

# Data Quality Assurance Platform for Financial Institutions

**Establishing clear,  
usable metrics to  
improve the reliability  
and accuracy of data**



In response to both regulatory and business imperatives, financial services organizations are realizing the urgency of establishing systematic, enterprise-wide Data Quality Management. Before they can do this, they need to establish a Data Quality Assurance Platform in order to gather metrics as a baseline for regular measurement of quality levels and improvements. Capgemini can help establish a tailored platform efficiently and cost-effectively using standard tools, techniques and best practices.

## **Business drivers for data quality**

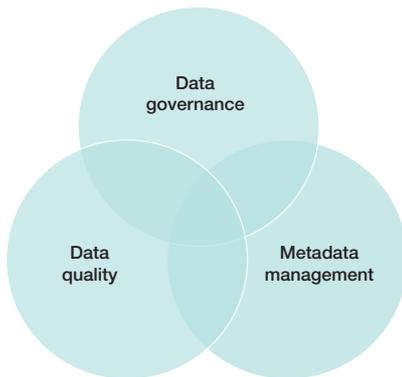
Optimizing data quality is now a must-do. Regulatory issues, operational problems, and business decisions that produce the wrong results are just a few of the manifestations of poor data quality, whether or not the organizations concerned recognize them as such. Problems like these can quickly escalate out of control, bringing a high risk of regulatory penalties and reputational damage.

On the positive side, improving data quality can produce significant cost savings, which may well offset the initial investment. Moreover, data quality is critical to establishing confidence in the data and for enabling better business decisions.

**People matter, results count.**

## Wider implications of data quality

Another reason for focusing on data quality is that it is critical to the implementation of data governance – which in turn underpins the overall management of the availability, usability, integrity, and security of enterprise data. These two disciplines, data governance and data quality, are closely related to a third: metadata management. (Metadata provides a common business glossary and business process data lineage from source systems to reporting.) Enterprise-level data governance requires management of both data quality and metadata.



## To improve data quality, you have to measure it

Recognizing the drivers for data quality, organizations are introducing enterprise-wide Data Quality Management initiatives. For companies embarking on this process, the first few steps should include defining a Data Quality Strategy and conducting a Data Quality Capability assessment. These steps ensure that senior stakeholders appreciate the importance of data quality by demonstrating the gaps between the target state and the current data quality capability.

Almost equally important is the establishment of accurate data quality metrics, because without measuring quality it is impossible to know where you are today and whether you're

improving it. Currently organizations tend to collect this type of data at the level of individual applications, if at all, and so they lack a baseline for improvement. The best way for an organization to measure the metrics it needs is by implementing a Data Quality Assurance Platform.

## The solution: a Data Quality Assurance Platform

An enterprise-level Data Quality Assurance Platform is a vital tool in improving the reliability and accuracy of data utilized across the firm. It establishes a process, procedure and technology solution to capture all data quality exceptions and metrics (usually defined in terms of KPIs) in an intuitive, user-friendly interface.

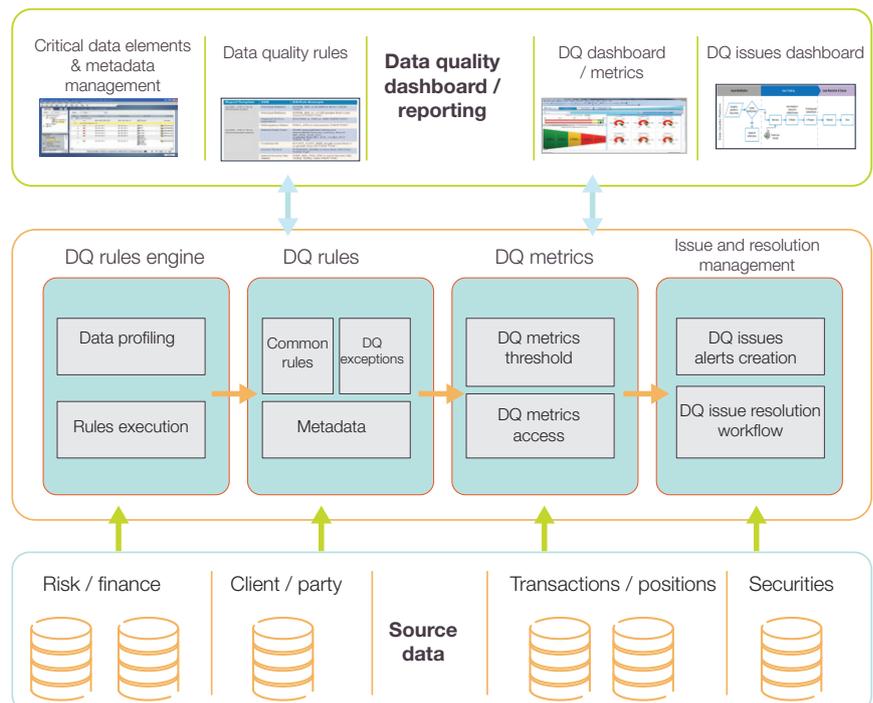
The Data Quality Assurance Platform provides the ability to monitor data quality exceptions on a regular basis

by applying user-defined data quality rules and rule exception thresholds. The enterprise-level approach means that multiple business units can leverage one common platform and share the cost and resources while benefiting from economies of scale.

The functionality of a Data Quality Assurance Platform includes data quality metrics reporting together with issue detection and resolution management. It enables users from diverse areas including business, operations, support, technology and senior management to monitor and improve data quality.

Capgemini collaborates with individual clients to implement an appropriate Data Quality Assurance Platform leveraging the third-party tools that suit that client's requirements and standards.

Figure 1: Data Quality Assurance Platform elements



## Implementing a Data Quality Assurance Platform

Capgemini helps clients establish the following components in order to achieve comprehensive data quality management functionality:

1. A data quality **rules engine** manages and executes the rules, and generates exceptions when records fail any rule.
2. A data quality **dashboard** reports all metrics and trends, and manages quality issues.
3. Data quality **issue/resolution management** is a workflow process to make it possible to manage issues through to closure via automated workflow steps.
4. **Metadata management** facilitates the administration of definitions of critical data elements, identifying

physical columns in tables together with usage information, data quality rules, names, descriptions and data lineage from data sources to reporting – all of which simplifies data quality issue resolution.

5. **Metrics management** captures exceptions and identifies red/amber/green (RAG) status based on multiple exception thresholds.

When required, we can help clients to create solutions and implement the platform in a big data context, as shown in Figure 2.

Although a full implementation of the platform is a significant project, a pilot can be completed in around three months. Capgemini collaborates closely with each client to ensure that the metrics and reports produced are tailored to the needs of the business.

Figure 2: The platform readily caters for big data



### Why Capgemini?

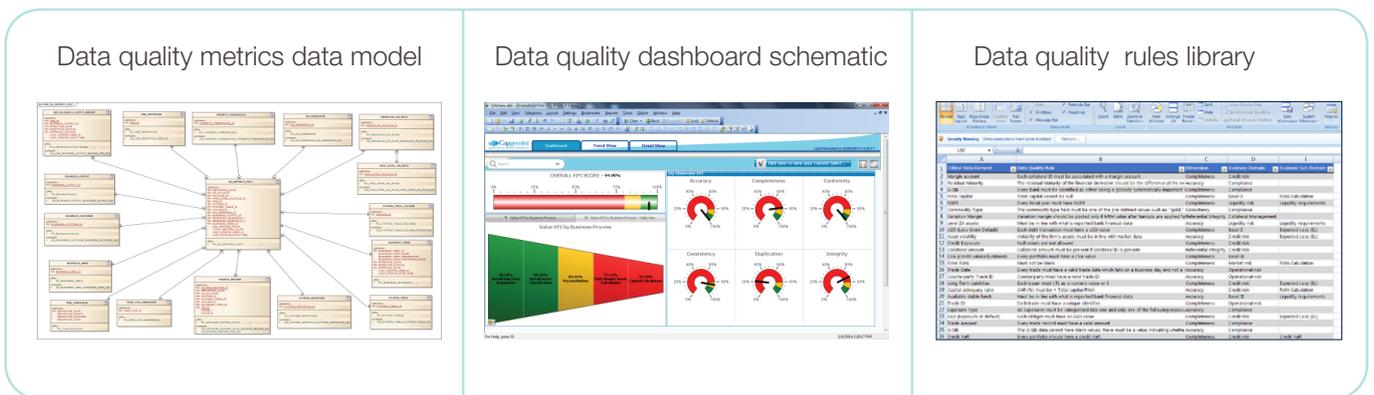
Capgemini implements the Data Quality Assurance Platform using an approach that has been proven to bring clients the following key benefits:

- Improved data accuracy resulting in better business decisions
- Reduced risk of compliance violations that could bring regulatory penalties
- Improved customer experience and increased sales opportunities
- Improved trust in the data at lower operational cost

Drawing on our experience with some of the largest financial services institutions in the world, we have built and matured a Data Quality Solution Accelerator that makes it possible to establish a platform in a shorter than usual timeframe and with better results. Key elements of the accelerator are illustrated in Figure 3.



Figure 3: Elements of the Data Quality Solution





## About Capgemini

With almost 140,000 people in over 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2013 global revenues of EUR 10.1 billion.

Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

For further information visit [www.capgemini.com/bim](http://www.capgemini.com/bim)