

Imagine a digital news service focused on issues that matter to you. Information about your business is continuously updated and continuously available. You ask questions and get answers in real-time. You get information fast on any device that supports a web browser. Information from many sources flows into a knowledge base designed to address management issues. This may sound like a vision of the future, but it is a system that is available today. Competitive intelligence as a service, draws on state-of-the-art methods from data science and data engineering. The system considers the complete business environment, noting competitive rivalries, new entrants into the industry, and substitute products. It considers the supply chain end-to-end, tracing relationships between suppliers and buyers.



Understanding the Competitive Environment

A Client-Specific Knowledge Base

Key to the work of competitive intelligence is information relating to companies, products, and those who buy products, whether buyers are other companies in business-to-business commerce or consumers in business-to-consumer commerce.

Extensive information is collected about the client and each of the client's competitors and suppliers. For clients involved in business-to-business commerce, additional information is collected about companies that buy the client's products.



Product information can be extensive, relating to hundreds or thousands of client product offerings, as well as products from competitors. The knowledge base can include information about product characteristics and prices. It can also show relationships among products in categories or hierarchies. We collect published reviews from industry experts. In business-to-consumer commerce, we collect additional information about consumers, their preferences, satisfaction with and reviews of products.

Product Information in the Knowledge Base



Consumer Information in the Knowledge Base



Drawing from Many Data Sources

Competitive intelligence emerges from information gathered from the World Wide Web, population and business census data, and client sales data. We gather data from the web in an automated fashion, learning about companies and products. These data are complemented by survey data showing buyer ratings of companies and brands.

In business-to-consumer commerce, extensive ratings data may be obtained from primary marketing research. Consumer respondents reveal their awareness of and experiences with companies, brands, and products. They reveal brand preferences and willingness to pay for products.

We employ sophisticated measurement methods, moving beyond preference ratings to assess perceived utilities of brands and products. We note relationships between consumers and brands, showing observed ratings and estimated utilities. Each consumer survey builds on results from past surveys.



Relating Consumers and Companies/Brands

We organize information about purchasing behavior similarly, noting relationships between customers and products with weights reflecting expenditures.



State-of-the-Art Knowledge Engineering

We employ modern methods of data science, drawing on traditional statistics, machine learning, and deep learning. We design and maintain a customized knowledge base and application for each client.

Competitive intelligence as a service relies on a knowledge base with relational tables, document stores, and graph data structures. Companies, products, and consumers represent entities or nodes in a knowledge graph. The knowledge base contains information about these entities and their relationships.

The knowledge base may begin with the information we gather, but it does not end there. Using a variety of methods, including marketing, recommendation, and graph data algorithms, we draw inferences about entities and relationships between entities. Competitive insights emerge from the knowledge base and contribute to the client's application.

Client-specific Competitive Intelligence, Accessible Online

Custom marketing research and competitive intelligence studies take time. Researchers and industry experts often work for weeks or months collecting and analyzing data relevant to the client's questions. The typical deliverable is a product, company, or industry research report and presentation.

Competitive intelligence as a service takes a different approach. Individual studies are replaced by continuous data collection and analysis. Research reports and presentations are complemented by a knowledge base that is continually updated. Competitive intelligence as a service is always available, always up to date.

Current client-specific competitive intelligence is available online to anyone authorized to use the service. The application provides research reports and analysis, as well as optional tools for information retrieval, information extraction, and question answering.

Informed by Industry Experts

Research Publishers works with value-added research providers and competitive intelligence professionals to deliver customized competitive intelligence solutions. Research Publishers provides the technology, building and maintaining client-specific knowledge bases and applications. Value-added research providers do the rest. These industry experts ensure that competitive intelligence as a service meets the client's special needs.

Summary

- Competitive intelligence as a service is designed to be flexible, adaptable to a wide range of industries worldwide.
- Competitive intelligence as a service is a digital news service focused on issues that matter to the client. Information about the client's business is continuously updated and continuously available.
- Clients can ask questions and get answers in real-time. They get information fast on any device that supports a web browser.
- Information flows from many sources into a knowledge base designed to address management issues.
- The service builds on state-of-the-art methods from data science and data engineering. Most importantly, it relies on client-specific knowledge graphs designed especially for competitive intelligence and market analysis.
- Competitive intelligence as a service requires no client investment in company IT systems or staff.

See product demonstrations at <u>competitor360.info</u>