



## Trinity Product Modeler (TPM) Data Sheet

Software for Oracle Master  
Data Management

Supply Chain  
Management  
Success  
Management

“In our i-Semicon (Oracle Application Implementation) project, we have implemented a Trinity productivity tool named, “Trinity Product Modeler” aimed at substantial improvements in the speed and accuracy of creating and maintaining the complete Supply Chain (Item, Bill of Materials, and Sourcing Rule). Today, our users can create, edit, and revise complex bills of material in a fraction of the time it would take otherwise.”

*Shuji Kuroki  
Global Master Center Lead, Sony Semiconductor*

### Reduce Time, Free Up Resources and Improve SCM Data Quality

TPM provides a flexible, intuitive, feature rich graphical user interface that greatly reduces the amount of time and resources required to maintain master data while significantly increasing the quality of the data in Oracle Applications.

### Need for Product Modeler

Traditional supply chain data models integrate inventory, supply chain, order management, and bills of materials modules to interface with each other. This data model requires users to:

- Enter inventory materials or parts and their descriptive data, and to enable materials in the respective plants.
- Group materials and assign the groups to materials
- Make cross-references to vendor part number or customer number
- Define BOM parent and component relationship
- Define Co-Product, alternates and substitutes
- Define material supply pattern for all inventory materials
- Define full supply chain sourcing

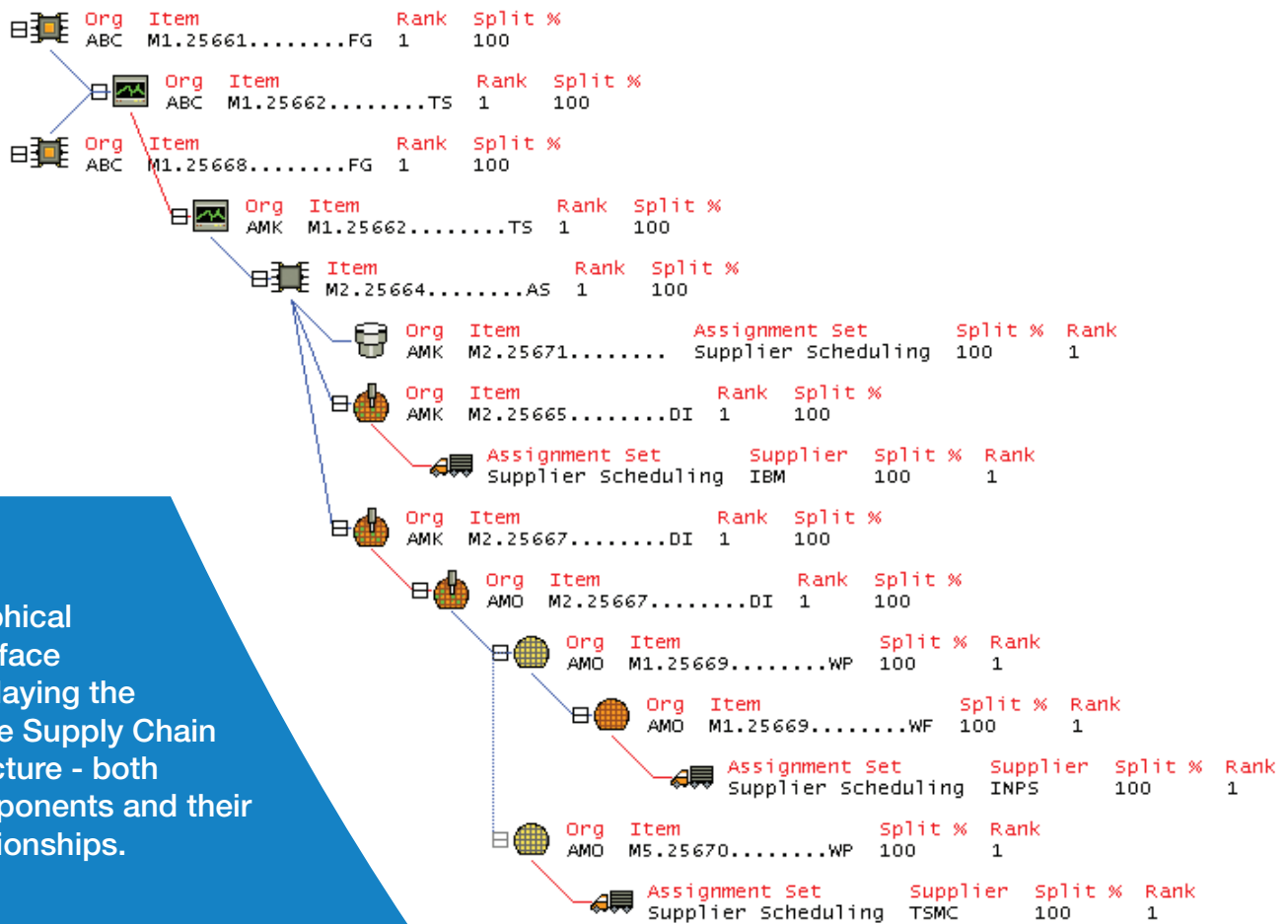
Because different modules and screens need to be accessed for these operations, the user loses visibility and track of the data definition. This process is laborious and requires long hours to generate a simple supply chain bill. All these constraints adversely effect user data retrieval.

Triniti developed Triniti Product Modeler (TPM) to provide a centralized user interface to build all master data. TPM offers the user better control and management of data and presents the data in a user-friendly format. Using TPM significantly reduces time in building a complex supply chain structure.

## Observed Productivity Results Using TPM: 85.6% Reduction in Time! Supply Chain Bill Creation: TPM Vs Oracle Applications Front End

ACTIVITY	Total User Time		Number of Screens	
	Oracle Applications Front End	TPM	Oracle Applications Front End	TPM
Bill of Material Creation (FG-TS-AS-DI-MS-RW BOM levels)	14 min 39 sec	2 min 25 sec	21	1
SR Creation (FG-TS-AS-DIMS-RW)	12 min 10 sec		4	
Bill of Material Creation (Alternate for the above case)	2 min 40 sec	1 min 50 sec	2	
<b>TOTAL</b>	<b>29 min 29 sec</b>	<b>4 min 15 sec</b>	<b>29</b>	<b>1</b>

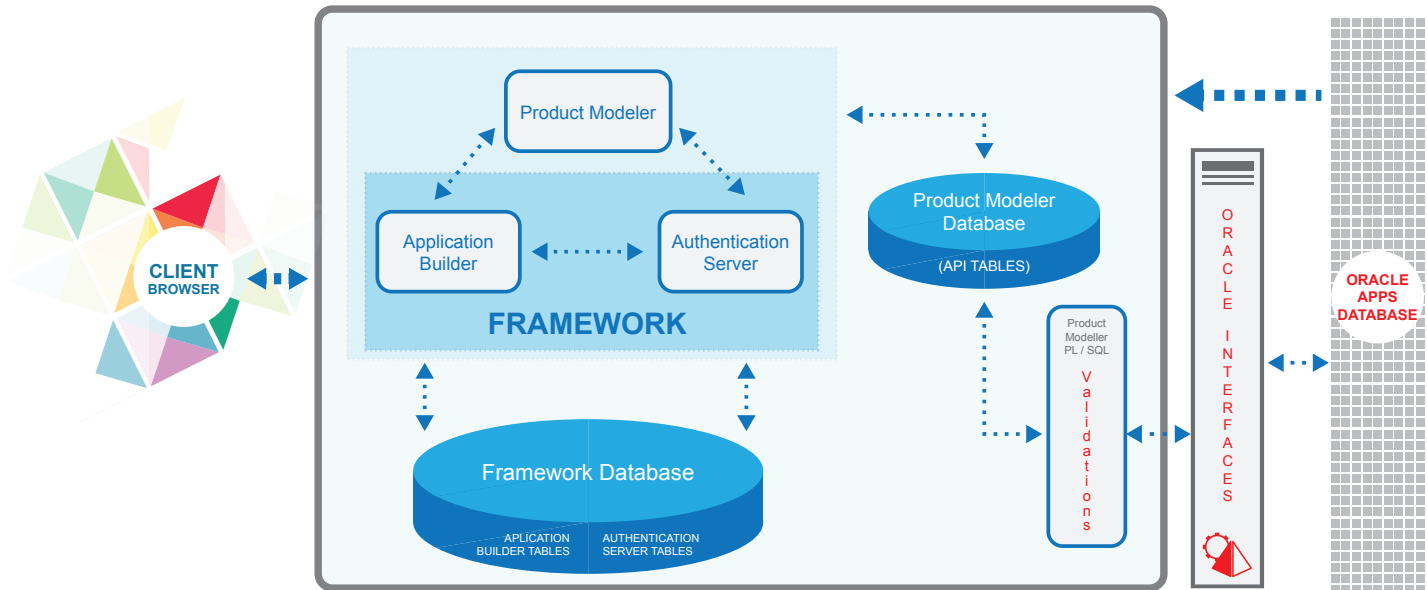
## Full Supply Chain as constructed in TPM



Graphical Interface displaying the entire Supply Chain structure - both components and their relationships.

Single window for creating, modifying and viewing supply chain structure.

## Triniti Product Modeler



## High Level Architecture & Framework of TPM

The above figure illustrates the three-tier architecture of TPM.

### Application Builder

Facilitates administrators to configure menu items, workflows, nodes, relations, sequences, models, eWorksheets, role-based security (RBS) and user-based security (UBS) profiles.

### Authentication Server

Facilitates creation of roles and users, assignment of roles to the users. It maps the control access to different application features.

### Product Modeler

A deployable Web application that interfaces with Oracle Applications. Facilitates users to create, modify, and view master data from a single user-friendly interface. Hierarchical and structured data is built by dragging and dropping nodes and linking them with appropriate relation connectors.

# Key Features of TPM

## Routing Templates

## Routing Mass Change

Single graphical screen to define the following:

- Items & Item Attributes/ Properties
- Bill of Materials
- Alternate BOM
- Co-Products
- Substitute Components
- Sourcing Rules

## Global Where Used

- Drills down through multiple BOM levels
- Search with filters

## View Cum Yield & Cycle Time

Mass BOM Copy  
(from one inventory organization to another)

## Item Mass Update

- Selection criteria based on plant, items, attributes, characteristics.
- Where Used criteria based on plant, material, attributes and characteristics
- Update criteria on item attributes, characteristics and templates
- Update propagation based on BOM levels
- Exclusion of specific items or attributes on updates
- Override of values on updates

## Model (improves data accuracy & efficiency)

- Model can be used to standardize manufacturing processes and sourcing for technologies.
- Model can be nested together. User can automatically look for the “Best Fit” of existing model.

## Supply Views - View real-time global supply for ALL levels of a supply chain BOM

- By BOM level
- By Organization
- By Item Number
- By Item Organization Level

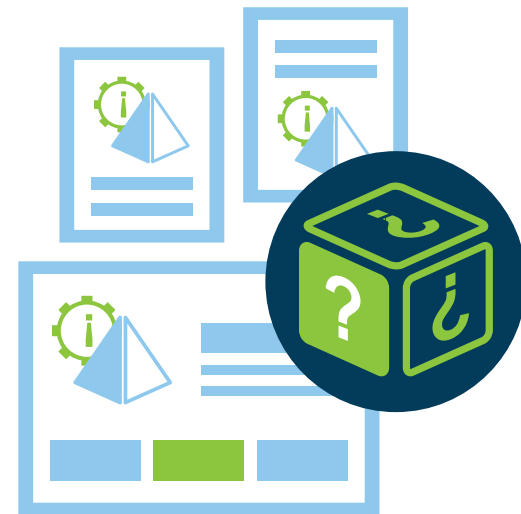
## Highly configurable

to match changing business requirements

## Additional Features:

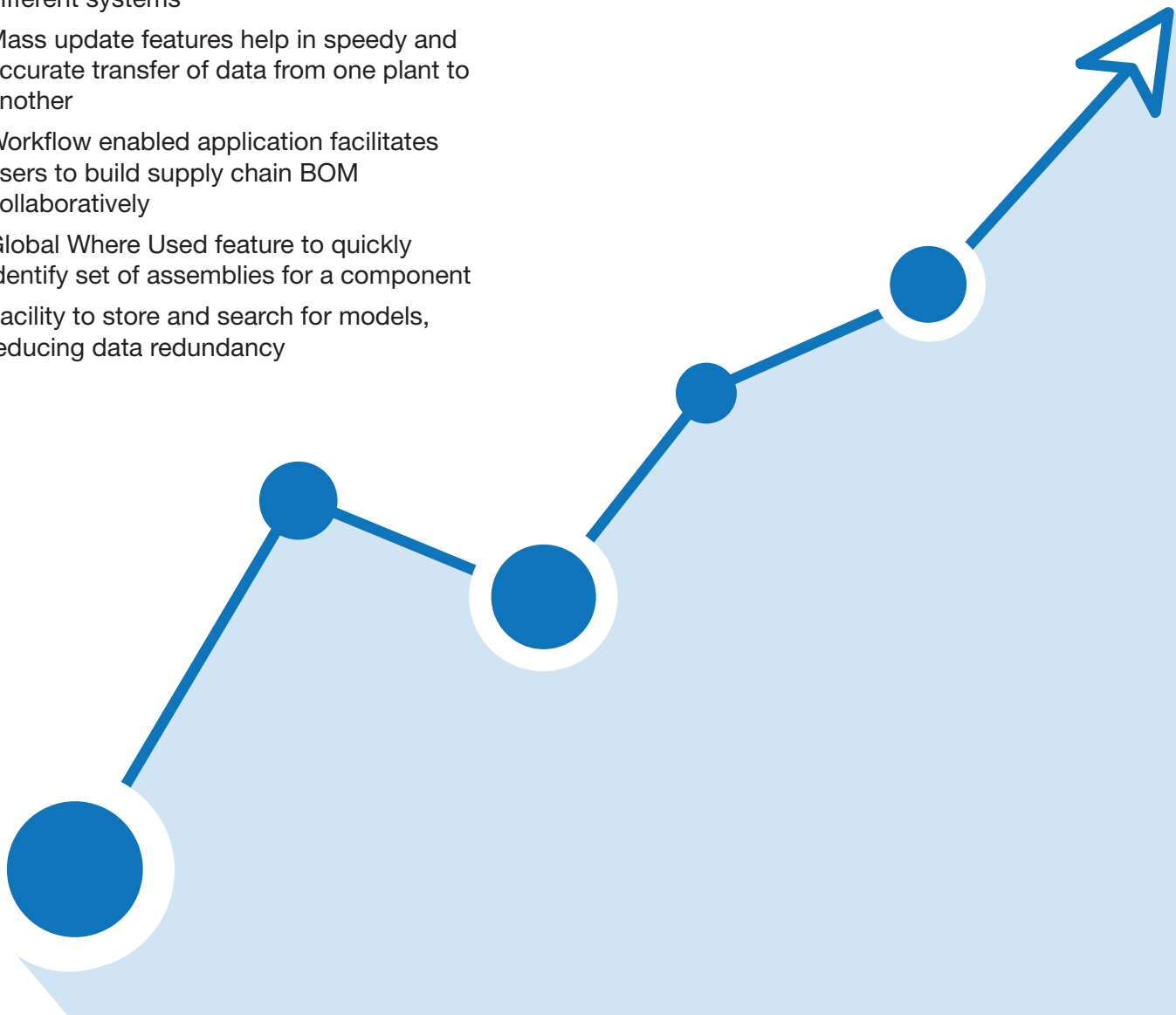
- Item Catalogs
- Safety Stock
- Routing/ Routing Operations/ Network operations/ Operation Resources
- Common Routings
- BOM component DFFs

TPM currently supports 11.5.9, 11.5.10, R12.06, R12.1 and R12.2



## Benefits of TPM

- Increase in productivity due to significant saving in time in building a complex BOM
- Graphically visible and intuitively linked product structure reduces errors
- Using templates ensures data integrity and speedy inputs
- Real time view of supply-chain throughout the enterprise
- Single platform to generate all supply-chain bill information
- Can be used as a centralized master data management tool by integrating with different systems
- Mass update features help in speedy and accurate transfer of data from one plant to another
- Workflow enabled application facilitates users to build supply chain BOM collaboratively
- Global Where Used feature to quickly identify set of assemblies for a component
- Facility to store and search for models, reducing data redundancy
- Reduces time & effort required to build complex BOM & sourcing structures by 80% or more.
- Timely, Reliable, Accurate and Complete (TRAC) Master Data significantly improve processes associated with Manufacturing, Planning, Financial, Marketing and Sales.
- Low cost of ownership (OAG compliant).



Is TPM for semiconductor companies alone?

No. TPM will work for any company that needs to manage complex supply chain bills of materials. The images on the item types (nodes) can be configured to any industry.

What versions of Oracle ERP does TPM support?

TPM currently supports 11.5.9, 11.5.10, R12.06, R12.1 and R12.2

Can we both create and update data in TPM?

Yes.

Can you control who updates data at the attribute level?

Yes. When Workflow feature is enabled in TPM, then the attribute level control is available at the Workflow Step level.

Does TPM keep an audit trail of the changes made?

Yes, TPM keeps an audit trail of all the changes.

How does TPM update data in the Oracle ERP? Does it use API's or directly updates the Oracle ERP tables?

TPM uses Oracle supported APIs to update data and does not write directly to the Oracle ERP base tables.

Does TPM update the data synchronously?

Yes. All item, BOM, sourcing and assignment information is updated synchronously in Oracle.

Does TPM update all the data in one transaction?

Yes. If even one attribute fails validation, it will not create any part of the supply chain BOM. This ensures that the data is complete in Oracle.

How do I add new attributes to the defaults provided by Triniti?

Using TPM's in-built configuration, new attributes can be added. Triniti's support team can also help with the same.

Does TPM support single sign on (SSO) with Oracle?

Yes, TPM supports both a) Oracle and b) Active Directory SSO authentication.

Does TPM view, create and modify data in its own tables?

No, Supply Chain Data is queried, created and modified in Oracle ERP. TPM does have its own database to store tool-specific data, Supply Chain Models and Routing Templates.

If I have Product Lifecycle Management (PLM) would I still need TPM?

PLM is predominantly for Engineering and Oracle ERP is for mass production. Hence the workflows and attributes are different. TPM has rich functionality to maintain supply chain related information which is lacking in PLM. One of our customers uses both Agile and TPM.