

# Price.me, Inc and Codex Software: developing a price comparison engine

## About

Codex Software and private US-based eCommerce company Price.me, Inc. joined forces to build an all-round price comparison engine that granted its users easy access to best-priced items in dozens of product categories, including clothing, computer hardware and firmware, mobile devices, hi-end audio equipment, gaming devices and many other.

## The Challenge

The main focus of the project was put on developing the fully scalable price comparison engine able to gather and process infinite loads of data with any quantities of simultaneous user requests. Achieving this entailed the completion of several complex software engineering tasks, including the following:

- ✓ Development of a tailor-made data storage and processing system to provide exceptional interoperability and availability of all elements of the software;
- ✓ Architecting and implementation of the custom CPC advertising and payment models for Price.Me Merchants;
- ✓ Engineering and implementation of the Google Feed-based feed processing and indexing systems.

Every software component, process and interaction within the system were to be thoroughly circumspect with regards to the expected capacity of the end-product to extract, store and process enormous bulks of data. This demanded the special qualifications of the development team – in particular, the expertise of both Big Data and eCommerce domains.

## The Result

The price comparison engine and all its subsystems were developed within several months, to 100% satisfaction of the Customer. The successful completion of the project ushered the establishment of a long-term partnership between Codex Software and Price.me.

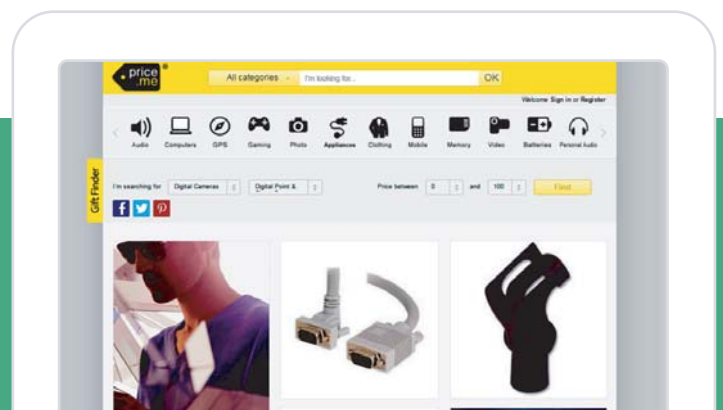
## The Process

After a thorough business analysis of client requirements, taken on the preliminary stages of the project, Codex Software was able to suggest the detailed scheming of all system components. Among the most notable of the latter were the unique outlay of the CPC payment model and the productiveness-oriented data storage & processing subsystems – the components we're most proud of.

The development blueprint implied using the carefully picked trailblazing tech stack. As the robust combination of most widely-used (MySQL, Java EE frameworks, Lucene Solr) and trending technologies (F3, Knockout.js, Redis, RabbitMQ), it allowed us to achieve the necessary scalability, productivity and smoothness of interactions between the price comparison engine's components:

- ✓ High-productivity data processing system with feed acquisition & processing, product search and price comparison subsystems;
- ✓ Integrated online seller's toolkit with a profound CPC payment model, protected from click fraud;
- ✓ eBay and Amazon integration;
- ✓ Secure integration of PayPal and other major payment services.

All the components demonstrated the expected productivity, in some cases even exceeding these expectations. For example, the combination of MySQL, Redis and message-oriented middleware RabbitMQ allowed us to get the better user query processing latency than that planned. Apart from that, we were able to enhance the efficiency of Google Feed data acquisition, processing and indexing subsystems, and developed the sleek UI compliant with the most modern UX/UI practices.



For more information, please get in touch

P: +375-29-8724-928 E: [contact@codex-soft.com](mailto:contact@codex-soft.com)