In today’s business, managing master data in an effective manner is critical. And MDM is the only solution used to create and maintain the master data as the system of record for the enterprise. As master data is used by multiple applications, a single error in it can cause errors in all the applications that use it. For example, an incorrect address in the customer master might mean orders, bills, and marketing literature are all sent to the wrong address. Similarly, an incorrect price on an item master can be a marketing disaster and an incorrect account number in an account master can lead to huge fines. Hence, proper data validation and integration validation strategy is essential to ensure data quality. However, MDM testing has its own set of challenges, some common ones include disparate source systems, huge data volume, complex business rules, multiple integration points, etc.

Master data management systems provide and maintain a consistent view of an enterprise’s core business entities, which may involve data scattered across a range of application systems. These systems store personalized fields such as customer, product, employee, asset, material, location, and more, making security extremely vital.

Four key organizational challenges – are you facing any of these?

- The MDM validation process demand a large number of test data combinations, with longer testing life cycles and higher cost for complete coverage.
- MDM validation involves disparate source systems?
- The MDM validation process results in an increase in the total cost of ownership (TCO) due to unskilled testers and expensive tools.
- The MDM validation process results in higher cost due to multiple integration points, increasing the size and complexity of system integration testing.
Four challenges, one solution

With our unique process, people and technology solutions, we enable enterprises to achieve one golden source for all the core business entities, helping provide a consolidated view, reduce inconsistencies across different systems, and increase compliance to privacy laws and Sox.

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<th>Tools and innovation</th>
<th>Benefit through reuse</th>
<th>Partnership</th>
<th>Focussed approach</th>
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<tr>
<td>MasterACT - Infosys IP tool for optimized test planning for Match and Merge</td>
<td>Defined MDM test approach which is customizable to different business domains and products</td>
<td>Partners with major MDM vendors such as Tibco, Informatica, Stibo, Riversand, Oracle etc.</td>
<td>MDM testing centre of excellence and validation programs</td>
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<tr>
<td>IDTW (integrated DataTesting Workbench) - Infosys IP tool for ETL data movement validation</td>
<td>Defined performance test strategy</td>
<td>Independent validation engagement models with partners owning implementation</td>
<td>150+ trained MDM testing professionals with a dedicated MDM lab</td>
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<tr>
<td>FASTest - Infosys IP for service layer testing</td>
<td>Automated validation of data quality, data migration and integration to improve test effectiveness</td>
<td>Automated validation engagement models with partners owning implementation</td>
<td>Vendor partnered training programs</td>
</tr>
<tr>
<td>Automation frameworks available for Riversand, Informatica</td>
<td>Efficient test data identification, sub-setting, and data generation for optimal test coverage</td>
<td>Early involvement of quality assurance and phased, shift-lift test approach, reducing failures during integration</td>
<td>Increased focus on system performance for data migration and integration</td>
</tr>
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</table>

These enable enterprises to:

- Gain better control of their core data and streamline data sharing among different personnel and departments
- Reduce process errors and improve test effectiveness through automated validation of data quality, data migration, and integration
- Prevent bad business decisions and reduce time-to-market by deploying best-in-class process and technical solutions
- Stay ahead in the MDM landscape by leveraging our skills and partnership with various MDM vendors and products vendors and products

Success stories

With our customer hub MDM implementation, a US-based freight railroad operator:

- Achieved 100% coverage and improved productivity using business process driven test suites
- Automated comparison using IDTW, which helped reduce cycle time by 30%
- Accelerated regression testing by match and merge automation

An EPM Integration using Riversand MDM center enabled a leading retailer in the US to:

- Attain a test data coverage of 100% using the test data generator tool
- Build automation using CSharp, which helped automate data validation
- Attain a 100% data coverage using Mindmap techniques