The mediating role of Information professionals in Environment scanning for the Intelligent Corporate Financial competitive edge in Kenya

Dr. Naomi W Mwai[1], Dr. Mbenge T.Ndiku[2]
[1,2]Lecturer, Department of Information and Knowledge Management, Technical University of Kenya, Kenya

*Corresponding Author:
Dr. Naomi W Mwai
Email: mwainaomi@yahoo.com

Abstract: The strategic value of competitive information to a corporation has received increased attention in management, business practice and information literature. Top level managers make strategic decisions that place the organization in situations that allows it to compete and adapt to turbulent environments in which the competition, market, technology, and social conditions are constantly changing. This paper aims at establishing the mediating role of information professionals in obtaining and disseminating information to enable the top level managers makes strategic decisions. The specific objectives are to; establish the sources of information for scanning, investigate environmental scanning methods utilized, establish the communicative methods utilized by information professionals to disseminate information and investigate the factors limiting effective environmental scanning. The study adopted a multi-case study of four financial institutions namely Bank of Africa, Kenya Women Finance Trust Microfinance and Old Mutual. The study purposively selected information professionals comprising senior librarians, and Archivists and Records Officers, and ICT librarians. Data collection was conducted using open and closed ended questionnaires and data was analyzed using quantitative techniques. Findings indicate that information professionals utilize various formal and informal environmental scanning methods especially virtual methods. However they are limited by factors such as funds. The study recommends that the Information professionals and the information center should make an effort to become the epicenter of a company's environmental scanning programme by becoming more proactive in promoting and defending their role within their own company.

Keywords: Information, Information Scanning, Information Intelligence, Environmental scanning, Information centers, Financial Institutions

INTRODUCTION

The work of managers is information-intensive. Managers receive huge amount of information from a wide range of sources and utilize the information to make day-to-day decisions and to formulate longer- term strategies. The acquisition and use of information is at the center of managerial work as articulated by [27, 28] that "it is the informational roles that tie all managerial work together". The information center becomes the epicenter of the information within the organization. The sole purpose is to support the manager make strategic decisions that will enable the organization keep a float in the changing organizational dynamics and attain a competitive edge. The information professional therefore acquire, organize, store and disseminate specific information to managers to enable them perform their Informational roles. Information personnel are the connecting tissue between information and managers.

Today's firms use a wide range of information resources to cope with the various environmental issues and challenges revolving around competition, market, technology, and social conditions. Much of the information service provided by information professionals depends on how information is defined. Information is a valuable commodity and adds considerable value to the decision-making process [33]. Each organization also defines and perceives the importance of information including processes of information, and uses of information differently. The traditional view of information management has focused very much on information as a resource and as a commodity, and on information management as a way of providing a service to the organization, [18]. One common belief among organizations is that the development of strategies for effective information management promotes better organizational performance [31].

To effectively utilize information in a manner desired by organizations, it is crucial that we understand issues such as why information is needed (for what purpose), how it is acquired (process), what kind of

information is used, and where it is located [30]. These concepts underlie the role that information and Information professional's plays in organizations. The information professional's role in connection to information is viewed as that of acquiring information, processing, storing and disseminating it to the right client when needed. In corporate and special libraries Information professional connects users with the right information on demand and more so in anticipation. Information Professional strategically scans information from the environment and connects it to the clients/ managers who utilize it to advance the mission of the organization. Information has to be accurate, Timely, current, and specific to user needs.

There is a range of services tailor- made to specific user needs provided by information centers. Among the information services provided are accesses to information in a range of sources including on-line commercial *databases*, archival collections, Web sites and in-house databases.

Environment is defined as "the totality of physical and social factors that are taken directly into consideration in the decision-making behavior of individuals in the organization" [20]. In this study environment is the settings or background where the organizations operate from. Environment contains resources that organization requires to survive and thrive. Some these resources are scarce and shared by many players. To survive and thrive the organizations must compete for these scarce resources. The environment is a source of information needed by organizations to navigate uncertainty in the environment that comprise a number of sectors that managers monitor in order to plan strategically. For example, analyzes the environment as comprising five sectors: socioeconomic, technological, supplier, competitor, and government[23].

Environmental scanning is defined by authors in different ways. Environmental scanning is viewed as the internal communication of external information about issues that may potentially influence an organization's decision-making process[9]. As a method for identifying, collecting, and translating information about external influences into useful plans and decisions Others authors define environmental scanning as: "…the activity of acquiring information... about events and relationships in a company's outside environment, the knowledge of which would assist top management in its task of charting the company's future course of action."[25, 3]. It is also defined as the acquisition and use of information about events, trends, and relationships in an organization's external environment, the knowledge of which would assist management in planning the organization's future course of action [14, 12]. All the definition point to a harmonized explanation that ES is about selecting, identifying, acquiring information from the internal and

external environment, that managers of an organization can use to influence future decisions about the organization. Such decisions would include, mergers, acquisitions, expansion, and reduction of workforce, identification of emerging issues, situations, and potential pitfalls that may affect the organization.

Critical dependencies between an organization and its environment require the organization to be constantly alert to changes and shifts in its external relationships and the ways these changes will have major effects on their business [35]. In practice, many multinational companies have formal in-house scanning capabilities, though the pattern and categories of scanning may vary widely among firms operating in global markets [35, 16].

Information Professionals work in the various organizationsand mediate between information and users. Mediation is the act by information professional to facilitate and intervene between information and the beneficially of that information by performing any act that , interprets , modifies , simplifies , compiles or avails that information for the user of the information center with the purpose of satisfying information needs. In special and corporate institutions the clients are those staff working for the organization. Corporate leaders have limited time and precognitive capacity to comprehensively and completely understand the environment, to choose from among many scanning alternatives, [22].The role of Information Professionals is to mediate between users and information by ensuring that the information center is functionally performing its responsibilities of harnessing information to satisfy the information needs of the organizations. They do this by building a dynamic collection of information resources based on a deep understanding of clients' information needs. Gathering evidence to support decisions made by top management, maintain current awareness of emerging corporate issues, assess and communicating the value of the information organization, including information services, products and policies to senior management, key stakeholders and client groups.All these are acts of information mediation, mediation of information as 'all action of interference accomplished by information professional, directly or indirectly, consciously or unconsciously, singular or plural, individually or collectively, which allows the appropriation of information that satisfies, fully or partially, a need of information from the user[4].

When seeking information, managers do not have the energy, time, or cognitive need to be comprehensive and systematic in their information search and to read long documents. So they prefer concrete information to abstract information that provides them with details and gradations that they need to evaluate the relevance and applicability of the

information [6, 13]. The role of Information Professionals therefore is to intervene by bridging the gap, thus providing vital information needed by managers to make decisions.

Contextual setting

Financial institution is an establishment that focuses on dealing with financial transactions, such as investments, loans and deposits. Conventionally, financial institutions are composed of organizations such as banks, trust companies, insurance companies and investment dealers. There are many financial institutions competing for the same resources in Kenya. Microfinance institutions have had wider impact within Kenya. The changing conditions have been the main driver increasing competition for middle and lower income clients [24, 34]. Microfinances well known successes have encouraged imitators, to compete for borrowers. In Kenya financial centers are becoming saturated by competition among numerous microfinance, and access to subsidized external lines of credit are a major competition among financial institutions [26]. It is in the backdrop of this, that this study seeks to establish the mediating role of information professionals in obtaining and disseminating information to enable the top level managers makes strategic decisions. This study was carried out in selected financial institutions in Kenya.

Aim

This study aims at establishing the mediating role of information professionals in obtaining and disseminating information to enable the top level managers makes strategic decisions.

Objectives of the study

The specific objectives were to:
- o Establish the sources of information for scanning,
- o Investigate environmental scanning methods utilized by Information
- o Professionals in corporate financial institutions in Kenya.
- o Establish the communicative methods utilized by information professionals to disseminate information to Managers.
- o Investigate the factors limiting effective environmental scanning.

LITERATURE REVIEW

Organizations scan the environment in order to understand the external forces of change so that they may develop effective responses that secure or improve their position in the future. They scan in order to avoid surprises, identify threats and opportunities, gain competitive advantage, and improve long-term and short-term planning [2, 13, 10].The purpose of environmental scanning is to identify at the earliest

opportunity new directions for the company, as well as to identify threats and barriers impeding the knowledge-flow which should inform corporate strategic decisions[5, 6]. The information gathered, including the events, trends, and relationships that are external to an organization, is provided to key managers within the organization and is used to guide management in future plans.[25, 3]. It is used to evaluate an organization's strengths and weaknesses in response to external threats and opportunities. An organization's ability to adapt to its outside environment is dependent on knowing and interpreting the external changes that are taking place, and environmental scanning constitutes a primary mode of organizational learning. Environmental scanning help managers identify opportunities, detect and interpret problem areas, and implement strategic or structural adaptations [36]. Studies revealed a positive relationship between information-scanning activity and organizational performance, and discovered that successful firms differ from unsuccessful firms in that they do more scanning and they have a broader pattern of scanning [8]. The amount of information needed by companies and its use as a characteristic that varies from one sector to another[7]. Financial services sector has been identified by[19, 30] as among sectors where companies perceive competition and a changing environment more intensely than companies from other sectors and[30] indicates a link between environmental scanning and competition.

Organizations need to think strategically and be more sensitive to their environment in order to gain competitive advantage. To do this, organizations need to continuously scan their environments to acquire quality information in order to form a strategy for performance. In his review, [17] concludes that the main functions of environmental scanning are to:

- learn about events and trends in the external environment;
- establish relationships between them;
- make sense of the data; and
- Extract the main implications for decision-making and strategy development.

Environmental scanning process should be conducted on a continuous basis, [17, 29]. The challenge is: who should assist managers in organizations to scan, organize, and acquire the right information? This brings in the mediating role of the Information professional in assisting managers perform environmental scanning which is the objective of this study.

The scope of Environmental scanning not only concerns seeking information to address a specific question (for example, 'how big is this market? '), but also includes doing a broad sweep of the horizon to

look for signs of change and opportunities ('where are the new markets? [13]. Scanning activities could range from gathering data deliberately such as by doing market research, to informal conversations with other executives, or reading the newspaper. Environmental scanning comprises of three distinct and yet related areas namely; *Competitive intelligence*, Business *intelligence* and *Environmental scanning* [13, 36]. Environmental scanning is the communication to internal staff on issues of importance to the organizational pertaining to growth, competition, market and anything that may affect the decisions about the organization in the future.

Information Scanned.

The information gathered, including the events, trends, and relationships that are external to an organization, is provided to key managers within the organization and is used to guide management in future plans[30, 21]. The scope of information scan to provide to managers has been classified by [29] from social, political, regulatory, technological, and economical factors, from social-cultural trends, economic trends, political developments, and technology factors [32]. Information scope is also categorized into internal (inputs and outputs) and external (current strategies to deliver services) categories, and also into categories based on the purpose of scanning [1, 20] and on the type of format used [15]. Typical focal points of scanning include competition, technology, regulatory activity and the economy. Regardless of the various ways information scope is classified, what matters is how the managers perceive it as relevant in enabling them deal with one's competitors and the changing trends in the market.

Information is broad in scope, future-directed, and differs from industry or competitor analysis [17]. Related to it are the changes in the environment, which also affect the scope of information scanned and its capacity[29]. Business organizations encounter greater risks whenever the environment changes. In Kenya for instance ,financial business environment is rapidly changing and becoming intensely competitive due to increase of financial institutions that include banks, microfinance institutions, savings and credit cooperatives, insurers, foreign exchange bureaus, non-bank financial institutions, mortgage finance houses, building societies, and a postal service offering savings products[11]. As a result, competition is intense among these institutions each trying to gain an inch of the financial market. The study therefore is seeking to gain an understanding of the information scope utilized by the institutions.

METHODOLOGY

This study was conducted in Nairobi Kenya among financial institutions with the aim of establishing the mediating role of information professionals in the financial institutions. The study adopted a multi-case study of three financial institutions namely Bank of Africa, Old Mutual andKenya Women Finance Trust. The study purposively selected all the top level information professionals comprising, corporate managers, senior librarians, Archivists, Records Officers, and ICT librarians in each institution amounting to 20 respondents. Data collection was conducted using open and closed ended questionnaires and data analyzed using quantitative techniques.

Research findings and discussions

This section seeks to present the findings of the study with a view of establishing the mediating role of information professionals'in environment scanning for the intelligent financial competitive edge. The section presents the sources of information for scanning, investigate environmental scanning methods utilized and establish the communicative methods utilized by information professionals to disseminate information and investigate the factors limiting effective environmental scanning.

Sources of Information for Scanning in libraries

Information professionals provide information to their clients based on the client's needs. This is done by assembling a wide collection of resources both print and digital resources from within the organization and outside the library. The study findings indicate that information professionals utilized various internal and external sources.

Internal sources

Information centers acquire various sources of information ranging from primary sources to tertiary sources. Primary information can be obtained internally through the various channels of information creation and generation such as through research activities, in meetings or through correcting information generated through transactions such as financial, personnel, marketing, purchasing, sales, manufacturing and administration. The information professional's role is in facilitating acquisition of those sources and transforming them in to usable state through acts such as document analysis, repackaging etc. This requires an understanding of the managers information needs involving current, continuous, immediate, and the future needs by anticipating information requirements.

The study found that information professionals utilized various internal methods such as committee meetings at 20%, other employees 17%, personal contacts 4%, internal reports 14%,focus groups 4%, participant action approaches 2%, conducting surveys and issues-oriented surveys 14%, SWOT analysis 3%, case studies and anecdotes 6%, visualization processes 6% and collecting reports14%.
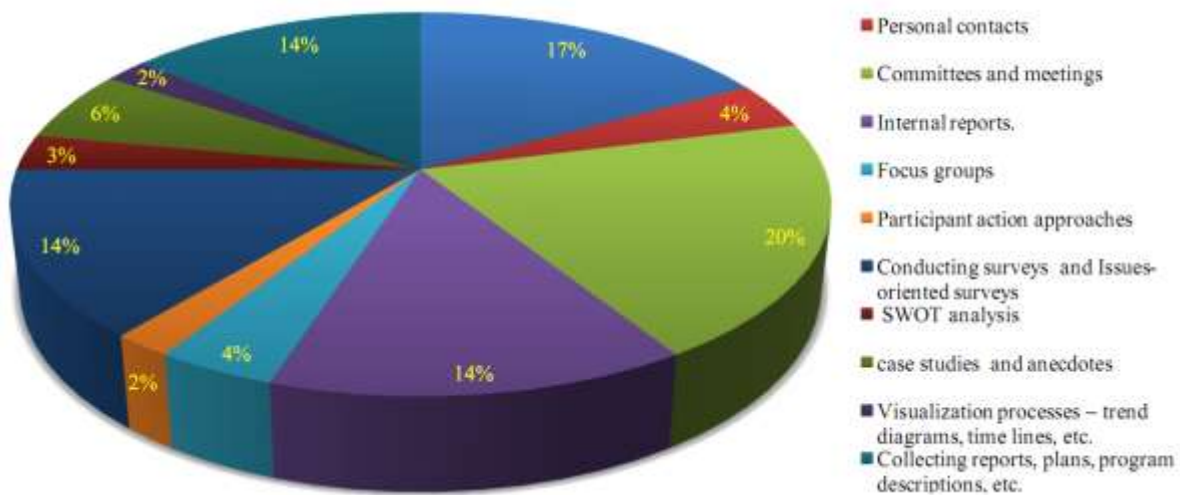
Fig-1. Internal sources of information scanning

External sources of Information

Information centers triangulate diverse methods to collect scanning information from the environment. External sources include sources from outside the organization such as Government reports, general surveys, professional articles, books, search-engines that a corporate organizations can use to guide its planning, operations, and the evaluation of its activities. The purpose for incorporation diverse sources is to try and get as much as possible. The importance of external methods in keeping up with developments is of paramount importance as it connects the organization to the outside world allowing it to compare, bench mark ,evaluate its performance with others.

The study found that the the organization utilized methods such as:
- Professional seminars and conferences,
- Radio, television,
- internet,
- Books, newspapers, journals,

- Commercial databases,
- Media monitoring,
- Attending public meetings and community forums,
- Exhibitions especially those that brought, finanacial the competitors together, Accessing networks – agencies and organizations especially their portfolios.
- Public opinion polls as illustrated in figure 2 below.

This enables the information professionals to scan widely contributing to a variety of information. However ,information professionals must acertain the relevance and accuracy of information from the sources provided. their mediating role must be alert to inacuracies ,false reporting authoritiveness of the information sources before providing the same to managers who must rely accurate data.
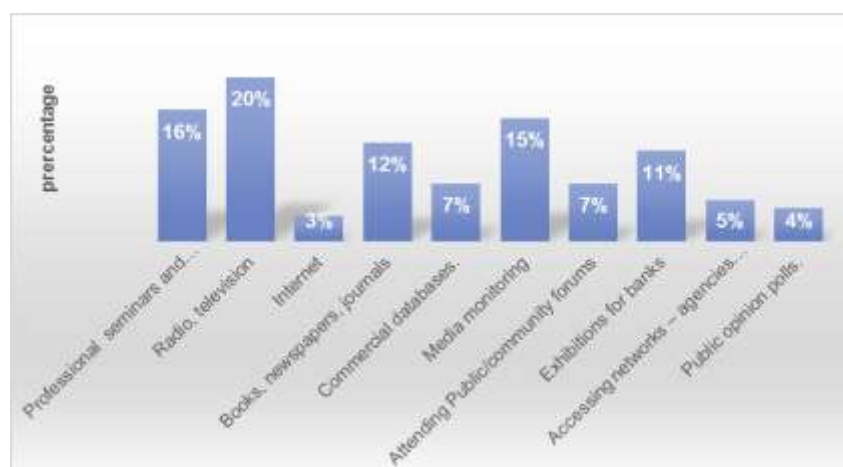

Fig-2: Methods of Obtaining information

Environmental scanning methods utilized by Information centers

There are a wide variety of services provided by Information professionals useto keep the users up-to-date on matters affecting the organizations. The study found that information professionals used several methods to up-date the managers. The study found that methods used according to frequency included visits at 16%, display14%, bookand article alerting services 13%,E-zines and electronic news letters11%, selective dissemination of information 10%,newspaper clippings at 8% social media, wikis and blogs 6%,push technology 5%,periodical circulation /automatic loaning at 5%, table of content 3%, discussion groups 2%, webcasting 2%7%, and Newswire at1%.
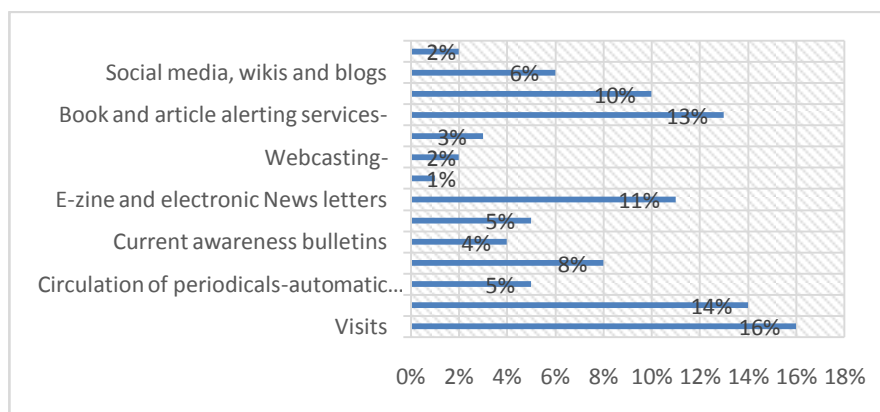

Fig-3: Methods of Disseminating Information to Managers

The information professionals displayed information such as floating share information, new bank tariffs in strategic places in the information centers or display boards in strategic places.

o Press/ newspaper clippings- files containing news relating to financial matters were clipped and displayed on the board. Published current awareness bulletins targeting different issues, such as daily news andcurrent issues in banking. The information professionals keep managers updated on current financial issues and dailydevelopment issues especially inflation. The study found that information professionals utilized external sources such as newspapers such as Nation Newspaper and Business Daily (local Newspaper published in Kenya by Nation Group of Newspapers).

o Periodical circulation – especially the Daily Newspapers, and other business journals once the information center receives the current issues.News alert services involving manual alert, such as photocopying the contents pages of new issues (such as new regulatory policy by National Bank , financial institutions merging or n trouble) acquired and pinning them on noticeboard, while automated involves displaying new issues on website for the organization or posting on the e-mail of clients. The study found that even though there were several online information services that information professionals in other areas such as academic libraries had subscribed to,   In the case of information centers these were non-existent. Such services include Contents page services from commercial publishers, such as Elsevier's Contents Direct Service, IDEAL Alert, SDI Services from online search service providers, such as Dialog. Emerald, EBSCOHOS used in Academic libraries in Kenya. These services are very useful for monitoring the literature in the latest journals. However the services are expensive to subscribe explaining why financial institutions had not subscribed to them.

o Virtual services included were, push –technology using mainly mobile phones especially on current issues such as new bank tariffs. Others virtual services included, E-zines focusing on financial matters and circulated to the staff. Newswire and Webcasting were only used by two institutions. The two have a wider market and mainly investment services provision explaining why they may have chosen to use this method as a quick way to reach their clients. Social media has also become quite popular, especially use of Twitter and Facebook will all the four financial institutions having their followers.

The study found that ICT had influenced the type of services that the information professionals provided to their clients. There was a greatshift in the delivery of services from using manual services to almost exclusively using digital/virtual services where information center provides services by connecting the library to their clients via an electronic network.

Methods of communicating Information to Managers by Information Professionals.

The study found that information professionals mediated by connecting the managers with information using various communicative methods. The major methods mainly used included use of e-mail, telephone, meetings, visits group discussions, blogs, social media and desktop conferencing. Email was the most commonly used by information professionals with the least used method being desktop conferencing. The methods were selected based on whether it was to one manager or many managers. The study found that if the information pertained to general issues affecting the sector, methods such as group discussions, meetings, blogs, and social media would be used. However on more focused information affecting the bank, methods used included telephone calls, email, meetings and personal visits. The choice of the method also depended on whether it was only one manager or a group of them. If one manager visits telephone calls were utilized.
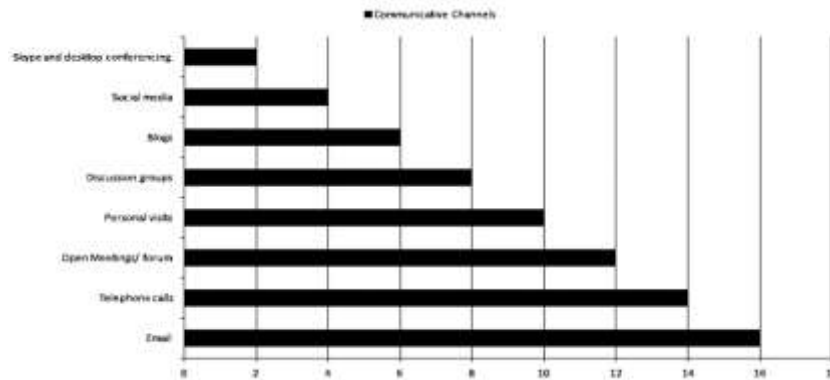

Fig-4: communicative methods to Managers by Librarians

Factors limiting environmental scanning.

The accuracy and timeliness of collecting and disseminating information is important at all levels of management. At the tactical and strategic levels, relevance and accurate information is the important. Information must also be filtered from operational data before it is presented to the middle and top management. Information work activities depend on reliable sources and services at the disposal of the information professionals. Effective environment scanning is depended on the information professionals having a variety of reliable and up-to-date information sources such as effective ICT infrastructure and the internet .However many libraries in Kenya are faced with problems that hinder their effective use of resources and therefore unable to conduct effective environmental scanning.

The study identified factors limiting environmental scanning as inadequate funding, inadequate resources, inadequate staff, lack of policies, lack of support from the management, low ICT skills and poor attitude of information professionals.
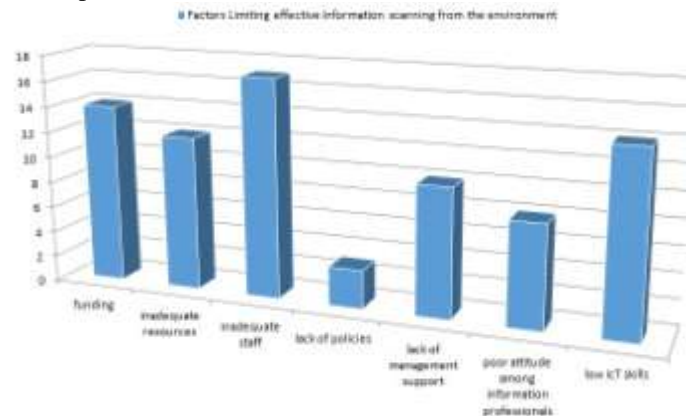

Fig-5: Factors Limiting information scanning from environment

a. Funding is still one of the major hindrances. The study found that there is a general underfunding culture among corporate financial organization. The money allocated is not enough to effectively manage the information center. The study found that in all the three institutions none had a satisfactory information center; many concentrated more on records management than information center. With advancement in ICT and Virtual information provision through internet access, there remains the problem that better sources of literature are more costly and therefore calling for

information centers to spend more ,something not many corporate financial organization are willing to do.

b. Due to lack of adequate funding, all the information centers had inadequate information resources and many lacked qualified, inadequate and competent staff. In all cases those trained in the LIS profession were few ranging from one to three. For effective scanning adequate resources are needed to facilitate information scanning, processing and dissemination.

c. Low ICT literacy among staff. Due to constant changes in information technology most of the information center staff lack skills in information searching and retrieval, a requirement for environmental scanning. The study found noted that there were few system librarians with ICT knowledge and skills and with the ability to design and set up ICT infrastructures that will allow the center capture necessary information useful for the manager's role. ICT skills most information providers were using are not adequate for the future we face. The role of an information professionals as an intermediary is changing especially with the current breed of user who can access information on their own due to availability of the internet. Thus, the information professionals must re-invent new skills that place them in a position to market and provide relevant information to the managers.

d. Lack of support from the top management.For effective service delivery information professionals out to be supported by the management in many ways top in the list being financial support. Without financial support the information center is crippled and cannot perform as expected.

e. Information policies. Kenya lacks a documented information policy which should inform other sectors on matters of information. The organizations had not also formulated their information policy. Information management policy covers how information is created, accessed, stored, and disposed. Lack of information policy hinders effective environmental scanning.

f. In addition environmental scanning can also be affected by what isreferred to as barriers to knowledge transfer[37 . That can take various forms such as;

- From individual to the team – the librarian may fail to disseminate scanned information due to inadequate skills of communication, lack of confidence, afraid that informant may not be adequate.

- Organizational barrier. The greatest fear of organization is the risk of uncontrolled information disclosure resting in diffusion of core competencies. Thus the organization may choose to be receptive (absorption) or transparent (disclosure) This can be caused by barriers such as organization's loss of its competitive edge, openness to ideas and trust top management directives stifle organizational learning, organizational culture, flexibility to change. Thus despite the librarian providing information the organization may fail to use it to remain competitive

What Information Providers need to do to facilitate effective scanning?

Information professional mediating role in environmental scanning cannot be underestimated as they provide the intellectual bond that ensures relevant information is available for solutions arising from issues affecting the organizations by playing an active role in environmental scanning. For libraries to play an active role in environmental scanning the study recommends the following as indicated in the figure below;

Fig-6: Facilitating Effective Environmental scanning

o Become proactive in their role as information intermediaries 20%,- Information professionals have taken a back seat in many cases that require their presence to be felt. The study found that 20% felt that this was the main factor that contributed to ineffective environmental scanning. They tended to perform tasks that placed them in the peripheral of the information scanning as such their presence in the organization was not felt by managers. As a consequence, the study suggest that more active role ought to be taken by information professionals placing them in the center of information scanning.

o Solicit more budget allocation 15%. The information professionals must find a way of requesting for adequate funds to be increased for effective service delivery. One way is to justify the value of information to the management. A more active role is required of them so that their presence is felt and therefore bringing into focus the information center and resources required to manage it.

o Provide value added addition to information at12%. With the vast range of choices available online, information professionals can add value by providing the most tailored information to simplify the decision process. The information center has the responsibility for the processes and functions that create added value out of information (i.e. selection, acquisition, processing organization, and dissemination of information. Information professionals can add value to information by helping users filter and retrieve information according to the users' own specifications and desires, reflecting individual personal interests and/or research needs.

o Market information center10%. Marketing the information center will contribute to its visibility. Marketing strategies involving conducting market research of information behaviors' of the organizations and competitors will enable the information center anticipate changes in the environment that the organization may need to be prepared for and thus increase their recognition by the clients as the information epicenter of the corporate organization.

o Outsource information services 8%. Outsourcing is a management strategy adopted by many organizations as a way to cut cost or deal with issues of lack of staff with skills. Outsourcing brings opportunities to organization such as having skilled personnel acquired without the burden of having to deal with large salaries resulting to overhead payment such as staff allowances. There are many consultancy firms dealing with information work that can be hired to perform the tasks of information mediation for organization that may not be willing to hire qualified information professionals

o Sensitize clients about their role at 8%. This can be done by assessing and communicating the value of information to the organization's clients in acceptable forms and medium for the clients to recognize their rightful place in the organization. This will contribute effectively to senior management recognition of their role in mediating information. As a result manager's decisions regarding information applications, tools and technologies will be more effective.

o Outreach services at 7%. Information professionals can extend their services to managers who may not have the time to visit the library.

o Align the information center role to organizations objectives. Aligning the information center with the strategic directions of the parent organization or the key clients groups will enable them understand clearly the information scope for scanning. this had a rating of 6%

o Evaluate services 5%. By evaluating services information professionals may discover areas requiring improvement, whether the clients are satisfied with the services or if there were areas the center was not addressing. The purpose is to improve services making the center more relevant.

o Reinvent their role 4%- Information professionals have always acted as intermediaries between information resources and readers. However with the advent of ICT, user have become more techno savvy. This does not mean that they are able to navigate information platform successful. Due to the massive Information available many users surfer from information overload. The information professional must therefore rediscover their new roles as mediators in the electronic and virtual information world.

o Built effective ICT - They need to build an effective ICT infrastructure with a wide and reliable sources of current literature at 3%.Even with internet access, better sources of literature are more costly and therefore calling for libraries to spend more, something not many funder's are willing to do. In the face of insufficient funding, it becomes important for libraries to find the best way to utilize the available funds. The solution to this problem is what many academic libraries in Kenya are doing, that of forging alliances with other libraries to collectively subscribe to electronic journals and databases, thereby reducing the burden on each individual organization.

o Understand the client's project 2%- This can be done by information professionals undertaking a user needs assessment in order to build up user profiles so as to acquire documents in line with the organization needs and information wants and gaps. This will enable the understanding of the manager's projects and effectively matching the client's needs with the right information.

CONCLUSION

The role of an information center is to help an organization achieve its objectives by providing resources and services that will facilitate the achievement of the goals. A library should make an effort to become the center of a company's environmental scanning programme. Information professionals are well-positioned to become an integral part of the information scanning for the corporate worldby being more proactive in promoting and defending their information center within their own company. This can be achieved by participating more as mediators and connecting managers with relevant information to address the various information needs.

Information and communication Technology (ICT) offers challenges to corporate financial organizations in acquiring, organizing and utilizing quality information. Internet use exposes corporate financial organization to a wide range of information resources some of which are not accurate. The internet also introduces wealth of opportunities such as promptness and variety of information as well as threats to organization form competitors wanting to gain or retain their competitiveness. The role of information professionals in mediating becomes more pronounced in facilitating, selection, acquisition, and analyzing, adding value to information, navigating the net, securing information and evaluating information quality so as to eliminate errors, and connecting right managers/users with right information in a timely manner.

There are additional problems that information center encounters, such as inadequate budget, inadequate trained information professionals and lack of support. For effective environmental scanning, information centers need support from the corporate organization. This will allow Information center to become the epicenter of scanning the environment using various search and retrieval techniques to be able to identify accurate, reliable literature useful for managers to make decision and enable the organization achieve a competitive edge.

REFERENCES

1. Abels A;Hot topics: Environmental scanning.Bulletin of the American Society for Information Science, 2002. 28 (3): 16-17.
2. Albright K S;Environmental scanning: radar for success.The Information Management Journal,2004;May/June: 38-45.
3. Aguilar FJ;Scanning the business environment,McMillan, NewYork, 1967.
4. Almeida Júnior O F: 2009,InMaría Cecilia Corda; Information Management and Mediation in a Digital Reference Service. BJIS, 2012Marília (SP), Jul. /Dec 6(2): 84-99, Available in: <http://www2.marilia.Unesp.br/revistas/index.php/bjis/index>.
5. Auster E, Choo CW;Environmental scanning: Preliminary findings of a survey of CEO information seeking behavior in two Canadian industries. In Proceedings of the 55th ASIS annual meeting, Pittsburgh, PA,American Society for Information Science, 1992; October 26-29, 48-54.
6. Auster E, Choo CW; How senior managers acquire and use information in environmental scanning. Information Processing & Management, 1994; 30 (5): 607-18.
7. Analoui F, Karami A; How chief executives perception of the environment impacts on company performance. Journal of Management Development , 21(4): 290-305.
8. Babbar S, Rai A; Competitive intelligence for international business. Long Range Planning, 1993;26 (3): 103-13.
9. Baines P ,Fill C;Marketing,3rd Edition 3 E P,Oxford University Press,Oxford, 2014.
10. Castiglione J;Environmental scanning: an essential tool for twenty-first century librarianship. Library Review Journal ,2008;57 (7) : 528-536
11. Central Bank of Kenya Retrieved fromhttps://www.centralbank.go.ke/index.php/bank-supervision, 2015.
12. Choo C W;The Art of Scanning the Environment, Bulletin of American society for information science.1999 Feb/Mar; 25. (3).
13. Choo CW. Environmental scanning as information seeking and organizational learning, Information Research,2001 Oct, 7 (1).
14. Choo C W and Auster, Ethel; Environmental scanning: acquisition and use of information by managers. Annual Review of Information Science and Technology, 1993; 28: 279-314.
15. Chowdhury G G , Chowdhury S; Searching CD-ROM and Online Information sources.Library Association Publishing, London ,2000.
16. CorreiaZ, Wilson T D; Factors influencing environmental scanning in the organizational context.Information Research,2001; 7(1) Available at http://InformationR.net/ir/7-1/paper121.html, 2001.
17. Costa J; An empirical-based review of the concept of environmental scanning. International Journal of Contemporary Hospitality Management; 1995: 7(7): 4-9.
18. Dalkir K; Knowledge management in theory and in practice. Elseview Inc, London, 2005 Available at .http://rudolf.stagingapps.net/chemicals/sites/rudolf.stagingapps.net.chemicals/files/knowledge-management-kimiz-dalkir.pdf
19. Denise B FH;Leveraging environmental scanning methods to identify knowledge management activities in transportation. Journal of Knowledge Management, 2015;19(3): 579 – 592. Permanent

link to this document:
http://dx.doi.org/10.1108/JKM-01-2015-0004

20. DuncanR;Characteristics of organizational environments and perceived environmental uncertainty. Administrative Science Quarterly, 1972: 17:13-327.
21. Duttweiler M; Environmental Scanning Principles and Processes. Available athttp://www.futuresconference.fi/2003/what_is.htm
22. Elenkov D S; Strategic uncertainty and Environmental scanning: The case of institutional influences on scanning behavior. Strategic Management Journal,2009; 18: 287-302.
23. Glueck W F,Jauch L; Business policy and strategic management.McGraw-Hill, New York: 1994.
24. Johnson S A;The impact of microfinance institutions in local financial markets: A case study from Kenya. Journal of International Development, 2004;16:501-517.
25. Kendra S. Albright; Environmental Scanning: Radar for Success.Information Management Journal,2004;38 (3), May/June :38
26. McIntosh C, Wydick, B; Competition and microfinance. Journal of Development Economics,2005 Dec, 78(2): 271-298. doi:10.1016/j.jdeveco.2004.11.008
27. Mintzberg, H; The nature of managerial work, Harper &Row, New York, 1973.
28. Mintzberg, H; Mintzberg on management: inside our strange world of organizations, McMillan, New York, 1989.
29. Ngamkroeckjoti C, Johri L.M; Management of environmental Scanning in large libraries in Thailand. Bussiness Process Management Journal, 2000, 6.(4):331-341.
30. Karim Abdul N S; The link between environmental scanning (ES) and organizational information behavior: implications for research and the role of information professionals. Library Review, 2004, 53 (7): 356 - 362 Permanent link to this document: http://dx.doi.org/10.1108/00242530410552296.
31. Owens I, Wilson T D, Abell A; Information and business performance: a study of information systems and services in high-performing companies. Journal of Librarianship and Information Science, 1997; 29 (1):19-28.
32. Phatak AV; Important Aspects of the International Component of an Organization's Operating Environment International Dimensions of Management, Wadsworth, Belmont, CT.1983.
33. Reid C, Thomson J, Wallace-Smith J;Impact of information on corporate decision making: the UK banking sector, Library Management, 1998; 19 (2):86-109.
34. Rothaermel FT ;Technological Innovation: Generating Economic Results. Advances in the Study of Entrepreneurship, Innovation and

Economic Growth, 2008;18:201-225.doi:10.1016/S1048-4736(07)00007-0
35. Shuhua L ; Strategic scanning and interpretation revisiting: foundations for a software agent support system - Part 1: understanding the concept and context of strategic scanning, Industrial Management and Data Systems, 1998; 98(7) : 295 – 312
36. Timtime ZT; Environmental scanning behavior of small and medium firms in Developing Economies;Evidence from Botswana. Pakistan Journal of Applied Science.2001; 1(3):263-269
37. Yin-Tong Sun P; An investigation of barriers to knowledge. Journal of Knowledge Management, 2005, 9(2):75-90