DRAWING BUSINESS VALUE FROM MASTER DATA MANAGEMENT

Abstract

How a business optimises available data impacts the value of data. A recent survey report by IDC on data organisations revealed that optimised data leaders are three times more likely to drive their business towards digital success. However, though every business understands data management's importance, most fail to realise its full potential. An optimised master data management (MDM) framework must deliver business intelligence while laying the foundation for future uses. In this POV, we will discuss how to get the best results from master data by converting information into business intelligence.

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Building an MDM framework

According to a recent Harvard survey, 87% of respondents said that having a strong MDM program is vital to the success of their business.[2] MDM creates a unified repository of business-critical data and ensures consistency, accuracy, stewardship, governance, and data accountability across several use cases.* Your business can leverage an ever-increasing data flow to create business intelligence by following a three-pronged approach that focuses on:

- **Data consolidation**
- **Data quality**
- **Data analytics**

Data consolidation

Fragmented data silos add complexity and make access to data a difficult task for users. Domain-specific systems increase complexity, inaccessibility, and fragmentation as data sources increase. They create obstacles to managing supply chains, addressing customer experiences, and delivering data-driven innovation. We can troubleshoot fragmented data across domains effectively by implementing multi-domain MDM, standardising and automating data processes, optimising the use of existing data architecture, and moving data and technology to the cloud or using a hybrid model.

- Multi-domain MDM can address fragmentation by integrating data from several domains. A multi-domain MDM enhances MDM capabilities by converting fragmented data into strategic information that provides a comprehensive business view. Moreover, it reduces cycle time and costs as well as boosts forecasting and planning by understanding the interrelationship between different data through analytics.

- On the technological front, standardising and automating data collection, segregation, storage, and access can reduce data fragmentation. Using AI and machine learning (ML), MDM becomes streamlined through automation, thus saving costs and time.

Moreover, businesses often deploy new technology for new processes without utilising the complete data architecture of existing systems to optimise the master data maintenance process.

- To integrate data and reduce the obstacles created by fragmentation, increase and encourage access to self-service data for better business intelligence. Moving data and technology to the cloud or changing to a hybrid model can also ease consolidation.

Data quality

Data quality is critical to any decision-making process. Ignoring data maintenance can lead to issues such as:

- Inaccurate or misrepresented facts that hamper decision-making
- Excessive data duplication that costs time and money to clean up
- Lack of employee trust in MDM systems for extracting accurate analysis for functional use

The solution lies in combining MDM capabilities with data governance to ensure clean, secure data. Governance makes the data services framework function efficiently by:

- Standardising processes for the MDM framework
- Documenting processes for dispute resolution in data collection, storage, and security

- Addressing quality issues of inconsistency, security, and integrity as well as aiding in creating the golden record
- Speeding up coordination and communication through well-defined rules and responsibilities

Data analytics

What use is the data when your business can't extract valuable insights from it? Data analytics is the means towards that end. Information is organised, cleaned, and standardised to analyse the data accurately. When applied to business functions, such analysis can provide insights directly affecting decision-making. Analytical MDM strives to shift the focus of MDM from technical processes towards a business-oriented solution with strict governance mechanisms. However, to support business intelligence applications, it is necessary to have a data services framework that enhances the quality, cross-referencing, and hierarchies of all data.

Machine learning in MDM

MDM and ML are technologies fuelled by data and enable and augment each other. Bundled with MDM, ML and AI offer the simple benefit of vastly upscaled analysis. On the other side, MDM is a great way to develop and prepare data for ML models. Structured and high-quality data can help

ML models function better and save efforts in data preparation.

An MDM ecosystem requires constant and specialised tactical handling by data stewards. As opposed to data governance, which is a policy- and procedure-level role, data stewardship focuses on data

usage, security, data matching, and inter-department liaising.[1] To reduce the workload of data stewards by about two-thirds, ML-assisted MDM can help with data matching. ML allows intelligent matching and grouping of data.[6]

The value offered by MDM

Revenue improvement

Every business targets cross-selling and upselling to increase revenue. With reliable data and effective analysis, it becomes easier to connect the dots to make a compelling pitch that is sure to convert into sales. A consolidated data source helps you understand the customers, draw more revenue, and provide better services to existing customers.

Customer satisfaction

Drawing from a key factor in revenue improvement, customer satisfaction is the primary factor in customer retention and successful cross-selling and upselling. The health of the business practically depends on these relationships.

Business insights

Of everything we hold MDM accountable for, efficient, transparent, and robust business insights are probably the most important. The faster businesses can identify patterns and connect customer data from various touchpoints, the faster they can act on it. Simplified access, management, interaction, and most importantly, data integration feed into better use of the data.

Inventory optimisation

The abundance of data points to draw insights from helps with inventory management as well. Strategically using and connecting the data is possible due to the centralised product perspective offered

by MDM. MDM creates an ecosystem that streamlines the supply chain and inventory optimisation with data on product returns, demands, delivery timelines, etc.

Innovation

MDM has proven to be a boon for the R&D teams just as much as any others, like analysts, IT delivery, administrators, project leaders, etc. The structure for implementing a new product is readily available with an efficient MDM framework. This can accelerate development processes by avoiding data redundancy, inconsistency, business process inefficiency, and unexpected changes.

Best practices for turning data into insights

Drawing business value from an MDM framework involves going one step ahead and integrating MDM with other data pools such as reference data, relationship data, and market data.[4] This provides a comprehensive view of all data types by integrating processes, technology, and talent. Thus, it creates an operating model in which data is available on demand for various use cases. Your business can extract value from MDM by incorporating a data services framework that integrates these five crucial components:

Data operations: This aspect involves integrating an MDM framework across the organisation. Moreover, data operations should be analytics led with technical and process expertise support from talent.

Data architecture: The data architecture should have a well-defined system of record-keeping and data lakes for complementary and reference data. Additionally, create a feedback loop that links data to insights by incorporating AI and ML within the data architecture.

Processes: Link your data strategy to business processes to identify data that are fit for the purpose. Find use cases for data insights that will support various business functions. Prioritise data utility based on how many functions that same data can be useful for.

Data governance: A formal governance strategy will define data ownership and responsibility, prioritising standardisation and security. It creates the foundation on which the entire data services framework stands.

Talent: Nurture talent that has both digital and industrial expertise. Improve data literacy through continued training and inculcate a culture of cross-domain data sharing.

Conclusion

With a digital-first outlook becoming the global norm, it is crucial that we effectively manage data. The agility in drawing inferences from data and acting on data-driven insights is one of the key factors that set businesses on the path to better customer relationships, higher revenue, and innovation. To realise business value from MDM, it is crucial that enterprises focus on data consolidation, data quality improvement, and effectively analysing the data. In doing this, the smarter choice is to make way for other technologies to aid your MDM framework and strengthen data stewards.
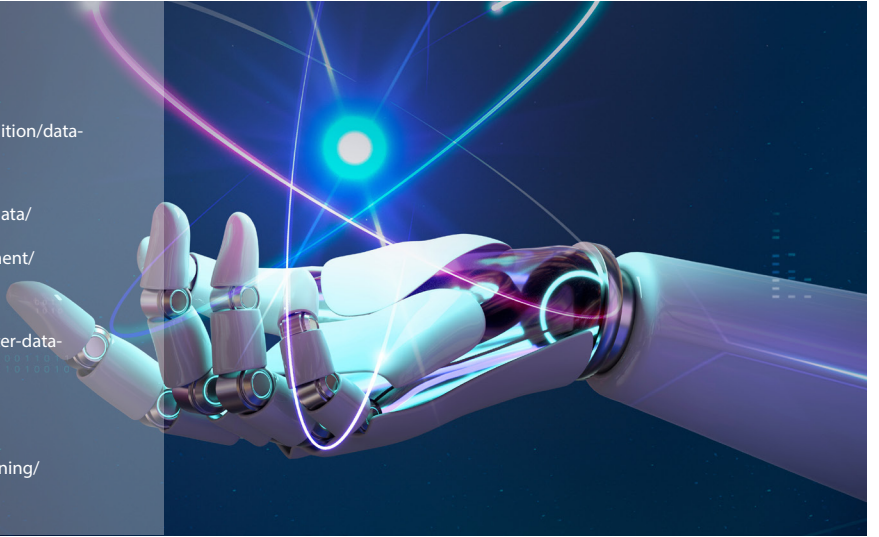
Business transformation with MDM needs impactful data stewardship. Leveraging AI and ML, we get an opportunity to enhance the MDM capabilities of stewards. While on the path to effective data utilisation, the required cultural and structural change comes in the form of implementing better MDM practices, creating space for more technologies, and focussing on data attributes.

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*For organisations on the digital transformation journey, agility is key in responding to a rapidly changing technology and business landscape. Now more than ever, it is crucial to deliver and exceed organisational expectations with a robust digital mindset backed by innovation. Enabling businesses to sense, learn, respond, and evolve like living organisms will be imperative for business excellence. A comprehensive yet modular suite of services is doing precisely that. Equipping organisations with intuitive decision-making automatically at scale, actionable insights based on real-time solutions, anytime/anywhere experience, and in-depth data visibility across functions leading to hyper-productivity, Live Enterprise is building connected organisations that are innovating collaboratively for the future.

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