

# Sourcing Advantage

Created by Joel Nave, last modified by Ralph Garcia on Jun 27, 2016

UX Prototype:

<https://invis.io/CZ78BTVJT>

Item Master is a temporary to permanent name for looking at parts across and outside of a Bill of Materials. The term Cross BOM Analysis is also used to describe this. Here are some contextual notes to start the discussions of this feature.

**New Lifecycle Phase** - Although there will be value in item master / BOM analysis in early phases of the lifecycle, this feature will have significant value for the production phase and beyond. As a product is introduced to the market sourcing activities transition from BOM specific to Commodity-based, cross BOM activities.

**New Persona** - As the sourcing activities transition to cross BOM activities new roles are introduced, specifically Commodity Managers / Supply Base Managers. These roles are responsible for negotiating pricing and managing suppliers for production products. They typically have a specialty based on a part category. For example, John is responsible for Power Supplies. Their goal is to negotiate the best price / cost and manage the supply base.

**New Data Source** - Currently our focus is loading data with relation to Bills of Materials. As we begin to look across BOMs, Manufacturing Resource Planning (MRP) will be a new source for Item Master information. This requires that we figure out how to handle public and private data, as well as BOM specific and MRP data.

## User

Commodity Manager or Supply Base Manager - at a bigger company

Could be VP or director or Procurement or Chief Procurement Officer (CPO) - at a smaller company

## Goals

Our users who look cross BOM (primarily for negotiating lower prices) need a consolidated view of spend per category.

#1 Goal: Reduce Costs

#2 Goal: Mitigate Supply Risks

Ways Paradata can help our customers negotiate lower prices:

- Demand rollup (across projects) to provide greater visibility than what they have today with traditional spend solutions. Know how much you are really buying to get the best volume discounts.
  - Demand by part category or by supplier
- Suggest ways to switch demand and consolidate suppliers. For example, show the user that they are buying 1M form, fit, function (FFF) equivalents of a part from 10 different suppliers (about 100k/supplier). If they consolidate to 3 main supplier, they can see who'll give the best prices when they say, this quarter I'm buying 100k, what will you give me if I increase that to 300k next quarter. (carrot)
  - Show me all the manufacturers that sell parts that match these key characteristics (meaning they are FFF equivalents) and what is the overall demand for those parts
  - Show me all the Items (the ones we consider duplicate times because they share some or all of the same AML) and what is the breakdown by supplier and the overall demand for those items
- "Should be" pricing (cross over with private data field support) - ability for customer to upload his prices (last price paid, quoted prices from CMs or ODMs), then provide visibility across the different prices what they are paying. Often turns out to be wildly different - 5¢ from the CM, 3¢ from one ODM, 2¢ from another ODM, and 1¢ from yet another ODM. Knowing this info provides leverage. Their demand is split across multiple groups, but they get the part from the same supplier and can negotiate the price for the total demand.
  - Suggest part equivalents where we have better prices (and if our public prices are better than theirs, they are really getting a bad price)
- Demand trend by project state (concept, design, active) - although the active demand may be going down, provide visibility in the upcoming commitments with newer products that will replace older products.

Ways we can help out customers mitigate risks:

- Supplier performance - Create a data-driven supplier score (Financials, Costs, Quality, On-time Delivery, Compliance, Lead Time, Responsiveness to our requests for information) and guide customers to use higher-rated suppliers. Suppliers can increase their scores by their responsiveness (cross-over into supply network collaboration) and other means.
- Health analysis (score/grade) per item and per part - better to user higher rated items/parts
- Visibility into opportunities to consolidate suppliers
- Visibility into Supply Risks and Data Integrity Issues
- Part equivalents suggestions
  - Replace non-compliant parts with compliant ones
  - Replace nearing obsolete parts with active ones
  - Suggest another supplier for single-sourced items
  - Replace parts with poor lead time with parts with better lead time
- Resolve data integrity issues - mark duplicate items as duplicate to correctly rollup demand

Depending on the size of the company and procurement department, an individual will be responsible for a varying number of parts, typically based on some categorization. A very small company may be a one man operation (like Keith at BrightSigns), one man does it all. A medium to large company, may divide the parts into a handful of categories where each person is responsible for one – Power Supplies, Semiconductors, Connectors, Discretes, All Others (Fred at Ruckus has 4 people working for him). A larger company (like Palo Alto Networks has about 100 people), each person will have a more narrow focus. At one company, a person could be responsible for all Passives. At another company, one person only manages Capacitors. At yet another company, one person only manages one type of capacitor, like Tantalum Capacitors or Ceramic Capacitors. Joel has been at HP years ago, where one person was responsible for 10 specific parts. At one company, there could be a mix, where one person is responsible for a big category of parts and another person is focused on a specific handful of critical parts.

Considering there will be 10s of thousands to 100s of thousands of parts for a customer, it's critical for the user to be able to filter down the item master to the items he's interested in.

- Show me items that I'm interested in – powerful filtering to slice and dice the info. For example, I'm generally interested in Passives, but I want to be able to see break-downs by sub-categories, or limit to projects in a particular lifecycle (like Concept) and only from a specific manufacturer (Motorola), or I want to be able to see break-downs by manufacturers to understand spend per manufacturer.

Help user consolidate and align manufacturers.

Help user understand spend per manufacturer.

## User Stories

### Supply Base Manager / Commodity Manager

- Large scale (giant list of items and MPNs) – show me the right sub-set to focus on and/or allow me to search and filter down to the subset I'm interested in
  - Filter by my area of responsibility (e.g. Memory)
  - View and search by
    - Item # / Description (search)
    - MFR Parts / Description (search)
    - MFRs (search)
- If I don't find a part in Part Master, then search catalog
- Understand the demand between BOMs
  - Project users need to flag Projects to be included in roll-up or not.
  - Project users need to flag quantity break to include in the roll-up.
- Understand the part usage between BOMs
- View potential alternate parts
  - Understand where there is sourcing risk (single-source, not ROHS compliant, EOL, not Lead Free)
  - Understand where cost opportunities are
- Understand spend per manufacturer (how many parts are we buying from each Mfr and how much do those parts cost)
- Understand spend per supplier (may be less interesting because our system is auto-selecting the supplier)
- Bubble up issues
  - Look for duplicate parts and either merge or "link" them
  - Understand where there is missing information
- Upload private Item / MPN information (std cost, target price, last price paid, split sourcing percentages, etc...)
  - Understand where private vs public data are conflicting

- Understand where are my opportunities to consolidate and reduce MFRs / Suppliers.
- Support Supplier splits - split sourcing to buy 40% of one and 60% of another
- Submit and RFI to a partner to get more information

## As a Supply Chain Operations user I want to...

- Know what percentage of my parts are re-used though-out BOMs?
  - This would impact the Health of the BOM.
  - Configure at the customer level the % goals.
- Leverage sourcing information from Part Master (private data - Std Cost, Target Price, Lead-time, RoHS)
  - Need to differentiate public and private data.
- Leverage prices uploaded for other Projects / BOMs
- Breakdown cost of BOM by my internal commodity categorization
  - Relate to the internal people who handle these so that I can collaborate with them.

## Other stories

- Ability to upload AVL
  - Include supplier score
- Specify preferences for Paradata sources

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## 3 Comments

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**Mike Godlewski**



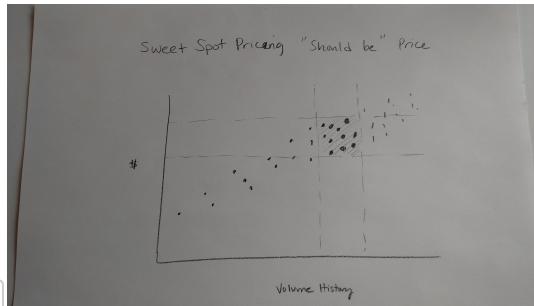
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@Joel Nave @Michele Yoshikawa @Ralph Garcia Here's V1 of the sitemap

document we reviewed on today's call.



**Michele Yoshikawa**



@Mike Godlewski

Here's a rough sketch of the sweet spot pricing for a part. I don't completely understand the story around it – maybe you can't expect to get the very best price all the time, but you can see where there is a grouping of prices and see if you're in the right range.



## Michele Yoshikawa

Mike's InVision Links

- Filter details: <https://projects.invisionapp.com/share/TR50EZUMU#/screens/116941050>
  - Dashboard and Tabs: <https://invis.io/2Q56H148S> or <https://projects.invisionapp.com/share/2Q56H148S#/screens>
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