Benefits of a PIM System

While the theoretical benefits of a PIM system are numerous, building a business case to implement a PIM system proves, in practice, to be more difficult. It is even the primary reason why a PIM project cannot be started.

This chapter discusses the benefits of a PIM system on strategic, tactical and operational levels based on material from several research papers and our own case studies. <sup>1</sup>

# 2.1 Strategic Benefits

There are several strategic reasons for implementing PIM in the organization. The most common are:

## 2.1.1 Assortment Expansion

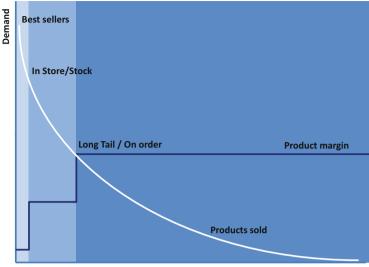
In Sect. 1.1 we briefly described the long-tail strategy some wholesalers and retailers follow. The benefits of a long-tail strategy are not only that more products can be sold to the same customers (and potential new ones as well) but also that the products in the long tail can be sold against a higher margin. As Fig. 2.1 shows, in general, price competition is much stronger for the top 20 % of the assortment than for the remaining 80 % of the assortment (the long tail). Aberdeen, for example,

<sup>&</sup>lt;sup>1</sup> Among the research papers used are:

A.T. Kearney, Action Plan to Accelerate Trading Partner Electronic Collaboration, Data Synchronization Proof of Concept: Case Studies from Leading Manufacturers and Retailers.

The Yankee Group, The Cost of Waiting: Building the ROI Case to Implement Product Information Management Now, January 2005.

Aberdeen Group, The Instant Power of All-Channel PIM: Increased Sales and Competitiveness, December 2011.



**Number of Products** 

Fig. 2.1 Long-tail assortment has a higher product margin

reports up to 29 % higher profits due to higher product margins in the long-tail assortment.

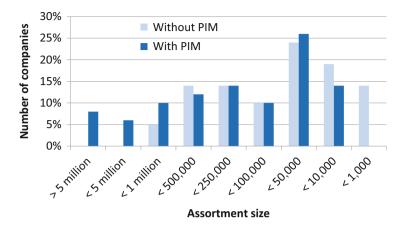
In Fig. 2.2 we see a clear relationship with the size of a company's assortments and having a PIM system. It is remarkable to see that when the assortment increases to over one million SKUs there are no companies who do not have a PIM system. 38 % of the retailers with a PIM system stated that they were aiming to achieve an additional 50 % expansion in their assortment, while 45 % are planning to expand their product range by between 11 % and 50 % in the next 3 years. This figure was 20 % lower for retailers without PIM.

However, implementing a long-tail strategy entails much more than just adding an Excel sheet with data from a supplier to your PIM system.

Processes have to be set up to manage the information in the PIM system. Price mechanisms have to be set up to manage the margin for which products are sold. Just adding 30 % margin to all products might be a simple thing to do, but it does not take into consideration the actual logistical costs, perceived product value by the customer, and competitors' prices. Likewise, when suppliers stop selling a product, the product also has to be removed from the assortment of the wholesaler or retailer.

Once a product is sold, the product has to be ordered, possibly repackaged at the company's warehouse and delivered to the customer. To do this, logistical processes have to be set up in the ERP system, especially when the ERP system does not yet know the product just sold.

With the external and internal processes set up right, companies are able to expand their offering very fast. WarmteService for example was able to expand its



**Fig. 2.2** Retailers with and without a PIM system in relation to their assortment size (*Source*: Heiler)

offering from 20,000 products to 150,000 products in less than 1.5 years (see the Warmteservice Case for more information).

### 2.1.2 Shorten Time to Market

Improvements in time to market have been recorded in several research papers. AT Kearney reports improvements of 7–13 % for wholesalers, while Aberdeen writes of a reduction by a factor of 10 for a software company.

A PIM system can reduce the time to market of a product significantly for producers in particular. If the PIM system is also used during the design process, it allows for the development and production across multiple locations, countries and time zones by multiple partners.

In addition, the commercial product information can already be created while the product is still being manufactured, or even being designed. Once set up well, the product information can already be distributed in an organized fashion, and sales can start exactly at the moment the product actually becomes available, or even earlier.

However, the effect also applies to wholesalers and retailers. With PIM set up, information can be distributed faster to all relevant channels across the globe to market and sell a product. This may be of strategic importance in a competitive environment where new products are being released all the time.

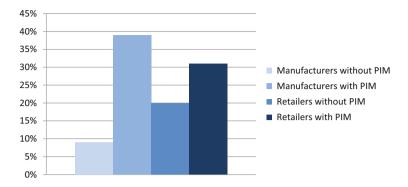


Fig. 2.3 Companies that stated to have very high-level customer satisfaction/loyalty

## 2.1.3 Uniform Customer Experience Across All Channels

However, the most important strategic benefit may be that a uniform customer experience can be created with a PIM system across all channels. Without PIM product information is managed per channel and will quickly lead to awkward results e.g. the use of two different product names for the same product in the wholesale and retail channels, and even disastrous differences e.g. inexplicable price differences (Fig. 2.3).

In the Heiler study, the manufacturers surveyed do indeed report a link between their performance in connection with product information quality as a result of using PIM and customer loyalty: 39 % of respondents confirm very high levels of customer satisfaction while only 9 % of those not using PIM rate their performance to be similarly high. For retailers, the difference between 31 % for those using PIM and 20 % for non-users is less, but nevertheless clear. Likewise, Yankee Group reports an increase of 26 % in customer loyalty due to the introduction of a PIM system.

### 2.2 Tactical Benefits

## 2.2.1 Manage Complexity

PIM allows companies to manage, and increase, the complexity of their organization. The number of dimensions in on the increase:

- Number of products;
- Number of attributes per product;
- Number of languages;
- Number of suppliers;
- Number of countries;
- Number of channels:

2.2 Tactical Benefits 19

- Number of product localizations/customizations;
- Number of customer-specific assortments and prices;
- ...

Without a PIM system it would be impossible for a company like Fabory to manage 120,000 products, from 3,000 suppliers in 32 languages across 58 countries (see the Fabory Case). Complexity increases further as products may vary slightly per country due to local preferences (e.g. the color white has different meanings in different cultures—from celebration to death), or legislation (e.g. one component of a product may differ as different materials have to be used). We do not even consider the fact that more and more products are increasingly customized to meet customer-specific needs.

A PIM system would seem to be a prerequisite for working internationally. In the ROI study conducted by Heiler we see that manufacturers with a PIM system operate in over 45 countries, while manufacturers who do not have a PIM system are only represented in 17 countries. Manufacturers with a PIM system provide product information in 19 languages whereas non-PIM users only support 4 languages. This difference will only increase as manufacturers with a PIM system plan to add 8 more languages over the next 3 years while non-PIM manufacturers are planning only 1.

Heiler also discovered that organizations with a PIM system offer:

- · Customer specific assortments to more customers,
- with per customer-specific assortment more products,
- and with more differentiation in product prices.

#### 2.2.2 Controlled Content Distribution

A central PIM system gives companies more control over which external parties get which product information than old distribution media like CD-ROMs do.

Some producers have an active policy to provide preferred retailers with more and better product information earlier, while reducing the number of product attributes and resolution of product photos to less preferred distribution channels.

This is, for example, often the case in the travel industry where tour operators provide retailers with less content than on their own Web site. In this way they can distinguish their own Web site from retailers selling their own products to the same consumers.

# 2.2.3 Legal Compliance

Legal compliance is increasingly becoming an important tactical benefit. With registration of who edits which information and who approves which content, companies with a PIM system state to have up to 50 % better control over their data than companies without PIM.

## 2.3 Operational Benefits

#### 2.3.1 Increased Turnover

It has been proven that the provision of good product information, improves sales. Studies have shown that online **conversion ratios** can increase from 17 % to 56 %, according to AT Kearney, by providing better product information. Likewise, Aberdeen reports 16 % more product sales by increased conversion rates in e-commerce.

Online conversion is increased in several ways:

- Online better **keyword search**, **navigation**, **filter and comparison facilities** can be offered when product information is in order.
  - Keyword search can be improved by limiting search results only to relevant categories and fields. A few examples:
    - Products in the "Banana" category probably match the search term "banana" better than an apple with within its description "banana like taste".
    - Similarly, PIM systems can support search by maintaining alternative names for products (e.g. a "Golden Kiwi" might also be called "Yellow Kiwi").
    - Many PIM systems not only support alternative names for products but also categories and attributes. As a result, the query "banana like taste" can be translated to taste = banana which again might result in showing bananas as search result but also apples which have as value for taste "banana".
    - Finally PIM systems store values separately from the unit they are specified in. A search for a "2 pound pineapple" can therefore result in showing pineapples with a weight index of 0.75–1.25 kg.
  - Navigation can be improved with clear categorization. E.g. most users will instinctively search for pineapples in the "Exotic fruit" category.
  - Filtering (also called facetted search) becomes possible when attributes are standardized, allowing users, for example, to filter on size (S, M, L, ...), color (red, blue, green), taste (sour, sweet).
  - Comparison is allowed when the same attributes can be matched. "Taste" may be a uniform attribute for both pears and apples and therefore a relevant comparison, while comparing a bike with an apple makes little sense as they have no attributes in common.
- Furthermore, a typical sales feature like **product bundling, configuration** and **online advisory** services can be offered if the basic product information is up to speed.
- A PIM is essential for cross- and up-selling which are known to increase the
  average purchase amount. In the ROI study conducted by Heiler, retailers with a
  PIM system created far more relationships between products than those without
  a PIM.

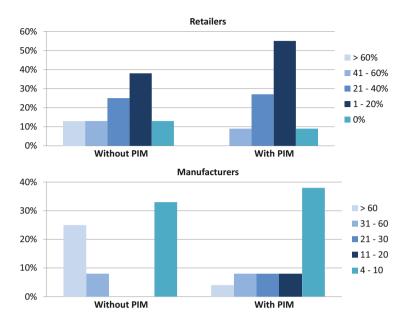


Fig. 2.4 Time needed to change the information for one product on the Web shop

• To conclude, with more and more accurate product information, the customer feels **less uncertainty** about his possible purchase.

Apart from increased conversion in the digital channel, conversion may also increase via other channels like customer care and in the sales force by enabling them with better product information. For example, The Yankee Group reports a 25 % enhancement within Customer Service due to the introduction of a PIM system.

In short, a PIM system can help revenues grow in several ways. How much depends on several factors. However, overall Aberdeen reports a growth in revenue of up to  $20\,\%$  and more.

## 2.3.2 Less Cost (or Better Information)

PIM can reduce the cost per product in several ways:

• Faster information retrieval: Aberdeen measured a reduction in time searching for information of 2 working hours a week per employee. A different study shows search time is reduced by more than 25 % with the introduction of a PDM (Könst et al. 2009). Heiler's ROI study also confirms improvement in search time. Before the introduction of a PIM system, less than 17 % of staff at manufacturing companies spend less than 2 h per week searching for products. After implementation this percentage had grown to 36 %. For retailers this percentage grew from 47 % to 58 %.

- Faster editing: It became clear in the ROI study by Heiler that a PIM can also influence the speed at which a product can be edited. Both retailers and manufacturers with a PIM needed less time to edit a product than companies without a PIM system, as Fig. 2.4 shows. On average retailers reported, with the introduction of a PIM system, the time to update one product was reduced by 30 %. In addition, the time needed to remove a product information error from the Web shop was reduced by 75 %. The reason for this is simple. The survey shows that 68 % of those retailers using a PIM system have only one or two systems for data maintenance, while for those retailers without a PIM this figure is only 21 %.
- **Fewer returns**: better product information not only leads to more sales, it also leads to fewer product returns (up to 23 % according to Heiler). Especially in the fashion industry, where returns are on average 20 % of all orders, being able to reduce the percentage of returns makes the difference between running a profitable Web shop or not.
- Less data cleaning: as PIM systems allow easy interfacing with other systems. As a result less information has to be updated manually. According to Goodmasters, 25 min per SKU per year is spent on manual item data cleaning which would take only 4 min with automatic synchronization. In other words, 20 man months per 10,000 SKUs!
- Less double work, more re-use: with one entry per product into the PIM system, the chances that the same product is maintained twice are strongly reduced. As product information becomes more centrally available, re-use of product information increases accordingly.
- Less re-work: as PIM systems offer several tools to validate product data entry the number of mistakes is significantly reduced. AT Kearney estimates that 30 % of all article data from wholesale and producers has at least one mistake in it. It estimates the cost of correction to be between 60 € and 80 € per product.
- Fewer logistical errors: when product information gets better fewer mistakes are made in logistical processes. Proctor & Gamble discovered that 3.6 % of its orders included products that were obsolete. Johnson & Johnson also discovered that inaccurate product data caused 2.5 % out of stocks with its biggest retailer Walmart. Accurate data would be able to reduce inbound logistical costs by 0.5–1.0 % and outbound logistical costs by 0.2–0.7 %. While the percentage seems low, the cost reductions are significant when financials are involved.
- **Fewer information enquiries**: according to AT Kearney, the introduction of a PIM system resulted in 27 % fewer customer calls. When product information improves, customers have to contact the company less by phone and email to get the information they want before they buy.
- Fewer integration costs: according to Heiler, the time needed to integrate the
  offering of a supplier differs strongly per company and per supplier. In the Heiler
  ROI study, over 50 % of manufacturers and 59 % of retailers have to manage

<sup>&</sup>lt;sup>2</sup> Source: GoodmastersHQ.com presentation, July 2012.

11 or more integration projects per year. In this context, 26 % of retailers have over 100 data integrations to manage. The respondents' answers make it clear that the time taken to integrate supplier data has been greatly reduced by using PIM. More than 54 % of integrations are carried out within 2 weeks; only 15 % managed to achieve this prior to the introduction of PIM. 45 % were carried out within 3–4 days (with PIM 25 %) and 35 % took 1–6 months (with PIM only 21 %).

- Letting suppliers do the work: PIM systems allow for the easy import of external product data, either automated or manually by the supplier itself. According to AT Kearney, savings can be significant as companies invest an average of 25 min per article per year from not synchronized data. With 100,000 products this adds up to 3 full time equivalents. However, in reality, few suppliers are yet able to provide accurate product information in a readable format. As a result, this benefit is rather industry specific and depends on the willingness and professionalism of the suppliers.
- Outsourcing of PIM processes: while we do not recommend any company outsource all their PIM processes, some labor intensive processes, like product enrichment and translation, can much more easily be outsourced to low cost countries than before or be purchased from an external supplier.

Overall the operational benefits of a PIM system can be significant. Aberdeen sees in its research a 67 % drop in labor cost. In a similar fashion, the Yankee Group reports an increase in employee productivity of 20 %.

However, in our own case studies we do not see the cost savings being realized. While the above-mentioned cost reductions are valid, in reality the introduction of a PIM system rarely reduced operational costs. The cost savings are usually directly invested in creating better and more complete product information and/or supporting the long-tail strategy.

To summarize, PIM systems seem to be quite able to create a positive ROI fast. According to the Yankee Group, an ROI of 25 % might even be achievable within 1 year (The Yankee Group 2005).

# 2.4 When to Consider a PIM System

A PIM system is not a "must have" for every company. Several factors determine whether there is a need for a PIM system:

- Lots of products and product changes: fashion retailers in particular change their entire assortment twice or even more times per year.
- Lots of users: Excel is a great tool but with a few thousand products it becomes less great, especially when several people need to work on product information at the same time.
- Product complexity: when products have many attributes and the kind of
  products offered differ widely, the cost of working with Excel or standard
  database systems increase sharply. PIM systems allow products to be classified
  much more easily.

- **Data quality/compliance**: PIM has several tools to improve and maintain the quality of product information. Usually it also logs who edits and/or approves which product content and when.
- Lots of sources/synchronizations: the manual import of data is doable if it involves uploading a CSV file once a week. However, synchronization of data with 15 different suppliers on a daily basis can best be automated.
- Lots of customer segments: the more customer segments, the more different views on the complete assortment have to be maintained.
- **Lots of channels**: the more (different) channels (print, Web, mobile, etc.) the more likely different output formats and interfaces have to be supported.
- **Countries/languages**: when providing product information in 32 countries with local adaptation of content, a PIM is no longer an option but a must have.

Even companies with a limited number of products may decide to invest in a PIM system. A premium brand producer of strollers, for example, only has three different kinds of strollers. However, the strollers are sold in over 80 countries in 13 different languages, the products have more than 1,000 variants as components may differ in color, product parts change over time and may differ per country due to regulatory demands, etc. As a result, 30+ central marketing staff and local sales employees are continuously working on product information and a PIM system proved a necessity to manage the complexity.

### References

Könst, J. S., la Fontaine, J. P., & Hoogeboom, M. G. R. (2009, August). *Product data management, a strategic perspective*. Geldermalsen: Maj Engineering Publishing.

The Yankee Group. (2005, January). The cost of waiting: Building the ROI case to implement product information management now.



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