



## Powering global business.

### Client

Multinational Computer Technology Corporation

### Project

Data Integration, Validation, and Management

### Highlights

- Collated important information regarding project requirements and the required design features, designed a project roadmap, and verified the feasibility of the roadmap, to successfully implement an MDM server
- Developed a unique solution, with an integrated Probabilistic Matching Engine, to accommodate the data of more than a billion customers

## Creating a customer hub for more efficient customer data processing

### Client Challenge

Mastech InfoTrellis was engaged to evaluate an enterprise customer hub solution proposed by another large SI, but based on a detailed assessment report. The client requested Mastech InfoTrellis take ownership of the MDM program and define the MDM roadmap.

The Mastech InfoTrellis team acquired vital knowledge to define requirements and design the features that would need to be implemented in the MDM server. We worked with client's business resources and the enterprise architecture team to validate the solution approach and its fitment with the client's future state, as envisioned by the Enterprise Architecture Group.

### Mastech InfoTrellis Solution

Our team devised a first-of-its-kind solution, which involved combining the power of probabilistic matching provided by IBM Initiate, with the precision and robustness of IBM MDM AE Server design, for more than a billion customers. We also built ETL routines for both initial and delta loads.

In detail, we engaged in the following activities:

- Derived functional requirements from business requirements, for implementing the MDM AE Server, and integrated the Probabilistic Matching Engine along with it
- Designed and implemented a multithreading MDM Messaging Adapter, and an integration layer, that takes into account the sequencing of the messages, significantly reducing the loss of critical information across multiple transactions. The design included creating the corresponding fine-grained and composite services meant to be accessible in real-time, near real-time, and batch modes.
- Extended the customer data model, for managing data for more than a billion customers, which serves as the only hub for the rest of the organization. We also helped implement the privacy management system for all future customer outreach programs, and additional hard extensions were created to provide a quicker response time for real-time searches.
- Designed and developed MDM data extensions, data additions, fine-grained transactions, composite transactions, business rules, and data validations for IBM MDM AE services, as well as routines for Bulk Cross Matching
- Developed a detailed plan with iteration-based WBS, features, and activities. A multi-team environment is typical for any MDM project, and the Mastech InfoTrellis team has extensive experience in delivering success in such a diverse environment. Best practices were leveraged to implement the new and changing program requirements, which had a stringent compliance rollout schedule.

### Outcomes

Mastech InfoTrellis successfully delivered the new client customer hub, currently storing more than a billion unique parties, by integrating more than twenty source systems and two new downstream applications, laying a foundation for future development toward Service-Oriented Architecture (SOA). Through close interaction with end users, the hub was easily adopted by the business team, post project go-live.