



# The Case for Integrated Product Information Management

Why does Product Information Management (PIM) matter today?

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## 1. WHY DOES PRODUCT INFORMATION MANAGEMENT (PIM) MATTER TODAY?

The shift from selling products in physical stores with the help of a personal sales assistant to selling products online has made digitalization and optimization of product information a must for all participants in supply chains.

Today you need to manage much more than just an internally understood product description and a price for your products.

Managing rich product information in a future digitalized world will, done the right way, make you sell more by:

- Enabling happy self-service scenarios for online purchases
- Underpinning personalization in product offering
- Allowing you to take advantage of product relationships

Furthermore, you can reduce costs by:

- Minimizing product returns
- Automating the handling of product data

### 1.1 Enabling self-service scenarios

Self-service purchase decisions need comprehensive and granular product information because:

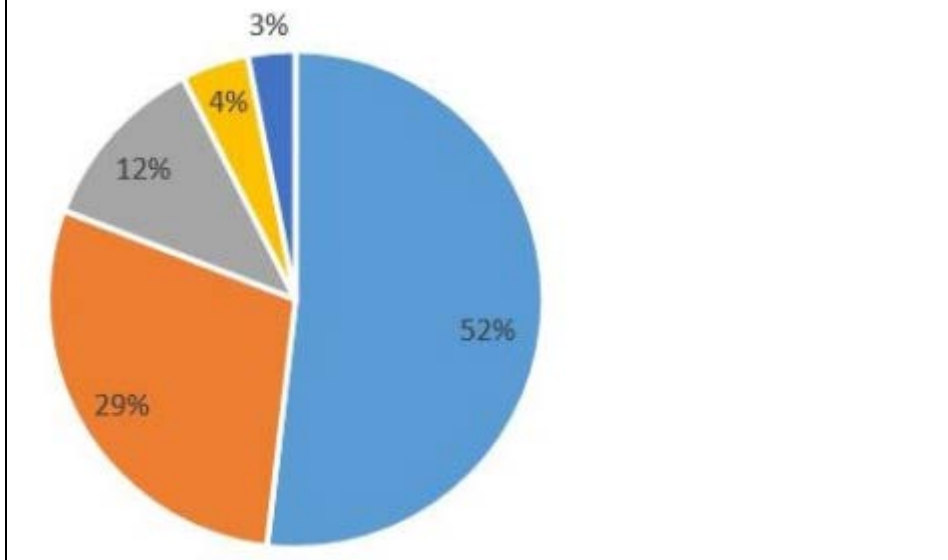
- The buyer must be able to search and navigate quickly to the product in mind within the web-shop
- The buyer needs to be sure that he/she is choosing the right product for the intended purpose of use
- The buyer will like to compare relevant products from different brands using the same metrics.

Providing your customer with these possibilities will make you sell more and reduce costs by minimizing product returns.

Your customer will need to have access to very specific product information to find and choose the right product with certainty. This includes the specific and granular facts related to the product in mind as well as images and documents related to the products.

According to FDIH (Danish Ecommerce Association) 81% of shoppers will leave a web-shop with inadequate product information.

Over 7,000 respondents were asked if they would turn away from a web-shop if the product information is incomplete or the product image is bad. 52 % answered that they totally agree and 29 % more agreed. 12 % were not sure. 4 % disagreed and 3 % totally disagreed.



#### 1.2 Making true personalization happen

Personalization of product offers require specific product attributes. Knowing about your customer, what he/she wants, and their buying behavior is one side personalization. The other side is being able to match these data with relevant products. For this quest, you need to structure all the hard facts about the products in your range.

By doing that you will be able to do more than merely presenting the products your visitor already have looked and in best case what others also looked at. By having access to structured product information, you can suggest and present products that have the same features and fulfil the same purposes.

#### 1.3 Utilizing product relationships

Increased online sales must encompass product relationships. The good old salesman always made sure the customer left the shop with the best option for the product in mind - and the additional products needed to fulfil the intended purpose of use.

A web-shop must work in the same way and will optimally do this job even better based on the huge amount of digitalized product information available.

#### 1.4 Automation of data flows

Handling elaborate product information cannot be done properly and in a cost-effective way without being supported by the right technology for the job.

A recent business case made by a Dynamicweb PIM customer showed that the cost of handling product data using manual oriented work processes were 54,000 EUR, while by using the PIM solution the costs of handling the same data were only 15,000 EUR. This means a cost reduction by 39,000 EUR or put in another way, down to under 30 % of the costs of doing it without the proper technology.

Some facts about the cost study:

- The amount of data encompassed 10,000 SKUs (Stock Keeping Units) having on average 70 attributes each
- The attributes were to be populated in 3 languages
- 33 % of the data were to be refreshed within a year
- The main cost reductions were achieved by:
- Smarter handling of attributes that shared the same value reducing the actual workload from 693,000 attributes to 429,000 attributes yearly
- Doubling the speed of putting through the required workload
- Dramatic reduction of time spent on digital assets
- The cost reduction paid well for the software license costs – in this case 6,000 EUR per year

## 2. WHAT ARE THE CAPABILITIES NEEDED IN A PIM SOLUTION?

### 2.1 Achieving a 360-degree overview of product information

A Product Information Management (PIM) solution will give you one place where all the information about your products are managed.

Typically, such information has been managed in different applications and productivity tools such as spreadsheets and personal databases. With the rise of ecommerce and the related need for more available product information, this approach creates a range of pain points such as:

- Inconsistent, inaccurate and incomplete product information in various sales channels
- Inability to maintain a sustainable process for updating product information
- Not being able to meet time to market metrics for new product introductions

By having a mature Product Information Management solution, you will be able to:

- Store and maintain all your product information in one place
- Intelligently handle product information, related products, digital assets and other references
- Seamlessly collect and distribute these product data from and to internal and external source and target systems

## 2.2 Having a flexible data structure

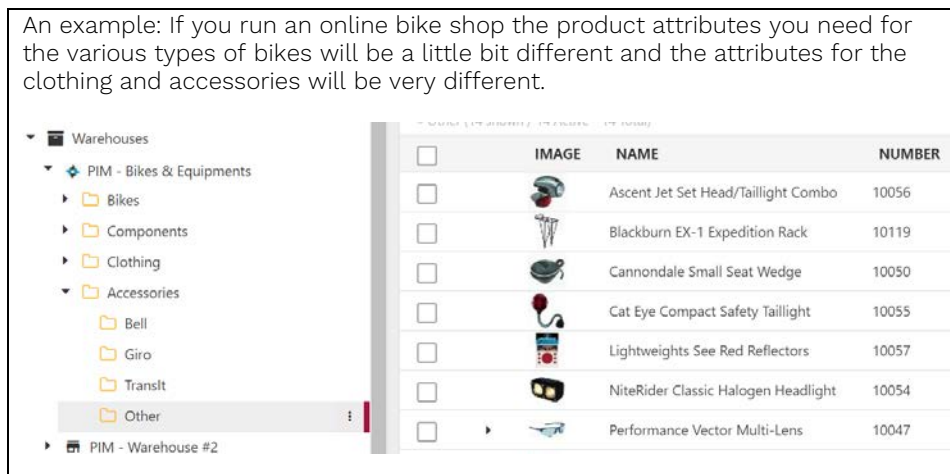
One challenge in managing product information is that we do not need the same product attributes for different groups of products. Handling that issue in a flexible and user-friendly way is a core capability in a professional Product Information Management (PIM) solution.

A PIM solution allows you to define the product attributes required for each group of products. Some attributes as dimensions, weight and colour will be needed for all or most products, while some attributes will be very specific to a given group of products. You may define these requirements internally and/or use an external standard such as eClass, ETIM or other available standards within the industry and geography where you operate.








Increasingly trading on marketplaces also imposes the maintenance of product attributes needed to onboard your products into those places.

A well thought PIM solution will not only provide you with flexibility around requirements for product attributes, but also ease your work where the requirements are the same. This is done through inherency. That means, that if a range of product groups or specific products should have the same definitions and values, you can maintain the product information at the common level and not need to collect and maintain the same shared information for each product.

An example: If you run an online bike shop the product attributes you need for the various types of bikes will be a little bit different and the attributes for the clothing and accessories will be very different.



The screenshot shows a PIM system interface. On the left is a sidebar with a tree view of product categories. The main area displays a table of products with columns for IMAGE, NAME, and NUMBER.

	IMAGE	NAME	NUMBER
<input type="checkbox"/>		Ascent Jet Set Head/Taillight Combo	10056
<input type="checkbox"/>		Blackburn EX-1 Expedition Rack	10119
<input type="checkbox"/>		Cannondale Small Seat Wedge	10050
<input type="checkbox"/>		Cat Eye Compact Safety Taillight	10055
<input type="checkbox"/>		Lightweights See Red Reflectors	10057
<input type="checkbox"/>		NiteRider Classic Halogen Headlight	10054
<input type="checkbox"/>		Performance Vector Multi-Lens	10047

### 2.3 Ensuring data quality

A product Information Management (PIM) solution will be able to measure the quality of your product data. The essential data quality dimensions for product data are:

- **Completeness** of product information, which is essential for self-service sales approaches. Completeness must be measured against the specific requirements for the product group.
- **Timeliness**, or currency if you like, of product information, so you have the most updated information is available when needed in the various sales channels.
- **Conformity** of product information which may be achieved by adhering to an internal or a public standard for product information.
- **Consistency** of product information so your customer can compare similar products using the same metrics.
- **Accuracy** of product information, that is ensured by having bespoke ways of controlling product data.

### 2.4 Taking care of relationships

Another challenge in managing product information is utilizing the many opportunities in collecting, storing and exposing the valuable relationships between products. Such relationships can be:

- **Accessories**, so you can present the best and adequate accessories available and suitable for a main product in order to facilitate a complete buying experience
- **Spare parts**, so you can assist your customer and underpin a lasting customer relationship
- **Replacements**, so you can suggest a new a better option when a product has become obsolete or a similar product when you are out of stock
- **Cross-sell options**, so you can make the customer aware of additional products to complement the initial product in mind
- **Up-sell options**, so you can give your customer the choice of a more satisfactory purchase

Also, for many kinds of products you will need to manage variants of the products like the range of sizes and colors that make up each Stock Keeping Unit (SKU).

### 2.5 Inclusion of digital assets and references

Handling product data is also about storing and managing the relationship to digital assets. Such assets are product images in various sizes and taken from different angles if not maintained as 3D media and videos, data sheets, line drawings, brochures, installation guides, safety handling sheets, certificates and more.

You can use your Product Information Management (PIM) solution to control the quality of product images. The typical data quality dimensions for images will be:

- **Uniqueness**: You want to use the same image in your printed catalogue and on your web shop.
- **Accuracy**: The image must show the described product and not something else.
- **Consistency**: The images for similar products should have the same style.

Data quality checks should also extend to making sure that all the required assets are present. As with product attributes the requirements for these assets differ between product groups.

Further, you can provide additional value to your customers by referencing available articles and other resources that can support your customers in the buying decision process.

#### 2.6 Providing Product Information in multiple languages

In today's globalized world one language is often not enough when presenting your range of products to your audience of buyers and users. A PIM solution must be able to handle product attributes in many languages and the relation to digital assets being in many languages.

Again, the ability to embrace flexibility is essential, as some attributes are language specific and some others are not, value lists for colors and other reference data are language specific but other lookup lists are not.

Adding language as an additional dimension to product hierarchies and product variants will in most cases make the final justification for solving your product data issues by implementing a professional and mature Product Information Management (PIM) solution.

### 3. WHAT ARE THE OPTIONS FOR HANDLING PRODUCT INFORMATION?

There are different options for handling product information. The factors that will guide your choice for a Product Information Management (PIM) solution includes:

- Your number of products
- The pace of product renewal
- The complexity of products handled
- The size of your organization
- The industry where you operate
- Your position in the supply chain

#### 3.1 Using spreadsheets

Handling product information in Excel spreadsheets has been a popular option in many organizations and indeed a spreadsheet can be a tempting solution when trying to meet the many varying requirements in a quick manner when it comes to handling product information. Spreadsheets are marvelous, because you can do almost anything you want with them.

However, spreadsheets are also horrendous, because you can do almost anything you want with them. Spreadsheets are based on individual understanding, are very work demanding and error prone. So, unless you have very few products to manage and only occasional needs for updates, this approach has reached its "best before" date.

#### 3.2 A separate PIM platform

In larger organizations with a wide spread IT landscape where product data already are handled in many applications the only option may be introducing a Product Information Management (PIM) platform separate to all other existing applications.

When doing that you have to be very careful about not just implementing another information silo besides the ones that already exists. Also, you must orchestrate the integration technology in a way that integration time and costs will not overshadow the benefits of a centralized PIM solution.



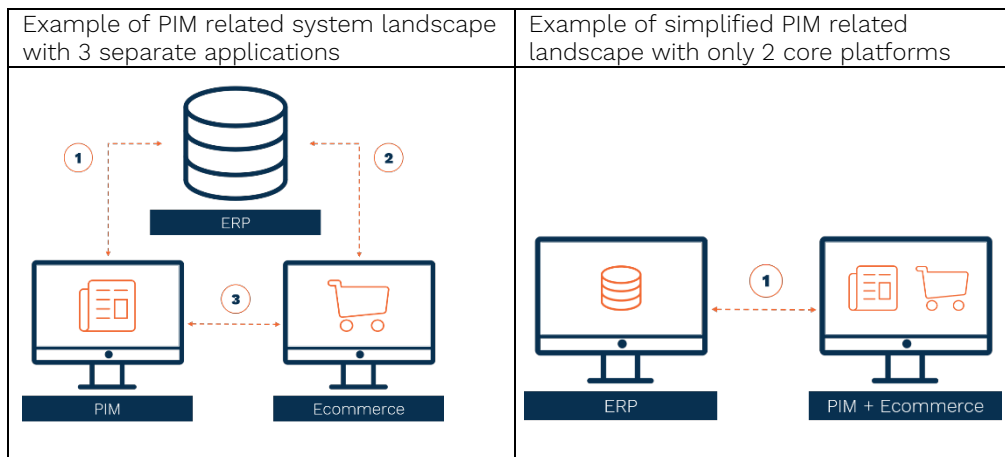
### 3.3 An integrated PIM platform

Implementing a Product Information Management (PIM) solution in close integration with the core back-end applications that handles product data and other data and the front-end customer facing applications will be a more cost-effective way for many organizations.

The disciplines that needs close collaboration and integration with the product information discipline includes:

- **Ecommerce:** The ecommerce front-end will most often be the main receiver of product information. By handling the ecommerce solution on the same platform as the PIM solution you will work directly on the same data foundation making both testing of data content and bringing data content in production a seamless job.
- **Content management:** Product content is a part of your wider content being published online (and offline) to your customers and business partners. Handling all this on the same platform will bring consistency to your overall messaging.
- **Marketing:** Whenever your digital marketing activities includes product content you will have your 360-degree product view available for that without any tedious an error prone work to do.
- **ERP:** All basic product data are master data in your ERP environment. These master data must be maintained in close alignment with the wider product content.
- **CRM:** Your CRM system holds the connection between your prospective and existing customers and your product range. Keeping those master data types close is essential to your competitive strength.

By integrating the technology support for these disciplines, you will need less time and resources to do the initial implementation and gain much less friction in running and enhancing the solution. In that way, you can direct your resources to the main task of improving the content of the data itself.



#### 4. HOW DYNAMICWEB OFFERS A COMPREHENSIVE & INTEGRATED PIM SOLUTION

The Product Information Management (PIM) solution from Dynamicweb is a mature and professional PIM solution encompassing all the capabilities you need in handling product information from getting the 360-degree overview, having a flexible data structure, ensuring data quality, exploiting product relationships, inclusion of digital assets to being true multi-lingual.

The solution is part of our All-in-One Platform.



##### 4.1 An end-to-end solution for ecommerce

The combined solution comes with a uniform user interface for content management, ecommerce front end, marketing and Product Information Management (PIM) which makes the learning curve for the users very fast and makes daily collaboration very effective and consistent. As an example, updates to the product information layer can be immediately proven on the front-end ecommerce layer.

The standard integration framework encompasses seamless coexistence with Microsoft Dynamics AX ©, Microsoft Dynamics NAV © and Microsoft Dynamics 365 ©.

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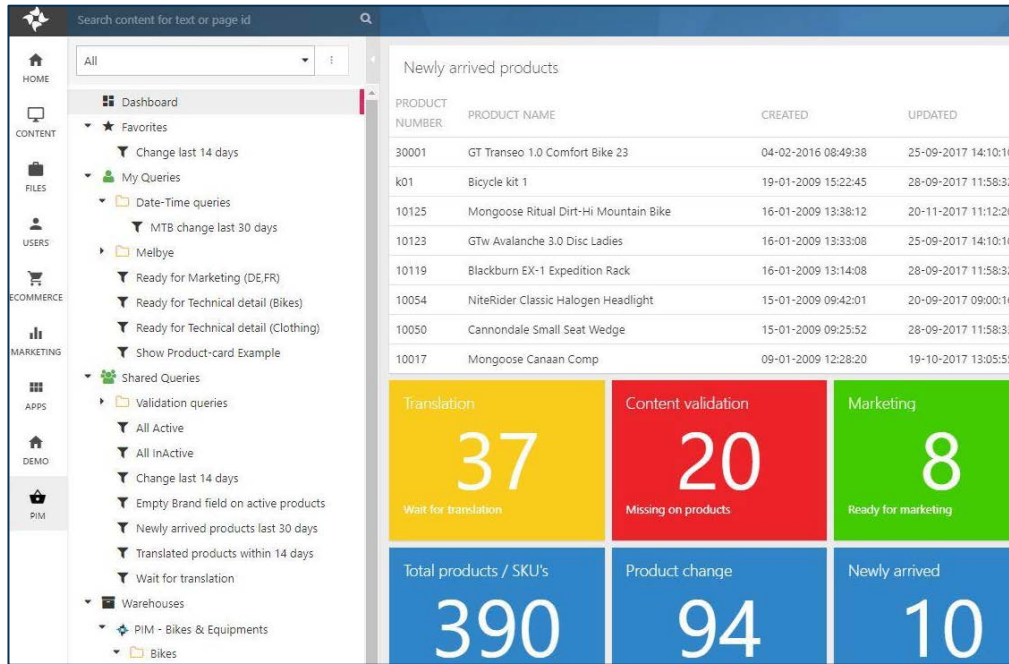
##### 4.2 Cost effective digitalization

The long-term survival of your business depends on successful digital transformation. Companies that are part of a supply chain for tangible products with online sales opportunities must include Product Information Management (PIM) in the digital transformation scenario. The most cost-effective approach in this quest is to have the PIM solutions as closely as possible integrated with all the back-end and front-end solutions where product data flows through.

#### 4.3 Using Product Data content as weapon

There is a considerable business outcome to gain from optimal product information management. Having the most complete, accurate and timely product information in front of your customers will make you sell more. Handling the combined content management, ecommerce front-end, marketing and product information management side of online selling will make you reduce costs.

**Combined workbench / dashboard for PIM, ecommerce, content management and marketing:**



Learn more about Dynamicweb PIM: <http://www.dynamicweb.com/pim>