ISSUE | CLIENT REQUIREMENTS

The client's operational process involves placing orders via phone, email, or website for plastic and metal embroidery hoops manufactured by the company, with assemblies having multifaceted layers, a combination of in-house manufacturing, outsourcing, and purchasing of completed components, where the majority of SKUs are assembled just before shipping, known as "Autobuild," with the mechanism initiated by the creation of a tracking label in ShipStation that subsequently updates NetSuite.

The client requirements involve the necessity for final assemblies to be automatically constructed prior to shipping and to set-up each auto build layer as an assembly item to track accurate costs, unlike kits where COGS are tied to components.

SOLUTION DESIGN | IMPLEMENTATION

- Autobuild Assembly Creation
 - When an autobuild assembly is added to a Sales Order, it now triggers a Special Work Order (WO).
- Component Availability Check
 - A script checks if the required components for each subassembly are in stock. If stock is available, it commits the quantity; if not, it converts the component to a Phantom item for that WO.
- Subassembly Processing
 - The script continues this process through all assembly layers, preparing for the top assembly build.
- ShipStation and NetSuite Integration
 - ShipStation sends a signal to NetSuite when a tracking package is created for the order. NetSuite uses this signal to convert the WO to an Assembly Build, making stock for the top assembly available.
- Item Fulfillment
 - At a scheduled time, ShipStation sends another signal to NetSuite, triggering Item Fulfillments with a "shipped" status for the Sales Order.

BENEFITS ACHIEVED

With the customization and scripting development, the client was able to have an efficient process and was able to perform the following:

- ✓ Seamless Autobuild Process and lavered automation
- ✓ Real time stock checks
- ✓ Accurate cost tracking
- ✓ Fulfillment automation thru ShipStation pulls right triggers daily
- Converting unavailable components to Phantom items, maintaining production flow even with 86 issues.
- Support processing of high-volume ordering/ peak period fulfillments.

