

Service Quality of Accounting Information Systems: A Detailed Empirical Study on Banking Sector in Sana'a City in Yemen and Nanded City in India

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Abstract:

Objectives: The current study endeavors to investigate the service quality of AIS being applied in banking sector in both Sana'a city in Yemen and Nanded city in India, and offering the proper refinements for services quality of AIS being applied in banking sector in both countries.

Methods / Statistical Analysis: The current study relied on the descriptive approach. Then, the survey method is regarded the proper way for collecting data from the representative samples. Accordingly, a set of tools which fit with this type of the researches has been applied in collecting data and processing of the data like a sampling, questionnaire and using very apt descriptive and inferential statistics which will be able to achieve of the objectives and testing hypotheses of the present study. Therefore, the study has focused managers, accountants and technicians in IT department working in banking sector through applying probability sampling, specifically the stratified sampling way. In addition to apply non parametric tests for testing of hypotheses, specially One- Sample Wilcoxon Signed Rank test.

Findings: In the long run, findings of the study brought out that the general average of the selected samples were (4.08, 4.24) in both countries Yemen and India respectively, which in turnpoint to that AIS being applied in banking sector in both countries are of high quality, these results match with previous studies specially regarding to censorial procedures. On the other side, the present study uncovered that there are significance differences between samples of the current study in both countries by the Mann Whitney test, which reached to .003. And through mean rank values (97.22, 122.199) of both countries in a row. And the differences are in the favor of India.

Improvements: The present study has rendered certain refinements to consolidate the performance of AIS for

keeping on its stability in the long run, and make it in line with latest technology in this field in steadily.

Keywords: Accounting, Accounting Information Systems (AIS), Banking sector, Service, System.

I. INTRODUCTION

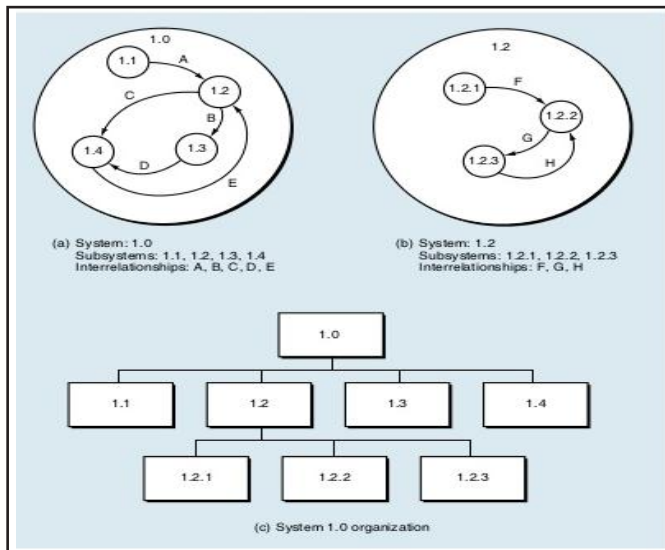
The success of business hinges on ability of organizations providing valuable, clear and accurate information to decision makers across the company, especially management operations. So, providing information in right time and with right manner leads to make proper decisions in favor of the firm. Thus, 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].

AIS is a system which collect, enter, process, store, and report data and information. The AIS can be in different forms, it can be manual system, a complex system under advanced technology in IT, or something in between. Regardless of the approach taken, an AIS and people that use should collect, enter, process, store, report data and information [2].

A. Systems and Subsystems

A system is a set of interdependent components that achieve together specific objectives. And a system should have organization, interrelationship, integration, and clear objectives. Thus, a system includes subsystems, which constitute a single system and have been interrelated to achieve the general objectives of the system. Moreover, subsystem might be divided into subsystems to facilitate the mechanism of accomplishing the main objectives. The Fig. 1 shows a system formed of

four interrelated parts that have come together, or have been integrated, as a single system, which have named a system 1.0. Each part of a system is named as a subsystem. In this case, parts 1.1, 1.2, 1.3, and 1.4. In Fig. 1.0(b), the subsystem 1.2 consist of (1.2.1, 1.2.2, 1.2.3) as interrelated subsystems and in the same Fig. parts (a) and (b) depict the interrelationships (A through H) in system, part (c) depicts the hierarchical organization structure inherent in any system [3].



Source (Gelinas & Dull and Wheeler. Accounting Information Systems. p. 13)

Fig. 1: Systems and Subsystems

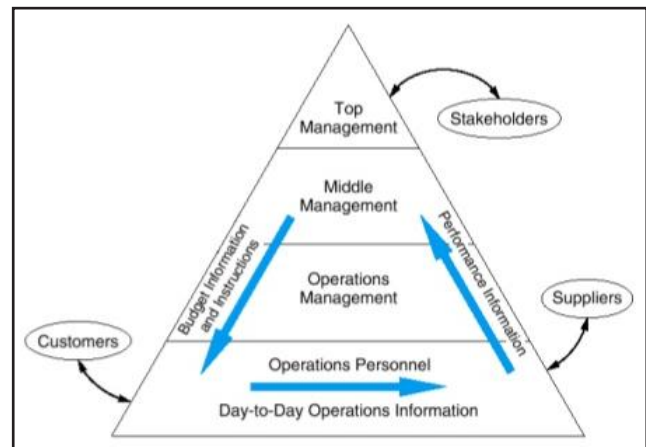
B. Information System (IS)

Information System has been defined in many different ways. It was defined as the set of human and capital resources within an organization that are responsible for the collecting and processing of data to produce information that is useful to all levels of management in planning and controlling the activities of the organization [4]. For many others, the term means a computer-based system but, in fact, it includes non-computer systems as well. Indeed, any business organization has an information system, but such systems vary greatly in their level of sophistication [5].

Every business day, huge quantities of information flow to internal users to meet a range of internal needs. In addition, information flows out from the enterprise to external users, such as customers, suppliers, and stakeholders who have an interest in the concern. Fig. 2 produce an outline of these internal and external information flows [6].

The pyramid in Fig. 2 demonstrates that the business organization is divided horizontally into a number of levels of activities. Business operations from the base of the pyramid. These activities consist of the product-oriented work of the organization, such as manufacturing, sales, and

distribution. Over the base level, the organization is divided into three management layers: operations management, middle management, and top management. Operations management is directly in charge of controlling day-to-day operations. Middle management is accountable for the short-term planning and coordination among necessary activities to achieve organizational objectives. Top management is in charge of longer-term planning and setting organizational objectives. Every individual in the organization, from business operations to top management needs information to achieve his or her responsibilities. Fig. 2 elaborates how information flows in two directions inside the company: horizontally and vertically. The horizontal flow supports operations-level duties with proper information about some business transactions affecting the firm. (Hall, 2008, p. 3) [6]. This embraces information on actions such as the production and storage of goods, the use of labor and materials in the production process, and internal transfers of resources needed from one section to another. The vertical flow gives summarized information about operations and other activities upward to managers of all levels. Management uses this information to make use of it in the performance of its functions. Information flows also downward from senior managers to junior managers and operations personnel in the form of instructions, quotas, and budgets [8].



Source (Hall, 2008, p. 3)

Fig. 2: Internal and External Information Flows

A third flow of information portrayed in Fig. 2 embodies exchanges between the company and users in the external environment. External users fall into two groups: trading partners and stakeholders. Exchanges with trading partners include customer sales and billing information, purchase information for suppliers, and inventory receipts information. Stakeholders are entities outside (or inside) the organization with a direct or indirect interest in the firm. Stockholders, financial institutions, and government agencies are examples of external stakeholders. Information exchanges with these groups contain financial statements, tax returns, and stock transaction information. Inside stakeholders include accountants and internal auditors. (Hall, 2008, p. 4) [9].

All user groups have distinctive information requirements. The level of details and nature of the information they should receive differ much. For instance, managers cannot use the highly detailed information needed by operations personnel. Management information is thus more summed up and oriented toward reporting on overall performance and problems rather than routine operations. The information must identify possible problems in time for management to take corrective measures. External stakeholders, on the other hand, need information very different from that of management and operations users. Their financial statement information, based generally on accepted accounting principles (GAAP). (Hall, 2008, p. 4) [9].

C. Statement of the Problem

The researcher aims to study service quality of Accounting Information Systems: A detailed empirical 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.

As such, the above problem of the study has been rendered in the form of two questions. The first one is: what is the current service 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 service quality of the AIS being applied in banking sector in both Sana'a city, Yemen and Nanded city, India from users' perspective?

D. Significance of the Study

The importance of the present study can be referred in the following points:

- The importance of the present study tapped from importance of AIS being applied in banking sector in both countries viz Yemen and India whereas Accounting Information Systems (AIS) play basic role through the following:
 - Improving the service quality and reducing the costs of services in banking sectors in both countries.
 - Improving efficiency in banking sectors to both countries through offering timely, accurate and up-to-date information that helps decision making process on time.
- Importance of the current study shows from the importance of banking sector in both countries, and its main role in national economy. Therefore, the study of requirements of banking sector is extremely important point. So, studying AIS being applied in it is regarded one of these needs.

E. Objectives of the Study

The research work was conducted with the following objective in mind:

- To study the service quality of AIS being applied in banking sector in both Sana'a city in Yemen and Nanded city in India.
- To render refinements needed for service quality of AIS being applied in banking sector in both Sana'a city in Yemen and Nanded city in India.

F. Hypotheses of the Study

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

G. Research Methodology

In fact, any kind of research needs to data through which the hypotheses may be tested. In order to collect data there are types of methods and procedures that have been developed in this regard. So, survey method was selected by the researcher for this study, as the researcher wanted to study service quality of Accounting Information Systems: A Detailed Empirical 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 present study relies on descriptive approach. So, survey method is used for the study which is most suitable for collecting data from the concerned samples. Accordingly, the researcher depended on a group of tools which match with this kind of researches to collect and processing data, especially, sampling, questionnaire and using appropriate descriptive and inferential statistics which are illustrated in the following points.

i. Population of the Study

The population of the present 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 side, in Indian banking sector specially, in Nanded city, it includes thirty nine banks. Because of the limitations of the study, it is difficult survey all employees working in banking sector in both countries Yemen and India in Sana'a city and Nanded city in a row. So, the researcher has decided to select a sample of these large populations to apply the research tool precisely.

TABLE I: TARGETED SAMPLE IN YEMEN AND INDIA

| Particulars | Population | | No. of Included Banks | | No. of Excluded Banks | | Questionnaires Distribution | | | | | | Total | | Valid | | Invalid | |
|-------------|------------|-----|-----------------------|----|-----------------------|----|-----------------------------|----|-------------|----|------------|----|-------|-----|-------|----|---------|----|
| | | | | | | | Managers | | Accountants | | IT Workers | | | | | | | |
| | N | % | N | % | N | % | 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

ii. 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 for research work in Yemen 17 banks are there. The researcher removed 5 banks because they have so limited banking activities. Then, 12 banks are remaining, which the researcher deals with. So in Yemeni side, 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 68 were invalid. 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 agreed to share information with the researcher. Then, all questionnaires are distributed by researcher 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. The Table I shows aforementioned explanation in clear manner.

iii. Tools for Data Collection

As a matter of fact, this step starts after a research problem has been defined and research design chalked out. While deciding about the method of data to be used for the current study, it is very important, the researcher should take into consideration two kind of data viz, primary and secondary data, moreover, studying the suitable techniques for obtaining them. So, in the present questionnaire as the tool has been selected to collect primary data for the present study, being the current

study counts on descriptive approach. On the other side, as to 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.

a) The Preparation of the Questionnaire

The researcher investigated some of the existing questionnaires used by previous studies in related fields and found that these questionnaires did not provide required 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 forwarded to 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:

b) Covering Letter

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

c) 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.

d) 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.

e) Analysis of Service Quality of the AIS in both Countries Yemen and India

This section of questionnaire focused on the analysis of AIS being applied in both countries Yemen and India in Sana'a city and Nanded respectively. Furthermore, 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 connection. These forms of questionnaire can be seen in Appendix.

f) Try out of the Questionnaire

In this regards, the researcher carried out 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 step makes the researcher able to interview the respondents and identifying the difficulties faced 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.

g) Internal Consistency of the Questionnaire

The present tool aims 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:

TABLE II: INTERNAL CONSISTENCY OF THE QUESTIONNAIRE

| Particulars | | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
|----------------|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Spearman's rho | Total | .901** | .950** | .915** | .935** | .935** | .933** | .948** | .966** |
| | Correlation Coefficient | .901** | .950** | .915** | .935** | .935** | .933** | .948** | .966** |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| | N | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 |

Source: SPSS version 21

The above Table II explains the internal consistency of questionnaire through identifying the Spearman's correlations coefficients between service quality and its items. It is clear that Spearman's correlations coefficients range between (.966, 901). This spells out that there is strong correlation between service quality and its components which means that internal consistency of this questionnaire is highly satisfied.

h) Validity and Reliability

Before to administration of the final form of the questionnaire, the researcher had administered the question to a sample of 30 accountants, who are not chosen in the sample study. Then, the researcher counted on Cronbach's Alpha as statistical tool to test validity and reliability. The following Table III explains validity and reliability in a patent manner as under.

TABLE III: COEFFICIENT OF CRONBACH'S ALPHA OF TESTING VALIDITY AND RELIABILITY

| No. | Name of Axis | Cronbach's Alpha | Validity | No. of Items |
|-----|-----------------|------------------|----------|--------------|
| 1 | Service Quality | .986 | .99 | 8 |

Source: SPSS Version 21

The above Table III shows that Cronbach's Alpha of all items reached to .986 and validity reached to .99 this refers to that the reliability and validity of questionnaire are highly satisfied.

i) 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.

j) Measurement Scales

Scales of measurement can be classified into the following scales: Nominal Scale & Ordinal Scale, Interval Scale and Ratio Scale [11]. The most suitable scales to the preset study are nominal scale, for measuring demographic data, and ordinal scale to measure questionnaire of the present study, it being relied on five likert scale.

k) Statistical Tools Used in Analysis Process

In general, two major kinds of statistics are there. The first type is descriptive statistics and the second one is inferential statistics. The present 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.

l) Limitations of the Study

- The researcher has limited the scope of his study through studying service quality of AIS being applied in both countries Yemen and India.
- 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.
- The targeted sample has been aimed managers, accountants and IT technicians whose jobs are so closed with the AIS.
- Turnaround time to achieve the present study should be considered.

II. REVIEW OF LITERATURE

A. Study (El-Dalabeeh, A., & Al-Shbiel, S. O., 2012). *The Role of Computerized Accounting Information Systems in Reducing the Costs of Medical Services at King Abdullah University Hospital [10]*

This study aimed to discover the role of computerized accounting information systems in reducing the costs of medical services provided at King Abdullah University Hospital. Therefore, the sample of the study consisted of 36 employees includes four groups as under the administrative & financial director, the head of the accounting department, information systems personnel, and accountants. In the other words, the previous groups represent the population and sample of the current study. So, the questionnaire technique was used to collect the primary data of the study's sample, also this instrument was designed well for this purpose. As for analytical aspect to process data has been collected by questionnaire method, the appropriate Statistical Treatment was done through the following statistical methods:-

- Percentages for describing the properties of the study samples.
- Averages and standard deviations to identify the respondents' responses on items and to test the study hypotheses.

Eventually, the findings of the current study manifested that:

- The study's findings showed that there is a significant role for computerized accounting information systems in the reduction medical services costs at the hospital.
- It illustrated a positive correlation between each component of accounting information systems (human resources, hardware and equipment, software, databases, and procedures) and the reduction of medical services costs at the hospital.

B. Study (Emeka-Nwokeji, N. A., 2012). *Repositioning Accounting Information System through Effective Data Quality Management: A Framework for Reducing Costs and Improving Performance [11]*

This study has been aimed to focus on repositioning information system by effective data quality management: a framework for reducing costs and improving performance. So the proper techniques used for collecting data related to the current study from respondents were questionnaire and interview techniques. In addition to use specific descriptive statistics like mean and standard deviation to analyze gathered data, and using t-test

method to test hypothesizes of the current study. Eventually findings of this study as the following:

- The study discovered that the quality of data in the Accounting Information System of the chosen companies match to data quality dimensions.
- The result also pointed that implementation of data quality management lead to cost decrease.
- Adoption of data quality management means ameliorates organizational performance.

Thus, the present study recommended that all the Accounting Information System stakeholders should be subjected to training so as to be knowledgeable about current tools and strategies that can help prevent consequences of poor data quality.

C. Study (KALU, U. C., & CAMPUS, E., 2011). Critical Success Factors for Accounting Information Systems Data Quality [12]

This aimed to know the critical factors that are important in ensuring data quality in accounting information systems to be desirable. Whereas a literature review related to this study reveals that there is a gap in the literature about critical success factors for data quality in accounting information systems. On this basis, this gap should be solved in addition to a framework for understanding relationships between stakeholder groups and data quality in accounting information systems should be

developed, too. So, for this purpose Case study and survey methodology were adopted for this research. Case studies in seven Australian organizations were implemented, whereas four of them were large organizations and the other three are Small to Medium Organizations (SMEs). And each case was examined as a whole to obtain an understanding of the opinions and perspectives of the respondents from each individual organization as to what are considered to be the important factors in the case. In analytical aspect cross-case analysis was used to analyze the similarities and differences of the seven cases, which also include the variations between large organizations and Small to Medium Organizations (SMEs). The findings of the study showed that the seven main case studies suggested 26 factors that may have impact on data quality in AIS.

III. ANALYSIS AND INTERPRETATION OF THE DATA

As stated earlier, the present study relied on descriptive statistics and inferential statistics in analysis process. So, this point can be elaborated in the following points:

A. 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 IV: MEAN, STD. DEVIATION, VARIANCE, RANGE, AND RANK OF ALL ITEMS OF SERVICE QUALITY

| Q | Mean | | Std. Deviation | | Variance | | Range | | Rank | |
|-------|-------|-------|----------------|-------|----------|-------|-------|-------|-------|-------|
| | YEMEN | INDIA | YEMEN | INDIA | YEMEN | INDIA | YEMEN | INDIA | YEMEN | INDIA |
| Q1 | 3.96 | 4.23 | .799 | .520 | .638 | .270 | 3 | 2 | 8 | 5 |
| Q2 | 4.15 | 4.25 | .738 | .511 | .544 | .261 | 3 | 2 | 2 | 2 |
| Q3 | 4.01 | 4.21 | .717 | .522 | .513 | .273 | 3 | 3 | 6 | 8 |
| Q4 | 4.13 | 4.22 | .678 | .497 | .459 | .247 | 3 | 2 | 3 | 6 |
| Q5 | 4.01 | 4.29 | .833 | .492 | .694 | .242 | 4 | 2 | 7 | 1 |
| Q6 | 4.08 | 4.24 | .840 | .507 | .705 | .257 | 4 | 2 | 4 | 3 |
| Q7 | 4.20 | 4.24 | .769 | .489 | .592 | .239 | 3 | 2 | 1 | 4 |
| Q8 | 4.07 | 4.21 | .756 | .510 | .571 | .260 | 3 | 2 | 5 | 7 |
| Total | 4.08 | 4.24 | | | | | | | | |

Prepared by Researcher

- In Respect of Yemen:
In the light of the above Table IV it can be seen that the mean value of all items (Q1, Q2, Q3, Q4, Q5, Q6, Q7 and Q8) in the current axis as following: (3.96, 4.15, 4.01, 4.13, 4.01, 4.08, 4.20 and 4.07), respectively. So it is clear that, the general average of the current axis is 4.08 which lies in the interval (4.2-3.4). This result does not support partially the null hypothesis

No (3-A) which reports that AIS applied in banking sector in Sana'a city, Yemen does not characterize high level of service quality.

- In Respect of Indian:
In the light of the above Table IV it can be seen that the mean value of all items (Q1, Q2, Q3, Q4, Q5, Q6, Q7 and Q8) in the current axis as following:

(4.23, 4.25, 4.21, 4.22, 4.29, 4.24, 4.24 and 4.21) respectively. So it is clear that, the general average of the current axis is 4.24 which lies in the interval (4.4.2) this result does not support partially *the null hypothesis No(3-B) which reports that AIS applied in banking sector in Nanded city, India does not characterize high level of service quality.*

B. Testing of Hypotheses

In this part, the current study applied non parametric tests for testing of hypotheses, it being depended on ordinal scale to collect primary data from the sample has been chosen. 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.

i. Testing of Hypotheses in Relation to Yemen

The null hypothesis in this regarding reports that: AIS being applied in banking sector in San'a city in Yemen does not characterize high level of Service Quality.

TABLE V: HYPOTHESIS TEST SUMMARY

| Test | Sig | Decision |
|---------------------------------------|------|-----------------------------|
| One- Sample Wilcoxon Signed Rank test | .000 | Reject the null hypothesis. |
| Level of Significance at .05 | | |
| Source: SPSS version 21 | | |

According to One- Sample Wilcoxon Signed Rank test, the general rule to accept null hypothesis as following:

- If value of One- Sample Wilcoxon Signed Rank test > than .05. The decision is accepting H0 against rejecting H1.
- If value of One- Sample Wilcoxon Signed Rank test < than .05. The decision is rejecting H0 against accepting H1.

By following up the above Table V, it can be revealed that significance value less than .05. Thus, the decision is rejecting the null hypothesis which reports that AIS being applied in banking sector in Sana'a city in Yemen does not characterize high level of Service quality against accepting alternative hypothesis which refers to that AIS being applied in banking sector in Sana'a city in Yemen characterizes high level of Service quality.

ii. Testing of Hypotheses in Relation to India

The null hypothesis in this connection reports that: Service Quality of the AIS applied in banking sector in Nanded city in India does not characterize high level of quality.

TABLE VI: 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 | | |

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

C. Testing Differences Between Samples

As a matter of fact, this part aims to offer insight regarding samples is used in the current study. Therefore, as mentioned 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. Furthermore, the proper nonparametric test of the present study is Mann Whiteny Test. The following Tables VII & VIII elaborate results of Mann Whiteny by using SPSS version 21.

TABLE VII: 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 VIII: 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 | | |

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 $M1\neq M2$.

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

IV. CONCLUSION

Actually, the current section is considered the culmination of the previous steps. So, after analyzing and interpreting the data of the current study, this part represents the conclusion in form of important findings and recommendations which can be ordered and reported as under:

A. Findings of the Study

i. Finding in Respect of Yemen

a) Demographic Data

- 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.
- The results of the field survey have revealed that the majority of sample's individuals are managers who reached to 42%.
- 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.
- 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.

b) Analysis of Questionnaire

- Results of frequencies of this study proved that AIS being applied in banking sector in Sana'a city, Yemen, characterizes high level of service quality.
- 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 service quality, through total value of means which reached upto 4.08.

ii. Finding in Respect of India

a) Demographic Data

- 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.

- The results of the field survey revealed that majority of sample's individuals are Accountants, which reached to 69%.
- 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.
- The result proved that the most of sample's individuals have years of experience in banking sector range above 10 years, reached to 66%.

b) Analysis of Questionnaire

- Results of frequencies of the current dimension have proved that AIS being applied in banking sector in Nanded city, India characterizes high level of service quality.
- 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 service quality.

B. Recommendations of the Study

In point of fact, findings of the current study have revealed that its results were completely positive. So this part seeks to fortify and enhance the positive aspects of the current study to both countries.

- Implementation of backup policy for maintaining AIS's performance in event of systems failure, or in the event of accidental deletion of data.
- 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.
- Improvement of bandwidth to increase the size and speed of data or information transformed among branches, which in turn enhances service quality of AIS.
- Selectivity in recruitment process. As staff is a key constituent of AIS, so a proper selection of qualified staff increases system quality. Thus, qualified users possess ability to adapt with environmental changes, especially in advanced technology and they have more ability to understand such changes. It is necessary to look for staff of professional competence and practical experience.

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