The Moderating Effect of Innovation on the Relationship between Human Resources Information Systems and Organizational Performance

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Abstract

This study aimed to examine the moderating effect of innovation on the relationship between human resources information systems and organizational performance as applied on the government Departments and Mutah University in the Karak. This study attends to these practical and theoretical gaps using a quantitative methodology that involves hypotheses testing with data collected from (168) managements of the government departments in the Karak area using systematic random sampling. The data investigates the positive influence of the moderating effect of innovation on the relationship between human resources information systems and organizational performance and analyzed using Partial Least Square-Structural Equation Modeling (PLS-SEM).

The findings, based on 4 accepted hypotheses, showed that (a) Response HRIS , (b) Efficiency HRIS, (c) Integration HRIS positively influence Organization performance and (d) Innovation moderates the influence on organizational performance. This study, therefore, recommended using human resource information system, organizations should integrate the HRIS Human Resources Information Systems with other organizational systems to speed information sharing and decision making.

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التأثير المعدِّل **للابتكار في العلاقة بين نظم معلومات الموارد البشرية وأداء المنظمة**

عماد علي الكساسبة

ملخص

تهدف هذه الدراسة إلى التعرف على التأثير المعدل للابتكار في العلاقة بين نظم معلومات الموارد البشرية وأداء المنظمة "دراسة تطبيقية على الدوائر الحكومية وجامعة مؤتة في محافظة الكرك". هذه الدراسة تتناول هذه الثغرات العملية والنظرية باستخدام منهجية كمية تتضمن اختبار الفرضيات من البيانات التي جمعها من (182) من إدارة الدوائر الحكومية في منطقة الكرك باستخدام أخذ العينات عشوائية منهجية، والبيانات هي لمعرفة التأثير المعتدل للابتكار على العلاقة بين نظم معلومات الموارد البشرية على أداء المنظمة وتحليلها باستخدام (PLS-SEM). وأظهرت النتائج، المستندة إلى أربع فرضيات مقبولة بأن: (أ) استجابة نظم معلومات الموارد البشرية (ب) كفاءة نظم معلومات الموارد البشرية (ج) تكامل نظم معلومات الموارد البشرية لها تأثير إيجابي كبير على أداء المنظمة. (د) الابتكار معتدل التأثير على أداء المنظمة. لذلك، أوصت هذه الدراسة أنه عند استخدام نظام معلومات الموارد البشرية، ينبغي للمنظمات أن تدمج نظام نظم معلومات الموارد البشرية HRIS مع النظم التنظيمية الأخرى لتسريع تبادل المعلومات واتخاذ القرارات.

Introduction:

Recently with dramatic and continuous change, new technologies are still being developed. This change requires that organizations and senior management to be aware of the different types of technologies, which could improve the overall organizational performance. Human Resource Information Systems (henceforth, Human Resources Information Systems HRIS) have considerably evolved since they were first introduced and utilized; they have gone far beyond their original purposes of converting paper records into computerized databases. Recently, HR/payroll systems are able to handle several of HR's various functions.

HR Software now encompasses a large variety of features that enable the HRIS to effectively store employee data with more security, privacy and accuracy. Nowadays, HR information systems have become a pivotal tool that assist HR professionals to perform the various HR related tasks and/or activities more effectively and efficiently.

With the increased importance of such systems (i.e. HR systems) and the technological advancements we are witnessing, most companies have realized the need to implement and invest in developing more sophisticated and computerized Human Resource Systems. By adopting HRIS, companies can reap the benefits of implementing such systems such as keeping employees records updated and accurate, and to better lead to increases in efficiency when making HR decisions.

The quality of HR decisions should also be enhanced and as a result, the productivity of both employees and managers should increase and become more effective. This simply implies that ideas must be generated by employees, experimented by the organization's members, and implemented in order for organizations to achieve thier potential. In spite of the controversy in the definition of innovation, several studies have confirmed that innovation has positive influence on the organizations' performance, the national economy, industrial competitiveness, and the quality of life (Agolla & Van, 2016; Kafetzopoulos et al., 2015).

Problem Statement:

Human resource has been reported as one of the antecedent factors of competitive advantage (Buller & McEvoy, 2012; Miller, 2006), and significantly related to firm strategy and organizational performance Saravanan & Vasumathi, (2015); Ologunde et al., (2015); Nigam et al., (2011). Human resource has also been reported to have direct and significant relationship with organizational performance (Ologunde et al., (2015); Khalil & Singh, (2013); Saakshi,(2016)). On the other end, there are few works on technology-enabled human resource management (HRM) (Yakusak, (2015); Stanton & Nankervis, (2011); Marler, (2009)), and they are largely non-empirical. Yakusak (2015; Obeidat. (2012). studied the recent technological changes in human resource and advocated for empirical study to duly examine its role in organizational performance. Marler, (2009) developed a model of e-HRM strategy formulation and the efficacy of its function is aimed at exploring the links between strategic HRM, performance management.

Several scholars have studied innovation in the context of individuals, groups and organization levels. However, there is a lack of studies in examining the interrelations of several Resources Information Systems and innovation in organizational performance. Given the paucity of literature in the area, the study aims to fill this gap through establishing a link between Human Resources Information Systems and innovation as a moderator on organizational performance. The need to test the moderating effect of innovation on the relationship between (HRIS) and organizational performance, apart from the recorded inconsistency from past related studies. In conclusion, based on the vivid explanations on issues and arguments that necessitate this study, it is deemed imperative to state that this study aims to investigate relationship between (HRIS) and organizational performance as applied on the government departments in Karak area, with the consideration of the moderating effect of innovation. Therefore, the specific question (s) to be solved through the findings of this study will be clearly highlighted in the next section of this study.

Research Questions:

The research questions of this study are:

1) Does career management of the human resources information systems influence organizational performance?
2) Does performance appraisal of the human resources information systems influence organizational performance?
3) Does HR development of the human resources information systems influence organizational performance?
4) What is the moderating effect of innovation on the relationship between human resources information systems and organizational performance?

Research Objectives:

The main objective of this study is to investigate (HRIS) on organizational performance with consideration to the moderating role of innovation. To achieve this main objective, the following are the specific objectives to be accomplished by this study:

1) To investigate the influence of career management of the (HRIS) on organizational performance.
2) To investigate the influence of performance appraisal of the (HRIS) on organizational performance.
3) To investigate the influence of HR development of the (HRIS) on organizational performance.
4) To investigate the moderating role of innovation on the relationship between (HRIS) and organizational performance.

Significance of the Study:

This study, as evident in the issues and gaps highlighted in the problem statement, has theoretical and practical significances. The most instructing of these significances is its novel provision of the empirical evidence of the influence of (HRIS) on organizational performance and the moderating role of innovation.

The theoretical contribution of this study is three folds:

First, the presented conceptual model of this study, depicting the various (HRIS), organizational performance and innovation, and their measuring dimensions, is a theoretical contribution. It is a model that can be adopted or adapted in investigating similar situations, even in different contexts and countries.

Second, the comparison of the empirical results by this study, with others from previous studies, extends the boundary of knowledge. It provides a new perspective to the understanding of the influence of Human Resources Information Systems, and the plausible conceptualization for organizational performance. This study investigates the implications of (HRIS) and innovation towards organizational performance.

Third, this study presents valuable deliverables to researchers in the field of business management, human resource management and other associated fields, and also the professional practitioners. ?????

Research Framework and hypotheses:

H01: Career management of the Human Resources Information Systems influences organizational performance.

H02: Performance appraisal of the Human Resources Information Systems influences organizational performance.

H03: HR development of the Human Resources Information Systems influences organizational performance.

H04: Innovation moderates the effect of Human Resources Information Systems on organizational performance.

Research Framework:

Framework, normally referred to as research framework, is the theoretical and conceptual depictions that narrate the concepts (variables) being studied and the relationship among them (Punch, 2013). The research model was formulated based on the literature review of previous studies that have empirically tested the relationships of similar variables. (HRIS Kassim

et al., (2012) & Aggarwal & Kapoor, 2012, Nagendra & Deshpande (2014). (Organization performance, Rasula et al., (2012), (Innovation, Sung & Choi, (2013). Bilevičienė et al., (2015). Awan & Javed, (2015).

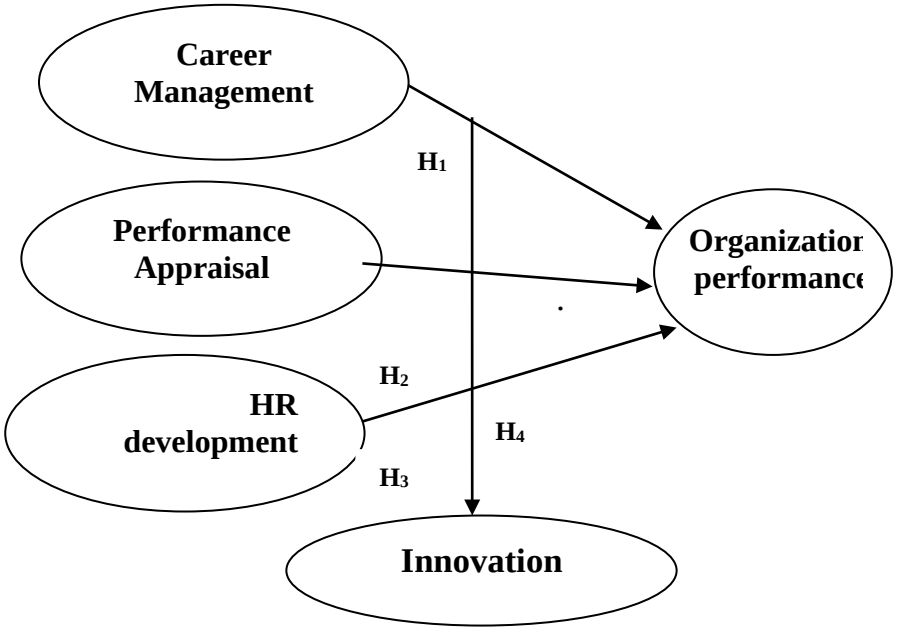

Figure (1): Research Framework

Theoretical framework and previous studies:

Human resource management resources information system, investigated from Lukito & Husin, (2016) was found to significantly related to organizational performance. The empirical findings showed that the organizational learning capability as moderating variable influenced the relationship between HRIS and organizational performance. Also, the application of human resources information systems based learning process has equally resulted in positive developments and improvements for the organization by contributing to the organization being more productive, resulting in better communication/ feedback processes, increasing employees' preference for working for the company and creating a climate

of high commitment among the employees and stakeholders Mbugua, (2015). According to Khera & Gulati, (2012) study With regard to identify the benefits of human resources information systems in the information technology organizations, and to clarify the role of human resources systems in strategic activities for human resource managers in human resource planning in these organizations, there was relationship human resources information systems and strategic activities for human resource managers and Provide supervision and control best workforce in the organization. human resource management systems which could safely be human resource management practices is the best panacea for addressing business competitive problem. Human resource has always been central to organizations and their strategic importance is developing in the knowledge-based industry today.

Obeidat (2012) argues that the strategic integration, forecasting, planning and analysis of human resources, communications, and integration does not have anything to do with jobs. While showing that the development of performance and knowledge management and records, have to do with the functions of Human Resources, one of the dimensions of human resources information system. Sham& Miloud. (2010). performance of human resource assessment and found that the human resources information systems in the organization always need to be developed so that it can achieve the assumed it performed tasks and makes the process of human resources performance evaluation more effective. and in turn has positive effect on the performance. Qadir & Agrawal, (2017) investigated Human Resource Information System (HRIS): Re-engineering The literatures, invariably show that the way human resources were managed three decades ago have seen fast changes. Expected benefits of introducing machines and softwares for managing HR, have for sure eased-up HR professionals work stations. However, the true predicted paradigm of SHRM is yet to unfold and to be realized. There is a strong need of literature and primary data which should confirm the strategic gains of HRIS in organizations.

In the same vein, Stone et al, (2013) examined factors influencing the acceptance of the efficiency of HR systems, and their impact on human resource functions.

The study found that, although the e-HR systems may be effective in both the organization and the individuals, they may be the reason to disable some functions of organizations and individuals, such as human relations and privacy. The study recommended the reduction and control of electronic media and supervision that restrict the freedom of individuals, and the use of a combination of traditional and electronic systems and good and proper design of the system to help increase efficiency.

Also, Buzkan, H. (2016) investigated the Role of Human Resource Information System (HRIS) in Organizations, and it turns out that the human resource information systems (HRIS) as a function of IS have also become inevitable for organization, therefore to implement a human resource information system in their human resources will help the organizations reach their goals easily. In this study a literature review related to HRIS is done and it is revealed its importance for the organizations. Khashman, Iyad & Khashman, Aysar (2016) investigated The Impact of Human Resource Information System (HRIS) Applications on Organizational Performance (Efficiency and Effectiveness) in Jordanian Private Hospitals The result of this study showed that there are a positive impact of the HRMS applications on organizational performance. Nagendra & Deshpande (2014). Human Resource Information Systems (HRIS) in HR planning and development in mid to large sized organizations. Findings suggest that there is evidence linking HRIS recruiting subsystem to the workforce planning of mid to large sized organizations. It was found that higher usage of the training and development function of HRIS resulted in better training needs analysis and better predictability Also, The study revealed that the relationship between increased usage of HRIS results in an increase in both effectiveness and efficiency of the organization.

Innovation:

Innovation is not only considered critical for sustainable competitiveness of Organizations, but also for regional and national development. Researchers emphasised the vital role of innovation in generating creative and subsequent economic growth in seminal work, Until then, many corporate chiefs did not recognise innovation as the driver of organizations' and countries' competitive advantage Agolla and Van Lill, (2013).

However, in spite of all these, there has been a remarkable change of late as scholars, organizations and countries embrace innovation as the panacea to prosperity and growth in the twenty-first century and key to the 4th industrial revolution Agolla and Van, (2016).

Therefore, the current buzzword for scholars, practitioners and corporate organizations is "innovate" or "perish" Agolla and Van, (2013); Kafetzopoulos et al., (2015). This underscores the importance and the role of innovation in both short and long run success of organizations and countries competitiveness. Snap shot overview of both developed and emerging economies have already proven that innovation does matter in terms of international competitiveness of both organizations and countries Arunprasad, (2016). For example, emerging countries namely Brazil, Russia, India, China and South Africa corporate organisations have joined the list of Fortune Global 500 of late, a fact that can perhaps be attributed to their innovativeness amongst other factors Warmerdam, (2015). Despite the rapid growth in the numbers of organizations in the list Fortune Global 500, the major challenges facing emerging markets is a lack of strategic alignment of human resource practices, innovation, strategy and competitiveness.

Innovation is a term that is used in different ways that in most cases create confusion as to what it really means Kafetzopoulos et al., (2015). For example, a new technology introduced by an organization, or a change in the production, process, or products/services can be referred to as innovation. However, the present study refutes such usage of the term "innovation" as change or introduction of new technologies may not necessarily add value (economic value) to the organization. Innovation can also be defined as the generation of new knowledge and ideas that facilitate new business outcomes. This is aimed at improving internal business processes, structures and to create market-driven products and services; innovation encompasses both radical and incremental innovation Du Plessis, (2007). On one hand, the OSLO Manual defines innovation as, "the implementation of a new or significantly improved product, process, marketing method, or organizational method in business practices, workplace organization or external relations" Manual, (2005). Therefore, the present study conceptualises the definition of innovation as, introduction or implementation of new ideas, or generation of creative ideas to improve processes, products, and services that result in economic value to

the organizations Amabile, (2012). This simply means ideas must be generated by employees, experimented with by the organization's members, and implemented in order for organizations to realise its economic value. Notwithstanding the controversy in the definition of innovation, several studies have confirmed that innovation has positive impacts on the organisations' performance, a nation's economy, industrial competitiveness, and standard of living Agolla and Van, (2016); Kafetzopoulos, et al., (2015).

Whereas extant literature reveals the importance of innovation in driving organizations' business bottom line, still there is dearth in literature establishing a link between innovation, strategy, and SHRM and organization competitiveness. Several scholars have studied innovation in the context of individual, groups and organization levels. However, there is a lack of studies in examining the interrelations of several SHRM practices, innovation, and their contribution to organizational competitiveness. Given the paucity of literature in the area, the study aims to fill this gap through establishing a link between Human Resources Information Systems, and innovation and Organization performance.

Organization performance:

Includes real productivity or outcome of a business which is calculated in opposite to its planned productivity or targets and aims. Organization performance has been defined as the capability of firm to accomplish its goals and objectives with the help of talented administration, good governance and have a constant rededication to accomplish business objectives .Researchers thought vary in terms of defining organization performance most of the researchers used the term performance to state the collection of measurement of input and output efficiency and transactional efficiency Shahzad et al., (2012).

Organizational performance is the ultimate dependent variable of interest for researchers concerned with just about any area of management Richard et al., (2009). The successfulness of an enterprise in term of achieving their objectives is determined by organizational performance. The criteria measured are the efficiency and effectiveness of goal and objective achievement.

Singh & Kassa, (2016) in their research found that there is a positive relationship between that human resource practices: recruitment and selection, training and development, performance appraisal and compensation have a significant relationship with university performance. Dobre, (2013) concluded that in there is a positive relationship between employee motivation and organizational effectiveness. (Lew, (2008). Research literature has shown that effective application of some human resources management (HRM) practices enables university employees to be committed to their work for good performance of the universities Pao-Long & Wei-Ling, (2012); Shahzad et al., (2012). According to karim Suhag et al., (2017). concluded that product innovation, process innovation and organizational innovation has a positive impact on organization performance.

Research Methodology:

For an effective research, it is imperative to select an appropriate research methodology. An appropriate research design is important to determine the type of data needed, method of collecting the data, and type of sampling technique to apply. Therefore, research design is very crucial to actualize the research objectives Bhatti & Sundram, (2012). This study applied a quantitative research design. Quantitative research design will enable the researcher to test the relationship between the research variables. It will also enable the researcher to unvaryingly determine if one concept or idea is better than the others. It can also respond to questions on the relationships that exist among measured variables with the aim of elucidating, envisaging, as well as controlling phenomena Sekaran & Bougie, (2016).

Thus, quantitative research design is an appropriate method for this study since it permits testing the relationship between variables with the use of statistical approaches Sekaran & Bougie, (2010). This is in line with the main objective of this study that focus Thus, quantitative research design is an appropriate method for this study since it permits testing the relationship between variables with the use of statistical approaches Sekaran & Bougie, (2006). This is in line with the main objective of this study that to investigate Relationship Between Human Resources Information Systems and Organization performance An Applied Study on The government Departments in the Karak area, with the consideration of The moderating

effect of Innovation. Therefore, the specific question Quantitative research also permits to carry out analysis using large sample to generalize the results among a set of population.

Population and Sampling:

Sekaran ,(2003) defines a research population as the entire group of people, events, or things of interest that the researcher wishes to investigate. The population size of this study consists of (284) from mangers and Assistant manager working at the government Departments and Mutah University in Karak.The most basic element of a research study is unit of analysis Zikmund et al, (2013). According to Sekaran & Bougie, (2016) a unit of analysis can be referred as "the level of aggregation of the data collected during the subsequent data analysis stage" while. Therefore, the unit of analysis is individual based, means that data was collected from (mangers and Assistant manager) The government Departments and Mutah University in Karak is the unit of analysis of the study.

This study used probability simple random sampling method. Sampling methods can be divided into probability and non-probability sampling. This study adopts the simple random sampling technique, which is a probability sampling method, in order for each aspect of the population to be represented in the sample Zikmund et al., (2013).

The appropriate sample size for a population size of 284 is 165. According the recommended Krejcie and Morgan (1970), as suggested by Sekaran and Bougie, (2010). In order to lessen sample size error and putting into consideration the occurrence of non-response by some respondents, the sample size was increased of the required size as suggested by Kotrlik, et al. (2001). Therefore, the sample size of this study had become by (165 +35 = 200). Hence, 200 questionnaires distributed to the targeted. questionnaires were distributed to the sample, eighteen of them were excluded because they were not filled completely or correctly so (182) questionnaires were valid.

Survey Instrument Design:

The researcher conducted a suitable questionnaire of Twenty-eight item to collect the required data, The survey instrument is designed by adapting related items from past related studies or designed based on the conceptual

explanation of the variables being investigated. The Questionnaire has been divided into three sections Section one contains (13) statements which is divided into three sections each one has some statements relates of the study independent variable, Section two contains (8) statements relates of the study dependent variable, and Section three contains g (7) statements relates of the study moderating variable. adoption of Likert five- point scale (strongly agree, agree, neutral, disagree, and strongly disagree) was used in this questionnaire to invite responses of the respondents. The researcher used this scale because it gives the respondents more freedom of choice it's a cheap and fast way for collecting data. Besides, it is commonly used in educational and social fields Robson, (2000).

Data Analysis:

The data collected are analyzed using different statistical techniques which are determined. The data analyses of this study were into two phases. The first phase is the pilot study with just 30 respondents to test the reliability and content validity of the instrument designed using Statistical Package for Social Sciences (SPSS) software and Expert review respectively. The values of the Crobanch Alpha coefficient are used in determining the reliability of the instrument, as suggested by Pallant, (2011).

The second phase of the data analysis is also into two parts. First, the missing data, outliers and normality, as part of the data screening, are performed using SPSS software. Secondly, the treated and screened data is transported to Smart Partial Least Square (PLS 2.0) software where computational actions like PLS modelling and Bootstrapping are employed. PLS SEM technique is called a second generation structural equation . The relatively new technique works well with structural equation models that contain latent variables and series of cause and effect relationships. The PLS SEM approach is a good and flexible tool for statistical model building as well as prediction Hair et al., (2013).

Instrument Reliability and Validity:

Validity:

Content and face validity involve a systematic assessment of the scale's ability to measure what is supposed to measure. So, to get feedback concerning the suitability, content, layout and adequacy of the items a draft of the instrument of this study was distributed to some Experts and specialists in universities in order to judge it. Based on their notes a number of questions were re-phrased in order to be understandable to the potential respondents and some items were removed. Then the researcher improved version of the instrument which was ultimately administered for the pilot test.

Reliability:

According to Sekaran & Bougie ,(2010) the most popular test of inter-item consistency reliability is Cronbach's alpha coefficient. Hence, Cronbach's alpha test is employed in this study to measure internal consistency of the instrument. Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. thirty participants were selected from the employees in the government Departments who would be the potential participants for the main study to conduct the Pilot Test. SPSS (V.19.0) software was used for the statistical analysis. As shown in table (2) all the result for alpha coefficient of the items of each variable alone and alpha's value of the whole instrument suggested that the items have relatively high internal consistency. They are greater than the guideline of.70 which means that the scale can be applied to the analysis with acceptable reliability Sekran, (2006).

Descriptive Analysis of the Latent Constructs

The descriptive statistics of the latent constructs investigated by this study is presented using the computed mean and standard deviation. The survey instrument is a 5-point Likert scale graded by 1 = Strongly agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly disagree. The findings are presented in.

Table (1) Descriptive Statistics for Latent Variables.

Dimensions	Level	Rank	S.D	Mean
Career Management	High	1	.53	4.33
Performance Appraisal	Average	3	.52	3.51
HR development	High	2	.55	4.12
Organization performance	High	1	.60	4.01
Innovation	High	1	.56	4.21

As shown in Table (1): the overall means of the exogenous and endogenous latent variables are within the 3.51 (Average) and 4.33 (the highest). Notably, all the mean values, except 3.51 for Efficiency of the Human Resources Information Systems, are above 4.00. When considered in relationship with 5 as the highest value, it shows that all the latent constructs are.

Assessing the measurement model

Assessing the measurement model is the first stage in PLS analysis, and it is used to ascertain the goodness of measures. Assessment of the measurement model entails an evaluation of the validity and reliability of the model's variables. Validity, in turn, comprises two types: convergent and discriminate. Evaluating the reliability and validity of the model involves assessing the relationships between the LVs and their associated items, which is done by way of two key coefficients: composite reliability (CR) and average variance extracted Hair et al. (2014).

The statistical software application Smart PLS 2.0 was used to compute the PLS path model and assess the strength of each factor affecting cost overrun through the developed model. The results of the Figure 2 In the PLS-SEM diagram there are three types of values: The values directed to the long arrow lines denote the path coefficients; values directed to the yellow box represent the item loadings and the value inside the circle represent the coefficient of determination. Interpreting R2 values in PLS analysis is like the interpretations given in multiple regression analysis. Therefore, the

values of R2 imply the degree of variance in a certain construct which a model explained Chin, (1998).

In a reflective measurement, as suggested by Hair et al. (2013), researchers should utilize the factor loadings, composite reliability (CR) and average variance extracted (AVE) to assess convergence validity. Based on this, the measurement model was evaluated for the convergent validity. This was examined through the factor loadings, composite reliability (CR), and average variance extracted (AVE). Internal consistency of the constructs was measured using composite reliability (CR) as proposed by Hoffmann & Birnbrich, (2012). The cut-off value for AVE, CR and Cronbach Alpha were 0.5, 0.7 and 0.6, respectively.

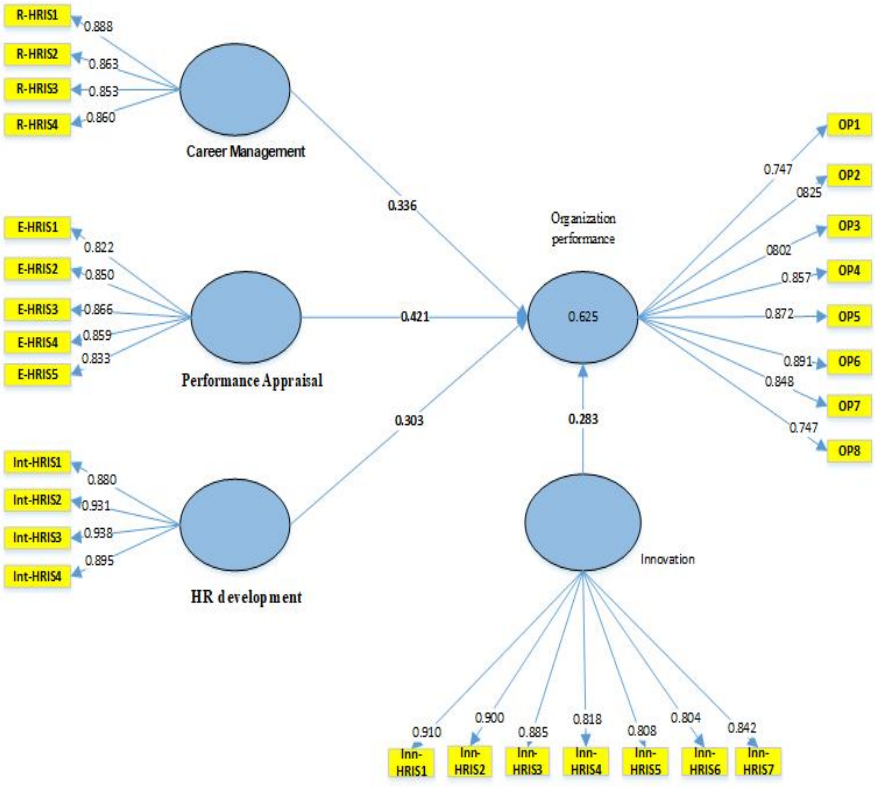

Figure 2: Original Study Model

This study used a cut-off value for factor loadings at 0.70 as being significant. Accordingly, there were 6 deleted loadings because they were lower than 0.70. These are: (R_HRIS 5, IN_HRIS5 & Inn9,10&OR9,10). Out of 35 items measuring the 5 constructs of this study, only 8 items were deleted leaving the study with the remaining 27 items that were considered acceptable for further analysis, as prescribed by Hair et al. (2013) (See Table 3 and Appendix F). The CR coefficient is also used for assessing construct reliability and should be higher than 0.7 to establish construct reliability (Chin (2010); Hair, et al. (2011). Since Composite Reliability (CR) takes into account the various outer loading of respective indictors, it provides less biased estimate of the reliability compared to the Cronbach alpha that assumes all items are equally reliable without considering the actual contribution of each individual item loading Hair et al., (2014).

Table (2) Convergent Validity and Reliability Analysis

Latent Constructsand Items	Loadings	Average variance Extracted (AVE)	Composite Reliability	Coronach alpha
Organization performance		0.651	0.937	0.925
OR_1	0.747			
OR_2	0.825			
OR_3	0.802			
OR_4	0.857			
OR_5	0.872			
OR_6	0.891			
OR_7	0.848			
OR_8	0.747			
Career Management		0.751	0.923	0.893
R_ HRIS 1	0.888			
R_ HRIS 2	0.863			
R_ HRIS 3	0.853			
R_ HRIS 4	0.860			
Performance Appraisal		0.754	0.924	0.891
E- HRIS 1	0.822			
E- HRIS 2	0.850			
E- HRIS 3	0.866			
E- HRIS 4	0.859			

Latent Constructsand Items	Loadings	Average variance Extracted (AVE)	Composite Reliability	Coronach alpha
E- HRIS 5	0.833			
HR development		0.785	0.935	0.907
Int_ HRIS 1	0.931307			
Int_ HRIS 2	0.934307			
Int_ HRIS 3	0.885307			
Int_ HRIS 4	0.891307			
Innovation		0.643	0.927	0.916
Inn_1	0.910			
Inn _2	0.900			
Inn _3	0.885			
Inn _4	0.818			
Inn _5	0.808			
Inn _6	0.804			
Inn _7	0.842			

Table (2): above showed that all the item loadings are above 0.70, which indicate convergent validity at indicator level Hair, et al. (2011). AVE values for the variables above 0.50 which indicate convergent validity at construct level Hair et al, (2014). On the other hand, it is shown that all constructs have Cronbach's alpha values of more than 0.70, which demonstrate adequate internal consistency; that is, reliability of data Hair et al., (2014).

Discriminant Validity:

Discriminant validity of the measures is the degree to which items differentiate among constructs or measure distinct concepts Hair et al., (2011). The current study assessed the discriminant validity using analysis of the average variance (AVE) extracted based on the criteria that “a construct should share more variance with its measures than it shares with other constructs in the model” Aibinu et al., (2011). This can be examined by comparing the AVE of construct shared on self and with other

constructs. For valid discriminant of construct, AVE shared on self should be greater than that shared with other constructs. Latent variable correlations are calculated with Smart PLS software and are shown in Table (3). The values of square root of average variance (AVE) in the diagonals of matrix are higher than off-diagonal values in the model. This confirms that all the variables represent their constructs and the discriminant validity is well established.

Table (3) Correlations among Constructs and Discriminant Validity

Construct	OR	R-HRIS	E-HRIS	In-HRIS	Inn
Organization performance	0.876				
Career Management	0.360	0.819			
Performance Appraisal	0.335	0.529	0.90		
HR development	0.460	0.329	0.423	0.81	
Innovation	0.312	0.381	0.381	0.0826	0.834

Table (3) above shows that the square root of average variance is higher among the inter-construct correlation in the particular columns which indicate the discriminant validity of data. All constructs have average variance above 0.5 and square root of average variance is above the correlation for each of the construct in the particular column.

Testing the Structural Model:

The next step after discussed the measurement model, in the Analysis was to evaluate the inner model (structural model), i.e. by analyzing the inner model. To do this, the researcher depended on suggested mentioned by Chin (2010), Hair et al. (2013), Hair et al. (2016), by considering the R^2 values, effect size (f2), predictive relevance of the model. This step allows the researcher to inspect the standardized path coefficients and bootstrapping in order to test the hypotheses of this study. the details in subsections following:

Coefficient of Determination (R^2):

The coefficient of determination (R-squared value) is also an important criterion and the most commonly-used measure of the evaluation of the relationships in the PLS-SEM model Hair et al., (2011). It measures the proportion of the variance of the endogenous latent construct as explained by the criterion constructs. Chin, (1998) stated that R2 values.

Table (4) The R2 Value of The Endogenous Latent Variable

Latent Construct	Variance Explained (R^2)	Variance Explained (%)
Organization performance	0.625	63.5%

The model of this study, with R2 value of 0.625, explains 62.5% of the total variance in competitive advantage. This suggests that the three dimensions, explain 62.5% variance of the exogenous variable, i.e. Organization performance. Also, the predictive accuracy of the model proposed by this study, based Chin, (1998), and the endogenous latent construct variance of 62.5% is above the moderate level, and it is substantial.

Hypotheses Testing for Direct Relationships:

In order to test hypotheses for direct relationship, the first step taken was to run PLS algorithm. This step enabled the researcher to generate path coefficient to determine the relationships between exogenous and endogenous constructs of this study. The second step was bootstrapping to generate the t-value to test the significance of the relationship (Figures 3). Therefore, bootstrapping sample in PLS-SEM enable the estimated coefficient to be examined for their significance. In general, applying bootstrapping approach provides an estimate for the spread, shape and the bias of the sample distribution of a specific statistic Henseler et al., (2009). The results of all bootstrapping samples in PLS-SEM provide standard error and t-value (t-test) for each path coefficient model to measure the significance of such path model relationship (Chin, (1998).

There are various suggestions about how bootstrapping can be run. For instance, Chin, (2010) and Hair et al, (2013) that bootstrapping can be run with 500 subsample sizes while Hair et al. (2014) recommend 5000. This study adheres to the recommendation of Hair et al, (2014) by using 5000 as earlier reported.

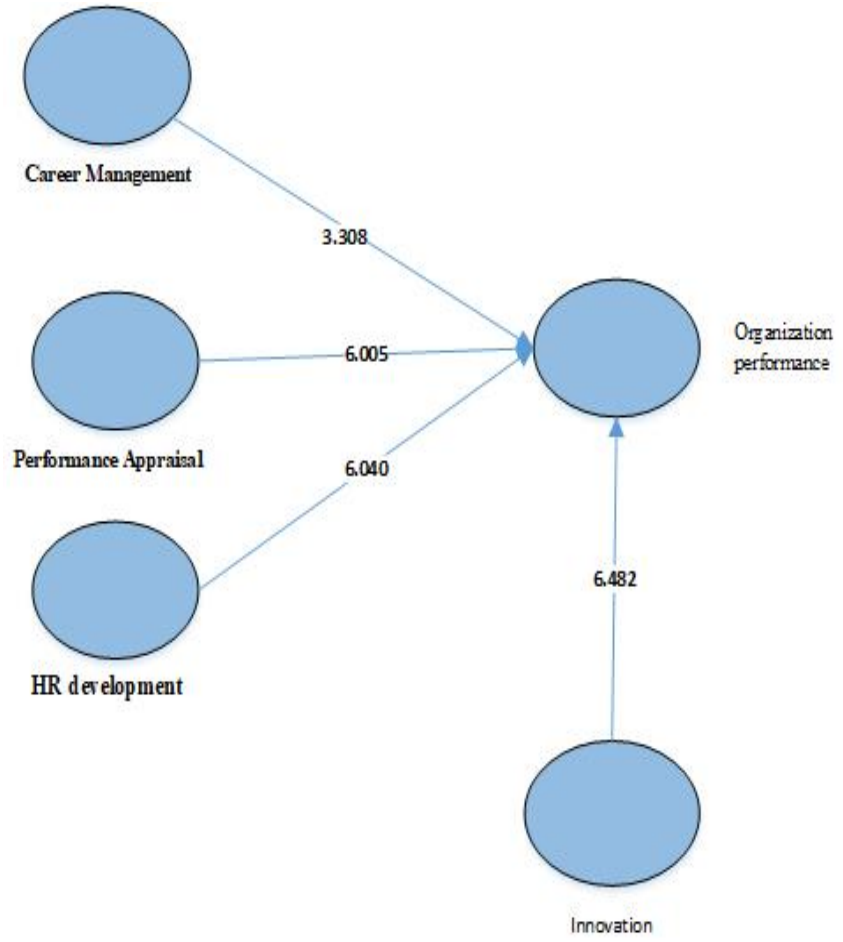

Figure 3: Structural Model

Table (5) shows the result of the structural model on the direct relationship between the variables of this study (excluding the moderating effects which are later tested). These results were interpreted using the Path Coefficient and t-value (t statistics) and p- value.

Table (5) Result of Hypothesis Testing.

Hypotheses	Hypothesized Relationships	Path Coefficient	T value	P value	Comments
H 1	Career Management -> Organization performance	0.336	3.308	0.000	*** Accepted
H2	Performance Appraisal -> Organization performance	0.421	6.005	0.003	*** Accepted
H3	HR development -> Organization performance	0.303	6.004	0.000	*** Accepted

Note: t-values > 1.65* ($p < 0.10$); t-values > 1.96** ($p < 0.05$); t-values > 2.58*** ($p < 0.01$)

Testing Moderating Effects:

The influence of an exogenous construct on an endogenous construct is primarily measured as main effect. This is when there is no other exogenous construct whose value determines the relationship between one exogenous construct and the endogenous construct. But if the influence/relationship is contingent upon the value of another construct, it means there is a moderating effect from such construct, while the effect of the exogenous construct on the endogenous construct is measured as simple effect Hair et al., (2013).

Moderating effect exists if the interaction path is significant which means that the t statistics of interaction effect must be 1.65 or 1.96 and above to be significant using one tail or two tails respectively Hair et al.,(2016) It is seen from the figure (4) there significant relationship using t-statistics and the detail results are shown in table 6.

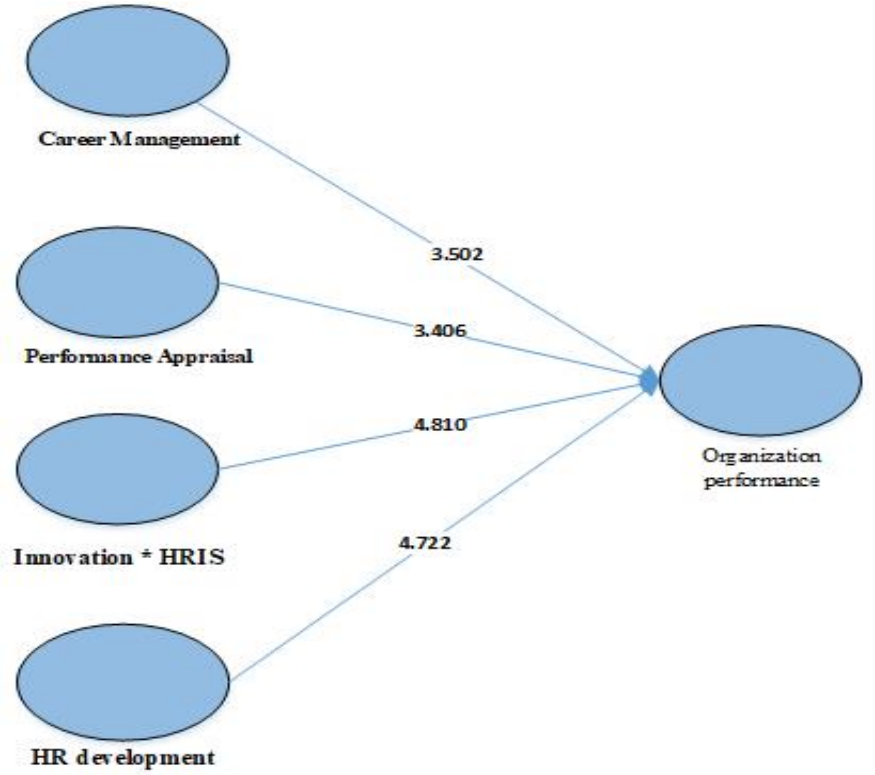

Figure.: Moderating Effects Test

Table (6): Results of Moderating Effect Test.

Relationship	Moderating Effects	Path coefficients	T value	P value	Inference
4	Innovation * HRIS-> Organization performance	0.283	4.810	0.001	Accepted***

Note: t-values > 1.65* (p < 0.10); t-values > 1.96** (p < 0.05); t-values > 2.58*** (p < 0.01)

Results &Conclusion:

This study involves four research questions which are extrapolated from the problem statement being investigated. The questions centered on the influence of Human Resources Information Systems on Organization performance , and the moderating effect of Innovation. Consistent with the research questions and objectives of the study was a descriptive statistics was conducted. Result was reported in Table 2. The result revealed that the mean of (Career Management is 4.33, Performance Appraisal is 3.51, Organization performance is 4.12,Innovation is 4.21) are perceived by management among in government Departments and Mutah Universityin the Karak as measuring up to their requirements as indicated by the response to the items in the questionnaire. The relationship between Human Resources Information Systems (CareerManagement , Performance Appraisal , HR development) and Organization performance is positive but with has major effect (tvalue : 3.308,6.005,6.004).

This implies that, among The government Departments and Mutah University in the Karak , there are Relationship Between Human Resources Information Systems (measured by (Career Management, Performance Appraisal, HR development) does and Organization performance. This study investigated the Relationship Between of Human Resources Information Systems and Organization performance, with the consideration of The moderating effect of Innovation. and found that, similar to Lukito & Husin, (2016), Mbugua, (2015), Khera & Gulati, (2012), Obeidat (2012), Sham& Miloud. (2010), Qadir & Agrawal, (2017), Stone et al, (2013) , Buzkan, H. (2016), Khashman, Iyad & Khashman, Aysar (2016), Nagendra & Deshpande (2014). Human Resources Information Systems has a positive effect on Organization performance.

Consistent with the final research question, The final objective of this study focuses is To investigate the moderating role of Innovation in the influence of Human Resources Information Systems (Career Management, Performance Appraisal, HR development) on Organization performance the government Departments and Mutah University in the Karak, and In order to achieve The final objective of the study, a descriptive statistic was conducted. Result was reported in Table 2. The result revealed that the mean of (Innovation is 4.21). Are perceived by management among the government Departments and Mutah University in the Karak as measuring up to their requirements as indicated by the response to the items in the

questionnaire Innovation moderates the effect of Human Resources Information Systems on Organization performance.

This study found that Innovation moderates the influences of Human Resources Information Systems (t statistics is 0.283 (p <0.000) on Organization performance. This implies that with the involvement of Human Resources Information Systems, the positive influences is further enhanced. Notably, many of the studies reviewed investigated Human Resources Information Systems as an antecedent of Organization performance , or related constructs like turnover rate of employee and financial performance. Though with certain variations, these studies found Human Resources Information Systems to be positively related with, and of positive influence to, Organization performance. Human Resources Information Systems are professionals are enjoined to be conversant with business strategy as integral partners in strategic management.

Recommendations:

Considering the findings, the study recommended that in using human resource information system, organizations should integrate the HRIS Human Resources Information Systems with other organizational systems to speed information sharing and decision making. Further, they should implement the recommendation from their HRIS Human Resources Information Systems concerning succession Recruitment/Selection of employees in order to accomplish the desired performance of the organization.

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