

PalArch's Journal of Archaeology of Egypt / Egyptology

THE ROLE OF KNOWLEDGE MACHINERY IN SUPPORTING FINANCIAL AND ACCOUNTING TRANSPARENCY IN THE ECONOMIC UNIT

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Atared Saad Jebur AL-Mashhadi, Muiead A. K. Al-Fadhel. The Role Of Knowledge Machinery In Supporting Financial And Accounting Transparency In The Economic Unit-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(8), 931-956. ISSN 1567-214x

ABSTRACT

The economic units carry out their activities in the market and achieve various results from returns, profits, losses and other financial matters. Therefore, it is necessary to pay attention to transparency in reporting these results to the supervisory authorities in accordance with agreed accounting standards and rules. What is new of the means that enhance the transparency of reporting for all external or internal parties in relation to the economic unit, and here is intended to use knowledge automation in support of financial and accounting reporting standards, in particular the use of barcode technology, as this technology has a wide base and wide links with knowledge information systems that are usually enhanced By means of automated storage and summoning that would provide information and accounting data to stakeholders and control authorities (external or internal) in line with global developments in various financial and accounting indicators, in order to reach transparency and optimality in financial and economic performance that would raise and enhance the position of the economic unit in The market thus enhances the value of stocks and assets, as well as the products provided by them Why is it that one of the most important forms and forms of automation that is studied in our research is for it here is the barcode technology, with the normal and fast quality, as it plays an important role in accomplishing many works and tasks in scientific life. These ideas will be addressed with regard to the economic units operating in the ethnic stock market in light of the external and internal environment indicators from 2003 to 2019. The two researchers have produced results in the form of important conclusions, namely:

1. The necessity of moving towards cognitive automation because of its important role in information support and the transparency of financial reporting.
2. The adoption of barcodes of all kinds enhances the transparency of financial and accounting reporting.

At the end of the study came a package of research and scientific references that were approved.

INTRODUCTION

It is no secret to anyone the importance of financial and accounting reporting in economic units, as these units are active in the market and achieve different results of returns, profits, losses and other financial matters, so it is necessary to pay attention to transparency in reporting these results to the regulators according to agreed accounting standards and rules, hence some of those interested in accounting thought go to introduce all new means that enhance the transparency of reporting to all external or internal parties for the economic unit, knowledge automation is intended to support financial and accounting reporting standards, particularly the use of barcode technology, as this technology has a broad base and links with knowledge information systems, which are usually enhanced by automated preservation and recall methods that will provide accounting information and data to stakeholders and regulators (external or internal) in accordance with global developments in various financial and accounting indicators, in order to enhance the financial and economic performance of the economic unit that will enhance the position of economic unity in the market. Thus enhances the value of shares and assets as well as the products provided by it, one of the most important forms and forms of automation that is studied in our research this is it's here is barcode technology of the usual quality and quick response code he has become an important player in accomplishing a lot of work and tasks in scientific life. These ideas will be addressed for the economic units operating in the ethnic stock market under external and internal environmental indicators from 2003 to 2019. Four chapters have been devoted to this problem as the first chapter includes scientific methodology and previous studies. The second chapter deals with the intellectual framework of the study the practical or practical aspect of the study, which was addressed in the third chapter. The fourth chapter contained the conclusions and recommendations reached. At the end of the study came a package of scientific research and references that were adopted.

SCIENTIFIC METHODOLOGY OF THE STUDY AND PREVIOUS STUDIES

Scientific methodology of the study

Study Problem

The problem of our study can be identified by asking the following questions:
First: Does the technology of information and accounting information systems and certainly here the use of barcode technology of various kinds a role in the marketing of goods and goods contribute to the provision of data standards of financial reporting in the economic unit.

Secondly, is financial reporting incomplete or incomplete when the economic unit does not have a knowledge system and does not have a clear design according to barcode technology that expresses the identity of the economic unit?

Third: Does financial reporting transparency need support from available knowledge, such as:

- a. The United Nations has been able to provide .B and support the United Nations.
- b. Computers and information laboratories.
- c. Social media and the Internet.

Fourth: Should the economic unit maintain an accounting database on all activities in order to strengthen the economic unit's position towards control over the application of accounting reporting standards?

Study hypotheses

Our current study is based on the following hypotheses:

1. We assume that the information technology and accounting information systems represented by Barcode are the basis for providing financial reporting data in the economic unit in a transparent manner.
2. We assume that one of the most important requirements of the computer department in the economic unit is to build an accounting database for the sake of control and application of accounting standards.
3. We assume that there is a statistically significant relationship between financial reporting standards and the support available from the knowledge machine such as:
 - a. Ready-made software (**QUK BOUK, MRP, Q.S.B, SPSS**).
 - b. Computers and informatics laboratories.
 - c. Social media and the Internet.
 - d. Performance, organization and preparation of future plans.
 - e. Build scenarios according to streamlined charts.
4. We assume that the integration of all financial reporting requirements in accordance with international standards is available in the presence of a system of knowledge in the economic unit.

Study Objectives

Our current study aims to achieve the following objectives:

First: To indicate how to employ the methods of cognitive mechanism, especially barcode technology in its various forms, relying on the following methods:

1. Ready-made software (**QUK BOUK, MRP, Q.S.B, SPSS**).
2. Computers and informatics laboratories
3. Social media and the Internet

In support of financial and accounting reporting standards in the economic unit.

Second: Harnessing all the advantages and benefits of information technology and accounting information systems

1. Management, organization and preparation of future plans
2. Build scenarios (streamlined charts)

In support of the financial and accounting reporting criteria stipulated by the accounting, local and international customs and laws.

Third: Pushing the economic unit towards restructuring the accounting and finance section of the economic unit, leading to the construction and design of the Accounting Data Base accounting database.

Fourth: Work to lay the foundations for the integration of all financial reporting requirements by employing knowledge-based methods such as:

1. Ready-made software.
2. Different communication devices.
3. Data preservation and decision support systems.

The importance of study

Our study derives its importance from:

1. An attempt to highlight a very important topic, namely the usual and fast barcode Q.R. Code and its entry into the world of finance and economics, and in particular to the world of accounting, assets and accounting customs.
2. Laying the foundations for the transition to electronic accounting and the globalization of assets and accounting norms and programming them.
3. Revealing the role that ready-made software, computers and laboratories can play in financial and accounting reporting.

A community and a study sample

The study community and sample adopted in our study are as follows:

1. The study community, all economic units subject to the Companies Law No. 21 of 1997 were adopted as the study community.
2. Sample study, selected companies operating within the Iraqi Stock Exchange.

Temporal and spatial boundaries of study

First: The temporal limits of our study extend from the year 2003, which is the beginning of economic and political change and for the time being, specifically 2020.

Second: spatial limits, where the reality of companies that are considered private and proceed according to the rules of economic package or the so-called (market economy) are all companies subject to the Law of Companies No. 21 of the year 1997 amended in the year 2004.

Study model

This study model is a complex information system characterized by technical foundations and dimensions where it is clear from Figure 1 of all the steps and trends related to the movement of information that uses financial reporting

standards. Whereas the beginning of (W) inputs that reach the manager and from the intervention by order of (Z) to the responsible for the preparation and design of accounting information systems in accordance with the framework of the mechanism, and then enter to compare with the requirements of the financial reporting standards within the track (a) and track (Z) and notes from the form that the reality reveals five methods and tools that express the elements of the mechanism that will support the standards of financial reporting within the direction (π) that branch to :

- π_5 (Software ready-made in Content S5).
- π_4 (S4 computers and information laboratories).
- π_3 (Social Media and Internet S3).
- π_2 (Management and Regulation S2).
- π_1 (Build Scenarios S1).

- Q_1 Building hooks (q1)
- Q_2 For management and organization in exchange with (q2)
- Q_3 For social media in exchange with (q3)
- Q_4 For computers and information laboratories in exchange with (q4)
- Q_5 For software that is in exchange for (q5).

These all flow in the five directions (Y1, Y2, Y3, Y4, Y5) as the main link in this system is barcode which contains all the details that all parties involved in production, stakeholders and others are looking for.

All of the above makes fun of the results of this system in the finance and accounting department of the economic unit.

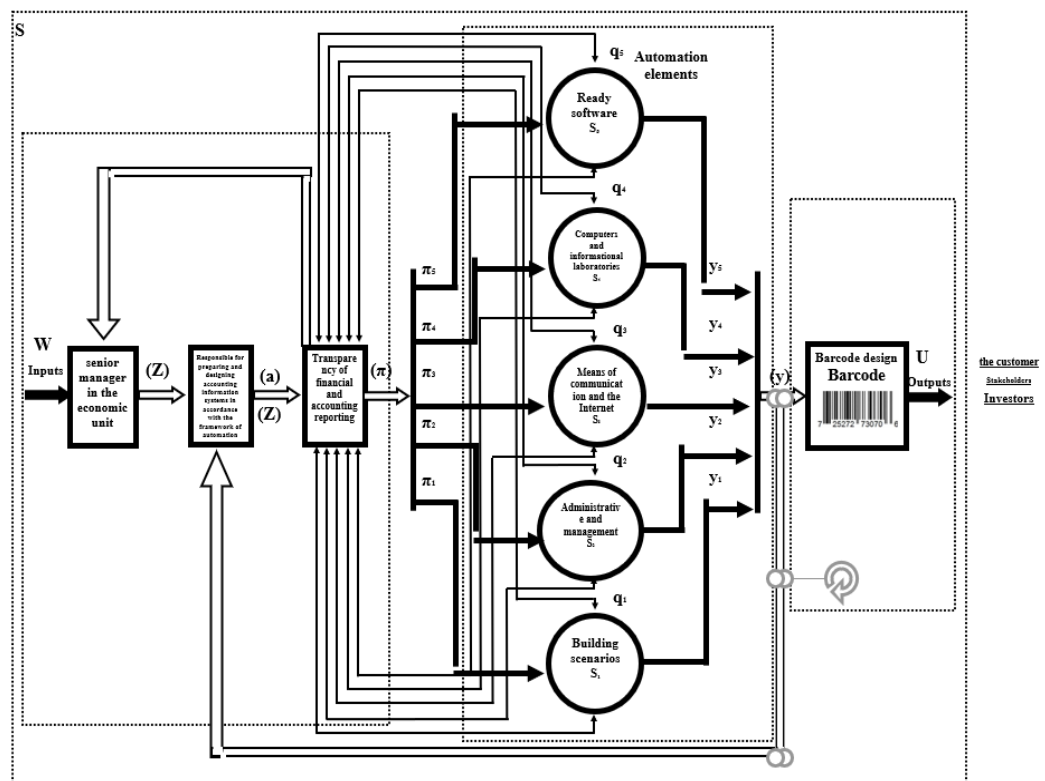


Figure 1, the study model that demonstrates the role of the machinery and its tools in supporting financial reporting transparency and its use to build barcode

Methods used in the study

The quantitative trend was used with descriptive trend and the methods each of them contain. In other countries, the problem in the study was addressed by two methods:

1. Quantitative methods, where quantitative models and modern mathematically based methods have been used to address the problem.
2. Descriptive (qualitative) methods, where the resolution was relied upon to address the dimensions of the problem under study, as is evident in the figure below:

Schooling disabilities

The researchers faced a range of obstacles in the preparation process for this research, the

Most important of which are:

1. Difficulty getting data.
2. The difficulty of navigating between the sites of the study due to the spread of covid-19.
3. The subject is sensitive and some are therefore afraid to submit statements.

LITERATURE REVIEW

Arabic literature review

A master's study of the electronic accounting information system and a course in enhancing the security of financial information. Al-Qadisiyah University, The study assessed the effectiveness of the electronic accounting information system in enhancing the security and control of information for spectrum financial transfer company and its ability to enhance reliability and meet operational requirements and effectively report them to all users in a timely manner while maintaining the confidentiality of inputs and outputs and taking into account the level of risk. Assuming the system is ready, necessary measures are available to enhance security and oversight efficiently.

Study of how to turn the machinery and technology into the accounting profession arab accountants network on April 14, 2020

The study showed the work of emerging technologies such as Artificial Intelligence (AI) and automated processes (RPA) to change the way in which every accounting and finance industry works, companies benefit from these technologies to increase efficiency and simplify business processes, but with these gains comes Fear through a 2019 Robert Hhaver survey praised that automation will have a negative impact on the work of 12% of employees by eliminating their role in reducing opportunities for creativity and problem solving in the over-reliance on technology to do their job.

But at the same time, according to the survey, those who adopt the positive side require them to develop new skills and use automation opportunity to reduce cost and risk as well as reduce time and effort, manage working capital better and improve financial reports by conducting frequent operations within the program.

There are three innovative technologies that affect accountants:

1. Data Analysis.
2. Block chain.
3. Artificial Intelligence.

Previous foreign studies

1. The study (Patel* Dalles: 2002) entitled Transparency * Disclosure, where the researcher studied and analyzed a range of metrics using modern technology, in the United States of America, the United Kingdom, Australia, Japan, Southeast Asia, and some Latin American countries, and the researchers came up with a set of scientific facts and findings that support the trend towards modern technological methods in addressing disclosure problems.

2. Bushman*smith study: 2003) entitled Transparency of Accounting and Financial Information and Corporate Governance.

The researchers provided some measures of transparency of disclosure and financial reporting in the inches markets in the United States of America with the use of some modern technologies in cognitive and information communication where the focus focused on long-term investments and also on the fundamentals of accounting in this regard.

The intellectual framework of the study

Understanding and importance

Automation is a term with an administrative and engineering dimension that refers to the application of machines to tasks that have been accomplished once or more than once in addition to tasks that seem impossible, although the concept of mechanization refers to the substitution of human labour with machines. It is rare that there is a aspect of life that is not used, but the history of the term appeared in 1946 around 1946 in the automotive industry as a result of the increased use of automatic devices in automatic production lines, the term is widely used in manufacturing processes and is also applied in systems where human effort and intelligence are applied to work. Mechanical, electrical or computer.

As for the importance of automation in practice, automation has been used in many industries including the field of information technology where the text of the software can examine its outputs in addition to attaching a report, as there are many multiple software tools in the market that can generate a code to apply a certain, and the user must finish and determine the process only, and

the impact of automation on both software and tools and cutting machines is accelerated significantly, as has contributed to other industries as well and continues to progress significantly. Fast, business intelligence in applications represents a new form of high-quality automation.

The benefits they offer are as follows:

1. **Cost Reduction:** All businesses need to increase their production and material income, and these goals can be reached by reducing costs, and automation is smart software that contributes to reducing costs.
2. **Raising productivity:** Productivity becomes a concern when demand for the services of a particular organization grows, and information technology processes play an important role in providing the tools to increase productivity and efficiency.
3. **Luck and safety:** The main advantage of the automation system is the ability to automate the preservation and recovery systems to ensure protection from the potential risks of loss of the disk to solid or damage or other human errors, which contributes to the follow-up work without problems in returning information and time consumption that leads to material loss and reduction in production.
4. **Reliability:** Automated processes ensure that tasks are not forgotten or malfunctioned, as well as their ability to successfully complete basic tasks and perform any special processing process.
5. **Performance:** Performance from companies can be improved by improving the system used as there are two options to improve performance: they are updating the software or buying.

Cognitive automation and information technology

That its knowledge and as an information technology has a major role in the sustainability of economic unity by providing the necessary tools to help the administration to move forward with the development of economic unity and make appropriate decisions that will maintain the competitive position of the organization among competitors and there are tools that help the administration in carrying out many tasks including

1. **The Web:** which is important in obtaining important data and information that helps the administration in making appropriate decisions.
2. **Computer:** Computer is an important role in administrative use and the computer is the tool that helps to save and analyse a huge amount of information.
3. **Communication systems:** Communication systems help the administration in accomplishing many tasks such as cell phone as well as the use of e-mail in sending important files or information that can help the administration but in proportion to the tv, it has a role in helping the administration.

Cognitive automation is the beating heart of various economic units, and it contributes to facilitating and streamlining the appropriate decisions and directing and implementing its various operations, it is a vital source of its durability, survival and discrimination.

Table 1 General Concepts on Cognitive Automation focusing on information technology

Concept	Author's name and year	T
The science of processing various types of information through modern means, especially computers, and using them to help communicate multiple human, social and scientific knowledge	(Qandilji and Samurai, 2002: 38)	1
A critical weapon that helps organizations maintain competitive precedence in facing global competition and reach customer requirements with speed, quality and appropriate value.	(daft, 2004: 285)	2
Tools and means used to collect, classify, analyse, store or distribute information	Alamy 166 :2007	3
Essential components that facilitate and succeed operations at the administrative and operational levels of the organization and increase its market share, and help to satisfy the needs, desires and aspirations of the beneficiaries of the service in the least cost, effort and time.	(Al-Awasi, 2010: 29)	4

Robbey defined cognitive automation as "all types of software, hardware and equipment related to the account and communication, whether it is a personal computer, a telephone or through administrative information systems."

In what i know in two parts:

The first part is physical: consists of computer equipment, automatic control and communication technology.

The second part is my mind: this consists of software, artificial intelligence and software engineering. These two parts can be represented in Figure 2.

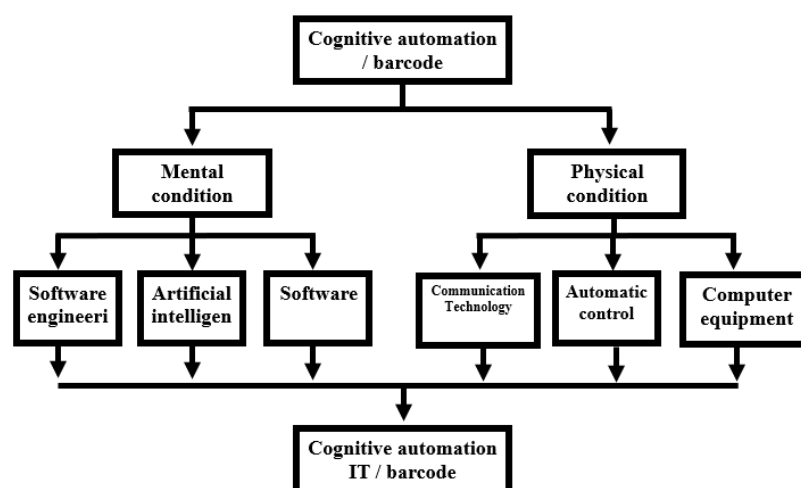


Figure 2, the components of the knowledge machine, according to Robbey.

Cognitive automation focusing on barcode technology

The knowledge mechanism is an important means in the third millennium because of its importance in the field of business management and the physical production of goods and goods, the use of barcode in the past years has spread widely, and has become widespread, and has become used in various places and shops, Barcode has been applied to products as a means of identification quickly, as well as it was used in sales stores as part of the purchase process, in warehouses to track inventory, on invoices to help with accounting, and many other uses.

Barcode is defined as the photosynthesis of all information and data until it is read using what is known as scanners (scanners in computers and barcode means thread code, as the data is stored in the outline slot as well as the spaces between these lines and it is possible that the barcode in the form of geometric shapes and different squares and rectangles merged with each other. The device emits a light beam on the code, the black columns absorb light, and the white columns (located between the black columns) reverse the light contained in the scanner which in turn analyzes the reflected light, decodes the code and sends data to the computer connected to it for display, there is a lot of information that can be extracted from the 'Barcode' as the name of the manufacturer of the commodity, the name and weight of the item

Barcode technology makes the work easy and provides many processes:

1. Arrange and manage documents in accounting records.
2. Eliminate manual data entry that supports transparency.
3. Speed and accuracy in identifying the data needed to support the accounts as desired by the stakeholders.
4. Collect information in an accurate and fast and reliable way.
5. Get customer satisfaction and raise the quality of customer service by speeding up the sales and purchases and adjusting the movement of goods in daily records.

The practical reality reveals different types of Barcode according to their purpose and use, the most famous of which are:

- The first-generation Barcode, the first-generation Barcode, stores information using black-and-white vertical lines of varying length and thickness, including ISBN, UPC, and EAN codes, all single-dimensional bar codes.



Figure 3 Is the Usual Barcode Shape

- QR Code: This type gives more information that takes the form of a matrix and is often in the form of an image as in Barcode located on the personal identity, through which the national number of identity can be inferred in black and white and also there are different types of it - QR Code - Maxi Code - Data Matrix.

With regard to qrCode, this term is an abbreviation of Quick Response code, which means qr code, a type of matrix barcode or (dd code), and has the ability to encode many types of data from Internet connections, personal cards, photos... Etc., it is also known by the world standard name 18004 ISO /IE.

Quick Response Code is a quick response code technique that converts data to a special encoding in a random manner in the form of small squares in length and width within a virtual box consisting of three squares in the upper and lower left corners, with a box of coders. As in Figure No. (4):

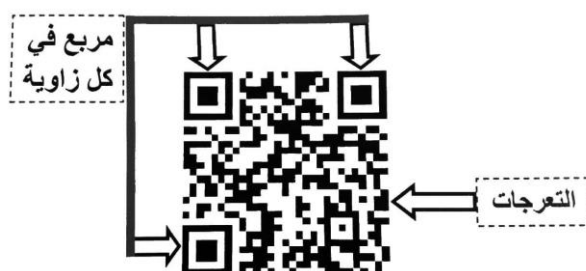


Figure (4) QR Code Illustration

The idea of the K.R.K., which began in 1994 under the name Denso, then changed its current name, was used by Japanese companies such as Toyota in the identification of parts, this technology has been used significantly and frequently in Japan in 2002, and phone manufacturers made sure to include it

as a pimp for users to rely on, and the UNITED Kingdom was the seventh largest national consumer of code.

The QR code consists of a small black-and-white square and in each corner contains a small square and inside the large box contains the code of the product in the form of strange lines, points and zigzags unlike what we see in the traditional Barcode code, which consists of vertical lines of varying length and below them numbers.

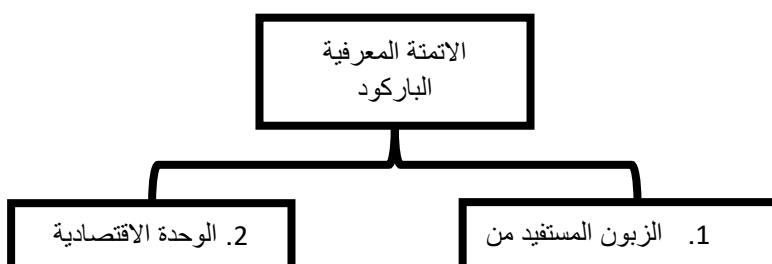


The Difference between Barcode and QR Code

1. Bar Code can store numbers only unlike Q.R. Code, so it can store as many information as letters in all languages such as Chinese or Arabic and complex languages.
2. Barcode is read only by specialized devices; unlike THE QWD can be read by mobile camera (using applications) and other specialized devices.
3. QR Code can store a huge amount of information unlike barcode
4. The Q-Code can contain a lot of languages, including Arabic, as well as q Q-Code, which is read from any side and any form, so that if the reader's eye falls on it, you will read it without a balance, while the barcode must be balanced on the reader.

Barcode (of All Kinds) and financial reporting

Barcode is important in the financial reporting process, it is known that barcode installed on the commodity, can divide the information in two directions as follows:



First: With regard to the customer, the process of barcode reading can be useful in achieving the following:

1. Know the components of the commodity
2. Knowing the final sale price
3. Knowing the item's measurements, color and all quality details.

Second: Regarding the economic unit, it focuses on much information regarding the subject of financial and accounting reporting, such as:

1. Control over the costs of producing the commodity, including the share of the commodity produced from the following paragraphs:

- A. The cost of basic and auxiliary materials
- B. B. Wages and salaries and the size of these injustices in relation to the rest of the paragraphs
- C. T. The commodity's share of operating costs of machinery and equipment

2. Facilitating trade exchange through unified code numbers.
3. The mechanism of electronic distribution outlets to reduce costs and thus reduce prices.
4. Control the movement of stores electronically.
5. Ease of monitoring the product through production stages and distribution channels.
6. Speed and accuracy of data display.
7. Evaluating the possibilities of entering the field of competition.
8. The breadth of internal distribution and competition.
9. Raising the efficiency of customer service through the rapid and accurate completion of sales and payments.
10. Ease of tracking several products from different sources in one shelf.
11. Reducing the size of inventory and reducing the waste resulting from the expiration of products.
12. Increasing the added value of the product and raising its competitiveness.
13. Global trade developments parade.
14. Controlling the details of the data and information related to the storage sites and the quality and value of the customer may be required by different regulatory authorities.

These ideas support the transparency of financial and accounting reporting in the economic unit. The following is an illustration of this concept:

in four words: Credibility, Disclosure, Clarity and Participation (Abu Karim, 2005: 34)

Credibility: it means honesty in expression (giving priority to substance over legal form).

Disclosure: Disclosure is generally defined as "transmitting knowledge or transferring information from its source of production to the place where it is produced or used." Disclosure aims to transfer information from those who know it to those who do not know it, and it means following a policy of complete clarity and showing all the important financial facts that are adopted. The parties interested in the company must have them, and adequate disclosure is one of the most important principles for preparing the financial statements, and this means that the financial statements, notes and additional

information attached to them include all available information related to the company to avoid misleading the interested parties (Hamada, 2007: 53).

Clarity: The information must be presented in a clear and understandable way to the user, and the product of the information should be aware and aware of the level of knowledge, experience and learning. Clarity requires that the report be easy to read and understand, and direct and non-technical language must be used in the report. Unusual technical terms and abbreviations if used in the report. The logical and proper organization of the material of the report and the accuracy in presenting the facts are conditions for clarity and statement (2009: 13-12, Bagad)

4. Participation: means the participation of citizens and economic units in the decisions taken by the government, the provision of greater information and transparency that reveal the facts, allow dialogue and discuss public issues in a way that raises the activities of government sector decisions in achieving the public interest and provides an opportunity for citizens to supervise the course of affairs within these sectors (Abu Bakr, 2001: 150). Figure (2) reflects the essence of transparency in financial reporting, as below:



Figure (5) Elements of transparency of financial reporting

Linking the transparency of financial reporting by adopting barcode

The barcode is the neutral technology in which we can provide data and information from the sold commodity to the customer, as the barcode represents the self-identification of the commodity and from it the information that enhances the transparency of financial reporting is derived as shown in Figure (6)

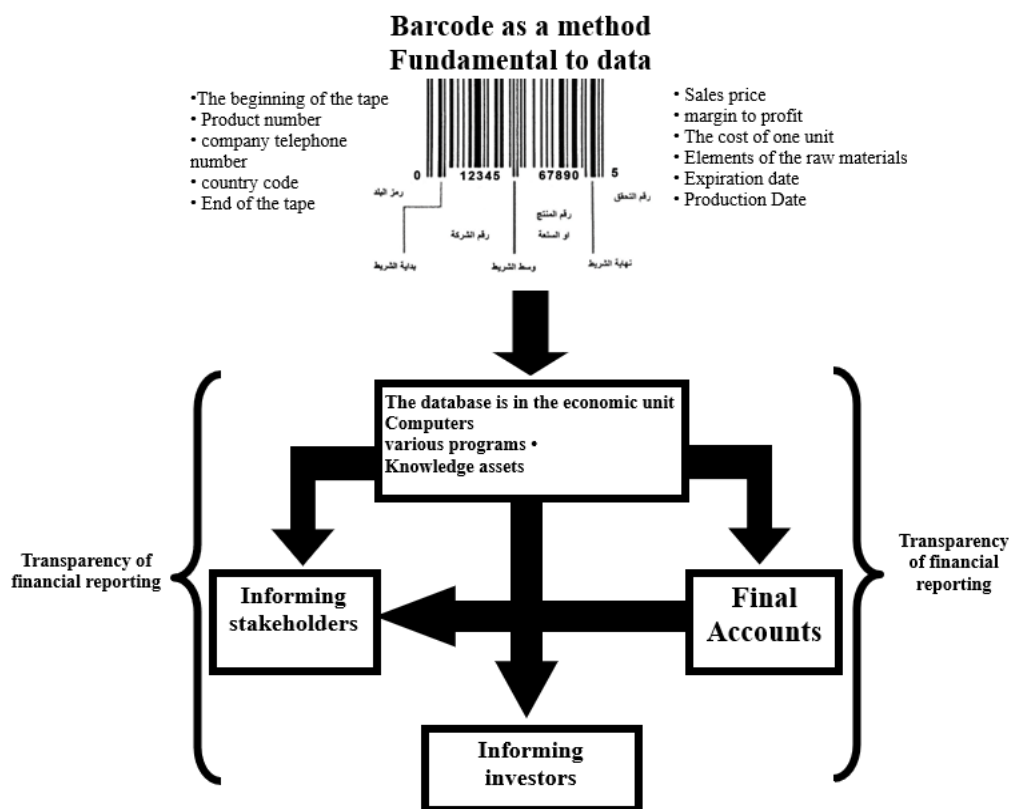


Figure (6) the relationship between barcode and financial reporting transparency

- The customer who gets the item
- Economic Unity

As far as the economic unit is concerned, we do not embrace that the latter is working on building and designing a database within the framework of computerized information technology systems that includes (computers and various programs that provide data to the departments responsible for organizing the final accounts, operating and trading accounts, etc. The final accounts are of a high degree of Transparency and can provide high levels of financial reporting requirements, if credible data are received within the database, and the latter receive its data from different parties, the most important of which is the barcode.

- Different stakeholders
- Investors of all kinds

From the outputs obtained from the database as well as from the final account statements that show what they need for the purposes of preserving the capital,

as well as for the purposes of the safety of the financial and accounting position towards the internal and external control units.

THE PRACTICAL SIDE OF THE STUDY

Brief on the Iraq Stock Exchange

The Iraq Stock Exchange was formed according to Law No. (24) for the year 1991, particularly on 8/6/1991, where a market was formed under this law for trading securities in Iraq called the Baghdad Stock Exchange (Stock Exchange), where it started its work in the middle of 1992 where it was It operates (64) joint stock and mixed companies. The name of the market was subsequently changed to the Iraq Stock Exchange and its activity was publicly practiced in the first session on June 24, 2004.

This market is the umbrella that gathers bundles of different companies, some of which work in the financial and banking services sector, others in the physical or industrial productive sector, and others in the agricultural sector, and other sectors as is evident in Table (2). As these different companies are required to work according to the rules and requirements of clarity and transparency in the field of profit management and in the field of financial control and auditing for their various financial activities.

Table No. (2) The main sectors operating in the Iraqi economy with companies listed on the Iraq Stock Exchange

the number	Companies	Sector	T
22	Baghdad - Iraq Commercial Bank of - Iraq Investment Bank of - Bank Iraqi Investment - Middle East Bank Credit - Iraqi National Bank - Bank Dar es Salaam - Iraq Bank of Sumer Commercial - Investment Bank Bank of - Babylon Bank of - Bank economy to invest - Bank of the - Mosul Bank of - Gulf Commercial the - North Bank - Iraqi Union Bank Ashur - Kurdistan Bank Al Mansour - Bank International United Investment - Bank Investment - Bank Tigris and Euphrates -Bank Islamic National - Bank Elaf Islamic Bank	The banking sector	1
21	- Mansour Pharmaceutical Industries Iraqi carpets and - Modern sewing - Baghdad soft drinks - furnishings Baghdad industry packaging - beverages Northern gas - materials - Iraqi Date Processing and Marketing - light industry - Industrial Crescent - chemical and plastic industries	Industrial sector	2

	Canadian - electronic industries - veterinary vaccines production of production Fallujah for the modern - materials construction of metal industries and - Painting industry Iraqi - garments production of - bikes biolo - industry cartoons - modern construction d industry national industries Home furniture		
13	-Al - Transfer Al-Tahrir for Financial -Al - Iraqiya for Financial Transfer -Al - Mohajh for Financial Transfer Transfer - Ata Al- for Financial Taif Mu'tah - Ghari for Financial Transfer Sama Baghdad - for Financial Transfer United Arab - for Financial Transfer - Financial Transfer Association for Financial Financial Noor for Financial - Al - Transfer Nubala for Financial - Al - Transfer Transfer - Al-Wael Transfer Financial - the benefits of a financial transfer	Financial transfer sector	3
10	Hotel - Baghdad Hotel - Palestine Hotel - Assyria Hotel - Hotel Babylon - Ishtar - Sadeer Hotel - Karbala Hotel tourist city in Mosul - Mansour Hotel National Tourism Investment - Dam	The hotel and tourism sector	4
9	Mosul to Toy - Al-Karkh Tourist City Maamoura for Real Estate -Al - Cities Elite for General - Investments - Iraqi Land Transport - Contracting - Baghdad Iraq for Public Transport Transportation of Oil Products and - Badia Public Transport Al - Goods Baghdad for Car Services	The service sector	5
6	National - Modern Animal Production Middle East - Agricultural Production Iraqi for Blisters - Fish Production Iraqi Meat Production - Production Ethnic Agricultural - and Marketing Products	The agricultural sector	6
1	Asia Cell Company	Telecom sector	7
5	Al - Financial Investment Secretary for the - Khaimah Financial Investment - Mesopotamian Financial Investment Zora - Harmony Financial Investment Financial Investment	The investment sector	8
4	Dar Al Salam - Al Amin Insurance - Ahlia Insurance Al - Insurance	The insurance	9

	Khaleej Insurance and Reinsurance Al	sector	
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The importance of transparency in corporate group financial reporting

The companies included in the previous Table (2) are required to disclose their financial accounts towards the tax departments and towards the stakeholders, as well as towards the investors and stock owners, belonging to these companies as these companies should disclose the following:

1. The amount of returns and profits generated
2. Production costs for goods and services
3. Movement of dispensing materials, goods and goods from warehouses
4. The nature of financial engagements and engagements from various parties

In this regard, the role of information technology and the database existing in the same companies emerges, and these companies have relied on the assets of the same companies, and these companies have relied on barcode technology in order to keep information in accordance with high transparency that supports financial reporting. In support of the transparency of financial reporting and accounting for the economic unit. The researchers went to seek the assistance of a group of specialists or those who have a relationship with such subjects, and they are:

First: A group of professors from the accounting department in Iraqi universities (Kufa, Middle Euphrates, University of Babylon, University of Karbala)

Second: A group of stakeholders who have an interest in the financial results and financial and accounting activity of a group of companies included in the Iraq Stock Exchange.

Third: A group of investors who own a share of the shares of companies entering the Iraq Stock Exchange.

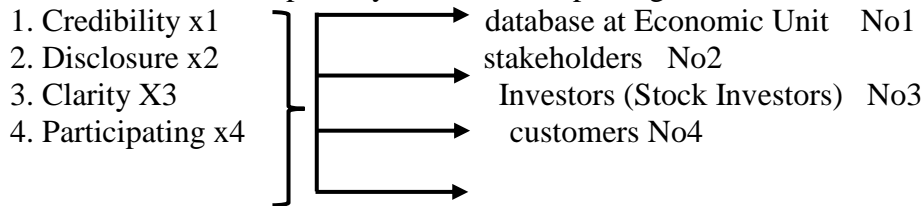
Fourth: A group of customers who wish to purchase the material goods (and services) produced from this company.

These groups of specialists or those involved in the activities of these companies can get a clear picture of the importance and role of cognitive automation in supporting the transparency of financial reporting, especially as far as barcode technology is concerned.

As this technology has become the language of local, regional and global trade and commerce In other words, it has become one of the most important modern technological concepts in the local and global financial and commercial exchange market, as the absence of the use of barcodes as an essential complement to information technology technologies leads to a lack of accuracy and speed in obtaining data and thus in the transparency of financial reporting.

Control variables on the employment of barcodes in the transparency of financial reporting

The elements of transparency in financial reporting are:



As the barcode technology can provide the following information:

- a. The cost and selling price of one unit
- b. The position of the item on the store withdrawal
- c. The components and contents of the commodity from the production elements
- d. Production date and expiration date for the product
- e. The manufacturer or exporter of the commodity (country, city, etc.)

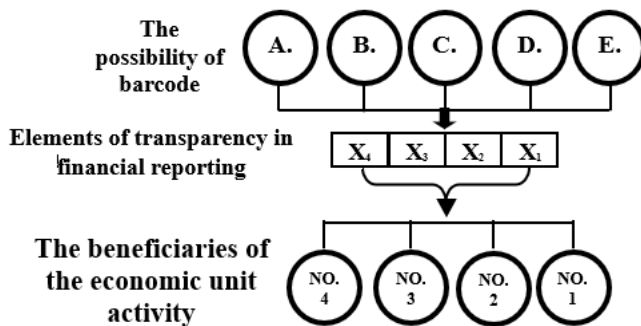


Figure No (7) The relationship between the two sides of the problem

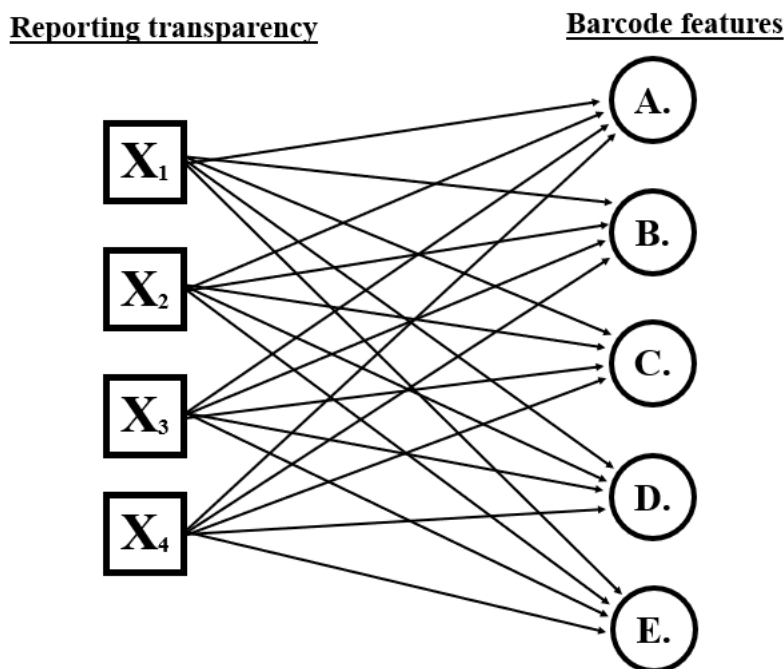


Figure No (8) The relationship between transparency of financial reporting and the advantages of barcode technology

On the basis of the foregoing, there is a relationship between the four elements of financial and accounting reporting transparency and the features of the barcode were developed within the framework of the network shown in Figure (8) on the basis of this network opinion poll directions were formulated.

Analysing employee opinion polls regarding the role of cognitive automation by focusing on barcodes in supporting transparency of financial and accounting reporting

A special survey questionnaire was prepared for this purpose in order to get acquainted with the opinion and opinions related to the problems related to the role of the barcode as one of the components of cognitive automation. Therefore, a sample of (120) was selected and distributed as follows:

- The industrial sector is 30 (20 workers + 10 customers).
- The agricultural sector is 30 (20 workers + 10 customers).
- The commercial sector is 30 (20 workers + 10 customers).
- The service sector is 30 (20 workers + 10 customers).

After collecting and analysing the questionnaire forms using the statistical program (spss), analysis tables were obtained divided according to the axes, and below are the tables that illustrate as in the following axes:

1. Analysing the credibility relationship as one of the elements of financial and accounting reporting transparency with the benefits of barcode technology
2. Analysing the relationship of disclosure as one of the elements of financial and accounting reporting transparency with the benefits of barcode technology

Table No. (3) statistical indicators related to the reliability relationship analysis (n=120)									
The order of relative importance	Weight percent	standard deviation	Arithmetic mean	Answers of the sample members					Question number
				Do not agree strongly	I do not agree	neutral	Agreed	Strongly agree	
1	77.40	0.78	4.35	0	5	10	45	60	The first question
2	76.31	0.77	3.93	2	3	15	44	56	second question
4	80.30	0.81	3.98	5	5	20	40	50	The

									third question
5	75.64	0.82	4.13	4	6	25	40	55	the fourth question
3	82.44	0.91	4.05	0	0	10	30	80	The fifth question
3	78.74	0.83	4.08	The arithmetic mean, standard deviation, and percentage weight					Average statistical indicators

Table 4 Statistical indicators related to the analysis of the disclosure relationship (n=120)

The order of relative importance	Weight percent	standard deviation	Arithmetic mean	Answers of the sample members					Question number
				Do not agree strongly	I do not agree	neutral	Agreed	Strongly agree	
5	82.04	0.76	3.91	0	0	10	23	87	The first question
3	80.30	0.77	3.93	5	10	5	20	80	second question
2	76.77	0.78	4.05	5	10	15	28	62	The third question
4	75.79	0.81	4.15	10	10	10	30	60	the fourth question
3	80.20	0.81	4.98	5	5	20	25	65	The fifth question
3	68.08	0.80	3.98	The arithmetic mean, standard deviation, and percentage weight					Average

					statistical indicators
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- 3. Analyzing the relationship of clarity as one of the elements of financial and accounting reporting transparency with the benefits of barcode technology
- 4. Analyzing the participation relationship as one of the elements of financial and accounting reporting transparency with the benefits of barcode technology

Table No (5) Statistical indicators related to clarity relationship analysis (n = 120)

The order of relative importance	Weight percent	standard deviation	Arithmetic mean	Answers of the sample members					Question number
				Do not agree strongly	I do not agree	neutral	Agreed	Strongly agree	
4	60.66	0.93	3.99	5	5	10	30	70	The first question
3	88.40	0.77	4.50	5	10	5	25	75	second question
2	71.60	0.76	3.98	10	10	10	30	60	The third question
5	77.60	0.82	4.20	10	20	10	25	65	the fourth question
1	77.50	0.78	4.13	10	10	10	40	50	The fifth question
3	76.02	0.83	4.16	The arithmetic mean, standard deviation, and percentage weight					Average statistical indicators

Table No(6) Statistical indicators related to the analysis of the participation relationship (n = 120)

The order of relative importance	Weight percent	standard deviation	Arithmetic mean	Answers of the sample members					Question number
				Do not agree strongly	I do not agree	neutral	Agreed	Strongly agree	
3	70.33	0.77	4.05	5	5	15	30	65	The question
1	77.50	0.79	3.93	5	5	10	40	60	second question
2	80.40	0.92	3.98	0	0	14	40	66	The third question
3	88.61	0.93	3.91	10	10	10	30	60	

									fo que
4	70.71	0.78	4.20	10	10	20	25	55	The que
3	77.64	0.84	3.22	The arithmetic mean, standard deviation, and percentage weight					Ave statis indica

From the previous analyzes, it is clear that in the four main sectors (the industrial sector 30, the agricultural sector 30, the commercial sector 30, the service sector 30 = 120) in Iraq. Therefore, the irrigation survey tries as much as possible to balance all the opinions and answers of the sample, whether it is related to workers or customers. It is noted from the analysis of the four tables that there is a bias in the answers.

Where it is noticed from Figure (9) that the answers (strongly agree, agree) received the most attention, so the figure was skewed to right, as the midpoint of an answer was considered (neutral) according to what is applied in Five-point Likert scale.

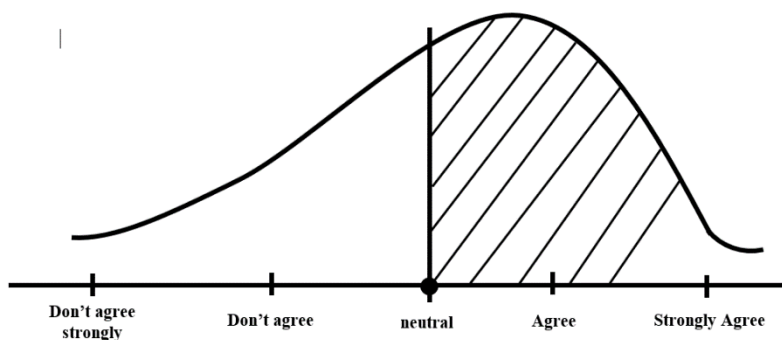


Figure (9) The curve that expresses the stacking of answers on the right side, as (Strongly agree, and agree)

Based on the foregoing, it became clear to us that the presence of barcodes of the two known types (Q. Barcode, N. Barcode), as well as the rest of the details related to cognitive automation, have an important and essential role in supporting the transparency of financial and accounting reporting in the sample companies.

CONCLUSIONS

Based on the above, the following conclusions were reached:

First: The transparency of financial reporting requires the provision of all technical and knowledge support requirements in the economic unit.

Second: The barcode, being one of the cognitive automation techniques, can provide data and information the four basic parties, and they are:

1. The database is in Economic Unit No. 1
2. Stakeholders from government and private agencies No. 2
3. Investors who have bought shares and paid No.3 capital
4. Customers who buy goods, No.4 merchandise

Third: Barcodes of all kinds:

- Normal barcode
- Quick response code

Both types can be employed to serve and support the transparency of financial reporting in the economic unit.

Fourth: The usual presence of the barcode on the produced physical commodity sends a message of reassurance to all parties that have a relationship with the financial and accounting results of the economic unit.

Fifth: The appearance of the barcode is quick-response. The code can be supported more widely than the regular barcode, because it is open to the subject of data, not just numbers, and has become used in personal and objective areas.

RECOMMENDATIONS

1. Emphasis on the blindness of the barcode technology, of both types for my convenience, and the rapid response in the field of supporting the transparency of financial and accounting reporting in the economic unit.
2. Creating an integrated database in economic units, the study sample (companies operating in the Iraq Stock Exchange) as well as companies subject to the Companies Law No. 21 of 1997 as amended in 2004.
3. Work to define a quick response barcode. The code is specific to each of the companies. The study sample will be entered into by all stakeholders and stakeholders in order to ensure the transparency of financial and accounting reporting and to identify all the activities of the current and future economic unit.
4. Participation in all seminars, events and activities calling for cognitive automation and preaching the importance of knowledge communication in all activities in the market.
5. Researchers are fully prepared to communicate with the sponsors in adopting barcode techniques, as well as other cognitive technologies, in order to develop and develop all means and methods that support the transparency of financial reporting.

ACKNOWLEDGMENT

The authors would like to express their thankfulness to the Al-Mustaqbal University College, for their continuous support during this study.

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