
ACCOUNTING INFORMATION SYSTEMS AND THEIR QUALITY: A REVIEW ARTICLE

Kifah Sami Hussein

National Center for Hematology Research and

Treatment: Al-Mustansiriya University

kifah@uomustansiriyah.edu.iq

Abstract

occurs related to the accounting information system and its quality. In general, it also aims to reach basically the importance of the accounting information system in the organization that they need for work tasks and work performance that directly or indirectly provides a product or service to the customer and the leaders of the organization.

Keywords: Accounting information systems, Review article concept and historical development.

Introduction

Information, as a funder and generator of decision-making, is an important element of power and has a significant impact on the development of interconnected relationships. Information is a vital and indispensable element. The ability of organizations to develop their mission and find new paths to innovation in an increasingly competitive market depends primarily on data. As a result of this fact, organizations are becoming more and more aware that the higher the quality of data, the greater the returns they can obtain. They understand very well ,the fact that providing sufficient information resources to support rational decision-making so the quality of information must be invested to meet the intended and future uses of .information

The society's orientation towards information has become through the change that occurred in societies represented by the information revolution, and this has led to a change in the social structure in society and the emergence of a new social structure based on investing information in all fields. The most prominent stages of the development of administrative information systems can be identified as follows (Hafez and Abbas, 2014: 21-2 2)

Data exchange stage (1950-1960) : This stage included the electronic operation of -1- data.The applications that appeared were the automation of accounting task programs such .as calculating salaries, keeping records, and calculating accounts receivable and payable

Data management stage (1960-1970): This is the stage in which the management -2- information system appeared, which provides reports of a limited nature in advance to support decision-making and prepare accounts in the organization as a research and .development tool

Decision support stage (1970-1980): The stage in which decision support systems -3- .appeared that provide specific-purpose support to serve decision-making processes

The stage of strategic support systems and end-user systems (1980-1990): The stage -4 in which the end-user appeared, who provides direct support to the end-user's work and is characterized by the user's reliance on himself in providing his information needs, providing important information to senior management and providing expert advice to the end-user .and supporting the provision of goods and services to achieve a competitive advantage

The electronic management stage (1990 - until now) : The stage characterized by the -5 electronic business system, the emergence of digital systems with integrated electronic applications, and the emergence of electronic commerce, based on the Internet and other .networks

Qualities of Good Accounting Information

There are several characteristics of good accounting information, which are: (Rufai & Dandago,2014:661)

Effectiveness

Efficiency

Confidentiality

Integrity

Availability

Compliance

Accounting information system components

The accounting information system consists of six elements that interact with each other in ,order to achieve the system objectives for which they were formed, which are: (Al-Nasan) ,(27 :2018Romney & Stenibart, 2018: 11 (

.Human resources: They use the system and perform various functions on it - 1

Manual and automated instructions, procedures and rules used to collect, process and - 2 .store information about activities

.Data on the economic unit and its work - 3

.Automated programs used in data processing within the organization - 4

.Information technology, which includes computers - 5

Data confidentiality and security in the accounting information system, which includes - 6 internal auditing

Characteristics of accounting information system

The characteristics of the accounting system can be generally defined as a set of the :following characteristics

(Al-Taie, 2002: 8)

Accounting procedures and operations are consistent with generally accepted accounting -1 .principles

,The sequence of accounting procedures that begin with recording various activities - 2 ,carrying out the processing, summarizing all the operations that were proven in the records .and submitting reports and statements to senior management and relevant parties

Simplicity and clarity in accounting treatments and their reliance on events that actually -3 .occurred and are not expected, which constitute inputs for this system

The interconnection of the system's parts to reflect its purpose, which begins with the -4 accounting entry and ends with the financial reports on which the investment and financing .decisions of the various parties are based

The legality and reliability of the accounting information that forms the basis of the system -5 .and its use as evidence before the courts

) Accounting Information SystemsAIS is a tool that is integrated into the field of () information systems and technologyIT designed to help manage and monitor issues (related to the economic and financial field of an economic unit. However, the amazing progress in technology has opened the way to the possibility of generating and using accounting information. From a strategic point of view, it is systems used to record the financial transactions of an economic unit. This system combines controls and accounting methods with information technology to track transactions and provide internal reporting .data, external reporting data and data Finance (Soudani, 2012:136)

Qualitative characteristics of accounting information

The availability of these characteristics helps the parties responsible for setting accounting standards, and also helps those responsible for preparing financial reports in evaluating the .accounting information that results from the application of alternative accounting methods

First: Basic qualitative characteristics within the framework ofIFRS17

1- Relevance

Information is relevant when its omission or distortion affects the economic decisions of users(Cosmen, 2015: 169) .

,In order for the information to be relevant, three sub-characteristics must also be present :which represent the components of the relevance characteristic, as follows

أ- Predictive Value

ب- Conformance Value

It is worth noting that there are some events that are important regardless of their size and :amount, the most important of which are the following (Al-Mahamid, 2015: 71-72)

.First: **Unusual events are classified under unusual items**

Second: Vocabulary with a relatively important meaning

Especially in the estimated aspects of information, especially those whose data are insufficient, and in this case the judgment is up to the actuary as to whether this) information is of relative importance or notActuaries Institute, 2018:178 .(

2 -Faithful Representation

Completeness

Neutrality

This characteristic means that there is no bias in selecting or presenting financial information that is tainted by manipulation, or that it is confirmed or unconfirmed. There are three main types of accounting measurement bias in preparing statements that negatively affect the quality of accounting information, which can be highlighted as follows (Saadawi and Al-:(Saidi, 2020: 41

- **Objectivity bias**
- **Suitability bias**
- **Common bias in accounting measurement**

Second: Secondary qualitative characteristics

-1Comparability

-2Verifiability

-3Timeliness

Understandability -4

The concept of information quality

Quality in general is "the sum of the characteristics of a product that affect its ability to meet specified or implied needs", as there is a narrow belief that describes the quality of information from the point of view of accuracy only, and this is a one-sided concept, but the quality of information includes other dimensions in addition to accuracy, which are completeness, consistency and value, and these dimensions are necessary in order to fully describe the quality of information. (Batini & Scannapieco, 2018: 5)

(Susanto,2015:4002 Thinkers differed in determining the standards for the quality of .(accounting information, where according to(Mclead & Schell,2007:43) the information must be accurate, timely, appropriate, and complete. As for(Gelinas & Dull,2012:19-22) , the quality of accounting information must be appropriate, accurate, and complete. As for (Porter & Norton,2012:27) ,the quality of accounting information must be appropriate , .timely, and faithful representation

knew it.Matching Product conformance to established specifications, or the degree to which ,the characteristics of a product conform to requirements It achieves its credibility through its endurance. The American Society for Quality Control defined quality as“ the set of . features necessary in the product or service provided to achieve a specific need” .Information quality is defined as a set of characteristics and qualities The information that is distinguished and leads to meeting the needs of managers at all levels ,Administrative whether in terms of its classification, organization and analysis in order to reach the satisfaction of needs Managers need information to reach an effective decision. (Hani The quality of accounting information depends on .(Darkal, 2014: 202

information quality

There is nothing that does not involve the use of information. A simple transaction over the .hard drive, or using a credit card file includes a lot of information Internet, purchasing a There are large financial organizations that deal entirely with the management of information. This information is vital to the existence of the company. Such companies value information and its quality because of its role in investments and maintaining the integrity of data and the quality of information. Weak and incorrect data increases operating costs and ,2006:3) can lead to losing customersParker . (

The importance of information quality can be viewed through the elements that must be :available in its definition, which are as follows (Al-Balla and Khamis, 2018: 252-253)

1. .It increases the recipient's knowledge of the future

2. .Reduces uncertainty about a particular event or situation
3. .Change the probabilities of the expected outcomes of a decision
4. .The quality of information varies depending on the decision
5. .It is an important resource of the organization that increases its value by using it

Information quality objective

)Eppler & Wittig, 2000: 85 believes that the information quality framework must achieve (: which are ,four goals

First, a regular and concise set of criteria should be provided against which the quality of .information can be assessed

.Second: It should provide a plan for analyzing and solving information quality problems

Third: It must provide the basis for measuring the quality of information and proactive .management

Fourth, it should provide the research community with a conceptual map that can be used to .build a variety of methods, theories, and phenomena related to information quality

Characteristics of quality information

Information quality has a set of characteristics in order to be consistent with quality which are as ,(specifications. Al-Mamary and others mention a set of these characteristics followsAl-Mamary et al, 2014: 9 :(

1- Accuracy 2. Relevance 3. Completeness 4. Timeliness 5. Scalability 6. Reliability 7. Understandability 8. Accessibility 9. Appropriate Amount of Information

Elements of quality information

The sources that talked about the elements of administrative information quality varied(Al-Badrani, 2017: 117) Most writers and researchers agreed that the elements of information . :system quality are based on the following

- 1- Inputs
- 2- Treatment
- 3- Outputs
- 4- Feedback

Information quality problems and constraints

Problems with information quality result in estimated costs of between ten and twenty percent of total revenues for organizations that use information to make operational and strategic decisions. These costs include decreased productivity due to the time taken to recover from data errors, decreased customer satisfaction and loyalty resulting in reduced future job opportunities, decreased employee morale, and decreased ability to change work :rules and policies (5Embury et al, 2009 .(

The quality of information systems : The compatibility of accounting Therefore, the appropriate matching between the designed accounting information systems and both internal and external factors will be the main component that leads to the successful

,implementation of the systems. As for the factors affecting accounting information systems) they are 2018: 196-199) (Raksong et al, :

1- Information Management Leadership Information Management Leadership

Information) Management Leadership IML refers to the managerial competence in (.updating and using information to improve the quality of information

2- Senior Management Support

Top Management Support is defined as managers stimulating employee engagement and .providing essential resources to facilitate business operations

3- IT Resources Information Technology Resource

Technology Resource refers to the IT infrastructure, IT investment, IT budgeting of an economic unit in the area of support and training of employees and investment in .information systems

4- Modern accounting knowledge Modern Accounting Knowledge

Accounting) Knowledge MAK refers to the focus on new knowledge of software, new (versions of relevant accounting standards, new accounting processes or modern accounting .techniques

5- Technology growth expansion Technology Munificence Growth

TMG) refers to the future advancement and change of technology that together lead to .superior outcomes

Factors affecting accounting information systems

Due to the continuous development and improvement in economic systems, this has led to the emergence of problems in the duties of the accountant, and as a result, it has become :necessary to be familiar with other areas of knowledge, which are :Suleiman et al., 2021) :(11-10

1. Behavioral Analysis

The accountant should take into account the behavioral factors that people face when performing their jobs, as the purpose is to prepare sound systems and the extent to which these people accept these systems through preparing budgets, as these budgets should not .be below the required level

2. Quantitative Methods

The accountant should use various statistical and analytical methods and means that help increase the efficiency of the information provided to management, such as statistical .analysis and linear programming

3. Computers

The use of electronic data processing systems has led to changes in accounting work such as reducing the time and daily work of manual recording operations. Accordingly, the use of computers helps in completing work and saving time in order to analyze information and .make correct administrative decisions

Types of Accounting System

There are different types of accounting information systems that determine the size of the economic unit, the nature of the work, the extent of computing, and the management style :of choosing the system. They are (JN,2016:6) .

- 1. Manual system Manual System**
- 2. old system Legacy System :**
- 3. Computerized System**

Factors affecting the quality of accounting information

These factors are as follows:)Ali, 2011: 104-106)

- :The applied accounting system -1
- :The accounting measurement used - 2
- :External Auditor's Report - 3
- :Corporate Governance - 4
- :Information Technology - 5

Conclusion

The research concluded that the importance of the accounting information system for managers in the organization is of fundamental importance that they need for work tasks and performance of work that directly or indirectly provides a product or service to the customer and leaders of the organization . The research concluded that based on the fact that the quality of information is an important aspect of work in organizations, the quality of information as is known from the models of success of information systems should be divided into two dimensions: the representative quality of information and the contextual quality of information, i.e. the alignment of information with training as well as the quality of information is important in determining the satisfaction of the end user

References

1. MONICA, SCANNAPIECO. (2018). "DATA AND INFORMATION QUALITY: Dimensions, Principles and Techniques". SPRINGER.
2. Al-Bala, Abdullah Hashim Hamoudi, and Khamis, Abdullah Abdul Haq, (2018), Reflections of Information Quality in Crisis Management, Tikrit Journal of Administrative and Economic Sciences / Volume (2) Issue (42) Part 1
3. Ali, Hamdi (2011) "The Impact of the Quality of Accounting Information on Decision-Making in Algerian Economic Institutions" A thesis submitted for a Master's degree in Accounting, Faculty of Economics, Commerce and Management Sciences / University of Mohamed Kheider Biskra.
4. Al-Jazrawi, Ibrahim, Al-Janabi, Amer, (2009) "Basics of Accounting Information Systems", Amman, Dar Al-Yazouri for Publishing and Distribution.
5. Al-Mahmoud, Dima Rizk, "The impact of market variables on the density and quality of disclosure in published financial reports to meet the requirements of financial market efficiency", Damascus University, Faculty of Economics, 2015.

6. Al-Mamary, Y. H., Shamsuddin, A., & Abdul Hamid, N. A. (2014). The relationship between system quality, information quality, and organizational performance. *International Journal of Knowledge and Research in Management & E-Commerce*, 4(3).
7. Al-Nasan, Hanadi Osama (2018) "The Effectiveness of Accounting Information Systems in Commercial Banks Operating in the Gaza Strip from the Management's Point of View", A thesis submitted for a Master's degree in Accounting and Finance Program, Faculty of Commerce / Islamic University in Gaza.
8. Al-Taie, Intisar Abdul-Ridha (2002) "Designing an Accounting System for Drug and Medical Supplies Trading Units in Nineveh Governorate", a thesis submitted to the Council of the College of Administration and Economics / University of Mosul, as part of the requirements for obtaining a Master of Science in Accounting.
9. Al-Yousfi, Ahmed, "Measuring the qualitative characteristics of accounting information in financial reports, an applied study on the Damascus Stock Exchange" WWW.researchgate.net, 2019.
10. Al-Zubaidi, Yasser Saheb Malik, "The Impact of Adopting IFRS 17 on the Quality of Accounting Information for Iraqi Business Units - A Proposed Model", PhD Thesis, University of Baghdad, College of Administration and Economics, 2020.
11. Castillo, Ricardo Perez & A & I & M & M & S & D (2018) " DAQUA-MASS: An ISO 8000-61 Based Data Quality Management Methodology for Sensor Data "Received: 1 August 2018; Accepted: 12 September 2018; Published: 14 September 2018.
12. Embury, S. M., Missier, P., Sampaio, S., Greenwood, R. M., & Preece, A. D. (2009). Incorporating domain-specific information quality constraints into database queries. *Journal of Data and Information Quality (JDIQ)*, 1(2), 1-31.
13. Eppler, M. J., & Wittig, D. (2000). Conceptualizing Information Quality: A Review of Information Quality Frameworks from the Last Ten Years. *IQ*, 20(0), 0.
14. Gelinas, Ulrich & Dull, B. Richard. (2012). " Accounting Information Systems " . 9th Edition. USA: South Western Cengage Learning .
15. Hafez, Abdul Nasser Alak, and Abbas, Hussein Walid Hussein, (2014), *Management Information Systems with a focus on the functions of the organization*, Dar Ghaida for Publishing and Distribution, first edition.
16. Hall, J. A. (2006). " Accounting Information Systems " , 6e .,USA, Cengage Learning .
17. Hall, J. A. (2011). " Accounting Information Systems " , 7e .,USA, Cengage Learning .
18. Prabakaran, N., Patrick, H. A., & Jawad, A. B. (2024). Global Regionalization of Consumer Neuroscience Behavioral Qualities on Insights From Google Trends. In *Explainable AI Applications for Human Behavior Analysis* (pp. 258-274). IGI Global.
19. Hani, Jihad Sayyah, and Darkal, Nadine Muhammad, (2015), "The Role of Information Quality in the Effectiveness of the Decision-Making Process, a Field Study on Jordanian Telecommunications Companies", *Journal of Administration and Economics*, University of Basra, Volume (7), Issue (14).
20. IAA, "International Actuarial Note on Application of IFRS 17 Insurance contracts".www.actuaries.org , 2018.

21. Iman Abdul Muhammad Ahmed Al-Badrani. (2017). Reflection of the characteristics of information technology on the quality of strategic information, an analytical study on a sample of employees in the Central Bank of Iraq - Mosul Branch. Technical Journal, 30(4), A112-A137.
22. Issa, Sirwan Karim, Musa, Ahmed Burhan, "The impact of changing the principle of accounting measurement within the conceptual framework on the quality of financial reports, a study of the opinions of a sample of certified accountants and auditors", Cihan University-Erbil Scientific Journal, 2018.
23. J.N,Thomas .(2016)." Accounting information systems classifications" The Business and Management Review, Volume 10 Number 2.
24. Laumer ,S., Maier, CH,& Weitzel(2017) Information quality, user satisfaction,and the manifestation of workarounds:a qualitative and quantitative studyof enterprise content management systemusers. European Journal of Information Systems.
25. Nikolai , Loren A . , Bazley , John D . , Jones , Jefferson P . , (2007) " Intermediate Accounting " , 10 e , USA , Thomson South-Western .
26. Parker, M. B., Moleshe, V., De la Harpe, R., & Wills, G. B. (2006). An evaluation of Information quality frameworks for the World Wide Web.
27. Porter, Gary A and Norton, Curtis L. (2012). " Using Financial Accounting Information: The Alternative to Debtor and Creditor " . South Western 5191 Natorp Boulevard, Mason, OH 45040. USA .
28. Raksong, Saranya., Phornlaphatrachakorn, Kornchai.& Lohapan, Nutchajarin.(2018)." factors affecting accounting information system quality: an empirical evidence from auto parts smes in thailand" Panyapiwat Journal Vol.10 No.3.
29. Romney,Marshall,B.Steinbart,Paul John.(2018). " Accounting information systems" ,14e.,New York , Pearson Education, Inc .
30. Rufai, Abdullahi Sani.& Dandago, Kabiru I.(2014)." information technology and accounting information system in the nigerian banking industry" Asian Economic and Financial Review, 2014, 4(5):655-670.
31. Saadawi, Murad Masoud, Al-Saeedi, Ahmed Youssef, "Accounting bias and its impact on the quality of financial information (a field study)", Journal of Economic Issue Studies, Volume 11, 2020.
32. Saleh, Reda Ibrahim, "The impact of accounting standards' orientation towards fair value on the qualitative characteristics of accounting information in light of the global financial crisis", Journal of the Faculty of Commerce for Scientific Research, 2009.
33. Simkin , Mark G . , Rose , Jacob M . , & Norman , Carolyn Strand . (2012) " Accounting Information Systems " , 12 e . , USA , John Wiley & Sons, Inc .
34. Soudani, Siamak Nejadhosseini. (2012)." The Usefulness of an Accounting Information System for Effective Organizational Performance".International Journal of Economics and Finance Vol. 4, No. 5.
35. Suleiman, Ashraf Saleh. Jawdat, Maha Ali. And Ibrahim, Hesham Saeed, (2021), "Accounting Information Systems", Faculty of Commerce, Ain Shams University, Cairo.
36. Susanto, A. (2015). " What factors influence the quality of accounting information. International Journal of Applied Business and Economic " Research, 13(6), 3995-4014 .
37. Weetman, Pauline," Financial and Management Accounting An introduction", Eighth Edition, 2019.