

Parts Search Engine-Magento Application

Client was a leading business enterprise dealing in auto parts search engine based in USA. Customers who have requirement for auto parts visits client's website and research on parts, its suppliers and alternate or form-fit parts for the original part. It has around 10 million parts in its database which makes it amongst the largest part search engine for automobiles in USA.

Application Overview

e-Zest has developed a search engine for the heavy duty truck parts to get the information regarding part details, manufacturer, description, category etc. in the initial phase which was highly admired by the client and simultaneously gained high popularity in the market. With a series of focused meetings and discussions regarding Parts Search Engine it was revealed that part buyers were looking for more features from a part website beyond efficient part search. Buyers wanted to have ability to reach to multiple sellers at one clicks for their part requests. Also they wanted to place the order online with clear information on delivery estimates and costs.

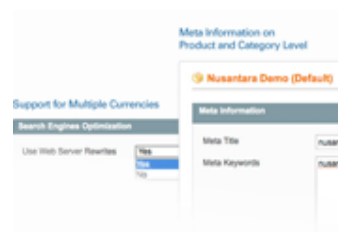
The enhancements were made in made Parts Search Engine by stepping into a new commerce arena that is going e-commerce. The features added to search engine were as follows



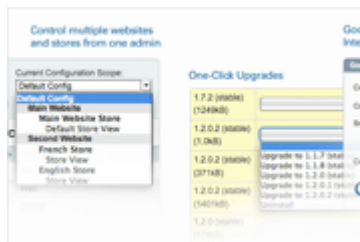
Marketing Promotions and Tools



Analytics and Reporting



Search Engine Optimization



Site Management



Catalog Management



Product Browsing

Technologies and Tools

Technology used:

- MySQL
- PHP
- HTML5
- jQuery
- Apache

Tools used:

- Magento framework
- Zend Framework
- Hosting: Amazon Web Services (Cloud platform)
- Apache Solr for blazing fast search response

Challenges and Solutions

Apart from going to online commerce the challenges faced by the team were as follows-

- Interactive platform
- Easy navigation
- High up-time and consistent performance
- Transformation of traditional market chain
- Security
- Consumer loyalty

e-Zest evaluated multiple e-Commerce platforms. Important parameters for the evaluation were facility to integrate with industry leader search engine solution (Solr based on Apache Lucene), support to multi-vendor system and drop-shipping, support to multi-store or multi-websites, strong platform support from community and promoters and open source code so that company can modify it as per the requirement.

e-Commerce platforms such as PrestaShop, osCommerce, OpenCart and Magento (Community and Enterprise editions) were evaluated. After thorough analysis e-Zest chose Magento Enterprise e-Commerce which proved to be above the rest.

For high up-time and consistence performance e-commerce website is hosted on Amazon cloud for many reasons such as security, agility open-source etc.

Business Benefits

- Buying/selling 24*7
- Reduced infrastructure cost
- Easy to start and manage a business
- Customers can easily select products from different providers without moving around physically
- More reach to customers, there is no theoretical geographic limitations
- Low operational costs and better quality services

Bottom Line

e-Zest has successfully customized Magento Enterprise according to client's requirement. It has improved search and e-commerce performance drastically by integrating Solr search and optimizing Magento installation for cloud environment.