From Complexity to Clarity - Part Two
Mastering Today's Complex Supply Chains

By Ann Grackin

Introduction

As we stated in Part One, achieving excellence in business management and performance has always been a challenging task. But over the last decade it has also become more complex. We now have globalization, the web, mergers & acquisitions, legislation and businesses' own striving for more markets, more products, and more ways to serve customers. The result is more complex trading relationships, with an increased number of interactions, transactions and information. Well, that's complicated!

In Part One, we looked at New Product Introduction decisions, culminating at the Sales and Operations Planning meeting. There, we modeled a New Product Introduction that would soon be in production and dealt with the cross-functional issues of demand cannibalization, "remnant" inventory, and other related issues.

In Part Two, we will explore the impact these decisions have, across the enterprise, on our sourcing and transportation teams and the choices they will have to make.

Total Cost Sourcing

In Part One, we decided to introduce a new product, effectively "end of life-ing" another product. The increased demand for the new product signaled procurement to buy more supply. So let's walk through the materials team, the transportation team and the management dashboard to see how the whole process plays out.

Obviously, the drive to reduce costs while improving performance is a key goal for supply chain managers. First, let's look at supply or sourcing costs. Sourcing decisions have an impact on many different elements of total cost (Figure 1). In large, complex organizations, many of these decisions are made in isolation, adversely impacting performance. (In fact, often we hear this complaint in discussions with customers.) Sourcing makes decisions about supply, volume, delivery frequency, and country of origin without consulting the logistics team, for example. If a lower cost country option is selected, it may negatively impact time/customer satisfaction metrics, resulting in penalties, charge-backs, or failed promotions. So while reducing supply cost, it ultimately raises the total cost due to increased expenses in other parts of the business.

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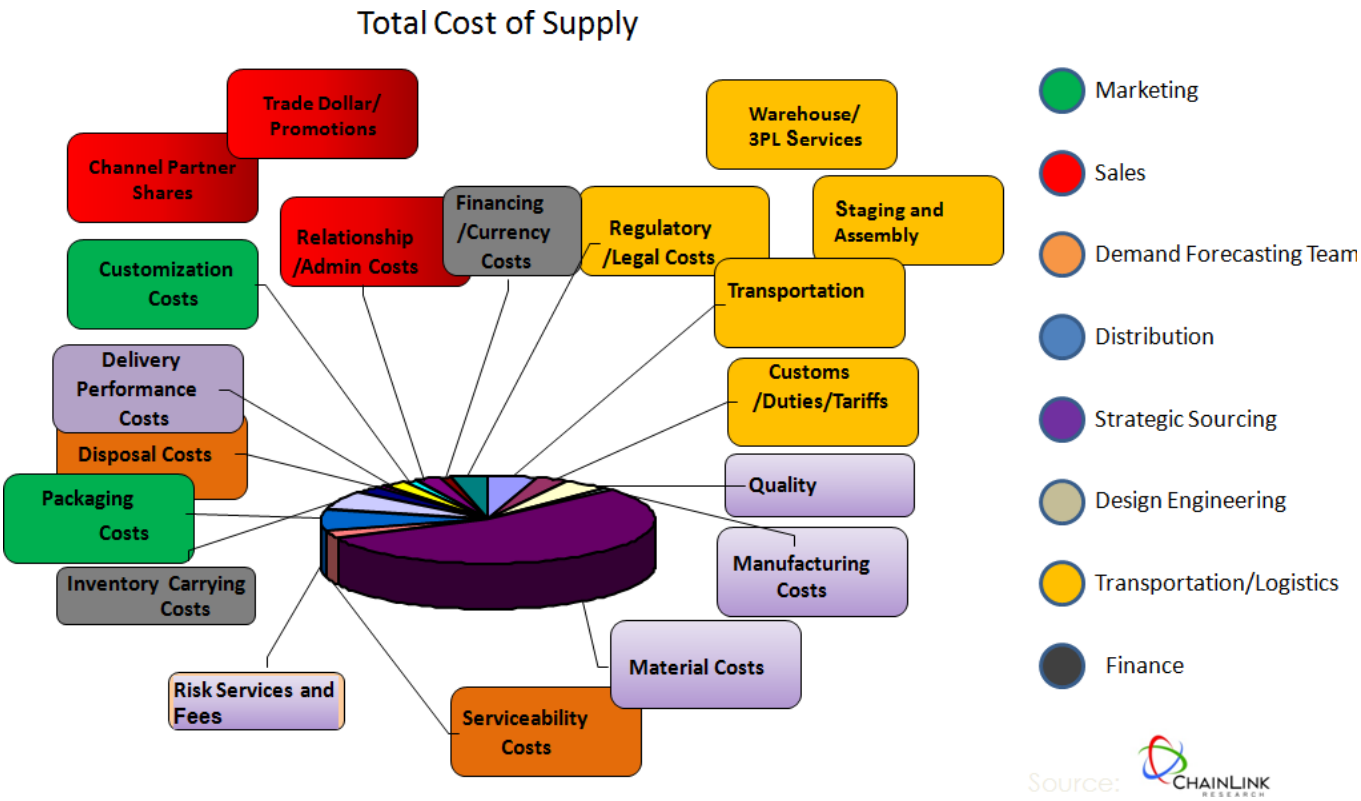

Figure 1: Who Impacts Total Sourcing Cost?

Until recently, controlling these costs has been quite challenging due to the inability to have visibility, and to understand and manage all the interactions. Within the context of an advanced business process, clarity can be attained, though, and problems resolved, producing improved performance.

Even today, though software modules **do** exist in planning and procurement systems, the drive to integrate these only becomes strong when users see the power of all the components coming together. Although it may appear challenging to implement a system that fully integrates the supply chain, it is actually more chaotic—and complicated—to work without it.

So, let's walk through another example. Figure 2 shows you how this can come together.

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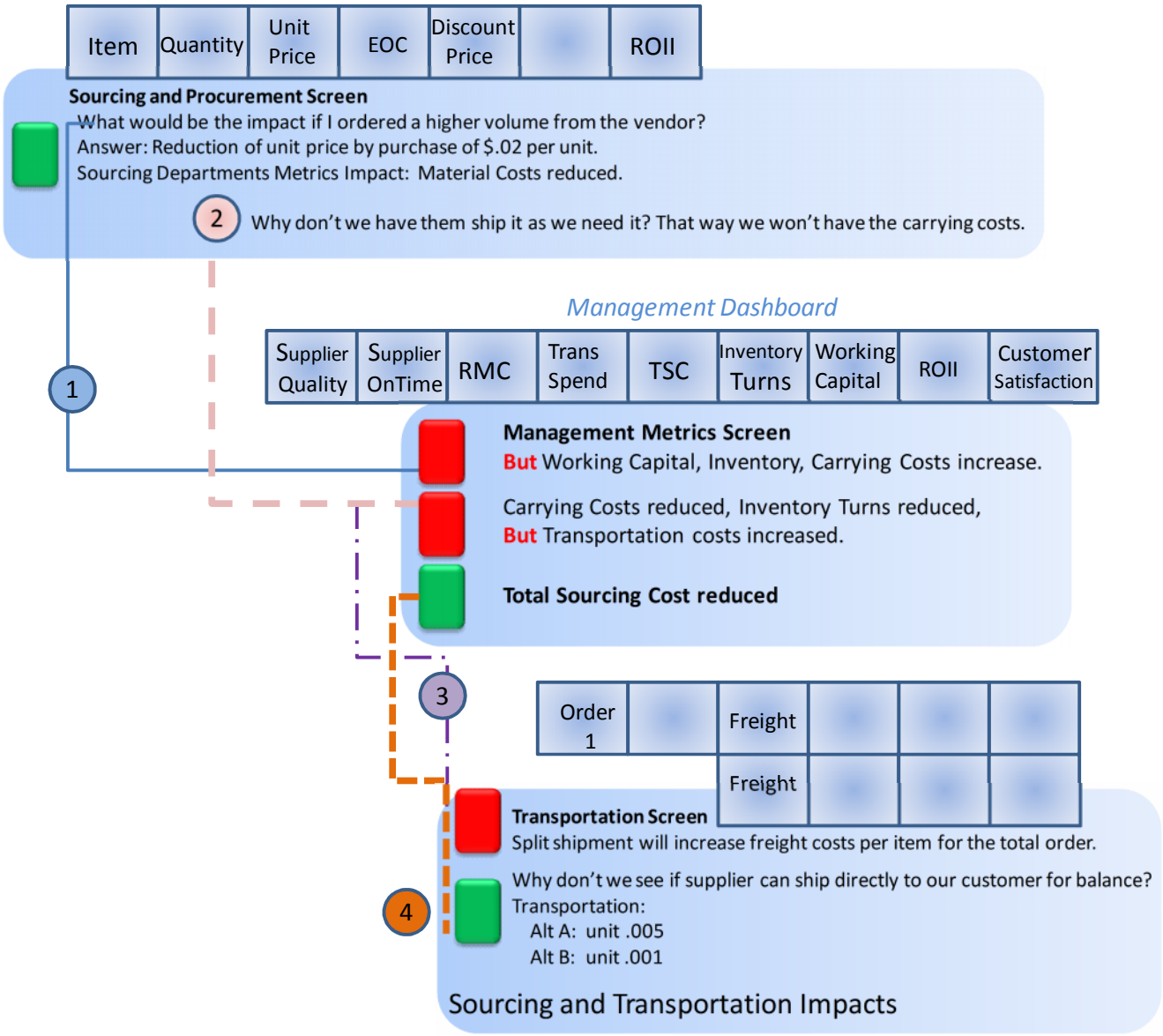

Figure 2: Advanced Business Processes - Getting the Total Sourcing Cost

The diagram numbers correspond to the numbers below:

1. In Part One of our series, the Demand Plan significantly increases. Approaching the supplier with these increases gives us an opportunity to make a larger purchase at a steep discount. In most organizations, these decisions just "get made," i.e., take the discount. In disjointed human and IT systems, there are no connections to other parts of the process. Materials focuses on metrics such as order quantity, price per item, etc. Success is seen as getting supply in on time and on budget. The "green indicator" says that a goal is achieved. But in our example, the linkages and workflows have been built and we have a "management dashboard." This allows us to see the implications of our decisions and the impact of those decisions on key metrics. Carrying costs for holding inventory and inventory turns are negatively impacted. So now the "indicator" turns red.

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2. A second solution is generated: break the order into smaller shipments so we receive the inventory "just in time," a common strategy. However, that now increases transportation costs. Ok, let's find another solution and, this time, let's get all the impacted organizations involved, including transportation.
3. The previous idea did not meet the transportation team's goal to reduce freight cost per order or the directive to reduce the overall transportation spend.
4. Now we have everyone involved and new options are generated that can meet all criteria, reducing the Total Sourcing Cost (not just reduced material costs at the expense of higher transportation costs and lower turns).

In this example, the underlying workflow supports the linkages, alerts the right people; target metrics are built in to alert all constituents if violations occur and to also suggest corrective actions. The result makes the process and alternatives clear and meets the goal.

As we have seen in both examples, (Figure 3 in Part One and this example), decisions made in isolation negatively impact the overall performance of the organization. Unfortunately, decisions like this are made every day. But if we bring clarity to the work processes (the work flow), we can see the interlocking dependencies and make better decisions.

Conclusions - Get Clear

Working independently or strictly within functional silos isolates departments from the big picture. Hence, when organizations try to improve performance, it can have unintended negative outcomes.

When most organizations attempt to manage cross-functionally, the complexity of the process is too great to manage without systems. This holds true even if they understand the concepts and interdependences. In complex organizations, supply chain teams cannot attempt such deft management without today's supply chain solutions. And the cost to purchase and implement the software is generally recovered by the savings from a few well-placed decisions[1].

As we concluded in Part One, the complexity of operating in today's supply chain can create tremendous organizational stress, cross-functional discord, and excessive meetings, with poor results to show for it.

Clarity can be brought to the business, progress can be made, and the business can improve in performance, while improving the working environment for the employees and demonstrating superior results to the market place!

Part One: From Complexity to Clarity - Mastering Today's Complex Supply Chains – the brief

Four year study on value of APS implementation

More on Demand Management www.chainlinkresearch.com/demand

[1] Read APS Implementation Truths for some statistics
http://www.chainlinkresearch.com/research/detail.cfm?guid=7D516870-AE60-A8AE-535F-82C245A523F2

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