

The Effect of Management Information Systems on Human Resources Management Practices

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Abstract

This study aimed to investigate the effect of management information systems on human resources management at the implementation of housing and utilities projects in Libya. Indeed, to achieve the objectives of the study adopted a model study by default through the relationship between the variables of the study. Management information systems as independent variable affects the human resource management as a dependent variable. The researcher has designed a questionnaire included (77) sentences, and then the distribution of the number of (304) questionnaire to all the data from the study sample, and then test study model and using a combination of statistical methods and by statistical assertion for Social Sciences (SPSS), and the program (Amos EMI).

Keywords: Management information systems, Human Resources Management, Libya.

1. Introduction

Organizations should increase spending on research and development in order to increase the organizational effectiveness (Osama Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2018; Isaac, Abdullah, Ramayah, & Mutahar, 2017b). The recent years the world witnessed information revolution which received great attention from researchers and specialists in the field of management of information of what the impact of a large role in all areas of public and private organizations, being a major supplier of the organization's resources and a source of its success, Which made of the impact of management information systems in different organizations a Necessity, to the role played by these systems in increasing the efficiency of the administrative process and its various functions.

The management information systems and human resources management systems, each of which affects the other where it was found that the failure to adopt good information technologies caused a humanitarian factors as it is to facilitate and evaluate the functions of resource management Human in efficiency without owning Organization for effective information management system provides adequate and effective flow of her information. (bukhmkhm et., 2005; Ibrahim et al., 2015; Ramadan & Habtoor N, 2015; Mohamed et al., 2016; Al-Awlaqi et al., 2018; Salama et al., 2019; Salama et al., 2020).

In fact, the role of information in society increasingly taking more of the previous in way never seen by the human before, leading some to label this era the era of information revolution, and call it the third wave after the wave of the agricultural revolution and the industrial revolution wave (Mokhtar et al., 2017; Habtoor et al., 2016; Tabouli et al., 2016;).

As well as the human resources occupies a fundamental place in the attention on the level of the modern world, as the most important factor of the development, and combines the countries of the world both through the World Summits on the Information Society in the concentration of efforts to develop a comprehensive and ambitious programs of human development based on studied scientific basis. For that there is increasing interest in contemporary human resource management to work to innovate and develop the best ways and mechanisms to invest its energies, and employ its creative and intellectual abilities in creating and developing competitive advantages of the institution in the form of goods and services and new technology (Ramadan et al., 2016; Habtoor, 2016; Saleh et al., 2018; Al-Ali et al., 2019).

If the information systems had an important role in the life of the average person, they are no less important in the life of small businesses or large, as most of our problems today are not in the realm of things, but in the world of people, and that the biggest failure of man was, and still is the inability to deal with others and understanding it. In most contemporary organizations, the use of technology not only relies on information and communication technologies to fill out some forms and records but is also a tool that performs the process of identifying, accumulating, analyzing, measuring, preparing, preparing, interpreting and communicating information that management uses for planning. It is used for evaluation and control within the organization and to ensure appropriate use and accountability for its resources (Ameen et al.,

2020, 2019c, 2019a, 2019b, 2018; Ameen and Ahmad, 2013, 2012, 2011). The importance of this study is the fact that the role of information systems in all the administrative processes of the organization, planning, supervision, coordination and decision-making, no wonder that most of the problems in the institutions to be a misunderstanding of the application of management information between management and personnel systems (Mokhtar et al., 2015; Ramadan et al., 2015; Tabouli et al., 2016; Habtoor, & Alharbi 2020). If the management information systems were not with the effectiveness, this leads to take some wrong decisions, so this study was to clarify the effect of management information systems for the human resources management (Salah et al., 2017; Ismail et al., 2019; Salama et al., 2019).

The impact of management information systems of contemporary topics as become an essential feature of modern organizations, there are many factors which emphasizes the need to adopt the impact of management information systems, such as technological development and competition and the desire to improve the working and others (Habtoor, 2019; Ismail et al., 2019).

And by the fact that the researcher is among the staff the implementation of Housing and Utilities projects body - Libya, and through the exploratory process, it turns out, and a management information system depends upon the completion of the work and activities of the sector, It is a mechanism of information consists of a set of regular operations of systems, but there is difficulty in obtaining the recent and accurate information due to delay receiving it on time from one level to another level, hence the aim of this study was to investigate the effect of management information systems for human resources management in implementation of housing and utilities projects in Libya. Therefore the key question of this study was is there a direct effect of management information systems for human resources management system in the implementation of housing and utilities projects in Libya? Thus, the study hypothesis that there is a direct effect of management information systems for human resources management system in the implementation of housing projects and utilities in Libya.

2. Model of Study

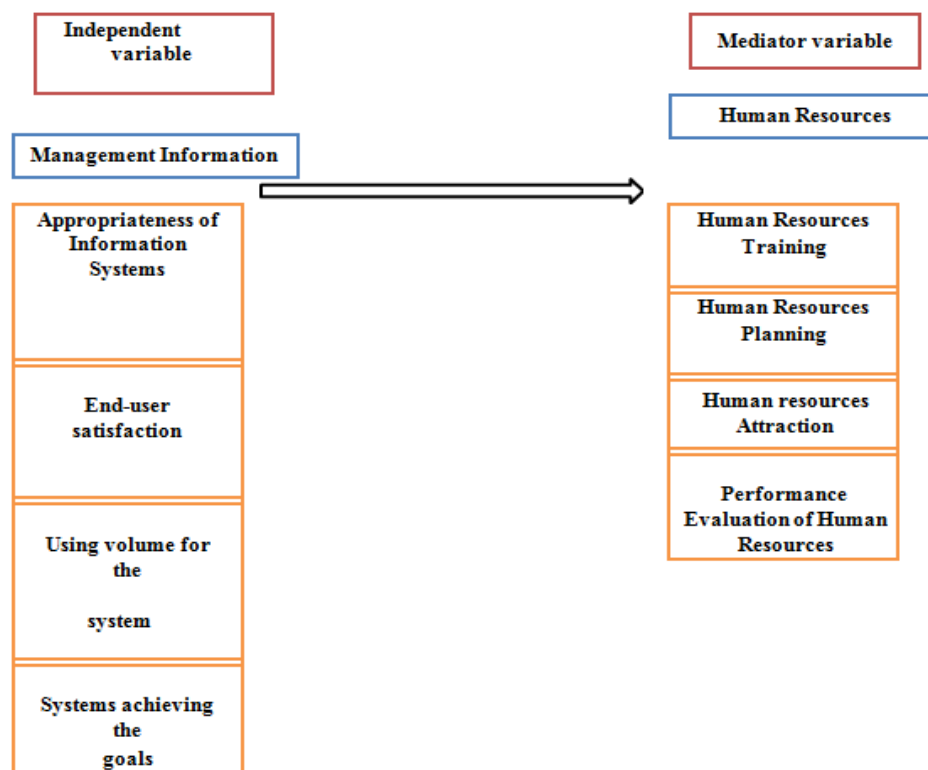


Figure 1: The proposed conceptual framework

3. Literature Review

Sophisticated communities live in an era of information technology, which is based on modern communication systems via satellite, and the information systems is the advanced use of information technology, and information systems play a crucial role in the development of modern businesses, Providing appropriate information in the most appropriate time for the various administrative levels, so as to support all the tasks and management functions in addition to the improvement and development of communication and information flow between those levels (khashba.1987).

Nomenclatures were varied and numerous that launched on certain the Department of the human element in organizations including: personnel management, labor relations, industrial relations, human relations (Salama et al., 2020). And management of human resources, and management personnel, and others, but the most common designation "human resource management" (Habtoor, 2015). And there is no doubt that human resources is one of the key components to the success of the organization, but it could even say that it is stated as the prime and fundamental to the success, as the availability of the human resources with efficiency and responsibility for enable it to fulfill the work and achieve the objectives of the organization and the use of available physical capabilities as efficiently as possible (Etlesh et al., 2016; Habtoor et al., 2016)

Anzi (2009) has indicated, to the role of the quality of management information systems in the effectiveness of human resource management planning. In government agencies in the Riyadh region, and to study concluded that the respondents' perceptions of the quality of management information systems had tested positive and high, And respondents' perceptions of the effectiveness of human resources planning came to a fair degree, the study has reached the existence of a significant impact and statistically significant for the quality of management information systems in the effectiveness of human resources systems, government planning (Al-shaibah et al., 2015; Habtoor, 2018).

Trtarh (2006) explained, "The impact of the use of computerized management information systems in human resources management functions in public institutions in Jordan. "It has produced several results of which trace of the efficiency of workers in administrative computerized information systems and human resources management functions Department staff, (attract and appoint staff, staff training, and evaluation of staff performance), and there is also the impact of the quality of the used devices in the administrative computerized information systems management functions human resources.

(Parry & Others, 2007) stated, the different functions of human resource management using technology, as well as the impact of technology on the functions of human resources and personnel management and analyzed (10) case studies for various organizations in the sectors of services and industry, The study concluded that there is a significant effect of the use of technology in the work of human resources, and the need to change the skills of staff during the transition to electronic management of human resources, the study recommended the development of infrastructure as a condition for the success of the electronic management of human resources, and the development of information and training of personnel systems to be used, and the involvement of employees in decision-making process electronically.

While (Huub Ruel.2007)pointed, the extent to which the contribution of information technology in human resources management in the efficiency of the performance of human resources, through the study of the amount held on the Interior Ministry in the Netherlands Was the process of transformation useful or not. The study concluded that the actual application of information technology in human resources management linked to the performance of human resources efficiently (Salah & Habtoor, 2015). More and more countries have focused on the use of ICT in its activities to strengthen its reform process with transparency as a necessary ingredient of good financial governance(Al-Obthani and Ameen, 2019; Albreiki et al., 2019; Alfalasi et al., 2020; Alghawi et al., 2019; Alshamsi, Rashed Ameen and Isaa, 2020; AlShamsi et al., 2020; Ameen et al., 2020, 2019a). Through regression analysis, the researcher reached that the quality of information technology applications in human resources management in terms of content and content is the most important explanatory factor in the efficiency of the human resources strategy (Al-Hammali et al., 2017; Al-Barani et al., 2020).

4. Methodology

To achieve the objectives of the study, the researcher used descriptive analytical method which is based on the study of the phenomenon as it is, in fact, as an accurate description and expressed qualitatively and quantitatively, where he describes the expression the qualitative phenomenon and illustrates the characteristics while giving quantitative expression digital description shows the Magnitude of the phenomenon or its volume and association levels with other phenomena.

5. Population and Sampling

The population of study consisted of all managers and directors of departments, heads of departments and units, and staff in the implementation of housing and utilities projects in Libya, for the year (2013 to 2014) and totaling (1,300) employees and according to the staffing records for the year (2013-2014) issued by the implementation of housing and utilities projects in Libya, it has selected a random sample by distributing (350) Questionnaires to sample individuals then was recovered a total of (318) of them (304) valid Questionnaires to analysis and form average of (23%) of the overall size of the Population of study.

6. Sample Size

Sample size was in this research (304) employees. As long as the overall population has been identified a number (1300) employees, there are many means to determine the sample size in the study. Considering to a table to determine the sample provided by (Sekaran, 2003). The sample size is (297), at least when the total population (1300), Notes that there is an agreement between the two technologies in the sample determines the size and entirely consistent with the research sample size (304). Many statisticians believe that when using structural equation modeling technique (Structural Equation Modeling) in the planned research analysis and assumptions, the appropriate sample size equals or exceeds.

The number (200) participant or employee (Kline, 2011). The size of the sample (304) exceeds the number specified for the use of structural equation model in the analysis.

7. Data Collection and Analysis

To identify the proposed model of management information systems and their impact on human resources management in the implementation housing and utilities projects in Libya, due to the nature of the study in terms of its objectives and its approach and society has been the development of a questionnaire as a tool to collect data necessary to achieve its objectives and information.

Questionnaire has been defined as: Form, which contains a set of questions or statements provided potential opinions or spaces to answer, and ask the respondent by reference to what he sees as important, or is believed to be the correct answer. (Assaf, 2006). Variables were measured using a Likert Scale which recommended in the previous studies (Isaac, Aldholay, Abdullah, & Ramayah, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2018). The main reasons for choosing SEM as a statistical method for this study is that SEM offers a simultaneous analysis which leads to more accurate estimates (Isaac, Abdullah, Aldholay, & Ameen, 2019; Isaac, Abdullah, Ramayah, & Mutahar, 2017; Mutahar, Daud, Thurasamy, Isaac, & Abdulsalam, 2018).

8. Validity

The researcher adopted the test method and re-test (test-retest), to ensure consistency, since the tool was distributed to a number of staff and faculty members, numbered (30) individuals from outside the study sample, and re-applied to them later more than two weeks, Value of the Pearson's correlation factors was reached (0.83), was also used Cronbach's alpha equation (Cronbach - Alpha) for internal consistency, and reliability coefficients were as follows:

The main objective of the current study is to examine the impact of online learning usage on the performance of students in public higher education institution in Bangladesh by examining the effect of user satisfaction and actual usage on the performance impact of online learning.

Table 1: Test-retest method

no.	The Variable	Number of the clauses	Cronbach's alpha value
1	Adequacy of information systems for the various administrative levels	7	%83
2	End-user satisfaction	7	%88
3	Size of the use of management information systems	7	%78
4	Achieving the objectives of the management information systems body	7	%80
5	Human Resource Management Planning	7	%90
6	human resources Attraction	7	%86
7	Human Resources Training	7	%88
8	Performance Evaluation of Human Resources	7	%90

9. The Results of the Data Analysis

9.1 Confirmatory Factor Analysis – CFA for management information systems

Based on the results of the factor analysis demonstration (exploratory) in a way the basic components, the management information systems included four factors: the achievement of management information to the goals of body systems "and" end-user satisfaction "and" appropriate information systems of different administrative levels "and" the volume of use of the management information systems ". All the latent factor was represented by four paragraphs and more. the researcher used the analytical technique factor affirmative (Confirmatory Factor Analysis-CFA) by Amos (Amos 2010) program.

9.2 Assumptions statistical analysis of factor affirmative

In addition to the statistical assumptions described in the demonstration factor analysis to identify the management information systems in the third quarter, the factor affirmative analysis requires the absence of outliers (neither too small nor too big). Considering the Table (2) Amos program output is clear to us that the value of the first possibility(p1) and the value of the second possibility (p2) higher than the zero value (0.000) for the case number (62), and was the first in the order and therefore the number of respondents (304). This indicates a lack of extreme cases that suggested to be deleted from the data.

Table 2. Outliers clauses of the Management Information Systems

Observation number case number	p1 The first possibility value	p2 The second possibility value
62	0.000	0.007
176	0.001	0.072
11	0.002	0.021
171	0.002	0.004
115	0.003	0.001

9.3 The result of the analysis of factor affirmative

Figure (1) shows the results of the factor affirmative analysis for the model of the Management Information Systems. As is evident from the figure that the model is free from the link is logical (Illogical Correlation), which reaches or exceeds the correct number (1). This assures us that there is no problem in the factor affirmative analysis for the model of the Management Information Systems, consisting of four factors: Group I "appropriate information systems of different administrative levels," second factor "end-user satisfaction. "The third factor, "the volume of use of management information systems" and fourth factor "to achieve the objectives of the management information systems of the body," according to the previous literature and theoretical framework. As shown in the figure, as well as Table (3) indicators that match the model Management Information Systems with data exceeded the standard limit, meaning that there is a mismatch between Management Information Systems and between , If the sample data that the value of Chi square test was (636.750) and the degree of freedom equal to (164). The significance level of moral statistically significant ($p = .000$) . Chi square like any standard (like a square / degrees of freedom) if (3.883). But did not exceed the test value (5). Matching comparative index value equal to (0.855) which is less than the value of the value of the test (0.90). Value Ramsey index or root mean square error approximation equal to (0.098) which is greater than the value of the test value (0.080). This discrepancy between the theoretical model and the data confirms the need to amend the Management Information Systems model.

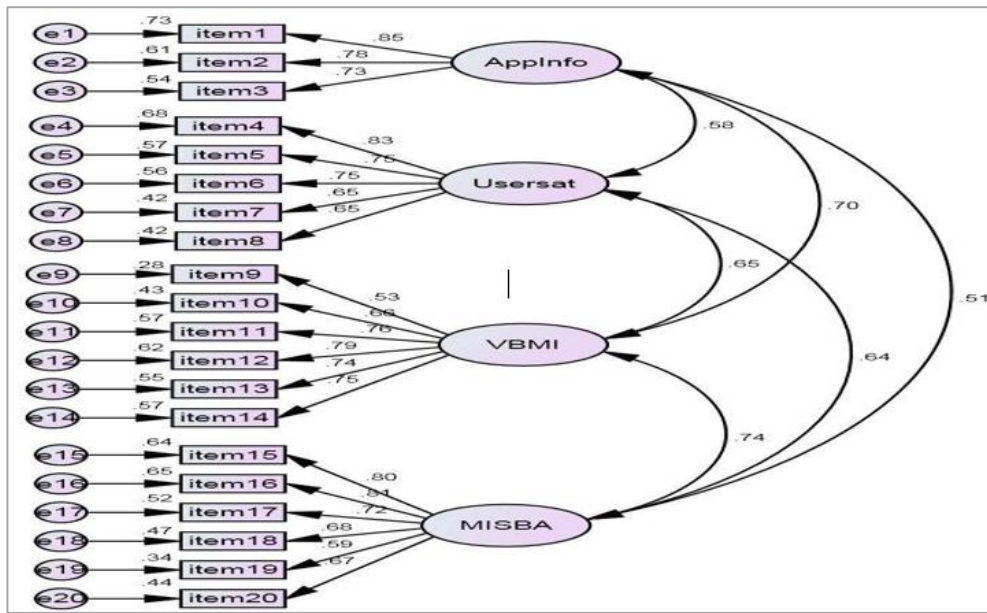


Figure 2. Factor affirmative Analysis (Amos program) model Management Information Systems (model before the amendment).

The Amendment of the Management Information Systems model request to delete four paragraphs (No. 8, No. 9, No. 10, No. 19), where the ratio of saturation or download at least compared to the other paragraphs.

Table 3. Congruence indicators Values for the model of the Management Information Systems

Matching indicators	The index value before modifying the model	The index value after modifying the model	indicating value on The quality of matching
Chi square test	636.750	282.633	---
Degree of freedom	164	98	---
The level of significance	0.000	0.000	not indicting
Chi square test standard	3.883	2.884	less of (5)
Matching comparative index	0.855	0.927	greater of (0.90)
Ramsey index or root mean square error approximation	0.098	0.079	less of (0.08)

9.4 Results Factor affirmative analysis (after modification)

After deleting four paragraphs, it is clear from Figure (2) on the factor affirmative analysis of the model of management information systems (Amended model) as well as the table (3) that the indicators match the model of management information systems with the data did not exceed the tested limit that there is a match between the information systems model administrative and between the sample data as the value of the square was like (282.633). And the degree of freedom equal to (98). The significance level of moral statistically significant ($P = 0.000$). This does not mean that there are differences or differences between the management information systems model and the sample data if the significance level is influenced by the size of the sample, but this has to be taking into account other indicators. Chi square test standard (like a square / degrees of freedom) was (2.884) did not exceed the value of the test (5). matching comparative index value equal to (0.927). Which is higher than the value of the test value (0.90) This indicates that there are links ties between the vertebrae management information systems as well as the links between the four underlying factors in the model. Root mean square value of the index rounding error (Ramsey index) equal to (0.079) and less than the test standard (0.080), and this shows that the management information systems prevalent in the overall society, taken from the sample model. Abstract meanings of indicators that there is a match between the theoretical model of management information and data collected between systems.

It's evident from Figure (2) and Table (4) that the links (relations) between the first factor "appropriate systems of different administrative levels of information," second factor "end-user satisfaction," third factor "The volume of the use of management information systems," fourth factor "to achieve management information to the goals of body systems" statistically significant was where the value of T statistically greater than (1.964), and the level of significance (probability value) equal to (0.000). And less than (0.05). The proportion of the

links between the four factors ranged between(0.50) as minimum link between the appropriation of the information and achieving information systems to the highest rate which was (0.70) And that was the appropriate information and The volume of the use. These values relational not be less than (0.20), and did not exceed (0.90), which shows that the Discriminant Validity Among the four factors included the questionnaire of management information systems. This means that there is a correlation between the four factors at the same time it contains difference and differentiation.

Table (4) includes (Share Variance-SV) of each relationship or correlation between the two factors. For example, the relationship between the appropriate information and user satisfaction were (0.53), when you multiple the figure by itself (0.53X 0.53) The result was (0.28), which is also called Share Variance. Also the relationship between the volume of appropriate information and use were (0.70), when you multiple the figure by itself (0.70x 0.70) The result was (0.49), which is also called Share Variance. So for the rest of relations or links between other factors. Covariance standard is also useful to study the real evidence of the differentiation as will be seen when viewing standard Fornl - to Archer: Fornell -Larcker Criterion.

Table 4. The Level of The Significance between The Four Underlying Factors And The Value Of The Link To Questionnaire Of The Management Information Systems

An underlying factor	link	An underlying factor	Estimate	S.E.	C.R.	p	R	SV
Appropriate information	<-->	User Satisfaction	0.571	0.084	6.819	0.000	0.53	0.28
Appropriate information	<-->	The volume of the Use	0.66	0.084	7.884	0.000	0.70	0.49
Appropriate information	<-->	Achieving information systems	0.489	0.075	6.494	0.000	0.50	0.25
User Satisfaction	<-->	The volume of the Use	0.576	0.078	7.346	0.000	0.62	0.38
User Satisfaction	<-->	Achieving information systems	0.60	0.079	7.619	0.000	0.63	0.40
The volume of the Use	<-->	Achieving information systems	0.577	0.075	7.716	0.000	0.69	0.48

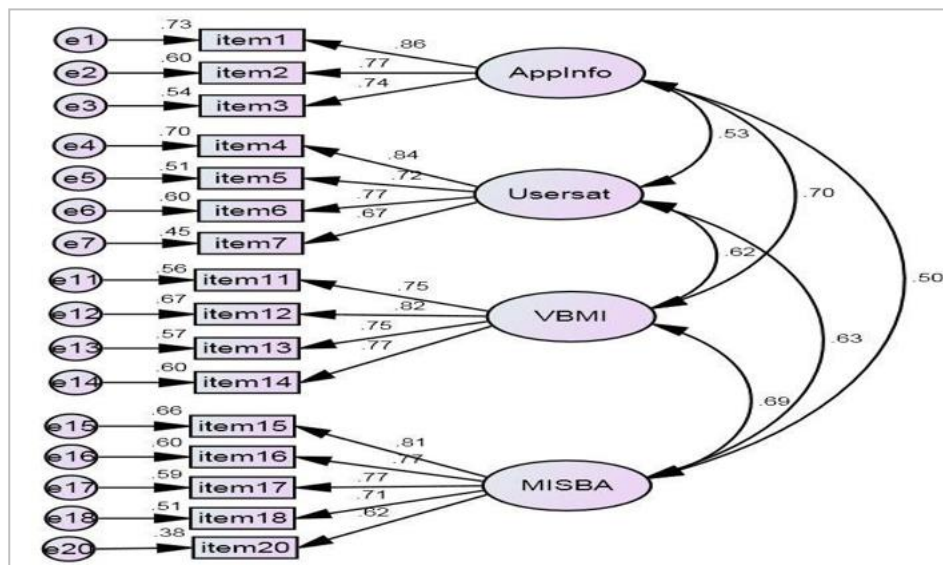


Figure 3. Factor affirmative analysis (Amos program) for the model of the management information systems (modified form)

It's evident from Figure (2) and Table (5) that the percentage of saturation or link between Group I: appropriateness of systems of various administrative levels of information "and the three paragraphs, which represented were statistically significant as the value of the t-statistics for each paragraph is greater than (1.964),And the level of significance (probability value) is less than (0.001). The saturation ratio high and excellent (0.7). Higher than the desired value (0.50) and ranged from (0.74),Paragraph (3) and (0.86), paragraph (1), and this confirms (Convergent Validity) to factor appropriateness of the systems appropriateness to different administrative levels of information. Squaring this percentage saturation or squared-called multi-squared correlation (stability concept or compound stability), which ranged from (0.54) to (0.73).The arithmetic average of multiple correlation squared (ie collect multiple links squared and divided by the number) called (Average

Variance Extracted-AVE). It must be at least (0.50), As one of the main criteria for asymptotic sincerity. On the table it is clear that the value of the contrast agent to extract appropriateness of different systems for administrative levels of information was (0.62). And thus higher than the test (0.50). Clear to us that the three paragraphs were efficient to represent factor: Information systems are appropriateness for different administrative levels and this factor known for the real Convergent evidence.

Table 5. Error Estimations, and the value of T and the significance level and the percentage of saturation and multi square linking and the average variance extracted for the model of the management information systems

no.	An underlying factor	Estimate	S.E.	C.R.	P	Loading	SMC	AVE
clause 1	Appropriate information	1			0.000	0.856	0.73	0.62
clause 2	Appropriate information	0.829	0.059	14.077	0.000	0.775	0.60	
clause 3	Appropriate information	0.86	0.064	13.362	0.000	0.737	0.54	
clause 4	User Satisfaction	1			0.000	0.839	0.70	0.54
clause 5	User Satisfaction	0.758	0.058	13.025	0.000	0.716	0.51	
clause 6	User Satisfaction	0.844	0.059	14.212	0.000	0.772	0.50	
clause 7	User Satisfaction	0.841	0.07	12.094	0.000	0.673	0.45	
clause 8	The volume of the Use	1			0.000	0.746	0.56	0.60
clause 9	The volume of the Use	1.042	0.075	13.853	0.000	0.820	0.67	
clause 10	The volume of the Use	0.931	0.073	12.713	0.000	0.753	0.57	
clause 11	The volume of the Use	1.006	0.077	13.052	0.000	0.772	0.60	
clause 12	The volume of the Use	1			0.000	0.811	0.66	0.55
clause 13	The volume of the Use	0.956	0.067	14.216	0.000	0.771	0.60	
clause 14	The volume of the Use	0.917	0.065	14.075	0.000	0.765	0.59	
clause 15	Achieving information systems	0.881	0.068	12.884	0.000	0.711	0.51	
clause 16	Achieving information systems	0.724	0.066	10.926	0.000	0.619	0.38	
clause 17	Achieving information systems	1			0.000	0.856	0.73	0.62
clause 18	Achieving information systems	0.829	0.059	14.077	0.000	0.775	0.60	
clause 20	Achieving information systems	0.86	0.064	13.362	0.000	0.737	0.54	

Note : AVE: Average Variance Extracted SMC: Squared Multiple Correlation ; P : Probability C.R.: Criti S.E. Standard Error

As it can be seen from Figure (2) and Table (5) that the percentage of saturation or the link between the second factor: the Satisfaction of the end user and clauses were statistically significant as the value of the T-statistics of each clause is greater than (1.964), and the level of significance (probability value) less from (0.001) The saturation ratio high and excellent (0.7) and higher than the desired value (0.50) and ranged from (0.67), clause number (7) and (0.84) of clause (4), and this confirms. (Convergent Validity) to factor end-user satisfaction. Squaring this percentage saturation or squared-called multi-squared correlation (stability concept or compound stability), which ranged from (0.45) to (0.70).

The arithmetic average of multiple correlation squared (ie collect multiple links squared and divided by the number) called (Average Variance Extracted-AVE) and must be at least (0.50), as one of the main criteria for asymptotic sincerity. And from the table it is clear that the average variance extracted for the end-user satisfaction factor value was (0.54). And top of test (0.50). Clear to us that four paragraphs were efficient to represent factor: the end-user satisfaction and this factor distinguishes the valid Convergent evidence.

As it can be seen from Figure (2) and Table (5) that the saturation or link ratio between the third factor: the volume of use of management information systems and clauses were statistically significant as the value of the t-statistics for each larger than clause (1.964), and the level of significance (value probability) less than (0.001). The saturation ratio high and excellent (0.7). Higher than of the desired value (0.50) and ranged from (0.75), for the clause number (11) and number (13) and also between (0.82), clause number (12), and this confirms, the Convergent Validity to factor the volume of the use of management information systems. Squaring this percentage saturation or squared-called multi-squared correlation (stability concept or compound stability), which ranged from (0.56) to (0.67). And from the table it is clear that the average variance extracted value (Average Variance Extracted-AVE) to factor the size-touse information systems were (0.60). Higher than the standard test (0.50). Clear to us that four clauses were efficient to represent factor: size-to-use information systems that factor distinguishes the valid Convergent evidence.

Finally, it is clear from Figure (2) and Table (5) that the saturation or link ratio between the fourth factor: the achievement of management information systems to the goals of the body and its clauses were statistically significant as the value of the T-statistics for each larger than clause (1.964), and the level of significance (probability value) is less than (0.001). The saturation ratio is high and excellent (0.7). Higher than the desired value (0.50) and ranged from (0.62), clause number (20) and (0.81) of paragraph number (15), This confirms (Convergent Validity) factor to achieve the objectives of the management information systems for the aims of the body. Squaring this percentage saturation or squared-called multi-squared correlation (stability concept or compound stability), which ranged from (0.38) to (0.66). And from the table it is clear that the average variance extracted value (Average Variance ExtractedAVE) factor to achieve the objectives of the management information systems device was (0.55), and higher than the standard test (0.50). Clear to us that the five clauses were efficient to represent the factor: to achieve the body objectives of the management information systems that factor distinguishes the valid Convergent evidence.

9.5 Fornell –Larcker Criterion

Both Fornell –Larcker gave a basic standard as proof of the sincerity of differentiation by using factor analysis affirmative . This standard is widespread in applied studies in various fields of knowledge. Standard states that the average variance extracted (Average Variance Extracted-AVE), each factor in the scale should be higher than the covariance (Share Variance-SV) of all relations or links between the two factors. Table 6 shows the correlations between the four factors for MIS.

Table 6. matrix correlations between latent variables in the scale of the management information systems

Latent Variables	Appropriate information	User Satisfaction	The volume of the Use	Achieving information systems
Appropriate information	1			
User Satisfaction	0.53	1		
The volume of the Use	0.70	0.62	1	
Achieving information systems	0.50	0.63	0.69	1

It is clear from Table (7) covariance between the four factors which results by multiplying the value of the link from the table in the same number (7) and the average variance extracted (the arithmetic average of the multi-link the square of the worker). It is clear from the table of average value of the extracted variance for each factor is (0.62,0.54,0.60,0.55), was higher than the covariance between all the factors, namely, (0.28,0.49,0.25,0.38,0.40,0.48). As long as the average variance extracted for each factor in the questionnaire of

the Management Information Systems from the highest correlation or covariance between these four factors, the questionnaire of the Management Information Systems is characterized by the valid differentiation.

Table 7. Covariance matrix and the extracted variance of the Model of the management information systems

Latent Variables	Appropriate information	User Satisfaction	The volume of the Use	Achieving information systems
Appropriate information	0.62			
User Satisfaction	0.28	0.54		
The volume of the Use	0.49	0.38	0.60	
Achieving information systems	0.25	0.40	0.48	0.55

10. Test of the hypothesis

Confirmed the hypothesis that there is a direct impact of management information systems for human resources management system in implementation of the housing and utilities projects body Libya. By reviewing the Theoretical model to a model of the management information systems and spreadsheet program outputs of the Amos No.(8): The hypothesis was a significance statistically that the value of T (T-Value) equal to (8.279) and higher than the test standard (1.964) and the value of the significance level (p) = (0.000), with statistical significance, and less than the test standard to denote significant (0.05). Value or standard Track coefficient estimates = (0.82). And a positive direction, which confirms that the increased interest in management information systems lead to improved human resource management. Where the effect size was (0.68). This means that (68%), human resource management attributable to the management information systems. This is a big influence in the underlying variables.

Table 8. parameters and non- normative and normative transactions for the theoretical model regarding the management information systems and human resources management

Latent Construct	Latent Construct	Estimate	Standard Error (S.E.)	Critical Ratio (C.R.)	P-Value	Standardized Regression Weights
MIS	<--- HRM	0.552	0.067	8.279	***	0.82

*** Indicates that the statistical moral level significance at (0.000) or less than (0.001).

11. Conclusion

One of the limitations of this study is that the data gathered was cross-sectional rather than longitudinal in nature. The longitudinal method might improve the understanding of the associations and the causality between variables (Isaac, Abdullah, Ramayah, Mutahar, & Alrajawy, 2017; Isaac, Abdullah, Ramayah, & Mutahar Ahmed, 2017). Future research should be conducted to investigate the relationship between variables by conducting cross-cultural studies as recommended by previous studies (Isaac, Abdullah, Ramayah, & Mutahar, 2017a; Isaac, Masoud, Samad, & Abdullah, 2016). Confirmed the hypothesis that there is a direct impact of management information systems for human resources management system in the implementation of housing and utilities projects body in Libya. The results also confirmed the existence of a positive relationship and statistically significant. The interest in management information systems lead to the improvement and development of human resources management. Increasing attention to the achievement of management information systems for the goals of the body "and" end-user satisfaction "and" appropriate systems of different administrative levels of information "and" The volume of use of management information systems "lead to increase the importance of" training of human resources "and" attraction human resources "and" evaluation the performance of human resources "and" human resource management planning. "

This confirms that the information form the backbone of any activity , it has increased the need for data and information in all administrative business to provide a suitable amount of information necessary for planning and evaluation, training, and attract human resources.

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