# **Information Overload:**

## **Should We Accept or**

### **Refuse Information?**

By Pascal Frion, University of Poitiers

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I have information for you, are you interested? Are you curious? Of course you are, everyone is. For centuries, we have been taking for granted that information is "a good thing." Some information is good, more information is better. This is the progress paradigm for information.

In competitive intelligence (CI) activities, information is a valuable element. Throughout extensive readings of international scientific CI literature and practitioners' books and articles, we have seen the progress paradigm for information appearing frequently. CI practice has been based on this progress paradigm. This tacit acceptance of the 'more is better' approach to information is now being challenged.

Current information management processes – primarily based on experience – aim to process information more efficiently. But improving human-computer interactions will not solve the data overload we experience daily. Adding data in the system often does not help and simply has an interruption and a disturbing effect. More information does not necessarily make it easier to understand a given situation. We need a new information management model.

In this article we investigate and question this paradigm and its resulting information overload. What are our options against information overload? Are we going to

keep on accepting or tolerating information in an overload situation? Are we going to start avoiding information? Isn't it time to imagine a more radical approach: a methodology of information refusal?

#### THE INFORMATION PARADIGM

A paradigm is a tacit conceptual framework, consisting of a set of rules and dominant ideas for which there seems that there is no alternative. To some extent, the process of identifying a paradigm already raises questions about it and restricts it to some specific applications and contextual uses.

The progress paradigm for information leads us to accept that receiving more information is valuable even thought we don't initially know what it contains. For instance, we follow the news everyday on television, radio, internet, and newspaper with no agenda set beforehand. It looks like an information ritual based on luck for want of anything better. Here it's difficult to distinguish curiosity from distraction. Is it effective to spend a substantial amount of time, day after day, reading data that is for the most part not used? With environmental scanning we watch to see if anything has changed, but hope nothing has.

We attach importance to gathering the maximum variety of information, then collectively try to make sense of it and turn it into actionable knowledge. We act as if we were in an information refinery – we mainly process existing data and information, we don't invent it. We believe it is necessary to go through available prior knowledge. We see information as neutral and process it based on the theory that being exposed to the maximum variety of information will provide us with the big picture. Foreknowledge is a must. Information is supposed to prevent us from blindness, hermitage, and ignorance.

#### A MODERN PARADOX

"There is a paradox of perceived information overload and lack of information" (Blanco, Caron-Fasan, Lesca 2003). Let's concentrate on the first side of this coin. For this article we use the words data, information, knowledge with no real distinction made between them since the progress paradigm applies to all of them (with slightly different specificities). They're all part of the huge problem we face: we all have too much "information."

We reviewed the content of competitive intelligence publications from 1996 through 2008, primarily those of SCIP: *Journal of Competitive Intelligence and Management* (JCIM); *Competitive Intelligence Magazine* (CIM), *Competitive* Intelligence Review (CIR), and *ScipOnline*. After going through the available material, we identified 1231 articles and analyzed their content to identify those which included an implicit or explicit reference to information overload. The results were:

- 18.5% of the articles included an implicit or explicit reference (between 18.5% and 27.5%).
- 7.1% of the articles included an explicit reference.
- None of the titles implicitly mention it and only one explicitly does (<u>Hohhof</u> 2003).

Approximately one document out of five published by SCIP contains a reference to information overload, but it seems to be taken for granted and not studied. In many cases, information overload is mentioned only once in a paper when describing the environment of the firm, and not as a cornerstone issue of competitive intelligence information management. When included, information overload is discussed in two contexts:

### SIDEBAR 1: THE VOCABULARY OF INFORMATION

The information overload reality and concept is described differently within the SCIP literature:

- · information overload
- · information input overload
- cognitive overload
- content overload
- · too much information
- · overwhelmed with information
- over-information
- abundance of information
- · massive information flow
- · huge amount of data collected
- · information explosion
- deluge of information
- · infoglut
- infosmog
- data smog
- information surplus
- · myriad of information
- paper mountain
- non-stop avalanche of information
- · a welter of information
- clutter
- Information is hidden and people need to make an effort to looking for that information.
- Data needs to be analyzed and turned into information, information into knowledge, knowledge into intelligence (Miller 1999).

Most authors see information overload as not caused by receiving too much information, but as an information gathering and management issue. Indeed, the only suggestion to eliminate information overload is to work on gathering information and its management (<u>Desouza</u> 2001). In other words: accept it and process it. We are supposed to be able to process information with time and effort or with more sophisticated filters (intelligent tools, selection of access and people sources, collective sensemaking, etc.). Another approach is to tolerate information overload and limit ourselves to a few access points and

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people sources (<u>Lisse</u> 1998) or to use filters (<u>Lackman, Saban & Lanasa</u> 2000). Once again, this is an information favoring approach.

We complain about information overload as a potential "bad thing," still, we act as if more information was a "good thing." In this respect, our methods do not match our needs. For instance, none of the articles clearly and methodologically repudiated acquiring more information. Our micro-perspective of information is "every little bit helps" and our macro-perspective sees information overload as spoiling the competitive intelligence effort.

#### THE OTHER SIDE OF THE COIN

In general, we have too much information, and we also lack information for specific strategic questioning. And from this paradoxical situation, most competitive intelligence professionals and academics tend to ignore the information overload side and instead focus on what I call the luck model.

A caricature of the luck model would be an all-you-can-eat restaurant where they serve you information. This approach becomes an all-you-can-gather information system. Material is largely "chosen at random," processed, and (if we are lucky) we discover useful nuggets. We found that competitive intelligence literature frequently uses the term nuggets – it appeared in 39 of the SCIP articles (see Miller 1999 for example).

#### WHAT WE DO WITH INFORMATION OVERLOAD

Here are some suggestions to defensively cope with information overload:

- Use more process (technology will sort it out) and develop information acceptance.
- Increase individual expertise (more effective internet searches for instance).
- Develop information tolerance rather than to actively fight it.
- Deny the existence of information overload and information avoidance.
- Move away from information and methodological information refusal (Frion 2010).

A general consensus exists for using the standard approaches to the way we treat information: focus, process, filter, analyze, make sense, use new software, etc. This way we act from an information acceptance or an information tolerance position. Often we accept any piece of information/data and we try to sort out the relevant information from the useless info-trash. Developing more sophisticated personal skills in processing information is one way to create a tolerance of information that will be further refined through collective sense-making activities.

Do we all agree with the information overload definition as too much information in a period of time? The reference to "a period of time" is important. We are not overloaded with information at all times.

#### METHODOLOGICAL INFORMATION REFUSAL

Apart from information acceptance and information tolerance (which are information favoring), what could help us escape this information age of redundancy and comments? Can we try and leave information overload age for an intelligence age? Can we imagine a choice/refusal approach of information?

Indeed, the tendency to avoid information is well known in the medical sciences. Some patients prefer not to be informed about their disease than to be told. They avoid discomforting information. It is clear that we sometimes behave that way in companies. Information refusal is based on the appreciation that environment scanning is often more a waste of time than a nugget discovery. Instead of doing more information processing, here's another approach.

The methodological information refusal approach is the opposite of information acceptance. Pushed information is refused, to avoid first information bias – the first information received is perceived as more relevant and stays longer in the forefront of later thoughts. In this approach the first effort is spent in a thorough strategic questioning of the personal needs and project goals. Only after this temporary refusal and strategic questioning have been determined is it time to seek information that will fill the information gaps. This approach prevents available data from taking priority, and focuses on the search for the unique, useful information. Small companies particularly apply this approach, since refusing data can often be the only pragmatic way for them to face information overload.

People who methodologically and temporarily refuse information are not foolish. They understand that in a

competitive intelligence project the human contribution is decisive. They accept that they cannot physically process all the available information, as personal resources are limited. They are trying to manage the information processing and the strategic questioning on the go, and to give a methodological order advantage to their projects and strategies.

These individuals don't want available information to dictate the outcome of the analysis and the decision recommendations. Information refusal is more a philosophy and a guiding approach than a checklist (see sidebar 2). But this refusal is generally seen by others as a negative action. Even mentioning the possibility of refusing information can provoke negative reactions such as "you are going to miss some information" or "we never know if one piece of information can help."

The vicious circle of more data, more technology, more treatment has to be questioned. To create a more virtuous circle, we need to follow these requirements:

- Communicate what information we need and on what we lack.
- Focus on our abilities to answer questions rather than providing the raw data we happen to have.
- Focus on the human behaviors required to successfully approach information (questioning, seeking, treating, distributing, protecting information) rather than on technological resources to treat data.
- Carefully watch a few strong signals rather than monitor a multitude of weak signals.
- Identify what causes many of our problems –
  not data processing but our low level of prior
  questioning and our inability to define accurate
  information.
- Place less emphasis on watching existing data and more effort in imagining or inventing relevant information.
- Eliminate the belief that we can acquire all the
  existing data on a subject prior to making a decision.
  The web alone cannot cover all of a subject the
  information market is asymmetric, therefore, as a
  principle, the uniquely valuable information is not
  on the internet.

The action of managing data itself is relatively reassuring. Nobody can contest that we put tremendous efforts into processing existing data. However, this approach no longer provides any competitive advantage – the industrial-era model of data management is outmoded.

All the elements of the Methodological Information Refusal model push to decrease the value of the downstream activities of data processing, and to increase the value of the upstream activities of questioning. The information era creates new situations and in most cases our old tools are not up to the task. We don't have time to evaluate every single item of information we happen to have contact with. Let us start by minimizing the time we spend supporting the result-and-process culture and maximizing our time in the choice culture.

#### **CONCLUSION**

Information overload has long been an issue for competitive intelligence. Unfortunately we support it with old habits that welcomed more and more information. In effect we accepted and welcomed information overload due to our culture, our education, our mindsets, and our habits. And information overload is often used as a justification for developing and implementing information retrieval and processing software.

It's time to question our approach to information. The Methodological Information Refusal approach provides an option to the existing progress paradigm where information is always a good thing. Is ignoring information overload in our information management a naïve information process? This study cannot determine the final answer. We need to continue exploring other fields of the business (such as information management, decision making, etc.) and other scientific fields (such as information behavior, psychology, sociology and philosophy) to identify the most relevant elements and reveal a more generalized situation.

This first article, which examines competitive intelligence and information overload material in SCIP publications, is not so much a review of the literature as a call for other authors to explore deeply this topic as a central issue in competitive intelligence. It is time that the progress paradigm is challenged by alternatives, either to strengthen it in some areas or to replace it by another paradigm. We should not hesitate to approach this effort, but we need to recognize that it is a tremendous shift to integrate it from the start in our information behavior.

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Pascal Frion has been involved in competitive intelligence since 1996 as a practitioner within the Acrie Network (www.acrie. com) and recently as a PhD candidate at the University of Poitiers in France. He also provides competitive intelligence training and consulting in many countries (Europe, Cameroun, Chile, Vietnam) particularly to small companies. Pascal has been a SCIP member and an Information Overload Research Group member (www.iorgforum.org) since 2008. He is a member of the French Competitive Intelligence Academia (www.academie-ie.org) since 2006 and a member of the French Institut of the high studies for national defense (www.ihedn.fr) since 2000. Pascal can be reached at pascal.frion@acrie.fr