Market Guide for Product Information Management Solutions

Published 12 October 2020 - ID G00720215 - 13 min read

By Analysts Simon Walker

Initiatives: Data Management Solutions

The complexity of digital commerce is driving organizations to optimize the creation, maintenance and publishing of product information to customer channels. Data and analytics leaders should use this market guide to evaluate benefits and technology choices of PIM solutions.

Overview

Key Findings

- Multichannel commerce places a substantial burden on data and analytics leaders to help their business deliver the product data required to meet the complex demands of positive customer experiences (CX).

- Often there is confusion as to the differences between product information management (PIM), master data management (MDM) and digital asset management (DAM) solutions. This can result in investing in the wrong technologies.

- The PIM market is difficult to grasp due to the proliferation of solutions both from established and emerging vendors.

Recommendations

Data and analytics leaders and marketing leaders managing a program to optimize the processes of product information management for multichannel commerce should:

- Establish how a product information management solution can rationalize and optimize product information processes by understanding the capabilities of MDM, PIM and product experience management (PXM) solutions.

- Boost business acceptance by communicating the benefits of PIM in business terms to convey value to key stakeholders.

- Evaluate and prioritize PIM solutions against requirements by establishing how each solution financially impacts existing and future business use cases.
Strategic Planning Assumption(s)

By 2022, 70% of organizations will rigorously track data quality levels via metrics, increasing data quality by 60% to significantly reduce operational risks and costs.

Market Definition

Packaged PIM solutions provide product, commerce and marketing teams with the ability to create and maintain an approved shareable version of rich product content. PIM makes available a single, trusted source of product information for the purposes of multichannel commerce and data exchange. Both B2C and B2B organizations across multiple vertical markets and product categories can benefit from the introduction of a PIM. Business benefits including faster time to market, improved data quality, reduced costs and enhanced CXs are attainable. PIM solutions have evolved to support complex use cases including product data syndication (PDS), PXM, product information effectiveness analytics, and the contextualization of product data for brands, markets and channels (see Figure 1).

Figure 1: PIM Provides Efficiency and Effectiveness for Multichannel Organizations

PIM Provides Efficiency and Effectiveness for Multichannel Organizations

Market Description

Creating and curating a single central source of the truth for product information continues to be a challenge for many organizations. Without a PIM, an organization will likely be reliant on email and spreadsheets to help collect and enrich product data. This is a very manual, inefficient and nonscalable process. Furthermore, manual processes create opportunities for error which lead to poor execution and engagement across channels.
PIM solutions are purpose built to provide product, commerce and marketing teams with the ability to create and maintain an approved shareable version of rich product content. Through out-of-the-box capabilities — including workflow, digital asset management and multichannel publishing — inefficient processes can be automated making it both efficient and scalable. Moreover, a PIM helps improve data quality and availability which results in effective execution and engagement across channels.

Product centric industries are those that will benefit the most from a PIM solution. In B2C these industry retailers include: grocery, apparel, consumer electronics, homewares and home improvement. The hospitality industry has also benefited from PIM. In B2B, manufactures including consumer packaged goods (CPG), complex industrial products, automotive as well as distribution companies have greatly benefited. PIM solutions are less successful if applied to financial products, utilities or telecommunications.

Business problems an organization is experiencing that could benefit from a PIM include:

- A large and/or complex product catalog
- International variations in products and language
- The need to support multiple channels (digital, physical, print)
- Inability to scale multichannel or adopt new channels
- Data quality issues impacting sales, customer satisfaction and retention
- Data quality issues impacting supply-chain relationships
- A lack of multichannel agility to adapt to a crisis like COVID-19

**Market Direction**

Data and analytics leaders should note that there is an overlap of capabilities between packaged MDM and PIM solutions. This overlap is due to vendors that evolved from PIM supporting a wider range of master data domains and related use cases. An MDM primarily aimed at the consistency of business-critical data solutions may provide “good enough” capabilities for rich product content and digital asset management; likewise, a PIM solution may provide “good enough” capabilities for product master data. Care should be taken when considering whether MDM, PIM, or a combination of both solutions can fulfill the specific business requirements of your product information initiative. Review Figure 2, highlighting how PIM supports the end-to-end product data supply chain, to assess current capabilities and deficits and where to prioritize (see Figure 2).

**Figure 2: How PIM supports the End-to-End Product Data Supply Chain**
Because of the overlap between MDM and PIM solutions, some PIM vendors have begun to differentiate their offerings. This has resulted in the creation of product experience management (PXM). PXM represents a shift in product strategy by these vendors and is creating new capabilities that address emerging needs. These capabilities include:

- Automated rich content creation using natural language generation (NLG)
- AI assisted rich content optimization
- Channel behavioral data & digital shelf analytics

Of the above PXM capabilities channel behavioral data and digital shelf analytics promise the greatest benefit to CXs. The concept is to collect and connect behavioral data assets — including transactional, interactional, observational and unstructured data, and analytics — to product master data (see Evolve From Product Information Management to Product Experience Management With a 360-Degree Analytics Strategy). As a result, real-time closed-loop analysis can be employed to assess the impact and effectiveness of product information across many contexts and variations.

PXM has yet to achieve broad market demand as the new acronym is not well known. Vendors that position their solutions as PXM include Akeneo, Contentserv, inRiver, Salsify and Syndigo. Figure 3 shows the value principles of product information management demonstrating that no one solution can fully support all business requirements. Use this model to identify the values that will enhance CX and the solution category that can provide them (see Figure 3).

Figure 3: Value Principles of Product Information Management
PIM core capabilities are also valid for an MDM solution. This is where the overlap in capabilities comes into focus. A clear understanding of business requirements and customer benefits is needed to help determine which category of solution is required (see Figure 3: Value Principles of Product Information Management above). These core capabilities include the following:

- **Workflow/BPM.** Necessary capabilities include business process modeling, data flow modeling and documentation, and analytics for key performance indicators and other benchmarking efforts in support of PIM.

- **Loading/sync/business services.** The PIM solution needs to provide facilities for loading data in a fast, efficient and accurate manner. There is often a need for integration middleware, including publish and subscribe mechanisms.
- **Data modeling.** The ability of the PIM solution to effectively and flexibly support an end-user organization's product data model requirements is essential.

- **Information quality/semantics.** Have strong facilities, in batch and real-time modes, for profiling, cleansing, matching, linking, identifying and semantically reconciling data in different data sources.

- **Hierarchy management.** The solution should also provide support for balanced, unbalanced and recursive hierarchies, a visualization capability to facilitate maintenance and presentation of hierarchical data, and a versioning capability to provide an audit trail and recovery capability during hierarchy creation and maintenance.

- **Performance, scalability, availability.** The PIM solution should have proof points — from live reference customers — of different aspects of performance scalability and availability that match current and future requirements.

- **Information stewardship.** Analytics and performance measures relating to a range of processes and activities taking place in support of PIM.

- **Digital asset management (DAM)/media asset management (MAM).** The ability to import digital assets (images, video, documents etc.) and associated metadata, link assets to products, preview assets, and publish assets to channels. Basic file format conversion is also required to optimize assets for each channel.

- **Rich product content authoring.** Provide configurable user interfaces (UIs) to enable business users to contribute to the creation and maintenance of rich product content. The UI should be easy to use.

- **Multichannel publishing.** The PIM must be able to publish product information to multiple channels including e-commerce, print, PDS, instore systems, product configurators etc. Ideally the vendor should offer a library of prebuilt connectors to leading channel solutions.

### PIM Additional Capabilities

Beyond the core PIM capabilities, some vendors can provide optional additional capabilities in support of specific use cases. These core capabilities include the following:

- **Product information contextualization.** The ability to create and maintain multiple versions of product information and digital assets optimized for channel, market, brand, customer segment and seasonality. This should be achieved without the duplication of the products within the PIM.

- **Product information language translation automation.** Selling products globally requires that the product information be translated into multiple language versions through automated translation or machine assisted translation. The process can be more efficient and result in faster product introduction to all markets.
- **Product data syndication (PDS).** Manufacturers have the need to syndicate product information to downstream partners in the supply chain such as retailers and distributors. Retailers and distributors also have a syndication need but to marketplaces and social media. PDS is often a capability that a PIM can provide (see *Failure to Address Product Data Syndication Properly Leads to Penalties*).

- **Product variant management.** Managing product variants such as size/color within a PIM can result in an “SKU explosion.” This is where each SKU — of which there could be many — represents an individual saleable size/color variant of a product. Some PIM solutions include advanced UIs to minimize the complexity of managing variants.

- **Print publishing.** The ability to automate the creation of print quality documents via desktop publishing tools such as Adobe InDesign.

### PXM Capabilities

To enable PXM the following capabilities are required in addition to the core and additional PIM capabilities. While these capabilities may seem long term in terms of availability, some vendors in this market guide are able to offer the following PXM capabilities now:

- **Automated rich content creation using natural language generation (NLG).** Through the use of NLG, a PIM can automate the creation of unique product information using master data as a source at scale (see *Revolutionize Product Information Management by Means of Disruptive Artificial Intelligence*).

- **AI assisted rich content optimization.** Product information optimized by AI will enhance quality and improve reliability of content, as the information is being created by business users. This is achieved by the real-time analysis of product information against a set of business rules and best practices, as it is being created within the PIM (see *Revolutionize Product Information Management by Means of Disruptive Artificial Intelligence*).

- **Channel behavioral data and digital shelf analytics.** Create a 360-degree view of your products by incorporating from channels transactional, interactional, observational and analytics data to enable actionable business insight. Digital shelf analytics applications provide insight for brands and retailers when monitoring product content and pricing on digital channels (see *Innovation Insight for Digital Shelf Analytics*).

- **Conversational commerce.** Natural language processing (NLP) techniques are emergent, and voice-only interfaces, for product discovery and commerce such as Amazon Echo, are fast evolving. A PIM must be able to provide product information to conversational commerce technologies in order to support these channel experiences.

### PIM Use Cases
There are two primary use cases that a PIM support:

- **Buy-side.** These implementations commonly serve as the point of capture for product data, as received from suppliers via online data onboarding portals and/or global data syndication networks (GDSN).

- **Sell-side.** These implementations commonly handle the enriched product data needed to support customer requirements, including its publication internally in the organization and syndication externally to customer-facing channels, e-commerce platforms and websites.

### Representative Vendors

The vendors listed in this Market Guide do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings.

#### Market Introduction

The 25 vendors named in this guide (see Table 1) were selected to represent MDM, PIM and PXM solutions discussed in the Market Direction section and do not imply an exhaustive list. This section is intended to provide more understanding of the market and its offerings. For each of these three solution categories, we list vendors in which Gartner has received the most client interest (via searches on gartner.com and inquiry).

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Product, Service or Solution Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1WorldSync</td>
<td>Product Information Cloud</td>
</tr>
<tr>
<td>Agility Multichannel by Magnitude</td>
<td>Agility PIM</td>
</tr>
<tr>
<td>Akeneo</td>
<td>PIM</td>
</tr>
<tr>
<td>Bluestone PIM</td>
<td>PIM</td>
</tr>
<tr>
<td>Censhare</td>
<td>Universal Content Management</td>
</tr>
<tr>
<td>Contentserv</td>
<td>PIM</td>
</tr>
<tr>
<td>IBM</td>
<td>InfoSphere Master Data Management Collaborative Edition</td>
</tr>
<tr>
<td>Vendor</td>
<td>Product, Service or Solution Name</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Informatica</td>
<td>Product 360</td>
</tr>
<tr>
<td>Innovit</td>
<td>PIM</td>
</tr>
<tr>
<td>inRiver</td>
<td>PIM</td>
</tr>
<tr>
<td>Perfion</td>
<td>PIM</td>
</tr>
<tr>
<td>Pimberly</td>
<td>PIM</td>
</tr>
<tr>
<td>Pimcore</td>
<td>PIM</td>
</tr>
<tr>
<td>PIMworks</td>
<td>PIMworks</td>
</tr>
<tr>
<td>Riversand</td>
<td>Master Data Experience Platform</td>
</tr>
<tr>
<td>Sales Layer</td>
<td>Product Information Manager</td>
</tr>
<tr>
<td>Salsify</td>
<td>PXM</td>
</tr>
<tr>
<td>SAP</td>
<td>Product Content Hub</td>
</tr>
<tr>
<td>Stibo Systems</td>
<td>Digital Business Hub</td>
</tr>
<tr>
<td>SyncForce</td>
<td>Product Success Platform</td>
</tr>
<tr>
<td>Syndigo</td>
<td>Content Experience Hub</td>
</tr>
<tr>
<td>UNBXD</td>
<td>PIM</td>
</tr>
<tr>
<td>Viamedici</td>
<td>EPIM</td>
</tr>
<tr>
<td>Widen</td>
<td>Widen Collective</td>
</tr>
</tbody>
</table>
Market Recommendations

As a data and analytics leader or marketing leader, responsible for data management, you should:

- Identify the values that will enhance CX and whether an MDM, PIM or PXM can provide them by using the value principles of product information management (see Figure 3). No one solution can fully support all CX and business requirements. Therefore, a combination of best-of-breed solutions may provide a more comprehensive solution e.g., MDM and a PIM solution.

- Rigorously evaluate PIM solutions and the pervasiveness on business processes by means of a proof of concept (POC). Preparation is essential, first document your most important use cases, secondly prepare a dataset that represents the breadth and depth of your product data. Vendors should be able to configure their solutions for your data and use cases. The POC should take no more than one day. Ensure that all key stakeholders and representative business users are present.

- Determine how a PIM solution will integrate into your technology ecosystem. Ensure you identify all source systems of product data and digital assets, and all product data consumers. The number, and complexity, of integrations will have the greatest impact on implementation time and cost.

Acronym Key and Glossary Terms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CX</td>
<td>customer experience</td>
</tr>
<tr>
<td>LOB</td>
<td>line of business</td>
</tr>
<tr>
<td>MDM</td>
<td>master data management</td>
</tr>
<tr>
<td>PDS</td>
<td>product data syndication</td>
</tr>
</tbody>
</table>
PIM | product information management
-----|----------------------------------
PLM | product life cycle management

Evidence
The analysis in this document is based on information from sources including:
- Conversations with users of Gartner's client inquiry services.
- Interactive briefings in which vendors provided Gartner with updates on their strategy, market positioning, recent key developments and product roadmaps.
- Analysis of 501 end-user interactions about PIM from 1Q20 through 3Q20 end.

Note 1: Representative Vendor Selection
The 25 vendors named in this guide were selected to represent the three types of solutions as discussed in the Market Analysis section: PIM capable MDM, PIM and PXM offerings. For each of these three categories, we list the vendors in which Gartner has received the most client interest (searches on Gartner.com and inquiry).

Note 2: Gartner's Initial Market Coverage
This Market Guide provides Gartner's initial coverage of the market and focuses on the market definition, rationale for the market and market dynamics.

Recommended by the Author
- Failure to Address Product Data Syndication Properly Leads to Penalties
- Revolutionize Product Information Management by Means of Disruptive Artificial Intelligence
- Innovation Insight for Digital Shelf Analytics
- Magic Quadrant for Master Data Management Solutions

Recommended For You
- 新しいビジネスモデル：8つのエコシステム活用事例 (2020年版)
- データセンターのコストを削減しながら運用を改善する
- リモートからの特権アクセスをセキュアにする
- データベース環境の近代化戦略：自らの意志と責任で推進する
- リモートワーカー／オフィス・ワーカー向け従業員生産性モニタリング・テクノロジから価値を引き出す
Supporting Initiatives

Data Management Solutions

Track

© 2020 Gartner, Inc. and/or its affiliates. All rights reserved. Gartner is a registered trademark of Gartner, Inc. and its affiliates. This publication may not be reproduced or distributed in any form without Gartner's prior written permission. It consists of the opinions of Gartner's research organization, which should not be construed as statements of fact. While the information contained in this publication has been obtained from sources believed to be reliable, Gartner disclaims all warranties as to the accuracy, completeness or adequacy of such information. Although Gartner research may address legal and financial issues, Gartner does not provide legal or investment advice and its research should not be construed or used as such. Your access and use of this publication are governed by Gartner's Usage Policy. Gartner prides itself on its reputation for independence and objectivity. Its research is produced independently by its research organization without input or influence from any third party. For further information, see "Guiding Principles on Independence and Objectivity."