Businesses are increasingly using their enterprise data for strategic decision-making activities. In fact, information, derived from data, has become one of the most important tools for businesses to gain competitive edge. Data quality assessment is now a hot topic in numerous sectors and considerable research has been carried out in this respect. Nonetheless, existing frameworks often need to be adapted with respect to the use case needs and features. Given this, the present work develops a methodology for assessing the quality of enterprises’ daily maintenance reporting, relying both on an existing data quality framework and on a Multi-Criteria Decision Making (MCDM) technique. This work is applied in cooperation with a Finnish multinational company in order to evaluate and rank different company sites/office branches (carrying out maintenance activities) according to the quality of their data reporting. Based on this evaluation, the industrial partner wants to establish new action plans for enhanced reporting practices.

**Problem in context**

The paper’s contribution is to develop a methodology combining an existing data quality framework (Krogstie’s framework [1]) and an efficient MCDM technique (Analytic Hierarchy Process – AHP [2]) in order to assess the quality of enterprises’ daily maintenance reporting. The overall methodology is depicted in Figure 1.

**Objectives**

The paper’s contribution is to develop a methodology combining an existing data quality framework (Krogstie’s framework [1]) and an efficient MCDM technique (Analytic Hierarchy Process – AHP [2]) in order to assess the quality of enterprises’ daily maintenance reporting. The overall methodology is depicted in Figure 1.

**Case study & Results**

The analysis on the maintenance reporting data has been carried out considering 54 maintenance sites of the Finnish company, and datasets collected during two years. The different sites have been assessed with respect to each criteria, and the resulting scores have been aggregated in order to get an overall score of the maintenance reporting quality. Figure 3 gives insight into the comparison of sites 11, 32, 37 and 47 when aggregating the scores at level 2 of the AHP structure (i.e., with respect to the three criteria: Believability, Completeness and Timeliness, cf. Figure 2).

**References**
