

Quality of accounting information systems: a study on banking sector in Sana'a city in Yemen and Nanded city in India

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Abstract

Objectives: To study the system quality of AIS being applied in banking sector in both Sana'a city in Yemen and Nanded city in India, and to provide refinements needed for system quality of AIS being applied in banking sector in both countries.

Methods/Statistical analysis: The present study depended on the descriptive approach. Hence, the survey method is used for the study for being the most suitable technique for collecting data from the representative samples. Accordingly, a group of tools which fit with this type of researches has been applied in data collection and processing such as sampling, questionnaire and using appropriate descriptive and inferential statistics which will be able to accomplish of the objectives and testing hypotheses regarding the present study. So, the study has targeted managers, accountants and technicians in IT department working in banking sector by applying probability sampling, specifically the stratified sampling technique. Moreover, the current study applied non parametric tests for testing of hypotheses, especially One- Sample Wilcoxon Signed Rank test.

Findings: Eventually, the study revealed that the general average of the selected samples were (4.08, 4.28) in both countries Yemen and India in a row, which refer to that AIS being applied in banking sector in both countries are of high quality, these results go along with previous studies. The specially regarding to censorial procedures. On the other hand, the current study disclosed that there are significance differences between samples of the current study in both countries through the Mann Whitney test, which reached to .003. And by mean rank values (97.22, 122.199) of both countries respectively. The differences are in the favor of India.

Improvements: The present study has provided certain refinements which in turn enhance the performance of AIS for keeping on its stability for so long time, and make it keeping up with latest technology in this domain continuously.

Keywords: System–Quality–Accounting– Accounting Information Systems (AIS) - Banking Sector.

1. Introduction

Accounting is generally related to business environment as it communicates the results of business operations to various users who are interested in business, such as owners, creditors, investors, government and other agencies [1]. Developments in information technology and telecommunication influenced Accounting Information Systems (AIS) completely; this impact had led to core changes in AIS generally. Then, under the shadow of information technology and telecommunication technology, AIS has ability to produce financial and non-financial information to all users either inside or outside the organization. As mentioned above, numerous developments in information and telecommunication technology have massive implications on information systems, specially accounting information system, where they made current accounting information system completely different from traditional accounting information system in several aspects, either at input stage, processing stage or output stage, where these stages are being conduct in the modern AIS electronically. But with the use of this technology, inherent risks must be taken into consideration to protect current system from these risks and threats. The success of business hinges on ability of organizations providing valuable, clear and accurate information to decision makers across the company, especially management operations. So, providing information in right time and with right manner leads to make proper decisions in favor of the firm.

Thus, here comes out the vital role of information and its effect on business. So, information in current era is regarded as one of the most important assets of organization. Therefore, it should be effective on accounting information system to generate information for decision making in general, and strategic decisions in particular.

1.1. Components of Accounting Information Systems (AIS)

In this regard, stated that, the AIS can be a manual system, a very complicated that relies on latest technology or something in between. Regardless of the approach taken, the process is similar. The AIS should collect, enter, process, store and report data and information. So, papers computer hardware and software are just tools used to produce the information. There are six components of AIS [2]:

1. The people who use the system.
2. The procedures and instructions used to collect process and store data.
3. The data about the organization and its business activities.
4. The software used to process the data.
5. The information technology infrastructure, including the computers, peripheral devices, and network communication devices used in the AIS.
6. The internal controls and security measures are all used to protect AIS data.
7. Thus, the above mentioned components enable AIS to meet its functions duly.

1.2. Functions of accounting information systems

The AIS depends on different group of functions, which may be divided into five main functions as follows [3]:

1. Data collection

This function is aimed at collecting raw data from its different sources, either from internal or external environment. This process includes certain steps as in the following:

1.1. Data recording

This process begins through collecting data from its resources by using suitable media bunch card and DVD and so on.

1.2. Data coding

This process aims to streamline amount of data, which should be registered by dedicating a set of numbers, letters or symbols according to specific way for representing data. The most salient ways of coding are represented in the following:

1. Numeric Code
2. Alphabetic Code
3. Alphanumeric Code

1.3. Data classifying

This step aims to classify and divide the data in similar groups in terms of qualities, such as classifying inventory to raw materials, work-in-process production and complete production.

1.4. Data editing

This process aims to ensure validity and integrity of recorded data and that need to be free of mistakes. The next steps depend on this point or step.

1.5. Data converting

This last task of data collection function aims to convert data from mediator to another, to get required information.

2. Data processing

After finishing the data collection step, the data processing starts aiming to convert data to useful information for users. This step includes specific activities as the following:

2.1. Data storing

This step seeks to put data in multi classifications, and arrangement of data in predetermined ordering. This stage may include data merging of multi classification to big classifications, such as sales data of each client whereas clients group is arranged in alphabetic order as per client name.

2.2. Data calculating

It is the process through which data form is converted to new useful form through basic mathematical calculations, and to be used by users easily.

2.3. Data comparing

This process is done to know the relations and differences among data and discovering the useful facts. For example, comparing sales data according to regions and salesmen to recognize the goods which are most selling, and salesmen who are more effective.

2.4. Data summarizing

It is a process to show the data in a summarized and concise form, such as providing management with final inventor at the end of the period.

3. Information production

Information production is regarded as the bases to existence of information systems, and its other functions. This process involves the following activities:

3.1. Information transmission

It refers to export information from one place to another so that it can be transmitted to final users or as inputs to another system.

3.2. Reporting

This process involves preparing reports needed to meet users' need which should be prepared to users as printed documents, schedule of payable accounts, schedule of receivable accounts, waybill, etc.

4. Data management

Data management plays a critical role in accounting information system. It involves the organization, saves and storage of data in organized manner to facilitate its retrieval in future, so the main activities of this stage are clarified as below:

4.1. Data storing

After the completion of data processing, data storage is the next step through which storage and collecting data is done by several ways to be useful in future, and it can be either of short-term or long-term.

4.2. Data maintenance

It implies maintaining quality of data, which is produced and stored by the system for future using. So quality of data depends on its updating, which includes effect of changes on events or decisions, and some activities like deleting, rectification, modification and so on.

4.3. Data retrieving

It means looking for stored and saved information in specific files, which can be recovered completely or partially for use in preparing required reports.

5. Data control security

Data control security is considered the most important function of the system. It helps in saving data of loss, fraud, misrepresentation or, etc.

1.3. Statement of the problem

The researcher strives to study Quality of Accounting Information Systems: A Study on Banking Sector in Sana'a City in Yemen and Nanded City in India. So the current study deals with the current AIS as a comprehensive system that includes human components (internal users), computer components (Hardware, Software and IT infrastructure). Thus, from the above discussion the problem of the study has been presented in the form of two questions. The first one is: what is the current quality of the AIS being applied in banking sector in both Sana'a city, Yemen and Nanded city, India from users' point of view? The second question is: What required refinements should be there for developing of the current quality of the AIS being applied in banking sector in both Sana'a city, Yemen and Nanded city, India from users' perspective?

1.4. Significance of the study

The importance of the present study stems from importance of AIS being applied in banking sector in both countries viz Yemen and India whereas Accounting Information Systems (AIS) play key role through the following:

1. Improving the quality and reducing the costs of services in banking sectors in both countries.
2. Improving efficiency in banking sectors in both countries through providing timely, accurate and up-to-date information that helps decision making process on time.
3. Importance of the current study comes out from the importance of banking sector in both countries, and its core role in national economy. Thus, the study of requirements of banking sector is extremely important point. Therefore, studying AIS being applied in it is one of these needs.

1.5. Objectives of the study

1. To study the system quality of AIS being applied in banking sector in both Sana'a city in Yemen and Nanded city in India.
2. To provide refinements needed for system quality of AIS being applied in banking sector in both Sana'a city in Yemen and Nanded city in India

1.6. Hypotheses of the study

1. The AIS being applied in banking sector in Sana'a city in Yemen does not characterize high level of system quality.
2. The AIS being applied in banking sector in Nanded city in India does not characterize high level of system quality.

2. Research methodology

In fact, any type of research calls for data with which the hypotheses may be tested. In order to collect data there are a variety of methods and procedures that have been developed in this connection. After going through the different methods of research, and keeping all the important points of survey methods in mind, survey method was selected by the researcher for this study, as the researcher wanted to study Quality of Accounting Information Systems: A Study on Banking Sector in Sana'a City in Yemen and Nanded City in India. Since, the information which the researcher required could not be available through documentary sources or related literature. As mentioned earlier, the current study hangs on descriptive approach.

So, survey method is used for the study which is most suitable for collecting data from the representative samples. Accordingly, the researcher used a group of tools which fit with this type of researches to collect and processing data, especially, sampling, questionnaire and using appropriate descriptive and inferential statistics which are illustrated in the following points.

1. Population of the study

The population of the current study included in banking sector in both countries Yemen and India, Sana'a city and Nanded respectively. In Yemeni banking sectors, Sana'a city includes seventeen banks. On the other hand in Indian banking sector specially, in Nanded city, it includes thirty nine banks. Because of the limitations of the study, it is difficult to survey all employees working in banking sector in both countries Yemen and India in Sana'a city and Nanded city respectively. Therefore, the researcher has decided to select a sample of these large populations to administer the research tool precisely.

2. Sample of the study

As mentioned earlier the current study hinges on descriptive approach. Thus, this step is the consequence of following this approach. As to research work in Yemen there are 17 banks. The researcher excluded 5 banks because they have so limited banking activities. Then there are 12 banks remaining which the researcher deals with. So in Yemeni aspect, the researcher distributed 15 questionnaires per bank, and then all questionnaires distributed were 180, that number is divided into two types; valid and invalid. Number of valid questionnaires was 112 and invalid questionnaires were 68. On the other hand, in Indian aspect, there are 38 banks but there are 9 out of them rejected to share any information with the researcher, and there are 29 out of them accepted to share information with the researcher. Thus, all questionnaires distributed were 180, which are divided into two types; valid and invalid questionnaire. Number of valid questionnaires was 112 which represent 62% from the selected sample and invalid questionnaires were 68 which represent 38%. The researcher has selected sample, whose job are related to AIS. So, the current study has targeted managers, accountants and technicians in IT department working in banking sector by applying probability sampling specifically stratified sampling technique, in both countries specially they work in the following departments: Loans and Facilities Management & Remittances Management & Documentary Credit Management & Clearing Management and IT Management in the Bank as shown in Table 1.

Table 1. Afore mentioned explanation in clear manner

Table No. 1			Targeted Sample in Yemen and India															
Particulars	Population		No. of included Banks		No. of excluded Banks		Questionnaires Distribution						Total		Valid		Invalid	
	N	%	N	%	N	%	Managers		Accountants		IT Workers		N	%	N	%	N	%
							N	%	N	%	N	%						
Yemen	17	100	12	71	5	29	60	33	84	47	36	20	180	100	112	62	68	38
India	38	100	29	76	9	24	60	33	84	47	36	20	180	100	112	62	68	38
Total			41		14		101		223		36		360		224		136	

Source: field survey

3. Tools for data collection

As a matter of fact, this stage commences after a research problem has been defined and research design chalked out. While deciding about the method of data to be used for the present study, it is very important, the researcher should keep in mind two types of data viz, primary and secondary data, in addition to knowing the suitable techniques to obtain them. So, in the present questionnaire as the tool has been selected to collect primary data for the current study, because the current study depends on descriptive approach. On the other hand, as for secondary data, the researcher has compiled various sources like books, earlier studies that are relevant to current study, statistical, issued reports, publications, magazines, journals, newspaper and internet.

4. Preparation of questionnaire

The researcher went through some of the existing questionnaires used by previous researchers in related fields and found that these questionnaires did not offer coverage completely of the objectives of the present study. Thus, it was very important to prepare a questionnaire which would translate the objectives of current study into specific questionnaires, the response to which would provide the data necessary to answer the questions, help testing the hypotheses and to explore the area defined by the objectives. This questionnaire was for the managers, accountants and employees in IT department in banking sector in both countries viz Yemen and India. The questionnaire was designed so as to elicit information regarding the system quality. The questionnaire consisted of four parts as below:

5. Covering letter

This part offers carefully and courteous constructed letter that spells out the purpose of the study. The value of the study to analyze system quality of the AIS being applied in banking sector in both countries Yemen and India, and to enrich of existing knowledge and for future researchers. In this covering letter, the respondents were assured that their responses would be treated as strictly confidential and that in no manner whatever would their personal identity or the identity of their institutions be revealed.

6. Instructions to respondents

This part includes the guide to the respondents on how the questionnaire should be filled in. This would enable the respondents to respond in a way that facilitate tabulation of the data.

7. Personal data

This section includes six statements viz Bank Name, Current Occupation, and Educational Level Type of your Academic Degree, Experience Years in your position and Professional Certificates if any.

8. Analysis of quality of the AIS in both countries Yemen and India

This part highlighted on the analysis of AIS being applied in both countries Yemen and India in Sana'a city and Nanded respectively. Moreover, the questionnaire gave the respondents a chance to add any additional information. So, the questionnaire included 11 items, which were finalized after exhaustive review and discussion with classmate and academicians in this regard. These forms of questionnaire can be seen in Appendix.

9. Try out of the questionnaire

In this connection, the researcher conducted a tryout of the questionnaire on a sample of 30 respondents (15 accountants, 10 managers and 5 technicians in IT section) who were not included in the main sample. The researcher administered the questionnaire personally and collected the questionnaires personally. This enabled the researcher to interview the respondents and ascertain the difficulties encountered by the respondents while filling in the questionnaire. The researcher took note of the same, so as to be able to effect modifications in the final questionnaire and also to gauge extent satisfaction of the respondents toward the current study. The responses helped to furnish data that would fulfill the objectives of the study. The necessary changes were made.

10. Internal consistency of questionnaire

The current tool seeks to measure validity related to the current study, by studying correlations coefficients between dimension and its components, which in turn mirror degree of internal consistency of instrument being applied in this study. So, in this context the researcher has applied internal consistency in the current research as under: The Table 2 shows the internal consistency of questionnaire through identifying the Spearman's correlations coefficients between system quality and its components. It is clear that Spearman's correlations coefficients range between (.963, .879). This spells out that there is strong correlation between system quality and its components which means that internal consistency of this tool is highly satisfied.

Table 2. Internal consistency of questionnaire

Particulars		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Spearman's rho	Total												
	Correlation Coefficient	.909**	.920**	.913**	.908**	.906**	.897**	.898**	.921**	.936**	.963**	.950**	.909**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	112	112	112	112	112	112	112	112	112	112	112	112

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Version 21

11. Validity and Reliability

Prior to administration of the final form of the questionnaire, the researcher administered the question to a sample of 30 accountants who are not selected in the sample study. Then, the researcher depended on Cronbach's Alpha as statistical tool to test validity and reliability. The following Table 3 explains validity and reliability in a patent manner as under. The Table 3 clarifies that Cronbach's Alpha of all items reached to .987 and validity reached to .99 this indicates that the reliability and validity of questionnaire are highly satisfied.

Table 3. Coefficient of Cronbach's Alpha of testing validity and reliability

No	Name of axis	Cronbach's Alpha	Validity	No of Items
1	System Quality	.987	.99	11

Source: SPSS Version 21

12. Administration of questionnaire

Having prepared the final questionnaire and having selected the sample for the final study, the researcher proceeded to administer the questionnaire. The researcher needs to seek approval from chief managers working in banking sectors in both countries Yemen and India before the administration of the questionnaire. After the approval was obtained, the field survey was started. Personal visit was made to all the selected banks in both countries Yemen and India working in Sana'a city and Nanded respectively. The questionnaires were given to the respondent personally. Before administrations of the questionnaire to respondents, the researcher explained the purpose of the questionnaire to respondents and how they should react to each statement. The researcher convinced the respondents that the confidentiality of their responses would be strictly maintained and they were asked to feel free to ask if they had any question concerning the content of each statement in the questionnaire.

The dates by which the respondents could return questionnaire duly filled in, were also as per convenience of the respondents. It was observed that managers in both countries were asked to take comparatively more time to fill in the questionnaires as they have been over-working with their administrative tasks. However, some respondents could not return the questionnaires duly filled in as per the duration given to them. So, the researcher repeatedly visits the places again and again for collecting data. Some of the other problems encountered by researcher were: absence of some respondents, misplacements of the questionnaires and forgetting questionnaire at homes. This created problems for the researcher for collecting data. However, the researcher surmounted all these difficulties and collected most of the questionnaires. The questionnaires being administrated were 180 in both countries, in respect of Yemen 112 questionnaire were received or return, so the percentage of returned questionnaire in Yemen was 62% which means that it is good. This encouraged the researcher to have degree of confidence in data that has been collected.

13. Measurement scales

Scales of measurement can be classified into the following scales: Nominal Scale & Ordinal Scale, Interval Scale and Ratio Scale.

The most suitable scales to the current study are nominal scale, for measuring demographic data, and ordinal scale to measure questionnaire of the present study, it being depended on five likert scales.

14. Statistical tools used in analysis process

In general, there are two major kinds of statistics. The first type is descriptive statistics and the second one is inferential statistics. The current study has used descriptive statistics such as the mean, median, mode, standard deviation, frequencies, charts, graphs and tables as well as inferential statistics such as non parametric tests in analysis process.

15. Limitations of the study

1. The researcher has limited the scope of his study through studying Quality of AIS being applied in both countries Yemen and India.
2. The study is limited to study the AIS being applied in banking sector located in both countries Yemen and India specifically Sana'a city and Nanded city respectively.
3. The targeted sample has been focused on managers, accountants and IT technicians whose jobs are so closed with the AIS.
4. Turnaround time to accomplish the current study should be considered.

3. Literature survey

1. Influence organizational commitment on the quality of accounting information system

The purpose of this study is to know the influence of organizational commitment on the quality of accounting information system. So, the researcher constituted main hypothesis as the following:

There are significant organizational commitment on the quality of accounting information system to reach to study's aim. In conclusion, the study showed that organizational commitment has effective influence on the quality of accounting information systems.

2. Influence of user involvement on the quality of accounting information system [4]

The main aim of this study is to examine the influence of user involvement on the quality of the information system of accounting information system. So, for achieving this purpose, the empirical study has taken place by selecting 55 universities in the city of Bandung. Questionnaire technique was employed for collecting primary data, and the sample selected of population for this purpose was the head of the accounting information system. In addition to, using PLS2.0 for analyzing of the data related to the current study. The results of this study are as follows: Participation of users of information systems significant positive effect on the quality of accounting information systems.

3. Information technology and accounting information systems' quality in Coruatian Middle and Large companies [5-7]

The present study aims to spell out the impact of information technology on accounting process and accounting information systems' quality. Therefore, this study was interested in the analysis of accounting information systems' characteristics and knowing the proper model of AISs' quality measurement. For this purpose, this study has adopted empirical study on medium and large companies in Croatia.

In conclusion, the research showed the following findings:

1. The quality of accounting information system is influenced by several factors.
2. Accounting information system is inconceivable without the use of advanced technology.
3. IT affects how AIS operates, contributes, processing, presenting, and delivering accounting information.
4. IT plays vital role in providing the accuracy and timeliness of accounting information system.
5. IT provides high satisfaction about the performance of accounting information system by users.

4. Analysis and Interpretation of the data

As mentioned earlier, the current study depended on descriptive statistics and inferential statistics in analysis process. So this point can be explained in the following points:

1. Descriptive statistics

Descriptive Statistics used in this study are represented in Mean, Std. Deviation, Variance, Range, Sum, and Rank. In this regarding the above mentioned Descriptive Statistics are computed on the level of each item.

Table 4. Mean, Std. Deviation, Variance, Range, and Rank of All Items of System Quality

	Mean		Std. Deviation		Variance		Range		Rank	
	YEMEN	INDIA	YEMEN	INDIA	YEMEN	INDIA	YEMEN	INDIA	YEMEN	INDIA
Q1	4.18	4.26	.785	.565	.616	.320	3	3	4	7
Q2	4.29	4.26	.812	.707	.660	.500	4	4	2	8
Q3	4.23	4.38	.794	.486	.630	.236	3	1	3	1
Q4	4.13	4.38	.749	.486	.561	.236	3	1	6	2
Q5	4.11	4.29	.689	.527	.475	.278	3	2	7	5
Q6	4.04	4.31	.676	.570	.457	.325	3	2	8	4
Q7	4.17	4.29	.709	.492	.502	.242	3	2	5	6
Q8	3.84	4.21	.833	.617	.695	.381	3	3	11	11
Q9	3.88	4.21	.867	.560	.752	.314	3	3	10	10
Q10	3.76	4.18	.979	.618	.959	.382	4	4	12	12
Q11	4.35	4.34	.681	.594	.463	.352	3	4	1	3
Total	4.08	4.28								

Source: SPSS 21

2. In respect of Yemen

In the light of the Table 4, it can be seen that the mean value of all items (Q1 to Q11) in the current axis as following (4.18,4.29, 4.23,4.13,4.11,4.04,4.17,3.84,3.88,3.76,4.35) respectively. So it is clear that, the general average of the current axis is 4.08 which lies in interval (4.2-3.4) which means agree, this result does not support partially the null hypothesis No (1-A) which reports that AIS being applied in banking sector in Sana’a city, Yemen does not characterize high level of system quality. On the other hand, the above Table 4 shows that the item number 11 “The current AIS provides specific authorizations for each user which enhance the censorial procedures in the bank” has got maximum average of Mean 4.35 and accordingly on the first place among the items of the current Axis, while item 10 “The current AIS includes the best developed devices” came in the eleventh order and last place with Mean of 3.76.

3. In respect of Indian

In the light of the Table 4, it can be seen that the mean value of all items (Q1 to Q11) in the current questionnaires delivered to respondents as following: (4.26,4.26,4.38,4.38,4.29,4.31,4.29,4.21,4.21,4.18,4.24,4.34) respectively. So it is clear that, the general average of the current axis is 4.28 which lies in interval (5-4.2) this result does not support partially the null hypothesis No(1-B) which reports that AIS being applied in banking sector in Nanded city, India does not characterize high level of system quality. On the other hand the Table 4 shows that the item number 3 “The current AIS is able to deal with electronic deposit and payment tools such as ATM & POS (point of sales)” and the item number 4 “The current AIS has database include financial and non-financial data which can help to make decision in banking” have got maximum average of Mean of 4.38 unlike. And accordingly on the first place among the items of the current Axis, while item 10 “The current AIS includes the best developed devices” came in the eleventh order and last place with Mean of 4.18.

4. Testing of hypotheses

In this regarding, the current study applied non parametric tests for testing of hypotheses, being it counted on ordinal scale to collect primary data from the sample has been selected. Thus, One- Sample Wilcoxon Signed Rank test is regarded one of most suitable non-parametric tests to test the hypothesis related to the current study.

4.1. Testing of hypotheses in relation to Yemen

The null hypothesis in this regarding reports that: Quality of the AIS applied in banking sector in Sana'a city in Yemen does not characterize high level of quality. By studying the Table 5 it can be revealed that significance value is less than .05. Thus the decision is rejected, the null hypothesis which reports that quality of the AIS being applied in banking sector in Sana'a city in Yemen does not characterize high level of quality against the acceptance of alternative hypothesis which refers to that quality of the AIS being applied in banking sector in Sana'a city in Yemen characterize high level of quality.

Table 5. Hypothesis test summary in relation to Yemen

Test	Sig	Decision
One- Sample Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.
Level of Significance at .05		

Source: SPSS version 21

4.2. Testing of hypotheses in relation to India

The null hypothesis in this connection reports that: Quality of the AIS applied in banking sector in Nanded city in India does not characterize high level of quality. By investigating the above Table 6, it can be revealed that significance value is less than .05. Thus, the decision is rejecting of the null hypothesis which reports that quality of the AIS being applied in banking sector in Nanded city in India does not characterize high level of quality against accepting alternative hypothesis which refers to that quality of the AIS being applied in banking sector in Nanded city in India characterize s high level of quality.

Table 6. Hypothesis test summary in relation to India

Test	Sig	Decision
One- Sample Wilcoxon Signed Rank Test	.000	Reject the null hypothesis.
Level of Significance at .05		

Source: SPSS version 21

5. Testing differences between samples

In fact, this part endeavors to provide insight regarding samples is used in the current study. Therefore, as stated earlier that the current study depended on ordinal data, so it applies nonparametric tests or distribution-free tests for achieving the aim of the current part. Moreover, the proper nonparametric test of the present study is Mann Whiteny Test. The following Table 7 elaborate results of Mann Whiteny by using SPSS version 21. The hypotheses of Mann Whiteny test can be formulated as follows:

H0: There are no differences between means of samples or $M1=M2$ against

H1: There are differences between means of samples or $M1\neq M2$.

Table 7. Ranks

Group	N	Mean Rank	Sum of Ranks
1	112	97.24	10405
2	112	122.19	13685
total	224		

Source: SPSS version 21

Table 8. Statistical tests of significance differences between samples

Test	Sig	decision
Mann Whitney test	.003	Reject the null hypothesis.
Level of Significance at .05		

Source: SPSS version 21

To conclude, there are significance differences between samples of the current study in both countries. In addition, these differences are in the favor of India, because mean rank of the sample in India stated above in Table 8 is more than mean rank of the sample in Yemen.

These differences may attribute to differences in demographic data such as difference in educational level and type of academic degree and experience years. All these factors played crucial role in responses of respondents to questionnaire.

6. Conclusion

As a matter of fact, the current portion is regarded the crowning step of the current study. So, after analyzing and interpreting the data of the present study, the major findings and conclusion can be organized and reported as under:

6.1. Findings of the study

6.1.1. Finding in respect of Yemen

6.1.1.1. Demographic data

1. It is found that, the sample of the current study represents a large part of the population that reached to 71% which is regarded as a positive indicator to represent the population of the study duly.
2. The results of the field survey have revealed that the majority of sample's individuals are managers who reached to 42%.
3. It is found that most of sample's individuals hold graduate qualification, reached to 83% of the total sample. And most of qualifications were in accounting, reached to 39% of the total sample.
4. It is found that most of sample's individuals have years of experience ranging between 6-10 years, its percentage reached to 41% of total sample

6.1.1.2. Analysis of questionnaire

1. Results of frequencies of this study proved that AIS being applied in banking sector in Sana'a city, Yemen, characterizes high level of system quality.
2. Results of other descriptive statistics, specially Mean, Std. Deviation and Variance approved that AIS being applied in banking sector in Sana'a city, Yemen, characterizes high level of system quality, through total value of means which reached to 4.08.

7. Finding in respect of India

7.1. Demographic data

1. The results showed that, the sample of the current study included a large part of the population which reached to 76% of the population, which is regarded a positive indicator to represent the population of the study duly, in which its majority are managers in banking sector.
2. The results of the field survey revealed that majority of sample's individuals are Accountants, which reached to 69%.
3. The result disclosed that the most of sample's individuals hold postgraduate qualification reaching to 49% of the total sample. And most of qualifications were in others qualifications selection, reached to 37% of the total sample.
4. The result proved that the most of sample's individuals have years of experience in banking sector range above 10 years, reached to 66%.

8. Analysis of questionnaire

1. Results of frequencies of the current dimension have proved that AIS being applied in banking sector in Nanded city, India characterizes high level of system quality.
2. Results of descriptive statistics specially Mean, Std. Deviation and Variance have proved that AIS being applied in banking sector in Nanded city, India characterizes high level of system quality.

9. Recommendations of the study

As mentioned earlier, findings of the current study have discovered that its results were entirely positive. So this section aims to support and consolidate the positive aspects of the current study to both countries. It is advisable to monitor network's performance of AIS permanently to ensure connectivity of the branches with each other and with headquarter. Moreover, there must be a secondary line connecting to the data center from the branches that can take over in case of the primary line is down. Considering the criticality of banking transactions and data, it is important that the network is adequately secured with devices like firewalls, intrusion detection systems, etc.

For keeping on system quality being applied in banking sector, there should be more considerations for imposing more strong physical security measures related to devices which are connected with AIS. The principles of physical security include:

1. Identifying assets that need protection.
2. Identifying threat and vulnerabilities through assessment.
3. Identifying the acceptable risk.

Choosing countermeasures to lower or contain expected loss based on that risk level. Emphasize on scrutiny of hardware related to the AIS from time to time, axing to outdated hardware, and acquisition of new hardware of high quality. Inspect computer sites continuously. Examining penetration of protecting systems periodically, such as firewall, encrypting data and password. Expanding connectivity of the AISs with terminals such ATM and POS (point of sales) as critical components of AIS in computerized environment, and examining ATM from time to time to ensure that it is activated all the time and performs its functionality duly.

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