

NAED's Journey Map of Product Data



Learn more about the electrical industry's current processes around product data creation, nine friction points that lead to inefficiencies, and how it impacts the bottom line.

Table of Contents



Topic:	<u>Page</u>
• Research Approach & Objectives.....	4
• Key Findings.....	6
• Friction Points with Current Product Data.....	7
• The Cost of Poor Product Data.....	12
• Current Product Data Journey Map.....	14
• Proven Practices for Improving Product Data.....	15
• Applying Proven Practices to Friction Points.....	27
• Action Items for Manufacturers and Distributors.....	28
• Product Data Practice – Maturity Model.....	32
• Best-Practice Product Data Journey Map.....	33

Click on page number to
jump ahead

We are most grateful to all those who participated in this study. We appreciate your time and insights. A special thank you to the members of task force who provided valuable feedback and recommendations throughout the entire project.

The NAED Foundation would also like to thank the current and legacy companies of Channel Advantage Partnership (CAP) Council. Since 2003, they have dedicated their time and resources to the NAED Foundation's research and education initiatives.

CAP Council*:

- Border States Electric
- Butler Supply
- Colonial Electric Supply Company
- CED
- Cooper Industries (now Eaton)
- Crescent Electric Supply Co.
- Dakota Supply Group
- Eaton Corporation
- Elliott Electric Supply
- Fluke Corporation
- GE Industrial Solutions
- Gexpro (Rexel)
- Graybar
- HD Supply Co. (now Anixter Power Solutions)
- Hubbell Incorporated
- Independent Electric Supply, Inc. (now part of Sonepar)
- Irby (now part of Sonepar)
- Kendall Electric
- Kirby Risk Electrical Supply
- Lester & Edward Anixter Family Foundation
- Legrand North America
- Lithonia Lighting
- Lutron
- Maurice Electrical Supply Co./USESI
- Mayer (now part of Rexel)
- McNaughton-McKay Electric Company
- North Coast Electric Company (now part of Sonepar)
- OSRAM SYLVANIA
- Panduit Corp
- Philips Lighting
- Revere Electric Supply Co.
- Rexel
- Siemens
- Sonepar USA
- Springfield Electric Supply Co. (now part of Sonepar)
- Square D by Schneider Electric
- State Electric Supply Co.
- Steiner Family Entities
- The Hite Company (now part of Mayer/Rexel)
- Thomas & Betts (now ABB Installation Products)
- United Electric Supply
- WESCO
- Western Extralite Co.(now part of Border States Electric)

CAP Associates*:

- B & K Power to Solve
- City Electric Company, Inc. (now part of Sonepar)
- Electric Supply
- EDGES Electrical Group (formerly Electrical Distributors Co.)
- Electrical Engineering & Equipment Co
- Hunzicker Brothers, Inc.

* This list features the name of businesses at the time they joined the CAP Council

Research Objective



The NAED Education & Research Foundation focuses on digital transformation, and in this case, the importance of product data and how companies require this information for various internal processes and external-facing platforms.

To better understand the current state, NAED chartered the documentation of how product data is created, deployed, and used across the channel. Specifically, the research focused on the following questions:

- *What is the “typical” product data journey from Manufacturer to Distributor to Customer?*
- *How do these journey differ across different types, sizes and maturity of companies?*
- *What practices are different companies using for the development, integration and maintenance of product data?*
- *What “Best Practices” exist within NAED members that can be used as a guiding light for improvement and adoption?*
- *What objectives and KPI’s are used to measure effectiveness?*
- *What opportunities to improve product data management exist?*
- *What is the impact of improved data management / journey to NAED membership?*
- *Where in the product data journey should NAED members focus?*
- *Identify specific areas where NAED has an opportunity to be an influencer.*
- *What “low hanging fruit” improvement opportunities exist for NAED / members?*

An integral component of this study is the involvement of NAED members to paint a clearer picture of current practices. NAED members were asked to participate in the research and over 60 interviews with 42 companies were conducted during August 25 – November 22, 2022. In addition to these interviews, secondary research was conducted to identify broader best practices and impacts of improving product data quality.

42 Companies and over 60 people were interviewed



Companies Interviewed:

- Agilix Solutions
- Atkore
- Blazer Electric Supply
- Border States Electric
- Connexion
- Current Lighting
- CK Electrical Sales
- DDS
- Eaton
- Elliott Electric
- ETIM
- Grainger
- Graybar
- Gross Electric
- Hubbell
- IDEA
- Interstate Electrical
- Kendall Group
- Kirby Risk
- Legrand
- Lutron
- Minerallac
- Mars Electric
- McNaughton-McKay
- Metro Electric Supply
- One Source
- Panduit
- Prysmian Group
- Ray Electric
- Rexel
- Rockwell
- Schaedler Yesco
- Schneider Electric
- Siemens
- SMC Electric
- Sonepar
- Southwire
- Stanion
- Trade Service
- United Electric
- Van Meter
- Xngage

Sample List of Titles Interviewed:

- Sales VP
- Business Development VP
- B2B Commerce Executive
- Digital Marketing Director
- Product Manager/ Business Development
- Sales Operations Manager
- Strategic Supplier Syndication Director
- E-Commerce Digital Strategy Manager
- eTools Marketing Director
- eCommerce Manager
- Ecommerce/Customer Experience Manager
- Enterprise Data Senior Manager
- Product Information Management Manager
- Master Data Manager
- Product Content Manager
- Product Data Manager

Key Findings



Product Data is critical for both Manufacturers and Distributors, but rarely gets the attention, prioritization and investment it deserves as “the fuel for the ecommerce / omnichannel engine”

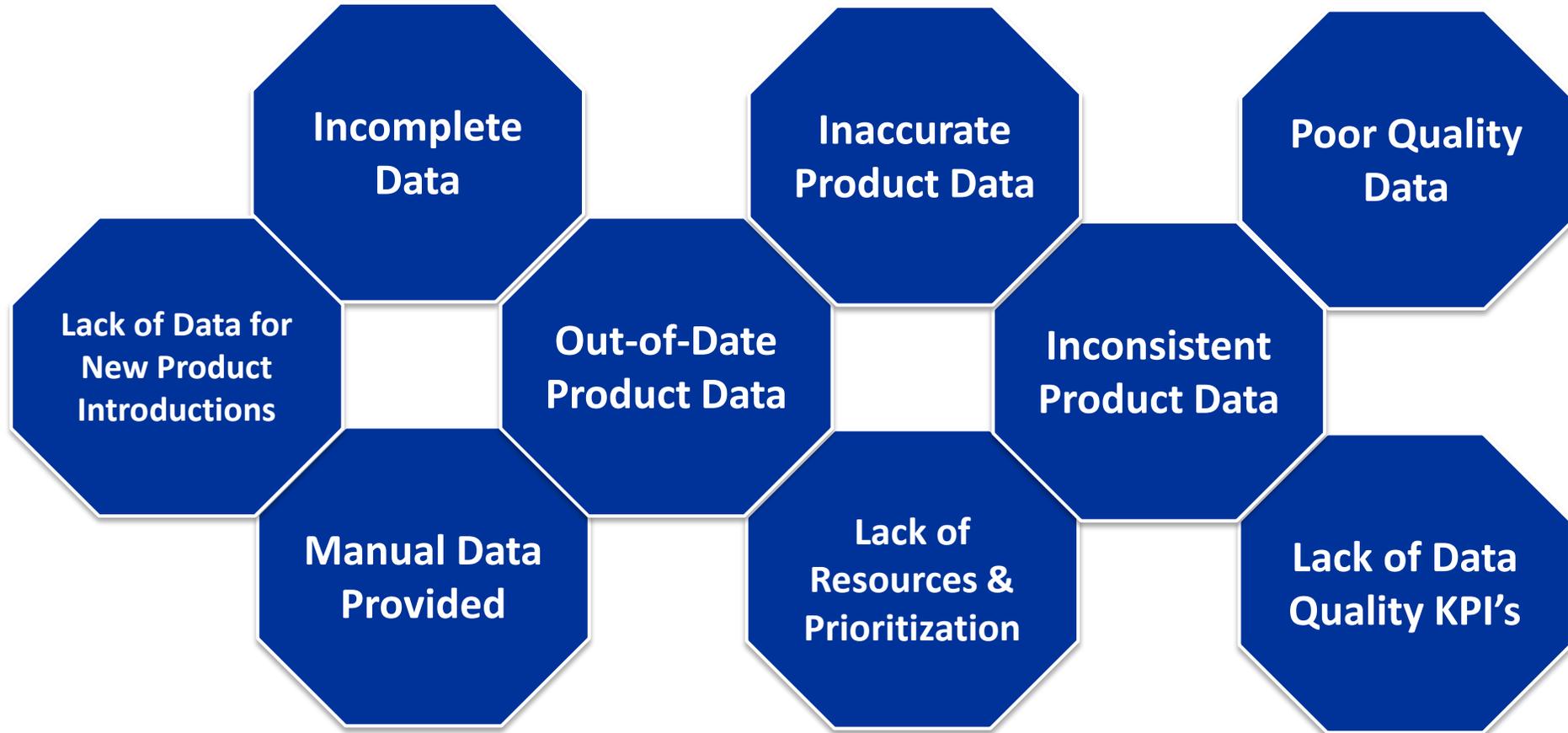
- We found nine challenges that are consistently faced by both Manufacturers and Distributors (beginning on page 7)
- The factors have people, process & technology elements – but technology isn’t a primary friction point
- The economic impact of poor product data quality to the electrical distribution industry is over \$2 Billion/year
- In addition, improving product data quality is necessary to keep up with generational changes with younger buyers, distribution sales and product management staff

“Proven Practices” to improve Product Data creation, management and innovation were identified with direct impact on the existing friction points and the ability to reduce the cost of poor data quality

- We also found eight Proven Practices that directly address all of the friction points identified above.
- Product Data Automation – using PIM and MDM systems integrated into ERP and eComm systems were commonly used
- “People & Process” best practices were far less consistent – including Product Data Governance, KPI measurement and reporting, Product Data roles/staffing, Manufacturer-Distributor collaboration
- IDEA is directly addressing several of the challenges with the Harmonized Data Model and Data Benchmarking service

“5 Steps to Start” for Manufacturers and Distributors were suggested by industry participants to make the improvement process practical and accelerate mobilization

9 Key Friction Points were Identified





Examples Provided by Research Participants

Incomplete Data

- Data Model missing critical data elements for Omnichannel success
- Required data elements not provided
- No images or enhanced data provided
- No data hierarchy / categorization provided

Inaccurate data

- Duplicate part number / UPC / Missing UPC digit
- Images don't match the item
 - E.g., Red and blue items have same image
- Unit price provided for a case quantity

Inconsistent Data

- Data elements provided in different versions or formats for different items
 - E.g., Volts vs. V, 15W vs. 15 Watts
- Similar products in different product categories
- Same color of unit uses different color codes (e.g., BLK vs. Black)

Poor Quality Data

- Image quality is poor (fuzzy, poor background)
- Description for an item has no/limited key words
- Key attributes of the data aren't well crafted for ecommerce or retail promotion

Product Data for New Product Introductions

- Data provided missing many elements of established Data Model
- Pricing information not provided in time for distribution integration through syndication partners



Product Data is out of date

- Product has been retired but notice not provided
- Price changes received after expiration date / not updated at all
- Spec sheets changed and never provided
- Links to product data no longer work

Manual data provided

- Data provided via excel for sharing with multiple distributors creates manual integration and enhancement efforts by distributors
- Changes in Excel format provided to Distributors requires re-automation and testing

Lack of Resources & Prioritization

- Product Data roles/capabilities commonly decentralized across product divisions with limited emphasis or training, leading to inconsistent practices and data provision
- Limited resources available for complete and consistent Product data for manufacturers
- Product data quality not always recognized as a critical element to product management, revenue generation and brand quality

Lack of Data Quality KPI's

- KPI's for Product Data Quality not consistently used by Manufacturers or Distributors for:
 - Assessing current data and identifying areas for improvement
 - Measuring the impact of data quality improvement efforts
 - Linking data quality gaps or improvements to ecommerce and omnichannel results

Product Data Modification & Enhancement - Key Friction Points & Examples (Page 1 of 2)



Product Data Completion & Quality Review

- Distributor Data Model has gaps after manufacturer data populated
 - Distributor Data Model not synched to Manufacturer data model
 - Gaps in required data elements / No images or enhanced data provided
- Data Quality review is required to identify errors and inconsistencies
 - Duplicate part number / UPC / Missing UPC digit
 - Images don't match the item / Image quality is poor (fuzzy, poor background)

Data Normalization & Categorization

- Data elements provided in different versions or formats for different items
 - Example: Volts vs. V, 15W vs. 15 Watts
- Product item is manually put into proper product categories for ecomm display and category reporting

Data Enhancement

- Common Enhancements: Demo videos, comparison charts, 360° product viewing, product manuals, social user-generated content, interactive product content
- Multiple descriptions generated for improving key-word search and use in variety of online publishing and promotion

Data refresh Incompletion

- Price changes received after expiration date / new price effective date
- Spec sheets changed and never provided
- Links to product data no longer work

Product Data Modification & Enhancement - Key Friction Points & Examples (Page 2 of 2)



Manual Data Management

- Excel files received from many manufacturers - requiring manual review, QC, integration and testing
- Changes by Manufacturers in their excel template requires a re-automation by distributors - adding more hassle to a manual process

Lack of Resources

- Distributors have limited resources available for the improvement, management and enhancement of Product data
- However, a great deal of resources are assigned to improving Product Data for Ecommerce purposes – a testament to its value and importance

Lack of KPI's for Data Mgmt. & Reporting

- Most Distributors reported no or rudimentary measurement of product data quality – but all emphasized its importance and their intention to address this in the future
- Lack of KPI information limits the ability to focus on improvements, measure the impact of changes and provide analytic vendor feedback

Limited Mfgr. Collaboration

- Many Distributors reported “not knowing who to contact at a manufacturer” for product data – resulting in delays and extra effort
- Product data quality not integrated into vendor discussions – so it rarely receives the attention it is due

Costs of Poor Product Data Quality

The Billion Dollar Problem



The cost of poor Product Data Quality comes from 3 primary sources:

1. **Higher Distributor Product Data management costs**

- *Every Distributor interviewed has resources dedicated to analyzing the product data they receive; this includes correcting, normalizing, categorizing and enhancing the data for use in their ecommerce systems. The majority of the resources spend their time on manual data received, versus syndicated data management that has been automated.*
- *Distributors noted in interviews that they have a minimum of 0.5 – 1.5 direct full-time employees assigned to Product Data improvement. Indirect full time-employees that also touch product data such as IT are likely to be the same amount.*

**\$2-\$4
Billion**

2. **Higher returns and related costs – for Manufacturers and Distributors**

- *Returns associated with ordering errors appear in 2 types: 1) ordering the wrong item due to lack of precise information and having to return it later, or 2) ordering more items than needed “just-in-case” and then returning the un-used item after a determination is made by the buyer. In both cases, costs associated with the shipment back to the distributor, pick/pack of the new order and shipment of replacement item are significant.*
- *Specific return rates associated with Product Data Quality problems was not provided by Distributors interviewed, benchmarks show that 1.9%-2.0% of electrical distribution sales are returned. Benchmarks show that returns cost 20% of original order value.*
- *STIBO systems case studies show that improving Product data quality using PIM systems has reduced Product data quality impacted returns from 20% to 0.5% for one company.*

**\$150+
Million**

Source: Gold Research, 2022, NAED 2022 Warehouse Ops report

Costs of Poor Product Data Quality

The Billion Dollar Problem (Page 2 of 2)



3. Reduced Ecommerce Results – for Manufacturers and Distributors

- *Every distributor interviewed noted that poor product data quality impacted their ecommerce results due to 3 factors:*
 - a. Reduced order size due to uncertainty of the item due to poor/missing information and images*
 - b. Loss of orders from buyers going to better websites to develop and place their orders*
 - c. Loss of online buyer loyalty due to frustration with product data quality*
- *Distributors interviewed did not provide measurable data of the above areas or the overall impact to their business of poor product data – they simply addressed it by investing resources to improve the product data they received.*

Source: Gold Research, 2022, NAED 2022 Warehouse Ops report

Product Data Journey for Electrical Manufacturers and Distributors



Trigger:

- New Product Development
- Product Update
- Pricing change
- Data Model Update

HIGH QUALITY PRODUCT DATA
“PREMIUM FUEL FOR THE ECOMMERCE ENGINE”



Stage	1 PRODUCT DATA CREATION & MANAGEMENT	2 PRODUCT DATA TRANSMISSION	3 PRODUCT DATA MODIFICATION & ENHANCEMENT	4 PRODUCT DATA USE & REVISIONS
Objective	“Define, Collect, Store and Manage Product Data necessary for optimally promoting and distributing the product”	“Transmit Product Data to Syndicators and Distributors with a minimum of effort and fidelity loss”	“Complete, modify and enhance Product Data to optimize ecommerce effectiveness”	“Search, filter and review Product Data to make critical buying decisions”
Actions & Staff Involved	<ul style="list-style-type: none"> • Establish Data Requirements • Develop Data Model • Gather data / populate data model • Review & approve data • Manage data in PIM / DAM • Integrate data into ERP & Ecomm systems <ul style="list-style-type: none"> • Product Managers + PIM Data Mgrs. 	<ul style="list-style-type: none"> • Integrate with Syndicators • Direct transmission to Distributors 	<ul style="list-style-type: none"> • Populate missing data attributes • Improve quality / consistency of data • Normalize data attributes • Categorize items • Add enhanced data elements (video, 360° images, hi-res images, keywords, expanded descriptions) • Integration into ERP and Ecomm systems <ul style="list-style-type: none"> • Product Manager • Ecomm Data Manager • Category Manager • Pricing 	<ul style="list-style-type: none"> • Search / Filter Product Options • Review Product details for confident decisions • Return products mis-ordered • Request complete information
Data Flow				
Effort				
Friction Points	<ul style="list-style-type: none"> • Inconsistent data models • Limited data model requirements • Incomplete data population • Inconsistent data provision • Lack of adherence to industry standard data models/categories • Lack of automated and integrated data management tools/systems • Limited Data Governance processes and impact • Decentralized and limited data quality resources • Lack of Product Data SPOC 	<ul style="list-style-type: none"> • Many-to-Many direct transmission = inconsistencies • Incomplete & inconsistent data population = Syndicator data enhancement 	<ul style="list-style-type: none"> • Inconsistent data models • Lack of adherence to industry standard data models/categories • Manual data management • Limited Data model requirements • Inconsistent data provision and population • Lack of automated and integrated data management tools/systems • Limited data quality resources • Lack of Data Quality KPI • Lack of closed loop reporting and Vendor improvement discussions 	<ul style="list-style-type: none"> • Difficult search & filter for in-spec products • Difficulty in making product decision based on incomplete and inaccurate data • Customer dissatisfaction • Attrition of customer from distributor site



Product Data Creation: Best Practices Identified



Enhanced Data Model

- Data Model requirements designed for maximum digital impact and quality throughout the channel
- Enhanced data requirements and standards clearly specified
- Integrated data hierarchy / categorization

Clarity of process, roles & resources

- Clear Product Data creation and management responsibilities assigned to key roles with committed staffing levels
- Strong product data management process design and management
- Centralized Product Data management roles (shared across product groups) to drive consistency and optimize investment

Product Data Governance

- Cross-functional Product Data teams work to build high quality data and drive improvements
- Senior governance group sets standards for data model requirements, categorization, normalization, enhanced data
- Product Data quality part of Distributor review agenda items

Automated Product Data Management

- Integrated IT architecture of PIM, DAM, ERP and Ecommerce systems designed to automate product data management and quality for fast-cycle deployments
- Integration and automation with syndicated data sources vs. manual uploads

Focus on Syndicated Data

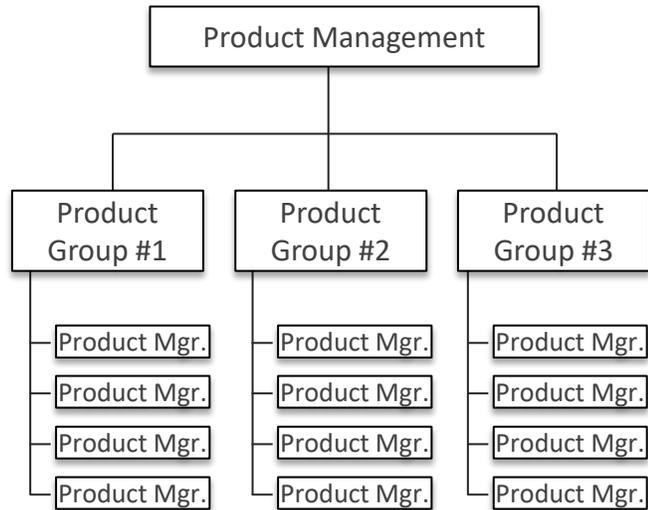
- Automation easier and more consistent for data from IDEA Connector, DDS
- Trade Services used for data enhancement - Images, rich descriptions, marketing text, attributed content, attachments (cutsheets, specs, MSDS, etc.)

Product Data Creation: Organization Best Practice Identified

Centralized Product Data Quality Roles



Original

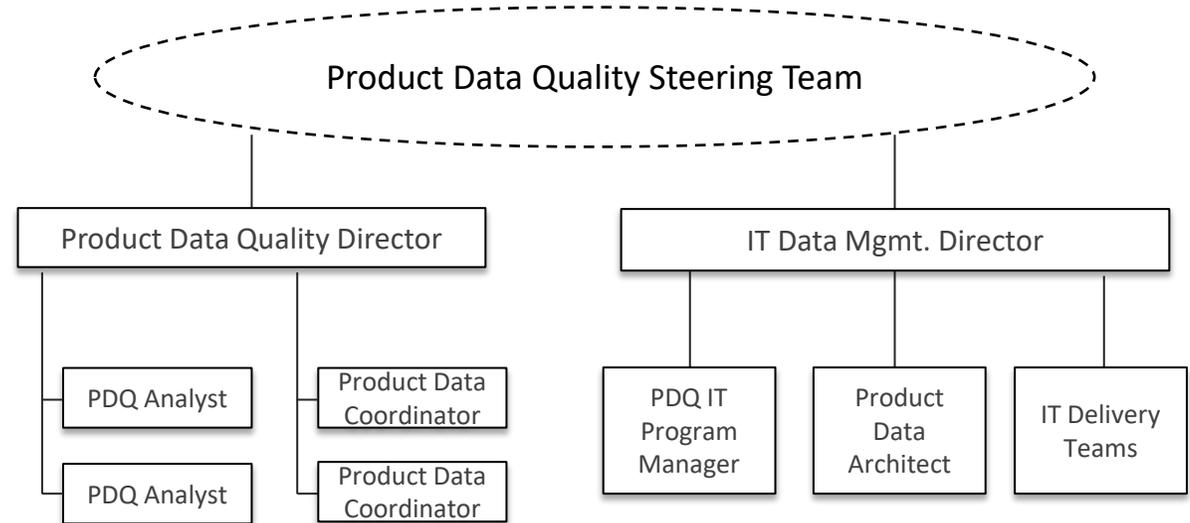


Product Data ~ 10% - 15% of each role

- ❖ Fragmented Product Data roles
- ❖ Lack of consistency
- ❖ Product Data lower priority for each role
- ❖ Limited Data capability / expertise



Redesigned



- ✓ Centralized Product Data roles
- ✓ High level of consistency
- ✓ Product Data high priority for each role
- ✓ High Data capability / expertise



Product Data Creation: Product Data Governance

Best Practices Identified



Global, Cross-functional Council

- Global group chartered to set guidelines and standards to enable company to fully capture global ecomm/omnichannel opportunities
- Global geographies, Product Groups and Key Departments represented
- Proactive decision-making and communication to enterprise

Setting, Communicating & Managing Standards

- Product Data Model Requirements and Standards established and constantly assessed / improved to adapt to rapidly changing ecomm/omnichannel landscape
- Standards include a high degree of specificity to ensure clarity & implementation compliance
- Maintains repository of standards and changes – critical to communicating, creating documentation of the standards, creating and sharing updates]

Disciplined Decision-making Process

- Clearly defined and disciplined execution of a review and approval process to allow for efficient and effective making and communication of decisions
- Coordinated meetings and agendas to ensure rigorous execution

Voice-of-the-Distributor / Channel Process

- Cross-channel capture and management of issues / improvements to optimize ecomm and other commercial opportunities from both distributors and syndication partners
- Rigorous discussion of ecomm topics & improvement planning with follow-up into Product Data Governance group

Product Data Creation: Product Data Governance

Best Practice Identified: Global, Cross-functional Council



Global Representation

Business Leader from:

- US / No. America
- Europe
- Asia / Pacific
- So. America

Product Representation

Business Leader from:

- Industrial
- Building Automation
- Residential

Departmental Representation

Business Leader from:

- Ecommerce
- IT
- Website
- Customer Experience
- Data Syndication

15 – 25 Business Leaders for a \$20 Billion+ global enterprise:

- Council meetings every 2-4 weeks
- Full-time Council coordinator sets agenda, ensures preparation

Small Manufacturers could consider:

- Council meetings every 4-6 weeks
- Part-time coordinator sets agenda, ensures preparation, follow-up

Product Data Creation: Product Data Governance

Best Practice Identified: Setting Standards for Enterprise Execution



Product Data Requirements

Types of data required for global omnichannel success:

- Transactional data
- Ecommerce data
- Categorization
- Enhanced data

Product Data Standards

Specifics of data to be provided:

- Image standards (*i.e., Front view, white background, JPG vs. PNG, resolution and size, etc.*)
- Normalization (*i.e., IN vs. Inch, etc.*)

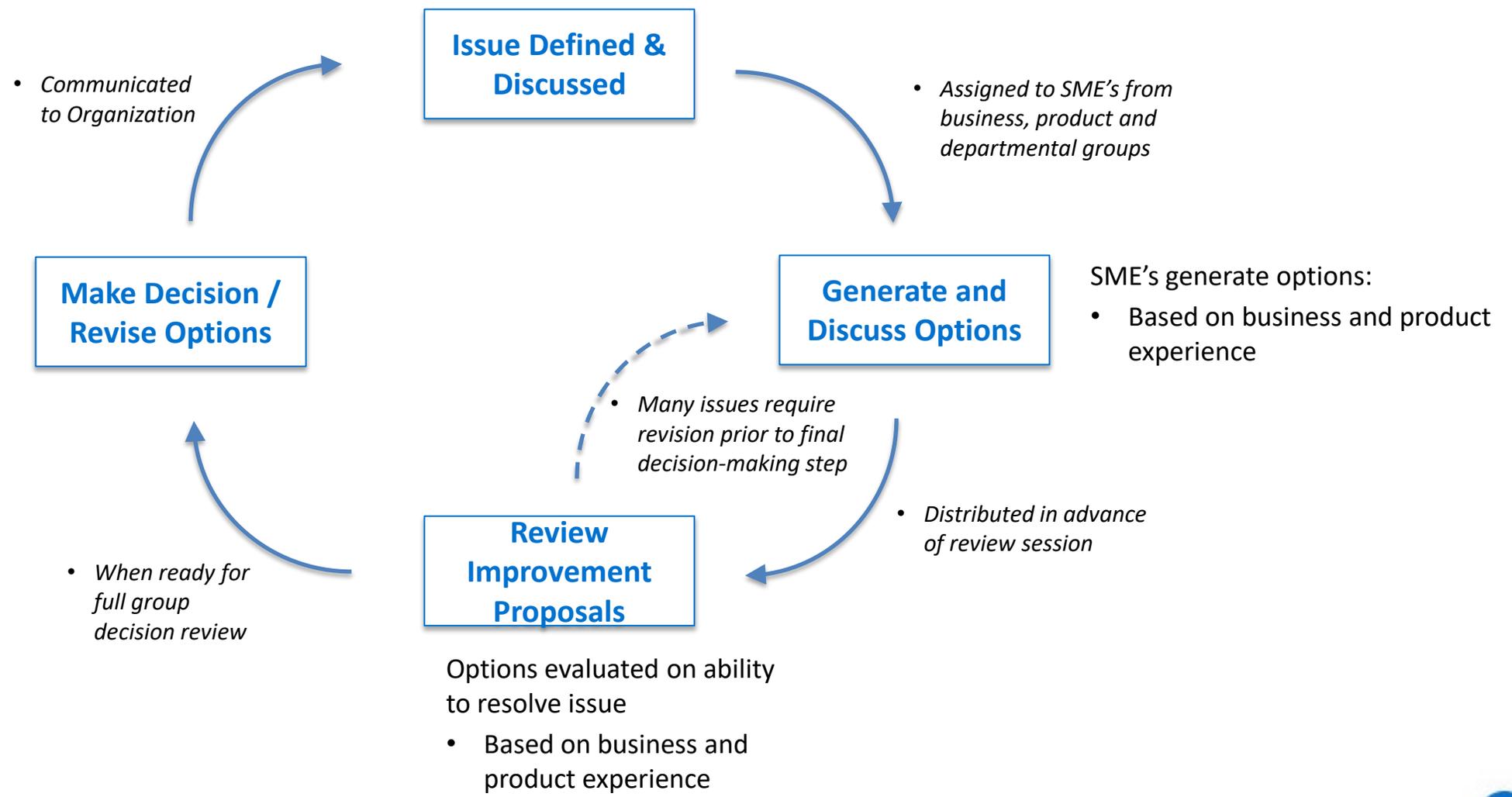
Data Distribution and Integration

How data should be distributed :

- Syndicators – IDEA, DDS, etc.
- Guideline for sharing directly to Distributors
- Ecomm / Website integration needs

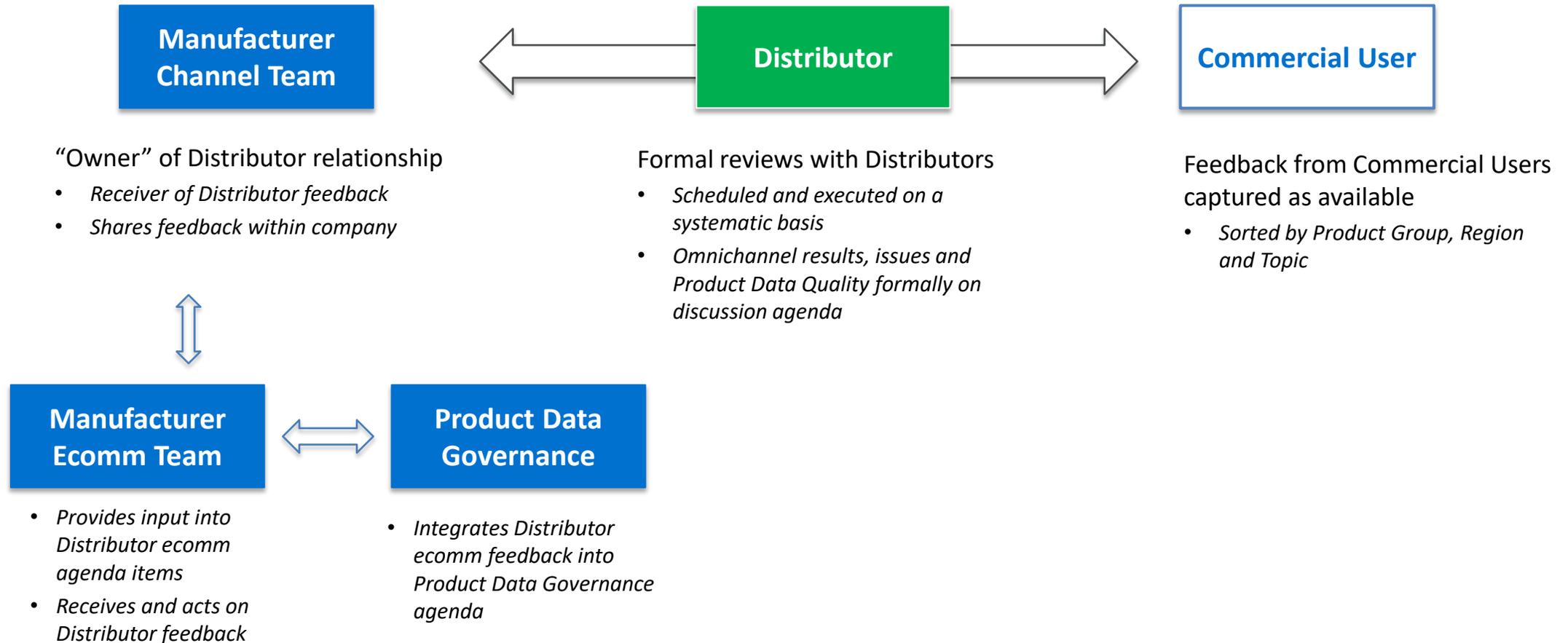
Product Data Creation: Product Data Governance

Best Practice Identified: Disciplined Decision Process



Product Data Creation: Product Data Governance

Best Practice Identified: Cross-Channel Communications



Product Data Collaboration

Best Practice Identified: Product Data integrated into Vendor Communications



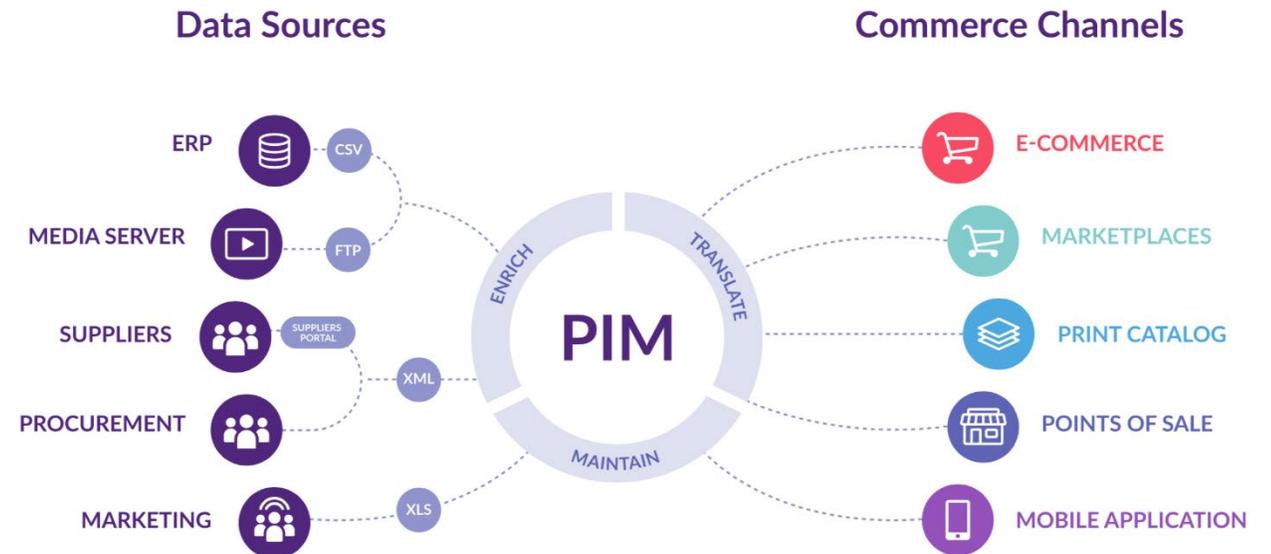
Formal reviews

- *Scheduled and executed on a systematic basis*
- *Ecommerce results, issues and Product Data Quality formally on discussion agenda*



PIM Systems used to efficiently and effectively manage data and automate integration into ERP and Ecomm systems as well as Data Syndicators

- *Critical to ecommerce growth / scalability*
- *Built for integration*
- *Affordable options for small manufacturers*



PIM System Affordability ranges from \$1,000 / month for small footprint SaaS systems to larger investments, but the ROI is powerful in the context of Ecommerce and Omnichannel growth results

Source: STIBO 2022, Gold Research, 2022

Product Data Quality – Following Retail Best Practices



“Retail had to address product data due to its high return rate and the rapid acceleration of ecommerce”

“Amazon has set the standard for ecommerce product data requirements”

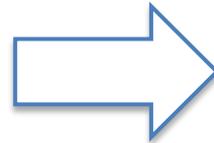
“Retail is far ahead of electrical distribution in terms of ecommerce maturity – led by Amazon, Walmart and Home Depot”

Product Return Rate

21% *



Retail Industry



Retail Practices / Maturity

- Enhanced data requirements and standards
- Automated ecommerce integration
- Robust PIM and DAM platform capabilities
- Product Images – clean, high quality and high-resolution product images with standard formats
- Normalized Data – standards for reporting dimensions, attributes and descriptions
- Product Categorization – standards for ecommerce presentation, search, filtering
- Volumetric data for warehouse automation
- Data Syndication – leveraging automation for scalable growth
- Demand-driven data governance and compliance

Source: Gold Research Interview

* Shopify, 2021

Future Requirements for Improved Product Data



Related Products

- Identification and linkage to related or required products as part of common installations
- Recommended products for improved user decision-making and brand loyalty

Dimensional Data

- Accurate 3D dimensions and weight for all packaging options (each, case, pallet)
- Mission critical data for warehouse automation
- Required data for optimizing transport cube/weight calculations

Digital Experience for generational change

- “New Generation” of industry participants raised on “search & filter” approach
- Catalogs and old media replaced with google and AI capabilities

Digital Data: “Premium Fuel for the Ecomm Engine”

- High quality data essential for brand consistency as data is moved down the system
- Enhanced Product data critical to 5 key stages of sales/product cycle
 - “Finding the Product” – searching, filtering and knowing the right product for the application
 - “Buying the Product” – whether buying online or through a sales rep
 - “Selling the Product” – Enabling distributors and Mfgr. Reps to sell effectively
 - “Moving the Product” – Shipping and Warehouse optimization
 - “Servicing the Product” – Digital info at the point of service to build brand loyalty

IDEA - Product Data Improvement Efforts



Harmonized Data Model

- Collaboration of Industry participants to develop harmonized data model for more consistent data models and categorizations
- 46 companies involved to build momentum and adoption

Product Data Benchmarking

- Product Data Quality score developed at the “item” level via “Content Audit”
- Report provided to Distributors and Manufacturers to catalyze improvements and prioritization

Volumetrics

- IDEA Volumetrics will provide four levels of Product Weights and Measures
- eComm Platforms, Automated Shipping and Warehouse Systems require this data
- Data includes manufacturer-provided and distributor-contributed data
- Cubiscan 325-based data collection required by distributors
- Data will be refreshed regularly and continuously updated with new data

Best Practice Enablement

- Data Enrichment Programs
- In collaboration with NAED, developing Data Governance and Best Practices Educational Program



Application of Proven Practices to Friction Points

Product Data Quality Friction Point	Best Practices Identified							
	Enhanced / Harmonized Data Model	Resource Assignment	Product Data Governance	Automated Product Data Mgmt.	Focus on Syndicated Data	Cross-Channel Collaboration	Product Data Benchmarking	Volumetric Data Provision
Incomplete Data	●	◐	◐	◐	◐	◐	●	◐
Inaccurate Data	◐	◐	◐	◐	◐	◐	◐	◐
Inconsistent Data	●	◐	◐	◐	◐	◐	◐	◐
Poor Quality Data	●	◐	◐	◐	◐	◐	◐	◐
Out-of-Date Data	○	◐	◐	◐	◐	◐	●	○
Manual Data	◐	◐	◐	●	●	●	◐	◐
Lack of Resources / Prioritization	○	●	◐	◐	◐	◐	◐	○
Lack of PDQ KPI	◐	◐	◐	◐	◐	◐	●	○
Data for New Product Introductions	◐	◐	◐	◐	◐	◐	◐	○

Key: ○ No/Limited Impact ↔ ● High Impact

Getting Started – Suggestions for Manufacturers

- 1

Establish an Enhanced Data Model Standard

 - Leverage Industry Standards and Best Practices; Utilize Benchmarks
 - Collaborate with Distributors to create ecommerce “Win-Win”
 - Provide clear examples and standards – and the rationale for examples to build internal commitment
- 2

Utilize Enhanced Data Model for all New Products

 - Utilize “The Gold Standard” for all New Product launches to deliver complete, on-spec product data
 - Train Product Management on the value of quality product data and provide tools to do it right every time
 - Monitor the new product launch impact and review new data quality results with distributors
- 3

Deliver the Data through automated channels

 - Use syndicators who deliver the data in automated manner throughout the channel
 - Minimize the use of excel and manual data delivery
 - Design automated paths through company systems to minimize manual work
- 4

Utilize Data Model use for all Top selling products

 - Leverage experience from New Product Launch efforts to all Top Selling products
 - Monitor improvement from prior product data (based on Benchmark data)
- 5

Establish Data Governance and Product Data Roles

 - Design & Mobilize Product Data governance to refine standards and drive improvements
 - Build Product Data capabilities and roles to optimize costs and quality
 - Establish Single-Point-of-Contact (SPOC) for Product Data
 - Monitor/track impact of Product Data Quality on business metrics:
 - ecommerce growth/metrics, scalability, returns, product inquiry calls, etc.*

Source: Gold Research Interviews

Getting Started – Suggestions for Distributors

- 1**
Adopt an Enhanced Data Model Standard

 - Leverage Industry Standards and Best Practices; Utilize Benchmarks
 - Collaborate with Manufacturers to create ecommerce “Win-Win”
 - Provide clear examples and standards – and the rationale for examples to build awareness and commitment

- 2**
Utilize Enhanced Data Model use for all Top selling products

 - Utilize “The Gold Standard” data quality for all best-selling products to deliver complete, on-spec data
 - Review the data quality impacts / benchmarks with suppliers/manufacturers

- 3**
Build Product Data Quality into Supplier discussions

 - Design & Mobilize Product Data Quality scorecard into Manufacturer discussions
 - Monitor/track impact of Product Data Quality on business metrics:
 - *ecommerce growth/metrics, scalability, returns, product inquiry calls, etc.*

- 4**
Automate Product Data Management

 - Give priority to syndicator data and invest in automated integration
 - Continue to invest in PIM and MDM capabilities and integration
 - Minimize the use of excel and manual data delivery

- 5**
Enforce Enhanced Data Model for all New Products

 - Utilize “The Gold Standard” enhanced data quality for all New Product launches
 - Monitor the new product launch impact and analyze the impact on adoption, revenue and end-buyer experience and purchase behavior
 - Review the data quality impacts / benchmarks with suppliers/manufacturers

Source: Gold Research Interviews

Product Data Quality – Benefits Summary



Omni-channel / Ecommerce Revenue Growth / Optimization

Manufacturers

- Increased Revenue growth and customer base
- Improved selection of manufacturer product (item)
- Faster new product adoption
- Broader product / Product Line footprint
- Increased Brand Loyalty / Trust
- Optimized ecommerce product management & response time
- Increased customer satisfaction with vendor product
- Seamless, omnichannel brand experience
- Reduced product management costs

Distributors

- Increased Revenue growth and customer base
- Increased Average Order Value
- Increased Customer Satisfaction with distributor
- Internal efficiency
- Higher Vendor / SKU ratings by customers
- Fewer returns
- Improved Self Service

Customers

- Ease of buying
- Fewer suppliers to buy from
- Faster ordering process
- Fewer returns
- Improved buyer experience

Source: Gold Research Interviews, Gartner, Stibo 2022

Examples of How Quality Product Data Can Benefit Companies

Here are a few examples of how companies realized efficiencies and profitability from improved product data management. "It's Good Business."

		<u>Benchmarks</u>
Accelerate Growth	<ul style="list-style-type: none"> • Get products to market faster and with less effort • Supercharge ecommerce growth 	<p>Up to 6 times faster</p> <p>By up to 50%</p>
Lower cost of Sales	<ul style="list-style-type: none"> • Reduce returns due to product ordering errors • Reduce customer inquiries by providing richer data 	<p>23% Lower</p> <p>27% fewer</p>
Optimize Ecommerce experience	<ul style="list-style-type: none"> • Reduce product description error rates • Increase direct and organic ecommerce traffic 	<p>by 90%+</p> <p>by 2.6X</p>

Source: Gold Research Interviews, Gartner 2022, Stibo 2022, PIMCore, 2022

Maturity Model – Current Practices vs. Leading Practices



Category / Maturity Level	Product Data Model Clarity	Product Data Management Technology	Product Data Governance	Cross-Channel Communications	Product Data Management Roles & Resources	Product Data Quality Measurement & Reporting
4 OPTIMIZED	Best-in-class Product Data Model requirements defined with full enhanced data and industry standards to optimize end-to-end ecommerce performance	PIM, DAM, ERP and Ecomm systems integrated with Syndicator & enhanced data automated for optimal quality, scalability and ecomm impacts	Cross-functional Product Data governance establishes standards, processes and roles to improve data quality and business results	Collaboration and communication across Manufacturer, Syndicators, Distributors and Customers to clarify product data needs and fill the gaps on a systematic basis with improved efficiency and cost effectiveness	Optimized Manufacturer org. structure and roles for providing and managing product data consistently and efficiently	Product Data Quality KPI's and reporting in place to measure performance against standards, identify improvement areas, monitor progress and link to business metrics
3 QUANTIFIABLY MANAGED	Expanded Product Data Model requirements established to optimize ecommerce performance for manufacturer and distributors	PIM, DAM, ERP and Ecomm systems integrated with Syndicator data automated for optimal quality, scalability	Product Data Team proactively manages data quality and improvement efforts	Product Data integrated into Manufacturer-Distributor review agenda to drive visibility, collaboration and communication	Manufacturer roles established and capability training in place for proactively managing and improving product data	Product Data quality measured and reported to identify improvement areas and gaps
2 DEFINED	Product Data Model requirements established to impact ecommerce performance for manufacturer and distributors	PIM, ERP and Ecomm systems designed to automate and integrate Syndicator data for cost effectiveness and scalability	Defined enterprise process and roles for Product data model collection, integration and distribution	Customer and Distributor data needs captured to inform Product Data requirements, target improvements and link to business impacts	Manufacturer roles and data management procedures established for managing product data	Data quality metrics defined for Product Data Model requirements - measurement and reporting at early stage of execution
1 MANAGED	Manufacturer-driven Product Data Model defined and data generation process in place	Syndicated data, Product Data Warehouse and Excel product data files automatically uploaded to ERP and Ecomm systems with manual adjustments	Informal process for Product Data provision and data model creation	Established communication between manufacturer and distributor for Product Data requirements, collection and transmission	Informal Product data responsibilities in place with limited training on best practices	Operational measures for Product Data in place – inconsistent quality metrics and reporting
0 AD HOC	Manufacturer-driven Product Data Model exists without full requirements to impact ecommerce impact	Excel product data files manually uploaded to ERP and Ecomm systems with manual adjustments	No formal data governance exists outside of Data Model design	Inconsistent communication between manufacturer and distributor for Product Data requirements, collection and transmission	Shortage of trained resources for Product data collection and management resulting in incomplete and inconsistent Product data	No KPI's in place for assessing Product Data quality or data management

Source: Gold Research Interviews, 2022

Best-In-Class Product Data Journey for Electrical Manufacturers and Distributors



Trigger:

- New Product Development
- Product Update
- Pricing change
- Data Model Update

HIGH QUALITY PRODUCT DATA “PREMIUM FUEL FOR THE ECOMMERCE ENGINE”



Stage	1 PRODUCT DATA CREATION & MANAGEMENT	2 PRODUCT DATA TRANSMISSION	3 PRODUCT DATA MODIFICATION & ENHANCEMENT	4 PRODUCT DATA USE & REVISIONS
Objective	“Define, Collect and Store Product data necessary for promoting and distributing the product”	“Transmit Product Data to Syndicators and Distributors with a minimum of effort and fidelity loss”	“Complete, modify and enhance Product data to optimize ecommerce effectiveness”	“Search, filter and review Product Data to make critical buying decisions”
Best Practice Actions & Staff Involved	<ul style="list-style-type: none"> • Adopt Best-In-Class Data Model • Adopt Industry standard Data Normalization and Categorization approach • Fully populate Data Model for <ul style="list-style-type: none"> • All New Products • Best-selling products • All Product changes • Build Voice-of-the-Distributor and Customer into Product and ecommerce • Establish cross-functional data governance • Establish a Product SPOC • Use syndicators for data sharing with distributors • Continue PIM/DAM, ERP and Ecommerce system integration and automation <p> Product Managers - PIM Data Mgrs.</p>	<ul style="list-style-type: none"> • Integrate with Syndicators • Direct transmission to Distributors 	<ul style="list-style-type: none"> • Adopt Best-In-Class Data Model • Adopt Industry standard Data Normalization and Categorization approach • Build Product Data Quality into Voice-of-the-Vendor and Customer process • Continue PIM/DAM, ERP and Ecommerce system integration and automation • Adopt Industry Product Data Quality KPI's and report to vendors to focus improvement areas <p> Product Manager Pricing Category Manager Ecomm Data Manager</p>	<ul style="list-style-type: none"> • Build Product Data Quality feedback into Distributor discussions <p></p>
Data Flow				
Effort				
Business Impact	<ul style="list-style-type: none"> • Improved Product Data Quality Benchmarks • Accelerated new product adoption and revenue • Increased product category share of wallet/market • Improved Brand Loyalty • Reduced returns 	<ul style="list-style-type: none"> • Lower ecomm operating costs • Improved Product Data Quality Benchmarks 	<ul style="list-style-type: none"> • Lower ecomm operating costs • Improved Product Data Quality Benchmarks • Accelerated new product adoption and revenue • Increased customer share of wallet • Reduced returns • Improved warehouse operations 	<ul style="list-style-type: none"> • Faster / better product selection • Reduced returns



Our mission

To promote the electrical distribution channel and to provide members with the most valuable and relevant tools, solutions, and information so they can thrive now and in the future.

Copyright ©2023. All rights reserved. No part of this report may be produced in whole or part without the written permission from the National Association of Electrical Distributors.



EDUCATION & RESEARCH FOUNDATION

National Association of Electrical Distributors
1181 Corporate Lake Drive, St. Louis, MO 63132
888-791-2512 ■ www.naed.org