Introduction to Competitive Intelligence Portals

The What, Why, and How of using IT tools to support your intelligence work
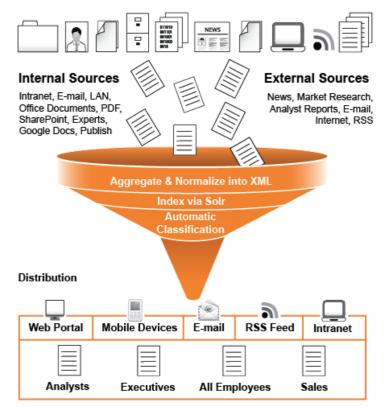
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The number of companies that are successfully deploying various kinds of CI portal solutions are constantly growing. The phrases CI portals, Intelligence systems, CI tools, MI portals are heard everywhere, but what do they really mean? And why should you really care?

The purpose of this article is to bring some clarity to the concept of CI portals, their range of functionalities, and the benefits an intelligence team should expect them to provide.

SO WHAT IS A CI PORTAL?

In a most condensed way, a CI portal is defined as a centralized platform for the collecting, storing, processing, reporting, and dissemination of both internal and external information with the specific purpose of providing the decisions processes in the organization with relevant intelligence.

Internal Sources
Intranet, E-mail, LAN, Office Documents, PDF, SharePoint, Experts, Google Docs, Publish

External Sources
News, Market Research, Analyst Reports, E-mail, Internet, RSS

Aggregate & Normalize into XML
Index via Solr
Automatic Classification

Distribution

| Web Portal | Mobile Devices | E-mail | RSS Feed | Intranet |

| Analysts | Executives | All Employees | Sales |

User Views / Dashboards

Figure 1. A CI Portal can be seen as a funnel

Innovative companies should ensure that their CI platforms are built upon the following four IT pillars of development:

1 **Cloud computing** – *should be possible to access securely via the internet.*

2 **Social collaboration** – *possible to connect intelligence experts with other experts and easy to contribute and share intelligence.*

3 **Big data analytics** - *should be possible to visualize large volumes of information.*

4 **Mobile computing** – *must be possible to access intelligence via any mobile device, wherever and whenever you want.*

Do we really need a CI portal?

CI portals are all about the management and visualization of information and people using that information. The main challenge of CI these days is no longer to find information, it is to make sense of the abundance of information available and, at the same time, be able to filter out the small elements of information that might indicate that a major change or disruption is coming.

The job of the CI professional in this world is not to add to this volume of info, but to deduce what information is relevant and find new sources, i.e. to actually reduce information. Irrelevant information must be filtered out – often a difficult decision to make, but essential if you are not to be left with an overwhelming amount of data. Then insight should be drawn on the information that is left. This is virtually impossible to do today without technology support!

A CI portal has many advantages. It is not only a working tool for the entire CI team, it is also a service portal for all users of intelligence. For the CI team, a CI portal is a technology enabler that automates CI processes and frees up time for analysis. A well-designed CI portal is designed to support the intelligence work both for CI producers
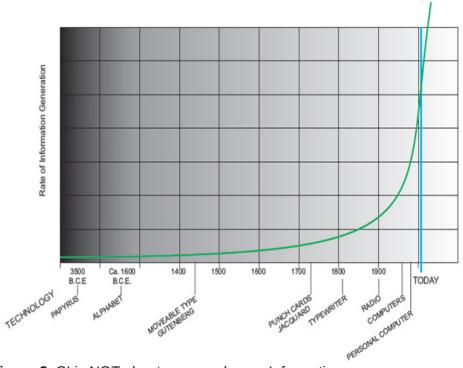

Figure 2. CI is NOT about more and more Information

and CI consumers. It helps inspire an intelligence culture by showing intelligence that is important and by enabling communication between all portal users, intelligence consumers as well as the CI professionals. It is one of most tangible elements of CI and, as such, makes it an excellent CI marketing and communication tool.

So, Yes! As a CI Team you do need some form of a CI portal to keep up today!

HOW DO CI PORTALS SUPPORT THE CI PROCESS?

An intelligence system is a must-have to support the intelligence process. The CI portal must be properly set up and adhere to the organization's specific intelligence needs and the working process of the CI team. Most CI teams these days have a working model that, in one way or the other, follows the so called CI cycle. As a reader of this magazine, it is highly likely that you are already familiar with this model so we are not going to spend time to explain what can be read on the topic in numerous other well written articles. In short though, it contains five distinct "steps" or activities:

1. *Planning*
2. *Collection*
3. *Processing*
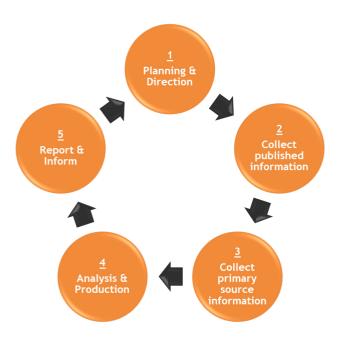4. *Analysis*
5. *Dissemination*

Figure 3. The CI Cycle

A capable CI portal will support the CI team in all these steps. For the sake of consistency with the established working model, we will discuss CI portals from the perspective of each of those five steps.

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Planning & Direction

In CI terms, planning and direction is very much about formulating the right questions and defining the intelligence need of the organization. As the business environment changes, so does the CI direction so this is an ongoing activity in which a CI portal is of tremendous support, once it is up and running, but let's start from the beginning.

A CI portal cannot work out of nothing, it must be told what to monitor and look for, i.e. what are the interests of the decision makers? In CI portal terms, these questions and interest areas are converted into an organization-specific information model, often referred to as a "Taxonomy".

Using Taxonomies as a Map

Vocabulary.com has an explanation that conveys the point: "Taxonomy is a word used mainly in biology to talk about classifying living organisms, organizing them according to their similarities. If you've ever seen a chart with animals divided into species, genus, and family, you know what scientific taxonomy is. The word comes straightforwardly from Greek for "arrangement" — taxis — and "method" — nomia. So any special method for arranging or organizing things can be called taxonomy."

A systematic and structured classification system of topics.

Helps users with a reference system to support finding and organizing information.

Figure 4. Definition of taxonomy for business

KIT's are but a subset of a proper CI taxonomy

In CI operations the concept of Key Intelligence Topics (KITs) is often used for the very specific questions that are in focus at each point in time. Although KIT's should definitely be part of a CI portal taxonomy, they are but a subset of what a CI portal should handle. An intelligence taxonomy should represent the entire business environment the organization is operating in: customers, competitors, products, technologies, countries, regulators etc. The taxonomy is a fisheye lens, tirelessly 24/7 monitoring the entire business environment on behalf of the CI team.

It is not what we DO have that matter, it is what we SHOULD have!

Objection!? Yes, we know, there are many articles and professionals claiming that taxonomies do not help at all... and they are right. The problem is just that they are referring to the wrong type of taxonomies, so keep reading. Traditionally, taxonomies have been tools to classify/codify what is already at hand. Think about a traditional library. There are huge models for knowing exactly on what shelf to put a book about British countryside cooking during the Victorian era, but no one would bother about that code if there was no such book. The same applies to corporate taxonomies today that are typically developed to answer the question "what **do** we have here?" A CI taxonomy, however, should answer the question "what **should** we have here?" And if nothing is to be found, we have a gap in our intelligence or understanding of our business environment. Hence, the procedures for developing a CI taxonomy differ significantly from those of developing e.g. an IT taxonomy.

The development and maintenance of a CI taxonomy involves both CI professionals and users of intelligence in order to make sure "the lens" is truly set for the strategic target of the organization. Going forward after the first initiation, the beauty of a taxonomy is that it will, itself, help define its own development by its sheer power to support the CI team in finding gaps or blind spots in the intelligence analysis.

In summary, a well operating CI taxonomy management is the portal part of the planning in the CI cycle.

- A CI Taxonomy reflects the industry and highlights information that is important to the organization.

- **Topics are NOT based on what available information is about, but rather on what the users need.**

- This means that there may e.g. be empty topics with no information in an intelligence taxonomy.

Collection of Sources

A CI portal is a technology tool that should enable significantly increased efficiency and quality in the CI work. It is however within one particular field of work in which the portal by magnitudes supersedes the capability of humans and that is in its "reading capacity." A portal can read tens or even hundreds of thousands of information elements daily and filter, categorize, and disseminate them without even a touch of a human hand. For the CI team this means that while ensuring that relevant and qualitative sources are fed into the portal, all work undertaken can focus on interpreting the patterns of information, draw conclusions, and suggest decisions to be taken. In short, spend time doing analysis. The question that arises though is what are those sources?

External vs Internal sources

Sources come in large varieties, but a typical segmentation of sources is whether they are internal or external. Strangely enough, it is still not uncommon that the two are handled in different systems which, of course, dilutes the possibilities of finding e.g. patterns significantly. By external sources we typically refer to:

- free RSS feeds on the internet
- web crawlers/agents, news agencies
- research and analysis companies

Internal sources are e.g.

- LAN drives
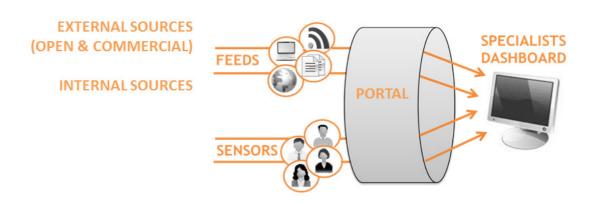- SharePoint sites
- CRM systems
- e-mail

Figure 5. Different types of sources are connected to a CI Portal

Information vs People

More valuable than most other sources are people and, in particular, internal people. Yes, your colleagues! It is truly distressing to see so many experts in their fields go without use in the CI processes within their organizations just because there are no supporting tools for CI to truly involve them in the analytical procedures. When a CI portal is in place, people can take on two very distinct roles; firstly as a source, we label that role "sensors", the other is as subject matter experts. In the latter of those capacities such individuals are of invaluable support to CI in that they, better than anyone, can support in judging and evaluating the relevance of a particular piece of information in the analytical process, within their particular field of expertise. As sensors however, people function more as triggers of dialog or originators of primary intelligence. In contrast to Sensors, we label all sources that automatically provide information to the portal "Feeds" (see graph below), disregarding if they are internal or external.

Defining sources

Sources can prove to be a very costly resource to procure so it is important to go about the definition and selection process with care. Obviously, having a well-defined taxonomy at hand helps a lot to gain a good understanding of what potential sources to retrieve, but there are still some requirements that have to be derived from the key users of the portal.

Firstly, make sure to retrieve the sources both the CI team and your users are used to in order to make the portal as familiar as possible.

Secondly, try to find out which commercial sources that are already being procured and seek to centralize such procurement and dialogue with the content providers. Long term, this is always a win-win situation for both the CI team and the content provider as the actual value delivered increases by the sheer dialogue and "context thinking" that will become the consequence.

Thirdly, use the taxonomy applied to analyze if there are source gaps with regards to the topics needed to monitor and, if so, finalize the source set-up by looking for and adding sources that can fill those gaps. This third step itself is, in many cases, reason enough to embark on a portal project as it is unlikely that you will find those intelligence gaps as clearly as you will with a portal.

Processing and storing

We will make it easy for us under this heading and that is simply because having a portal makes this step in the CI cycle a non-issue. With a CI portal in place, provided the portal platform is up to modern standards, the processing and storing of information is automated. The taxonomy should take care of the basic sorting and classification of the majority of the content, while the search engine manages indexing and the IT facility the storing, security and backup. In short, the CI portal should do this job automatically for you.

Analysis

Can a portal undertake analysis? Can any IT system undertake analysis? No, systems do not analyze! Systems structure, calculate, read, and visualize magnitudes of more data than any human can ever be capable of doing. Systems support human analysts in putting details into context. They help in providing perspectives. They are simply invaluable in helping us humans making sense of bizarre amounts of information, but they do not analyze — people do!

Consequently, what should truly be expected from a CI portal is a range of analysis support tools, such as:

> **Visualization**

> **Flagging**

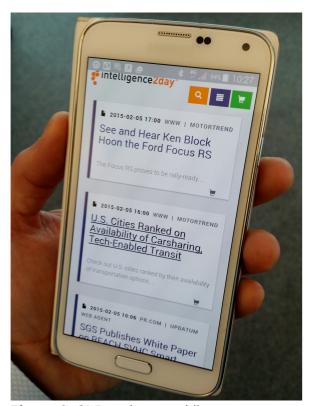> **Analysis templates and profiles**

Figure 6. CI Portals go mobile

Dissemination

Dissemination is in many aspects an erroneous term in the perspective of CI. According to Cambridge dictionary it means, "to spread or give out something, especially news, information, ideas, etc., to a lot of people." It refers to mass distribution whereas CI should target a range of segmented and defined, not unusually individual, audiences with insights relevant to very specific matters. Despite this aim, many CI units still do not have the capacity to go beyond the weekly newsletter to the wider audience of the organization, even though the actual business value of such a "general news channel" most often can be seriously challenged. The reason? A lack of an efficient dissemination/communication support tool in the CI platform, or no CI system at all.

So what dissemination functions should a CI portal be equipped with? As a CI team, the question to ask is "who are our CI 'customers'?" A CI professional is always there to support someone else's decision making for the better so the question really boils down to how one best supports the different individual recipients of intelligence. Two of the main ways of distributing intelligence are:

•   Automated Alerts
•   Reports & Newsletters

Automated alerts

From a pure economics perspective, a CI team should be able to serve as many as possible with as limited means as possible (which by the way is a good rule of thumb for any general support function in a company). Combining this with the requirement of almost personalized services to all in need for intelligence makes up an impossible task. The only possible answer is automation. Hence, a fundamental "bulk service" of a CI portal must be the capability for any individual, throughout the company, to easily set the portal to send personalized e-mail alerts or similar with the filter and focus relevant to each particular individual's needs. To opt for a CI portal without such features would today be a questionable decision. If not immediately seen as a necessity, it will inevitably be required within a short period of time after having launched a portal.

Reports & newsletters

The gathering, classification and storage of information is automated in a CI Portal. The fundamental service of sending alerts to many

users is automated and personalized. The analysis tools are all readily available in the same interface. A CI portal provides the CI team what is so often sought for; time to focus on analysis and delivery of high quality intelligence.

Still, it is not unusual that CI teams are so used to draw information out of many disparate systems and feeds that the only modus operandi known is to cut/paste into word documents and send them out by e-mail. However, most CI portals these days are equipped with impressive functionality for making sure the analyst can "stay within the system" through the entire work process of producing different kinds of output so the need for the "word workaround" should really diminish over time. The important aspect to look for in a CI portal is whether it is reasonably adjustable to the own CI organization's structures and output models. Obviously there is no "one size fit all" so it is usually a give and take between the system of choice and the work procedures' need to change somewhat in order to be able to fully draw the benefit from the system support. Any reports or other "output" produced in the system should of course be possible to distribute through the system. Again, look for functionality that enables a seamless process without having to leave the intelligence system at all.
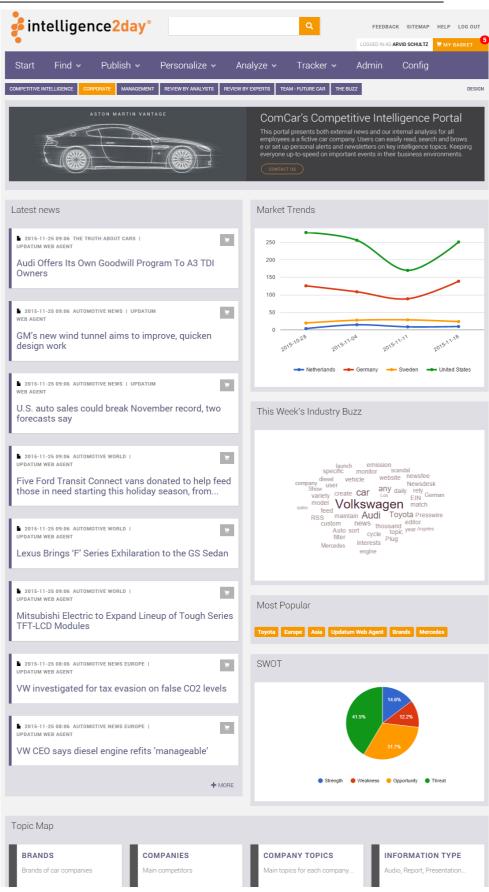

Figure 7. Example of CI Portal

JUST DO IT!

Get started now, before it is too late… A CI portal is a must-have tool, not only for the CI team of a company, but also for the entire intelligence network (although it should be managed and maintained by the CI team.) To get everyone using it, you need to find CI tools that are easy, engaging and fun to use, so users want to spend time using the CI tools.

Last but not least, remember that although a CI Portal is a must-have tool, it is only just that, a tool. The CI portal in itself will not provide you with intelligence or decisions…but it will definitely make your life as a CI professional much, much easier. Your organization will be better equipped to react to market threats and opportunities in time and gain an edge over the competition.

The authors welcome any comments and questions on the content of this article. You will find their e-mail addresses below.

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