PRODUCT MANAGER

OBJECTIVE

Product Manager addresses product customization and variety definition early in the “idea” or concept phase of the development process. With Product Manager, companies can capture market and technology requirements and then decide how to best satisfy them with standard product features that are leveraged as appropriate across the product portfolio.
OVERVIEW

Quantifying and minimizing the “cost of variety” is a business challenge many companies face today. In a competitive landscape driven by the rapidly evolving needs of technology-savvy consumers, companies recognize that product personalization is critical to business success. Companies are forced to concentrate on more market segments and constantly strive for short lead times in order to stay competitive. Introducing customization and personalization in existing product portfolios increases development costs and introduces risk. 

Product Manager helps manufacturers of complex products to manage the conceptual and commercial aspects of their products while maximizing the reuse of existing intellectual property (IP) and assets. With Product Manager, users define and manage a master feature-option dictionary and configuration rules across the product portfolio. This approach to product planning provides valuable input to R&D and operations to deliver products to market faster while helping to minimize design changes and reducing development cost.

Product Manager, Product Architect, and Product Engineer are often used together by companies to develop and launch the right solution at the right time. They collectively increase company efficiency while reducing time to market. Product Manager is used to articulate and plan the company’s product objectives and strategy. Product Architect systematically designs the product architecture to meet the product objectives and strategy. Finally, Product Engineer executes and implements physical solutions that meet the design goals set with Product Architect.

HIGHLIGHTS

Key features and capabilities include:

Product Line Definition

Group and manage the company’s portfolio of products and define the mandatory features and configuration rules that all products within that product line must adhere to. Mandatory features are inherited by all products without compromising organization security.

Product Planning/Product Evolution

Before development starts, Product Manager can plan product evolutions (“product revisions”) that meet market demands and incorporate new technology improvements that correspond to customer needs. Each product evolution includes the introduction of features and options for a given date range. Each product adheres to the mandatory usage of the master option dictionary defined by each product line. Companies can manage concurrently parallel product releases within the same product model.

Build Management

Product Manager can plan specific end-item builds for a given product. These builds can be for a specific configuration with assigned unit numbers, serial numbers, or SKU/PCU numbers.

Requirements Management

Product Manager enables organizations to improve their overall global requirement management process by capturing the “voice of the customer,” regulation, or any other product requirements that define the product. In addition, as requirements can be linked to the components of the product architecture, users get full traceability throughout the entire development process, ensuring that the products that are developed meet original goals.

Requirements traceability maintains the linkages from the source of each requirement through its decomposition to implementation and verification. Requirements can be decomposed from high level requirements into individual detailed low-level requirements so that they can be partitioned and allocated to products and system components. While creating derived and decomposed requirements, design rationale can be captured to effectively maintain design decisions throughout the product lifecycle and provide traceability to the underlying foundation of the original designs.

During the analysis process, users can filter requirements in specifications and compare entire requirement structures or individual requirements to identify changes or deltas. Users can also reserve and un-reserve requirement structures to prevent multiple users from making modifications simultaneously.

Configuration Feature-Option Dictionary

Product Manager increases product definition integrity and design efficiency by establishing a single list of features and options with usage rules for all process domains to adhere. Seamless and immediate access to each model’s option list is available to digital designers to configure their product structures. With Product Manager, users can establish a single configuration feature dictionary that enables configuration consistency across all configured structures. Product Manager defines the configuration feature dictionary from a marketing perspective and Product Architect defines their features from an engineering perspective. Features and options are aligned together with mapping rules to bridge the gap between engineering and marketing.

Key Benefits:

• Bridge the gap between marketing requirements and engineering.
• Introduce a new product customization strategy that can react to changing market needs.
• Define customer and product requirements that will drive all product development functions.
• Improve customer satisfaction by ensuring that all requirements are delivered in products and services.
• Manage standard product configuration and variants per customer requirements (new SKUs).
• Validate that customer needs are fulfilled during product development.
• Reduce product development duration, cost and risk by reusing proven and standardized technology.
Configuration Rules
Configuration rules support different kinds of rules to enable automatic inclusion of components based on configuration options in the definition of the generic product architecture (150%). Simple and complex expressions are supported as well as a wide variety of rules such as “if-then,” Boolean compatibility, resource rules, and variant inclusion rules for both products and parts. Mandatory rules can be defined at any level of the product hierarchy to enforce consistency and control the number of buildable combinations.

Product Configurator
The web-based product configurator helps define the standard product configurations that respond to specific customer requirements or company sales goals. The configurator consistently enables users to select options quickly from the list of features while evaluating all the compatibility and preference rules defined for the product. The result is only valid combinations of options are available for the user to select. The user experience grays-out invalid options and automatically selects other dependencies providing a consistent result independent of selection sequence. With Product Manager, users can rapidly create standard product configurations that meet specific markets or consumers configurations called SKUs.

BOM Generation
A multi-level EBOM can be generated based on a specific product configuration. During EBOM generation, users can preview the selected standard parts based on the selected configuration choices and replace standard part selections with custom parts to satisfy custom order demands. A precise BOM, a flat list of parts, can be generated based on a specific product configuration for build-to-order (BTO) business models.

Issue Resolution and Change Management
As products enter into the development phase of their project, changes are inevitable but too many changes are cost prohibitive. A cross-functional change process helps users to manage and respond to component changes systematically. Variant management provides a choice of change management processes that provide immediate visibility to change requests while maintaining integrity of the original reported problem to the internal resolution, ensuring the orchestration of the change implementation, while enabling users to monitor the change process progress and take the appropriate informed decisions.

Collaboration & Approvals
Users can benefit from a wide range of capabilities for global enterprise collaboration. Those capabilities include the ability to manage and organize shared documents and structured product data. They also enable the creation of digital workspaces for virtual teams to work together. Users can easily raise issues, organize meetings and track decisions while any object lifecycle modifications can be formally approved using routes defined by end-users or, to simplify and facilitate a repeatable approval process, standard route templates.

Microsoft Integration
Users can create and access 3DEXPERIENCE® data from the most popular Microsoft applications: Word®, Excel®, PowerPoint®, Outlook®, Windows Explorer, and Windows Desktop Search. This capability enables enterprise-level collaboration while not disrupting the established productivity of end-users. With product content being managed in 3DEXPERIENCE rather than on users’ PCs, organizations are able to create, manage and review product content more securely.

Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes’ collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.

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