How a Product Information Management Strategy can Benefit Your Company

Mikkel Jensen, VP Product Strategy

The Stibo Group

$180 Million
800+ Employees
Established in 1794
In the US since 1985

PIM – Product Information Management

Defined according to Gartner 2008

PIM systems are independent of any single business application and, as part of the information infrastructure, serve to maintain the semantic consistency of product master data wherever it's used.

Gartner

Objectives of PIM

- **Quality Data**
  Improve data quality for operational, analytical processes.
- **Increased Sales**
  Accelerate product on-boarding. Reduce time to market. Improve product presentation and consistency. Drive new channels from existing core data.
- **Reduced Operating Costs**
  Fewer supply chain errors due to poor data quality. Enable self-service model for customer service.
- **Reduced System Maintenance Costs**
  Simplified system landscape, phasing out legacy systems.
- **Business Flexibility**
  System readiness for mergers, acquisitions, new legal requirements, out-sourcing etc.

Single Product Record across the Enterprise

Procurement Buying	Supply Chain	Distribution	Planning & Marketing	Stores, eCommerce, & Fulfillment	Service & Support
Spend Analysis Supplier Consolidation Invoicing	Load Planning Pallet Building Transportation Regulation Compliance	Space Management Storage Regulations Compliance Stackability, Crushability, Nesting	Merchandising Forecasting Store Layout (space, range & display) Multi Channel Campaigns Packaging	Shipping estimation for ecommerce Returns and QA POS Product Configurators Search based navigation	Call center Self service websites Support documentation Parts & Accessories

Building ROI for a PIM project

Calculating the business cost of data errors and omissions for product data is not an exact science but an estimate is achievable.

Metrics for the cost of data maintenance:

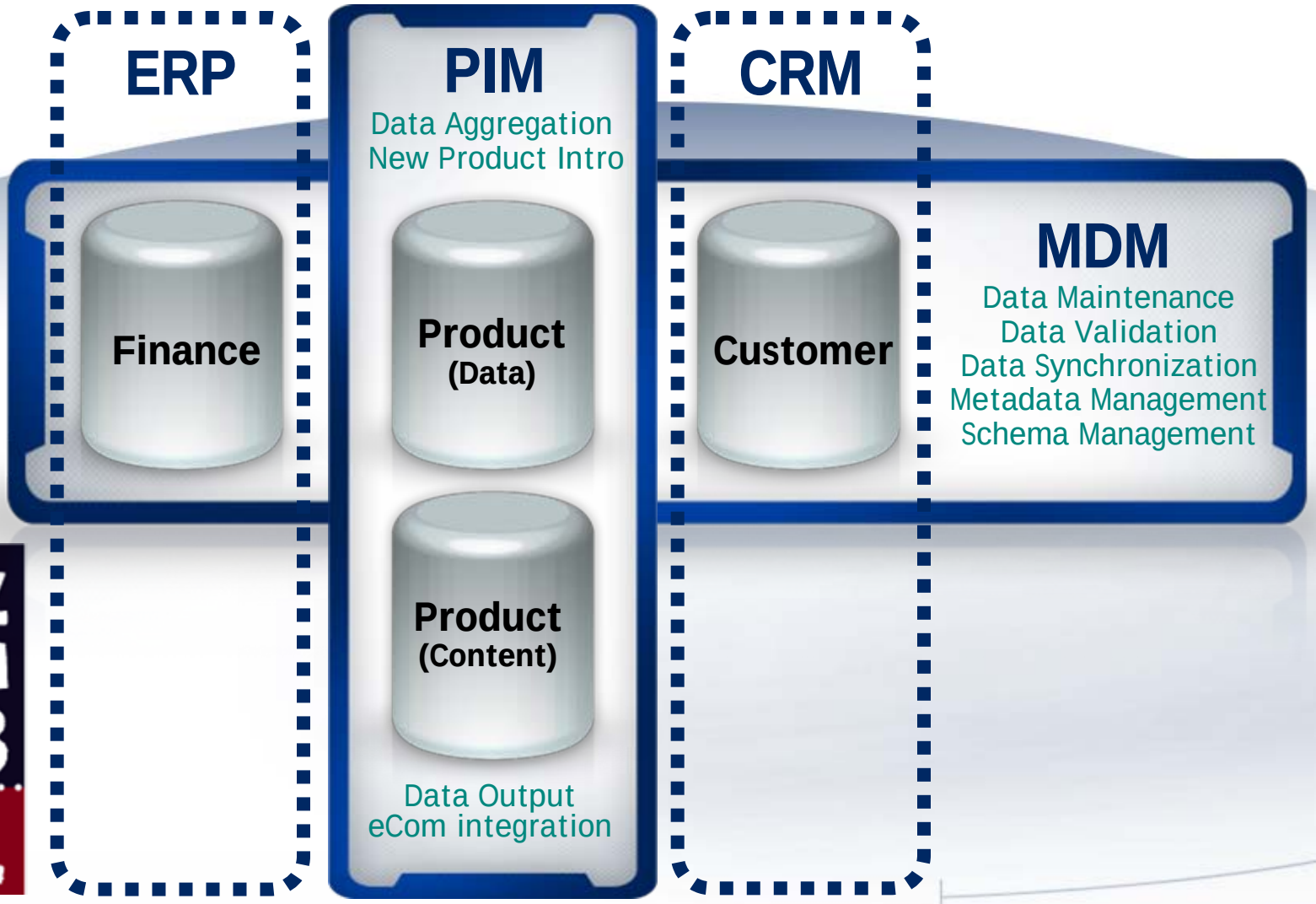
- Cost of initial data entry + cost of data correction x number of errors
- Cost of loss productivity due to checking data
- Cost of duplicated data management

Metrics for the cost of poor data quality:

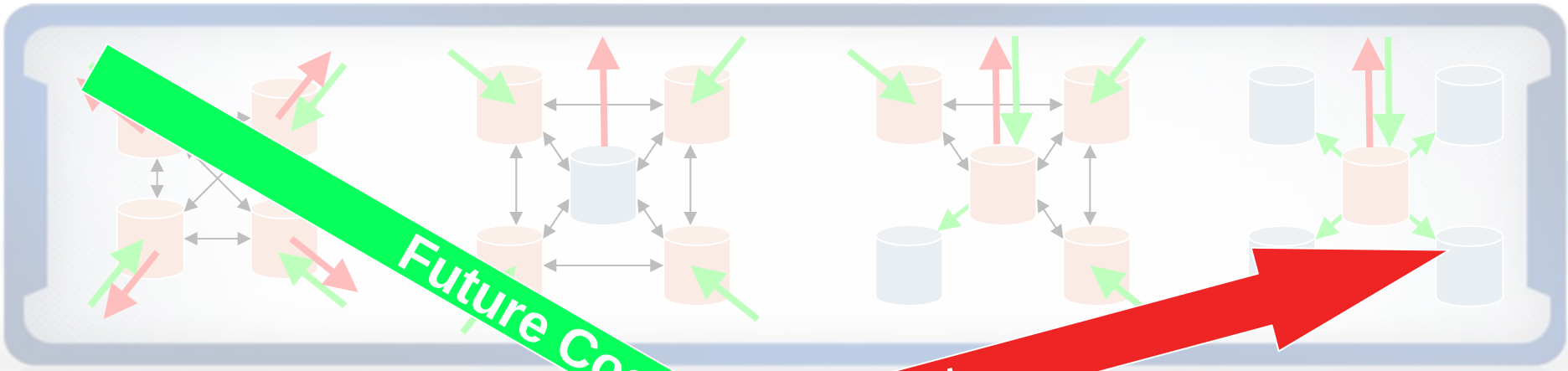
- Cost of returns and support due to incorrect product information
- Cost of shipping and invoicing errors
- Cost of lost sales (inaccurate merchandising causing loss of sales)

IT is often held accountable for poor data quality, but what business needs to understand is that Master Data Management is equally a business problem which requires board level support to action change.

The PIM & MDM Overlap



PIM Implementation Styles



- No central PIM. Master record data is kept in disparate systems.
- Central PIM holds product master with references to the product data kept in legacy systems.
- Central PIM holds product master with some product data and references other product data in legacy systems.
- Central PIM holds complete product master data. Legacy systems are no longer maintaining data.

Pitfalls in a typical PIM project

1. ***Data and Validation Model***
   - ***Validation capabilities***
   - ***Versioning capabilities***
   - ***Unique key generation***
2. Data Maintenance
   - Integrated collection and validation process
   - Distributed or centralized
3. Reporting & Analysis
   - Historical data
   - Data Quality KPIs
   - Data Governance

Data and Validation Model

Simple Validation

- Mandatory/Optional
- Data Types
- Formats
- Masks

Complex Validation

- Mandatory by category
- Independent validation of UoM
- Dependent attributes
- Algorithmic validation

Versioning

- Avoid having duplicate attributes to support different version of the data
- Versioning at record level causes too many updates
- Enables translation tracking at attribute level rather than having to re-translate at record-level.

Data and Validation Model cont.

Unique Key in PIM

- Your PIM needs to support next-in-sequence or other algorithm for constructing unique product identifiers.
- Time-to-market will be reduced when data enrichment can take place in parallel with item setup in ERP.

Value Inheritance

- Maintain data at the family level that can then be inherited and/or overwritten at the item level.

Derived attributes

- Define attributes based on the values of existing more granular attributes

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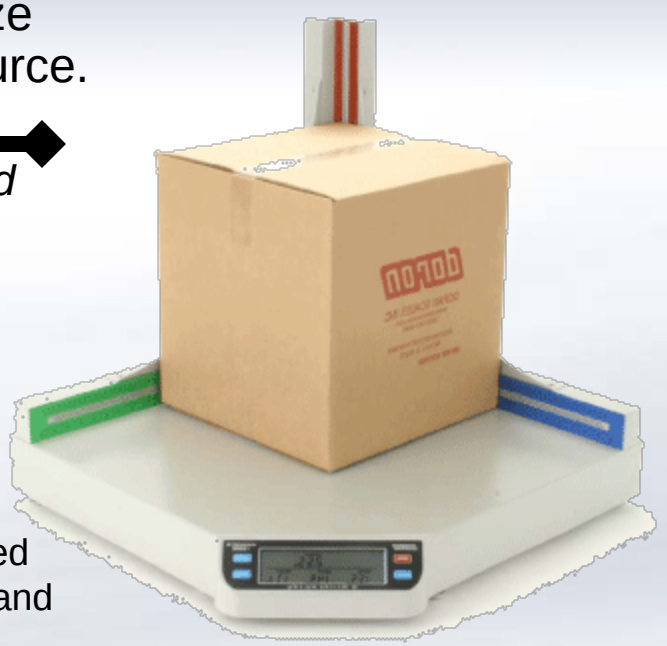
Data Maintenance

Data Collection

- Make data validation an integral part of the data collection process.
- Fixing bad data at the point of entry is cheaper (by far) than relying on data checks later in the process.
- Design you workflows to minimize validation round-trips to data source.

Distributed — *Distributed with gatekeeper* — *Centralized*



Distributed

- Fast data on-boarding
- Simple validation rules
- Close to external data sources

(Retail/Distribution)

Centralized

- Highest data quality
- Complex validation rules
- Specialist skills required for data maintenance and classification

(Manufacturing)

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Reporting & Analysis

Measurable KPIs

- Completeness
- Conformance
- Consistency
- Metadata based ratings
- Data errors identified

Other KPIs

- Correctness
- Validity

Data Governance

- Who owns the structure (schema)?
- What is the business case?
- Who owns/maintains the data?
  - Where is it collected?
  - Where is it used?

mikkel.jensen@stibo.com