




PRODUCT MDM

Align your Product Data with
the Organizational Strategy to

*Embrace Emerging Opportunities,
Conquer Customers &
Capture Market Share!*





In the era of digital transformation, businesses are facing evolving customer expectations, the need for improved services, faster delivery, and cost optimization. To remain competitive and relevant, organizations must undergo a transformation and leverage the power of data. By harnessing the power of data, you can identify new growth opportunities, optimize operations, and foster innovation.

At Bizdata, we are poised to assist you in leading the way intelligently, regardless of your sector, category, or niche.

We invite you to explore the Bizdata Enterprise MDM suite of solutions, backed by cutting-edge technology, which enables you to effectively manage, integrate, and govern your data, ensuring its accuracy, consistency, and security. Together, we can embark on a transformative journey, tapping into the potential of data to revolutionize your business and propel it towards sustained growth and success.

For company who care



Growth
Scalability &
Resilience



Environment
Sustainability &
Compliance



Profit
Trust &
Transparency



Performance
Quality &
Satisfaction



Executive Summary

Inaccurate Product data has a direct impact on Customer Experience and hence Organization growth. Incomplete and inconsistent product data affects almost all departments. The product data runs across the veins of different departments right from Marketing, sales, Supply chain & operations, customer service and at the same time it is used by various stakeholders right from C-level executives, marketers, sellers, manufacturers, products managers, suppliers etc...

This Whitepaper aims to provide key findings and recommendations for organizations struggling problems on:





INTRODUCTION

Regardless of the nature or scope of your company's operations, data remains the most important asset. A vast amount of data linked to the creation, distribution, and sale of any product, spanning from raw materials to consumption, is dispersed & fall into countless repositories, categories, libraries and continues to grow exponentially. Incorrect & incomplete data impedes driving decisions, shaping organizational strategies, and gaining business insights. In short, everyone in the organization relies on data, so data needs to be accurate, same data needs to be available throughout the organization.

Arrays of Issues Companies Face

Long Lead Time

The long lead time is the outcome of Bad Product Data, causes extensive design, approval, build and test processes. It impacts overall operation and efficiency; some key areas are:

1. Inaccurate Demand Forecasting

Incomplete or incorrect sales data, leads to inaccurate demand forecasting. This leads to over-estimating or under-estimating the product quantities.

- **Overestimating:** Higher inventory cost, increased lead time
- **Underestimating:** loss of sales, customer dissatisfaction, stockouts & delays.

2. Supply Chain Disruptions

Longer lead times make supply chains more vulnerable to disruptions. Any delays, disruptions, or bottlenecks along the supply chain can have a more significant impact when lead times are already extended, potentially causing production delays, or losing customers.

3. Reputation Damage

Bad data is directly proportional to the damage-causing factors to the Company's reputation.

- **Compromised Product Quality and Compliance:** Bad data directly affects product quality and compliance, resulting in returns, recalls.
- **Order Delays:** Incorrect demand forecasting leads to delayed shipments.
- **Customer dissatisfaction:** Delayed deliveries, compromised product quality, inaccurate pricing, pricing and service experience.

4. Increase in Company Expenses

- **Incorrect Inventories:** Lack of visibility of demand & supply, no correct co-ordination & control over inventories, incompetent warehouse management
- **Product Design Issues:** Lead Increased Scrap/product recalls, increased manufacturing cost due to lack of co-ordination between design, manufacturing, and supply departments.
- **Delayed Sales & Shipments:** Incomplete customer data, location data, inventory data, promised quality and multiple factors affects product sales and hence revenue.

Poor decision Making

Bad data can have various detrimental effects on organizations. When decisions are based on unreliable data, organizations may make flawed strategic choices, ineffective resource allocation, or incorrect market assessments, which can result in financial losses or missed opportunities.

1. Inaccurate Insights

- **Incorrect reporting and Analysis.**
- **Compromised data directly affects accuracy and reliability of reports and related analysis.**

2. Missed Opportunities

- **Organizations fail to recognize emerging trends, customer preferences, or market shifts.**
- **This can result in missed opportunities to capitalize on market demand, launch new products, or expand into new territories.**

3. Increased Risk

- Financial losses
- Operational disruptions
- Reputational damage
- **Overestimating:** Higher inventory cost, increased lead time
- **Underestimating:** loss of sales, customer dissatisfaction, stockouts & delays.

4. Wasted Resources

- Organization not aligned with current customers & Market Trends, lack of Business Insights.
- Waste of time, money & person-hours.
- Inefficient resource allocation and poor returns on investment

Legal & Compliance Risk

Bad data can have various detrimental effects on organizations. When decisions are based on unreliable data, organizations may make flawed strategic choices, ineffective resource allocation, or incorrect market assessments, which can result in financial losses or missed opportunities.

1. Non-Compliance with Regulation

- Product compliance & Certification, Trade Compliance.
- Data privacy regulations regarding collection, storage & handling of data especially for healthcare industries.

2. Mishandling Information

- Customer Data, employee data and all classified information as per guidelines & rules.

3. Inaccurate Financial Reporting

- Inaccurate or incomplete financial data, such as incorrect revenue figures or erroneous expense calculations, can lead to misleading financial statements.
- This can result in non-compliance with accounting standards, regulatory scrutiny, and legal implications.

4. False or Misleading advertisements

- Bad data can contribute to false or misleading advertising practices.
- If organizations base their marketing campaigns on inaccurate or outdated data, they may make false claims or target inappropriate audiences.
- This can result in consumer complaints, legal actions by regulatory bodies, and damage to the organization's reputation.

Remember!

- ◆ How much COST incurred by your company in developing a finished & commercialized product?
And turn it into part of your revenue System?
- ◆ How LONG was the process?
- ◆ How many & how much stakeholders' EFFORTS invested?

Challenges of Managing Product Data

Volume	Velocity	Veracity	Variety	Value
Thousands of attributes, hundreds of relationships & millions of records, siloed across different disconnected systems	Data continuously poured as records have been created, updated, and changed across the organization in the systems such as sales, SCM, ERP, CRM etc...	Product data quality, accuracy & reliability. Encompasses data governance, validation & quality practices to ensure data trustworthiness	Same data in diverse formats available in different systems such as PLM, SCM, ERP etc. Needs to be managed & integrated to form a single source of truth	Usefulness of data in deriving valuable insights such as customer preferences, market trends, product performance etc.

Departments Getting **Affected** by Product Data



Remember!

These departments rely on product data on daily basis.

- ◆ Are these departments working with SINGLE & TRUE information?
- ◆ Are executives gaining correct INSIGHTS to make fruitful business decisions?

Hurdles of High-Quality Product Data: The 10 C's

The data hurdles which need to be harmonized before making it available to the stakeholders and before making trusted business decisions, below are the ten notions needs to be addressed.

1. Complexity

If it is complex, it is mandatory to make it uniform.

- Product data availability across multiple systems such as PLM, ERP, CRM etc.
- Product data hierarchy and relationships such as BoMs, Product Taxonomies, Product catalogues etc...
- Product Versioning, revisioning, change management
- Product data varieties such as product images, pricing, specifications, warranty/guaranty information, product reviews, compliances and many more.

3. Completeness

Incomplete product data, incomplete revenue goal

- Multiple systems maintained by the organization on suppliers, distributors, manufacturers, and internal records.
- No strong data standards or data validation & data quality practices followed.
- Manual data entry with no data rules.
- System upgrades & migration.

2. Consistency

Consistency is difficult but critically important

- Lack of data governance & data quality practices in the organization.
- Multiple data silos of the product data are maintained in the different systems and /or integrated with each other.
- Manual data manipulation & no data validation/cleansing process.
- Data poured from mergers & acquisitions, comes with different data standards lacking consistency with the source systems.

4. Compliant

Incompliant products, an open invitation for legal complications & penalties

- Product compliance is depending on product data available.
- MSDS, trade compliances, regulations and practices need to be followed as per rules & guidelines set by the respective regions.





5. Collaboration

Communication is the key, direct impact on operational efficiency

- Right from Product ideation till commercialization, various stakeholders get involved to tackle the product related data from various fronts such as design, development, manufacturing, suppliers, sales, customer feedback and so on
- No Single source of truth in place to keep all stakeholders on same page to make correct decisions on each front

6. Current

Outdated information is a key to misguided decisions & expensive consequences

- No updated information in place for the products gone through change management.
- Obsolete products, revised products information out of reach, inventory & suppliers in a haphazard situation.
- Un-synchronized information and lack of interchangeability of data within various systems.

7. Control

Control data, gain useful insights, drive better organization

- There are no set data standards, same data lies in multiple systems either with redundant/ incomplete/ incorrect information.
- No trust in results when insights or reports are generated from such data.

8. Cohesive

Together data stands, divide it fall and loses its value

- No interconnection of data, lacking linkage of data attributes makes organization difficult to trace data origin and its relationship with related product/ product information.
- Data loses its value and so does the organization lose its value, in terms of compliance, revenue leads wastage of resources.

9. Culture

Without culture, technology/process will not come to the rescue

- No data strategy, any organizational strategy will not be fruitful to give any robust outcomes.
- No data governance, data standards in place, difficult to gain correct insights from the data which is inaccurate.

10. Confidentiality

Right to information of Right information but to the Right stakeholder

- Product data is sensitive & classified information asset for company needs to be protected and respected.
- Suppliers/vendors, sales, marketing etc., organization & extended organization, only authorized information to the authorized stakeholders.

Organization level Challenges due to Bad Product Data

Company Product data can be broadly classified in to 2 Categories.

- a) Sell-Side Products
- b) Buy-Side Products

Sell-Side Products Challenges

- ◆ A product sold as a finished good to the customer/ consumer/buyer company.
- ◆ Products/services responsible for generating revenue for a company.
- ◆ Company strategy & vision/mission to grow for that Products/services.

1. Making key decisions on setting up the facilities

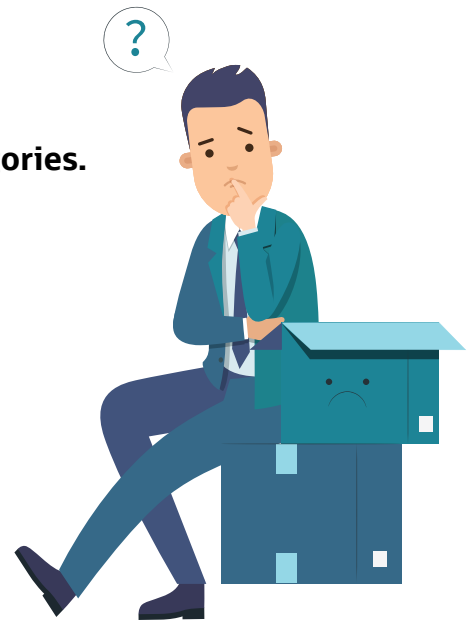
- Incorrect data makes difficult in making key decisions such as where to set up manufacturing and service centers.
- Selection of vendors is also based on the information such as “which product is popular amongst which regions?”

2. Limited cross-selling and upselling opportunities

- Inadequate information of customer preference on products/services.
- Inaccurate insights regarding product performance in each region by each customer Above factors makes it critical to explore the cross-sell/up-sell opportunities with customers.

3. Order fulfilment challenges

- Delayed shipments, backorders, or incorrect deliveries due to incomplete product data.
- Not so streamlined order management process caused due to Incorrect demand forecasting followed by incorrect inventory levels.



- No proper collaboration, hence, no effective communication with logistics partners to ensure smooth order fulfilment.

4. Pricing and discount discrepancies

- Inconsistent pricing or discrepancies between different sales channels or customer segments can cause confusion and erode customer trust.
- Not so robust pricing strategies to ensure that pricing information is accurate and synchronized across all channels.
- No guidelines or standards in place across organization to ensure that any discounts or promotions are applied correctly and consistently.

5. Customer service issues

- If your sell-side products are associated with poor customer service experiences, it can negatively impact your brand reputation and customer loyalty.
- Inadequately trained customer service team for products and lack of product-related information, necessary tools, and resources.
- No established processes for addressing customer inquiries, complaints, or returns promptly and effectively

6. Inefficient order processing and tracking

- Due to bad data order processing system is slow, prone to errors, or lacks real-time tracking capabilities, it can result in frustrated customers and operational inefficiencies
- No standard product data, incorrect information available makes order processing workflows erroneous & difficult to automate process
- Systems fed with incorrect data disables real-time order tracking and impacts customer satisfaction.

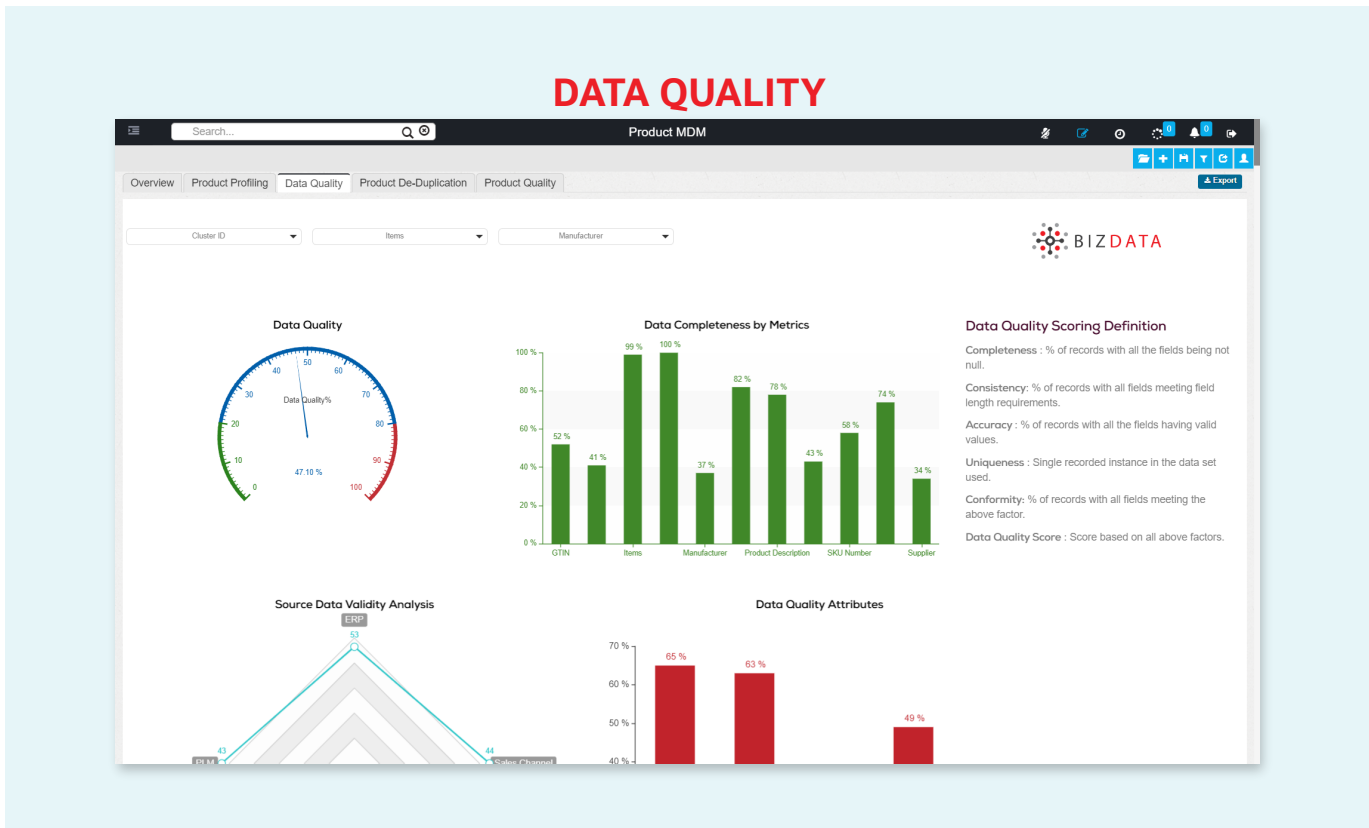
7. Poor product visibility

- With incomplete & incorrect product data, sell-side products are not effectively showcased or promoted, customers may have difficulty finding them.
- Resulting in low sales and missed opportunities.

- Difficulty in optimizing your product listings, improving search engine optimization (SEO), and implementing effective marketing strategies to enhance product visibility.

8. Inadequate product information

- Customers' purchasing decision heavily based on completeness of product information, accurate, detailed, and visually appealing content.
- If the product descriptions, specifications, or images provided to customers are insufficient or unclear, it can lead to customer dissatisfaction or confusion.



Buy side Products

- Anything which is sourced from supplier/vendor in the form of raw materials, parts/components/ semi-finished goods.
- Products/materials responsible to accomplish finished products.
- Can be products/services.

1. Lack of visibility into supply chain

- Lack of visibility into the supply chain can impede proactive decision-making, increase lead times, and hinder responsiveness to market demands.
- No collaborative relationships with suppliers, and improper insights from data analytics, failed to gain real-time insights into the supply chain, no timely actions, and increased risks.

2. Supplier collaboration and communication issues

- Poor communication and collaboration with suppliers can lead to misunderstandings, delays, and disruptions in the supply chain.

3. Poor inventory management

- Incorrect demand forecasting leads to inefficient inventory management results in stockouts, overstocking, or incorrect inventory levels, resulting in lost sales, increased carrying costs, and operational inefficiencies.

4. Inadequate product sourcing

- Insufficient product sourcing efforts may lead to limited options, higher costs, or subpar product quality.
- Insufficient visibility of product performance makes it difficult for an organization to do supplier negotiations and establish strategic partnerships to optimize product sourcing.
- Enforcing strict quality control measures, conducting supplier audits, and establishing clear quality requirements to ensure consistent product quality becomes challenging due to a lack of accurate and reliable data.

5. Inconsistent product quality

- Incomplete & inaccurate product data affects the quality of product directly, failure to set standards for a supplier, results in compromised quality, supplier relationships and supplier performance.
- Generates potential disruption in downstream processes.

6. Complex procurement processes

- No alignment & streamlining of the procurement process, manual errors, and hampered efficiency.
- Cumbersome and time-consuming procurement processes can lead to delays in acquiring necessary products and services.

7. Supplier management challenges

- With inadequate data, it's difficult to implement robust supplier management systems, perform frequent supplier assessments, and develop clear communication lines.
- Managing many suppliers and ensuring their compliance with quality, pricing, and delivery requirements becomes complex.

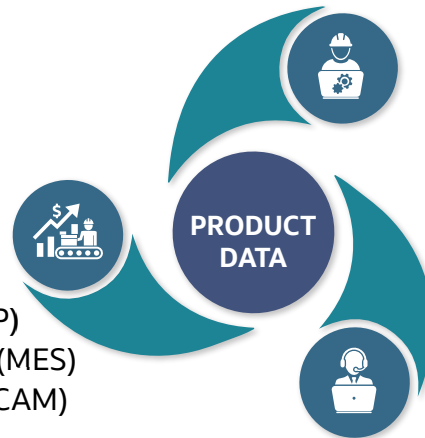


Where is my Product Data?

Often company assumes that only PLM contains product data, only partially true.

Manufacturing Sales

- Enterprise Resource Planning (ERP)
- Manufacturing Execution System (MES)
- Computer-Aided Manufacturing (CAM)
- Requirements Planning (MRP)
- Quality Management System (QMS)
- Product Lifecycle Management (PLM)
- Warehouse Management System (WMS)
- Advanced Planning and Scheduling (APS)



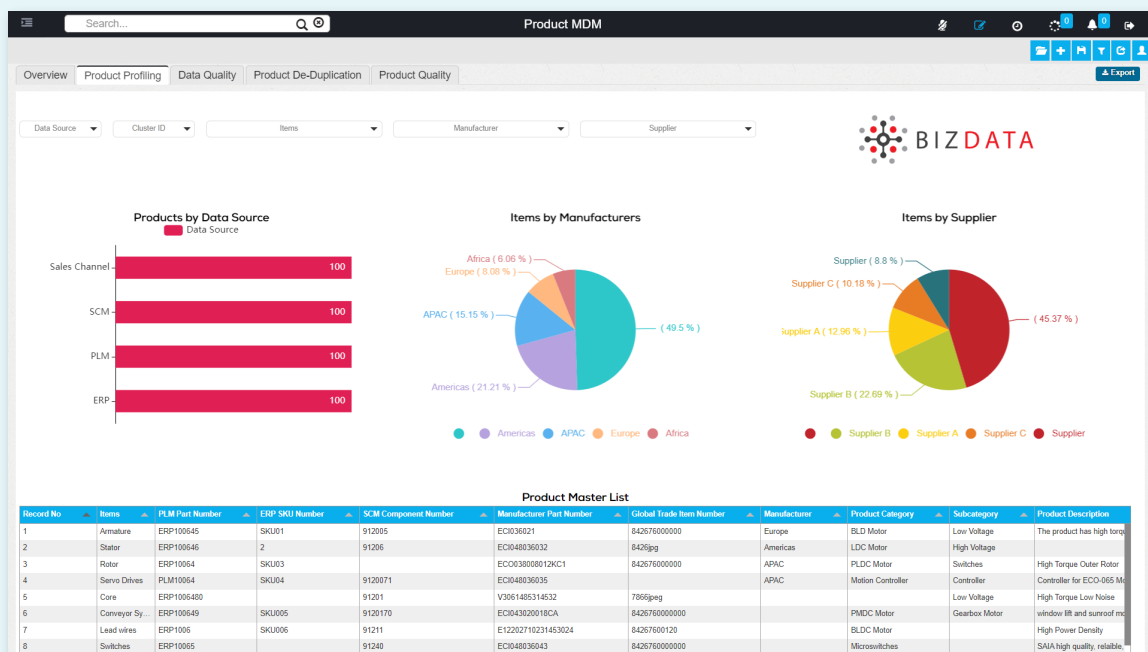
Engineering

- Computer Aided Designing (CAD)
- Computer Aided Manufacturing (CAM)
- Finite Element Analysis (FEA)
- Product Data Management (PDM)
- Simulation & Testing Software

Service & Support

- Customer Relationship Management (CRM)
- Sales Force Automation (SFA)
- Marketing Automation
- E-commerce
- Field Service Management
- Customer Experience Management (CEM)
- Help Desk

PRODUCT PROFILING



Change your Product Game with Bizdata MDM

Turn Product Data into Competitive Advantage

Enhanced product launch

- Manage inventories of parts and materials by location.

Reuse, Reduce & Recycle

- Identify parts from different vendors that can be reused.
- Designers can identify and reuse existing designs, reducing the time and cost required to create new designs from scratch.

Product Data Syndication

- Seamlessly import, enhance, enrich, and syndicate product data across your systems and touchpoints.

Accurate Demand/Supply Forecasting

- Manage inventories of parts and materials by location.

Integration

- Integrate product data across enterprise systems.
- This can help ensure that all stakeholders have access to the most up-to-date information, regardless of where it is stored.

Product Data Lineage & Linkage

- Traceability of product data information on each attribute, origin of data, its lineage & linkage to & from across the organization.

Single Source of Truth

- Reconcile and transform all product master data from each system format into a common structure.

Win-win for Organization & Supplier

- Sourced product standardization & quality assurance, get a low rate of rejection and at a competitive price.

Identifying Areas of Improvement

- Help businesses identify opportunities to reduce material costs, optimize manufacturing processes, or improve product quality.

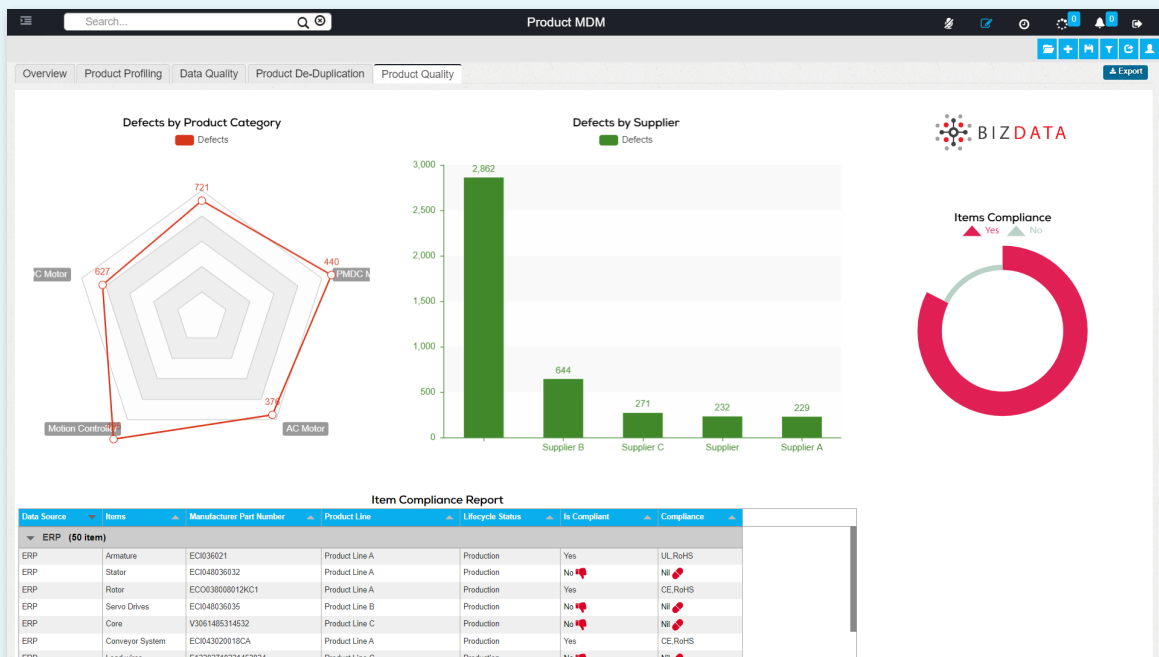


Business Outcomes of implementing Bizdata MDM

- Foster Innovation
- Empower Transformation
- Engaging Experience
- Lean System Seamless Operation
- Optimized Operation
- Improved Customer Satisfaction
- Reduce Cost & Increase revenue
- Achieve Sustainability
- Worry free Mergers & Acquisitions
- Care for Environment
- Improved Business Agility & Scalability
- Eliminated wastage
- Increase up-sell, cross-sell & customer retention



PRODUCT MDM



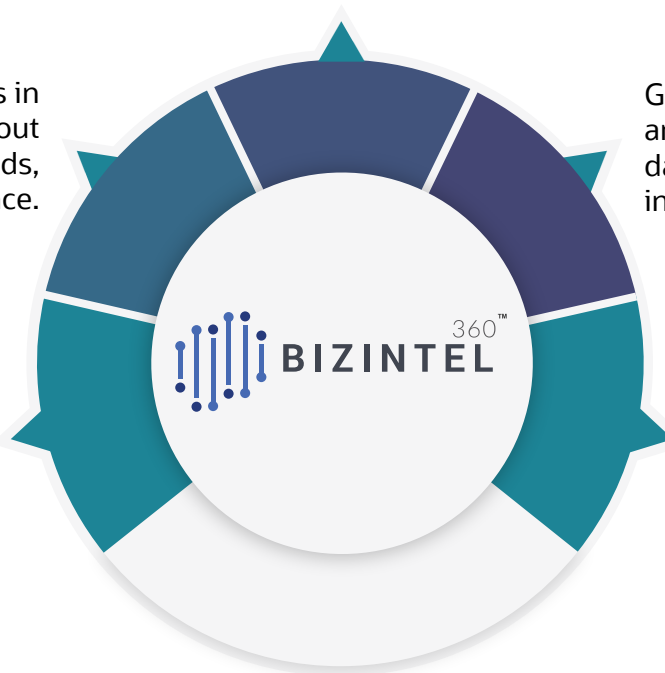
Obtain a single source of truth for product data such as descriptions, features, price, and availability, which includes consistency and accuracy.

Assists organizations in acquiring insights about product performance, trends, and supplier performance.

Gain real-time tracking and insight into product data quality and related information.

Streamline information from numerous sources into a web view that is easily accessible on both a laptop and a mobile device.

Maintain precise and accessible product information, track product characteristics necessary for compliance, and provide reports for ensuring regulatory compliance.





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