About Infosys

Infosys Technologies Ltd, (NASDAQ: INFY) defines, designs and delivers IT-enabled business solutions that help Global 2000 companies win in a flat world. These solutions focus on providing strategic differentiation and operational superiority to clients. Infosys creates these solutions for its clients by leveraging its domain and business expertise along with a complete range of services.

With Infosys, clients are assured of a transparent business partner, world-class processes, speed of execution and the power to stretch their IT budget by leveraging the Global Delivery Model that Infosys pioneered.

For more information on this, please mail us at Infosys@infosys.com
Do you have multiple fragmented systems and challenges in scalability?

- Companies have unsynchronized master data in multiple disparate systems
- Master data presents non-standard forms in multiple silos in different locations
- Systems not scalable and hence couldn’t handle high data volumes arising due to new initiatives
- Consolidating data in Mergers and Acquisitions is a challenge and a nightmare

Disparate legacy systems, poor governance, stewardship challenges, and turnover all can harm your best-laid integration plans. Merger and Acquisition activity have additional impacts on fragmentation of Master Data. The key is to define an approach which is flexible and helps scalability. Infosys has a 4-step approach (given below), which guides you build and implement a good Master Data Management (MDM) strategy:

- Build a MDM Strategy and business case (based on our Value Realization Method) to ensure that value is designed-on.
- Design a solution based on the most up to date tools in the marketplace
- Build a Proof of Concept to solidify the fit, solution, and final form of your customized solution
- World-Class Global Delivery Model can facilitate your Implementation - optimized to your unique business needs

Infosys has developed a robust methodology to ensure success of MDM programs. It guides in defining the MDM strategy, evaluation of the tool, doing the proof of concept through to implementation of the strategy.

How to manage data across distributed systems?

Frequently Asked Questions

There are multiple approaches for implementing MDM. Based upon client environment specifics and data elements, Infosys methodology prescribes different architecture approaches (given below).

A. MDM Strategy & Business Case
   - A1. Define MDM capabilities to support strategic initiatives, over come pain points
   - A2. Streamline master data processes and identify functional capabilities
   - A3. Define data governance process
   - A4. Define to-be application & integration architecture
   - A5. Define Data architecture
   - A6. Develop business case
   - A7. Define Implementation Roadmap, Plan and MDM cookbook
   - A8. Define approach to Change Management

B. MDM Tool Evaluation
   - B1. Develop RFP for MDM vendors
   - B2. Define demo scenarios and provide sample data
   - B3. Evaluate MDM tools and identify gaps
   - B4. Complete custom build versus buy MDM package analysis
   - B5. Finalize recommendation and Socialize with stakeholders

C. Proof of Concept
   - C1. Define POC use cases
   - C2. Define POC evaluation scripts & assessment criteria
   - C3. Design, configure, build & prepare test data
   - C4. Test the POC and document performance
   - C5. Analyze performance vis-a-vis assessment criteria
   - C6. Finalize recommendation

D. Phased Implementation (Phase 1,2,3... N)
   - D1. Define business requirements and complete high-level design
   - D2. Complete detailed design, use case definition, and data modeling
   - D3. Define detailed test scripts and test strategy
   - D4. Configure MDM tool / custom build as needed
   - D5. Perform unit, and integration testing
   - D6. Implement Data Governance and ensure good quality data
   - D7. Cleans data and complete data migration
   - D8. Implement Change Management for MDM Program
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How to manage data across distributed systems?

Frequently Asked Questions

There are multiple approaches for implementing MDM. Based upon client environment specifics and data elements, Infosys methodology prescribes different architecture approaches (given below).
Poor data quality brings multiple challenges. It leads to inefficiencies, loss of productivity and inaccurate information. Sometimes, people are not able to get the exact data that is required. The Data Governance and Quality processes need to be tightly integrated to build a flexible framework. The Data Governance Framework (shown below) shows a tight integration between Data Management Governance and Data Quality processes.

Data Management Governance

- Execution and Decision-Making
- Compliance Monitoring and Enforcement
- Leadership
- Planning and Coordination
- Policy Definition
- Master Data

Data Management Processes

- Record Definition
- Data Quality Assessment
- Initial Data Quality and Data Acquisition
- Ongoing Data Quality and Data Acquisition
- Ongoing Enterprise Closed Loop DQ

In a nutshell, it is a way to make hard decisions within the enterprise. The case study below highlights the need for data governance and master data quality management.

Program Overview

The Customer Integrity Team at client was established to drive an organization wide customer data quality initiatives. Their goals included:

- Define Customer Life Cycle
- Identify Problem Areas
- Gather and Analyze Information & Processes
- Prioritize Initiatives & Kick-Off Projects

Customer Pain Points & Improvements

- Define Customer Life Cycle
- Identify Problem Areas
- Gather and Analyze Information & Processes
- Prioritize Initiatives & Kick-Off Projects

Is there a strong data governance process for your master data across multiple systems?

- Companies do not have defined processes for creation and maintenance of master data
- Companies have manual, labor intensive process for data cleansing and synchronizing data across multiple systems
- Acquisitions/Consolidations are making the management of master data difficult for companies

For good MDM strategies to succeed, strong Data Governance processes are needed. Data Governance is an orchestration of people, process and technology to enable an organization to leverage data as an enterprise asset. The execution and enforcement of authority, over the management of data assets, and the performance of data functions is required. A framework for the intersection of IT and business, working together to establish confidence and credibility in the enterprise’s information, is required.

Infosys Perspective on Data Governance
Are you experiencing poor master data quality, leading to poor decision making and loss of productivity?
Companies:
- have disintegrated information in multiple systems - duplicate, incomplete and old records, and incorrect or missing attributes
- are spending a significant amount of time fixing master data issues, instead of chasing customers and prospects
- do not trust the quality of data. It takes a long time to manually correct and reconcile data, before it can be used for decision making
- have sub-optimal business analytics, and transactional and operational reporting, leading to poor and slow decision making
- are not using resources effectively on the right set of customers

Data Management Governance

Data Management Processes
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Customer Pain Points & Improvements
- Duplicate accounts (30%)
- Incorrect or missing customer attributes (50%)
- Significant time spent on data maintenance (20,000 man hrs per year)

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Infosys Perspective on Data Governance
The examples, for managing the two key master data elements - Item and Customer, are given in detail.

**Item Data Management**

In our view, four key components (given below) are needed to develop a robust item data foundation. Infosys has developed a reference architecture (given below) to bridge the gaps of Oracle PDH’s capabilities.

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**Customer Data Management**: Infosys’ approach to Customer MDM is comprehensive. Example of Oracle-based Reference Architecture with UCM as Customer Data Hub is given below.

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Develop above components within a flexible and scalable technology architecture.
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**Customer Data Management**: Infosys’ approach to Customer MDM is comprehensive. Example of Oracle-based Reference Architecture with UCM as Customer Data Hub is given below.
**Four Key Components To Develop Master Data Foundation**

1. **Streamlined Master Data Processes & Workflows**  
   - Streamline tedious manual processes, clearly establish governance and ownership for master data: Enhances responsiveness of master processes, proactively eliminates master data errors  
   - Implement workflows: Automate master data processes, improve manual handoffs and provide alerts in case of delays

2. **Master Repository, Data cleansing & Internal Synch**  
   - Establish a master repository for master data that is decoupled from any transactional system like CRM: This provides ‘one version of truth’ to the business.

3. **Electronic Integration with 3rd party vendors**  
   - Exchange master data with 3rd party vendors electronically. Leverage persistent identifier for each consumer or business.

4. **Uniform and flexible global hierarchies**  
   - Establish uniform global hierarchies to develop consistent view of performance across globe  
   - Implement flexible master hierarchies to support reporting needs of multiple geographies / business units / divisions

**OLTP System**

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<th>Operational Data Mart</th>
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<td>Enterprise Integration Platform</td>
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**OLTP System**

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<tr>
<th>B2B Integration &amp; External Systems</th>
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**DB Layer**

- How do we address the right customer at the right time?
- How do we achieve a 360-degree customer view through MDM?
- How do we align current processes with expected changes?
- How do we achieve simplified processes and architecture, when dealing with regionalization, Mergers and Acquisitions (M&A), legacy investments and business disruption?
- How do we realize concrete returns on our existing Customer Relationship Management (CRM) investments?
- Use internal sync engines to synchronize all application databases with the Master repository. Deploy data cleaning tools to identify duplicates and address them

**Infosys** utilizes a proprietary business case and value assessment capability - the Value Realization Method™ (VRM). This method contains tools and techniques that scale to large and small projects, and tie business results and metrics together throughout the project lifecycle. During a typical MDM project, Infosys expects to prepare a preliminary business case that will identify expected business benefits and cost reductions, based on improved data quality and accountability. The business case and financial model are utilized to study options and scenarios regarding alternatives, and including specific metrics developed to measure and compare data management costs and value added.

Capturing and realizing the value from business process improvements requires the rigorous application of a fairly simple methodology:

- The effort begins with studying the processes and underlying technology, while interacting with the process owners.
- The objective is to understand the current causes of bottlenecks and failure points, where data quality problems begin.
- Through discussions with process owners, technical and functional experts, process improvement opportunities are identified.
- Financial benefits are then specified by quantifying the impact of the changes.
- A mix of automated workflow rules and effective governance policies are then developed to ensure the realization of long-term value.

**Business Case Steps**

Clients can expect the following general steps to occur in the preparation of the business case. First, a general template is created as the baseline modeling document. Value themes, metrics, and operational levers are identified in conjunction with business and IT team members. Then, cost factors and benefits are modeled to capture the full value impact of the initial modeling scenario. What-if analysis and optional scenarios are built as needed by varying the assumptions and data elements of this initial model. The extent and complexity of this modeling exercise can vary greatly, based on factors such as data and personnel availability, numbers of scenarios, and scenario flexibility. Infosys will work with the project sponsor to clearly define this activity, to fit our recommended staffing level and timing for each project.

VRM™ consists of three main phases: Find Value, Design Value, and Capture Value. Typical questions we seek to answer during each phase are listed below:

- **Find:** What are the objectives of the transformation? What is the business case? Which process metrics matter?
- **Design:** What are the optimal “to-be” systems and processes? How do processes translate to changes in systems and people?
- **Capture:** Are we on track to achieve value? How best to track and report progress? How do we provide feedback for subsequent rollouts?

Depending on the nature of program activities, this business case could “stand alone” or feed into a larger business case model for an entire Enterprise Resource Planning (ERP) transformation, for example. Additional deliverables that assign metric attainment accountability, decision frameworks (when design changes occur, for example) and benefits tracking throughout the program lifecycle - are also part of VRM™ toolkit and can be scaled to client needs.
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This helps answers the key CRM concerns of our customers:

- Increasing customer satisfaction, reducing customer churn, increasing customer loyalty, rewarding best customers;
- How do we drive profitable new services to our target customers?
- How do we address the right customer at the right time?
- How do we achieve a 360-degree customer view through MDM?
- How do we fit the right tool to the right job?
- How do we achieve simplified processes and architecture, when dealing with regionalization, Mergers and Acquisitions (M&A), legacy investments and business disruption?
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Infosys also has a customizable approach to meet the MDM Strategy Definition Needs of our clients …

1. Project Kick-off and validation
   - Validate project/program objectives and scope across brands, products and channels
   - Identify and align stakeholders across business & IT
   - Review existing documents, develop guides for interviews, data document requests
   - Prepare and present kick-off document

2. Document as-is MDM processes and issues
   - Interview / conduct workshops with business stakeholders to form a common understanding of business opportunities and drivers
   - Define key performance indicators
   - Validate current processes and identify gaps, bottlenecks and opportunities

3. Document MDM systems and current issues
   - Interview / conduct workshops with IT stakeholders
   - Document current architecture for systems that related to master data
   - Understand existing strategic technology vision
   - List architecture dependencies

4. Identify key MDM opportunities
   - Synthesize current pain points, industry best practices and future business initiatives to outline what MDM capabilities can create significant impact for client
   - List any opportunities to improve data accuracy thru validation rules

5. Develop to-be MDM processes & governance

6. Develop to-be architecture

7. Develop business case and roadmap