

ESSENTIEL Antwerp designs a stylish web shop on Combell's flexible infrastructure

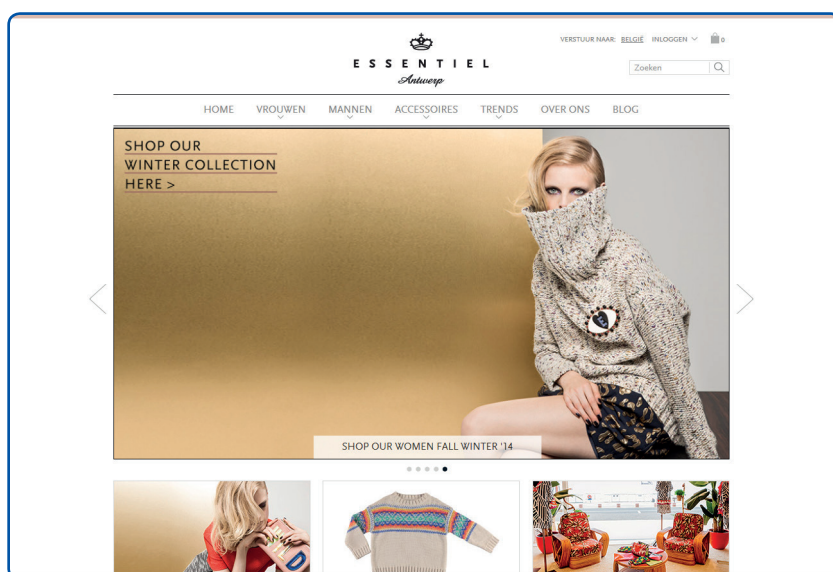
From now on, the Belgian fashion design house ESSENTIEL Antwerp also sells its branded apparel online. The web shop, which runs on the open source platform Magento, combines an elegant look with a user-friendly interface. Combell provides efficient and flexible hosting based on a virtual infrastructure, so that the site stays available even on the busiest of bargain days.



To ESSENTIEL Antwerp, e-commerce has become an important third sales channel ever since 2012, next to the company's prestigious retail store and its wholesale channels in Belgium and abroad. The web shop allows visitors to discover the unique style of Essentiel and the hottest new items, while also offering a direct point of sale that also leaves room for promotions. "With this investment, ESSENTIEL Antwerp wants to build its image, be present everywhere near the customer and generate direct sales", says IT manager Danny Broers. The digital visitor takes matters a lot further than window shopping. "We can count on a significant turnover, especially at the onset

of the bargain season. Our web shop can more or less be compared to our retail stores", he adds. "Mind you, the start-up costs can also be compared to the ones required for launching a regular retail store. We thus need a substantial turnover to break even."

"Online, one evidently needs less staff for support. One single person is enough to support four online shops. And the costs are also quite different. There are no rental expenses and transport, stock management and security are also less costly." Consumers buy luxury clothing online with increasing frequency. Danny Broers concurs:



ESSENTIEL's ISSUE

- Efficient e-shop hosting
- Robust, flexible hardware environment
- Limited manpower for system management outside office hours
- Unpredictable traffic peaks during the bargain season
- Save money on ICT infrastructure and software licenses

Combell's SOLUTION

- Virtualisation (VMWare)
- Public Cloud
- Private Cloud
- Backup infrastructure
- Managed open source solutions (Linux, Apache, Magento, MySQL)
- Combell hardware with service guarantee and replacement hardware on site

COMBELL'S ASSETS according to ESSENTIEL

- 24/7 monitoring and technical support
- Evolving infrastructure
- Rapid scalability during traffic peaks
- Flexible allocation of virtual servers and storage
- Replication to backup and testing environment

“Thanks to Combell, we could cope with the traffic peaks during the bargain season and, at the same time, rapidly track the underlying problem.”



“Since the breakthrough of the smartphone, Internet has become a part of daily life. People carry their device on them at all times and are in a way always online.”

“There is more trust than say three years ago. Is the parcel going to arrive at its destination? What to do if the product isn't right for me? It doesn't matter anymore. You just order and then return the goods if necessary. There's no more threshold. It also helps when your brand is renowned and has its own stores.”

Quality hosting on branded hardware

“When, as a brand, you are getting ready to launch an e-shop, it is of vital importance that it always remains accessible, that it is permanently monitored and that it can stay online flawlessly even in the event of a problem”, says Danny Broers. “From that starting point, I thought it was imperative to choose a hosting partner that I know would be available at all times and who always helps find solutions.”

“I expect from a hosting partner that it monitors the infrastructure and manages it proactively

when a problem arises, like when you are running out of disk space. In practice, I had already noticed that Combell's services and technical support really are available 24/7. That really matters to us. A web store that is offline during weekends is utterly unacceptable.”

ESSENTIEL Antwerp eventually compared hosting offers from four different providers. “Combell immediately provided a very detailed analysis of what they would offer with respect to our needs, so that we were able to compare apples to apples so to speak. During further negotiations, Combell also made a lot of efforts to adapt the offer to our needs. They also proved to be the most interesting provider for the configuration we chose. Moreover, they exclusively use branded hardware and are true specialists in their field. Combell put its best foot forward, so our choice quickly became clear.” The e-shop went online at the end of September 2012. “Setting up the hardware went fast—really fast. The infrastructure was installed right away, as we were promised. From the moment we made the formal decision, all machines were supposed to be running in the desired configuration within 48 to 72 hours. And so it was done – nice work”. Combell acted in an advisory role in the project. “Mainly as regards hardware dimensioning”, Danny Broers confirms. “And, in fact, they still do. Because Combell's proactive monitoring helps us improve certain things in programming also. Thanks to this, our disk space is now easier to manage, the available memory is used more efficiently and the site actually runs faster.”

Bargain sales cause traffic peaks

During the bargain season in the beginning of 2013, herds of customers found their way to the web store of ESSENTIEL Antwerp. The

ESSENTIEL'S IDENTIKIT

The Belgian fashion label ESSENTIEL Antwerp was founded in 1999 by Esfan Eghtessadi, son of designer Nicole Cadine, and Inge Onsea. Their collection rapidly grew from colourful t-shirts to complete ready-to-wear collections. Thanks to its own prestigious retail stores in Belgian cities and wholesale contracts in major European markets, ESSENTIEL Antwerp has become an international player to reckon with. Today, ESSENTIEL Antwerp employs a staff of 135 and owns 27 stores in Belgium, France (Paris, Lille) and Great-Britain (London).

For more information:

www.essentiel-antwerp.com

www.essentiel.be



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combination of an error in the queries and the huge success of the site even caused a brief overload. "On the first day of the bargain season, the site had suddenly become so popular that the Magento server couldn't handle it. It is of course no coincidence that we reached our performance limits during the bargain season. We did not expect such a traffic peak however", Danny Broers admits. Combell immediately helped us look for solutions. "We held a meeting at Combell's right away about those performance issues. I don't believe anyone could have handled it better. The people we dealt with at Combell's were all very skilled technically, which is something you don't come across at just any ICT provider's office. Those people immediately take action to help. They followed our situation from up close."

To allow us to cope with the temporary traffic peak, Combell temporarily transferred ESSENTIEL Antwerp's web shop from the foreseen Public Cloud infrastructure to a more efficient Private Cloud. "Our web infrastructure entirely ran on virtual servers. Thanks to this choice in architecture and to the fact that Combell immediately had efficient hardware at its disposal, we could switch to an environment with even more computing power remarkably fast", Danny Broers remembers.

"Combell really went all the way for us in order to find a solution quickly", he confirms. "They also follow-up all matters closely. They were right on top of the littlest thing that could go wrong."

Rapid switch between Public and Private Cloud

According to the expected number of visitors and an optimum infrastructure cost, ESSENTIEL Antwerp had chosen an e-shop in Combell's Public Cloud. "This is the normal situation", Danny Broers confirms. "We use virtualized servers on shared hardware. The basic infrastructure consists of two virtual servers of which one works for the Magento environment and the other for the database. On the Public Cloud, we also have a failover mechanism. We don't have that in the Private Cloud. There, we work on a VMWare environment that is reserved for us."

On account of the unexpected tide of visitors, Combell transferred the e-shop to the Private Cloud environment in the beginning of 2013. "Because Combell couldn't offer enough CPUs in the Public Cloud to keep running without problems. This was a temporary situation that would go on for one month only. During that time, we have been working without direct failover, but on an extremely robust

infrastructure." The problem eventually wasn't only the enormous tide of visitors for the online bargain season. "There also seemed to be something wrong with the programming by our webmaster. Some queries took a lot of CPU time, which made the site abnormally slow. During the bargain season, we suddenly needed eight powerful CPUs whose load regularly reached 99%. We immediately suspected that there were a couple of reasoning mistakes in several queries. Be that as it may, we are most satisfied with the fact that Combell succeeded in transferring us from the Public Cloud to the Private Cloud environment seamlessly until problems were solved."

Performance analysis for Magento

ESSENTIEL Antwerp chose the Magento platform for its central development environment. "Magento powers our e-shop. We use Apache as our web server. The database in the background is MySQL. These are all Open Source components, which allows us to save a lot on license fees in the long run. We also manage an entire copy of this environment ourselves. It works as a backup infrastructure and testing environment. We synchronise both environments very regularly".

In order to be able to cope with unexpected performance problems during the bargain season in the



"Virtualization allowed us to make the switch remarkably quickly to an environment with even more computing power."

"Combell installed a profiler, which immediately showed us where the problem was located."

beginning of 2013, Combell also had an advisory function with respect to performance. "Clearly, something wasn't right. So Combell installed a profiler. Starting from the first results, we immediately found a couple of issues", Danny Broers remembers. "Thanks to such an analysis, you can immediately see where your CPU time is going. And thus you can see where the actual problem lies".

"I was very happy with Combell's intervention. It was obvious to all involved that there was a development problem. A few minutes later, Magento Profiler detected the actual problem".

"Combell has all the necessary in-house experience to be able to estimate, starting from the traffic levels, what is a normal load and what isn't a

normal situation. The problem was the scalability of a few queries. We knew that Magento uses a lot of resources. But there was more going on here. The complexity of our business entailed reasoning mistakes on a software level."

"I don't think that Magento really has a problem with product matrixes. Only, working with models, colours and sizes seems to have proven a little bit complex for our webmaster. That's where the shoe pinched. The database experienced absolutely no problems. Subsequently, we examined how far we can optimize this within the existing infrastructure. Thanks to Combell, we were able to cope with the traffic peak during the bargain season and, at the same time, rapidly track the underlying problem."



International expansion and Gift Cards

From Belgium, ESSENTIEL Antwerp is working on its international expansion via its own stores and wholesale contracts. The e-shop will have to acquire international appeal in the future. "We intend to expand across the whole of Europe, at least on the level of online business", Danny Broers explains. "Now, the e-shop is active in four countries. Some part of the collection is always available online. I expect that the offer will be expanded even more. The extent to which we expand internationally will in part depend on the costs involved."

"We can build a separate database per country or rather keep everything on one and the same infrastructure. We will probably get the best performances by scaling horizontally. We also started publishing Gift Cards that one can buy in a store and use online as well. And vice versa – one can buy a Gift Card online that can be cashed in at a store. That is a recent development. This way, we integrate the website increasingly to our standard business."

More info about this solution?
Contact one of our account managers on
0800-8-567890