

# **AN EXPOSITION OF BASIC FINANCIAL KNOWLEDGE FOR IMPROVED PERFORMANCE OF ENTREPRENEURS AND PERSONNEL IN THE TECHNOLOGY SECTOR**

**By**

**Adeyeye, M.M. and Fakokunde, T. O.**

Department of Entrepreneurship and Business Studies,  
Federal University of Technology, Minna, Nigeria.

## **ABSTRACT**

The understanding of the theory of accounts providing a conceptual and analytical insight into making skillful and prudent decision cannot be overemphasized. The paper is a theoretical study that presents the importance of embracing some basic knowledge of accounting to entrepreneurs and other personnel in the technological sector with the aim of enhancing the understanding and interpretation of their organizational status. The paper identifies some users and uses of financial accounts, various kinds of accounts, common abbreviations and definitions. It also specifies major statutory and regulatory frameworks of financial accounting and suggests the need for awareness forum for personnel in technology to keep abreast of their inter-relationship with professionals in other sectors. The implementation of these would enable the personnel to be informed users of accounting information and consequently heighten the progress in the technological sector.

**Keywords:** Accounting, creativity, curriculum, entrepreneurship, skills acquisition, technology staff.

## **INTRODUCTION**

Technology has always been the mechanism through which mankind leveraged her efforts both individually and collectively, to improve her quality of life (Harrison and Samson, 2002) hence long-term economic growth is associated with technological progress (Forman, 2007). In the medieval, early form of technology included simple tools such as the axe, spear, bows and arrows, and other similar implements that helped people to survive (Harrison and Samson, 2002). Later, at the industrial revolution, the wheel, the steam engine, the telegraph, internal combustion engine emanated. In the contemporary,

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the automobile, electricity, aircraft, computers, the internet, biotechnologies, nuclear power and so on are emerging. All these emerging inventions make technology to be used as a lever of control over the natural environment in which human beings found themselves in order to improve the quality of life. Therefore, it will be appropriate to conceive technology as an artificial or human – devised tools or aids for accomplishing tasks that have a goal or purpose (Harrison and Samson, 2002). Thus, technology can be rightly considered as assisting human endeavours of innovations and inventions which are the main domain of modern entrepreneurship.

Technology although perceived differently by different authors points to the same direction. That is, the efforts of man to control nature and improve quality of life. Thus, Andah (1992) referred to technology as all it takes (in terms of mental and material energy) for man to set in motion the natural forces of his body to make natural materials available in forms of his own useful life. Also, Knowls (1998) explained that technology is the systematic use of all technical knowledge, methods and operations to control nature. Oke (2005) in his own submission viewed technology as a collection of techniques- processes, methods, skills of performing practical operations. Maigida (2005) also considers technology as a generic term involving training in the process of applying both sciences and technology education to solve practical problems. A common trend in this definition is the application of this scientific knowledge into practical terms which involves entrepreneurs taking the risks required in order to improve quality of life.

In the present day, technology is becoming more closely linked with entrepreneurial activities and practices as often found in almost every fields of human endeavours such as Engineering, Agriculture, Health (paramedical), Energy, Science and Science Education, Commerce and Industry and so on. These activities involved various personnel and entrepreneurs who have attained certain levels of professionalism in their various fields by acquiring knowledge and skills over time. They are the human resources paddling the canoe of technology in the various fields through strategy, development, adoption, implementation, innovation, management and forecasting. They are usually individuals that have undergone formal training in the tertiary institutions like Universities, Polytechnics, and Colleges of Education or technical staffs with semi-formal training from Vocational Schools. This corroborates Maigida (2005) which considers technology as covering all skills training in the engineering family, technical and vocational education. These categories of professionals are referred to in this paper as technology-sector entrepreneurs and personnel, or simply as, technological practitioners. They are responsible for the co-ordination of all the factors of technology involved in the production system (land, labour, capital or man, machine, money, materials) in their

various sectors and subsectors. They could be engineers, pilots, computer analysts, biotechnologists, radiographers, agriculturists, lecturers, geologists, chemists etc.

In all justifications, skill acquisition and development have been considered as basic and paramount to all the activities of technological practitioners. But, it is noteworthy that acquiring these skills should be in recognition of the interdependence of the different functional areas of the organization with the sole aim of achieving a final quantifiable outcome and destination. In doing this, it is simply clear that financial knowledge is required in measuring performance and decision making. Unfortunately, the extreme focus of technology sector entrepreneurs and personnel on technology made them to give little or no attention to financial knowledge. Therefore, this paper strives to introduce financial skills as the fourth category of skills, apart from the conventional technical, human and conceptual skills (Ilesanmi, 2000), needed to be acquired and developed by all technological practitioners for improved performance.

## **OBJECTIVE AND PROBLEM OF STUDY**

The principal objective of this paper is to assert the need for technology-sector entrepreneurs and personnel to acquire basic financial knowledge that will enhance the understanding and interpretation of their organizational financial status to improve their performances. The knowledge of accounting seems not to arouse the interest of these personnel because it is not physics, chemistry, additional mathematics and the science and technology that is held in high esteem. Suffice to acknowledge that the aim of any business venture (technological or non-technological) is to maximize profit. ‘Money answers all things’ is that common adage. The economic status and technological advancement of a country is measured monetarily. In like manner, the inability to access and assess simple accounting by technological personnel in knowing the financial position and profitability of the organization could affect their ability to monitor performance. Technological practitioners should be encouraged to become informed users of accounting information, more so that technology has become a key factor in defining competitive advantage in the modern business world, and it is likely to become a more pervasive factor of production in the future. Akintunde (2006) affirms that the standard of living of a nation is dependent on the response of practitioners to the dynamic changes in technological development whilst Omuya (1998) described accounting as the language of business. Hence for any technologist to make headway in the global market, he must possess simple knowledge of basic accounting. Therefore, there is the need to learn the language of business.

## **THE NEED FOR FINANCIAL KNOWLEDGE**

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Despite the growth of the global corporate environment which has nevertheless influenced the acquisition of appropriate skills levels among entrepreneurs and organization's workforce (Fakokunde and Mustapha, 2009), technology practitioners seem not to possess the basic knowledge of finance perhaps because it is not part of the mainstream applied science and technology curriculum. They often ignore the accounting aspect even when the aim of their technological venture is to maximize profit. Although, Watts (2003) attributed this to the conservatism in accounting, but Akintunde (2006) postulated that economic and technological progress can only be attained when practitioners and scientists have a change of attitude towards learning outside the box.

Undoubtedly, the main measurement of the economic status and technological advancement of any country is in monetary term. According to David & Foray (1995), the ability to monitor performance of technology by comparing actual performance with planned or targeted performance is essential through knowledge of simple accounting. Aside, decoding financial information will authenticate the demand for improvement in remuneration and condition of service. Hence for any technological personnel to be relevant and compete wisely in the global market, it is imperative to possess a basic knowledge of finance (Adeyeye, 2013).

Finally, the importance of budgeting with all simplicity as a financial proposal that gives a detail source of expected revenue and the expected expenditure should be understood not only by the accountant but also by technological practitioners. This will go a long way in expanding the science and technology knowledge-base (Watts, 2003). Unfortunately, this basic knowledge is missing. Therefore, David and Foray (1995) suggested the need to expand science and technology knowledge base, while Obi (2006) also suggested the need for curriculum reformation on technology education.

## CONCEPTUAL DEFINITION

Accounting is frequently perceived as something that others do, rather than the process of providing information that supports decisions and informed judgment. Relatively few people actually become accountants, but almost all people use accounting information (Igben (2004). Accounting is used in the business world to describe the transactions entered into by all kinds of organizations, be it non- trading (social clubs and societies), trading (sole trader, partnership, limited liability companies); industrial, governmental agencies (social services, governmental units, educational institutions, political committees) or non- governmental agencies in their daily economic and non-economic activities (Adeyeye, 2008).

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Accounting information is used by people associated with business whereas financial accounting is the process of identifying, measuring and communicating such information for decision making and informed judgement (Marshall, McManus and Vielle, 2004). Similarly, Igben (2004) also summarized accounting as the process of collecting, recording, presenting and analyzing/interpreting financial information for the users of financial statements.

Examples of such users and uses are **Owners/shareholders** that evaluate the long - term prospect of the enterprise; **Managers** that supervise performance, plan, direct and control; **Investors** that assess the amount, timing and uncertainty of future cash returns investment; **Creditors** that also evaluate the value of assets and liquid resources for the probability of collection and the risks of late (or non -) payment; **Employers** who monitor performance, progress, ensure job security, better condition of service and trade union negotiation; Furthermore, **Public/Competitors/Customers** ascertain reliability of the venture and their investment; **Analysts/Insurers/Researchers** use it to analysis data for the provision of professional ideas based on findings; **Suppliers** who appraise their ability to pay up the supply; **Government Agencies** such as tax authorities, court, corporate Affairs, Commission, Federal Office of Statistics and Central Bank use it for regulatory purpose, tax assessment and national planning (Afolabi, 1997). Finally, **Entrepreneurs and Personnel in Technology**, in their own case would be interested in using it for the relationship between the financial results and technological activities. Thus it is necessary to acquaint them with basic accounting knowledge to improve their performance.

### **Introducing Basic Accounting Classifications to Technological Staff**

The language of any business is accounting (Omuya, 1998), therefore, there are certain words and terms in accounting which means something else in ordinary course of life that needed to be properly understood in the course of acquiring basic financial knowledge.

The first term is **Book-keeping**. Book- keeping in accounting language refers to the record making stage practiced by accountants and non-professionals alike in many organizations. It is the art of recording the day- to- day monetary transactions for future reference. It is used to accumulate results of business activities over a period of time manually, mechanically or electronically. With regards to this, it should be noted that accounting extends far beyond the art of bookkeeping but are concerned with the use to which these records are put into. These processes of course, do not exclude technological decision making process. Therefore, technological personnel in the course of their duties

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should be able to identify the different kinds of accounts such as financial accounts, management accounts, cost accounts, income tax accounts etc and their uses. In most instances, all these various accounts are handled by an employee referred to as an **accountant**. An accountant is an individual who has undergone a formal or professional training in the process of accounting and belongs to one of the recognized professional accountancy bodies such as Institute of Chartered Accountants of Nigeria (ICAN) (Igben, 2004). Suffice to note that not all that are involved in accounting processes are accountants.

Second is the **Financial Accounting** which is concerned with the provision of information to stakeholders, creditors, employees including technology staff and others outside the organization. It records all financial transactions, analyses the financial information and presents reports/statements to users of these information. Noreen (2003) stated that financial accounting provides the scorecard by which a company's overall past performance is simply judged by outsiders.

Furthermore, **Management Accounting** is a branch of accounting that is concerned with the use of economic and financial information to plan and control many of the activities of the entity. It assists and supports the entrepreneur in the decision making process. Hilton (2002) asserted that the focus of managerial accounting is about the needs of managers in the organization rather than outsiders. These activities of course do not exclude higher level technological staff within the organization.

Also, another classification is the **Cost Accounting** which is a subset of managerial accounting that aids in determining the cost of goods and services produced for effective cost control and profit maximization decision by management (Lipe and Salterio, 2000). Technological personnel need this knowledge to evaluate the cost of their inventions and products for better competitive advantage.

Moreover, **Income Tax Accounting**, the complexity in the law and practice of taxation led to a demand for professionals in this field of accounting. The accountant uses his knowledge to advice management on tax avoidance which is legal instead of tax evasion (Watts, 2003). Technological personnel need a basic knowledge of this field in order to comprehend and communicate adequately in this regard.

Finally, another related classification is referred to as **Auditing**. Auditing can be classified into both internal and external. Internal auditing is the examination and reporting on the work of the various official/section/department in the organization while external audit is executed by an auditor that is appointed by shareholders who reports on the financial statement prepared by the management. According to Monetary Policy (1991), Audit Reports are usually presented in three relatively brief paragraphs:-

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- i. Identification of the financial statements that are audited. It is the responsibility of the management to present the statement while the auditor's responsibility is to give his opinion on the statement.
- ii. Explains and describes the conduct of the auditing in accordance with the Generally Accepted Auditing Standards (GAAS).
- iii. The auditor's opinion 'present fairly in all material respects'...'in conformity with accounting principles.

Other classifications worthy of note are **Governmental Accounting and Accounts of Non-Trading Organizations** which are accounts of governments at local, state and federal levels and also accounts for Not-for-Profit Entities such as Colleges and Universities, Hospitals, Welfare Organizations, Trade Associations and Religious Organizations and so on.

Based on the above classifications, it is inevitable for all technology sector entrepreneurs and personnel to be informed users of these services by acquiring the basic financial knowledge needed for improved performance.

### **Introducing Basic Accounting Terms, Concepts and Abbreviations to Technological Staff**

The acquisition of basic financial knowledge among technological staff also involves the exposition of the following common abbreviations used in accounting such as:

A/C	=	Account not Air-conditioner
Dr.	=	Debit not Doctor
Cr.	=	Credit
Folio	=	Page number
B/f	=	Brought forward
C/f	=	Carried forward

At this point, certain financial concepts and terms need to be introduced and operationally defined. These include:

**Business Entity Concept:** Every business is an entity that is separate, and distinct from its owner (Floyd, 2006). In accounting, all businesses are treated as separate entities from their owners. This is in consonance with the principle of separation from ownership in the theory of bureaucracy. In the eyes of the law, sole traders and partnerships are not separate entities from their owners. Thus a technological personnel need to have the understanding that the firm is different from the owner.

**Bad Debt** is the long and overdue debt that appears irrecoverable.

**Capital** is the total value of resources (cash or kind) the proprietor brought at the commencement of the business. Subsequently, any profits retained are added while losses and drawing are deducted from it. It is the owner's equity.

**Drawing** is the withdrawal of anything (cash or kind) from the business for personal use.

**Purchases** means goods bought for resale.

**Assets** are resources owned by the organization which are not meant for resale. Assets can be divided into two categories: fixed and current assets.

**Fixed Assets** are resources that are permanent in nature and meant to assist productivity. Their economic useful life usually exceed one year. Examples are motor vehicles, fixtures and fittings and so on.

**Current assets** are resources that exist for a short time before being transformed into other kinds of asset. Their life span do not exceed one year. Examples are cash in hand, cash at bank, stock, debtors and so on. Current assets are sometimes referred to as **circulating or liquid assets** because they are revolving by changing from one form to another. This is further illustrated in Figure 1 below.

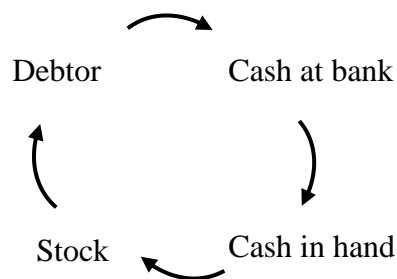


Figure1: The circulation of assets.

Source: Adeyeye, 2008



**Liabilities** are amounts owed by the business. The claims by outsiders over the assets of the organization which may be **long-term liabilities** like bank loan or debenture. It may also be **current liabilities** like creditors, overdraft, and accrued expenses.

**Capital Expenditure** is the money spent to acquire capital items that is not for resale but to aid income generation. That is, money spent on the acquisition of fixed assets.

**Revenue Expenditure** is the expenses incurred which the full benefits are used up within one year. They are used for the day - to - day running of the organization for instance rent, salaries, stationeries, transport etc.

**Book of Subsidiary Entry** is the book of prime entry or like a diary. Entries are made from the source documents (invoice, receipt, bills and so on) into this book. It is often referred to as Journal or Day Books. There are Sales journal, Purchases, Returns inward, Returns outward, proper journal and Cash book. A specimen of entries in a journal is shown in Figure 2

Title			
Date	Invoice No	Customer's name	Amount

Figure2: Specimen of a Journal

Source: Wood, (1998)

**The Ledger** is the book that contains all the accounts for the transactions of a business organization. Entries are posted from the subsidiary book to the ledger. It is the principal book of account. An account is a page in the ledger divided into two equal halves as shown in Figure 3 below.

Dr.				Title				Cr.			
Date	Particulars	Folio	Amount	Date	Particulars	Folio	Amount				

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Figure 3: Specimen of a Ledger.

Source: Wood, (1998)

**Single - entry and Double - entry method.** These are the two basic methods of recording into the ledger. While single – entry is a direct recording of transactions in the raw form into the books. Double – entry requires the recording of transactions from the journal into the ledger following these three principles:

- a. Debit the receiver or the account that receives.
- b. Credit the giver or the account that gives
- c. For every debit entry there must be a corresponding credit entry and vice versa.

Acquisition of all this knowledge is basic and will go a long way in assisting the technological personnel to achieve better performance.

## **STATUTORY AND REGULATORY FRAMEWORKS OF FINANCIAL ACCOUNTING**

It is also of utmost importance for technology sector entrepreneurs and personnel to know and comprehend the existence of certain statutory and regulatory frameworks and standards guiding the practice of accounting as a profession in order to ensure orderliness, consistency and uniformity like in any other professions. The statutory framework comprises the statutes enacted by government to govern the conduct of economic activities. In Nigeria, the main one is the Companies and Allied Matters Act (C.A.M.A) 1990. The regulatory framework consists of the non-statutory statements, circulars and pronouncements which are to be complied with in conduct and recording of economic activities. Such include Accounting Standards and Central Bank of Nigeria (CBN) monetary policy circulars (Monetary Policy, 1991).

**Accounting Standards.** Accounting standards according to Igben (2004) is a statement issued by the appropriate standard- setting body locally or internationally on specific area or topic in accounting, the acceptance / application of which is mandatory for preparers or users of financial statements. For instance, there is the standard for the presentation of financial statement, Depreciation accounting, earning per share and so on. Any deviation from the set standard will not be acceptable in such country where it has been prepared.

Internationally, there is the International Accounting Standards Board (I.A.S.B) that issues International Financial Reporting Standards (IFRS) while locally in Nigeria there is the Nigerian Accounting Standards Board (NASB) established in 1982 issuing the Statement of Accounting Standards (SAS) which is the main acceptable reference point in accounting in the country today. All country of the world has its own local board which is a replica of the international board to serve its community (Afolabi, 1997). For instance, there is the UK Accounting Standards Board.

## RECOMMENDATIONS

Obviously, there is still much to be done in the pursuance of the efforts at introducing and improving technological staff's knowledge of accounts and finance in the organization, which is now seen as a sine-qua-none to improved performance. The need then arises for the repositioning of personnel in technology to embrace serious efforts made towards financial literacy. These efforts should include the following:

- Awareness forum for personnel in technology to be abreast of their interrelationship with other professionals.
- Seminars educating and exposing technological personnel to some basic knowledge of accounting.
- Policy makers should review the present policy to include basic accounting courses in the curriculum of science and technology students in tertiary institution.
- On-the-job training and conferences for personnel in technology to include an overview of financial accounting.

## CONCLUSION

This paper recognizes, on one hand, the tendency of entrepreneurs and personnel in the field of technology to be rigid, conventional and isolated, and on the other hand, the need to judiciously use money as a yardstick for measuring the output of technological activities and converting it appropriately to economic values. Practicing entrepreneurs and technology sector personnel must therefore comprehend simple accounting vocabularies that will be of assistance to them in evaluating the relationship between the financial result and technological activities in decision making. Also in this paper, the various types of accounts were enumerated and highlighted. Common

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abbreviations and terminologies were explained. The statutory and regulatory frameworks are simply expatiated. Certain recommendations such as awareness forum for technological personnel to discover the interrelationship with other professionals and others were made. The implementation of these suggestions among others therefore is expected to exert greater influence on the modern-day increasing technological drive witnessed in all sectors of human endeavours worldwide. Further research could investigate the level of exposure of technological entrepreneurs to accounting knowledge and the effect on organizational performance.

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