



APS Package Selection

PRODUCTION PLANNING SOLUTION

AT A GLANCE

- **Client Industry:**
International CPG company
- **Supply Chain Profile:**
Production operation for manufacturing and assembling packaged goods
Two major production lines – each dedicated to a specific product
Fabrication plant – molding / extrusion operations, supplying parts for both production lines
Manufacturing/assembly plant – production / packaging for first production line
Assembly plant – assembly / packaging for second production line
- **Transactions:**
Raw materials input from third-party supplier; parts input from client fabrication; items manufactured and/or assembled at 2 plants; products sent to DCs
- **Size:**
3 major manufacturing facilities, plus smaller manufacturing / distribution sites
10 production planners/schedulers
\$800 million annual turnover
20+ customers worldwide, including 4 leading retail chains
About 5,000 employees nationwide

USING AN APPRAISAL PROCESS TO DRIVE INFORMED TECHNOLOGY DECISIONS

Our client—a worldwide leader in the consumer packaged goods (CPG) industry—is committed to leveraging the latest-and-greatest technologies to achieve efficiency and cost savings throughout their enterprise. Until recently, though, the company had no reliable way to determine what vendor packages would best serve this purpose.

With Plan4Demand's help, they were able to build their own technology appraisal process, based on P4D's proven scientific approach to rating technology applications. Designed to evaluate any type of vendor package, this methodology can take our client all the way from the decision to implement some type of technology, through the package evaluation or validation process, to the actual implementation pilot (see diagram).

"TEST RUNNING" THE NEW METHODOLOGY

A major part of P4D's role on this project was helping the client use the appraisal process to solve a thorny selection problem. The company was trying to evaluate the merits of four proposed Advanced Planning and Scheduling (APS) solutions. After researching many vendors and narrowing their choices down to four companies, they simply "hit the wall."

Each vendor was making outstanding claims for its product—using the same "buzz words"—but their prices ranged across the board from "budget friendly" to "prohibitively expensive." Frustrated, our client began focusing on cost as the key consideration, seeing no way to differentiate less important features from critical functionality that would really benefit their operation.

Our job was to enable them to make an objective "apples-to-apples" functionality comparison of the APS solutions, using criteria based on their long-term organizational needs.

BUSINESS DRIVERS DETERMINE CRITERIA

Following the appraisal process, we chose a modified version of the "package selection" route (to evaluate the "short list" of four contenders), and opted for a "limited investigation" because the client had already done some research on the vendors. We kicked off the process by helping the client develop a comprehensive set of criteria for judging how much value each package could offer—based on what the client wanted to accomplish (Phase 1).

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CORPORATE OBJECTIVES

1. Reduce inventory-related costs
2. Maintain high levels of customer service
3. Become a more technology-driven organization
4. Gain the manufacturing flexibility to respond to ever-higher customer expectations
5. Shorten manufacturing and distribution lead times

The company's purpose in buying new technology was to improve production planning operations at their New York plastic fabrication plant and two Delaware assembly plants. Their ultimate goal? Increase cash flow by improving inventory management methods, without sacrificing the company's high levels of on-time customer delivery. Worried that "reducing" inventory would slow their production output, they wanted to find a way to reap the cost savings while maintaining, or even improving, their outstanding customer service. P4D's experts helped them focus on these business objectives so they could see exactly what they needed in an APS solution.

With our guidance, the client created a high-level concept for redistributing inventory to the most effective locations in the production process—thereby reducing the total *average* inventory and lowering inventory-related costs. This modification does two things: shortens production lead times, and allows the same amount of inventory to be utilized more cost-effectively. The result? There's enough material at the right place, at the right time, to meet customer due dates—and preserve good customer relationships (Phase 2).

The client then developed a list of specific requirements based on this new concept, prioritized them, and used P4D's knowledge base to create a "matching" list of APS package functionality.

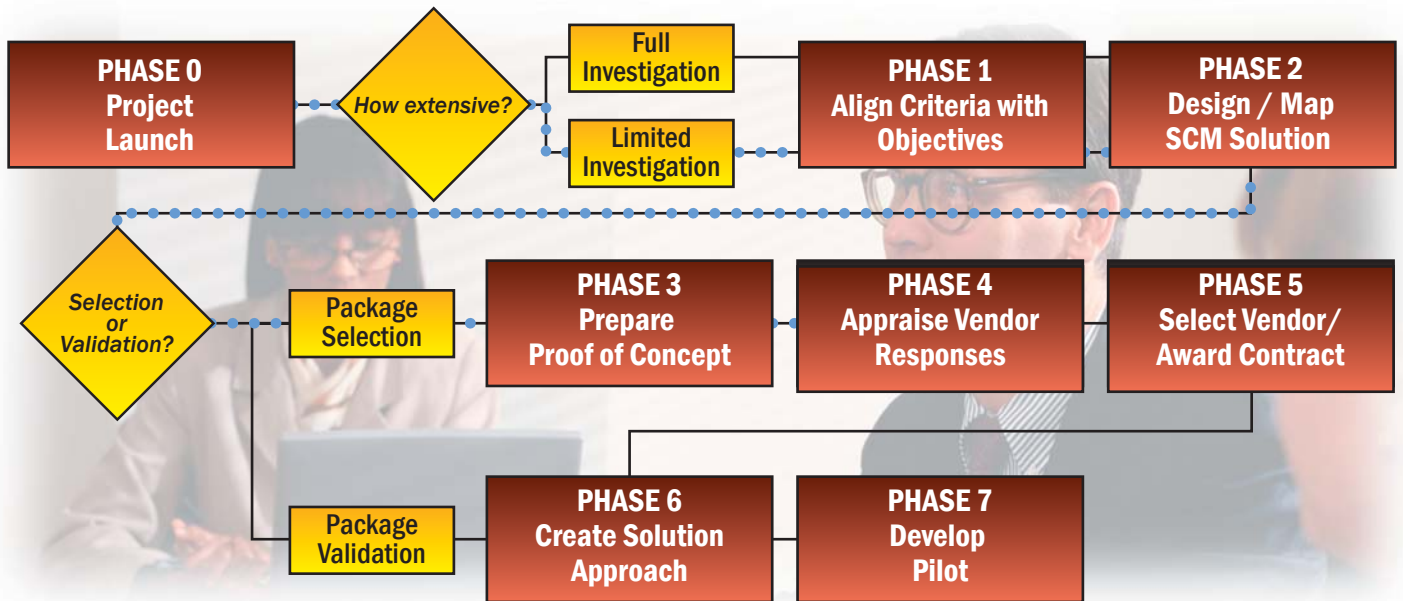
THE PROOF IS IN THE DEMO

To find out how much of this functionality each vendor package really possessed, P4D recommended a "proof of concept." We supported the client's steering committee as they set up a process for making an "apples-to-apples" comparison of vendor capabilities.

- Scripted a business scenario based on a representative mini-process at the Delaware manufacturing plant
- Asked each vendor to prepare a product demo showing how their package would apply functionality to tackle the inventory cost reduction / customer satisfaction objective, and drive business benefits for our client (Phase 3)
- Used the list of criteria and functionalities as a "scorecard" to rate each vendor demo (Phase 4). P4D sat in on the demos, providing an overview to help our client validate the findings.
- Used P4D knowledge to rate the vendors on other important criteria, such as reliability, implementation success, solution scalability, and solution benefits relative to costs.

To sharpen the selection process even more, we highlighted the differences between two major approaches to advanced planning and scheduling—the "constraint-based" approach (which balances the production flow around the global rate-setting operation) and the "rule-based" approach (which loads the plant to achieve local efficiencies). Using the scripted scenario, we showed how each approach could impact the client's own production flow, and why a constraint-based approach could be more effective.

PLAN4DEMAND'S TECHNOLOGY APPRAISAL METHODOLOGY



Using a modified version of the package selection process (blue-dotted path), P4D helped the client evaluate 4 competing vendor APS packages

TANGIBLE RESULTS

Deliverables

- Technology Appraisal Methodology enables the client to scientifically evaluate vendor packages and select a best-fit technology solution
- Comprehensive list of APS package decision criteria, re-aligned according to company priorities and industry standards, helps the client rate APS candidates in a fair and equitable way
- Detailed Proof of Concept serves as a basis for the business case and future-state functional design
- Proof of Concept overview refines the decision-making process by differentiating two major approaches to APS

Qualitative Benefits

- Reduced risk in making an APS capital expenditure
- Better due diligence in the APS appraisal process
- Greatly increased objectivity in evaluating functionality that drives value for the organization
- Streamlined selection process that reduces the chance for mistakes
- Enhanced capability for collaboration and consensus-building

READY TO DECIDE

As a result of partnering with Plan4Demand, our client now has all of the tools and information they need to make the best possible technology package choices.

Their new appraisal methodology can be used either to evaluate a short list of software choices, or to validate a package that's already been chosen.

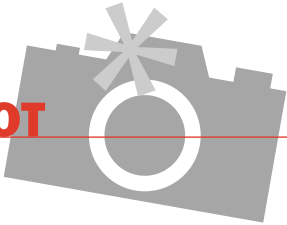
The company now knows how to judge technology purchases in terms of their own business requirements.

Our client's hands-on involvement in creating the vendor scorecard and developing the proof of concept has given them hands-on experience in setting up the step-by-step selection process.

And finally, the company's collaboration with Plan4Demand has given them a totally new perspective on planning—one that will help them better understand the variables of their production operations.



SOLUTION SNAPSHOT



- **Challenge:**
Enable a major CPG producer to effectively evaluate technology applications, beginning with the selection of a best-fit APS solution from among four competing vendors.
- **P4D Solution:**
Give the client a process—our Technology Appraisal Methodology—for scientifically testing and evaluating vendor packages. Use this process to rate the four vendors and their APS solutions, applying P4D experience to guide them through the various phases.
- **Technology:**
Excel-spreadsheet-based production planning system, Demand Solutions demand planning application, Prism ERP system, Siebel CRM system

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