

**Utility Warehouse
Consolidation...A Waste
of Time or Cost-Savings
and Performance Driver?**

Smart. Focused. Done Right.





INTRODUCTION

In a recent article, "[Electric Utility Inventory Analysis and Optimization](#)," we addressed ways in which electric utilities can determine how much inventory they need to support a company's generation, transmission, and distribution assets. Looking beyond optimization, utilities should also consider how their warehouse network strategy is impacting supply chain performance and costs. Implementing an improved warehousing strategy has enabled some supply chain organizations to realize savings that equate to 10% to 15% of their total inventory value.

Whether warehouse growth was the result of mergers/acquisitions or the expansion of transmission and distribution service coverage, a large driver of supply chain costs is the number of Maintenance, Repair, and Operations (MRO) warehouses in a utility's service territory. Once supply chain organizations realize the cost implications of running multiple warehouses, they will often begin an initiative to evaluate the benefits of MRO warehouse consolidation.

Although warehouse consolidations have the opportunity to drive significant cost reductions, these moves may increase costs or negatively impact the performance of work crews if not done correctly. Based on our experience, there are five key factors for a successful warehouse consolidation.

Five Key Factors for a Successful Warehouse Consolidation



FACTOR #1 – DEFINE SUCCESS

Before embarking on any major project, executive sponsors and supply chain leaders must define what success will look like upon project completion.

The ways to define success are not mutually exclusive—all three success definitions should be taken into consideration when organizations decide what a successful warehouse consolidation project will deliver. We believe there are three ways to define success:

1. **Realize additional cost savings** – Some clients define success by establishing a goal of reducing warehousing costs by X% or establishing a target to reduce costs by \$Y million. When organizations define success by realizing additional cost savings, the following questions should be answered prior to embarking on the consolidation project:

- a. Do we only care about direct savings or will we attempt to quantify indirect savings?
- b. Will we adjust our supply chain budget by the amount of savings realized?
- c. Are capital and O&M cost savings of equal value?
- d. How quickly will we realize the cost savings if we make an investment to consolidate?
- e. What are the consequences of never realizing our projected cost savings?

Answering these questions early in the project level-sets the expectations of the supply chain organization and key business stakeholders.

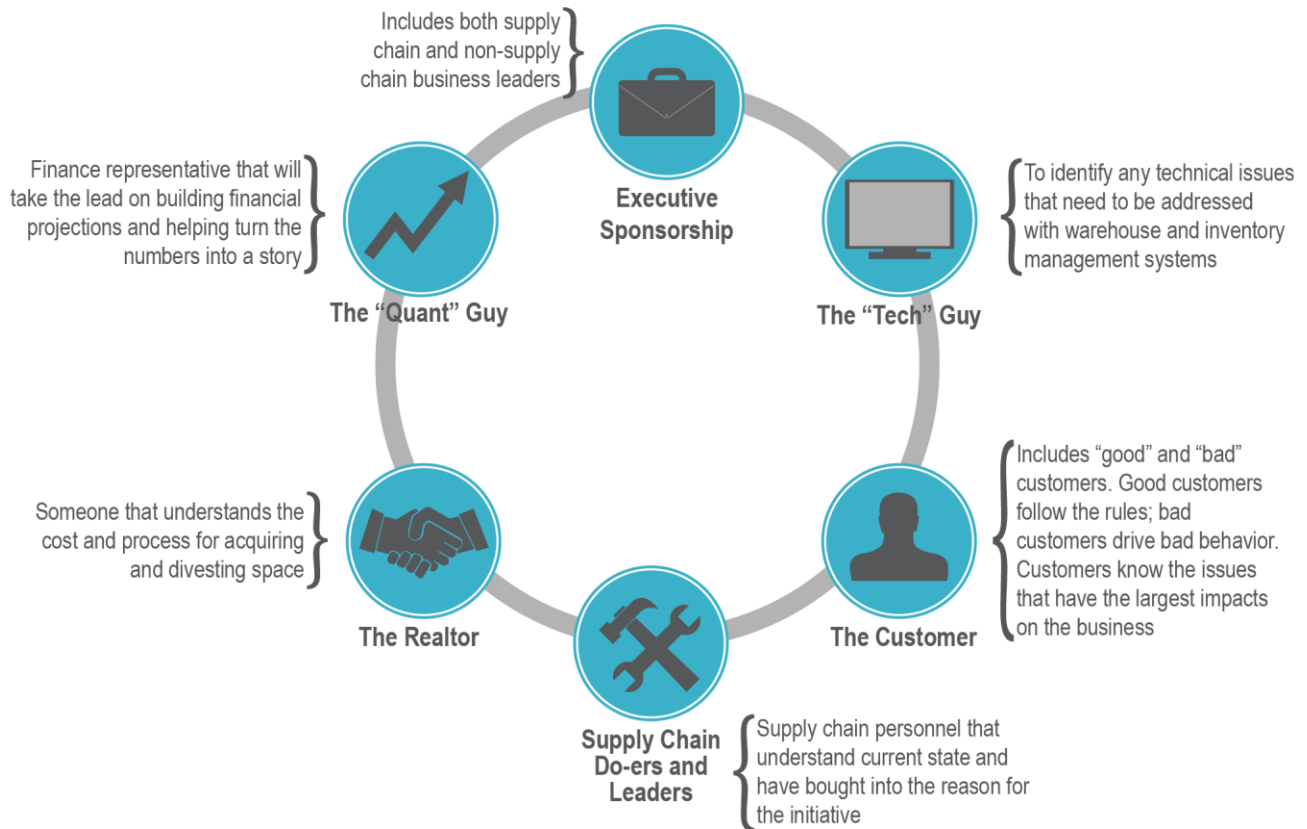
2. **Increase operational efficiency** – Instead of focusing on cost savings, some clients define success by increasing utilization of warehouse space and personnel. Increasing operational efficiency will provide the flexibility to keep warehouse space and headcount levels steady in high-growth environments. When organizations define success by increasing operational efficiency, the following questions should be answered prior to embarking on the consolidation project:

- a. How will we utilize available warehouse space, and how “full” should our warehouses be to avoid space constraint challenges?
- b. Can warehouse team members handle additional transactional volume?
- c. Can we transfer warehouse staff to support other supply chain functions (e.g., transportation, maintenance, safety)?
- d. What impact will more efficient warehouse operations have on business metrics? Can we quantify the impact?

3. **Demonstrate a commitment to controlling costs** – All warehouse consolidation projects require some upfront investment. Some companies may not be able to make the upfront investment required to realize additional cost savings or improve operational efficiencies. In these situations, success may be defined by demonstrating a commitment to controlling costs. Simply completing the analysis to consolidate warehouses demonstrates that the organization is committed to controlling costs. As utilities face more rate pressures, ratepayers and regulators need to know that utilities are proactively identifying (and hopefully pursuing) cost control (and performance improvement) opportunities.

FACTOR #2 – GET THE RIGHT RESOURCES ON THE PROJECT TEAM

As with any major project, getting the right people on the project team is absolutely critical to the success of the project. Warehouse consolidation project teams should include (at a minimum):



FACTOR #3 – COLLECT THE RIGHT DATA

Knowing which pieces of data to collect is critical to ensuring that meaningful conclusions can be produced when information is analyzed. A project typically only has one chance to collect data from key sources. Thus, it is important to know what questions to ask before field visits occur or data mining requests are submitted. Understanding the process by which the data are collected is critical to providing context to the story behind the data. For example, if a manual process is used to capture material requests and issues, the team must assume that data collection will not be 100% accurate. Even if a warehouse management system is used to automatically capture material requests and issues, a deeper look into operational processes may identify errors due to manual or inconsistent data entry.

Analyzing the data is the most important step in the process. Numbers do not lie, but people may ignore or overlook their significance. It is important for supply chain "do-ers" to sanity check the data before the "quant and tech guys" use the data in analyses to quantify the impact of consolidating warehouses. Dirty data can quickly derail a warehouse consolidation project, so spending the appropriate time to collect, review, and confirm the data is right is critical.

FACTOR #4 – QUANTIFY THE IMPACT OF CONSOLIDATING

In addition to ensuring data are as clean as possible, comparing data against industry benchmarks to identify performance improvement opportunities is a great way to support consolidation recommendations. When using benchmark data to support recommendations, companies must use appropriate peer groups to drive the right conclusions (e.g., commercial warehouses are a lot different than T&D warehouses). It is also important to consider the type of goods that an entity is warehousing (e.g., a generation-only warehouse will have much lower turnover than a warehouse that stores poles and switches). Once data is cleaned and compared to industry benchmarks, the project team can begin to develop warehouse consolidation scenarios.

First, we recommend organizations develop and evaluate multiple warehouse consolidation scenarios. We also recommend plotting each scenario on a matrix that weighs the success definition (e.g. cost savings and operational efficiencies) against the degree of difficulty to implement the recommendation. Two matrices should be developed for organizations that define success by driving cost savings **and** increasing operational efficiencies. Scenarios will likely fall in similar areas on the matrices, but it is important to evaluate each scenario against a particular success criteria. When determining the impact of each warehouse consolidation scenario, there are several key considerations to include in the analysis:

1. Baseline/minimum service levels

- Do certain areas/locations need shorter delivery times than others?
- How does additional drive-time in traffic impact our ability to consolidate?
- Do we need multiple warehouses in different parts of our territory to allow for contingency planning (e.g., earthquakes, fires, etc.)?
- Do we need to budget for additional mobile inventory or “truck stock” so that work crews do not need to return to the consolidated warehouses multiple times?

2. Small changes with big impacts

- It is important to include scenarios that may involve minor tweaks to existing operations, but the tweaks can be made to each warehouse location
- When aggregated across multiple warehouses/processes, this low/medium tweak is multiplied several times, and may become a top candidate for cost savings

3. Cultural barriers to change

- Executive sponsors and supply chain leaders do not effectively identify lessons learned from past failures and incorporate those lessons learned into each scenario
- Organizations should always consider the cost/benefit of maintaining the status quo, and whether business customers and the supply chain organization can truly change the culture and achieve savings



4. Tax implications/public relations/labor relations
 - Finance should determine the tax impact of investment costs or the additional revenues from the sale of existing property
 - State and local tax guidelines may significantly impact the final cost-savings calculations
 - Organizations must also consider the public and labor relations impact of changes, as backlash from a perceived decrease in service levels or union impacts from proposed labor savings may require careful planning, negotiating, and publicity for the implementation rollout to be successful

FACTOR #5 – BUILD THE RIGHT IMPLEMENTATION PLAN

Building an implementation plan requires significant coordination. Presenting implementation options along with the warehouse consolidation scenario analysis is often a good approach to facilitate decision-making. Before presenting the consolidation scenarios and respective implementation plans to executive sponsors, it is important for the project team to take the following into consideration:

1. What information is to build stakeholder buy-in and allow for objective decision-making?
2. Will implementation timelines vary substantially for each scenario developed? If so, should the scenarios with longer timelines include “go/no-go” milestones after each phase is completed to ensure the project is proceeding on time and within budget?
3. Will a formal business case need to be developed and approved to obtain funding for the implementation project?
4. What is the plan for securing internal resources for the implementation project team?
5. Will external support (e.g., contractors, consultants) be used to execute the implementation plan? What change management and communications support is needed, and who will be responsible for developing and executing the change management and communications plan?

Once the implementation plans for each scenario are developed, they should be presented to the executive sponsors for discussion. Scenarios that present the biggest return must be balanced with competing priorities. In most cases, the implementation timeline, upfront capital investments, and headcount changes will typically rank high in the decision-making process.

CONCLUSION

Utility warehouse consolidation projects present a huge opportunity to drive cost savings. ScottMadden has worked with utilities that have realized savings that equate to 10% to 15% of their total MRO inventory value over a five-year time horizon. Our clients succeeded by turning the key factors for a warehouse consolidation into action.

ScottMadden’s long history of working with electric and gas utilities and our deep understanding of the key performance levers in supply chain gives us a clear lens through which to view efficiency and effectiveness. Additionally, ScottMadden’s proven methodology to uncover the true drivers of warehousing costs and develop realistic improvement plans is the most comprehensive approach in the industry.

For more information about ScottMadden's supply chain practice, please click [here](#).

To submit a request to learn more about our warehouse consolidation methodology, please contact us directly at supplychain@scottmadden.com.

ABOUT SCOTTMADDEN'S CORPORATE & SHARED SERVICES PRACTICE

ScottMadden has been a pioneer in corporate and shared services since the practice began decades ago. Our Corporate & Shared Services practice has completed more than 1,100 projects since the early 90s, including hundreds of large, multi-year implementations. Our clients span a variety of industries from entertainment to energy to high tech. Examples of our projects include business case development, shared services design, and shared services build support and implementation.

ABOUT THE AUTHORS

Andy Flores (aeflores@scottmadden.com) is a partner in ScottMadden's Atlanta office and Michael Morley (mfmorley@scottmadden.com) is a manager.