The Five Most Common Pilot Models for Supply Chain Planning Technology

Published: 11 July 2019   ID: G00390707

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Pilots are common methods for organizations to test SCP technology solutions during vendor selection, but not all pilot models achieve the same goals. Supply chain technology leaders can use this research as a guide when evaluating and aligning the appropriate pilot model to an organization’s needs.

Key Challenges

- Organizations starting a pilot may not have defined their expectations and goals clearly. Hence, they don’t know what type of pilot program to look for to best support their requirements, what “success” constitutes and how to measure the value the pilot brings.

- Not all pilot models are designed to achieve the same goals, making it difficult for organizations to compare the different types of pilot programs available across vendors, and prepare for the types of outcomes to expect.

- Because of most organizations’ limited exposure to vendor pilot programs, they may not know what offerings are available, the pros/cons of each model and how to benchmark what “good” looks like.

Recommendations

Supply chain technology leaders responsible for technology and solutions:

- Identify the most appropriate vendor program model to meet your needs by evaluating the pilot program’s description, methodology and vendor resources. Use this research to help.

- Identify and communicate the most appropriate pilot model for your organization by codifying the organization’s business objective for the pilot and the outcome you are pursuing.

- Ensure that everyone has the same expectations regarding the value proposition — even if it doesn’t make everyone’s wish list — by making sure stakeholders understand the need for both consensus on the business objective and common ground on the pilot scope.
Introduction

Organizations evaluating supply chain planning (SCP) technology are looking for guidance on how to introduce and select a pilot and make it successful. Including a pilot (see Note 1) as part of a software vendor assessment is not a new concept — but in our conversations with organizations and vendors alike, Gartner has observed that the concept of pilots is gaining traction.

In previous research, we introduced the challenges organizations encounter. Too often, they complete their RFP process, conduct vendor demos and begin working on implementation, but don’t have a complete understanding of the path they need to travel and the level of work or effort required (see “Conduct a Pilot to Mitigate Risk and Uncertainty When Evaluating Supply Chain Planning Technology”).

SCP technology continues to evolve with new planning functionality, new capabilities, new architectures, new delivery models and the rise of new SCP vendors. Organizations are looking to verify, validate and test that the business and technical requirements, as well as the use cases, can be met now and in the future.

While the primary underlying need driving the pilot is to fundamentally test the most important business and technical requirements, our research finds that there are five distinct pilot models available in the SCP technology market. All five models fall under the broader category umbrella of “pilots,” but each model supports distinct business objectives (see Figure 1), such as:

- Learn about and experiment with the planning functionality and algorithms.
Learn about the financial impact/benefits and help with the business case.

Learn about the implementation services.

Learn about the “art of the possible.”

Learn about the vendor’s domain expertise.

Organizations should not limit their objectives to only those mentioned here. These are just a few examples of the types of business objectives commonly supported by SCP technology pilots.

Figure 1. Pilot Models Supported by SCP Technology

Use this research to:

- Get an overview of the five common pilot models you can expect to find in the SCP technology market.
- Identify which is the most appropriate pilot model based on your needs.
- Learn the pros and cons of the pilot models.
Analysis

Before Making a Selection, Become Familiar With the Different Pilot Models Available

Within the SCP technology market, our research interviewing 14 SCP technology vendors and speaking with end-user organizations has revealed that there are five main categories of pilot models. The models listed here serve to illustrate the core concepts our research found; however, in the marketplace, there are many variations and hybrid versions among these models.

There is no standard industry pilot program. Therefore, when evaluating SCP vendors’ pilot programs (or, at times, those of their SCP service providers), organizations need to be mindful that each vendor has its own methodology, level of support and commitment to various types of pilot engagements. Organizations should assess the number of resources and determine the extent of vendors’ experience supporting the different pilot model types.

Our research finds that, while several vendors can offer a variety of pilot models, this is not necessarily indicative of the quality of the overall pilot programs being offered (or how “good” they are). Instead, organizations should evaluate specific pilot models versus assessing the overall pilot program. While many SCP technology vendors offer pilot programs, this is an area that is evolving as SCP vendors assess to what degree they will offer comprehensive pilot programs to prospective clients.

For many vendors, the challenge also becomes how to scale and structure their pilot program offerings. Given the time and resource commitment it takes to support more comprehensive pilot models, SCP technology vendors are selective as to the organizations they will partner with to ensure it is the right fit for both parties. SCP technology vendors also want to ensure there is commitment from the organization.

During your research, become familiar with the different pilot models, their offerings, their typical duration and the cost before making a selection (see Table 1). There is no single, set fee model. Rather, it may involve some of the following fees, depending on the duration, complexity and vendor pilot pricing model (e.g., flat fee, short-term software evaluation license fee, professional services, monthly subscription, etc.).
### Table 1. Five Main Pilot Models

<table>
<thead>
<tr>
<th>Pilot Model</th>
<th>Engagement Description</th>
<th>Duration Period*</th>
<th>Cost*</th>
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<tbody>
<tr>
<td><strong>Lightweight custom demo</strong></td>
<td>These types of engagements typically are an extension of the vendor demo during the sales cycle. The vendor will use the data provided by the organization and build a lightweight custom demo for the organization. The purpose is to view sample scenarios with the organization’s data, test a couple of calculations, and see how the data and planning decisions would be made in the solution.</td>
<td>2 to 3 weeks</td>
<td>No cost</td>
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<td><strong>Forecast accuracy competition</strong></td>
<td>In these types of engagements, the assessment is focused on testing the demand-planning capabilities, typically by having an evaluation focused on forecast accuracy and testing the algorithms. Typically, prospective vendors are tested against each other and/or against the organization’s internal demand-planning solution through simulations. Through this engagement, key requirements can be validated, and capabilities can be measured and scored.</td>
<td>4 to 16 weeks</td>
<td>Low</td>
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<td><strong>Feasibility study and evaluation workshop</strong></td>
<td>These types of programs are focused on evaluating the performance of your supply chain. They identify and quantify ROI, determine financial benefits, translate the improvement potential into financial impact, and provide recommendations on which areas to focus on to capture the most value.</td>
<td>4 to 10 weeks</td>
<td>Low</td>
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<tr>
<td><strong>Quick start blueprint</strong></td>
<td>In its simplest form, this is a smaller and quicker version of a “classical pilot” model. In these types of engagements, the focus of the pilot model is to experiment, learn and simulate the future state of the SCP solution by testing different use cases. This is done through a combination of workshops, light business process and solution design work, and technical demos. Typically, this type of model is used when a vendor is on a shortlist.</td>
<td>8 weeks to 4 months</td>
<td>Medium</td>
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<td><strong>Classical pilot</strong></td>
<td>These types of engagements are focused on laying the groundwork for the broader implementation to prove the technology will work live with the organization’s own data. This is done through a combination of workshops, process and design work, and change management. The scope for these engagements is broader with multiple capabilities/functions being tested across one or many region(s) or business unit(s). The work done at this stage is to help the organization have a smoother transition into the implementation. Typically, this type of model is used postselection.</td>
<td>3 to 6 months (or more)</td>
<td>High</td>
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* Varies by organization, scope and complexity of project

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**Recommendations:**

- Start with the goals and objectives of the exercise in mind to ensure you choose the pilot approach that best addresses your needs. More time, effort and cost might not deliver more value if the objectives are poorly aligned with the chosen approach.
Evaluate the different models by developing a strategic view for how a pilot could support your internal organization and broader SCP technology landscape.

Determine the type of pilot models offered by the prospective SCP vendors you are working with, and assess their level of support and commitment to these types of engagements. In addition, not only evaluate the resources and past use cases, but also pay close attention to their methodology — the iterative learning and testing component of the use cases.

Select the Pilot Model That Best Meets and Aligns to Your Business Objective

What is the desired outcome or goal of the pilot? When it is complete, what are you truly looking to achieve that will help you make the final decision? Some organizations may look to develop a comprehensive return on investment (ROI) evaluation study to support a business case and will use the pilot to conduct the study. Other organizations may use the pilot to assess any areas where there is still uncertainty and further validation is needed. A pilot in its most common form is a way to test a subset of a prospective SCP solution and validate a variety of requirements or benefits. Organizations must clearly identify their business objectives upfront and align those to the most appropriate pilot model.

Piloting can be a good option for many organizations, but, depending on the model selected, there is a degree of time, money and resources that will be invested by both the organization and the vendor. Regardless of which pilot model your organization chooses to move forward with — be it a lightweight custom demo or a quick start blueprint — piloting should be approached with an emphasis on experimenting with hypotheticals, iterative exercises and learning.

Running pilots with a focus on learning helps the organization avoid the risk of having a pilot carried out sequentially in a checklistlike approach that doesn’t leave any room for a test-and-learn environment. A focus on learning includes learning about such things as:

- Functionality/algorithms
- Business case/ROI
- Implementation services
- The “art of the possible”
- Vendor’s domain expertise

To ensure that the optimal value add is gained from the engagement, supply chain technology leaders need to clearly define their business objectives upfront and map those to the most appropriate pilot model (see Figure 2).
**Pilot Model's Business Objectives**

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<tr>
<th>Lightweight Custom Demo</th>
<th>Forecast Accuracy Competition</th>
<th>Feasibility Study and Evaluation Workshop</th>
<th>Quick Start Blueprint</th>
<th>Classical Pilot</th>
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<td>• Gain confidence in the solution and move to final vendor selection.</td>
<td>• Evaluate demand-planning technology functionality.</td>
<td>• A financial business case for change.</td>
<td>• Agility in the vendor selection process — the primary purpose is to test a solution upfront vs. going through the traditional vendor selection process.</td>
<td>• Laying the groundwork for the broader implementation.</td>
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<td>• Showcase the solution with the organization’s data to key stakeholders.</td>
<td>• Assess forecast accuracy of prospective vendor’s solutions.</td>
<td>• Validation of applicability that the vendor can deliver quantitative/qualitative benefits.</td>
<td>• Help translate and verify the improvement potential into financial impact.</td>
<td>• “Stress test” the organization’s internal environment by interconnecting the people-process-data-technology.</td>
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<td>• Rally key stakeholders toward making a next step or final decision.</td>
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<td>• Fast path to shorten the vendor selection process.</td>
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<td>• Testing the overall quality of the planning decisions and how planning trade-offs are made in the solution in real time across various business functions.</td>
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Source: Gartner
ID: 390707
Recommendations:

- Prioritize and weight your business objectives to support the pilot. Focus on what is absolutely critical to help you support your overarching project goal: getting to the “next step” to support your SCP technology implementation. Avoid scope creep by staying within the pilot objective guardrails.

- Use the goals and objectives to help drive the pilot process to ensure that the eventual outcome fully addresses the predetermined need.

- Be selective in why you want to do a pilot. Determine how much time, commitment and resources your organization will want to devote to each pilot model and expected outcome.

Weigh the Advantages and Disadvantages of Pilot Models

While a pilot period can offer many benefits, the conundrum for some organizations becomes, “Is it necessary and really worth it?” This is further exacerbated by another possibility, depending on where an organization may be in the vendor assessment process. That is, an organization may have limited internal supply chain resources it can devote to a pilot, and additional work/steps in what may already seem like a drawn-out process.

Once the business objective has been clearly identified and the best pilot model has been aligned with your objective, consider the following advantages and disadvantages:

Advantages:

- **Agility:** Different pilot models can give an organization flexibility, speed, and the ability to interact and manage as necessary to support their business objectives during the vendor assessment process.

- **Reducing uncertainty and mitigating risk:** Helps to derisk a long-term SCP technology investment.

- **Hands-on evaluation and a test-and-learn environment:** The organization can have a hands-on evaluation of the functionality and capabilities as well as a test-and-learn environment.

- **Considers context:** Enables end users to generate an understanding and visualize the solution with the organization’s data, allowing people to see how the SCP decisions would and would not be done in the solution, not just what the salesperson says they’ll do.

Disadvantages:

- **Cost:** Depending on the scope and complexity of the pilot, the investment can vary from a very minimal to a significant investment.

- **Key performance indicators (KPIs) and metrics:** Carefully scoping and defining KPIs and metrics are critical steps; otherwise, pilot results can be misleading. Furthermore, defining these and establishing guidelines on how to measure value (such as service level, cost reduction, etc.) can be time-consuming.
**Incremental internal resources to support the pilot:** Depending on the scope and complexity of the pilot, the organization will need business and IT resources allocated to support the pilot project team.

**Can limit exploring different options:** Given the significant level of investment and commitment the organization may put into a pilot (time, resources, budget), it can be challenging to pilot other solutions.

**SCP vendor ability to support pilot model:** While many SCP technology vendors offer pilot programs, not all vendors may support the specific model your organization is interested in, or have a comprehensive pilot model offering that is worth the time and investment (see Note 2).

**Recommendations:**

- Use the initial research process to gauge the SCP vendor’s ability to support different pilot model offerings, and the pros/cons specific to each vendor’s offering.

- Work with internal stakeholders and the prospective vendor to align expectations and address any gaps.

**Gartner Recommended Reading**

*Some documents may not be available as part of your current Gartner subscription.*

“Design a Supply Chain Planning Technology Pilot Focused on Five Best Practices”

“Conduct a Pilot to Mitigate Risk and Uncertainty When Evaluating Supply Chain Planning Technology”

“Develop a Structured Change Management Approach for SCP Technology-Enabled Transformation”

“How to Build a Strong Business Case for Your Supply Chain Planning Technology Investment”

“How to Avoid Pitfalls During Supply Chain Planning Technology Vendor Selection”

“4 Steps for an Effective Execution Phase in an S&OP Transformation”

**Evidence**

This research was gathered through:

- Interviews with vendors that provide SCP solutions; and …

- Conversations with Gartner clients.

Note 1 Definition of a Pilot

In its most common form, a pilot is a joint engagement with usually one or two shortlisted vendors as part of the sales cycle. A pilot can also be an initial-release full production deployment for a particular business unit or region as part of a broader solution deployment. For some organizations, this is a quick, rough-cut implementation. A pilot provides an organization with the opportunity to assess the SCP technology, validate the business case, build confidence in the value and use of the SCP solution, and assess its own readiness.

Note 2 Weigh the Pros and Cons of Different Pilot Models in SCP Technology

In upcoming research, Gartner will publish detailed pros and cons of each pilot model to help organizations with their strategic decision making.