Article

Appraisal of Value of Information in Executing Socio-Economic Activities in Nigeria

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Information Impact

Information Impact: Journal of information and knowledge management 2018, Vol. 9 (4) Pg 73-82 ISSN: 2141 – 4297 (print) ISSN: 2360 – 994X (e-version)

Abstract

The paper examined and appraised the actual meanings of the concepts of value, information and information value in different ways. As value is the worth, price or cost of something, information is accepted as that which increases the state of knowledge. The two concepts are integrated to mean importance attached to something according to perceived worth and which makes it desirable. The attributes, qualities, and categories of information are surveyed to add value to information value. The documentary study of information as commodity and analysis of information and the economic price system are duly discussed. Librarians' roles in marketing the value of information are critically discussed to bring out the true nature of information as a material with intrinsic value which can be disseminated, absorbed and used. After highlighting the importance and sources of information resources the paper recognizes information as an indispensable socio-economic need of life which must be harnessed with the information and communication technology to build a well informed society.

Keywords: information, information value, information worth, information cost, information commodity

Introduction

Human beings are usually created with socio-economic needs of life. Some of these needs are more important than others. Air, water, food, information form the most important of all the human needs. Ironically information is not valued as a necessity in some parts of the world. But on a closer survey one can safely infer that information is important in all spheres of life depending on how we value it. Value varies according to understanding of individuals. This is why it is difficult to provide the exact meaning of the word – value. *The Merriam* – *Webster Online Dictionary*(2015) defines value as : Usefulness, importance, the amount of money that something is worth, the price or cost of something. On the other hand it means to scale or rate in usefulness, importance according to its perceived worth, importance or worth, regard something highly, qualities considered worthwhile and desirable. Value is an outgrowth of human desires to satisfy information need.

Information on the other hand is knowledge that you get about someone or something, facts or details about a subject. Aina, (2004) maintains that information is that which increases the state of knowledge of a recipient, which resolves uncertainty, or which adds value in decision making. He also states that the information is body of knowledge and all published and unpublished knowledge about any given subject.

At this point it is vital to integrate the meanings of the two concepts – value and information. Information value is therefore the importance attached to information according to its perceived worth, the qualities of information considered worthwhile and desirable. The intrinsic nature which evokes the sense of high regard for information is the value. The value is highly dependent upon the giver or source of information. The value cannot be quantified or fixed. Time is of necessity to the value of information. Information value is intangible as it can be felt but not touched.

Though information value is intangible it is the people that feel the impact of the value in their various social and economic activities which form part of their living in the society. Every society in Nigeria has a social setting where they interact and engage in diverse activities, be it economic, agricultural, educational, cultural etc. All these activities are dependent upon the use and application of the information value, (Unegbu &Nwanekezie, 2014).In essence, Merriam-Webster Dictionary relates social setting to human society designed for the interaction of the individuals or group as means of achieving individual or group objectives. The interactive activity which involves the use of information also has some economic and other practical significance.

Attributes and features of valuable Information:

Good information is that which is used and which creates value. Experience and research show that good information has numerous qualities. Good information is relevant for its purpose, sufficiently accurate for its purpose, completes enough for the problem, reliable and targeted to the right person. It is also communicated in time for its purpose, contains the right level of detail and is communicated by an appropriate channel, i.e. one that is understandable to the user. Further details of these characteristics related to organisational information for decision-making follows.

Availability/accessibility:

Information should be easy to obtain or access. Information kept in a book is only available and easy to access if accessibility is properly ensured. A good example of availability is a telephone directory, as every home has one for its local area. It is probably the first place you look for a local number. Businesses used to keep customer details on a card-index system at the customer's branch. If the customer visited a different branch a telephone call would be needed to check details. Now, with centralised computer systems, businesses like banks and building societies can access any customer's data from any branch.

Accuracy:

Information needs to be accurate enough for the use to which it is going to be put. To obtain information that is 100% accurate is usually unrealistic as it likely to be too expensive to produce on time. The degree of accuracy depends upon the circumstances. At operational levels information may need to be accurate to the nearest penny – on a supermarket till receipt, for example. At tactical level department heads may see weekly summaries correct to the nearest Naira, whereas at strategic level directors may look at comparing stores' performances over several months to the nearest N100,000 per month.

Accuracy is important. As an example, if government statistics based on the last census wrongly show an increase in births within an area, plans may be made to build schools and construction companies may invest in new housing developments. In these cases any investment may not be recouped.

Reliability or objectivity:

Reliability deals with the truth of information or the objectivity with which it is presented. You can only really use information confidently if you are sure of its reliability and objectivity. When researching for an essay in any subject, we might make straight for the library to find a suitable book. We are reasonably confident that the information found in a book, especially one that the library has purchased, is reliable and (in the case of factual information) objective. The book has been written and the author's name is usually printed for all to see. The publisher should have employed an editor and an expert in the field to edit the book and question any factual doubts they may have. In short, much time and energy goes into publishing a book and for that reason we can be reasonably confident that the information is reliable and objective.

Compare that to finding information on the Internet where anybody can write unedited and unverified material and 'publish' it on the web. Unless you know who the author is, or a reputable university or government agency backs up the research, then you cannot be sure that the information is reliable. Some Internet websites are like vanity publishing, where anyone can write a book and pay certain amount of money to publish it.

Relevance/appropriateness:

Information should be relevant to the purpose for which it is required. It must be suitable. What is relevant for one manager may not be relevant for another. The user will become frustrated if information contains data irrelevant to the task in hand. For example, a market research company may give information on users' perceptions of the quality of a product. This is not relevant for the manager who wants to know opinions on relative prices of the product and its rivals. The information gained would not be relevant to the purpose.

Completeness:

Information should contain all the details required by the user. Otherwise, it may not be useful as the basis for making a decision. For example, if an organisation is supplied with information regarding the costs of supplying a fleet of cars for the sales force, and servicing and maintenance costs are not included, then a costing based on the information supplied will be considerably underestimated. Ideally all the information needed for a particular decision should be available. However, this rarely happens; good information may be incomplete. To meet all the needs of the situation, you have to collect it from a variety of sources.

Level of detail/conciseness

Information should be in a form that is short enough to allow for its examination and use. There should be no extraneous information. For example, it is very common practice to summarise financial data and present the information, both in the form of figures and by using a chart or graph. We would say that the graph is more concise than the tables of figures as there are little or no extraneous information in the graph or chart. Clearly there is a trade-off between level of detail and conciseness.

Presentation

The presentation of information is important to the user. Information can be more easily assimilated if it is aesthetically pleasing. For example, a marketing report that includes graphs of statistics will be more concise as well as more aesthetically pleasing to the users within the organisation. Many organisations use presentation software and show summary information

via a data projector. These presentations have usually been well thought out to be visually attractive and to convey the correct amount of detail.

Timing

Information must be on time for the purpose for which it is required. Information received too late will be irrelevant. For example, if you receive a brochure from a theatre and notice there was a live band by your favourite band yesterday, then the information is too late to be of use. Information is dependent upon time for its value.

Competitive advantage

The relative importance of information for decision-making can increase or decrease its value to an organisation. For example, an organisation requires information on a competitor's performance that is critical to their own decision on whether to invest in new machinery for their factory. The value of this information would be high if available on time. Always keep in mind that information should be available on time, within cost constraints and be legally obtained.

Categories/Types of Information

Uhegbu (2007) categorises information into ten and describes as follows:

1. Economic Information: This is based on issues like cost of goods and services, location of industries, salaries and wages, employment/unemployment statistics loans and credit news etc. Issues like foreign exchange transactions, investment opportunities etc also come under economic problems. The effects can be measured and quantified monetarily.

2. Social Information: This reflects on the social life of the information seeker, the effects of which can be quantified and measured in terms of money. This type of information enhances interpersonal relationship in the society; by way of social integration, companionship, respect and integrity etc. It enables the individuals understand and keep abreast of what is going on in his community. One is always aware of issues like housing accommodation, burial ceremonies, child naming ceremonies, religious activities etc.

3. Political Information: Polities means quest for power and allocation f resources. Political information enables the person effect changes on democratic principles, choice of political parties, campaign strategy, election methods and voting patterns of the electorate, constituency issues and use of individuals to win election. The politicians and leaders of all types will require this type of information.

4. Cultural Information: Culture is the totality of the people's way of life. The cultural information makes the information user have a better understanding of himself, his origin and identity. He knows the norms, mores and societal values.

5. Health Information: This type of information takes care of about the wellbeing of the individuals, His physical and emotional states. The individuals will require the information that will make him have physical and emotional stability. It will incorporate information about sanitation rules regulations, family planning, disease control, drugs and their roles, health centres, clinics and hospital locations etc.

6. Sports and Entertainment: The information about recreational activities is essential and the information is acquired from knowledge about sports and entertainment. The items

of information in this area are gathered from music of different types, local and international soccer activities Musical Band entertainment etc.

7. Security Information: Every member of the society wants to be safe and peaceful. The activities of social miscreants to avert physical assault by people armed robbery, contact address of security information to the people makes for individuals and collective alertness.

8. Educational Information: This has to do with news and data that assist in the promotion of teaching and learning in our institutions of learning whether at primary, secondary and tertiary levels. Owing to the degree of importance attached to education educational information is the perhaps the most crucial type of information in Nigeria. It relates to issues such as scholarships and sponsorships, admission criteria, examination results and cancellations, examination and school fees, educational programmes, examination malpractices etc.

9. Agricultural Information: This is all about production of crops and animals for the society. Farming is also an essential occupation for feeding the populace. Information in this area is therefore very important. Information in this field includes modern methods of cultivation, fertilizer production and procurement, sources and methods of procuring agricultural loans. Other information areas for agriculture include: animal husbandry, poultry farming, seed multiplication programmes, fishery, farm management etc.

10. Scientific and Technological Information: Science and technology fosters rapid development. For it to continue to execute this role effectively there must be abundant flow of scientific and technological information. Information on this area encompasses modern inventive methods, technological innovations in Engineering, information and communication technology, automobile and aerospace technology, research findings in science and technology and so on.

All these categories which are associated with all facets of our socio-economic activities clearly indicate that information is needed in all facets of our socio-economic systems for our normal functioning in the society.

Cost and value of information

Information should be available within set cost levels that may vary dependent on situation. If costs are too high to obtain information an organisation may decide to seek slightly less comprehensive information elsewhere. For example, an organisation wants to commission a market survey on a new product. The survey could cost more than the forecast initial profit from the product. In that situation, the organisation would probably decide that a less costly source of information should be used, even if it may give inferior information.

Many students in the past few years have confused the definitions of value and cost.In his view Ononogbo (2006),says that information gained or used by an organisation may have a great deal of value even if it may not have cost a lot. For pricing of product the consumer will look at the value related to it and evaluates the process of generating the service and the total transaction cost.Hence, value is the benefits received from the burden endured, (Kumar & Kumar, 2008). The benefits may be product quality, personal services and convenience. Economically speaking cost is what you will forego in order to obtain value.

Much more valuable is a stock system which can tell you instantly whether or not the book is in stock, linked to an on-line system which can tell you if the book exists, where it is available from, the cost and delivery time. This information has far more value than the other two systems, but probably actually costs quite a bit less. It is always up-to-date and stock levels are accurate.

We are so used to this system that we cannot envisage what frustrations and inconvenience the older systems gave. The new system is certainly values for money.

What is Information Value?

Information has become an element of commerce. In earlier times, success was based on such criteria as control of finance, physical resources, writing, food, fire or shelter. But Fenner (2012), states that today, successful people and businesses are those who control information: its development, access, analysis and presentation. We refer to our era as the ''Information Age. ''We buy and sell information, sometimes with money and some times by trading it for other information. Information, as an element of commerce, is a commodity, yet there are no cogent, universally accepted accountings or economic theories of information.

Adimora (2005) ,while reviewing the value of information through its economics argues that there are various frameworks in which we try to view and define information, various attempts to measure it, decide what kind of value it has, and determine how much it is worth. For example, disciplines such as economics, accounting, sociology and behavioural science regard information in very different ways. Economists define information as phenomena that reduce uncertainty, and measure it in terms of exchange rates based on supply and demand. Accountants think of costs and benefits (debits and credits), while sociologists concern themselves with the net public good of information. Behaviourists study cognitive and behavioural change brought about by information. Clearly, placing value on information is not a straightforward, single-step process.

Information passes through many stages before it has value to anyone. It exists first in a latent state, waiting for the right paradigm or perspective, long before anyone recognizes it to be information. Then we realize that raw, unorganized data may be of some use. We collect it, organize it, analyse it and draw conclusions from it. Both the information and our conclusions can be communicated. Only when information has been comprehended, can we value it and respond to it.

A determination of the actual value of information can be made only at this final stage. Information has no value in itself; its value is derived from its understanding and subsequent application. Before this last state we can do no more than estimate the value we expect it to have. Society values only the product, or result, of information.

Information as Commodity

Business regards information as a commodity and the possession of it as an asset. Economists would like to treat and account for information in the same way as physical asserts. However, no discipline has given us an accepted model for such treatment although analogies abound. Information can, to some extent, be valued in the same way as the other assets of organizations, and included in their financial reports. As inventory, Information goes through the value-added states or raw material (events or processes to be measured), work-in-progress (information in development), and finished goods (marketable information). Information gathering and presentation require capital investment and human labour. Besides being costly to acquire information incurs management costs. Like physical assets, information faces quality control inspection before it can be distributed. Information is subject to just-in-time requirements, just like physical inventory. Left on its own, its value may depreciate over time.

At each state or level of information, there are specialized vendors and customers. Seekers of information may overpay and providers of information may undercharge because they do not differentiate among levels and varieties of information transactions. This is due to problems in identification and measurement of information.

Information and the economic price system: a review

Stigliz (2000) refers to the belief of early twentieth century economists that the decentralized price system led to the efficient allocation of resource 'it was hopedthat 'the same kinds of tools that provided insights into other branches of economics would work in the 'economics of information'. 'In fact, to stiglitz the price system is not a satisfactory model for the economy since it does not acknowledge problems of information, 'the ways in which information differs from physical commodities.

Barlow (1994), referring to 'information commerce', sketched an outline of the nonmonetary ways that society assigns value to information. Generally, Barlow says information increases in value as it becomes more familiar, unlike physical goods that are more valuable when they are scarce. Sometimes scarcity does increase the value of information as when, for example, the possessor of a secret profits from knowing it. In these instances timing is as much the determinate of value as is the information itself. The person who is closest to the information at the time it is produced is the one who benefits from implementing it. The information becomes less valuable, less relevant, as the interval between its formation its formation and its use increases. Barlow also points out that the value we place on information is affected by the reputation or point of view of the provider. We value the opinion of people recognized as experts, and those people sell us their way of perceiving the world at the same time as they provide us with information.

In further analysis of difficulties of pricing the value of information he

highlights the peculiar differences between information and material commodity.

It is very difficult to measure the value of information according to the price system. Its characteristics make it both like and unlike physical inventory. Thus he differentiates information from ordinary material commodity with the following:

- Information is not necessarily a product of manufacturing.
- Information can often be produced at little or no cost.

• Each items of information is different from every other. If it is not different, it is not new information. The same product can be bought repeatedly from the same store, but information once provided or 'sold' cannot be 'bought' again since the 'buyer' already knows it.

• Information may be exchanged, but exchange is not necessary. Receiving information can be an entirely individual or personal experience, and information can be received when a person is in contact with a non-human environment only.

• Information is not necessarily scarce, though well- analysed, well presented, and welldisseminated information is not always available.

• Information is non-rivalrous. It can be consumed by one person and still be provided to others at additional cost.

• Information can have multiple effects, both positive and negative, often at the same time

• Information can be both stabilizing, and destabilizing often at the same time, for different subjects.

• Information may be available yet not be provided where it is needed, and information provided is not always used effectively.

• There is no such thing as perfect information, which would be the presence and effective use of all existing, applicable, necessary knowledge.

• Information may be either subjective or objective or both at the same time.Unlike material objects that either exist, information can exist in part.

• Information may be totally false or true, partially false or true, or neither false nor true.

• Information is both a public good and a private commodity. One person's consumption of information does not necessarily reduce the amount available to other, its cost or its value notwithstanding. Information, unlike objects, cannot exist apart from value. According to Unegbu and Nwanekezie (2014) the importance of information in the execution of human activities has long been recognised as no society can thrive successfully without adequate supply of information .Economic growth and social harmony depend on information.

Information marketing and librarians

Librarians view themselves as information professionals. How do they view information? In the past, librarians have busied themselves most with the communication or transmittal stage of information process. Others do the collecting and organizing of information writers, artists, and publishers, for example. Librarians present this gathered content and make it available. While a librarian must be aware of content, knowing what it is and where to find it, his or her chief concern is with the presentation of content, not with its production.

At present librarians are keenly interested in the format in which information appears, and with its means of presentation. Many library conferences and journal articles focus on the characteristics of print versus electronic formats, or discuss commercial enterprises such as content mediators that librarians fear may encroach on territory they consider their own.

In the literature of library science there is much discussion of value-added information services. Both librarians and their clients have become concerned about the glut of information, asking how to eliminate needless and worthless data in the search for appropriate content. For library users, there are very real barriers to accessing, analysing, and applying information, and librarians add value to information whenever they reduce the barriers to it. Value is added in easing the finding of the most appropriate, complete source of information, and in easing connections with information. Value is also added in easing the

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analysis and processing of information, and in facilitating its application. Consultants of all sorts know this well, and it is plain to see how much value our society places on providing hand-holding and turn-key solution.

For all their concern with providing information access, giving good service to users, and adding value, librarians are hampered by the fact that information cannot yet be quantified and valued in any measurable way. Each element of information –handling requires its own accounting: acquiring information, presenting information, analysing information and so on. What is the relationship between the expense incurred in collecting information and the value of that information? This is a troublesome question for librarians. They must plan for the future, justifying increasing expenditures to their funding agencies, in the absence of a meaningful scheme to measure the value of information.

Librarians have long recognized the interrelated nature of knowledge, the many ways in which information produced in one discipline is integrated into another. Rather than finding analogies for valuing information in the fields of business, economics and accounting, information scientists could shape metaphors from other models. For example, information could be compared with the processes of metabolism,(Fenner,2002). In the metabolic character he states that:

• Information is always in circulation. It acts as the medium of exchange, the content of exchange, and the valuing mechanism of the exchange.

• Contradictions are evidence of being out of stable state of equilibrium; they occur when the circulation of information is blocked.

• Information is disseminated, absorbed, and used in a way that can be likened to an organism's use of nutrients.

• Just as most chemical alterations occur at a cellular level, integration of information can take place only as an individual phenomenon.

• Information is integrated or comprehended at discrete levels, in a stepwise progression, just as energy levels within the molecule progress from lower energy to higher energy in discrete stages.

• Information is an inherent property of structure. Some information is stabilizing while some is destabilizing. Some destabilization is necessary to arrive at higher levels of integration and complexity.

• Higher levels of information, meaning greater integration of information, bring greater power, longer periods of stability, and wider vistas of understanding.

Money is a means of exchange, a way of measuring needs and wants, status and social expectations, scarcity and copious supply, quantity and quality, usefulness and satisfaction, and so forth. However, the price system is an aggregate system. We cannot easily determine value at an individual level. It is obvious that the price is rarely equivalent to intrinsic value. Perhaps value is, at root, a metaphysical construct. Is money the best surrogate for value? Could information itself better represent value? Information is a larger and more inclusive concept than money. Could information become the currency of a new barter system, a true information economy? Irrespective of the difficult and contradicting situation librarians deliver large quantities of information without due consideration for the value.I foresee a situation whereby librarians and information experts will begin to charge fees for services

rendered in all types of libraries. This will be in line with the great importance attached to information in modern Nigerian society.

Conclusion

As the value of information is an indispensible socio-economic need of life, there is need for librarians and information scientists to fashion out ways of driving home the great importance of applying the use of information in every facet of our endeavours. Making information and communication technology resources accessible is essential. All these will help build information literate and well informed society.

References

- Adimora,E.N.O.(2005). The economics and politics of global information: the lot of developing countries. *Communicate journal of library and information science* (1&2) 1-14
- Aina, L.O. (2004). *Library and information science text for Africa*. IbadaThird world information services
- Aniebo, M.U (2010) Information literacy: An essential ingredient for effective use of information resources in university libraries in Nigeria. *The Research librarian: Journal of the NLA, Abia state chapter, No.4*
- Atherton, P. (1977). Handbook for information systems and services Paris: UNESCO
- Barlow, J.P. (1994). The economy of ideas. Wired 2, 45(84)
- Fenner, A. (2002). Placing value on information. Library Philosophy and Practice, 4;(2)
- Kumar,D.B. & Kumar,K.S.(2008).Marketing of library and information services in global era :a current approach.Webology, 5;(2) www.webology,ir/2008/v5n2/a5b.html
- Kumar,K. (2006).*Reference service*, 5threv.ed.New Delhi:Vikas publishing.
- Merriam-Webster Online Dictionary. (2015). Definitions of value, social and econtinuity in educational technology. Onitsha: West and Solomon publishing.
- Olukemi, A.O. (2006). The role of information in enhancing the status of Women in developing countries. *Nigerbiblios*, 17 (1&2):151
- Ononogbo, R.U. (2006). Economic dimension of information. *Communicate journal of library and information science*, 9(2):1-4
- Reitz, J. (2005). *Dictionary for library and information science*. Westport: Libraries unlimited.
- Stiglitz, J.E.(2000)The contribution of the economics of information to twentieth century economics. *Quarterly journal of economics: 115(1441-1478)*
- Uhegbu,A.N.(2007).*The information user: Issues and themes*,2^{nd ed} ed. Okigwe: Whytem publishers
- Unegbu,M.C.&Nwanekezie,N.(2014) *Economics and marketing of information services and products*.Owerri: Cel-Bez Publishing