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“Business Intelligence: A New Challenge for Librarians?”

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Abstract:

Watching for information is an occupation which can be aimed at many fields of activity: competitive business watch, information technology watch, scientific watch, commercial watch, social watch, business strategy watch, current information watch, etc. The operation is a continuous and dynamic process which requires data as it becomes available to the individuals or more specifically to information scientists, with a view to being used by them. It requires a sense of expertise consistent with the topic or nature of the gathered information. Information watch services are different from services provided by librarians in that the course of the event is being anticipated. For instance, business competition is the main trigger of the technology watch process. In the framework of a government service, information watch is performed in order to know of the repercussions of decision-making on public opinion.

The information watch process involves a wide range of tools which can be combined altogether: databases specialized in the field of patents, trademarks, corporate files, press releases, etc; reviews of the press and journals, mail-order catalogues, marketing offers, etc; conferences, meetings and forums.

“Business Intelligence: A New Challenge for Librarians?”

« *The information watch consists in observing and analyzing the scientific, technical, technological, and economical environment of a company to counteract potential threats and seize growth opportunities.*

It especially aims at identifying information as it becomes available to make good use of it within a network of experts.”

(**op. cit. JAKOBIAK F.**, *Pratique de la veille technologique*, Paris, Editions d'Organisation, 1990)

Information at the centre of the watch process

The information watch is a process that involves networks of individuals and technologies. A « watch culture » should be part of the life of any company. In the United States, the concept is known as « Business Intelligence ». At the core of watch concerns is information basically.

Ninety per cent of the information useful is easily accessible via databases, scientific and technical publications, journals, promotional business brochures, etc via the informal exchange of ideas between various experts.

Such information is all the more accessible as electronic information networks grow.

The difficulty of financing business plans is increased as technologies become more sophisticated. The right to error is not allowed in the adoption of a business plan and subsequent implementation of a strategy. This is rendered more complex with the increase in business competition. The decision-makers must be meticulous and keep a watchful eye on the examination of business plans before making decisions. This *beforehand* requires an expertise in gathering and processing technological information (including competitive businesses whenever possible). *Information watch as an occupation is becoming a mandatory strategic objective in a range of activities which may be huge.*

| The role of information and watch in a company | |
|---|--|
| FLOW OF CURRENT INFORMATION | WATCH |
| Sporadic needs | Must be considered in terms of duration/delay as many unknowns are often encountered in the search for information |
| Unique origin/source | Multiple origins/sources: gathering of the available data once the nature of the watch has been determined |
| Gives information about the present time | Anticipate information |
| Rough information processing | Elaborate information processing |
| Functional nature | Strategic nature |

At the centre of the information watch: the business strategy

To establish corporate information watch systems, 5 aspects need answering:

- information field;
- information sources;
- value of the information;
- participants involved;
- modes of conveying information.

The key object of the information watch must be searched for. To get the right information, the exact nature of the search must be determined. A certain number of priority trends in a variety of domains must be chosen.

The concept of « vertical watch » restricted to the field of business activity must be combined with the « horizontal watch » concept (matching several fields of activity).

Then, a good information watch *approach stems from the assessment of the risks involved in making certain choices*. The watch does not provide raw facts but reliable, current, and analyzed data presenting the opportunities, risks and issues at stake. The decision-makers will partly rely on this information to formulate the business strategy. *The information watch may well go beyond the encompassing view of things or the multidisciplinary state-of-the-art and claim a twofold skill: both the skill of a librarian/information scientist and the skill of an expert in a given specialty.*

To thoroughly assess the best investigation field to perform the information watch requires that the specificity of the company be determined by the leading authorities:

- *orientation and strategy of the company*: data which have to be watched and managed as a priority may then come out more clearly in specific fields (products, guidelines, technologies, marketplaces, competitive businesses), just as in the characteristics of the possible origin/source of information: fresh news, experts' sources.
- *the sum total of the know-how specific to the industry* (in techniques, marketing and management)
- *merchandized products as a whole, corresponding and competitive markets, and distribution channels.*

Incite the management team to precisely formulate the strategy which implies that the decision-makers have to clearly expose the objectives of the watch to their personnel

Identifying the source persons

Get information outside the usual body of experience and competence of the company often consists in identifying the source persons via the address books of the decision-makers and many other networks of public relations.

These books are supplied with information gathered at conferences, seminars, forums which are attended by the managerial staff. The experts met there may help in giving valuable advice to others or showing the way to another type of information sources.

The documentation service (when in charge of the watch) looks out for the experts in reviewing press releases and minutes from symposiums, questioning specific databases, information networks and taking part in newsgroups on the Internet. Once the experts are identified, the decision-makers are informed of conferences and forthcoming meetings.

Difficulties encountered while performing the watch

The aim is to get to know where the interesting grey information is, to learn how to identify, crosscheck and validate it. (...) One must be able to:

- *find the information,*
- *and detect the part of truth which it contains.*

(op. cit. BERNAT J.P., *Les Métiers de la documentation*, Paris, Ed. d'Organisation, 1998, p. 31)

Decision-makers run short of time and searches performed in the information watch process must be related to well-defined objectives so as not to be diluted in a mass of data. The amount of functional information necessary for the management of companies sometimes takes precedence over certain prospects.

The shortage of time experts experience as regards analysis of data is another pitfall.

The relevance and reliability of published and unpublished data are carefully checked out and the results sorted. The documentation service in charge of the information watch has to keep a constant watchful eye on the course of events and stay tuned in to decision-makers.

These various aspects show that the implementation of an information watch is not done spontaneously by the company. Most importantly, it corresponds to a full-time occupation that requires a rigorous and structured approach.

The person in charge of the watch

Michael E. Porter, teacher at the Harvard Business School epitomizes the philosophical outlook of the watch:

« Give the right piece of information to the right person at the right time to make the right decision ».

The person in charge of the information watch, be it a librarian or another person, is not the only one to collect information useful for the company. Its role as a moderator consists in establishing networks in urging each employee in the company to trace back/find the information, collect and analyze (whenever possible) every part of it. The information provided to the chief executive is processed and should be as reliable as possible.

The art of performing the information watch is to identify and incorporate *the right piece of information* among an ever-increasing bulk of data, a great variety of business activities that worldwide exchanges make complex. In addition, the life cycle of products grows shorter, competition is fiercer and demand changes more and more rapidly.

To keep people informed at the right moment is a priority for the watch specialist who must grasp the news as it comes out, follow its evolution and keep a steady pace in performing the information watch (even anticipate its developments).

The facts show that this watchfulness is a means of access to greater and more successful sources of information or still unpublished data. Information of a strategic importance may result from contacts with experts in a given field.

The person who performs the information watch is not limited to the corporate address books, nor to the boundaries of published information. The watch specialist uses a whole lot of instruments: databases, specialized periodicals of general interest, patents, manuals and publications, business brochures, etc and orally-transmitted information likely to emerge from all categories of experts (in technological nodes, corporate trade-unions, universities, industries, etc).

The watch specialist handles data files concerning experts with the following information: identification, domain(s), level of skill, nature of the ongoing searches. Contacts and regular exchanges with experts allow to check out and validate the information. Meetings/interviews also make it possible to take minutes.

Selective dissemination of information (SDI)

The selective dissemination of information is a type of watch. However, if it meets the criterion of permanence in the information watch process, it does not take into account certain basic criteria in the search performed:

- selection of data by the user in order to make a decision on an individual basis;
- consequences of the facts set out about the management of activities in a company are not considered;
- risks and stakes related to the company;
- orally transmitted information is not retained.

This type of information watch is adapted to a logic of supply corresponding to the current interests of the company but not to the development of a prospective strategy.

Methods for the watch

Functional analysis (i.e. the analysis of the function of the technology as target of the watch), the strategic analysis, marketing, evaluation of risks, are tools elaborated by the watch specialists. These tools allow to stratify/structure information.

The watch specialist endeavours to make the information to be conveyed attractive. Beyond the synthetic analysis that is made, it is necessary to elaborate blueprints and tables to make the text format richer.

Information watch and the Intranet

The information watch specialists within a company have to exchange ideas. The creation of a specific « information watch » website on the Intranet helps them in that respect. The information gathered by the various information sensors and watch specialists in the company are accessible in a limited way (e.g. the Intranet of the Lagardère combine testifies to this).

The participants in the watch

The prospective aspect of the information watch may induce a sense of data privacy when being initiated. Only a few fellow workers are contacted to become *information sensors*,

notably through a network of contacts and potential sources. They convey every information gathered to the analysts of the watch department in the form of minutes, interviews or quizzes. Such elements promote the information watch process, and when combined with others allow to check out the information gathered and help the decision-makers to formulate the best strategy possible for the company.

The concept of professional hierarchy, the type of activity, the understanding of the concept of information watch determine the modalities of communication with the potential users of the information watch.

The expectations of information watch users

Decision-makers in information watch departments show all diverse interests consistent with various needs when information watch is at stake.

It is therefore necessary to devise a system of information applied to the watch whereby individual exchanges can take precedence over documents:

- The managerial staff expects to be given a synthesis of all informative elements which will serve as a basis to its strategy/action programme.
- The operational departments need a more extensive base/background presenting the facts, data and lines of argument.
- The field specialists need to identify their scope of activities within the business plan as a whole and rely on precise information as regards their own business assignments.

Watch and quality assessment: comparable approaches

The information watch system of a company mandates the presence of a person in charge. The watch specialist is somehow a conductor with a good knowledge of the company and a good handling of the system. This person can evaluate the costs and efficacy of such a system for the company.

The information watch approach is comparable to that undertaken since the last decade in the field of quality scoring. Previously, the concept of quality scoring represented a stake and an industrial reality. However, the quality business (which was the key objective of so many industries) did only exist implicitly. Today the quality business is clearly a matter for the individual. To set it up means to integrate it within a professional, structured, and formalized background with a quality analyst to get it going — the quality analyst using proven and reproducible methods. Likewise if the company tends to spontaneously perform the information watch, it is presently essential to make this approach formal to optimize it in terms of efficacy.

The information watch specialist in a company must show similar skills to the ones of a quality analyst, that is *to lead and motivate employees*.

From the watch to business intelligence (information in economics)

The contemporary industries are subject to the hazards of technology, economics, finance, and politics, etc. However, the person in charge of the watch cannot watch everything. Priorities must be taken based on the corporate strategy. Indeed, the corporate strategy commands a specific know-how which must be preserved and reinforced with an increased watch of the corresponding technologies.

It is the strategy which allows to identify which products to use and which markets to watch as a priority.

Additionally to the sense of watchfulness, the information watch specialist is keen on the processing of the gathered information. Easily understandable, the information conveyed to

the chief executives acts as a *guideline/recommendation* to launch a project. It can lead to re-evaluate the strategy of the company.

Not only is the watch addressed to the evolution in sciences and technologies, but also it *focuses on solving daily industrial problems* as it takes into account any factors likely to have an impact on business activities.

As a result, the concept of *business intelligence* increasingly tends to take over the more limited concept of competitive business or commercial watch. **Business intelligence is defined as the combination of coordinated steps of research, processing, dissemination, and protection of the information useful to economical participants.**

Industries and the approach of business intelligence

Coordinated methods of information management are tools of strategic efficacy. The managerial staff must make good use of the information watch which mobilizes a whole lot of skills to promote strategy. This necessitates that the employees be trained, the organization and structuring of the company memory be transformed.

A project manager is appointed: either having a general knowledge or being a specialist, that person must have a perfect knowledge of the company and play the role of network moderator. The useful information is formalized in accordance with management protocols.

Business intelligence practice must allow to identify:

- *strategic information* in order to build competitive strategic approaches;
- *tactical information*;
- *competitive information* (with the use of benchmarking);
- *commercial information* (marketplaces/customers) providing the best service to the customer;
- *social information* allowing for the mobilization of all inner energies and resources.

References

- CLERC P., *Intelligence économique*, Rapport mondial sur l'information 1997-1998, Paris, UNESCO, 1998.
- COURTIAL J.P., *Introduction à la scientométrie : de la bibliométrie à la veille technologique*, Paris, Anthropos, 1990.
- DASSA F., "L'utilisation des banques de données pour la veille technologique : l'exemple d'un groupe industriel", *Documentaliste, sciences de l'information*, vol.28, n°1, p.11, 1991, pp.8-18.
- DEGOU P., "L'information scientifique et économique (ISTE) pour l'entreprise", *Documentaliste, sciences de l'information*, vol.27, n°1, 1990, p.11.
- DESVAL H., DOU H., *La Veille technologique : l'information scientifique, technique et industrielle*, Paris, Dunod, 1992.
- Intelligence économique et stratégie des entreprises*, Rapport du groupe de travail présidé par Henri MARTRE, Commissariat général du Plan, Paris, La Documentation française, 1994.
- JAKOBIAK F., *Exemples commentés de veille technologique*, Paris, Editions d'Organisation, 1992.
- JAKOBIAK F., *Pratique de la veille technologique*, Paris, Ed. d'Organisation, 1990.
- MARTINET B., RIBAUT J. M., *La Veille technologique, concurrentielle et commerciale : sources, méthodologie, organisation*, Paris, Ed. d'Organisation, 1988.
- OBERSON P., *L'Internet et l'intelligence économique*, Paris, Ed. d'Organisation, 1997.
- WERNER E., DEGOUL P., "La veille technologique. Un nouveau métier pour l'entreprise", *La Recherche*, oct. 1994, vol.25, n°269, pp.1068-77.