

SSB Web-forms

(Extract from CoRD 041 "A brief outline on existing data collection tools and new developments at Statistics of Sweden", Hans Irebäck, 2001)

An example of a application developed with MS tools is Statistics Sweden's web questionnaire for the Consumption of Electricity Survey.

The screenshot shows a web browser window displaying the 'Förbrukningsuppgifter' (Consumption Data) form for 'North Pole Energy'. The form is titled 'EnergiStatistik Förbrukningsuppgifter' and includes a 'Period' dropdown set to '1999 Oktober'. A table with 7 rows, each labeled 'Enterprise 1' through 'Enterprise 7', is shown. Each row has two input fields: 'Avläsningsdatum (EL, MWh)' and 'MWh'. The form also includes a 'Spara till SSS' button and a 'Påminnelse' link. At the bottom, there is a footer with contact information and a disclaimer.

Enterprise	Avläsningsdatum (EL, MWh)	MWh
Enterprise 1		
Enterprise 2		
Enterprise 3		
Enterprise 4		
Enterprise 5		
Enterprise 6		
Enterprise 7		

Figure 1. The consumption of electricity energy survey is answered by energy producers. The questionnaire is quite simple with only two values per consumer/row to fill in, the consumption in mWh and the date for the reading of the value.

The application was introduced in 1999 and developed using traditional Hyper Text Mark up Language (HTML) techniques. It includes validation of input through Java script but also through database communication, and extensive back-end editing via stored procedures in the database. The survey occurs on a monthly basis and input data are checked against previous values. Respondents can obtain several tables with their own data as feedback from the application. This feedback has been very appreciated by the enterprises.

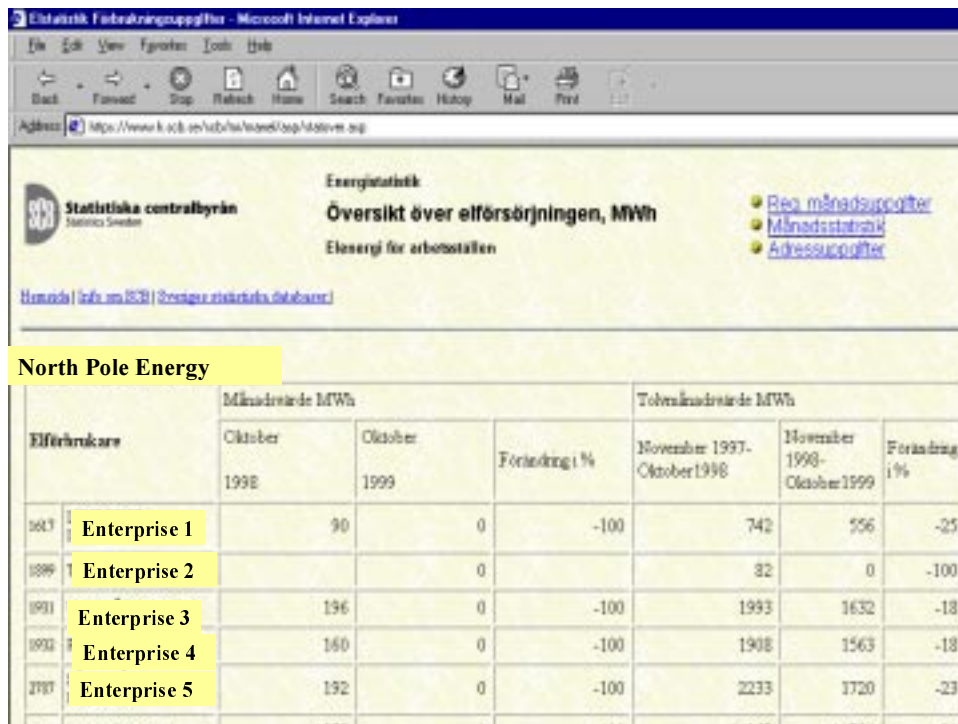


Figure 2. Example of feedback. Difference in percent between the current reporting month and the same month previous year and difference in percent between 12-month periods.

Communication with the database is implemented using Microsoft Active Server Pages and the application runs on Microsoft Internet Information Server. The security solution used are SSL (Secure Sockets Layer) with a server certificate and the standard (40-bits) built in support in the web browsers.

Surveys using MS-environment

- Consumption of electricity energy survey.
- Compulsory school, pupils and schools divisions.
- Rescue services survey.

Silverstream

During year 2000 three data collection applications were developed with Silverstream. Silverstream is a comprehensive application server that allows corporations to build and deploy complex HTML and Java applications. Silverstream provides support for applications that are deployed to a very large number of users with functions such as load balancing and fail-over. It also provides a multi-tier application development environment with support for Microsoft Common Object Model (COM) and Common Object Request Broker Architecture (CORBA) objects. Compared with the Microsoft environment, it has a more integrated tool set. We believe that it's an advantage to have an alternative to the Microsoft tools and it will give us valuable experience of Java. The experience so far has been positive with relative rapid application development. The first application (the Research Libraries survey) was developed in 5 weeks.

Surveys using Silverstream

- Research Libraries, stock and accession.
- Municipal and private child care.
- Social welfare for elderly persons

Silverstream has also been used for developing the application for Statistics Sweden internal staff survey.