Quality Driven Approach for Data Integration Systems

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Abstract—By data integration systems (DIS) we mean the systems in which query answers are instantaneously mapped from a set of available data sources. The query answers may be improved by detecting the quality of the data sources and map answers from the significant ones only. The quality measures of the data in the data sources may help in determining the significant data sources for a given query. In this paper, we suggest a method to calculate and store a set of quality measures on data sources. The quality measures are, then, interactively used in selecting the most significant candidates of data sources to answer user queries. User queries may include the user preferences of quality issues. Quality-based approach becomes increasingly important in case of big number of data sources or when the user requires data with specific quality preferences.

Keywords—data integration; quality measures; data sources; query answers; user preferences