Master Data Management: the backbone of modern digital transformation initiatives
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What digital transformation means today?

In a world where digital is the go-to for customers, employees, partners, C-level executives, and even manufacturing plant workers, digital transformation is no longer synonymous with digital enablement. Instead, it is the pathway to excelling and building a competitive edge in an ecosystem where everyone else is operating, innovating, and serving in the digital mode too.

Today, four key trends characterize digital transformation:

- **Supply chains**: With faltering supply chains exposed at their weak links, the search for resilience and efficiency has turned into a continuous imperative.

- **Customer experience**: As digital natives continue to raise the bar for great digital experiences, consumer expectations are rising, and each buyer expects an individual focus from businesses.

- **Channel strategies**: Digital thrives across multiple channels – this calls for a consistent brand image and uniform experience across multiple channels.

- **Analytical insights**: Operating on the digital mode has exposed the value of insights not just at the strategic level but also at the point of action. From CXOs to demand planners and customer success teams, analytics is the key to repeatable success.

These trends have led businesses to undertake tumultuous digital transformation initiatives that aim to respond to these trends and bring the business up to the speed of change in the ecosystem. However, businesses need to look deeper - or rather, at the source to bring a lasting change.

Why digital transformation is a data problem now?

It has been said that data is the new oil in the 21st century. However, unlike oil, data is neither depletable nor valuable in its raw form. While operating in the digital mode brings data to the core of all aspects of a business, it is also the commodity to solve critical business challenges that will continue to shape tomorrow's business. This includes rapidly evolving ways of working, new benchmarks of customer experiences in the B2B and B2C universe, agile and nimble digital operating models, and the future of finance.

Moreover, data is also the key to harnessing the business benefits of emerging technologies like Artificial Intelligence and Machine Learning, Blockchain, Internet of Things, Conversational UI, AR and VR, and so on. As a result, digital transformation in the post-2020 world is essentially a business-wide data problem.
Kickstarting transformation initiatives

Four golden rules for lasting change

Before embarking on digital transformation journeys, organizations must consider the following four rules that will help them achieve lasting change with maximal benefits for the business:

- **Future-forward**: Amidst a fast-moving business technology landscape, technologies that are deployed today must build flexibility for the future with minimal technical debt.

- **Change management**: Digital transformation initiatives must impose minimal change management burden on the organization.

- **Fast RoI delivery**: Implemented solutions must deliver quick RoI to the business in question.

- **Value-focused**: Lastly, each undertaking should be pivoted on business value from day one.

In a digital-first world where data is at the heart of all business processes, mastering master data management is the key to delivering lasting value for the enterprise.

Master Data - the starting point

Be it hyperscalers or global companies, in the manufacturing industry, healthcare, or retail - master data is the heart of all business threads. In fact, master data is the key to building continuity across all end-to-end processes. See why:
• **Ideate to commercialize:** From prototypes to proofs-of-concept and product registries, product lifecycle data is the origin of all business domains.

• **Record to report:** Charter of accounts holds the key to an organization-wide financial transformation today.

• **Source to settle:** Efficiency and efficacy of material sourcing are hinged on supplier data contextualized with the organization’s facilities data.

• **Plan to produce:** Aligning manufacturing processes to market needs calls for precise and rich locations metadata.

• **Order to cash:** Customer data and other partner systems drive order-to-cash excellence.

Previously, master data resided in on-premises systems, and few organizations could leverage it to orchestrate global workflows with excellence. With highly mature cloud solutions, master data management (MDM) promises a new horizon of business benefits and is the key to lasting digital change today.

**MDM in Cloud: a 4-step data strategy for digital transformation**

By using Cloud, MDM can be leveraged to provide a single source of truth to the organization across distributed end-to-end processes. Here is a four-step data strategy for succeeding with a cloud-based MDM powered digital transformation undertaking:

1. **Make Master Data**
   - Define Rules, Standards
   - Profile and Analyse data

2. **Consolidate Master Data in Cloud Hubs**
   - Single Repository of Master data with the organisation
   - Global Item Taxonomy (Parts Classification and Attribution), Customer and Supplier Model

3. **Govern Master Data**
   - Streamline Ongoing master Maintenance
   - Workflow Driven Process

4. **Optimize Processes & Extend**
   - New Master Introduction
   - Change Mgmt.

Start your cloud journey with master data
Define/Make: Profile and analyze data from multiple systems, define master data domains, rules and standards for building a master data lake, then cleanse, deduplicate, and standardize the data.

Consolidate: Consolidate and rationalize data collated from multiple sources in cloud hubs to build a single repository within the organization.

Govern: Streamline the policies and schedules for master data maintenance, introduce and implement workflows, and outline ownership of MDM governance processes.

Optimize: Leverage Cloud MDM to optimize processes and extend to new use cases for driving value.

By implementing MDM in the Cloud, organizations can lay a solid foundation for orchestrating highly-efficient supply chains and impeccable customer experiences across channels, with precise analytics for decision support. Following are some of the key use cases of cloud-based MDM deployments that have brought proven benefits to hundreds of large-scale organizations.

### Speeding RoI by implementing MDM in the Cloud

Eight use cases with proven business benefits

1. **Item master operational data governance excellence**

Data quality is a major challenge in digital transformation initiatives that aim to bring precision, speed, and cost benefits through operational improvements. Many enterprises often implement cutting-edge ERP systems with better process implementation and user interface capabilities but fail to reduce operational errors and overall effectiveness. This is because ERP systems ingest sub-optimal quality data from the source and continue to throw exceptions and mismatches in item names, specifications, and other product metadata.

This calls for tackling the problem at the level of master data itself. With robust rules to define, consolidate, govern, and optimize item master data, enterprises can supply high-quality master data to the various systems - like ERPs that drive business transactions on a daily basis. With a solid integration solution like Birlasoft iLink, integrating cloud MDM systems to the ERP can reduce operational errors by 30% and improve operational effectiveness by 10%.

**Item master operational data governance**

*Single Process/Tool for Item Mastering for the Organization setting base for Cloud roadmap*

- **Reduction in operational data errors**: 30%
- **Overall Operation Effectiveness**: 10%

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Enterprise to the Power of Digital
Before 2020, most organizations with global engineering and manufacturing teams relied on fragmented and non-standard mechanisms to ideate, prototype, and launch new products. For instance, engineers and R&D technicians had to share CAD files and item catalogs via emails to work with their cross-border peers. However, this injected delays in the ideate-to-commercialize process created multiple versions of product data, distributed across file systems and owned by multiple entities.

That's why taking product master data to the Cloud can help enterprises streamline the R&D and engineering efforts that go into the development of a product. Powering the product value chain with a single source of truth, product master data also serves as the bridge between PLM (product development) and ERP (post-launch order and supply chain transactions) systems. This helps the enterprise bring products faster to the market by reducing the launch times by up to 20%, thereby helping them realize the first-mover advantage in industries where product innovations come with a time-based value. Our work with over 100 clients demonstrates that faster product launches carry the potential for 20% revenue gains in some product segments.

**Enhance your product value chain experience**

- **New Product Development**
  - PLM
    - Master Item
    - Item Engineering Attributes
    - Item Revision
    - Item Master- Design BOM
  - CAD Design (Representation)
  - Engineering Collaboration
  - Quality Management (CAPA)
- **PH Cloud**
  - Master Item
  - Item Engineering Attributes
  - Item Revision
  - Item Master- Design BOM
  - Item Site Assignment
  - Item Site Attributes
  - Item Site BOM
  - Item Catalog
  - Item Catalog Hierarchy
  - Item Catalog Specifications
  - Item Sales Attributes
  - Item Marketing Attributes
  - ERP Operational Attributes
  - Sales Configurations
  - Marketing Bundles
  - Item-to-Item Relationship
  - Item-to-Customer Relationship
- **Transaction Management**
  - ERP
    - Master Item
    - Item Engineering Attributes
    - Item Revision
    - Item Master- Design BOM
    - Item Site Assignment
    - Item Site Attributes
    - Item Site BOM
    - Item Catalog
    - Item Catalog Hierarchy
    - Item Catalog Specifications
    - Item Sales Attributes
    - Item Marketing Attributes
    - ERP Operational Attributes
    - Sales & Purchase Orders
    - Receipts & Shipments
    - Payables & Receivables

**2. Reinventing the product value chain experience**

- Improvement in Product Launch time: 20%
- Potential Revenue gains: 20%
Today, customers looking to buy high complexity products expect businesses to provide quotes in real-time over instant messaging channels. However, without high-quality product and customer data, the CPQ process fills the gaps by sourcing data fragments from various systems. Starting from the lead generation stage in the sales CRM to quote generation in the CPQ system, right to order creation and fulfillment in the ERP, consistency of product and customer master data is the key to capitalizing quickly on opportunities, issuing quotes at pace, and closing deals.

This is precisely what Cloud MDM solutions help achieve - they bring the right context to frontline employees at the right point in the process. Instead of making calls, email colleagues, and searching through product data sheets and pricing software, cloud MDM solutions bring this information to the point of action, thereby enabling sales teams to issue quotes quickly. This results in a 15% increase in customer satisfaction and a 25% reduction in searching for information during the CPQ process.

### 3. Power Configure-to-Quote with a single source of truth

Reduction in Search during quote process

Next gen configure price quote process

Increase customer satisfaction

### 4. Easing product registration with regulatory bodies

When large-scale organizations attain a global presence, registering new products with regulatory agencies across multiple geographies can not only delay the time-to-market but is also fraught with collaboration, non-standardization, and erroneous details-related challenges. In addition, because various regulations request product information in varying templates and degrees of detail, multiple versions of product data can introduce delays in the launch process and subtract from the competitive value of innovations.
However, cloud MDM solutions can not only supply consistent and precise product data across borders, but they also integrate with product registration platforms to automate multiple steps of the product registration process. For instance, these solutions, supplied with complete product data, can auto-fill registration templates, manage multi-party approvals, release submissions, and notify stakeholders when new products are ready to enter the market - thereby reducing data maintenance efforts by 25% and launch delays by 10%.

Organizations that manufacture and supply products to various geographies often experience delays in shipping products and getting their shipments cleared at import offices. This is because downstream systems that are tasked with product classification with Harmonized Tariff Schedule (HTS) codes, sourcing of services, sanction screening, and weight and volume labeling introduce inconsistent or erroneous information that leads to unmet compliance, customs, or tariffs. This leads to slowing down shipments and eroding commitments to consumers while increasing operational costs for the enterprise.

However, supplying these downstream systems with high-quality product master data can help obliterate these challenges. It not only saves time for internal teams but also leads to smoother cross-border operations while bringing 10% improvements in cross-border product shipments.

5. Speeding shipments with compliance data management

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Enterprises manufacturing and supplying complex products need to maintain highly precise parts records for manufacturing and service excellence. However, when the number of products in their catalog grows and multiple versions of the same product are manufactured and supplied, maintaining accurate records of their constituent parts, and raw materials can prove challenging without a centralized, standard record maintenance mechanism.

Product master data hosted in the Cloud is a one-stop answer to these challenges. It supplies accurate parts records to the manufacturing OT, sourcing, and ERP systems. It brings tangible improvements in the customer service experience while maintaining precise and optimal inventory levels - bringing down the number of false positives to <1%.

### Parts catalog: golden part records for enterprise

- De-Duplicate records
- Assign Classification
- Standardise Record Information
- Enrich Record Information
- Automated Web Scraping
7. Synchronizing product data with partners globally

In industries like retail, consumer packaged goods (CPG), and manufacturing, businesses add hundreds of new SKUs per year. Each SKU calls for the management of nearly 700 attributes today. Retailers interact with a number of suppliers to launch a new SKU, and inaccurate product data per year cause nearly 15000 issues. This is essentially a product data management issue that cascades down to the supply chain, from distributors to consumers - especially now, when customers are left to digital channels to learn and verify product information.

However, synchronizing product master data with global data synchronization networks could essentially help enterprises share high-quality product data across the network, thereby eliminating inaccuracies erosion of brand image due to inconsistent product information. Our work with hundreds of clients shows that product data synchronization with GDSN data pools can reduce the data maintenance efforts by 25%.

Global product synchronization to trading partners with product hub cloud

8. Powering consistent omnichannel strategy and operations

Global retailers, CPG brands, manufacturers, and distribution networks have been compelled to expand their business to multiple digital channels as consumers show greater agility in switching between channels for even a single transaction. However, most businesses fail to deliver a consistent and satisfactory experience across channels today. Why? Because without precise product and customer data, sales teams often quote different prices at points of opportunity and fail to realize cross-sell and upsell opportunities without an ability to contextualize product data with customer data.

Deploying MDM in the Cloud and integrating it with channel operations orchestration solutions can help eliminate these issues altogether. In fact, a single source of truth powering channel operations is the key to delivering a consistent experience, brand image, pricing, and uniform customer satisfaction across all channels - opening up the potential for 10% revenue gains and increasing customer satisfaction by 15% on average.
Today, most digital transformations fail to meet their objectives - 70%, to be precise. This is simply because most undertakings aim to alleviate the symptoms of master data problems that continue to inform business strategy and operations across the organization. However, by leveraging cloud-based MDM solutions, organizations can meet digital transformation objectives today and lay the foundations for a digital-first future. Time to recognize digital transformation for what it actually is: a data problem. Start solving it today by leveraging a modern cloud MDM solution and transforming your business for lasting success.

What next?

Potential Revenue with cross sell & up sell
- 10%
Increase customer satisfaction
- 15%
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