

The internet: A central tool for knowledge management in organization case-study in an Hitech company / Sarah Kamin

Abstract

This work examines the area of knowledge management in organizations, and presents Intranets as a central tool for knowledge management in companies as phenomena which are part of the global phenomenon of knowledge economics and the rapid and revolutionary development of the information industry.

There are differences of opinion regarding the definition of the concept of knowledge management. For our purposes here, we have adopted the definition which says that knowledge management relates to the confluence of information technologies and the creative and innovative abilities of men and women. Knowledge management contributes to the organizational capacity to adjust to and survive the continual and pressured processes of changing environments.

Knowledge management in organizations, a relatively new area, developed in parallel to the increased use of Internet technology for intra-organizational needs, and is still in the development stage. Its implementation in organizations depends on the presence of a unique organizational culture that encourages community relations among organization members, and an appropriate technological and human infrastructure. For these reasons, it would seem, we did not find detailed studies presenting active implementation of knowledge management using intranets in high tech organizations. Nonetheless, the experiences of those companies that are already dealing with and taking advantage of knowledge management can make a positive contribution to other companies and organizations, people and society in general.

The knowledge and experience of the organization under study here, as described in this work, and the research questions that arose as the work proceeded, are part of this contribution.

This research was conducted using “qualitative methodology,” which is based on the following principles. Research is conducted in a “natural” environment; there is no a priori determination of theories or hypotheses; the research

process itself is the chief tool for collecting and analyzing data; the presented data is theoretical, that is, it has been reported through the medium of words or pictures, not through numbers. Qualitative analysis of the content of information and knowledge is very important, since conducting a quantitative content analysis may lead researchers to neglect investigating the content and to imprecision. When the quantitative analysis deals with content that is less unequivocal, it is less reliable. In this work we are dealing with content that has multiple meanings and therefore, the subjectivity imposed by the research methodology, despite not allowing precise determinations and periodicity of the findings, is vital.

Additional characteristics of qualitative methodology that relate to researchers' modes of operation can also be seen in this study. We do not attempt to confirm or refute hypotheses held at the beginning of this research. Our understanding crystallized as data was collected, and our theory is built on a foundation of evidence and pieces of information in a continuous circular process.

The work presents in detail, as a case study, the Intranet network of a multinational high tech firm. The company deals with developing, producing and marketing advanced communications technologies, and is one of the world leaders in these areas.

The company's Intranet is blocked to those outside of it, while accessible to the organization's personnel. Through use of it, the company's intangible assets are documented and managed.

Another important job of knowledge management in an Intranet is to shorten development and marketing processes by efficient and rapid retrieval of relevant data. In addition, it permits current employees to rely on the expertise and experience of others, in order to prevent the situation of having to reinvent the wheel each time a fresh project is planned.

This work presents the process of mapping the company's information, the organization of company knowledge "papers" on its Intranet, and the relation between these and the process of development and marketing within the company. The company's Intranet sites were reviewed interactively on the writer of this work's PC. The author, as all other authorized employees, had access to the sites.

guidelines written about managing the knowledge on the Intranet. Due to the company's size and the range of its activities, it is impossible to centralize administration of all the diverse organizational knowledge. The Compass site, the most comprehensive of the set, is also the most centralized site, containing the cultural and policy statements of the company's directorate, yet there are many other additional different sites spread all over the organization. There is as yet no perfect search mechanism that allows efficient and precise locating of specific knowledge from among the knowledge maintained on the Intranet, but the initiated activities are becoming established and creating acceptable patterns for improving the processes.

The attempt to compare the mass and volume of the information and its management Intranets to other alternatives is possible only in the abstract. Is it feasible to create such a cooperative effort through a medium other than an Intranet? Is it possible to transfer on paper, by telephone, through electronic mail or all of these together the messages, policies, guidance and knowledge, as well as inspire initiatives and processes among the company's 130,000 employees, as has been accomplished through the knowledge management on the Intranet Compass site?

The answer to this virtual attempt is negative in an extremely tangible way.

The great advantage of Intranets, allowing access by each and every member of an organization (access heretofore unavailable) to the huge storehouse of knowledge held by a global company is also their disadvantage. Users are exposed to amounts of knowledge that can only be termed "infinite", as it lacks clear limits. Since the company's internal Intranet is also open to the Internet, and allows connection to relevant sites there as well, the phenomenon of infinite information and knowledge acquires even greater dimensions. On the one hand, there is access to the whole of the organization's knowledge. yet on the other hand, there is a real problem in coping with the amount of knowledge available and selecting from among it specific information. The search mechanisms which appear on the different Intranets ease the task of finding information yet there is still no central search mechanism for all the sites for the global company's Intranets, and until there is such a uniform mechanism, the problem of locating information will continue. A meta search mechanism when it appears will not solve the

problem of evaluating the information on the Intranet. Since most, if not all the activities related to knowledge management on the Intranet are the result of the initiatives of people, departments or groups within the organization, and each is solely responsible for the content that they put on the company's internal network, the ability to evaluate the knowledge from this source is problematic. This influences the process of selecting information from the supply, leading to a certain extent to random selection. The random selection also occurred in this work, which was based primarily on Internet and Intranet. The combination of information overload and the inability to grade its quality has strong significance as to the investment of time given to surfing the Intranet. On the one hand, it exposes the organizational knowledge which previously had been inaccessible to all its employees, yet on the other, a situation is created wherein the end-user must make a large investment of work and time.

Continual updating of the information on the intranet is very important and sites which are not updated become, over time, irrelevant and anyway, few people make use of them until finally no one visits them. However, even when updating is done, there are problems since site history is not kept. Users see a different vista every time they return to a site. and in many cases, they will not, at any given moment, find the documents which they had previously seen. The problems of updating also affected this work, as sites which were surveyed for the purposes of this research were continually changed and the appendices which were presented at the beginning are not the same ones appended to the finished work. The original ones were impossible to locate as they no longer exist.

The immense organizational knowledge found on the network constitutes a central strategic asset for the company, and the degree of protection given to this asset affects the measure of innovation and invention of the company in comparison to other organizations. The Intranet network opens this resource to many people, and is in danger of penetration by competitors. This, in practice, results in a conflict between the company's two central interests. One, to allow its personnel access to as much knowledge as possible, yet, two, it must protect the same knowledge by setting up security mechanisms which will prevent misuse of the knowledge - use which is totally contrary to

its stated purpose. Security mechanisms are uniform throughout the organization, and security procedures are detailed throughout the intranet.

In comparison to the list of deficiencies set out above, the list of benefits from the intranet as a central tool of knowledge management in organizations is much longer:

The intranet - a virtual system - does not require a physical presence and is not time dependent. its dependence on people is minimal. This is particularly important in the world of high tech, where employee turnover is high. Using intranets knowledge is preserved and turned over to other organization members. Response rate is high immediate or bordering on immediate. This is in opposition to the time required in the past to locate within an organization requested information using conventional means, that is: printed sources, mail, telephone, and the like. Information can be located online by clicking on a keyboard and results appear in real time. The shortened cycle for information retrieval influences the cycle of developing products and locating business and market opportunities. This, of course, directly impacts on the organization's ability to survive and even lead, in the world marketplace.

The Intranet, which is an intra-organizational Internet technology application, is a product aimed at the masses allowing everyone, without exception, to connect to the organizational network. In the organization under study, with around 130,000 people employees, all its members are linked to the network. Each has access to the information sources, as clients as well as providers.

An Intranet network is a cheap on a cost/benefit basis. In an organization that already has a computer network infrastructure, such as the company being examined, no additional investments are required in order to establish an Intranet. The ongoing investments are not large in comparison to the advantages gleaned through the product the company's knowledge bank.

An Intranet's memory capacity is virtually limitless with minimal expense.

An Intranet is an instrument for gathering together. It links people in the organization and contributes to the creation of a professional knowledge community from among a myriad number of individuals.

Using appropriate retrieval software programs, vast amounts of information can be organized rapidly at a low cost. Via an Intranet, a process can be carried out simultaneously along the entire breadth of the organization, thus

ensuring a uniform, efficient and controllable execution of the program. Improvement of the implementation efforts are even possible as it is being carried out.

The above mentioned benefits characterize the existing Intranet in the organization being studied. It was set up relatively quickly, driven by the individual initiative of people within the organization, encouraged by the organization's policies and global management. 130,000 employees, spread around the world, have become, through this Intranet, a community of knowledge whose members are partners in creating a reservoir of organizational knowledge in order to achieve the organization's goals, despite the physical distances, the time differences and the cultural diversity inherent in a company so large and farflung. This Intranet is used to disseminate and emphasize the company's messages and policies among its employees. It simplifies processes and prevents recurrence and repetition of problems and documents the organizational memory. All this contributes to the development of new knowledge and strategies.

The effect of the Intranet on the organization can be estimated to a great extent by its effect on the organization's employees.

The experience of being instantaneously exposed to information, in itself, is a strong and Significant experience and provokes enthusiastic reactions among users. This was seen during the interviews.

This feeling also has a negative side. Quite a few people rely solely on the network as their source of information, without being aware of its deficiencies, limitations and other existing options.

The great change in knowledge management through an Intranet requires the user to be active and take initiative, to access it, to be interested, to provide and receive information. The responsibility is transferred to the user/builder of the knowledge and in this regard, it "adds work". The user must be smart enough to choose from among what is being offered to him or her.

Knowledge management on an Intranet is typically premised on the willingness of the organization's members to share their knowledge with the whole organization and to show initiative and activism in displaying the information on the network. Such action lessens the natural dependence of an organization on the individuals who comprise it. In practice, this presumption

contradicts people's natural inclination to keep their personal knowledge for themselves, to preserve their relative advantage to the organization, protecting their professional and personal positions.

Knowledge management through an Intranet has an overwhelming effect on the organization's members, perhaps the most blatant of which is its social/sociological effect. The Intranet under study here indeed transformed the organization into a knowledge community, linking all members heretofore separated by virtue of time and place. The opportunity and ease of access, the range of sources and the daily interaction engender feelings of cooperation and empowerment commensurate with belonging to a global information community. This is all also expressed in the work practices and the delegation of time resources of the organization's members.

Knowledge Management, Really?!

Today's existing mechanisms for managing the relevant knowledge from amid the existing infinite knowledge on Intranet and Internet systems are those that permit access and exposure to the existing knowledge. By virtue of this reality a paradox between the attempt to control the knowledge and the inability to cope with the vast amount of knowledge is created.

System No.
000435812