

Main tools for a _____
technology watch and _____
competitive intelligence

Harnessing Key Resources: Enhancing Strategic
Decision-Making through Effective Technology
Watch and Competitive Intelligence Tools



Main tools for a technology watch and competitive intelligence

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Objective

This training module is designed to provide learners with comprehensive insights into the main tools used in technology watch and competitive intelligence. Through a structured curriculum, participants will explore various tools and resources that are key for gathering, analysing, and interpreting valuable information in today's dynamic business landscape.

Learners will develop the necessary skills to leverage these tools effectively, enabling them to enhance their organisation's strategic decision-making processes and stay ahead of the competition in today's rapidly evolving business environment.

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1. Introduction

In today's fast-paced and ever-evolving market landscape, the ability to effectively gather, analyse, and utilise information is paramount. This module is designed to equip you with the knowledge and skills necessary to leverage various tools for enhancing your technology watch and competitive intelligence capabilities.

We will begin by exploring alert tools, which are essential for monitoring relevant information and staying up-to-date with the latest developments in your industry. Following this, we will delve into the use of metasearch engines, which streamline your information retrieval process by aggregating results from multiple sources.

Next, we will examine specialised databases. This includes databases for scientific articles, theses, and research reports, which provide access to valuable academic research. We will also cover industrial property databases, such as those for patents, trademarks, and industrial designs, which are crucial for tracking intellectual property.

Additionally, we will look into financing databases that offer information on funding opportunities and R&D+i databases that focus on research, development, and innovation. You will also learn about databases that provide statistical, economic, and business information, as well as those that support legal monitoring.

Sectorial magazines and associations, along with research organisations, play a significant role in industry-specific intelligence gathering. Finally, we will introduce you to technology watch software, which enhances your ability to conduct a complete and efficient watch process.

By the end of this module, you will have a thorough understanding of the tools available for technology watch and competitive intelligence, enabling you to make informed decisions and stay ahead in your field.

You can know more about the TechGrow project in www.techgrow-project.eu

2. Alert Tools

One of the fundamental aspects of Technology Watch is to be informed of all news, patents or periodically updated information.

Alerts are personalised services of current information on specific aspects of a sector or topic. Currently, multiple institutions and organisations begin to offer these information services "on demand", after subscription or unionization (RSS), which help the monitoring and detection of informative signals.

Alerts are generated on several aspects such as: legislation, regulations, calls, events, scientific articles, patents, public tenders or technological offers.

Some of the most widespread alert tools are:

- **Google Alerts:** Google Alerts is a content monitoring service, offered by the Google Search engine, which automatically notifies the user about the creation of new content matching a set of search terms selected and stored by the user. Notifications of this service can be sent in two ways: by email or as a web link.
- **Talkwalker:** Talkwalker alerts monitor every single mention of your brand and keywords across the internet, including news sites, blogs, forums, websites and even X (Twitter).
- **RSS Feeds:** RSS is a format used to facilitate access to web information that is regularly updated; the user retrieves updates as soon as news related to their interest is uploaded. There are many tools to manage RSS alerts like Feedly, AOL Reader, Digg Reader, CommaFeed or Inoreader. If a website does not contain RSS, the user creates manually their own using different tools through HTML such as:
 - <https://feed43.com/>
 - <https://feedity.com/>
 - <https://feedly.com/>
 - <https://twitrss.me/>
 - <https://queryfeed.net/>
 - <https://www.inoreader.com/>
- **ALERTAS:** The ALERTAS tool is a System of Technology Watch Alerts created by the Observatory of Technology Watch and Transfer, which offers current information on science, technology and innovation produced in Ibero-America, adapted to their professional preferences and sectoral interests. The tool is easy and free. It is designed to help capture signals

from the environment about technology and innovation, which can be processed and transformed into useful knowledge for the decision-making process.

Through these technology watch alerts, the user can retrieve information on:

- Updated events
- News to the day
- Recent articles
- Fairs and congresses
- Regulations and legislation
- Featured publications
- Innovation projects
- Success stories and good practices
- Calls and grants
- Contacts and collaborators

3. Metasearch engines

Metasearch engines allow the user to launch a single search in multiple search engines simultaneously, offering results on a single screen and, in many cases, in an organized and hierarchical manner. They offer exhaustive results on a multitude of information sources and provide a general overview on a specific topic.

Normally, the easiest tool when searching for something on the web is a search engine such as Google, Bing, Ask, About, Yahoo, etc., which allow us to obtain listings of web addresses related to the words we have indicated. However, there are other tools less common, such as metasearch engines that enable us to reach more specific and quality information.

Some of the most widely used metasearch tools are:

- **MetaCrawler**: Metasearch engine that performs the search simultaneously in Google, Yahoo, Bing, Ask and About.
- **Clusty (Yippy)**: Metasearch engine that performs the search mainly in Bing and Ask. One of its features is grouping the results under certain categories.
- **DOGPILE**: Dogpile is an Internet metasearch engine that returns searches from About engines, Ask.com, FinWhat, Google, LookSmart, MSN Search, Teoma, Yahoo, Bing and other popular search engines, including audio and video.
- **OBSERVA**: Metasearch engine that offers relevant information on science, technology and innovation produced in Ibero-America. OBSERVA organizes its results based on strategic information sources for technology watch.

4. Specialised Databases

There are different aspects that require regular monitoring in an organization, such as scientific articles, R&D projects or public tenders; resulting in different specialized databases. Some of the specialized databases are further developed below.

4.1 Scientific Articles Database

There are many databases that collect information on scientific and academic publications on different topics. These databases generate knowledge of the bibliographic citation of each article and, in most cases, provide access to the complete text.

Open access databases

- **Dialnet:** Dialnet is a dissemination portal of the Hispanic scientific production whose operation began in 2001 specialising in human and social sciences.
- **REDALYC:** REDALYC is an academic project for the diffusion in Open Acces of the scientific publishing activity that takes place in and about IberoAmerican States.
- **Google Scholar:** Search engine of academic publications of Google. The results collect theses, books, summaries and articles from sources, such as academic publishers.
- **Worldwidescience:** Global science gateway comprised of national and international scientific databases and portals. The platform accelerates scientific discovery and progress by providing one-stop searching of databases from around the world.
- **BASE (Bielefeld Academia Search Engine):** Multidisciplinary search engine, which is generally used to find texts in school resources through the Internet. This search engine was created by the Library of the University of Bielefeld in the city of Bielefeld, Germany.

Databases under subscription

- **Web of Science:** Paid-version platform with a wide collection of bibliographic databases, citations and references of scientific publications of any discipline of knowledge.

- [Scopus](#): Scopus is a bibliographic database of abstracts, citations of articles from scientific journals, books and conference proceedings.
- [IEEE Xplore. Digital Library](#): IEEE Xplore is a research database for discovery and access to journal articles, conference proceedings, technical standards, and related materials on computer science, electrical engineering and electronics, and related fields.
- [Springer Link](#): Springer Link provides researchers with access to millions of scientific documents from journals, books, series, protocols, reference works and proceedings.
- [Science Direct](#): Access tool to the books and magazines of the Elsevier group (physical sciences and engineering, life sciences, health sciences and social sciences and humanities). A free version and a paid version are available.
- [ACM Digital Library](#): The ACM Digital Library is a research, discovery and networking platform containing the full-text collection of all ACM publications, including journals, conference proceedings, technical magazines, newsletters and books. A collection of curated and hosted full text publications from select publishers. The ACM Guide to Computing Literature is a comprehensive bibliographic database focused exclusively on the field of computing. A richly interlinked set of connections among authors, works, institutions, and specialized communities.

4.2 Database of theses and research reports

Theses and research reports allow to know the lines of research related to the objectives identified in the monitoring process of the organisation.

Some of the specialised databases are:

- [Open Access Theses and Dissertations \(OATD\)](#): OATD aims to be the best possible resource for finding open access graduate theses and dissertations published around the world. Metadata (information about the theses) comes from over 1,100 colleges, universities, and research institutions. OATD currently indexes 4,814,919 theses and dissertations.
- [Teseo](#): Teseo is a database of doctoral theses that allows to retrieve information about doctoral theses defended in Spanish universities since 1976.
- [DART-Europe](#): DART-Europe is a partnership of research libraries and library consortia which are working together to improve global access to European research theses. DART-Europe is endorsed by LIBER (Ligue des Bibliothèques

Européennes de Recherche), and it is the European Working Group of the Networked Digital Library of Theses and Dissertations (NDLTD).

- [NDLTD \(Networked Digital Library of Theses and Dissertations\)](#): NDLTD is a global digital library of doctoral and undergraduate theses.

4.3 Industrial property databases

Industrial property is related to creations of the mind. It is a right granted by states for a fixed period of time to use or exploit industrially and commercially inventions or innovations

Industrial Property Titles imply a type of right that the State recognises to its holder. These rights include:

- **Patents.** Exclusive right of industrial and commercial exploitation of an invention. They are granted by the State or by a regional office acting for several states to an inventor for a certain period of time.
- **Trademarks.** A sign that identifies goods or services from a company and distinguishes them from others, specifying the manufacturer and the producer.
- **Industrial designs.** They are the aesthetic aspect of an item. There are several databases in which they can be protected.

Patent databases

- [Espacenet](#): Open access database with high geographical coverage managed by the European Patent Office (EPO). It gathers more than 80 million patent documents, published since 1836 in more than 90 countries. It provides fast and advanced search options and allows the use of Boolean and/or truncation operators.
 - [Patentscope](#): Free database providing access to a collection of more than 70 million patent documents. It consists of international applications via PCT and documents belonging to other national and regional offices' collections. The search system is provided by WIPO.
 - [Google Patents](#): The Google search engine has a specific service to search for patents.
 - [Patent Lens](#): Patent search service for multiple countries. It provides full-text searches of European, American and Australian patents.
- ### 4.6 Public Tender Database.

Trademark databases

- [EUIPO](#): It provides access to different tools which are specialised in trademarks inside and outside the European Union.
- [WIPO](#): International trademark database with an access portal to more than 38,080,000 entries from around 40 national and international collections. It is the first step in determining whether a similar or identical trademark already exists.
- [TMView](#): International database specialised in trademarks. It is a collaborative platform connecting information from EUIPO and WIPO.

Industrial design databases

- [EUIPO](#): Database of the European Union Industrial Property Office providing access to trademarks, designs, and models.
- [WIPO](#): Global database providing access to information and reproductions of industrial designs.
- [DesignView](#): Database allowing the visualisation of information on registered designs or models from the different participating National Offices.

4.4 Financing Database

The financing databases are useful for organizations to learn about financing aids. Some examples of this type of database are:

- [FundingBox](#): FundingBox provides constant guidance in the quest for funding through an open culture that nurtures funding opportunities and empowers growth connections.
- [Euroalert](#): Information services on calls for proposals for European Union funds. In addition, it provides information on subsidies and European legislation.
- [TED Europe](#): Online version of the 'Supplement to the Official Journal' of the European Union, dedicated to European Public Procurement.
- [European Commission Funding & tender opportunities](#): The Funding and Tenders Portal is the single-entry point (the Single Electronic Data Interchange Area) for applicants, contractors and experts in funding.
- [Guiafc](#): The aim of the Community Financing Guide is to provide up-to-date information on the programs and initiatives of the European Union

4.5 R&D+i Databases

- [CORDIS](#): CORDIS provides information on all EU-supported R&D activities, including programs (H2020, FP7, etc), projects, results, publications.
- [keep.eu](#): Keep is a source of aggregated data regarding projects and beneficiaries of European Union cross-border, transnational and interregional cooperation programs among the member States, and between member States and neighbouring countries.
- [LIFE](#): Database of projects approved under the LIFE programme, which supports environmental, nature conservation and climate action projects.
- [Erasmus+](#): platform to search for Erasmus+ projects in your field, explore projects with outstanding results and stories, and find inspiration for your own projects.
- [World Bank](#): The World Bank includes a search database of R+D+i projects by sector, by subject and by country.

4.6 Statistical, economic, and business information databases

Economic and business information is crucial when it comes to managing an organisation. Knowing financial data and foreign trade statistics is key to be aware of the state of an industry or to carry out strategies towards certain countries.

- [ABI/INFORM Collection](#): Database specialised in the area of economics and business. It consists of thousands of full-text journals, working papers, key business, and economics publications, such as The Economist.
- [European Central Bank](#): The European Central Bank regularly publishes statistical information on European markets. One of the main publications is the ECB Annual Report of the.
- [UNdata](#): UNdata is an Internet search engine, retrieving data series from statistical databases provided by the UN system.
- [Organisation for Economic Co-operation and Development \(OECD\)](#): statistical and comparative data between countries on population, agriculture, development, education, society, technology, environment, etc.
- [eurostat Database](#): comprehensive statistical data for all European Union countries. Produced by the Statistical Office of the EU, Eurostat data are divided into 9 main categories and 30 subcategories

4.7 Legal monitoring databases

Monitoring legislation and regulations is essential for furniture, footwear, and textile manufacturing companies, enabling them to comply with laws, protect consumers, be competitive, act responsibly and manage the risks associated with non-compliance.

- [EUR-Lex](#): Official Journal of the European Union, EU legislation, EU case law, consolidated texts, summaries of legislation, etc.
- [Publications Office of the European Union](#): Official provider of publishing services to EU institutions and other EU bodies. The Office publishes official EU documents and public relations material in printed and online format.
- [European Standards](#): Database and online purchase of European standards defining requirements for products, production processes, services, or test methods.

5. Specialised Magazines

Journals and websites specialised in the textile, footwear, and furniture industries in Europe include:

Furniture

- [Furniture News](#): comprehensive source of information for the furniture industry including news on manufacturers, trends or the market.
- [World Furniture](#): Website with news, events and resources on the furniture sector.

Textile

- [Textile Technology](#): platform for the technical textile industry with updated news and practical advice.
- [FashionNetwork](#): website providing information for fashion, luxury and beauty professionals.
- [Textilegence: Magazine and Digital Platform](#): Most relevant daily updates on the textile value chain.

Footwear

- [Footwear biz](#): This magazine offers the latest in-depth technical features on footwear industry innovations
- [Footwear News](#): leading shoe magazine reporting on the latest in shoe industry business, sneaker trends, fashion news and celebrity style.

6. Industry Associations and Research Organizations

Below is a list of European associations related to the textile, footwear, and furniture industries in Europe:

- [European Cluster Collaboration Platform](#): The European online hub for industry clusters maps and supports their work through dedicated services, including matching events. Specific sections for the textile industry and the furniture industry.
- [European Technology Platform for the Future of Textiles and Clothing \(Textile ETP\)](#): Textile ETP is a non-profit association that aims to represent the research and innovation interests of the entire manufacturing value chain, from fibres to final textile products, as well as directly allied industries.
- [European Furniture Industries Confederation \(EFIC\)](#): Founded in 2006 by seven national federations representing furniture produces.
- [Home Textile Market Observatory](#): is a system that generates and circulates information about the home textile market and its consumers.
- [SmartX The European Smart Textiles Accelerator](#): SmartX aims to drive innovation in smart textiles to develop an end-to-end smart textile manufacturing value chain in Europe and accelerate promising prototypes to market.
- [Innovawood](#): InnovaWood is a coordinating organisation that integrates four European networks from the forest, wood, and furniture industries into a more efficient mechanism to support innovation in these sectors. Its mission is to foster innovation and deliver business benefits to the entire value chain, from forestry to wood, including furniture and building.
- [European Footwear Confederation](#): The European Confederation of the Footwear Industry, or CEC, is the representative body of the European footwear industry.

7. Technology Watch Software

Technology Watch and Competitive Intelligence is a challenging job that requires periodic searches and commitment from the entire team. There are certain types of software automating the process, but always requiring the intervention of the technology watch team.

These comprehensive platforms display general features such as:

- Automatic capture and retrieval of multiple information sources
- Manual content entry
- Integration with other company systems (Intranets, idea management, Internal reports)
- Advanced management of different user profiles
- Automatic generation of newsletters and alerts
- Advanced search engines within the repository

Some examples of this software include:

- **Orbit Questel**: It offers a full suite of web-based productivity and collaboration services focused on intellectual property with search, analysis and idea-to-asset management capabilities. Questel provides a comprehensive and unique collection of intellectual property databases for each stage of the innovation lifecycle. Questel delivers consulting and legal services, as well as online and onsite training.
- **Vicubocloud**: It is a platform that allows the user to conduct their technology watch and competitive intelligence process, extracting strategic information necessary for their organisation and providing Competitive Intelligence in order to be a step ahead of their competition.
- **Tetralogie**: This competitive intelligence software is supplied with full text or factual data from bibliographic databases, online or on CD/Rom, from Internet or any other computer source. With statistical methods and exploratory data analysis methods, it shows, in a short time, previously inaccessible strategic information, such as actor identities, mobility, emergence and evolution of topics and concepts, terminology, strong domains, what to read, where to publish, with whom to cooperate.
- **SoftVT**: SoftVT is a SaaS technology watch and competitive intelligence tool. It allows the recovery, management, analysis and dissemination of information.

- **The Vantage Point**: It is a text mining tool to discover information in the search results of patent and literature databases.
- **KEYWATCH**: It is a competitive intelligence tool that has been constantly evolving to integrate the fundamental capacities of modern competitive intelligence systems.
- **DENODO**: The platform contains a set of tools to manage both structured data (databases) and unstructured information in a unified manner, in order to take advantage of both in the same environment.
- **Antara**: Antara aims to change the way companies manage intelligence. It is an easy-to-use software that develops the intelligence of the organization and makes it more competitive.
- **VIGIALE**: VIGIALE is a web platform for the management of technology watch and the environment that allows tracking the selected information sources and notifying detected changes. It allows to manage different sources of information in an integrated way, order them, classify them and update them, using modern capture, categorisation, indexing and filtering technologies of diverse nature (technological, scientific, commercial and regulatory), customizable according to the needs and requirements of each company or organisation.
- **INNGUMA**: INNGUMA is a software that captures, filters, organises, searches, disseminates and analyses relevant and strategic information to support the decision-making process in competitive environments. It offers different versions to adapt to the needs of different organisations, regardless of their type or size.
- **MATHEO ANALYZER**: Matheo Analyzer is a decision-making software that provides a dashboard, information maps, syntheses and indicators generated from large sets of information. It is frequently used by experts and analysts on patents and scientific papers to develop maps on main players and technologies, detect trends, assure a scientific, strategic, commercial and competitiveness monitoring. Matheo Analyzer works from a set of structured information coming from large, specialised bases (free as some patent databases or PubMed, or commercial through providers such as Questel-Orbit, Dialog, STN, etcetera) or from company homemade databases.
- **Digimind**: Digimind is a global company for social media monitoring and competitive intelligence, provider of information on the competitive position of companies relative to the market.

- Hontza: Hontza is a free software platform that supports the entire cycle of Competitive and Strategic Intelligence. Hontza is based on Teams. Hontza is designed for any entity that has defined a competitive challenge and a team of people watching for opportunities to anticipate.

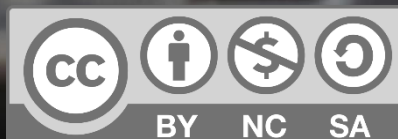
8. Recommended bibliography

Audit information infographics (English version) https://www.techgrow-project.eu/files/Audit-information_TechGrow.pdf

Methodological guide to define a Technology Watch System based in a personalised information audit. https://www.techgrow-project.eu/files/Methodological-guide-3_v2.pdf



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