

## Customer

Technocentrum Utrecht, a partnership of business and technical training in the region. The TCU focuses on intermediate reinforcement and renewal of knowledge and a better integration between technical vocational education and current professional practice.

## Solution

The developed website represents a system for preparation of statistical reports on educational system development at the country level.

The main functionality is contained in data construction based on the necessary criteria and their representation in the form of tables or graphs. Dynamic query generator is of greatest interest.

It allows users to set necessary parameters in the form, thus dynamically changing additional parameters.

ScienceSoft's team implemented the features for:

- different levels of grouping;
- calculation of total sums;
- tables and graphs creation based on the received data.

A special module was developed in order to delete/add data. It takes into account the logical breakdown of information, thereby enhancing control over it. In case of emergency there is an opportunity to use backups which are automatically created while importing the data

Build-in system of articles allows to distinguish access for different groups of users. Currently all the articles are divided into three groups:

- static pages;
- articles for reference;
- pages containing statistical reports.

Pages with statistical data are unique for each reporting year. The current status of the page can be added to history at any time.

Articles for reference are static but connected to existing ones.

## Challenge

The database was specially developed for the website. Initially, it was necessary to systematize the available data, to build the system and make it possible to import data. As a result, the quantity of tables decreased 3 times, the number of duplicated data 5 times, the visualization improved and the need to create temporary tables and unreasonable stored procedures disappeared. At the same time the stability of the system and the overall performance increased. The protection from "improper" actions of the user was introduced as well as protection from "incomplete" and / or "incorrect" data input at the database/php content.

## Technologies and tools

**CMS:** Drupal 6

**Additional modules:** Taxonomy, CCK

**Database:** MySQL 5.x

**Language:** PHP 5.2.x

**Webserver:** Apache 2.x

**Frontend:** AJAX, Javascript/Jquery, XHTML

**IDE:** Eclipse, NetBeans

**Operating system:** Linux, Windows