculty, level and difficulty of subject content, workload given to students and student numbers in each class and availability of university staff to be consulted by students.

Hadikoemoro (2002) in a research study that focused on public and private universities captured thirty five items of service quality after conducting two focus group interviews and after factor analysis seven items were dropped and 28 items remained and five dimension of service quality were extracted as follows academic services, readiness and attentiveness, fairness and impartiality, tangibility and attitudes. Academic services concern the ability of the university to perform services dependably and accurately, and also the completeness of academic-support facilities. Readiness and attentiveness dimension is about the university willingness and attentiveness to help students, and provide prompt service at all times. Fairness and impartiality on the other hand concerns the ability of the university to implement democratic campus regulations and apply discipline to all members. Tangibility is about the appearance of the university based on complete and modern equipment, physical facilities and neatness of employees. General attitudes cover fairness of grading and courteous handling of student issues.

Hassan, Rahman, &Ghouri, (2012) in their study on Educational Service Quality at Public Higher Educational Institutions targeting research universities and non-research universities in Malaysia concluded lack of significant difference in the importance educational service quality dimensions between research universities and non-research universities. From the student perspective they identified ten dimension of educational service quality namely; reliability, assurance, empathy, responsiveness, tangibles, communication, expertise, secondary services, social responsibility and self-development.

It is evident from the discussed literature that the main concern in developing the dimension of service quality is about the customers targeted customer preferences and context where the study is being conducted. It is also evident that, most studies on service quality conducted in universities target students both at undergraduate and post graduate level as the respondents. Very limited studies have explored the perspective of faculty and administrative staff in universities. There is even more scanty evidence on studies that target to generate data from multiple perspectives of both internal and external customers of universities. Different dimensions of service quality have been used for different industries. However, there are some similarities on some adopted dimensions (Lagrosen, 2004). Extant literature reveals that many authors have developed service quality dimensions according to their customers, customers' preferences and the context of the study and the most utilized dimensions of service quality are those developed Parasuraman and his colleagues. Kang and James, (2004) observe a concurrence in thought that the service quality model developed by Parasuraman and his associates is widely acceptable in the measurement of service quality in different contexts (Parasuraman, Berry, and Zeithaml, 1985). Based on the conceptual gaps identified in literature, the study sought to explore the link between e-HRM and service quality from faculty, administrative staff and student perspectives in public university context.

This study therefore covered five specific dimensions of service quality namely; tangibles which included physical facilities and equipment, reliability which involved consistency and dependability in service provision, responsiveness which involved willingness by the service provider to help customers and provide prompt service, assurance which involved ability to convey trust and confidence, and empathy which involveshowing care and individualized attention by the service provider.

customer experience which considered aspects like time taken, resolution of complaints, costs involved, behavior of service givers; tangible factors for instance physical facilities, equipment, and appearance of workers), reliability which involves ability of staff to perform the promised service dependably and accurately; responsiveness which involves willingness to help customer and provide prompt service; assurance which involves knowledge and courtesy of workers and their abilities to inspire trust and confidence in the customers; and empathy which involves caring, individualized attention the organization provides its customers. It also covered the aspects of service culture and employee engagement as measures of quality service delivery.

Stone, et al., (2006) observed that every organization has its own culture which affects its ability to compete and respond successfully to changes in the external environment. The changes in the external environment in turn determine if the organization will succeed or fail. On the other hand, Sole (2009) observed that there are two basic factors which influence performance management systems in public organization. These are internal and external factors. Internal factors include leadership and internal management commitment, internal resources, performance-oriented culture, employee engagement, and maturity of PMS. Leadership is important in designing relevant policies and documenting work procedures that would help in providing guidance and ensuring consistency in decision making. Sole (2009) observed that culture can be thought of as the sum total of beliefs, ideologies, behaviors and values prevalent in organizations, which can influence organization power relationship and their response to change. It could have a great impact on its success if the employees are involved and motivated during the development of the performance measurement and management system. Experience in performance management and measurement systems will affect the system implementation and also its end results.

1.1. Statement of the Problem

There have been widespread concerns that rapid expansion of higher education has led to a degradation of quality, particularly in the lower-income countries of Africa, Asia and Latin America as manifested variously in poor physical infrastructure, overcrowded classrooms, curricula that do not respond to market needs, academic staff without the required qualifications, or moonlighting in multiple institutions (Tilak, 2013; Altbach et al. 2009; Tettey & PHEA 2009). Mulili, (2014), observed that constrained service delivery contributes to increased customer complaints which are an indicator of customer dissatisfaction. Widespread dissatisfaction of both internal and external customers affects the reputation of universities and its ability to attract and retain customers leading to poor performance (Agarwal 2009; Oketch 2016; Pitan & Adedeji 2012; McCowan et al. 2017). Literature reveals that e-HR training has the potential to

improve service quality and as a result improve employee satisfaction and commitment (Bondarouk e al, 2017; Ruel et al, 2007; Kovach et al 2002).

A survey through documented literature reveals that public universities have adopted e-CM, however, there is limited documentation on the link between e-CM practices and quality service delivery. Evidence suggest contextual variations on service quality between public and private universities with no significant difference between research and non-research universities from student perspectives (Yusof, Rahman, & Ghouri 2017; Owino 2014). However, studies focusing on service quality from multiple perspectives are scanty and therefore this study explored e-CM and service quality from teaching staff, administrative staff and student perspectives.

Conceptual review revealed conceptual gaps in e-CM and service quality constructs that calls for more research. The concept of e-CM lacks convergence on definition, categorization and conceptualization (Ball, 2001; Bondarouk, Harms, &Lepak, 2015; Bondarouk & Ruël, 2009). Scholars agree that service quality is a multi-dimensional construct; however, divergence is evident on the number of dimensions and measures (Yusof et al, 2017; Owino, 2014).

Even though the e-CM concept is gaining acceptance today, there is still a missing link between the e-CM practices and quality service delivery in public universities and therefore this study sought to contribute in filling the identified gaps.

1.2. Purpose

The purpose of this study was to assess the influence of e-compensation management on service quality delivery in public universities in the Western Region of Kenya.

1.3. Specific Objectives

The specific objectives of this study were:
- To establish the influence of electronic compensation management on service quality.
- To examine the moderating role of organizational factors on the influence of electronic compensation management practice on service quality.

1.4. Research Hypotheses

Research hypothesis for this study was:
- H01: Electronic compensation management has no significant influence on service quality.
- H01a: Organizational factors do not have any moderating effect on the influence of electronic compensation management on service quality.

2. Methodology

This study was carried out in the following six public universities in the Western Region of Kenya: Masinde Muliro University of Science and Technology (MMUST), Kibabii University (KIBU), Maseno University, Kisii University, Jaramogi Oginga Odinga University of Science and Technology (JOOUST) and Rongo University.

2.1. Research Design

This study adopted a mixed methods research approach where explanatory, correlational and survey designs were adopted. Mixed methods research approach presents more than one approach to examining a research problem. The study focused on real life contextual situations in public universities in the Western Region of Kenya, particularly on diverse aspects of electronic human resource management and service quality delivery. It handled both quantitative and qualitative data in assessing the influence of e-CM practice on service quality delivery which were considered to require the mixed method research approach.

2.2. Target Population

The target population of this study was 5,467 teaching and administrative staff, 6 human resource officers, and 42 student leaders from the Students Governing Council (SGC) from the six universities in Western Region. Teaching staff and administrative staff comprised of 1,343 and 4,124 employees respectively.

2.3. Sample Size and Sampling Procedures

2.3.1. Sample Size

Sample size for teaching and administrative staff was determined using Equation 1:
Equation 1: Formula for Determination of Sample Size

$$n_o = \frac{Z^{2*}p*q}{e^2}$$

Where:
no = the sample size
Z = the standard normal deviate at the required confidence level (1.96 for 95% confidence level)
P = the proportion of the target population estimated to be having the characteristic being measured (0.5)

q = 1 – p (0.5)
e2 = desired level of statistical significance (0.05)
Sample size calculation when the population is finite

$$n_o = \frac{Z^2 * p * q}{e^2} = \frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2} = 385$$

For correction of finite population, the adjusted sample size was calculated using Equation 2 as follows:
Equation 2: Formula for Correction of Finite Population

$$n = \frac{n_o}{1 + \frac{n_o - 1}{N}}$$

Where:
n = the new sample size
N = the target population of the study
no = 385.

$$n = \frac{385}{1 + \frac{385 - 1}{5,696}} = \frac{385}{1.0674} = 360$$

(Krejcie and Morgan, 1970)
The sample size and distribution of the respondents for this study was as indicated in Table 1.

Name of University	Strata	Target Population	Sample Size Calculation $n = \dfrac{no}{1 + \frac{no-1}{N}}$	Sample Size
MasindeMuliro University of Science and Technology	TS	317	317 x 360/5,467	21
	AS	695	695 x 360/5,467	46
Kibabii University	TS	126	126 x 360/5,467	8
	AS	284	284 x 360/5,467	19
Maseno University	TS	300	300 x 360/5,467	20
	AS	1186	1186 x 360/5,467	78
JaramogiOgingaOdinga University of Science and Technology	TS	158	158 x 360/5,467	10
	AS	695	695 x 360/5,467	46
Kisii University	TS	316	316 x 360/5,467	21
	AS	948	948 x 360/5,467	62
Rongo University	TS	126	126 x 360/5,467	8
	AS	316	316 x 360/5,467	21
TOTAL		5,467	5,467 x 360/5,467	360

Table 1: Sample Size and Distribution of Respondents per University
Source: Survey Data, 2019

2.4. Sampling Procedures

    In this study, more than one approach was used in sampling. This is because of certain underlying factors peculiar to the population of the study. For instance, first, the population for the sampling was large. Second, the population varied greatly in its composition. Accordingly, several sampling techniques were used in this study, these were: stratified sampling method (Kothari, 2014); census sampling paradigm (Cohen, Marion, and Marrison, 2005) and random sampling. Several scholars have observed that stratified sampling is acceptable when handling populations that are not uniform (Kerlinger, 2004).

    Forty two (42) Student leaders in the Students Governing Councils from the six universities were targeted and were sampled by census method. Nominal discussion groups were used to collect data. Information gathered from student leaders was used to corroborate information gathered from staff. This was done because if teaching and administrative staff receive service quality in e-training, their satisfaction is enhanced, their loyalty and commitment to their tasks will be enhanced as argued by Bondarouk et al, (2017), Ruel et al, (2007) and Kovach et al (2002).Therefore, students' views can either confirm whether staffs are committed in quality service delivery or not.

2.5. Data Collection Instruments

This study used questionnaires, interview schedules and nominal group discussion schedules for data collection. A structured questionnaire with a five-point Likert scale was used to collect data from the teaching and administrative staffs. Structured questionnaire on a five point Likert scale measurement was used. Open-ended questions were used for instance, to clarify facts, verify information given or control a conversation (Gupta, 2002) and to capture participant's views on the influence of e-training practice on service delivery in universities in Kenya. The questionnaire was divided into sections. Each section tackled an independent variable and dependent variable as listed in the conceptual framework.

Interview schedule was used to collect data from the HROs. The information gathered was used for triangulation and corroboration of information gathered from the questionnaires. In this study, interview schedules were used to enhance quality of data, confirm and/or solicit some of the uncovered information by use of questionnaires. Nominal group discussions were conducted on Students Leaders to enable the researcher get their views on quality of services received. Student leaders in each university were gathered in a room and guided discussions lasting for about one hour were conducted. The purpose of conducting NGDs on students' leaders was to gather information which will be used for triangulation and corroboration of information gathered from the questionnaires administered to teaching and administrative staff in the universities.

2.6. Reliability of the Research Instruments

Internal reliability of the questionnaires for this study was measured and calculated using the Cronbach's alpha coefficient. This study used the Cronbach's Alpha Coefficient test to test for the reliability of the scale used to measure the study constructs. The study adopted 0.7 Cronbach's Alpha Coefficient value as the minimum threshold for deciding whether the scale was reliable; in the early stages of research on hypothesised measures of a construct, reliabilities of 0.70 or higher would be sufficient (Nunnally, 1994). Results for reliability test were as indicated in Table 2.

Variables (Constructs)	Number of items	Cronbach Alpha
E-Training	8	0.933
Quality Service Delivery	20	0.881

Table 2: Reliability Test Results
Source: Research Data, 2019

Findings in Table 3.2 show that Cronbach's alpha coefficient for the two constructs were above minimum threshold of 0.7 (Nunnally, 1994); The Cronbach's alpha for E-TM practice was 0.933, and for QSD was 0.881. Therefore, this study concluded that the scale of the items used to measure the constructs was reliable and acceptable for further analysis.

2.7. Validity of Research Instruments

Construct validity, content validity, internal validity and external validity of research instruments for this study was determined. For construct validity, the questionnaire was divided into three sections to ensure that each section assesses information for the objective, and the constructs as reflected in the conceptual framework for the study. Factor analysis statistical methods of testing for construct validity were used. Frankfort-Nachmias and Nachmias (2007) describe validity as the degree of congruence between the explanations of the phenomena and the realities of the world. Factor analysis is a term that represents a large number of different mathematical procedures for analyzing the interrelationships among a set of variables and for explaining these interrelationships in terms of a reduced number of variables, called factors (Comrey & Lee, 2013). Factor analysis was conducted on all items for each of the study variables.

Content validity is usually established through expert or researcher judgment (Malhotra and Birks, 2007). Content validity (also known as face validity) is a subjective assessment of the extent of correspondence between the items constituting a scale and its theoretical definition (Malhorta and Birks, 2007). In this study, content validity was assessed through the use of four expert judges (academic members of staff) who examined the questionnaire to determine whether the scale items covered the full scope of the constructs being measured. Each of the four academic staff independently rated the items and confirmed that the content was relevant and measuring the intended purpose.

Construct validity which sought to determine whether the questionnaire accurately measured the study phenomena, was tested using Factor Analysis method. Through factor analysis, Kaiser-Meyer-Olkin (KMO)measure of sampling adequacy was used to affirm that the number of items used to measure a particular construct (variable) was adequate enough and Bartlett's Test of Sphericity was used to measure if the items were coming from a population with equal variance. The study results were as shown in Table 3.

Variable	Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	Degrees of Freedom	p-value
E-HR training	0.812	2031.887	28	0.000
Quality of Service	0.623	5148.072	190	0.000

Table 3: Sampling Adequacy and Sphericity Results
Source: Research Data, 2019

The results in Table 3 indicate that the study met the validity test threshold. The KMO results for sampling adequacy for all the variables were above 0.6 threshold value as established by Saunderset al, (2009), that is, the measure for sampling adequacy for E-RM practice was 0.664, for E-Compensation was 0.636, for E-HR training was 0.812 for E-PM practice was 0.687, for organizational factors was 0.699 and for QSD was 0.623. These results indicated acceptable degree of sampling adequacy for all the factors. The significant results of Bartlett's Test of Sphericity shows that the sampled items were from population with equal variance; (χ2 (91) = 146.402, p < .05) state for each variable.

Finally, the researcher performed Principal Component Analysis (PCA) to identify and compute composite scores for the factors underlying the version of the five-point Likert Scale that was used in the questionnaire. Communalities were obtained to see if the items were sharing a common variance with other items. Varimax rotation was conducted to provide the best-defined factor structure.

3. Results and Discussions

3.1. Variable Reduction

Factor analysis was used to explore the data for patterns, confirm hypotheses, and reduce the many variables to a more manageable number and group variables with similar characteristics. Factor analysis was conducted for e-CM variables ad service quality. Many studies have hypothesized the dimensions of service quality as five. This study used the same and the factor analysis findings confirmed those dimensions although some items were dropped.

3.2. Factor Analysis with Varimax Loadings for Service Quality Delivery

The study conducted Factor Analysis with Varimax Loadings for service quality delivery based on a principal components analysis with Varimax rotation for 16 items. The results were as presented in Table 4.

Statement	Factor Loading	Decision
Adoption of e-HRM in our university has raised awareness of customer expectations and requirements	0.347	Excluded
Use of e-HRM system in our university has reduced the time for providing services to customers of HR services	0.869	Retained
Use of e-HRM in our university saves time and has helped employees to be more efficient in their work	0.812	Retained
Use of e-HRM in our university helps employees to treat customers with courtesy.	0.344	Excluded
Use of e-HRM in my university has ensured customer complaints are addressed promptly by HR department	0.702	Retained
Use of e-HRM in our university has helped in increasing reliability among staff	0.483	Retained
The university has used e-HRM to create good working relationships between employees and customers.	0.786	Retained
I am happy with the way our university uses e-HRM to address complaints raised	0.302	Excluded
Complaints and complements office in my university uses e-platforms in handling complaints raised	0.533	Retained
HR staff are courteous, friendly and welcoming when engaging on e-HRM practices	0.489	Retained
Use of E-HRM has reduced paper work, increased organization in offices where staff operate and makes the office environment appealing to customers	0.684	Retained
The university uses e-HRM to create awareness on costs of services provided to customers	0.557	Retained
Use of E-HRM in my university has made staff confident in the way they handle their work	0.643	Retained
My university uses E-HRM to ensure no extra charges are levied on services rendered	0.644	Retained
The use of E-HRM has reduced pressure on office space requirements for staff are spacious and organized	0.361	Excluded

Table 4: Factor Analysis with Varimax for SQD
Source: Research Data, 2019

Table 4 indicates that the factor analysis results for 11 statements regarding Quality Service Delivery attracted a coefficient of more than 0.4 minimum threshold (Saunders et al, 2009) hence they were retained in the questionnaire for the main study. However, 5 statements (romans number i, iv, viii, xi and xvi) attracted a coefficient of less than 0.4. Therefore, the five statements that attracted a coefficient of less 0.4 were excluded from the questionnaire.

3.3. Factor Analysis with Varimax Loadings for E-Compensation Management

The study conducted Factor Analysis with Varimax Loadings for E-Compensation Management Practice based on a principal components analysis with Varimax rotation for 12 items. The results were as presented in Table 5.

Statement	Component	Remarks
Processing of claims for payment by staff is done electronically	0.446	Retained
My salary is send to my bank account electronically	0.696	Retained
Accessing departmental vote heads in the university is done online	0.389	Excluded
The university has established a system for facilitating payments electronically	0.722	Retained
The university shares information on packages for compensation to employees via email and social media.	0.498	Retained
In our university, imprest for facilitation to undertake official assignments is processed via intra net platform	0.723	Retained
Any additional allowance payable to employees is processed electronically	0.632	Retained
The university uses electronic systems to compare salaries and allowances payable to employees with other universities.	0.611	Retained
Part time payments are electronically channeled to individual accounts for part time staff	0.598	Retained
It is easy to access information on e-payments made by the university	0.342	Excluded
Staff in the university enjoy e-payments than cash payments	0.618	Retained
Access to finance office has been made easy due to e-payments.	0.528	Retained

Table 5: Factor Analysis with Varimax Loading for E-CM Practice
Source: Research Data, 2019

Results in Table 5 indicate that the factor analysis for 10 statements regarding E-Compensation Management Practice attracted a coefficient of more than 0.4 minimum threshold (Saunders et al, 2009) hence they were retained in the questionnaire. However, 2 statements (romans number iii and x) attracted a coefficient of less than 0.4. Therefore, the two statements that attracted a coefficient of less 0.4 were excluded from the questionnaire.

3.4. Factor Analysis for Organizational Factors

The study conducted factor analysis with Varimax Loadings for Organizational Factors based on a principal components analysis with Varimax rotation for 4 items. Results were as presented in Table 6.

Statement	Component	Remarks
Leadership of the university is committed to providing resources for implementation of E-HRM.	0.448	Retained
The University has developed and implemented policies to enable operationalization of E-HRM practices.	0.643	Retained
The University has developed work procedures that support implementation of E-HRM.	0.533	Retained
There is sufficient infrastructure for implementation of E-HRM in my university.	0.544	Retained

Table 6: Factor Analysis with Varimax Loading for Organizational Factors
Source: Research Data, 2019

Results in Table 6 indicate that the factor analysis for the 4 statements regarding Organizational Factors attracted a coefficient of more than 0.4 minimum threshold (Saunders et al., 2009) hence all the 4 statements were retained in the questionnaire.

3.5. Quantitative Results

This section presents descriptive results for service quality delivery, e-compensation management and organizational factors.

3.6. Descriptive Characteristic for Dependent Variable (Service Quality)

Service quality was the dependent variable for this study. The constructs considered in the study were customer requirements, resolution of customer complaints, cost of services, environment in which the services were given and persons giving the services.

This section presents results for descriptive data analysis for quality service delivery in public universities in the Western Region of Kenya. Respondents wereassessed on service quality delivery in public universities using the matrix with questions on quality service, they were asked to put a tick (√) in the column to the right side of the option that best

suited their response. The rating was on a scale of 1 to 5 with 1 denoting Strongly Disagree, 2 - Disagree, 3 – Somewhat Agreed, 4 - Agree and 5 – Strongly Agree. Results for descriptive analysis for SQD were as indicated in Table 7.

Statement	SD	D	SWA	A	SA	Mean	Std. Dev.
SQ1	14	15	62	136	51	3.7	0.995
	5%	5%	22%	49%	18%		
SQ2	8	34	121	75	39	3.37	0.968
	3%	12%	44%	27%	14%		
SQ3	10	15	129	62	59	3.53	1.005
	4%	5%	47%	23%	21%		
SQ4	14	105	56	69	28	2.97	1.123
	5%	39%	21%	25%	10%		
SQ5	13	88	47	90	33	3.15	1.147
	5%	32%	17%	33%	12%		
SQ6	13	111	60	64	27	2.93	1.104
	5%	40%	22%	23%	10%		
SQ7	9	88	48	84	46	3.25	1.169
	3%	32%	17%	31%	17%		
SQ8	13	26	129	67	41	3.35	1
	5%	9%	47%	24%	15%		
SQ9	7	21	113	101	30	3.46	0.884
	3%	8%	42%	37%	11%		
SQ10	6	45	62	98	61	3.6	1.075
	2%	17%	23%	36%	22%		
SQ11	22	121	43	55	37	2.87	1.213
	8%	44%	15%	20%	13%		
	Mean		% Mean		Std. Deviation		Std. Error of Mean
Average Satisfaction level of Quality Service Delivery	3.2933		66%		.66700		.03958

Table 7: Descriptive Statistics for SQD
Source: Research Data, 2019

Results in Table 7 revealed that 5% of the respondents strongly disagreed that use of e-HRM in their university had reduced the time for providing services to customers 5% disagreed, 49% somewhat Agreed, 22% agreed and (18%) strongly agreed, with the statement; 3% of the respondents strongly disagreed that e-HRM practices in our university saves time and has helped employees to be more efficient in their work, 12% disagreed, 44% somewhat Agreed, 27% agreed and (14%) strongly agreed, with the statement; 4% of the respondents strongly disagreed e-HRM practices in my university has ensured customer complaints are addressed promptly by HR department, 5% disagreed, 47% somewhat Agreed, 23% agreed and (21%) strongly agreed with the statement; 5% of the respondents strongly disagreed that e-HRM practices in our university has reduced customer complaints on HR services, 39% disagreed, 21% somewhat Agreed, 25% agreed and (10%) strongly agreed with the statement; 5% of the respondents strongly disagreed that the university has used e-HRM to create good working relationships between employees and customers., 32% disagreed, 17% somewhat Agreed, 33% agreed and (12%) strongly agreed with the statement; 5% of the respondents strongly disagreed that complaints and complements office in my university uses e-platforms in handling complaints raised, 40% disagreed, 22% somewhat Agreed, 23% agreed and (10%) strongly agreed with the statement; 3% of the respondents strongly disagreed that HR staff are courteous, friendly and welcoming when engaging on e-HRM practices, 32% disagreed, 17% somewhat Agreed, 31% agreed and (17%) strongly agreed with the statement; 5% of the respondents strongly disagreed that Use of E-HRM has reduced paper work, increased organization in offices where staff operate and makes the office environment appealing to customers, 9% disagreed, 47% somewhat Agreed, 24% agreed and (15%) strongly agreed with the statement; 3% of the respondents strongly disagreed that the university uses E-HRM to create awareness on costs of services provided to customers, 8% disagreed, 42% somewhat Agreed, 37% agreed and 11% strongly agreed with the statement; 2% of the respondents strongly disagreed that use of e-HRM system in their university had made staff confident in the way they handle their work, 17% disagreed, 23% somewhat Agreed, 36% agreed and 22% strongly agreed with the statement; 8% of the respondents strongly disagreed that university uses e-HRM system to ensure no extra charges are levied on services rendered, 44% disagreed, 15% somewhat Agreed, 20% agreed and 13% strongly agreed with the statement.

On average, the satisfaction level for SQD was 66% (mean = 3.2933, Std. Dev. = 0.667) (Table 7), rated moderate. There was no mean of 4 or five on any of the items in the questionnaire. This implies that the level of satisfaction with service quality in universities in the Western Region of Kenya is moderate. Thus staff are moderately satisfied with the quality of services they receive from the respective HR departments in universities. The moderate level of satisfaction with quality service delivery observed in this study could be attributed to the challenges faced by the public universities in the Western Region of Kenya, thus limiting them from achieving quality services delivery.

The challenges facing public universities in the Western Region of Kenya include inadequate ICT infrastructure to support full-fledged adoption of technology; organization factors which include restructuring of the institutions for purposes of maximizing utilization of e-services; and attitude of employees towards utilization of e-services. These challenges pose a risk on employee engagement, which in its absence would directly affect quality service delivery. These observations agree with Shuck, &Zigarmi (2016) observed that work engagement, job engagement, organizational engagement, and intellectual/ social engagement were constructs of employee engagement that if adopted and implemented would result into quality service delivery. Furthermore, Watson (2009) observed that an efficient human resource management structure enables companies to deal with matters related to human resource adequately. This assists the employees deliver an acceptable quality of services, in spite of the challenges within and without the organization. These observations agree with Walter (2017) who posited that a robust human Resource management structure assists organizations give more priority to their organizational and business plans while efficiently administering the variations inherent in their daily operations. Human Resource management assists in attracting and maintaining competent staff, assists staff and management in embracing to organizational change, and allows the application of technology in determining how and where a job is performed leading to improved service delivery.

3.7. Descriptive Statistics for Electronic -Compensation Management

This section presents results and discussions on preference between electronic payment and print media/hard cash, perception of respondents towards e-compensation services and descriptive statistics for e-compensation services.

The study sought to establish respondents' preference in relation to use of e-compensation services against transactions with hard cash. The results were as presented in Table 8.

Preferred Media	Count Response	% Response
E-Compensation	272	99%
Hard Cash	4	1%
Total Response	276	100%

Table 8: Preference between E-CM Practice and Hard Copy
Source: Research Data, 2019

From the findings of Table 8, majority of the respondents, 99% prefer use of e-compensation services to hard cash (1%) for the services rendered in the university. Use of -e-compensation services is preferred because they are more convenient as compared to compensation using hard cash exchange for services rendered. Dealings with e-compensation services save time for both the service providers and the customers receiving services. Besides, e-compensation services can be accessed from anywhere so long as there is internet connectivity. Other respondents indicated that e-compensation services are more secure and makes it easy to store information on transactions by both the service providers and the customers. These findings agree with Aruwa (2016) who observed that Electronic payment presents a number of advantages, including cost and time savings, increased sales and reduced transaction costs. But it is vulnerable to internet fraud and could potentially increase business expenses.

The study sought to determine the perception of the respondents towards use of e-compensation practice for services rendered in their respective universities. The responses were as shown in Table 9.

Do you think making payments using Electronic media can improve on service delivery in the university	Count Response	% Response
Yes	273	99%
No	3	1%
Total Response	276	100%

Table 9: Perception towards Electronic –Compensation Management
Source: Research Data, 2019

From the findings of Table 9 majority of the respondents, 99% think that making payments using Electronic media can significantly improve on service delivery in a university.

The study, therefore, sought to assess the use of Electronic payments in the Universities in Western region of Kenya for services rendered and the responses were as shown in Table 10.

Statement	SD	D	SWA	A	SA	Mean	Std. Dev.
ECompens1	36	112	29	53	57	2.94	1.369
	13%	39%	10%	18%	20%		
ECompens2	9	19	126	84	47	3.49	0.952
	3%	7%	44%	29%	16%		
ECompens3	13	19	66	153	35	3.62	0.943
	5%	7%	23%	53%	12%		
ECompens4	89	19	60	49	70	2.97	1.569
	31%	7%	21%	17%	24%		
ECompens5	11	91	35	60	88	3.43	1.319
	4%	32%	12%	21%	31%		
ECompens6	35	92	31	78	48	3.04	1.331
	12%	32%	11%	27%	17%		
ECompens7	86	52	46	67	35	2.7	1.422
	30%	18%	16%	23%	12%		
ECompens8	13	122	68	54	28	2.87	1.086
	5%	43%	24%	19%	10%		
ECompens9	14	125	65	49	32	2.86	1.114
	5%	44%	23%	17%	11%		
ECompens10	92	32	65	46	53	2.78	1.498
	32%	11%	23%	16%	18%		

	Mean		% Mean		Std. Deviation		Std. Error of Mean	
Average Satisfaction level in E-Compensation HRM Management Practices	3.0688		61%		.91784		.05408	

Table 10: Descriptive Statistics for Electronic Compensation Management
Source: Research Data, 2019

Results in Table 10 revealed that 13% of the respondents strongly disagreed that processing of claims for payment by staff is done Electronically, 39% disagreed, 10% somewhat Agreed, 18% agreed and (20%) strongly agreed, with the statement. Three per cent (3%) of the respondents strongly disagreed with the statement that my salary is send to my bank account Electronically, 7% disagreed, 44% somewhat Agreed, 29% agreed and 16% strongly agreed, with the statement. Five per cent (5%) of the respondents strongly disagreed with the statement that the university has established a system for facilitating payments electronically, 7% disagreed, 23% somewhat Agreed, 53% agreed and 12% strongly agreed, with the statement. Thirty one per cent (31%) of the respondents strongly disagreed with the statement that the university shares information on packages for compensation to employees via email and social media, 7% disagreed, 21% somewhat Agreed, 17% agreed and 24% strongly agreed, with the statement. Four per cent (4%) of the respondents strongly disagreed with the statement that imprest for facilitation to undertake official assignments is processed via intra net platform in the university, 32% disagreed, 12% somewhat Agreed, 21% agreed and 31% strongly agreed, with the statement. Twelve per cent (12%) of the respondents strongly disagreed with the statement that the university shares information on packages for compensation to employees via email and social media, 32% disagreed, 11% somewhat Agreed, 27% agreed and 17% strongly agreed, with the statement. Thirty per cent (30%) of the respondents strongly disagreed with the statement that the university uses Electronic systems to compare salaries and allowances payable to employees with other universities, 18% disagreed, 16% somewhat Agreed, 23% agreed and 12% strongly agreed, with the statement. Five per cent (5%) of the respondents strongly disagreed with the statement that part time payments are Electronically channeled to individual accounts for part time staff, 43% disagreed, 24% somewhat Agreed, 19% agreed and 10% strongly agreed, with the statement. Five per cent (5%) of the respondents strongly disagreed with the statement that Staff in the university enjoy E-payments than cash payments, 44% disagreed, 23% somewhat Agreed, 17% agreed and 11% strongly agreed, with the statement. Thirty two per cent (32%) of the respondents strongly disagreed with the statement that access to finance office has been made easy due to e-payments facilitation, 11% disagreed, 23% somewhat Agreed, 16% agreed and 18% strongly agreed, with the statement.

On average, the satisfaction level in the electronic compensation Practice in the Universities in the Western region of Kenya was 61% (mean = 3.0688, Std. Dev. = 0.91784), rated moderate as shown in Table 10. There was no mean of 4 or 5 on any of the items in the questionnaire. This implies that the universities in the Western Region of Kenya have moderately adopted use of electronic compensation practices. From the information gathered from HROs, the implementation of e-compensation practice has been faced with challenges such as inadequate ICT infrastructure upon which platforms for e-compensation services can be mounted. This apparent shortage of ICT infrastructure is occasioned by insufficient funding of the universities. Information gathered from HROs indicated that the universities had developed road maps for development and establishment of the ICT infrastructure, but due to insufficient funding, the plans had not been effected to a satisfactory level, thus affecting the implementation of e-compensation practice. The findings of this

study agree with Irvan (2008) who observed that E-payment is very convenient compared to traditional payment methods such as cash or cheque. With E-payment, one can pay for goods or services online at any time of day or night, from any part of the world; customers don't have to spend time in a line, waiting for their turn to transact. Nor do they have to wait for a cheque to be cleared by the bank for them to access the funds they need. Mahmud (2017) also observed that E-payment also eliminates the security risks that come with handling cash money.

3.8. Descriptive Statistics for Organizational Factors (Moderator)

The study sought to determine the moderating effect of Organizational factors and their influence on the relationship between relational e-HRM practices (e-recruitment management, e-compensation management, e-human resource training management and e-performance management) and service quality delivery in public universities in the Western Region of Kenya.

In this sub-section, the study described the status of the Organizational factors in the public universities in the Western Region of Kenya. The findings were as detailed in Table 11.

Statement	SD	D	SWA	A	SA	Mean	Std. Dev.
Organizational factor 1	16	91	41	91	43	3.19	1.204
	6%	32%	15%	32%	15%		
Organizational factor 2	14	37	145	70	21	3.16	0.915
	5%	13%	51%	24%	7%		
Organizational factor 3	5	108	50	90	26	3.09	1.073
	2%	39%	18%	32%	9%		
Organizational factor 4	10	105	45	79	38	3.11	1.162
	4%	38%	16%	29%	14%		
Organizational factor 5	11	106	78	58	24	2.92	1.046
	4%	38%	28%	21%	9%		
	Mean	% Mean	Std. Deviation		Std. Error of Mean		
Average Satisfaction level in E-Performance Management Practices	3.1129	62%	0.79521		0.04678		

Table 11: Descriptive Statistics for Organizational Factors (Moderator)
Source: Research Data, 2020

From the results in Table 11 above, 6% of the respondents strongly disagreed with the statement that leadership of the university is committed to providing resources for implementation of e-HRM, 32% disagreed, 15% somewhat Agreed, 32% agreed and 15% strongly agreed, with the statement. Five (5%) of the respondents strongly disagreed with the statement that the University has developed and implemented policies to enable operationalization of e-HRM practices, 13% disagreed, 51% Somewhat Agreed, 24% agreed and 7% strongly agreed, with the statement. Two (2%) of the respondents strongly disagreed with the statement that the university has developed work procedures that support implementation of e-HRM, 39% disagreed, 18% Somewhat Agreed, 32% agreed and 9% strongly agreed, with the statement. Four (4%) of the respondents strongly disagreed with the statement that employees of the university have requisite experience in handling intranet software with regard to e-HRM, 38% disagreed, 16% Somewhat Agreed, 29% agreed and 14% strongly agreed, with the statement. Four (4%) of the respondents strongly disagreed with the statement that there is sufficient infrastructure for implementation of e-HRM in my university, 38% disagreed, 28% Somewhat Agreed, 21% agreed and 9% strongly agreed, with the statement.

On average, the satisfaction level organizational factorsin the universities in the Western Region of Kenya was 62% (mean = 3.1129, Std. Dev. = 0.79521), rated moderate as shown in Table 4.21. There was no mean of 4 or 5 on any of the items in the questionnaire. Provision of strategic leadership is a key ingredient in steering the public universities in the Western Region of Kenya reach the goal of quality service delivery. Leadership of the public universities in the region has established structures and documented information on establishment and use of e-CM practices in improving service delivery. The universities in the region have prepared policies and procedures that support implementation of e-CM practice. Managements' commitment is observed in universities in the region ensuring provision of physical, financial and human resources. The extent of provision of these resources directly affects the quality of services delivered in public universities in the Western Region of Kenya. It is therefore important that management of respective public universities in the region ensure that these resources are provided for improved quality service delivery.

3.9. Hypothesis Testing

The study sought to test for the assumptions for linear regression between e-CM Practices and service quality delivery. These included tests for Normality, Linearity, Homoscedasticity and presence of outliers.

3.10. Test for Normality

The study sought to assess whether the scores for the E-CM practices variable were normally distributed. To achieve this, the study used the Shapiro-Wilk Test and the findings were as shown in Table 12.

	Shapiro-Wilk test		
	Statistic (W)	Df	p-value
E-Compensation	.915	288	.063
Organization Factors	.944	245	.082

Table 12: Results for Normality Test
Source: Research Data, 2020

From the results of Table 12, the p-values for all the variables were greater than 0.05 level of significance; e-Compensation (W= 0.915, p-vale = 0.063 > 0.05), and Organizational factors (W= 0.944, p-vale = 0.082 > 0.05). The study concludes that the scores for all the variables were significantly normally distributed.

3.11. Test for Linearity
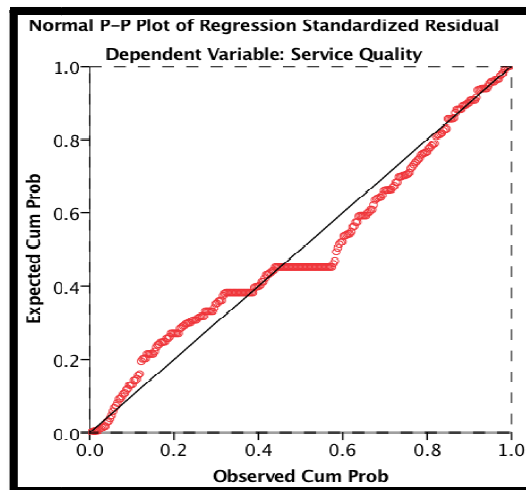
Figure 1: Normal P-P Plot for E-CM Practice
Source: Research Data, 2020

In Figure 1 the points lie in a reasonably straight diagonal line from bottom left to top right; this was an indication that there was a linear relationship between e-compensation and service quality delivery.

3.12. Test for Homoscedasticity

Homoscedasticity refers to the assumption that the dependent variable exhibits similar amounts of variance across the range of values for an independent variable. To achieve test for test for homoscedasticity, the study used the residual scatterplots and the findings were as shown in the Figure2.
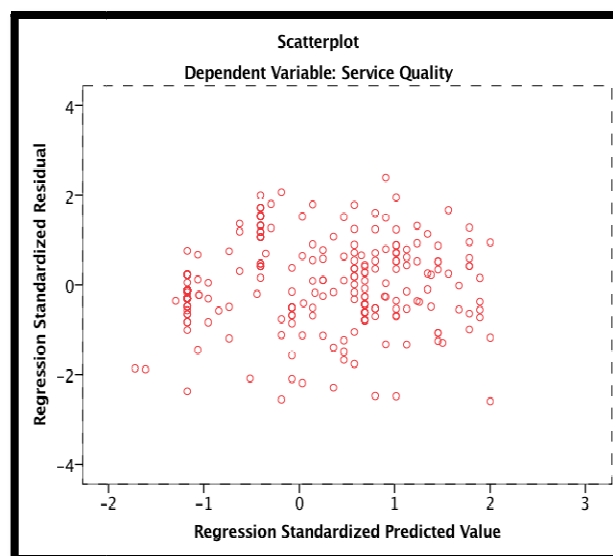

Figure 2: Scatter Plot for Standardized Residuals for E-CM Practice
Source: Research Data, 2020

In the Scatterplot shown in Figure 2 shows that the residuals are roughly rectangular distributed, with most of the scores concentrated in the centre, thus an indication that the assumption of homoscedasticity holds.

3.13. Multicollinearity Test

The study adopted the use of Variance Inflation Factor (VIF), tolerance values and correlation coefficients to detect multicollinearitya shown in Table 4.23 and 4.24 respectively. The study utilized the centering of independent variables and moderator variables prior to computing interaction terms to counter multicollinearity (Hayes 2013). This was tested through the visual inspection of variance inflation factors which revealed acceptable values which were all below the set values of -10 to 10. To further confirm that there was no multicollinearity, tolerance values were checked and it was established that they were all below 1.0 which is the accepted standard according to Hayes (2013).

Variable	Tolerance (1/VIF)	VIF
E-Compensation	0.253	3.949

Table 13: Multicollinearity Test Using Variance Inflated Factor (VIF)
Source: Research Data, 2020

The correlation analysis results were based on threshold by (Moore, 2004). According to Moore, a bivariate Pearson correlation coefficient above 0.9 indicates multicollinearity. Therefore, for the independent variables, the study indicates that there was no multicollinearity among the independent variables thus supporting the Variance Inflation Factors (VIF) findings of Table 13 above.

		Service Quality	Electronic Compensation
Electronic Compensation	Pearson Correlation	.641**	1
	p-value	.000	

Table 14: Correlation Matrix
**. Correlation is significant at the 0.01 level (2-tailed)

The correlation coefficients in the correlation matrix (Table 14) show that the coefficient for (e-compensation) was below 0.9. E-compensation had a significant strong positive relationship with the service quality delivery in ($r = 0.641 > 0.5$, $p = 0.000 < 0.05$). A coefficient (r) between +0.5 and +1 or -0.5 and -1 indicates a strong relationship based on the argument by Lyndsay (2009), therefore, the study concludes that e-compensation had a significant strong positive relationship with the service quality delivery in public universities in Western Kenya.

3.14. Results for Simple Linear Regression Analysis

Model 1 represents the results of the simple linear regression for e-compensation.

Model Summary	Model 1
R	0.641
R Square	0.412
Adjusted R Square	0.409
Std. Error	0.51311
ANOVA	
Degrees of freedom (a,b)	(1, 281)
F- statistic, F(a,b)	196.489
p-value for F- statistic	0.000
Regression Coefficients	
Intercept	1.852
β (Unstandardized coefficient)	0.469
Standardized Beta Coefficient	0.641
t (β)	14.017
p-value (β)	0.000
t (Intercept)	17.288
p-value (Intercept)	0.000

Table 15: Results of Hypothesis Testing

The hypothesis for the study was, H01: E-compensation management practice has no significant influence on quality service delivery in public universities in the Western Region of Kenya. The coefficient results in Table 15 showed a positive significant influence ($\beta = 0.469$, $t = 14.017$, $p=0.000<0.05$) and therefore the study rejected the null hypothesis and concluded that e-compensation management had a statistically significant influence on the service quality delivery. E-compensation management had a positive standardized beta coefficient value of 0.641 as shown in the coefficients results of Table 4.25 this indicated that a unit improvement in the e-compensation management was likely to result to an improvement in the quality service delivery in public universities in the Western Region of Kenya by 64.1%. The ANOVA results as shown in model 2 of Table 15 were, F (1, 281) = 196.489, P = 0.000 < 0.05, an indication that the linear regression model was a good fit to the dataset. The model (e-compensation management) was able to explain 41.2% of the

variation in the quality of service delivered in public universities in the Western Region of Kenyaas indicated by the R Square value of 0.412 as shown in Table 15. The following was the linear regression model to predict the service quality delivery in public universities in the Western Region of Kenya when given the level of effectiveness of the e-compensation management:

Service Quality Delivery = 1.852 + 0.469 E-Compensation Management Practices

E-compensation management practice saves employees and customers time as it reduces the queues at finance offices. Most of the staff who need financial facilitation to undertake various assignments as directed by the universities are facilitated through e-payment system. Instead of staff queuing at finance department to be paid salaries, the money is wired to their individual accounts and can be withdrawn at their convenient time. Hence the time that is saved can be used by the employees in serving customers. E-compensation management has also saved the universities on documentation since when payments are done electronically, the records are automatically generated. E-compensation management practice also increases transparency in operations, despite the fact that there could be some unscrupulous employees who may want to be malicious in use of the e-system of payment. Thus, according to the results in the model, adoption of e-compensation management practice heightens quality service delivery. E-compensation reduces time taken to compensate service providers; it is more convenient and reduces or eliminates risks that come with handling cash money. Marler and Dulebohn (2005) described e-compensation as web-enabled approach to an array of compensation tools that enable an organization to gather, store, manipulate, analyze, utilize, and distribute compensation data and information. From the findings of this study, staff in public universities enjoys access to compensation information with a lot more ease than before when they could only access via hard copies which were hard to come by. This has helped to create more awareness among employees and in return it has helped to change employee attitude about how compensation for the services they provide is handled. Further, Marler, (2009) observed that an e-compensation system cannot be underestimated as it consists of making more efficient HR practices by increasing efficiency through streamlining HRM operations by involving mechanisms that facilitate among other things: employee information, attendance record, leave record, generation of pay slips; submission of annual returns, training and induction programmes among many other operations. This study also observed that there is remarkable improvement in employee compensation management occasioned by adoption and implementation of electronic compensation. It has saved staff the trouble of following up payment processes in order to be facilitated to undertake official functions. As observed by Gueutal&Falbe, (2005) this study also confirms that E- Compensation systems in the public universities covered by this study are used to communicate data about benefits options to employees, and give them the opportunity to select benefit plans online which in turn leads to the achievement of organizational goal (Teixeira et al., 2013) and improvement of the organizational commitment (Daily and Hang, 2001).

3.15. Results for Moderation Analysis

Model 2 represent the results for moderation analysis for e-compensation management using hierarchical linear regression.

Model Summary	Model 2
R	0.654
R Square	0.427
Adjusted R Square	0.423
Std. Error	0.50718
ANOVA	
Degrees of freedom (a,b)	(2, 280)
F- statistic, F(a,b)	104.360
p-value for F- statistic	0.000
F-Change statistic	7.609
p-value for F- Change statistic	0.006
Regression Coefficients	
Intercept	1.948
β (Unstandardized coefficient)	0.461
Standardized Beta Coefficient	0.630
t (β)	13.884
p-value (β)	0.000
t (Intercept)	17.477
p-value (Intercept)	0.000
Interaction Effect	
β (Unstandardized coefficient)	-0.101
Standardized Beta Coefficient	-0.125
t (β)	-2.758
p-value (β)	0.006

Table 16: Results of Moderation Analysis
Source: Research Data, 2020

Hypothesis H01a states that there is no significant moderating effect of organizational factors on the relationship between e-compensation management and service quality delivery in public universities. Based on the findings in Table 16, model 6 shows that the interaction effect for e-compensation management had a significant influence on service quality delivery as indicated by significant beta and p values (ß = -0.101, p-value =0.006 < 0.05). Therefore the study rejected the null hypothesis and concluded that organizational factors had a negative significant moderation effect on the relationship between e-compensation management and service quality. The ANOVA results as shown in model 6 of Table 4.26 were significant as indicated by the F-Statistic, $F_{(1, 280)} = 104.360$, $P = 0.000 < 0.05$ which indicated that the moderated hierarchical linear regression model was a good fit to the dataset. The overall model was able to explain 42.7% of the variation in service quality delivery as indicated by the R Square value of 0.427 (Table 16). To determine how organizational factors moderate the relationship between e-compensation management and service quality delivery in public universities in the Western Region of Kenya, the study used the interaction Plots as suggested by Brien (2007). The plot is as shown in Figure 4.10.
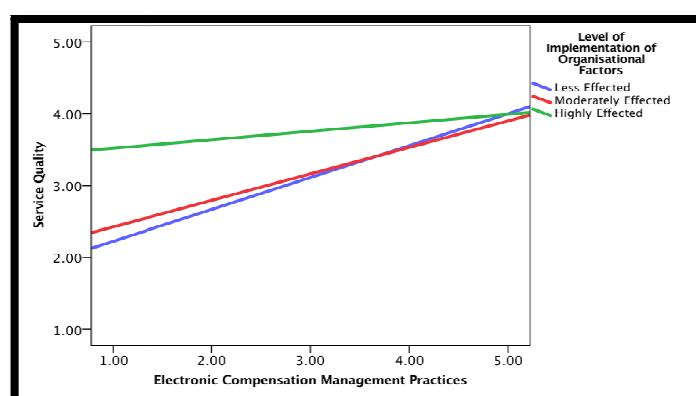

Figure 3: Interaction Plot On Moderation Effect of Organizational Factors on the
Relationship between E-CM Practice and Service Quality Delivery
Source, Research Data, 2020

Close and thorough examination of the interaction plot in Figure 3, revealed that organizational factors demonstrated an enhancing moderation effect on the relationship between e-compensation management and the quality service delivery. When the level of implementation of the organization factors is low, e-compensation management seem to have a lower influence on service quality delivery compared to moderate and high levels of implementation, and when the level of implementation of the Organization factors is moderate, e-compensation management seem to have a lower influence on service quality delivery compared to high levels of implementation of the organizational factors. However, the moderation effect reduces in strength as the level of e-compensation management practices increase as shown in Figure 3.

Leadership is of great importance in any management system. Committed leadership would ensure that universities in the Western Region of Kenya strategically design and implement e-compensation measures that would give them competitive advantage over other competitors. Committed leadership ensures that financial and human resources required for implementation of e-compensation management practices are provided consistently. Consistent provision of such required resources motivate employees in the public universities in the region to establish and maintain a performance oriented culture. These observations agree with Sole (2009) who observed that internal factors which included leadership and internal management commitment, internal resources, performance-oriented culture, and maturity of performance management would influence performance of a system. Sole (2009) further observed that leadership was important in designing and developing effective performance measurement system and internal management commitment brought formality to the performance management reviews and as a consequence could influence employees' commitment to achieving targets and improving performance.

3.16. Qualitative Data Analysis

This section presents results from interview schedules administered to HROs and nominal group discussions for students' leaders.

3.17. Findings from Human Resource Managers

HROs from the sampled universities indicated that the universities had installed and were using enterprise resource planning (ERP) software in processing payments to staff. The findings indicated that though ERP had been installed in all the six universities, implementation of the finance and human resource modules which are used to compute employee remuneration and payments were at different levels. In one university, all processes involving computing, giving necessary approvals and wiring money to the staff accounts is done online while in the other five universities, they blend electronic and manual systems. HROs explained that the main challenge facing the universities in full implementation of ERP software was insufficient ICT infrastructure. They reported that only a fraction of university staff have access to continuous access to internet facilities, training and retraining of staff on the application of ERP system has not been sufficiently done and other technical challenges related to implementation of the ERP system. However, each HRO in the

six respective universities confirmed that use of electronic compensation method was more efficient enabling staff both in HR and finance departments provide fast and reliable service to employees. They preferred use of electronic system to hard copy transactions.

These findings corroborate the findings of the questionnaire. In the questionnaire, the mean for most of the questions was 3.07 which indicates that majority of the respondents somewhat agreed with the statements, an indication that implementation of E-compensation and service quality delivery in the universities was moderate. In the questionnaire it was also observed that there was no mean of 4 and 5 on any of the questionnaire items. This indicates that universities still had a lot to do in linking E-compensation management to service quality delivery.

3.18. Findings from Nominal Group Discussion with for Students Leaders

The findings from nominal group discussions with students revealed that students were moderately satisfied with the physical facilities in their respective universities. The students held the opinion that insufficient physical facilities in their universities affected the service offered to them by staff. However they appreciated efforts made by the universities in improving physical facilities as time went by.

Students leaders observed that though universities had made effort to provide ICT equipment to staff, there was still a challenge since not all staff had been facilitated to get ICT Equipment that would enable them provide quality service. They observed that staff were using the limited ICT equipment available to provide electronic services. This had improved flexibility in staff work environment and had made staff to improve the quality of services they received from staff. In all the universities, student leaders observed the internet coverage was a big challenge as internet could only be accessed in certain areas and not others. They explained that non-resident students could not access internet services in their areas of residence unless they came to the universities. The findings indicated that employees in the universities were most of the times in official wear. The staff looked neat and they were warm to them as time progressed.

On rating university employees' ability of to perform the promised service dependably and accurately student leaders observed that not all university employees had the ability to perform their duties dependably and accurately. They cited cases where some staff both in teaching and administrative positions promised to deliver certain services but reneged on the promises at the last minute. They indicated that even in the top management of the university, some mangers delivered better than others. Issues that came out conspicuously were related to teaching and handling of student welfare issues.

Student leaders were asked how they would describe university employees' willingness to help customer and provide prompt service. Responses to this line of discussion indicated that willingness of staff to help students fluctuated with staff being more willing at end and beginning of the month, but they also observed that it was difficult to even tress some staff on dates that fall in the middle of the months, leave alone whether they were willing to help or not. However, some student leaders observed that staff generally helped them whenever they presented issues. Other student leaders confirmed that staff in the university were generally cordial in their relationship with students, were fair in their dealings, appeared neat and were welcoming to students.

Student leaders were asked if the university employees inspire trust and confidence in students through their work performance. This line of discussion elicited mixed reactions in most of the responses received. Half of the student leaders observed that there was trust and confidence inspired by the teaching and administrative staff in the universities. They reported that there were cases of trusted staff both in teaching and administrative positions. However, they indicated that there were reports of staff who had even conned students of their monies. Other responses indicated that some teaching staff did not inspire confidence in the students as they missed lectures and involved themselves in malpractices with students. However, the student's leaders lauded other staff who went beyond requirements of their line of duty to help students. They cited cases of staff who did extra work with students, provided adequate learning resources and facilitated students to get requisite learning materials. Such staff won the trust of students wholesomely.

Student leaders were also asked to describe the way the university treated the concerns raised by the students. They observed that on academic matters, the universities addressed their concerns moderately well. However, they expressed dissatisfaction in the way departments addressed issues of missing marks. They indicated that some students in the universities failed to graduate because their marks could not be traced. On student welfare, students indicated that universities did not meet the expectations of students. They cited cases where they had raised concerns about security of nonresident students, meals provided at the dining hall, games and sporting facilities, in twouniversities student leaders cited the bedbug menace that had not been addressed over a period of tie.

Student leaders indicated that since introduction of electronic services in the universities, the staff improved in the performance of their duties. Students confirmed that the level of accuracy in performance of services had steadily increased. In addition, student leaders confirmed that they had observed that staff were more willing to provide services than in the past. They further confirmed that as time progressed, and as staff were getting used to integrating ICT in the operations, they were winning trust and confidence of students.

Student leaders also reported that though the universities were registering improvement in how they provided service to students, there were still areas where students concerns had been raised but were not addressed as fast as was anticipated. For instance, they observed that there were cases of missing marks that made some students not to graduate on time. They also reported that though they could receive details about their fee payment through electronic messages, they still noted that there were cases of irregularities in their statements thus making some of them to be denied chance to sit for their examinations.

These results agree with the observations made in the findings in the questionnaire and in the interview schedule for the HROs. In the questionnaire, it was noted that staff were moderately satisfied with e-HRM operations and service quality with an average mean of 3.22.

4. Summary of Findings

This study sought to examine the influence of e-compensation practice on service quality in public universities in the Western Region of Kenya. Pearson Moment Correlation (r) was used to determine the strength and direction of the relationship between electronic compensation management and service quality delivery. Results showed that e-compensation management had a significantly strong positive relationship with service quality in universities in western Kenya (r = 0.641; p = 0.000<0.05). A coefficient (r) between +0.5 and +1 or -0.5 and -1 indicated a strong relationship based on the argument by Lyndsay (2009). ANOVA test showed a positive significant influence of e-compensation management on service quality delivery β = 0. 469, t = 14.017, p=0.000<0.05.

5. Conclusion

The study concluded that:
- E-compensation management had a significantly positive influence on service quality delivery in public universities in the Western Region of Kenya.
- Organizational factors have a negative significant moderating effect on the relationship between e-compensation practices on service quality delivery in public universities in the Western Region of Kenya.

6. New Knowledge

This study contributes to the body of knowledge by providing a strategic framework based on relational e-CM practice dimensions that public universities can use to improve on service quality delivery. The findings of this study have led to the development of a new model which states that the relational e-CM practice can be adopted as a strategy to improve service quality delivery contrary to some of the previous findings.

The study contributes to the empirical literature by establishing that relational e-CM dimension has a significant relationship with quality service delivery in public universities in the Western Region of Kenya and that public universities should focus on implementing the e-CM strategy appropriately by focusing on training programmes that support the implementation of the relational e-CM practice strategy.

The study brings out the importance of the independent variable e-compensation management practice to service quality delivery. This is a departure from the previous e-CM practices that were not information technology based. The findings will be used in the education industry to ensure that despite the challenges experienced; they can reach the target of quality service delivery by operationalizing e-CM Practice.

7. Recommendations

The recommendations from the study are two tier; recommendation for practice and policy and recommendations for future research.

8. Recommendations for Practice and Policy

The following recommendations were made based on the findings and conclusions of the study:
Public Universities in the Western Region of Kenya should embrace use of e-compensation practice for efficiency and quality service delivery.

Public universities in the Western Region of Kenya should commit enough resources for continued improvement of e-CM practices in order to improve on quality of service delivered.

Government through the Ministry of Education and other education stakeholders should consider increasing funding for ICT infrastructure in universities so as to enable provision of e-CM services.

9. Recommendation for Further Research

First, this study concentrated on only e-CM. Other factors come into the interplay and provide insightful results to the relationship between e-HRM practice and service quality delivery. Such e-HRM practices could be in areas categorized as relational, operational or transformational in nature.

Secondly, the study relied on mixed method design where the respondents were asked to assess viewpoints on the item in the instrument. But some success factors of e-CM are known to be strategic and dynamic in nature. Therefore, a longitudinal study would be more preferable as it could provide a better perspective in addition to further informing the policy frameworks of quality service delivery.

Thirdly, the findings presented in this study are based on evidence gathered from public universities in the Western Region of Kenya. Further research should be carried out in other industries, for example, financial and manufacturing industries whose e-CM issues closely relate to those of the educational industry.

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