INFORMATION AND KNOWLEDGE ORGANIZATIONAL AUDIT: GENESIS OF AN INTEGRATION

Gloria Ponjuán Dante
Universidad de la Habana
Cuba

ABSTRACT

Since the decade of 80 when the information management as a resource had a higher emphasis, it also aroused the need to deepen the control measures of such information. This way appeared the informational audit with different focuses. One decade later, the organizations evaluated that the work with information was not enough, but that people and their knowledge marked differences. Then they began to study the phenomenon of the management processes associated to the organizational knowledge, generating also different kinds of audit to this resource. If between the information and the knowledge exist skidding borders, the same may also occur among the audits in both the resources. In fact when an information audit is made in any manner the knowledge is present and vice versa. Therefore, this route presents us the option to think in the integration of both the focuses in an integral methodology which may develop in different organizations. This article introduces us to these issues and justifies the need to count on an integral methodology to the development of these audits in organizational level.

Keywords: Information Audit; Knowledge Audit; Integral Audit of Information-Knowledge; Information Management; Knowledge Management.

INTRODUCTION

The function of control is one the oldest. The history raises the role of supervisors in the oldest civilizations and cultures. Since then, for different reasons, the man saw himself impelled to control and estimate his actions with different purposes. The XX century brought great advances in the management sphere and different resources had to be object of control, in order to assure its rational use and, also, to try to develop subsequent measures.

According to Braman (2006) the advances which took place in the XIX century, more specifically of relevance to the economical focuses of information, they were related, mainly, with the way that the technological development fulfill influence in the economical relations, as well as in the economical effect of

information flow. In the organizations field, since 1890 Marshall considered and analyzed the knowledge as the critical resource more relevant to the economical production.

2 INFORMATION AND ORGANIZATIONAL KNOWLEDGE

The information with no doubt is constituted, since the decade of 70 from last century, in fundamental resource to the organizations, complemented in the decade of 90 by the organizative knowledge. Bueno (s.d.) defines the organizational knowledge

> […] as a set of intangible resources and proper capacities of people, groups and organization, which present a quality and strategic idiosyncrasy, which forces this organization to know how to manage, motivate and develop, since the human plan or the people who have the knowledge, without setting aside the importance which the technologies have as catalytic or tools and, even more, the context or environment in which the knowledge processes are developed.

Marchan and Horton (1986) expressed that the only companies that will survive in the information economy will be those which use information resources and computational technologies as reducer elements of costs, being constituted in tools to reduce the work force, will be those which use the information technology and the information resources in a strategic way to elaborate new and better products, to find new markets and increase their space in the existing ones, distributing products in a creative way. These will be the intelligent organizations of the future.

Orna (1999) considers that the knowledge is that which we acquire by means of our interaction with the world, equivalent to the results of the experience organized and stored by the individual, in such a way that is exclusive of him. It is presented in two ways: 'the knowledge about things' and the 'know how', like this, this knowledge is available in many levels: tacit – that is what we know and use without expressing in words; and the explicit – that is what we can formulate and explain – "we appropriated it, at the changing the experience (external) into knowledge (internal)".

On the other hand, it is considered that the information is what the human beings obtain when changing the knowledge whenever they want to communicate it

to the others. It is the knowledge made visible or audible, in written words, printed or expressed orally.

The knowledge and information are separated, but they interact. It is accomplished permanently the change from one to another. To Orna (1999) the distinction is that before the information may be used, it has to be converted into knowledge in the human mind and, then, apply it to generate changes in the material world and in the world of ideas.

These distinctions between information and knowledge are basic, but they go beyond when they refer to the organizational domain. The organizations are objects of management and the roots of this process fulfill influence in all the manifestations which occur in the organizational ambit.

Since the cultural angle the management is an opened activity, because the organizations are operated by people and the decisions are taken inside a cultural and institutional mark. The culture includes ways of human behavior and conduct and about the management it is related to the economical, social and political aspects which influence in the education of an organization.

There is a direct relation between people and the resources. The people influence them, because they create, manage and use them to several facets of life. The human efforts, and the knowledge itself, are resources because they permit the development of activities oriented to the production or generation of goods and services.

The social angle is referred to the relation between people inside a given culture. The values change according to determined conditions, from time to time and from culture to culture. The managerial efforts see themselves affected by the relations between the individual and the group and by the social values prevalent in the culture.

The political angle include the fittings and agreements to the establishment of a social order, as well as for the own protection of the society.

For this reason, the organizational information is almost always partial or incomplete, because it tries to search the relation between the environment generation and the particularity which allows the decision taken. This complexity which operates permanently in the organization exercises a vital influence in the

manipulation of the diversity in all the levels, what forces the organization to know itself very deeply and, consequently, to know the environment in which it is developed. The organizations accomplish different cycles and by means of these ones they acquire, interpret and process information, obtaining new information which is interpreted inside the ambit of the existing organizational knowledge, enriching the same and generating the obtaining of new knowledge.

This same cycle has notable influence in the own information management and in the management of the organizational knowledge, which must be renovated and reviewed permanently due to the decision taken, as well as change the complex system of information and organizational knowledge.

2 INFORMATION AUDITS

Botha and Boon (2003) mentioning to Robertson (1994) identify the existence of different kinds of audit: financial, communication, techniques, employment, and since the end of the decade of 80, the ones relative to the information. St Clair (1995) considers that the objective of the information audit is the identification of the information needs of users as well as the prevention of the degree in what the service of information assists to those needs. However other authors express that the information audits have wider objectives. In any case, an audit is the incorporation of information about a determined objective, with the aim to make a deep review of the functioning or behavior of the object of analysis. Therefore, the obtaining of information, its validity, its organization, systematization and analysis are phases or stages which occur in all the audit process.

The fundamental problems which are presented in the organizations are characterized by the absence of information politics, the absence of communication between the high management and the other organizational instances, as well as the few valorization and identification about the information which is obtained and is available to the different institutional processes (SWASH, 1997). Many times exist the possibility to obtain determined information and the absence of an informational culture does not allow assuming proactive conduct to the systematic employment of these resources.

The information audit, according to Dubois (1995), is constituted in one of the most important tools to the management of information in the organizations. Its importance roots not only on its contribution to an adequate management of these resources and services of information, but also to make the organization aware about what constitutes these resources and services to the development of work. This is possible by means of the:

1. Identification of resources, services and information flow;
2. Verification of the existence of adequate services to determined purposes;
3. Rationalization of resources;
4. Control of costs;
5. Increase of the visibility of services starting from the improvement of the market;
6. Execution of the recommendations with the consequent improvement proceeding of it.

Buchanan and Gibb (2007) value the objectives of the information audits and consider that they not only have something with the identification of information resources of the organization and of their information needs, but also pursue the:

a) Identification of costs and benefits of information resources;
b) Identification of opportunities to the employment of the information resources to strategic competitive advantages;
c) Integration of investments of information technology with the strategic initiative of the business;
d) Identification of information flow and processes;
e) Development of an integrated strategy and/or information politic;
f) Creation of a conscience of importance of information management and the definition of its role in the management;
g) Observation and evaluation of the correspondence with rules, laws and politics.

Botha and Boon (2004) explain the differences between distinct kinds of audit:

▪ Communication: audit emphasizes the information flow regularities.

- Information mapping: identification and use of the information resources of an organization.
- Information systems: form that the technological tools are used to manipulate the information resources.
- Knowledge: the knowledge management (or the strategic information management) is the highest level of the information management (according to the evolution of the information management functions) and, therefore, it is based in the information management and the information audit.
- Intelligence: for its relation, as much with the information management as with the knowledge management.

Therefore, for these authors, the information audit has relation with the systematic exam of the information resources, the information use, and the information flow in an organization. Imply in the identification of the information needs of users and how much efficiently (or not) are assisted. Besides this, the cost and value of the information resources are calculated and determinate. It is significant the definition considering the inclusion of the knowledge audit.

To Buchanan and Gibb (1998) it is the process of discovering, monitoring and evaluating the information resources of an organization to program, maintain and improve the information management of an organization. These same authors (2007) mention a definition presented by the Knowledge and Information Management Network, work group of The Association for Information Management (ASLIB) which describes the informational audit as a systematic exam of the information use, the resources and flows, whose verification occurs starting from the analysis of the relations of people with existing documents, to establish the degree by means of what they contribute for the organization objectives.

The Figure 1 observes the contributions of the information audit with the processes of information management in different levels:

GI Functions	Contribution of the Information Audit
Level 1: Personal Information Management	
Information Use	One of the results is to obtain an inventory of used information, factor which may contribute to increase the use.

Information file and Information discard	The inventory of information reflects the utility of information, what eases the decision to the conservation/discard of the same.
Information Marketing	The information audit in itself is an excellent marketing to this resource, and it elevates the visibility of the available resources.
Information dissemination and reproduction	The precision of the knowledge base, of the status of organizational information resources may contribute to the decisions referring to the information resource, about the dissemination, reproduction, organization, access and security/storing of the information sources.
Level 2: Operation Information Management	
Identification of informational needs	A very important document of the information audit is the evaluation of the informational needs.
Information generation; location of the necessary information; information dissemination.	A comparison of the inventory with the study of the informational needs will relapse in whom and where it is needed determined information.
Identification of relevant information	During the audit process are made evaluations about the value/relevance of information to the users.
Level 3: Organizational information management	
Development of a infrastructure of information technologies	The audit may include an exam of the informational technological tools which may contribute for the information management.
Determination of cost and value of information	Although not all the methodologies of information audit include this aspect, it is considered that these elements are vital to the information management.
Compilation of an inventory of information entities	This is a fundamental component of all the information audits.
Coordination and implementation of a information politic	This can be derived of the audit and, therefore, be constituted in one of its main results.
Information organization in a information system	The audit offers very significant results which allow obtaining and prepare directions to the information organization.
Education about information	The audit information sensitize all to the importance of this resource to the organization activities.
Information consultancy	The audit is developed by means of a consult, what elevates its benefits.
Planning, development and continuous evaluation of the information systems	The audit should be executed with certain regularity with the goal to evaluate sources and systems.
Level 4: Corporate and strategic Information Management	
Formulation of an organizational information politic	The results of an Information audit give elements to formulate a politic of information.
Management of the physical, financial and human resources to proportionate the information systems	The results of an audit allow the decision taking about the information resources of an organization.
Identification of the needs of strategic information	It is a fundamental component of the information audit.

Figure 1: Contributions of the Information Audit to the Processes of Information Management.

Adapted Source: Botha; Boon – 2004.

The focuses shown on this table give an image of the different levels in which it is possible to accomplish the information management, evidently are the levels 3 and 4 which have a direct relation with the strategic management of information or information management.

Buchanan and Gibb (2007) taking into account some considerations of Earl (2000) and of Gib et al., (2006) propose three perspectives to the information audits: the ones which have relation with the strategic domain, with the domain of the processes and with the resources domain:

The strategic starts from the principles established by Buchanan himself as well as by Henczel (2001). The main results result in an informative strategy of the organization. The recommendation would be oriented to the future strategic direction marking the role of the information resources on it.

The oriented to the processes emphasizes the organizational processes. It is emphasized in the Gibb focuses (2006) that its main results contribute to a mapping based in processes and an analysis of information flow and of the information resources. The recommendations are back to the improvement of the existing flows by means of a better information provisioning, support and management. They may also contribute to determined initiatives of the management processes what increases the value of the information audit.

The one related to the resources emphasizes the identification, classification and evaluation of the information resources. The previous focuses associate the resources to the strategic aspects, but this one is centered in the identification and inventory of the resources. The results permit to dispose of an inventory of these resources and a complete evaluation of them. The recommendations allow a better work with these resources and more efficient manipulation of the same.

4 KNOWLEDGE AUDITS

At the same time in which the organizations value the importance of the organizational knowledge and its role to the obtaining of the competitive advantage,

they consider the importance of the accomplishment of the processes of control of this resource, even though by means of different measure systems or audit processes.

According to Chong (2005) they are distinguished two types of knowledge audit, the one named "K-audit" (knowledge audit) which is an exam and systematic evaluation of the organizational assets of knowledge and it is recommended, usually, to the industries as a first step, previous to the release of a program of knowledge management (CHOY et al., 2004). It differs from the "KM audit", even though, sometimes, refer to, faintly, both using the same denomination. To Chong it refers to the process of identifying and denominating the knowledge which exists and lacks in an organization. It also refers to the flow of knowledge and to the webs which are developed.

Hylton (2002 a, b) defines the "KM audit" (management knowledge audit) as an exam and systematic evaluations, but scientific, of the explicit and tacit resources including the knowledge which exists, where it is, when and how they were created and who has it in the organization. To Chong, it refers to the process of the creation audit, acquisition, retention, distribution, transference, sharing and re-use of the institutional knowledge of an organization, finally refers to how the knowledge is manipulated in the organization. This kind of knowledge audit should also include the exam of the organizational strategy; leadership; the learning culture; the participation of people at work in team as well as the technological infrastructure at the different processes of knowledge.

The conceptual focuses reflected previously place the organizational knowledge on its wider extension, considering components linked more to the information systems than to the own tacit knowledge.

The most common tools include the direct observation, interviews, questionnaires, focal groups and shops. In general, a knowledge audit (K-audit) is divided in four parts: study of the antecedents, collections, analysis and data evaluation. The goal is to reveal, inside the organization, who has determined knowledge (as explicit as tacit), where and who uses this knowledge, to which tasks, in what context. These results and information are presented in the following way:

- A list of items of knowledge (as explicit as tacit) in calculation page format;

- A map of knowledge webs which shows the flow of items of knowledge;
- A map of social webs which reveal the interaction between the persons to share the knowledge.

This helps the organizations to identify the empty spaces between the existing and what should exist in the future through a perspective of knowledge management. Evidently when considering the explicit knowledge, it is incorporating the information to this kind of audit. Therefore, in this space it is presented the same difficult to define both the focuses. In some previous works, Ponjuán Dante (2003, 2004, 2005) identified the spaces relative to the strategic management of information and its entails with the documental management and with the organizational knowledge management, as well as the role of the informational professional on these organizational dimensions.

PRELIMINARY CONCLUSIONS

The function of the control is indispensable to the valorization and development of any activity. Since the appearance of the information and knowledge management focuses, different approaches were developed to the measure systems, including the information audits and, more recently, the knowledge audits and the knowledge management. In many cases the named knowledge management filled spaces referring to the organizational information generating confusions in relation to the limits and interactions of those who intervene in another activity.

The organizational knowledge management can not develop itself in an adequate strategic management of information. As Orna used to say, the information is what the human beings obtain when changing the knowledge when they want to communicate it to the others; it is the knowledge turned visible or audible, in words written, printed or expressed orally. This conversion of information into knowledge and vice-versa[1] (NONAKA; TAKEUCHI, 1995) is a permanent practice in the process which develops all the persons in their multiple facets of life, it is also a practice which develops the organizations, because they do not consume only information, seen that they change it into knowledge and again into information.

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[1] Nonaka and Takeuchi in their model SECI refer to the conversion of tacit to explicit knowledge, from explicit to explicit, from explicit to tacit and from tacit to tacit.

The integral audit of information and knowledge (AudIntIC) may be a managerial focus which contributes to the strengthening of the presence of both the resources in the organizations as a continuous indispensable whose management permits higher advantages to the ones which recognize and impel the presence of these levels in all organization.

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Gloria Ponjuán Dante
Universidad de La Habana
Facultad de Comunicación
Carrera Bibliotecología y Ciencia de la Información
Calle G # 506 e/23 y 21
Vedado
10400 – La Habana – Cuba
Email: gponjuan@fcom.uh.cu