xplosion interactive: Intelligent Retargeting of E-Commerce Sites in Record Time

ExaSolution speeds up data analysis for personalised banner advertisements

The company
xplosion interactive GmbH from Hamburg is one of the leading suppliers of intelligent retargeting solutions in the German speaking area. A team of more than 25 online marketing specialists develop innovative solutions for optimally dynamically personalised banner advertisements in web shops. The customers of the company, which is part of the international Otto Group, include firms from the e-commerce, telecommunications, finance and tourism industries.

The initial situation
Visitors of a web site are interested in the most diverse individual products and 95-98 percent of them leave the web site again without having bought or booked anything. The aim of retargeting is to again confront these anonymous users with advertising for the website after leaving the web address. Dynamic banner advertisements with tailor-made product recommendations aim at reactivating interest and in this way to increase click-and-conversion rates. These intelligent, i.e. retargeting campaigns adapted individually to the user behaviour, are thought to be much more successful than standard targeting. The reason for this is that users perceive campaigns as more diverse and positive when they are confronted with products in which they are actually interested.

How does intelligent retargeting work? Technically speaking, it is based on an adserver cookie. The shop website integrates a retargeting pixel by the adserver, the pixel sets a cookie on the user’s computer and thus saves the user’s interests. If the user moves to a different web site that advertises using the same adserver, the adserver can read the cookie and the banner can be personalised accordingly.

Here, the timing and frequency of advertising required by a user must among others be taken into account, as well as which products are to be recommended to him and how strongly the advertising should be personalised. Data Mining helps to optimally take into account these factors. It makes it possible to relate data from different sources, reworking it analytically and using it in a targeted manner, exceeding the mere profiling of the search and buy behaviour of the user. In this way, new areas of interest open up for the individual user which were not demonstrated I:1 before. The results are personalised, wide-spread product recommendations, which offer new sales potential.

Originally, xplosion interactive GmbH had a separate MySQL database for each of their customers with which events were entered and processed. This warranted optimal performance; however, it involved high administrative effort. Aggregates had to be created laboriously. In the medium term, this system could not keep up with the growing demands of the firm from Hamburg. The responsible parties started looking for a powerful, efficient and scalable data warehouse management solution.

The solution
When the experts from EXASOL first came into contact with xplosion interactive in August 2010, it was soon obvious that a considerable optimisation of the processes was possible using the high performance database EXASolution, which is based on in-memory technology. They offered xplosion interactive to carry out a proof of concept. This way a direct comparison between EXASolution and the database solution in place could be established. Following this, xplosion interactive used a remote test system, with which detailed investigations regarding compatibility and performance were carried out.

After intensive checks showing convincing results, IT decision-makers at xplosion interactive decided to establish EXASolution as data warehouse solution. The test system was utilised to prepare the processes in place for the pending migration. In November 2010 the productive system was switched over to EXASolution including a smooth connection of the existing ETL and analysis tools. This corresponded to the demands to keep the switch-over phase as short as possible.

The benefits:
• xplosion interactive customers benefit from tailormade retargeting
• Real time data mining thanks to the high performance EXASOL database
We were looking for a sustainable solution, which grows with us and with the data volume to be analysed, and EXASolution impressed us. The new database offers us this scalability at a reduced total cost of ownership. Thus, we can continue to render optimal analytical performance for our clients in the future. Additionally, EXASolution forms the foundation for the planned enhancement of our product range with new tools and analysis procedures,” says Nils Grabbert, Head of Business Intelligence at xplosion.

Using EXASolution, xplosion interactive now has the data of all end customers centrally available in a common data bank. This enables cross-customer analyses and the access time for individual customers has been reduced considerably. Within seconds, analyses of the shopping basket, performance monitoring and reports are available. Here the analytical platform consists of three layers with different functions: The data layer saves the raw data 1:1, historicises and versions it. The intelligence layer turns data into information, i.e. it summarises the data and sets up relations. The business layer reworks and analyses the information in a targeted manner.

Conclusion
Currently, EXASolution handles 500 million new sets of data each month. The analyses involve approx. 5 billion data sets. This means that within one hour, the data is loaded into the data warehouse, processed, analysed and put back into the operative system. As a result, xplosion interactive GmbH is able to offer its customers optimal performance at any time. A further advantage of the relational high performance database EXASolution is that it can be enlarged flexibly and can grow with the rising demands of a firm. This will affect xplosion solution in the medium term, when the company starts to target Belgium, the Netherlands and further European countries as new markets.