



## Data – The Most Valuable Asset

Consultants emphasize that data has become one of the most valuable corporate assets. It is used and reused in various business intelligence applications to support sophisticated analysis and decision-making processes that make the company more competitive. But the value of data is clearly dependent upon its quality. Decisions based on flawed data are suspect and can dearly cost the company. With this in mind, it makes definite corporate sense to thoroughly cleanse any data prior to storing it in a secondary site, such as a data warehouse, and utilizing it in the decision-making process.

Clean, useful and accurate data translate directly to the bottom line for most companies. It represents the added revenues that are realized when businesses correctly model and track their customer relationships, product or service preferences. Analyses performed using data warehouses containing flawed information will lead to flawed strategic decisions.

**It has been demonstrated that non-quality data can cause business losses in excess of 20 percent of revenue and can cause business failure**

– Gartner Group

## Case and Point

❶ With reliable data, a major credit company was able to assign risk assessment for loans based on the ability to read free format generalized text regarding automobile year, make and model data. Within weeks of implementation, 27 million records were processed and the company was able to offer new product line to their customers.

❷ Similarly, a local bank was able to cleanse and standardize the names and addresses from its customer information files, resulting in a 62% reduction in names and an 80% reduction in addresses from duplications. This translated into huge savings in processing time, storage and mailing costs, in the confidence users have in their own data, analysis and conclusions, but most importantly in the cost of contacting customer and managing ongoing customer relationship



## Catch 22

Assessing data quality prior to commencing a data auditing and cleansing exercise is usually unrealistic because data cleansing is an intense and iterative process. Of course, it is important to specify a standard of quality for the data cleansing exercise to achieve. However, often the "true" quality of the data is unknown until it has been thoroughly probed, queried and tested against the business rules. This creates a "catch-22" situation where a company would not authorize a data cleansing exercise before it has a "proof" that data needs cleansing, yet such proof cannot be obtained until the effort is well under way. The truth is that every organization contemplating development of a data warehouse has to ultimately wrestle with data quality. Skipping the data-cleansing phase in a data warehousing project is like building a new, expensive car and putting in a 10-year-old engine without ever testing that it works. Surprisingly many organizations are still focusing on Knowledge Management tools first rather than Data Quality Projects; the continuing problem of bad data costs money and reduces productivity. Time spent diagnosing and fixing erroneous data is time not spent productively.

Low data quality eventually leads to reduced customer satisfaction; for example, customers exposed to incorrect reports or statements are less likely to trust the organization providing those reports. Lastly, strategic decisions based on untrustworthy information are likely to be poor decisions.

## KnowledgeBase Data Quality Professional Services

Knowledge Base Data Quality Service helps to radically enhance the quality and integrity of the data. It combines cutting-edge technologies that turn legacy account information into problem-free standardized files. Knowledge Base Data Quality service ensures that data is cleansed of errors, anomalies, duplication and misspellings.



Clearly, information is of value only if it is accurate. Today, more than ever, it is imperative to tackle the data quality issue from a point of prevention as well as cleansing existing data warehouse

Knowledge Base provides a framework for increasing data quality levels and ensuring that data quality is maintained at levels that are satisfactory for all information stakeholders in an enterprise. This framework consists of a combination of knowledge management, intelligent software, an analysis of embedded business rules, process improvement techniques, and ongoing educational and training programs.



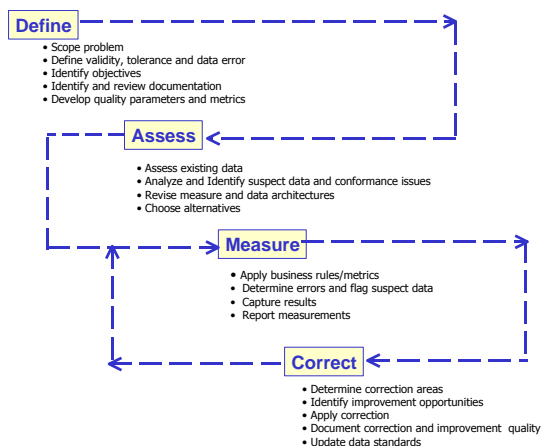
Knowledge Base provides an integrated suite of data quality measuring, filtering, and certification tools to provide customers immediately measurable improvements in levels of data quality in the short term, and to allow data consumers to separate business-oriented data quality rules from their explicit coded implementation in the medium to long term. By applying advanced data quality management techniques to the information manufacturing chain, organizations can identify and eliminate process inefficiencies, reducing upward-spiraling operational maintenance costs. As a direct result, these organizations can effectively manage the quality of information while isolating data quality rules as a valuable enterprise resource.

We work with data consumers to understand, identify, and abstract data quality requirements, to determine the data quality rules, and to integrate a rule-based system with a functional library that will test and validate data items at the insertion point. The tools that we offer allow the user to integrate in-process qualification into the information manufacture and processing chain to both measure and validate data quality. At the same time this provides feedback for the identification of root causes of data quality problems.

A streamlined data merging, migration, and quality assurance methodology will uncover synergistic opportunities when combining data sets. Leverage in affecting the organizational bottom line can be obtained through the qualified merging of data resources by decreasing operational costs (e.g., error detection and correction) and by increasing customer response and customer satisfaction. We will provide guidelines for both the acquisition of valid data over the Internet, as well as guidelines for accurate, customer-focused data presentation.

### Knowledge Base Data Quality Methodology

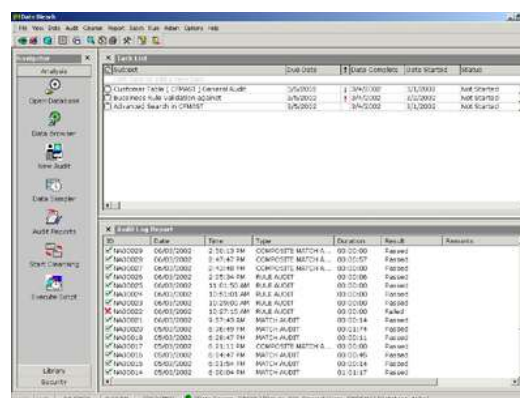
Knowledge Base uses a methodology unique in the world of information integration that was conceptualized by our Founders. Our solution and services automate the process of discovering and fixing errors hidden in data systems. We use a business-rule driven approach to improve information quality and the exchange of information between systems.



At Knowledge Base, we optimize data for the specific business rules of your company. Because our methodology is based on the disciplines of set theory and information theory, we rely on the synergy of domain analysis, category and relational theory, and fuzzy and approximate searching and matching techniques to provide a higher level of data quality service than is currently available on the market.

### Introducing DataBleach

Knowledge Base DataBleach is a data quality tool that performs data auditing and cleansing. It is developed ground up to handle data quality issues. It comes with various techniques and pre-built libraries utilizing various techniques, integrity checks and fuzzy search method to cleanse "dirty". By finding and eliminating errors and then integrating information, DataBleach can help protect businesses against legal liabilities, lost revenue, credibility concerns and other information quality issues that significantly affect the bottom line.



DataBleach provides the facilities to Analyze, Audit and Cleanse the data. It provides:

- Ability to define extensive data domain libraries for data governance and standardization.
- Ability to apply Fuzzy Logic Searching and Phonetic Search to fix typographical errors.
- Extensive array of text searching and manipulation facilities
- Ability to define referential integrity and check integrity rules.
- Duplicate record identification and elimination.
- Customer Name and Address cleansing
- Data Formatting
- User defined Business Rules, Derivation and Calculation validation.
- Statistical measurements and charting facility.

### DataBleach Supported Platform

DataBleach supports various platforms and databases including AS400, NT4/W2K, Various UNIX variants and Linux. Databases include DB2, TERADATA, ORACLE, SQLSERVER, INFORMIX, SYBASE and ODBC compliant databases.

