

# Workflow for Product Information Management



## Applies to:

SAP MDM 5.5. For more information, visit the [Master Data Management homepage](#).

## Summary

The Master Data Management (MDM) has been broadly classified into two streams; Customer Data Integration (CDI) and Product Information Management (PIM). Unlike CDI, the PIM challenges are more around enrichment of the product data that is consolidated from various sources. Generally “product” data is more fragmented than “customer” data. The “product” data may come to PIM hub through automated sources or it may be created through manual interactions. In most of the scenarios enrichment of “product” data is done through manual interactions with PIM system. This white paper discusses the PIM scenario of “product” data enrichment and how workflow can be utilized to model such scenarios.

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## Author Bio

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## Context of Product Data enrichment

Product Information Management (PIM) is the very prominent stream of master data management (MDM) domain. The PIM deals with handling the people, processes and technology around the “product” master data. Another stream of MDM is Customer Data Integration (CDI) that deals with providing golden source of “party” (primarily known as customer) information at an enterprise level.

As I have discussed in another article, PIM challenges are different than CDI challenges. The “party” data needs more focus on cleansing. The “party” data is typically consolidated from multiple silos of “party” information (from applications / databases). Generally such sources provide conflicting information related to same set of attributes of “party” information. The cleansing consists of standardizing, transforming/correcting and matching/merging of “party” data. The “party” data cleansing can be automated in most of the business scenarios without or very minimal manual intervention.

The “product” data cleansing has different needs as compared to “party” data cleansing. Typically “product” data is consolidated from various sources which provide information about different set of attributes. The product data is typically considered as fragmented data. The “product” data consolidation can be automated provided that the due diligence (correcting product data) is done outside the boundary of master data hub.

The best practice is to do the “product” data due diligence / enrichment within master data hub. Unlike CDI, the majority of “product” data cleansing / enrichment process is manual. Various stakeholders take part in “product” data enrichment. Typically this enrichment process is implemented in terms of workflow within master data hub.

## Workflow in Product Data Cleansing / Enrichment

There are various processes that need to be considered for “product” data master hub. Following is the list of typical such processes in retail domain.

- New Product Introduction (NPI)
- Product maintenance
- Product removal / reintroduction
- Product promotion
- Mass product update

### New Product Introduction (NPI)

The NPI process is the primary process and organizations make sure that it is optimized to improve the “product” time-to-market. Organizations need to make the profit during the shorter life span of the product in the market. They can not afford to spend lot of time in introducing new products in the market.

Traditionally the NPI process takes significant amount of time anywhere from one month to multiple months. This is primarily because NPI process involves lot of stakeholders who need to know the shared product information so as to contribute other related information of the product to make the product definition complete. This requirement itself demands lot of collaboration and information exchanges within various stakeholders. This poses lots of challenges and makes the NPI process very slow. Further we will see typical NPI process (vanilla version) in retail industry. Also we will see basic ingredients of implementing this NPI process in SAP MDM.

## Product Maintenance

It is not only the NPI process, but product maintenance is equally important. Organization might be doing a price change for a product which needs to go in market for specific season. This also demands quick time-to-market.

Typically “product” maintenance involves same or majority of subset of stakeholders that would be involved in NPI process. It has been observed that organizations face lot of challenges in doing product maintenance due to non availability of golden source and inability of coordinating the maintenance efforts.

The product maintenance process deals with changing any of the attribute values of the “product”. Typically this process is implemented in terms of workflow in MDM hub. This enables organizations to control and coordinate the product maintenance effectively. The workflow makes it faster and quick time to market.

## Product Removal / Reintroduction

Typically this process deals with to remove or reintroduce the earlier removed product from the market. Organization need to take decision depending on the market condition and demand to remove the product from the market. For instance during back to school season, some products are introduced to cater to the school needs and then later those are removed due to lower demands for those products. Those products are again reintroduced next year during back to school season.

This process can also be implemented in terms of workflow. Typically few stakeholders are involved in this process as compared to NPI or Product maintenance workflows. The stakeholders are required to approve or disapprove the removal or reintroduction of product/s.

The same process has two versions; one for individual product and another could be for set of products. Again for instance for back to school, number of products are reintroduced and removed later.

## Product Promotion

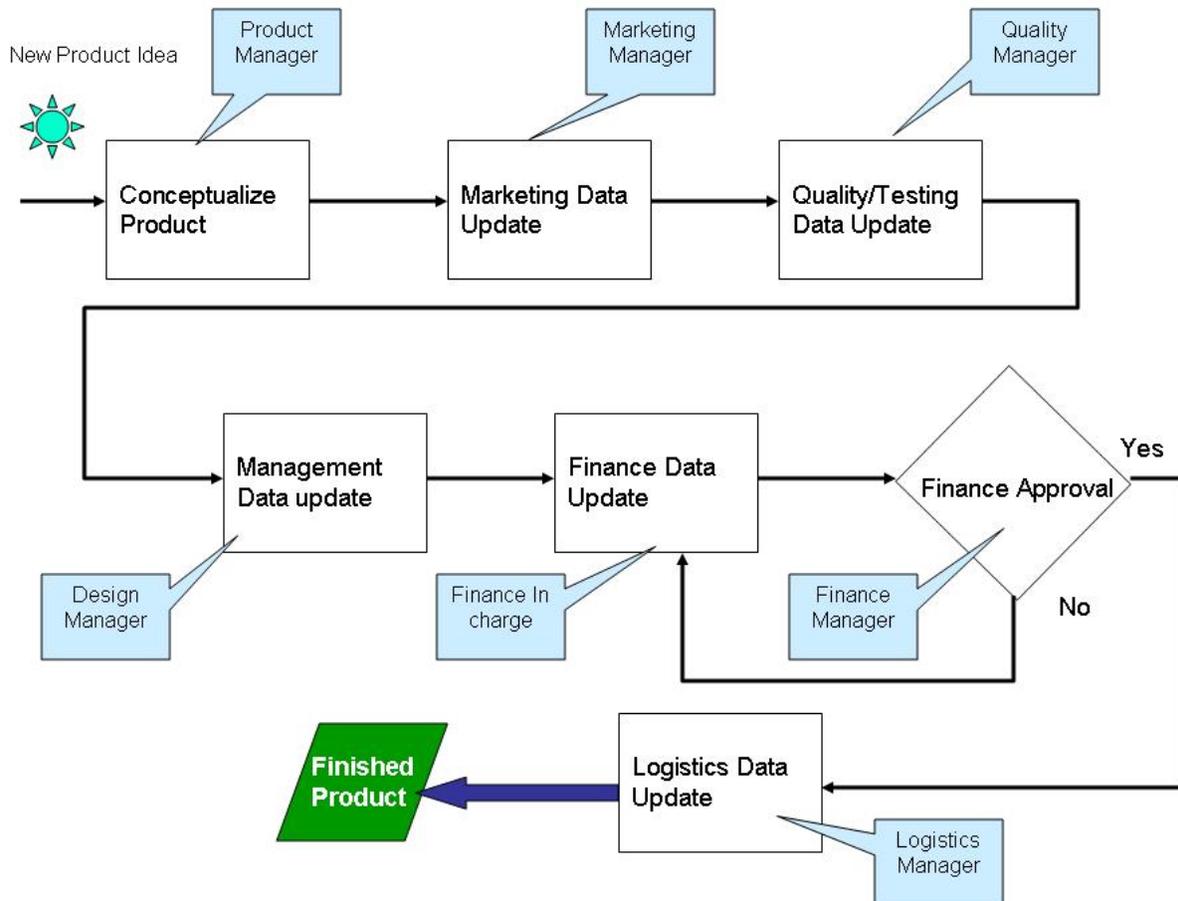
This process needs to be extremely fast to make sure that the rising curve of the product life cycle is captured. Typically this process is used during seasonal promotions or special promotions. The products which are suitable for specific season are put on promotion to capture the bottom line of the profit. This process involves more involvement from marketing and finance departments to make sure that the product promotion looks attractive for the season or the purpose.

## Mass Product Update

This process is used less frequently typically once or twice a year. The use of this process is to do the mass product correction for any market shift or due to regulatory requirements. Organizations also do mass product updates one or twice a year to adjust to market needs.

## New Product Introduction

Let us take a look at the typical NPI process in retail scenario. Following diagram shows the typical process. This is the vanilla version of the NPI process. It could involve lots of complexity and complex sequencing of activities.



**Figure 1 : Typical NPI workflow in Retail domain**

In this vanilla version of the NPI process, various stakeholders take part and collaboratively enrich the product data.

- 1) **Product Manager** : Product manager is the In-charge of the specific product that is being introduced. The product idea may be initiated by himself or some other person. Although typically Product manager gathers necessary information to initiate the new product introduction.
- 2) **Marketing Manager** : Marketing manager is the key person who adds very important market information. This could also include various features and specifications that are typical characteristics of the product.
- 3) **Quality / Test Manager** : Test manager is responsible for doing product testing and making sure that the product could meet the stated specification. Also his role is to validate specification and make necessary corrections if necessary.
- 4) **Design Manager** : Design manager does the planning around the product. He uses the information updated by product, marketing and quality manager to do the planning.
- 5) **Finance In charge** : Finance person updates the finance related information for the product. He makes decision based on marketing data updated in the product data.

- 6) Logistics Manager : Logistics manager is responsible for doing the transport planning of the new product being introduced.
- 7) Finance Manager : Finance manager is typical approving authority. He would approve or reject the new product request. The finance manager sends the request back for finance update or to any other previous steps or reject the request completely. There could be other approval processes as well in the flow of NPI process.

## Workflow in SAP MDM

We will see some of the important aspects of implementing workflows in SAP MDM. In the dropdown select “Workflows” table.

The screenshot shows the SAP MDM interface. The 'Workflows' table is selected in the dropdown menu. The table contains one record with the following details:

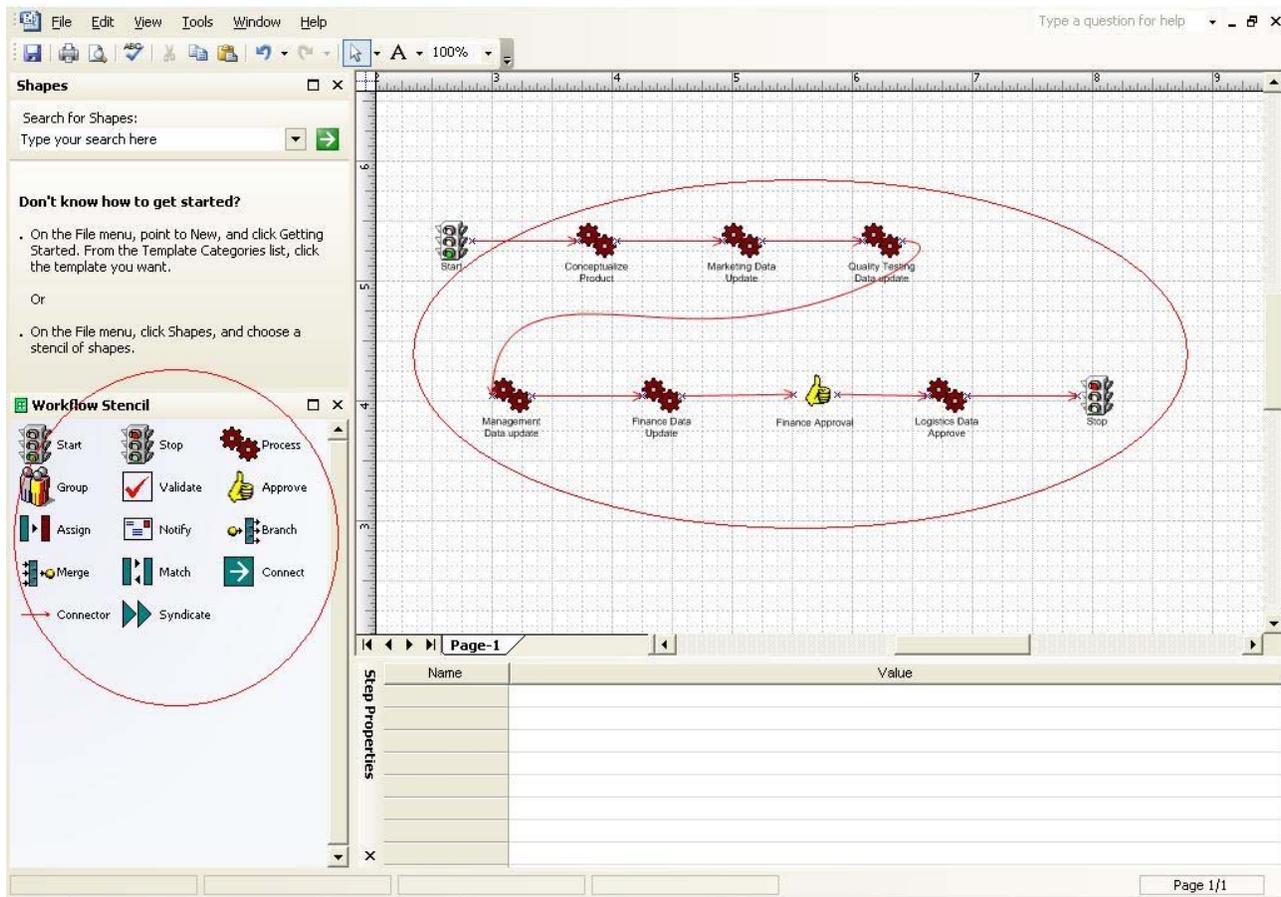
Name	Description	Table
New Product Introduction	Workflow to introduce the new product	Products

The Record Detail view for the selected record shows the following information:

Name	New Product Introduction
Description	Workflow to introduce the new product
Table	Products
Workflow	[Microsoft Visio Document]
Owner	Admin
Active	Yes
Trigger Actions	Manual
Max Records Launch	1
Max Time Launch	1 d
Created By	Admin
Created	08/30/2008 20:33:23
Modified By	Admin
Modified	09/01/2008 20:56:38
CodeName	New Workflow

**Figure 2 : Creating Workflow**

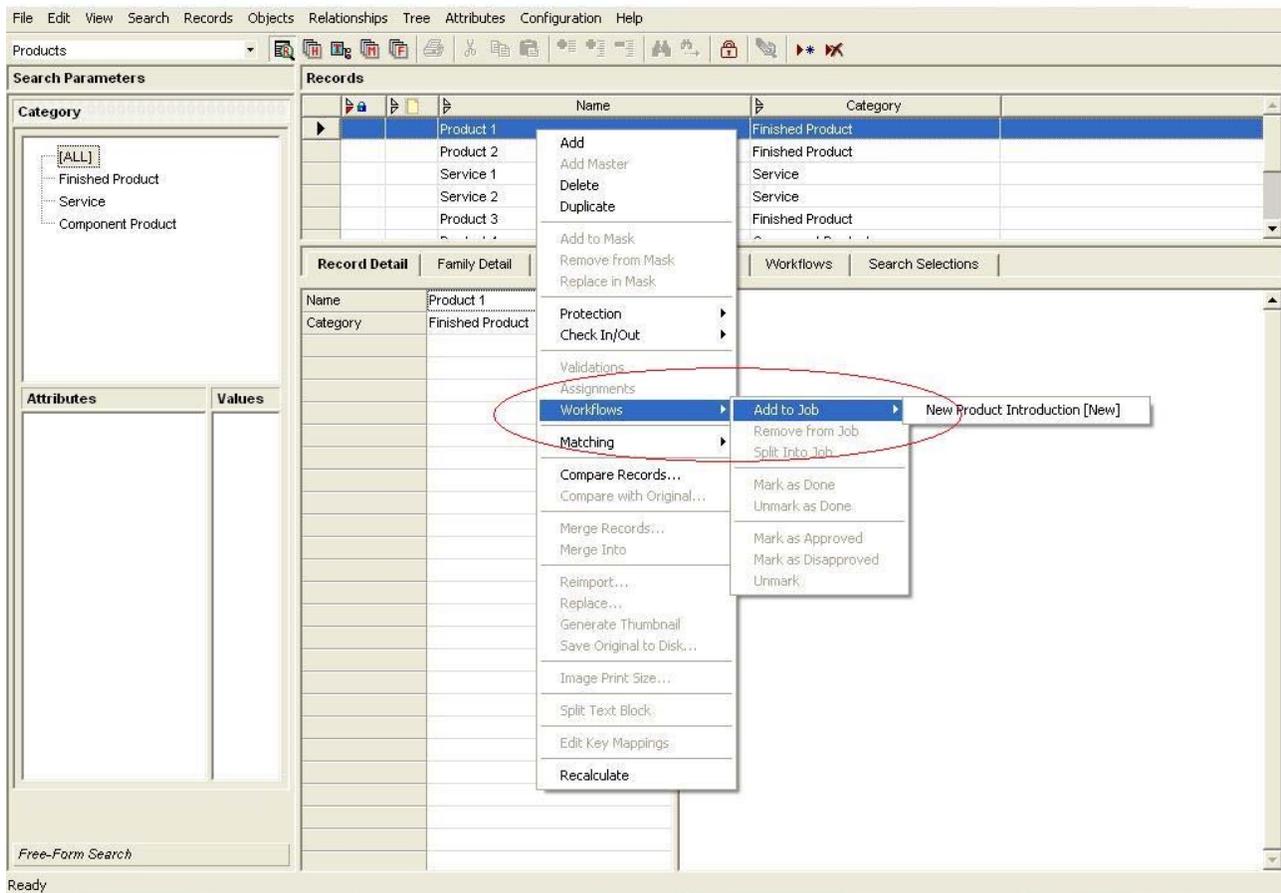
Insert new record to the table to create a workflow. There is various information to be provided including the table and the status of the workflow if it is active. Table is the table to which this workflow is associated with. It also has “workflow” parameter. Click on extreme right icon “...” to open the Visio editor to design the workflow. Following diagram shows the Visio editor that is invoked for this workflow. The diagram also shows the vanilla version of this workflow design.



**Figure 3 : Workflow Design**

In the left pane, Visio editor shows workflow stencil. It has various items that can be introduced as workflow steps in the design. It includes start, stop, process, validate, approve and many other steps. You can simply drag and drop the workflow step into the right hand pane of the Visio editor. Once the design is complete, click save and exit.

Workflow can be triggered as either manual or as record import, record update or record add. Here in this example we have used manual workflow trigger. This means the workflow can be started only by manual intervention.



**Figure 4 : Adding “product” to workflow**

As shown in the diagram, a “product” record/s can be added to workflow by right clicking on the selected row/s and choosing “workflows” and “Add to Job” selected workflow. This creates workflow job and makes it ready to be launched by the user.

The screenshot displays the SAP Workflow Manager interface. The top menu bar includes File, Edit, View, Search, Records, Objects, Relationships, Tree, Attributes, Configuration, and Help. The main window is divided into several sections:

- Search Parameters:** A tree view under 'Category' showing '[ALL]', 'Finished Product', 'Service', and 'Component Product'.
- Records:** A table with columns 'Name' and 'Category'. One record is visible: 'Product 1' in the 'Finished Product' category.
- Navigation:** Tabs for 'Record Detail', 'Family Detail', 'Validations', 'Assignments', 'Workflows', and 'Search Selections'. The 'Workflows' tab is active.
- Status:** A list of workflow statuses: '[ALL]', 'Unlaunched', 'Available', 'Received', 'Send Next', and 'Completed'. The 'Unlaunched' status is highlighted with a red oval.
- Tasks:** A table with columns 'Workflows', 'Step', 'Step Description', 'Status', 'User', and 'Rec'. One task is visible: 'New Product Intr...' with status 'Unlaunched' and user 'Admin'. This row is also highlighted with a red oval.

At the bottom, the status bar shows 'Ready', '1 of 9 records found', and 'Record Mode'.

**Figure 5 : Launching workflow**

As shown in the figure, the “Unlaunched” section of the “Workflows” tab shows list of workflow jobs that are not yet started. One can start the workflow job by right clicking the selected workflow job and selecting “launch”.

The screenshot displays the SAP Workflow Manager interface. On the left, the 'Search Parameters' pane shows 'Category' set to '[ALL]' and 'Finished Product'. Below it, the 'Attributes' and 'Values' panes are empty. The main area is divided into several sections: 'Records' at the top, a navigation bar with tabs for 'Record Detail', 'Family Detail', 'Validations', 'Assignments', 'Workflows', and 'Search Selections', and a 'Status' list on the left. The 'Status' list includes '[ALL]', 'Unlaunched', 'Available', 'Received', 'Send Next', and 'Completed', with 'Received' highlighted. The 'Tasks' table on the right shows a workflow step with the following data:

Workflows	Step	Step Description	Status	User
New Product Intr...	Conceptualize Pr...	The first step in ...	Received	Admin

At the bottom of the interface, the status bar indicates 'Ready', '1 of 9 records found', and 'Record Mode'.

**Figure 6 : Receiving workflow notification**

The user of the first step receives the workflow notification in “Received” section of “Workflow” tab. The workflow can be advanced by selecting next workflow step in “Next Step” right click menu. In the above example, “Assignee User” is set as “owner”. Although specific users or roles can be assigned to every workflow step as “Assignee User”.

## Related Content

[MDM 5.5 SP05 - Console Reference Guide](#)

[MDM 5.5 SP05 - Data Manager Reference Guide](#)

[SAP MDM Workflow](#)

For more information, visit the [Master Data Management homepage](#).

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