

# **INFORMATION LITERACY: A SINE QUA NON FOR ENVIRONMENTAL SCANNING**

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## **Abstract**

*The external environment is becoming more uncertain and volatile. To be successful and retain competitiveness, organizations have to regularly detect external signals systematically process information and use such information. Environmental scanning is a way for organizations to detect changes and thereby formulate a strategy to cope with uncertainties. Information literacy skills are required to conduct effective and efficient environmental scanning activities as it is an information intensive process. The development of information technology and telecommunication, and libraries provides various channels and applications for accessing, processing and distributing information, which requires information literacy skills for dealing with environmental information scanning. This paper therefore discusses the issues in environmental scanning, rationale for information literacy on environmental scanning, and aspect of information literacy needed for environmental scanning. Challenges of conducting environmental scanning and recommendations were also shed lighted.*

**Keywords:** *Information, information Literacy, Library, Environmental Scanning*

## **Introduction**

Nowadays, man lives in a complex environment with endless struggle and challenges. The means of living has ushered in new type of environment that open widows of opportunities for business process to strive. The opportunities created are divert and very difficult to assessed in-terms of level of genuine success, and level of crimes. To this, man was uncertain to his quest for economic, political, and socio-

cultural survival in the society (environment). But one thing that has been helpful to him is information, which its availability will create healthy and progressive environment, while without it keep the environment/man in dark. According to Uhegbu (2007), information is something that changes person's state of knowledge in a subject that affects or influences his environment in the conduct of its business. It makes man take negative or positive decision. This is what man had lived with since creation.

For an individual, group and organization to identifies information relevant for their business environment, or to scan or to identifies some hazards/ key issues, or to solve some pertaining problems, or to make a wise decisions, they must acquaint themselves with certain skills, or obtains some level of literacy relevant to analyzed, assessed, retrieved and justified information.

Information literacy is a skill to search process and evaluate information, to conduct research, make decision, and solve problems, and to fit in to their work environment. Klause (2000) states that information literacy includes ability to access evaluate and apply information effectively to situation requiring decision-making, problem-solving and acquisition of knowledge.

Since environmental scanning connotes systematic process of detecting environmental signals, and ascertain a way to deal with uncertainties. In the words of Aguilar (1967), environmental scanning is a process of acquiring information about events and relationships in a company's outside environment, the knowledge of which would assist senior management in the task of charting the company's future course of action. According to Lester and Waters (1989) environmental scanning is a management process of using information from the environment to aid decision making through the process of obtaining, analyzing and using information. In environmental scanning, the organization scans the environment in order to get an understanding of external influences so that it will develop effective response that secures or adjust its position in the future. In other words, the basis of environmental scanning includes both looking at information (viewing) and looking for information (searching) (Choo, 2002).

The need for environmental scanning arose today, because, organizational environment has become more and more turbulent and uncertain due to political realignments, economic crises, terrorism threats, technological innovations and natural disasters (Majid and Kowtha, 2008).

Environmental scanning is very imperative and critical for all types of organizations to survive. And to remain successful, organizations have to closely monitor their task and remote environments, and use the acquired environmental information to assist tactical and strategic decision making. Therefore, to obtain result, organizations ought to be conversant with ability to identifies, evaluates, recognizes, locate needed

information, and used the information productively to the task of environmental issues.

### **Rationale for Information Literacy in the Business Environment**

Information literacy, the key to information access, has not been of great concern in the business environment. Employees tend to attend more to the need for computer skills than information literacy skills (Bruce, 1999). Nevertheless, having the ability to handle technology is good, but does not necessarily mean that they are information literate (Cheuk, 2002). Negative examples were observed in various workplace contexts, such as "unable to determine the nature and the extent of the information needed", unable to retrieve information effectively from the information systems", not aware of the full range of resources available" and so on, which may result in increased operating cost and inability to fully exploit valuable information sources (Cheuk, 2002; O'sullivan, 2002). To become information literate person simply means, to possess the ability to identify, retrieve, justify, explore, and verify needed information required for productive workforce.

Drucker (1992) elaborates the need for organizations to become information literate, he suggests that organizations need to learn to ask questions as: What information do we need in this company? In what form and how do we get it? Mutch (1997) and Layman (2001) also point-out the potential importance of information literacy skills to business as they outlined how the concept might be employed within the business field. Information literacy is a means of helping individuals handle the massive amount of information that pervades their daily life. Karim and Hussein (2008) state that good and quality information can improve decision-making, enhance efficiency and allow organizations to gain competitive advantage.

Also, information literacy skill aids in scanning business environment, determining the market opportunities, as well as hazards and uncertainties. These would yield in ascertaining the due position of the organizations, in its environment (internal and external), and (product) market flow.

Knowledge of environment is very vital for business to thrive; as external environments are becoming more uncertain and volatile due to various factors, such as rapid globalization, technological innovations, frequent economic crises, political realignments, terrorism threats, and natural disasters. As a result, organizations need to regularly X-ray their environment. Systematically process and use such information to maintain competitive success. And only information literacy can imbue individual and organization with a worthwhile knowledge to scan business environment and obtain success.

## **Aspect of Information Literacy Skills Relevant for Environmental Scanning**

Information literacy skill relevant for conducting environmental scanning includes;

- ❖ **Identification of Information.** Recognizing the information needs and environmental requirement of an organization is a way forward of attaining significant strategies for promoting organization-wide creativity and innovation. In the context of environmental scanning, information need occurs when the existing organizational knowledge cannot cope with the signals from the external environment. In other words, organization needs to acquire more information to analyze its environment and adapt to it accordingly. A good recognition is essential, as they determine the scope and depth of environmental scanning. Therefore, information literacy (if possessed) plays crucial role in helping organizations to identify information they needs at a point in time.
- ❖ **Acquisition of Information.** Acquisition of information aims to satisfy the identified information needs. In this literature, three key issues are highlighted during the process of information acquisition, where to collect, how to collect, and what to collect. Where to collect, regards the sources of information, which medium or channel can be used to acquire the identified and needed information? How to collect, regards to methods and techniques of retrieving the needed information. What ways is suitable to collect the information? What to collect regards to exact information is needed; is it hazard, terrorism, crime, market, products etc? Information literacy is very helpful in taken appropriate decision as regarded to the questions.
- ❖ **Information Judgment.** Ability to justify information collected aided in environmental scanning, organizations are therefore required to possess this vital skill to ensure that working documents (information) are appropriately sieved. With this skill, studying and understanding of peculiar or divert nature of environmental uncertainties can be vividly made and structurally matched with decisions to suit the prevailing situations.
- ❖ **Communication Skill.** Ability to communicate the information coined, to the issue of organizational environment will determine the success or progress of the organization. This aspect of information literacy is very importance to the various group to ensure right ways, methods and design are succinctly followed to channel, and establishes their protocol to the environment.
- ❖ **Information Processing and Synthesizing Skill.** This connotes ability to evaluate, analyze, verify, and diagnose information. Ifs the aspects of information literacy that equipped organization to extract meaning from

the study of environment. The collected information should be analyzed for issues and trends that may influence the organization, to assist users to acquire a better sense of situations and make better decisions, and hence facilitate the creation of a dynamic knowledge capability. The relevant information from each source should be extracted and information from multiple sources should be organized. Srinivas (2009) points out that questions needed to be addressed during processing are: Which parts of the information collected will be used? What additional data is needed? How can information be best presented to enable situation understanding and problem-solving? Inadequate titting of information would result in information overload; with inadequate time for assessment; the collected information will provide either a recital of facts or a "dump" of data with little advice or confirmation (Myburgh, 2004). Without proper information processing skills, the gathered information would be underutilized as "the organization does not know what it knows" (O'Dell & Grayson, 1998).

### **Challenges of Conducting Environmental Scanning**

Some organizations, especially those in smaller size, may not be able to conduct environmental scanning by themselves, due to some factors such as;

1. Lack of resources or well trained personnel information literacy. In this context, organizations may not be able to look deep, into the need to scan environment, as well be unable to seek information concerning its surroundings. These occurrences may leads to incapacitation to adapt to new surge of environment
2. Unable to determine the nature of environment and the extent of the information needed, and unable to retrieve information effectively from the information system, not aware of the full range of resources available, and so on; Which may result to increased operating cost and inability to fully exploit valuable information sources (Cheuk, 2002; O' Sullivan, 2002).
3. Negligent or ignorant of environmental scanning. Most organizations are totally unaware of its environment or has negative attitude to environmental scanning. When this is the case, such organizations will be floating in the sure of risk of environmental uncertainties, which are capable of consuming their existence.
4. Inability of the libraries and information centers to square-up awareness on needs for environmental scanning to the public domain. As the concept environmental scanning is relatively new and emerging to the general public.

5. Inadequate funds. Information sector has suffered set back due to poor availability of funds or mismanagement of available fund met to resuscitate the decaying information system. This has led to poor use of ICT's facilities to provide information, lack of hiring information professional, inefficient library and information (re)sources and services, and degradation of librarian's professional services to the society. These therefore, hampered environmental scanning.
6. Inability of the organization to detect their environment or decide what type of information products and services will be useful based on the attributes of their external environment.

### **Way Forward**

As an information need of organizational surrounding differs, so their information on external environment affairs; but to ameliorate the challenges encountered, the following measures have to be used;

1. Libraries and information centers will consider offering periodically, a variant of information services tracking information needed for current environmental situation and making it available for public use. Also, alerts like "breaking news" on detecting an important environmental signal requiring immediate attention of their clients. Information centers may send an SMS "alert" or push email to all concerned individuals and departments for taking appropriate action and formulate adaptive strategy. Such an information services could help organizations to immediately respond to an emerging situation at an early stage, and avoid or minimize its negative impacts.
2. In other to transform employees to become knowledge workers with the required information skill and to make organization to identities with the importance of scanning their business environment Libraries and information centers should be able to provide customized staff training services according to organizations information strength and needs. This will help to improves information and environmental literacy skill of the employees and the employers.
3. Provision of adequate funds and honest management of available funds should be made for acquisition of information (re)sources, hiring of information professional, and training of employers on information literacy. This will help organizations and libraries and information practitioners to work mutually in providing information needed to make decisions.
4. Organizations should found scanning of their business environment as important as their business operations, because external environment determine the success or failure of accomplishing their organizational objectives.

## Conclusion

Information literacy is about people's ability to operate effectively in a society. This involves critical thinking, an awareness of personal and professional ethics, information evaluation, conceptualizing information needs, organizing information, interacting with information professionals and making effective use of information in problem solving, decision-making and research. It is these information based processes which are crucial to the character of organizations, and which need to be supported through organization's information technology and illiteracy skill acquisition. Environmental scanning could provide early warning signals for organizations and help companies develop and modify business strategies to meet changing external circumstances and hence improve their competitiveness and performance. As external environment is becoming increasingly complex and turbulent to conduct businesses, environmental scanning is sine qua non for adaptation to uncertainties. Employers/employees must possess the corresponding information literacy skills with support from the various librarians and information specialist. Therefore, problems noted in conducting environmental scanning should be given maximum resolution in order to retract them.

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