

## ***„Crystal Reports – advanced reporting”***

### ***Course description:***

Crystal Reports training – advanced reporting is addressed to Crystal Reports users who want to deepen their knowledge of this topic. It is recommended that participants have basic knowledge of database and Crystal Reports or have finished Crystal Reports – basic training. The course is led by an expert in the field of data processing and reporting who has years of experience.

During Crystal Reports training advanced reporting you will learn how to use parameters as input data, how to create advanced formulas, how to create templates, how to optimize reports, how to work with OLAP cubes.

### ***Skills acquired during the training:***

- o Advanced reporting techniques
- o Ability to write complex formulas
- o Writing SQL queries
- o Working on variable data sources including OLAP cubes
- o Creating advanced pivot reports
- o Ability to correct used reports
- o Working with parameters
- o Creating report templates
- o Sharing reports with other users

### ***Training program:***

1. **Creating parameters in reports**
  - Defining parameters,
  - Validation of given values in parameters,

- Using discrete and range parameters,
  - Creating reports with multiple input parameters,
  - Sorting and grouping by using the parameters,
  - Conditional formatting using the parameters.
2. **Creating reports that summarize data from OLAP cubes**
    - Defining a data source for a table representing data from the OLAP cube,
    - Create the OLAP cube based report,
    - Formatting tables with data from the OLAP cube.
  3. **Defining advanced formulas**
    - Using functions and operators,
    - Defining control structures,
    - Using variables,
    - Visibility range of variables,
    - Working with arrays.
  4. **Advanced section formatting**
    - Using formulas to format a section,
    - Showing / Hiding section depending on certain conditions.
  5. **Advanced data grouping capabilities**
    - Running Totals Expert,
    - Advanced summary options.
  6. **Defining a subreport in the main report**
  7. **Creating alert reports**
    - Defining alerts,
    - Using parametric alerts.
  8. **Using SQL language in the report**
    - Using SQL expressions,
    - Creating the SQL query for the report,
    - The basics of SQL syntax,
    - SQL query edition,
    - Creating SQL parameters for the report.
  9. **Using report templates**
    - Using built-in report templates,
    - Create a template,
    - Deleting a template.

***Methodology:***

- PowerPoint mini lectures

- working on computers (each participant works on a separate computer)

***Organizational information:***

Number of training hours: 14 hours / 2 days

Time of training 9:15-16:15

Place of training: Łódź, Piotrkowska 125 – KM Studio - trainings