



## **The Role of Information Technology in Improving the Quality of Information and its Implications for Economic Development**

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### **Abstract**

The world is witnessing today a new reality characterized by dynamism and speed of change because of the revolutions that the economy has undergone, especially the information and communication technology revolution, which led to an increase in interest in producing information and delivering it to decision makers in a timely manner to make rational decisions, contributing to advancing the wheel of economic development forward. The research aims to clarify the role of information and communication technology in improving the quality of information and the implications of this information on investment decisions that achieve economic development.

**Keywords:** Information Technology (IT); Economic Development; Accounting Information; Decision Making; Investment; Governance.

### **1. Introduction**

The world today is experiencing many transformations in various economic, social, political, and legal fields as a result of the revolutions that the world economy has undergone, especially the information and communication technology revolution in which information has become the main element and main product in the business world.

Therefore, there has become an increasing interest in providing information to all decision makers in a timely manner to make rational decisions, and this means that traditional information systems have become less suitable in providing information to decision makers, as the information has lost its most important qualitative characteristics, which is relevance “timeliness”, and from this point emerged the need for a new information system that fits with the incubating environment of information and communication technology to be able to provide high quality information in a timely manner that contributes to rationalizing decisions, especially investment decisions that depend on high quality information due to the huge amounts invested in mega projects, with the aim of achieving economic development, which reflect on economic and social life positively.

Considering the above, the research will address the following topics: research methodology, an introductory view of information and communication technology, the role of information and communication technology in improving the quality of information, the implications of information quality on economic development, conclusions and recommendations.

### **2. Literature Review**

Economic units that are concerned with keeping pace with the rapid developments in the current environment need to employ modern and advanced technology in all fields at a level no less than what is prevalent in the

surrounding environment of the economic unit, and as a result, the term technology has spread in our world today, and everyone strives to make the most of the use of this advanced technology.

Technology has been defined as consisting of two parts, one (Techno) which means application or scientific method, and the second (Logy) which means science. When the two parts are combined, the concept of technology is an applied science or technical method for achieving a scientific purpose. Technology has also been known to indicate the possibility of scientific application of advanced and modern scientific methods, given that these scientific methods are often related to new developments in processes or production, in addition to scientific progress affecting the various activities that can be used in them. It is also defined as improvements in the technical and technological methods of production to enable economic units to increase production units with the least resources (McConnell & Brue, 2008).

While information is a product of data processing, analysis or synthesis to extract what it contains, and the application of arithmetic operations, balances, equations, statistical, mathematical and logical methods, (Gelinas et al, 2004) sees that information is a set of meaningful data that is assembled to become a task that can be used in making decisions. Information is simply defined as the arrangement of data into useful models (Romney & Steinbart, 2000).

Whereas information technology is defined as a set of computers, supporting equipment, software, services, and associated resources applied to support business processes, that make digital information generated and stored easy to use and share (Mcnabb, 2006). It is also defined as new, highly efficient ways and means of exchanging information among all users using computers, fax, wire-line telephones and the Internet (McConnell & Brue, 2008). It is also defined as all technology used to operate, transmit and store information in electronic form. It also means that it is a tripartite fusion between microelectronics, computers and modern means of communication that includes all devices, systems and software related to the automatic circulation of information (Abdurashidova M. & Balbaa M., 2022).

The best example of information technology is a computer, which is defined as an electronic device that has the ability to receive, store and process data, that is, to perform arithmetic operations and logical comparisons, automatically by a program of instructions to obtain the desired results. Software is defined as programs that contains instructions required for physical devices to complete desired tasks (Bodnar&Hopwood, 1993). Communication is defined as the transfer of messages, information and reports between stations and terminals of telecommunication networks (Summers, 1989). Communication networks are the main component of electronic communication systems that provide channels for electronic data transfer, and they are at different levels according to the economic unit's need for them, including linking a few computers together with the Internet (Gelinas & Sutton, 2001). Communication networks are also defined as the integration of equipment, computers, and procedures to transfer data and information from collection, processing, and storage to user objectives. One of the main reasons why economic units need networks is to provide timely updated information to management to make appropriate decisions (Summers, 1989).

Information and communication technology is defined as the technology that integrates the computer with high-speed communications that link downloaded data, voice and video between users for use in decision-making (Mcnabb, 2006).

The best example of communication technology is the Internet, which is defined as the network of networks through which millions of computers are connected, local networks and wide networks, which are used to transmit and exchange information on a world scale. The Internet is also defined as the massive interconnection of computer networks of global reach that enable communication between disparate technological programs (Gelinas et al, 2004). The Internet is also known as a system of computers that link together an interlocking system to allow the exchange of information and resources, and that the use of computers linked by means of communication, such as telephones, makes it easy for all individuals across the world to communicate with one another (Mcnabb, 2006).

The importance and characteristics of information and communication technology

Scientific and technological development has contributed to achieving the well-being of individuals, and among the developments that constantly occur are those related to information and communication technology, and its importance in terms of providing communication services of various kinds, education and learning services and providing the necessary information for individuals and economic units, which made the world a small village. The members can communicate with each other easily and exchange information at anytime and anywhere, and this importance of information and communication technology is due to the characteristics that characterize the latter, including widespread and tolerance, both in relation to the number of individuals participating or communicating, or in relation to the volume of information transmitted. It is characterized by speed of performance, ease of use and diversity of services, while the most important characteristics of information and communication technology are as follows:

-ICT contributes to economic development through the digital revolution that leads to the emergence of completely new forms of social and economic interaction and the emergence of new societies.

-Increasing the ability of individuals to communicate and share information and knowledge increases the chance of the world becoming a more peaceful and prosperous place for all its inhabitants. This is if all individuals have the potential to participate and benefit from this technology.

-ICT, in addition to traditional and modern media, enable marginalized and isolated individuals to make a voice in the global community, regardless of their gender or where they live. It helps to reconcile power and decision-making relationships at the local and international levels. It can empower individuals, communities, and countries to improve their lives in ways that were not previously possible. It can also help improve the efficiency of the essential tools of the economy through access to information and transparency.

In summary, the most important characteristics of information and communication technology are the speed in electronic data processing and the ability to communicate it to all users around the world at the appropriate time for decision-making (Balbaa M. & Abdurashidova M., 2023).

Factors that led to the use of information and communication technology

The studies that dealt with the subject of information and communication technology have identified a number of factors that had an important role in the use of this technology, and the most important factors agreed on their importance in this field are the following (Jesson, 2010):

-Economic globalization and its accompanying breaking of traditional barriers between markets, and the generalization of some patterns of consumer behavior to all societies, on the contrast of the cultures prevailing in these societies and the varying standards of living in them. In his opinion (Francis Cairncross), the first factor generates the second, and results in the collapse of borders in front of foreign and international trade.

-Extensive use of information in production processes, and this was mainly represented by the increasing reliance on more advanced technologies and more complex working methods, with the necessity of resorting increasingly to specialized skills and diverse experiences in order to operate these technologies and manage these methods.

-The great development in the current business environment, and the significant changes that led to it in the structure of economic activities and the methods of their practice.

-Rapid technological change and low transportation and communication costs have made it more economical to integrate geographically dispersed operations and move products and components around the world in search of efficiency.

-The increasing competition that forced economic units to discover new ways to increase their efficiency, including the use of new markets and the relocation of certain production activities to reduce costs.

And that the use of information technology to support the achievements of the business stages achieves one or more of the following objectives (Turner, 2009):

-Increasing the efficiency of the business stages.

-Reducing the cost of the business stages "cost economy".

-Increasing the accuracy of data related to the phases of the business.

-The huge abundance of information.

-Access to information in a timely manner.

The concept of economic development

The development of underdeveloped societies is to transfer them from one state to another and from a certain pattern to an advanced pattern. Development has also been defined as a tangible increase in production and comprehensive and integrated services, using modern scientific methods in technology, organization and management.

Researchers in the field of economics stressed the need to clarify the concepts of economic growth and economic development. A change in the production curve that results from an increase in resources or an improvement in technology to increase real output (GNP) or real output per capita (McConnell & Brue, 2008). Economic growth is also defined as the increase in the real national income of the prevailing economic system during a certain period of time. As for economic development, change with improvement due to an event or administrative action. Others see that economic development is progress for society by devising new and better production methods and raising production levels through the development of human skills and energies and the creation of better organizations. Economic development is also defined as, in essence, changes in the productive capacity of the economy as a result of wealth creation (Bartik, 1995).

Based on the foregoing, it can be said that the concept of economic growth is the increase in per capita income, while the concept of economic development represents changes in the economic and social structures represented in the improvement and development of the elements of production and technology, in addition to the increase in per capita income, and therefore the concept of economic growth is part of Economic development because the latter is more comprehensive.

## **1 Research Methodology**

### Research Questions:

The research problem stems from the fact that accounting information is presented to decision makers at the end of each year. Which negatively affects decision-making, especially investment decisions, which leads to obstruction of economic development, and this research problem emerges through the following questions:

1. Is the information prepared according to traditional systems useful for decision makers in light of information and communication technology?
2. Is there a possibility to employ information and communication technology to improve the quality of accounting information?
3. Does improving the quality of information according to information and communication technology help rationalize investment decisions in a way that contributes to achieving economic development?

### Research Goals:

The research aims to achieve the following:

1. Introducing the concept of information and communication technology.
2. Statement of the role of information and communication technology in the quality of accounting information.
3. Analysis of the implications of information quality in light of information and communication technology on achieving economic development.

### Research Hypothesis:

The research seeks to test two main hypotheses:

1. Employing information and communication technology in preparing and communicating information contributes to improving the quality of information.
2. Improving the quality of information "as a result of the role of information and communication technology" helps to rationalize investment decisions that contribute to achieving economic development.

## **2 RESULTS AND DISCUSSION**

### **2.1 The role of information and communication technology in improving the quality of information**

It seems that the characteristics of accounting information in today's world and its traditional form, which is supposed to serve as a basis for discussing the quality of information, is no longer sufficient unless the focus is on the comprehensiveness of information and its dissemination in several different ways and means in line with the rapid technological developments, whether at the internal level or the external economic unit.

Accounting is a treatment of several components that starts with the company's operations and end with information about transactions, events, policies, general estimates and others, and all of this depends on the quality of each part of the accounting operations, and this can be ensured by taking advantage of the effects and developments of information technology and adopting modern methods of preparing information. Accounting software, financial modeling programs, databases, decision aid systems software and expert systems, all of this helps accountants and others to collect, analyze and prepare financial information, which saves them time and efforts directed towards interpretation, analysis, control and support in conducting published evaluations, in order to support the decision-making process, which is positively reflected on the quality of accounting information in terms of relevance, quality, accuracy, comprehensiveness, frequency and timeliness of providing information, and then achieving accounting goals with the highest quality.

### **2.2 Accounting information as an important and main part of information system of direction of economic unit**

Accounting is one of the basic information systems, as its objectives have evolved in response to the evolving need for it. This development provides explanations for the important events that contributed to the modernization of accounting, as well as the development and upgrading of the capabilities to issue judgments and link the accounting applications that existed in the past with the current applications and with what should be applied, accounting has always been an important factor during periods of economic change, performing its function in multiple ways and under various economic practices.

The American Institute of Certified Public Accountants (AICPA) provides a definition that accounting is a service activity, whose function is to provide quantitative information, mainly financial in nature, about a particular economic unit, and its purpose is to be useful to those involved in making rational economic decisions (Wolk et al, 2004).

Impact of IT in Accounting	
Advantages	Disadvantages
1. Saves time and money by automating the accounts.	1. High cost of setting up the computer systems.
2. More accuracy	2. Purchase of accounting software.
3. Only need to post into the accounts once as it will automatically post the second account for you. e.g. if you debit the bank with the detail vehicles it will automatically post on the credit side of the vehicles account with the detail bank with the same amount.	3. Cost to train staff in this software.
4. Can be connected to a Payroll processing procedure so that payments are made automatically.	4. Inefficiently while staff are adjusting to the new system.
5. Accounts are balanced off automatically.	5. Can cause technical faults so a technical support team will have to be hired if no already in the business. Will have to go through the recruitment process to find these.
6. Information is automatically transferred into the final accounts so no need to collect the right information.	6. Staff morale may be effected.
7. These can all be backed up and be password protected.	7. Security issues may occur and data could be lost or put in the wrong hands. Can cause fraud.
8. ICT will make it easier for the owner to assess the business at a point of time as accounts will automatically be ready, making it quicker for them to make costly decisions.	8. Data backups will have to be done regularly so that all information is safe and secure.
9. Not as many staff need to be paid for the same amount of work done.	9. Some staff may become redundant and will no longer be needed, so the owner will have to pay their redundancy.
10. The business will have increased their reputation by using the computer systems making them seem more up to date and reliable.	10. Staff may need to be paid a higher wage because they are more productive than before with the assistance of the ICT system.
11. New job opportunities for employees.	11. When faults occur they may stunt work and productivity of staff and the business
12. Managers have less staff to manage and may give them a larger department/s to be managed.	
13. Employees get to learn new software making them more employable.	

Figure 1: Impact of ICT to Accounting, advantages & disadvantages

(Wolk et al, 2004) believes that the concept of the quality of accounting information means the credibility of this information and its benefit to users, and that it is free from distortion and misleading, and that it is prepared in light of a set of standards, which helps to achieve the goal of its use.

Rapid changes in the age of technology, the proliferation of multinational corporations and international investors, and the growing need for information accordingly, have changed the nature of the information required of the accounting system. In order to keep pace with these changes and satisfy the wishes of the beneficiary parties, it has become necessary to change the systems used, and these systems must provide non-financial information and future information along with the financial information. In order for the information provided by the accounting system to be useful, it must be characterized by some qualitative characteristics.

Statement No. A issued by the Financial Accounting Standards Board (FASB) in 1980 entitled “Qualitative characteristics of accounting information” is the most comprehensive and important study, and is divided into two main characteristics, namely, the property of relevance of information that contains secondary characteristics (the predictive value of information and the ability to regressive evaluation and appropriate timing) and the property of reliability and credibility of information that contains secondary characteristics (verifiability, truthfulness in expression and impartiality) (kieso et al, 2007).

The list of FASB concepts presents most of the advanced ideas that worked for the objectives and characteristics of information quality, and a proposal was made by (Jonas & Blanchet) to develop the framework, adding some elements or characteristics to the existing quality in the FASB framework, and it is believed that it will provide additional insight into the quality of information. The following figure illustrates this framework.

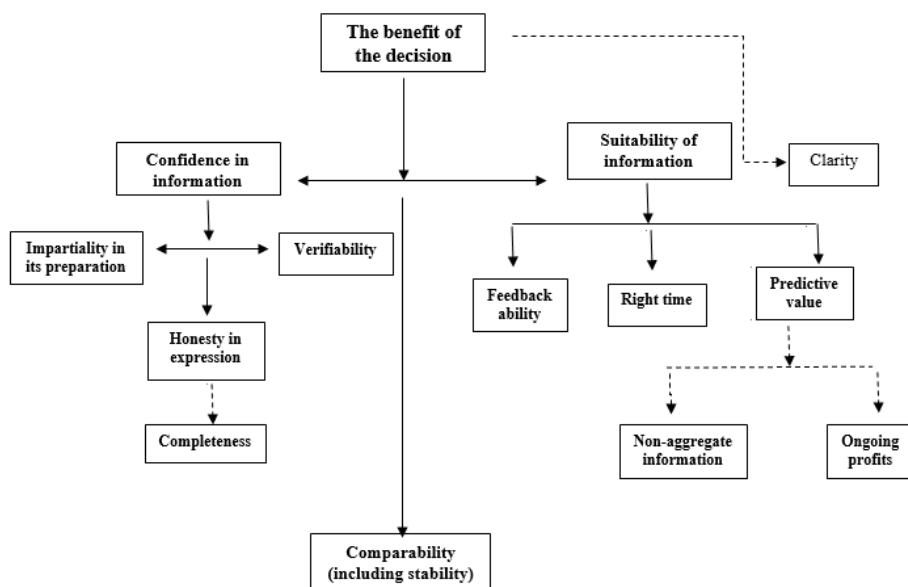


Figure 2: Framework of qualitative characteristics of accounting information

Source: Jonas & Blanchet, 2000

Information and communication technology has an important role in achieving these characteristics, through the strong penetration of technology and its penetration into the profession. In light of all the alternatives available in a very short time and with a high degree of accuracy, in the sense that it contributes to the achievement and availability of the properties of relevance and reliability of the information.

**2.3 The importance of accounting information in making decision of any user**

Users of accounting data typically include existing and potential investors, employees, consumers, creditors, suppliers, and other trade creditors, as well as the public and governments and their agencies (Anon., N.d.). We can clearly understand the significance of accounting information, which is governed by specific regulatory frameworks, for business unit decision-making if we further analyze the motivations for employing the aforementioned accounting information.

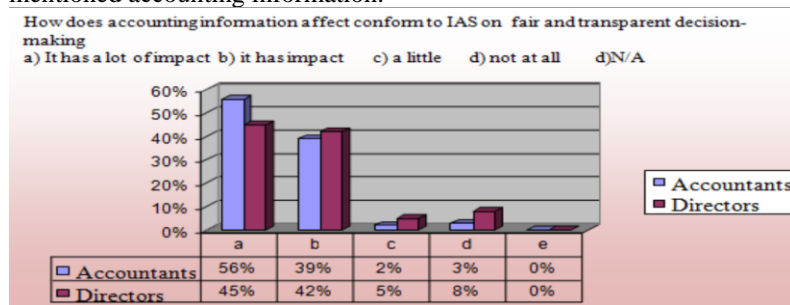


Figure 3: The effect of AI on decision- making process (Source: <http://ssrn.com/link/2017-ENTRENOVA.html> Innovation Research & Policy Network (IRPN))

In response to the question "How does information standardized accounting affect at making fair and transparent decisions?" which was directed at accountants working in small, medium, and large businesses, banks, insurance companies, tax administration, and management of these units, 56% or 45% of them responded "has a lot of impact," while 39% or 42% responded "has impact."

The multivariate results in panels examining the association between the accuracy of the accounting result and the likelihood of under- and overinvestment are shown in Table 1.

Table 1: Results of the estimation of the relationship between the quality of accounting results and the probability of under-investment and over-investment. Source: Accounting Information Quality and Investment Decisions (<https://doi.org/10.5772/intechopen.93980>)

	UNDINVEST		OVERINVEST	
	QACC	CONSV	QACC	CONSV
ACCOUNQUL	0.341 (2.26)**	0.351 (0.33)	-0.915 (-0.29)	-1.419 (-0.41)
MTB	-0.656 (2.35)***	-0.735 (-2.34)***	0.735 (2.51)***	0.709 (2.53)**
XCE	-0.67 (-1.82)***	-0.654 (-1.75)*	0.789 (1.72)*	0.603 (1.57)*
SIZE	-5.489 (4.16)***	5.769 (4.31)***	-5.06 (-4.21)***	5.863 (-3.73)***
DEBT	0.332 (0.22)	0.321 (-0.12)	-0.009 (-0.03)	-0.614 (-0.41)
Constant	-91.123 (-2.86)***	-91.560 (-3.28)***	94.861 (4.00)***	93.312 (3.43)***
Log likelihood	-55.881	-53.635	-57.019	-54.361
LR test	25.73***	23.43***	23.37***	21.03***
Quality of Prediction	91.42%	90.24%	89.68%	91.45%
Specific Effect	Random	Random	Random	Random

\* Coefficient significant if à 10%.

\*\* Coefficient significant if à 5%.

\*\*\* Coefficient significant if à 1%.

A fixed or random effect can be used to estimate the Logit model when applied to panel data. The constant is viewed as an unobservable property unique to firm I in relation to the other variables in the model if the estimation of fixed effects is employed.

Only organizations whose status has changed from one period to the next are taken into consideration in the estimate since the dependent variable is binary and the specific effect must be eliminated, which necessitates the elimination of observations whose status has not changed over time. The constant, on the other hand, is regarded as a non-observable random variable and is not correlated with the other variables if the estimate used follows a random effect, allowing it to be incorporated into the model. We decided to use the random effect model to avoid excluding observations that do not change over time because of these factors.

Prior to evaluating our findings, it is critical to understand that our models have extremely high prediction accuracy (90%) over the range of criteria that we chose. The likelihood ratio test (LR test), which is significant at the 1% level, indicates that the models also have extremely excellent overall significance.

Table 1 shows that the quality of the accruals increases the likelihood of underinvestment while having no effect on the likelihood of overinvestment. However, the context-specific characteristics of the market as well as investor behavior can be used to explain our results. Thus, we might first claim that our findings may be explained by the poor quality of financial data that enterprises typically display.

#### 2.4 Main objectives of an information system to a decision-making process

Some researchers believe that electronic systems allow the operation of accounting data in a flexible manner and capable of producing multiple information in terms of quality and quantity in light of all required alternatives, as quickly as possible and with the highest degree of accuracy. The use of a computer to operate the data related to the accounting system achieves major advantages of accuracy, speed, huge data storage capacity, and the ability to process many complex operations that are difficult or impossible to complete manually. The use of informatics is one of the features of modern economic units, as technological progress in the production, marketing and financial stages requires obtaining instant and accurate data that enables the management of institutions to make decisions.

(Reimers, 2011) believes that the main objectives of an information system is to provide information that is useful for decision-making and must be characterized by relevance, reliability, stability and comparability. These characteristics are as follows:

1. Appropriateness: clarified that relevance achieves its linguistic meaning if the recipients of the information understand the intended meaning of the information, which is the primary objective of accounting, and the relevance requires the possibility of relying on the information in a useful way or its restricted connection with the

behaviors or results desired to be achieved (Hendriksen & Breda, 2001). For information to be relevant, it must be meaningful enough to influence business decisions (Reimers, 2011).

We find that the computer helps to provide information that is characterized by a better predictive and feedback ability. For considerations of cost / benefit, it is not possible to apply these methods in practice by the manual method. Such information is found in quarterly progress re-ports, and such reports cannot be prepared apart from the use of the computer.

Predictive value: is the quality of information that helps users to increase the likelihood that outcome predictions will be correct for past or present events (Porwal, 1997). Predictive value helps evaluate past and present events and estimate future events (Glautier et al, 2011).

Therefore, the accountant relies on information technology and the computer using quantitative methods to contribute to raising the efficiency of information, as well as using statistical probability theory to make the necessary estimates in that (Moscove & Simkin, 1987).

In order for the information to be more predictable, the predictive value has been divided into two sub-properties, the continuous earnings feature and the non-aggregate information feature, as follows:

**Continuous Profits Feature:** This characteristic focuses on distinguishing between the components of profits that are not recurring and the components of profits that are expected to continue in the future, and therefore there is a benefit for the investor who wants to predict the aspirations of the future of the economic unit by linking them to this useful information. That no reduction in profits will be a better prediction than continuous earnings per economic unit (Jonas & Blanchet, 2000). And that one of the axes of focus on helping users of financial statements to make decisions is the pursuit of quality with a future or predictive outlook, and this is reflected through some requirements of accounting characteristics (for example: disclosure of continuous profits and discontinued profits). It helps the users of the financial statements to predict the future cash flows of the economic unit, in particular their timing and certainty. Computer and software can draw a line between continuous and discontinued earnings.

**Non-aggregate information feature:** helps investors understand accounting information better, and (Jonas & Blanchet) believe that non-aggregate information helps users identify and estimate opportunities and risks related to the various business of the economic unit, meaning that this feature allows users to better predict opportunities and risks facing economic units (Jonas & Blanchet, 2000).

This is because investors may wish to use accounting data to forecast certain events such as sales of product lines, and use their own forecasts about these events to formulate certain inputs to model their decisions.

Besides, the computer can process detailed and accurate information at high speed and low costs and in multiple methods and ways. Both (Lymer & Tallberg) presented a historical summary discussing event-based accounting versus value-based accounting that came as a conclusion to this technology. They saw that the Internet would be the mechanism that would allow the development of the new form of accounting (Lymer & Tallberg, 2000), and one of the accounting entries that provide "detailed" non-aggregate information useful in predicting future events is the entry of events.

## **2.5 Implications of the quality of information on investment decisions to achieve economic development**

The information and communication technology revolution has contributed to the growing interest in information to improve its quality and deliver it as quickly as possible to decision makers to make rational investment decisions, which depend mainly on high quality information to rationalize these decisions and thus help economic development rates.

The ICT industry has become an important economic resource for many countries, and the important role that this industry plays in strengthening the economies of countries cannot be ignored. The information technology industry also contributes to the development of the economy and the acceleration of development by providing some job opportunities.

As information has been transformed into economic products similar to the materials offered in the market that are subject to the law of supply and demand, and technological transformations have contributed a great deal to changing individual attitudes towards the use and functions of information, to materialize its value, to a degree that has made the human society based on the principle of computer communication. Expressing human access to technological development in the field of processing and distributing intellectual, cognitive and informational material by computers. If we look closely at the real pillars that stand behind the progress of the industrialized countries, we will find that the most important pillar is management and organization, and that management and organization stand behind pillars and foundations, and among those pillars and modern foundations are information and communication technology.

## **2.6 Indicators, requirements and policies for economic development**

### Economic development indicators

Among the most commonly used indicators to measure the level of economic development achieved in one country compared to another (ropert, 1988): physical capital accumulation, technological change, and human development.

### Economic development requirements

Some studies and research have observed that the basic requirements for achieving economic development are concentrated in the following: planning, providing the necessary data and information, providing appropriate technology, providing specialized human resources, producing high quality, setting appropriate economic policies, providing the necessary security and stability, and spreading development awareness among citizens.

### Economic development policies

Among the most important policies agreed on their importance in achieving economic development, are the following: savings policies, investment policies, price policy, fiscal policy, monetary policy, and foreign trade policy.

The main focus will be on investment policy, as it is the basic policy through which economic development rates are raised.

Before addressing the investment policy, it is necessary to address the savings policy because of its great importance in the process of economic development, as the importance of saving stems from the fact that it represents the internal source to enable the necessary investments to achieve development, which effectively contributes to reducing dependence on external sources.

### Investment policy

Investment has received a lot of attention in the development economic literature as the main key to economic development. Investment is the expression of creating new productive capacities in addition to maintaining existing capacities. Investment policy is devoted to deciding investment priorities within the framework of economic development. The reporting process has two main aspects: determining the size of the total investment that secures the full operation of production capacity, and distributing this volume among the various economic sectors.

### Stages of making an investment decision

Some sources indicated that the stages of decision-making for long-term investments are as follows (Horngren et al, 2000): the stage of identification, the stage of searching for alternatives, the stage of obtaining information, the stage of selection, the stage of financing, and the stage of implementation “investment decision making” and follow-up.

#### - Investment decision

Investment decisions are among the most important and complex financial management decisions due to their investment nature. Most of these decisions are used by the financial management in the hope of increasing the return on investment or revenue power in order to maximize the owners' wealth or maximize the market value. Where investment decisions are divided into two types:

Long-term investment decisions: They are defined as the decisions of the economic unit to invest funds in an ideal way in long-term activities, from which future returns are expected to flow for several years. It also means those decisions that aim to invest capital in a group of assets with the intention of obtaining future revenues that are expected to achieve two main goals:

- To be profitable for the economic unit.
- To serve the main objective of investors and owners of maximizing wealth.

Some researchers believe that it is the capital expenditure plan on fixed assets that is prepared by the financial department of the economic unit through analyzing projects and making the necessary decisions to include some of them in the mentioned plan. In the same context, some see it as a quantitative and financial plan for investment activities in the coming period, and in this way it is a very important planning and control program for financial management. Some see it as the steps and stages undertaken by the economic unit in order to allocate some of the financial resources available to it for capital investments that the unit will benefit from for a period exceeding one year.

Short-term investment decisions: These decisions are concerned with investing in current assets represented in investments in cash, receivables, inventory and investment in securities.

Investment at the level of the national economy is related to capital spending on new projects in the public utilities and infrastructure sectors, such as main and secondary road construction projects, water and sewage installation projects, preparing urban plans, construction and housing projects, electricity installations and power generation, as well as social development projects in the fields of education, Health and communications, in addition to projects related to economic activity for the production of goods and services in the productive and service sectors such as industry, agriculture, housing, health, education and tourism.

Based on the foregoing, it can be said that social development projects in the fields of education are long-term private investment decisions in building universities, whether at the governmental or private level, that will achieve an increase in capital accumulation and raise human development rates.

Investment can be classified into three types, namely:

- Public investment: It is the investment made by the state's public institutions. Usually, this type of investment focuses on the public services provided by the state to the community, such as health, education and other services such as water, electricity and sanitation.

- Private investment: It is the investment made by persons or economic units by employing citizens' savings or by borrowing from local or foreign financial institutions.

- Foreign investment: It is the investment made by individuals, economic units, or international institutions within the concerned country, and this type of investment is important in many countries of the world, especially developing ones, through what natural individuals or companies do by transferring money from a country to its investment in another country, the appropriate climate has been created for the investment process.

The importance of investment in achieving economic development:

- Increasing production and productivity, which leads to an increase in national income and an increase in the average per capita share of it, thus improving the standard of living of citizens.

- Providing services to citizens and investors.

- Providing job opportunities and reducing unemployment.

- Increasing the state's capital formation rates.

- Providing different specializations of technicians, administrators and skilled labor.

- Producing goods and services that satisfy citizens' needs and exporting the surplus abroad, which provides the foreign currency needed to purchase machinery and equipment and increase capital formation.

One of the main conditions for economic development that depends mainly on investment decisions are as follows: industrialization, technological progress and capital accumulation. Industrialization means the expansion of the industrial base of society which leads to raising the level and size of the prevailing production forces. Capital accumulation means raising the rate of capital accumulation, i.e. providing a minimum level of investment resources that are directed to the development process.

Finally, raising the rate of capital accumulation requires achieving a growth rate of national income higher than the population growth rate, which results in a high growth rate of per capita income to a degree that allows for increased savings and investments, and thus a continuous addition to the productive capacity of society.

## **2.7 The importance of accounting information in making an investment decision to achieve economic development**

The past three decades, in both the government sector and the private sector in industrialized countries and developing countries, have witnessed the important role that the accounting profession plays in rationalizing decisions that require the process of economic development. Practicing this profession with its origins and ethics makes the management of the economic unit can be provided with the information necessary for decision-making, whether at the planning stage, the implementation stage, or in the performance evaluation stage for development programs and projects, which embodies the saying that whoever possesses the information has the power to make decisions. To the extent that the information available to decision makers in the economic unit is accurate, sound and sufficient, the decision will be successful in achieving the desired goals.

The decision-making process is a humane and rational process that can be rationalized to the extent that the decision-maker has the essence of the administrative process. In light of the enormous challenges arising from globalization and the information revolution, an indication of the need to activate the role of accounting information to contribute more effectively to achieving goals.

It is known that the primary objective of accounting is to provide information useful for investment and credit decisions to estimate the amount, timing and degree of uncertainty associated with future cash flows (Kieso et al, 2007).

Financial reports constitute the main tool for communicating information and giving a clear, summarized picture of the unit's activity and financial position to decision makers, especially investors, because they have specific authority and ability to access it directly. Therefore, preparing financial reports cannot be described as a goal in itself, but rather as a means aimed at providing useful information for investors to rationalize their investment decisions.

There are investment decisions related to future events, which depend on many sources of information, but the most important source among these sources is accounting information (kam, 1990).

(Schroeder et al, 2009) believe that the primary objective of providing accounting information is to provide investors with relevant and reliable information that enables them to make informed decisions, and investors use

all available financial information in line with their preferences regarding risk and expected return on investment (Schroeder et al, 2009).

The computer is characterized by the ability to update information immediately and directly when the process or financial event occurs. Some researchers believe that electronic systems allow the operation of accounting data in a flexible manner. The Internet also makes the process of accessing large amounts of external information easy and cheap, and improves the speed in exchanging this information. The importance of electronic dissemination of information increases as the information network expands. Electronic publishing may not eliminate the paper-based model, but it will meet the needs of users to make rational economic decisions. Modern technologies are also working to bring about fundamental transformations in the process of dissemination and distribution of information that form the basis of the new information society.

The researcher believes that one of the most important long-term investment decisions that depend on high-quality accounting information are the decisions to invest in private universities that achieve indicators of economic development, including: increasing capital accumulation and human development.

### 3 Conclusions And Recommendations

#### 3.1 Conclusions

Information and Communication Technology (ICT) is a blanket term encompassing all the technologies and services involved in computing, data management, telecommunications provision, and the internet. ICT permeates all aspects of life, providing newer, better, and quicker ways for people to interact, network, seek help, gain access to information, and learn. The technology sector accounts for a significant portion of economic activity around the globe, as economies, employment, and personal lives become more digital, more connected, and more automated.

To sum up, it's clear to mention that the adoption of the Internet as a channel for the distribution of information contributed to putting the approach of expanding disclosure into practice. The traditional model of disclosure is based on providing financial information about the economic unit as the main source of information. With the emergence of information and rapid development in communication network technology, this model has changed. The importance of electronic dissemination of information increases as the information network expands. Modern technologies are working to bring about fundamental transformations in the process of dissemination and distribution of information. Electronic publishing may not eliminate the paper-based model, but it will constitute an important tributary to meet the needs of users. Emerging economies should take initiative to improve their market infrastructures such as adopting better accounting standards and encourage greater disclosure as well as enhancing the role of enforcement agencies. It is likely that more efficient investments will lead to better allocation of capital and resources and this may lead to higher social welfare and hence economic growth. To be more precise, further summary has been done to elaborate IT in spheres that have surveyed on the paper and effect of it:

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ICT	Information and communication technology is new and highly efficient methods that lead to interconnection of computers and communication networks together to be able to process and communicate information electronically.
HR	Information and communication technology increases the knowledge of individuals and economic units through the exchange of information between different users and thus achieves sustainable human development.
Accounting	The qualitative characteristics of accounting information lack some characteristics such as clarity, completeness, continuous profits, and non-aggregate information that lead to improving the quality of this information and in line with information and communication technology.
Decision-making	Accounting information is of high quality in light of the use of information and communication technology.

Investment	Economic units do not provide timely information, which leads to the loss of this information's importance to decision makers.
Economic	Investment decisions depend on information in general and accounting information in particular to rationalize these decisions.

### 3.2 Recommendations:

1. Employing information and communication technology in information systems in general and the accounting system in particular to process and communicate information to decision makers in a timely manner to rationalize investment decisions.
2. Educating and training all employees in the public and private sectors on information and communications technology, especially computers, Internet and software, in line with current developments.
3. Adding some elements or characteristics of clarity, completeness, continuous profit, and non-aggregation information to the characteristics that have been presented in the framework of the Financial Accounting Standards Board to improve the quality of this information.
4. Relying on accounting and non-accounting information that are characterized by qualitative characteristics in investment decisions that achieve economic development.
5. Given the importance of economic development in each country, the researcher recommends the importance of devising new and better production methods, extending human skills and energies, and creating better organizations to raise production levels to achieve economic development.
6. Given the importance of information and communication technology in developing the accounting profession and other professions, the researcher recommends the importance of including the topic of information and communication technology in the primary and higher accounting curricula.
7. Given the importance of information quality in light of information and communication technology in investment decisions, the researcher recommends preparing research papers for electronic auditing to add confidence to the information.

### References

- [1] Abdurashidova Marina Sagatovna and Muhammad Eid Balbaa. 2022. Digital Transformation of the Industrial Sector: The Case of Uzbekistan Economy. In The 6th International Conference on Future Networks & Distributed Systems (ICFNDS '22), December 15, 2022, Tashkent, TAS, Uzbekistan. ACM, New York, NY, USA, 7 pages. <https://doi.org/10.1145/3584202.3584222>
- [2] Bartik, Timothy, "Economic Development Strategies", Upjohn Institute, 1995.
- [3] Bodnar, George, H. & Hopwood, William, S., "Accounting Information Systems", Hall Inc, United States of America, 1993.
- [4] Gelinas, Jr. Ulric, J. Sutton, Steve, G. & Fedorowic, Jane, "Business Processes & Information Technology", South -Western, United States of America, 2004.
- [5] Gelinas, Jr. Ulric, J. & Sutton, Steve, G. "Accounting Information Systems", Thomson Learning, United States of America, 2001.
- [6] Glautier, Michel, Underdown, Brian & Morris, Deigan, "Accounting Theory and Practice", Prentice Hall, 2011.
- [7] Hall, James, "Accounting Information Systems", South - Western, United States of America, 2004.
- [8] Hanafi, Siti Rosmaini, Kasim, Mohd & Hancock, Dawson, "Business Reporting on the Internet: Development of a Disclosure Quality Index", International Journal of Business and Economics, University Tenaga Nasional Malaysia, No. 8, 2009.
- [9] Hendriksen, Eldon, "Accounting Theory", Irwin, United States of America, 1977.
- [10] Hendriksen, Eldon & Breda, Machael Van, "Accounting Theory", Mcgraw Hill, Singapore, 2001.
- [11] Horngren, Charles t. & George, Foster & Datar, Srikant m., "Cost Accounting- a Managerial Emphasis", Hall, United States of America, 2000.
- [12] Jesson, Joce, "The Unacceptable Face of the Global Knowledge Economy", New Zealand Journal of Teachers, University of Auckland, No. 19, 2010.
- [13] Jonas, Gregory & Blanchet, Jeanchet, "Assessing Quality of Financial Reporting", Accounting Horizons, American Accounting Association, No. 3, 2000.
- [14] Kam, Vernon, "Accounting Theory", Wiley, Singapore, 1990.
- [15] Kieso, Donald, Weygandt, Jerry & Warfield, Terry, "Intermediate Accounting", Wiley, United States of America, 2007.

- [16] Lymer, Andrew & Tallberg, Anders, "Corporate Reporting and the Internet – a Survey and Commentary on the Use of the WWW in Corporate Reporting in the UK and Finland", University of Birmingham, 1997.
- [17] McConnell, Campbell r. & Brue, Stanleyl," Macroeconomics", Irwin, United States, 2008.
- [18] McNabb, Divad," Knowledge Management in the Public Sector ", M. E. Sharpe, United States of America, 2006.
- [19] Moscovice, Stephen & Simkin, Mark, "Accounting Information Systems", Wiley & Sons, Singapore, 1987.
- [20] Muhammad Eid BALBAA and Marina Sagatovna ABDURASHIDOVA, 2023. Digitalization processes in the energy complex of Uzbekistan. EPRA International Journal of Economics, Business and Management Studies (EBMS). Vol 10, Issue 3, p 91. DOI: <https://doi.org/10.36713/epra12767>
- [21] Porwal, L. S." Accounting Theory ", Mcgraw-Hill, India, 1997.
- [22] Reimers, Jane," Financial Accounting-A Business Process Approach ", Pearson, United States of America, 2011.
- [23] Romney, Marshall, B. & Steinbart, Paul John, "Accounting Information Systems", 8th, Pearson Prentice Hall, United States of America, 2000.
- [24] Ropert, e. Lucas jr,"On The Mechanics of Economic Development", University of Chicago, Chicago, 1988.
- [25] Schroeder, Richard, G. Clark, Myrtle, W. & Cathey, Jack, M., "Financial Accounting Theory and Analysis: Text and Cases", 9th Edition, Wiley, United States, 2009.
- [26] Summers, Edward, Lee, "Accounting Information Systems", Houghton Mifflin Company, United States of America, 1989.
- [27] Turner, Weickgenannt,"Accounting Information Systems-Controls and Processes", Wiley, United States of America, 2009.
- [28] Wolk, Harry, Dodd, James & Tearney, Michael, "Accounting Theory", South-Western, United States of America, 2004.