Business Intelligence

Lecture 1: Thursday 20 February 2014
Lecturer: Prof. Hennie Daniels
Time: 18:45-21:30

Topic
One of the goals of business intelligence is to generate significant information/knowledge from company data. Until now researchers mainly addressed this process of data collection, aggregation and visualization. During the lecture, we will firstly provide a short overview of methods for report generation. When a manager is examining the report he/she is looking for extreme or unexpected items and tries to find the underlying causes. This is mostly done by reversing the process of report generation by drilling down in a business model or using additional knowledge, possibly from external sources. The process of explanation and causal analysis is an important new research area. Prior to the lecture, the participants study some recent articles on this topic and if necessary can briefly present their findings during the lecture.

Requirements (before start course)
Students are required to study papers 1,2,3,4.
Write a one page summary for papers P1 and P2 and formulate research questions related to P1 and P2. Or alternatively a one page summary of P3 and P4, and formulate research questions related to P3 and P4. In the lecture we will discuss/evaluate your research questions.
The final assignment for IM is an essay addressing the research questions. Information will follow.

Literature
Note: you can also use a preliminary version of this text that is free available on internet:
Data mining in Excel: Lecture Notes and cases, 2005, same authors.
P2: Explanation and understanding, Keil, Annual Review of Psychology, 2006, 57 (use worldcat local from Tilburg University Library).
P3: Continuous Data Level Auditing: Business Process Based Analytic Procedures in an Unconstrained Data Environment1, Alles et.al., 2006.
P4: Large scale Detection of Irregularities in Accounting data, Bay et.al. 2006 (use Google).