NelsonHall
TRANSFORM THROUGH INSIGHT

Reinventing Master Data Management in Consumer Electricals & Electronics

December 2022

Introduction

Consumer electricals & electronics manufacturers are increasingly digitalizing their administrative processes with the goal of zero-touch end-to-end processing and enhanced analytics for improved purchasing and supply chain decision-making. This approach is highly dependent on complete and accurate master data and streamlined master data management to ensure reliable transactions and decision-making.

This paper aims to assist major enterprises in consumer electricals & electronics manufacturing in understanding and benchmarking their master data management issues and approaches to transformation.

The study is based on interviews with 30 master data management leaders in major enterprises across North America, the U.K., and Europe and identifies:

- The key challenges faced by master data management (MDM) organizations and the importance of enhancing master data management
- Desired changes to MDM within future operating models and the importance of automating master data management
- The key use cases for data enrichment
- The level of appetite for third-party master data management services
- The benefits sought from third-party master data management
- The challenges and key success factors in master data management transformation.

Note that infographics in this paper show percentage values, which indicate the proportions of master data management leaders who perceive specific characteristics to be highly important.

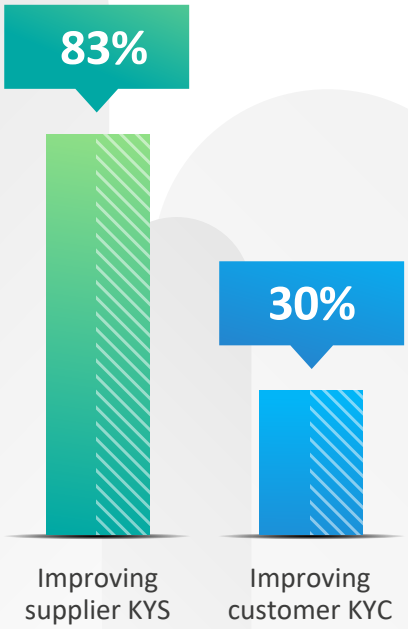
Issues in Master Data Management

Enterprise-level master data management has frequently been an afterthought in system implementations, with each system and business silo holding its own sets of master data in isolation. This data inconsistency across the enterprise is often compounded by a lack of formal mechanisms for ensuring the data remains current.

The main issues in master data management faced by consumer electricals & electronics manufacturers are:

- Lack of formal structured mechanisms for keeping data up-to-date
- Too many manual processes
- Cost/lack of budget for maintaining data
- Lack of a single source of truth and conflicts of ownership for many data types
- Lack of integration & inability to edit data at source.

Importance of Enhancing Master Data Management



Key use cases for enhancing master data management include earlier identification of potential customer and supplier failure and distribution hold-ups.

Early identification of potential distribution hold-ups

Current master data management adequacy **10%**

Need to enhance master data management **87%**

Early identification of potential supplier failure

Current master data management adequacy **17%**

Need to enhance master data management **90%**

Early identification of potential customer failure

Current master data management adequacy **73%**

Need to enhance master data management **73%**

MDM leader perspectives

"Customer data is always out-of-date and frequently requires updating, and there is no formal mechanism for ensuring this is maintained"

"We need to update data in a more reliable manner to ensure the data is current"

"There is a lack of automation and too many manual tasks relying on administrators to update the data"

Desired Changes to MDM within Future Operating Model

Consumer electricals & electronics MDM leaders recognize that they need to adopt single sources of truth for master data which are used across the enterprise with enhanced end-to-end information sharing. This internal master data needs to be actively managed and enhanced with external data sources to maintain its timeliness and accuracy.

Desired Changes to MDM within Future Operating Model

"We need to reduce manual processing and move towards more real-time data acquisition & processing"

"We need to enhance information sharing, particularly across the supply chain"

"We need to investigate ways of actively managing master data rather than passively making updates as they are stumbled upon"

"We need to develop improved integration across the organization to enable the real-time flow of information"

"We need to enhance our data with outside sources of data".

Importance of Automating Master Data Management Processes

Many organizations use RPA and digital assistants for account setup and reducing duplications in manual data entry. However, the level of automation underpinning master data management is currently modest, with scope to combine enhanced use of RPA with document cognition and machine learning technologies, which currently exhibit very low deployment levels in MDM.

RPA

33% Significant current use

73% Need to enhance use

Document cognition

10% Significant current use

60% Need to enhance use

Analytics

67% Significant current use

33% Need to enhance use

Third-party databases

57% Significant current use

93% Need to enhance use

Appetite for Outsourcing Master Data Management Services

Master data management includes many support services which can be regarded as non-core and are not always carried out as systematically as they might. This potentially makes them strong candidates for outsourcing.

Adequacy of MDM support services

Data cleansing

High adequacy **33%**

Willingness to use third-party services **100%**

Data enrichment

33% High adequacy

90% Willingness to use third-party services

Data reconciliation

High adequacy **40%**

Willingness to use third-party services **97%**

Data maintenance

40% High adequacy

87% Willingness to use third-party services

Only 10% of MDM leaders are highly satisfied with their organization's overall master data management, with 50% highly amenable to the delivery of their future master data management operating model as a managed service. When outsourcing MDM services, 60% of MDM leaders favor a single third-party supplier of comprehensive data management services.

Ability to meet KPIs

This shortfall in master data management delivery and organizations' willingness to consider third-party services to rectify this situation is particularly pronounced when the impact of master data management delivery on KPIs such as ensuring data accuracy and completeness is considered.

Ensuring data accuracy

0% High adequacy

93% Willingness to use third-party services

Ensuring data completeness

13% High adequacy

90% Willingness to use third-party services

Ensuring data timeliness

60% High adequacy

93% Willingness to use third-party services

Importance of data cleansing on migration to S/4Hana

47% of enterprises are migrating or about to migrate to S/4Hana

86% of these enterprises are highly likely to undertake a master data clean-up as part of the migration

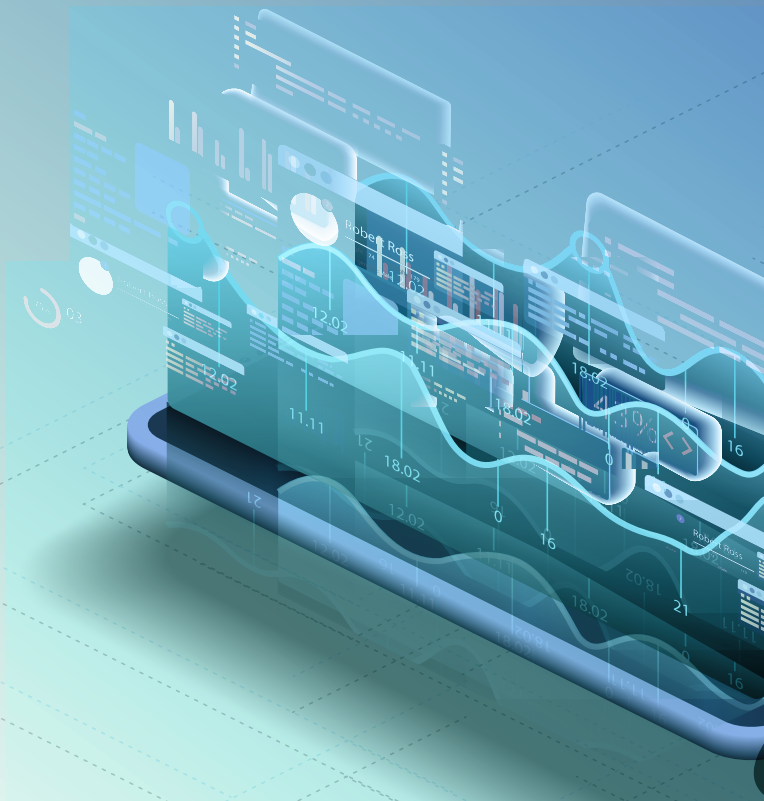
Data enrichment & sharing

One aspect of master data management typically needing enhancement is data enrichment, introducing complementary sources of data from outside the enterprise. The most useful forms of data enrichment, in the words of MDM leaders, are:

"Anything that allows us to improve the robustness of our demand and supply forecasting together with data for enhanced intelligence on risk management"

"Having better visibility of our supply chain would be a big enhancement for better forecasting lead times and pricing changes"

"Real-time access is the main enhancement so that changes don't rely on manual interventions and updates"



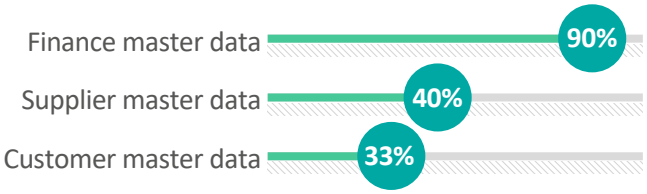
Data enrichment is viewed as being particularly important in addressing some of the key MDM issues identified by MDM leaders earlier:

Key areas for data enrichment		Willingness to consider third-party master data management services with data enrichment
87%	Early identification of potential customer failure	100%
80%	Early identification of potential supplier failure	97%
63%	Early identification of potential distribution hold-ups	70%
63%	Enhanced ability to monitor product & operational sustainability	47%
60%	Reducing stock-outs	100%

Master data sharing as a means of data enrichment

One potential data enrichment approach is sharing master data across organizations facilitated by a third-party data management services provider. MDM leaders in consumer electricals and electronics manufacturers show appetite for this approach, provided the data is highly anonymized and they have a high level of trust in the third party.

Willingness to anonymously share master data with a third-party data management services provider:



MDM leader perspectives on customer data sharing

"We could share summary data"

"Anything could potentially be shared depending on how well it is masked or anonymized"

"We can share most data if we have sufficient trust in the vendor"

MDM leader perspectives on supplier and component data sharing

"We could share import data and cross-border trade information together with logistics planning data"

"It could be interesting to share and enhance logistics data"

"We could share most supplier data"

Benefits from Third-Party Master Data Management Services

As shown earlier, MDM leaders are highly willing to consider outsourcing elements of their MDM support processes.

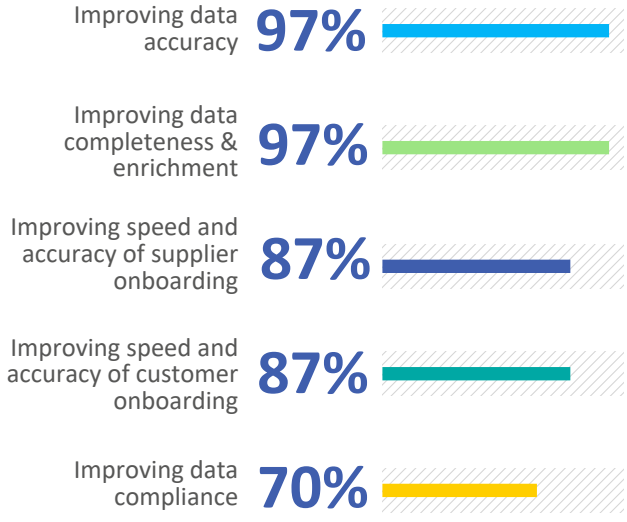
Examples of the benefits sought quoted by MDM leaders are:

"Reducing the delays in other processes due to poor data"

"Improving organization agility and speed of decision-making"

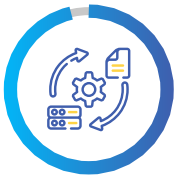
"Reducing the number of internal pain points in data management"

Benefits sought from third-party master data management services:



Characteristics sought in a provider of third-party master data management services include the ability to transform the organization's approach to MDM and increase the level of automation in MDM processes. Indeed, **73% seek the ability to transform and operate the organization's master data management.**

Ability to transform approach to MDM:



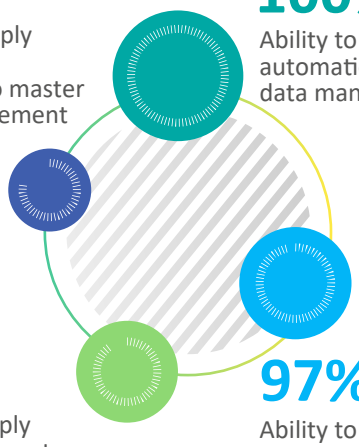
93%
Ability to transform the organization's master data management

100%
Ability to establish consistent enterprise-wide data structures for master data

Ability to automate master data management:

80%
Ability to apply cloud-based platforms to master data management

100%
Ability to apply intelligent automation to master data management



90%
Ability to apply analytics to master data management

97%
Ability to apply intelligent document cognition to master data management

Challenges & Success Factors

01

Challenges

- Consumer electricals & electronics manufacturers express low levels of satisfaction with their current MDM processes
- Key areas of low satisfaction are ensuring data accuracy, completeness, and data enrichment
- Many organizations lack processes and policies for keeping data up-to-date
- Slow updating of master data often results in out-of-date data
- High cost and low budget for active master data management

02

Key Success factors

- Establish consistent enterprise-wide data structures
- Actively, rather than passively, manage master data
- Enhance data with external and third-party managed data sources
- Move towards real-time data acquisition & processing
- Target earlier identification of customer & supplier failure
- Target reducing stock-outs & increasing manufacturing up-time

03

Opportunities

- Migration to S/4Hana presents an opportunity to adopt new MDM operating models
- Consider using third-party MDM services for MDM transformation, automation and data enrichment

About NelsonHall

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