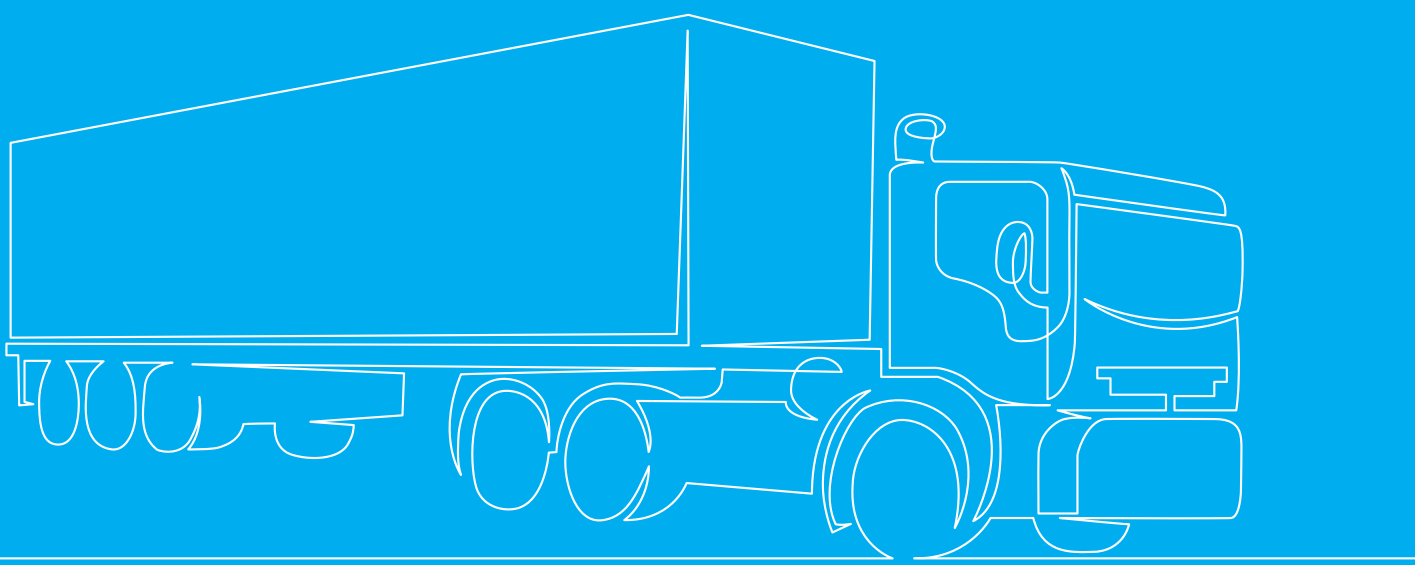
LOGISTICS AND FINANCE: SEALING THE GAP



LOGISTICS AND FINANCE: SEALING THE GAP

Logistics, which is a part of the supply chain process, has a definite impact on business performance especially the financial performance of an organization. A study conducted in Central Sulawesi Province proved the same[1]. Even though there are several such studies to establish this fact, close cooperation between the logistics and finance teams is still an elusive reality for several organizations. The C-suite managers such as CFOs and logistics/transportation managers do not consider this component of logistics in the same way.

Here's what commonly happens. The logistics managers who are usually in charge of the transportation costs, often, have a myopic view of it as they tend to only focus on budgets and metrics of their department without relating it to the bigger picture – as to how logistics can massively influence an organization's bottom-line. As pointed out by the blog on The Institute for Entrepreneurial Excellence, every dollar saved in the area of supply chain/logistics expenditures would be the equivalent of an increase in sales[2]. CFOs, on the other hand, analyze company-wide metrics which include transportation costs among several other components of expenditure, but they do not get clarity on the exact impact transportation can have on their revenue.

It is thus clear that transportation costs substantially affect a company's financial performance. However, CFOs don't prioritize managing these costs because it's left to the logistic managers. As a result, there are long term consequences which can be quite damaging.

There are two major challenges when it comes to freight:

1) Inventory levels

2) Costs involved

Let's look at both in detail.

INVENTORY LEVELS

In an article in The International Journal of Production Economics, they mention: "Companies in several industries are implementing lean practices to keep pace with the competition and achieve better results."[3] They indeed are trying their best, which has led to several companies decrease the amount of inventory in supply chains. But one must remember that having a lean inventory will not always translate into favorable financial outcomes. Here are a few crucial points to note:

- A company must determine the inventory based on the tied-up capital, insurance, obsolescence, taxes, losses, storage, and handling costs among other factors. Also, they cannot risk on a lower inventory since it can increase the logistics costs
- A leaner inventory implies quicker transportation, which also has a ripple effect of other costs
- For a CFO, lean inventory directly means lesser working capital tied up in inventory. But for a 3PL, it means pressure on expedited freight, complex changes with the mode of transport and a stifling pressure to be 100% accurate.

[1] Suryadi Hadi, "The relationship between logistics and financial performance of SMEs in Indonesia," Research Gate, January, 2015, https://www.researchgate.net/publication/302208613_The_relationship_between_logistics_and_financial_performance_of_smes_in_Indonesia

[2] Millard Humphreys, "Supply Chain & Logistics: The Bottom Line," The Institute for Entrepreneurial Excellence (IEE), April 26, 2016, http://entrepreneur.pitt.edu/supply-chain-logistics-the-bottom-line/

[3] Krisztina Demeter and Zsolt Matyusz, "The impact of lean practices on inventory turnover," Article in International Journal of Production Economics, September 2011, https://www.researchgate.net/publication/227420797_The_impact_of_lean_practices_on_inventory_turnover

Usually, lean inventory means an increase in costs, including logistics costs, because:

a) Keeping too little inventory can delay your service to your clients or customers, disappointing them, and driving them away from your business. This will eventually hurt your revenue

b) Higher freight costs make it impossible to opt for cheaper, longer-transit modes and often demand a premium because of the expedited freight

c) In the back end, lack of raw materials can cause production lines to come to halt and result in stockouts

d) And this can have a bad consequence on the outbound side, leading to empty shelves, missed sales, a negative impact on associated lifetime revenue and the heavy loss of a customer

e) Lean inventory also depends a lot on the fact that stock levels are constantly monitored and when required there is immediate restocking so that orders are processed quickly. This cumbersome and continuous process will lead to an increase in labor costs

In an insightful article titled, **'The real impact of high transportation costs,'** on the Supply Chain Quarterly, the following was mentioned[4]:

The widely practiced lean inventory approach favors minimizing inventory costs at the expense of transportation costs, due to the requirement for small and frequent shipments. In an environment where transportation costs are high, however, managers have become more astute in regard to shipment size, migrating from lean inventory to a hybrid transport/inventory strategy.

Hence, this becomes a fragile system where companies must carefully tread on. Inventory is a part of the working capital. Ensure that the profit margin is not damaged, and particularly your working capital tied up in the supply chain remains balanced. This will be important since investors evaluate the working capital based on which they tend to invest.

For the financial executives, including the CFOs, inventory metrics like days-on-hand inventory or inventory turns, is a window to supply chain performance. But the challenge here is to get accurate information about inventory. Experts insist that to get better information about their supply chain, companies tend to install enterprise resource planning (ERP) systems. CFOs in some organizations have been able to help drive better inventory management by ensuring that the ERP implementation process runs smoothly.

REMEDY

The potential increases in freight charges and lower customer satisfaction because of stockouts have to be balanced out with the decrease in the working capital used. The CFOs and their 3PLs have to examine the logistical implications together and find the right balance

Define clear goals, benchmark with industry standards, and factor in the aspects that will impact the current scenario. The right inventory and working capital compromise can be reached if departments collaborated within the company

3PLs plays an important role in determining how much inventory a company should carry. They can actively help companies with regards to inventory-related decisions

[4] Dawn Russell, John J. Coyle, Kusumal Ruamsook, and Evelyn A. Thomchick, "The real impact of high transportation costs," CSCMP's Supply Chain Quarterly, March 11, 2014, https://www.supplychainquarterly.com/articles/838-the-real-impact-of-high-transportation-costs

COSTS INVOLVED

It is now increasingly evident that a company has to ensure that it has a good logistics strategy to safeguard its financial health. Management must take both short-term and long-term actions to ensure they utilize logistics as an effective lever and an important component of business strategy.

More often than not, CFOs under evaluate the potential of logistics, especially in financial terms. This can prove expensive in several ways. Here's an example:

Say, you are establishing your business in new geography. You would certainly require establishing new supply lines as well. Since today everything is about competition, you will race against time to ensure short order-to-delivery time to keep the clients content. So you may resort to using expensive and quicker modes of transportation/freight that will eat into the establishment's profits. To prevent this, CFOs will have to have a comprehensive understanding of how such transportation costs will impact the overall business performance of an organization.

One cannot simply ignore the fact that logistics is a significant part of operating costs. These are expenses associated with the maintenance and administration of a business on an everyday basis. When it comes to logistics, several such costs are included under the operating costs, which will be discussed in the next segment.

Before proceeding to the next segment, we end this one on a note that the key to decreasing the business costs is a better understanding of the whole logistics set-up. A good example of this is the carrier rates. Late deliveries result in lower customer confidence and negatively impact revenues. The carriers may quote attractive lower rates for the business deal, but these costs come with many hidden 'accessorial charges' in the bill. Some of them are:

- Fuel surcharges - excessive fuel costs the hauler has to be reimbursed for
- Lashing surcharges - costs involving the protection of the cargo
- Unused truck order - a delay in shipment due to the weather is charged
- Detention - costs incurred when carrier delays returns of carrier equipment

These charges make the cost comparisons very complex because each carrier has a different method to arrive at their quote. And it can be safely established that carrier rates cannot be equated to the costs involved in the process. Many things have to be taken into consideration.

The CFO and the transportation department need to consider and analyze the real cost of transportation and see their defining role in determining the viability of a commercial strategy.

This brings us to the next important section – understanding the various costs associated with the logistics department. Here are some:

1. Direct and indirect costs
2. Fixed and variable costs
3. Tangible and intangible costs
4. Cost of supply and distribution

Before delving into the details of these costs, it is important to understand its relevance. A common conundrum that poses CFOs is whether they must invest in or simply rent certain assets. To balance these fixed and variable costs, all the costs related to fleet ownership need to be considered. They can be divided into two: direct and indirect costs.

Direct logistics costs are those which are incurred in the process of moving goods, such as transportation, warehousing, and value-added services. To elaborate, they can also include equipment (tarps, chains, etc.), maintenance (tires, oil, parts, emissions compliance, washing), lease, insurance, cell phone, permits & licenses, taxes, tolls, fines, parking, hotels, systems, and uniforms, etc.

Indirect logistics costs are often referred to as hidden costs which are not evident and yet add to the logistics costs. To elaborate, they can include implementation and training time taken for a logistics software system in the company, systems support, dispatch/fleet management, risk/compliance management, and recruiting (recruiter compensation, advertising, screening and qualification, drug testing). Driver orientation and training, maintenance (shop personnel and management compensation, parts inventory, shop tooling, depreciation, fuel dispenser expense), buildings and terminals, legal and professional services, record keeping, periodic inspections, insurance, utilities, and bad debt accrual are also part of indirect expenses.

Another important concept in logistics cost analysis is: fixed (or standing, capital) costs versus variable (or running, operational, recurrent) costs.

Fixed costs are those that do not vary regardless of a change in quantity or volume of output provided in the short-run (typically, one year). These costs vary from time to time. They take into account resources like vehicles, drivers, and warehouse buildings that enable the distribution of products. Ideally, the cost incurred for these resources does not exponentially change in a short period of time, such as a year, with variations in volume or distance.

Variable costs, on the other hand, are those costs that can change depending upon quantity or output volume. They monetarily quantify the logistics resources that are influenced by a change in the volume of goods to be distributed and also by the distance to be covered for delivering those goods. Fuel costs required to operate the delivery vehicle is a good instance of variable costs in this scenario.

After a thorough understanding of these costs and also others associated with the supply chain, the CFOs will have to determine whether or not to rent or buy, manage in-house functions, or outsource them. To get this understanding they must have access to all the costs incurred for any given period of time, analyze it, and sometimes even forecast trends and make strategic decisions accordingly.

An example highlighting one aspect of these costs is the decision to owning assets like a fleet. When you examine risk management and all the other costs related to owning assets that could be outsourced, on balance, it’s a good idea to consider divesting as much as possible. Often true costs of a dedicated fleet are not allocated. For example, the fleet doesn’t always have its insurance and may just be piggy-backing on the corporate insurance policy.

Business volatility also tips the scales in favor of outsourcing. When business slows, the relationship of assets to revenue becomes unbalanced. Outsourcing transportation to a logistics company – one that provides the required people, carrier capacity, and systems – helps manage this volatility by allowing your costs to parallel your revenue stream.

CFOs don't always consider the risk involved in fleet ownership. When an accident happens, you are liable, not your carrier. When you face legal questions about your safety program, you will realize that it is not as well-developed as a carrier's safety program.

Divesting may be a good option to consider because upon analyzing your risk management and the other costs involved that can replace the costs of owning assets. The true costs of owning a fleet aren't always clear. A fleet often does not have an insurance policy and maybe just a part of the corporate insurance policy. When your business is slow, the asset-to-revenue ratio becomes unbalanced. Business can be very turbulent and outsourcing offers some stability by allowing your costs to balance out your revenue stream. Apart from this, there are many advantages of being asset-light.

1. You can avoid fixed labor and systems costs
2. You're not obligated to undertake pension and other personnel costs
3. You have lower and lesser SG&A expenses to worry about
4. This will allow you to better your return on assets
5. You can grow substantially even if it's unexpected because you have access to extra capacity

SUPPLY CHAIN TECHNOLOGY COSTS

We earlier mentioned how important it is for CFOs to get accurate information about inventory at all times. It is equally important for them to get real-time visibility into the operations that will pave way for better business decision-making. We also discussed how one needs to have a thorough understanding of the logistics costs and also other costs associated with the supply chain, for which they must have access to all the costs incurred for any given period of time.

To manage all this and more, it is recommended that a company invests in a supply chain technology that can help in all aspects. Increasingly, many choose an enterprise resource planning (ERP) system to take care of the challenges discussed above. There are also pitfalls there since some of the logistics ERP solutions cater to only certain aspects of logistics, in which case organizations buy multiple systems, and they tend to work as disparate systems.

One will have to examine and assess the logistics ERP systems carefully before implementing them. They should invest heavily in ERP solutions that are disconnected to one another, work in silos and eventually bleed the company's finances. For there is a significant cost involved in implementing an ERP system in a company.

That said, CFO also needs to realize that when a logistics manager says s/he wants to buy a logistics ERP solution s/ he is implying a logistics strategy that they want to implement. The CFO should understand all the implications, on cost and strategy, before deciding to purchase transportation management software.

HITTING A HOME RUN

A holistic approach towards gaining a better understanding of the logistics operations, which is a part of an organization's supply chain operations, will lead to an easier and better collaboration between the key stakeholders in an organization – the CFOs and the logistics managers, particularly.

RAMCO LOGISTICS PLATFORM: NOT JUST AN OPERATIONAL SOLUTION BUT A BUSINESS SOLUTION

3PLs can add tremendous value to their customer's supply chain by not just meeting their on-time deliveries at the lowest possible costs, but also by playing a major role in reducing the inventory tied up in supply chains. The challenge that 3PLs face is that while they have the right intent they don't have the tools required to provide the visibility and in turn, the objective is not achieved.

Affordability: Ramco Logistics platform, leveraging Artificial Intelligence (AI) and Machine Learning (ML) is an integrated platform that monitors and improves services levels, keeps a track of the service cost, and enables the shipper the visibility to maintain a leaner inventory. 3PLs can use the planning and optimization tools of the Ramco Platform to set the "right speed" of transportation to get the right balance between affordability and reduction in working capital tied up in inventory.

The platform can calculate stockout costs that can arise due to plant or production line shut-downs caused by a lack of raw material or parts and undertake expedited transportation. Similarly, the platform can enable 3PLs to make decisions on the timing of the outbound movement to avoid empty shelves, missed sales or, at worst, the loss of a customer and the associated lifetime revenue.

The need for logistics services in the global supply chain need not be limited to single transportation mode and service. Ramco Logistics platform is an integrated platform that covers all modes of road, sea and air and also covers warehousing, cross docking, and value-added services. This allows a single source for the end to end data that create value for the complete supply chain.

Optimization: Ramco solution not only automates all the cumbersome manual tasks eating up the time of logistics operators or logistics managers, but it also helps in optimizing resources. Ramco iPO, In Memory Planning & Optimization engine, is a library of a wide range of predefined scenarios, constraints, and algorithms with high-speed processing capability that helps our clients achieve optimal resource utilization plan in their logistics operations.

Real-time visibility: Yet another aspect is the Command Center that accesses multiple sources of real-time data (operational, historical, transient, etc.), collates and processes them, and through a forecasting engine provides effective options after scanning all influencers. It keeps the suppliers, partners, and customers informed up-to-the-minute with timely and accurate data about each stage of the supply chain.

One-stop-shop: Most importantly, Ramco Logistics is a single platform that comprehensively covers the needs of the supply chain. All the functional aspects including, warehousing, transportation, billing et al are integrated to provide seamless workflow.

It is time to tap into the aspect of organization which is often overlooks, the logistics and supply chain, to ensure that there is a positive impact of logistics decisions on the finances of an organization.

ABOUT THE AUTHOR

Naval Sabharwal heads the Global Logistics & Supply Chain practice at Ramco Systems. He has over 33 years of experience in Supply Chain and Logistics operations, technology implementation and consulting. He has worked extensively in the field of Supply Chain and Logistics across various verticals, with a special focus on military, automobile, retail, oil and gas, apparels, cements, consumer durables, and manufacturing, for upstream as well as downstream supply chains.

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Ramco Systems is part of the USD 1 Billion diversified conglomerate, the Ramco Group of companies, and has 1900+ employees with 24 offices spread across the world. We are a fast-growing enterprise software player disrupting the market with our multi-tenant cloud and mobile-based enterprise software for ERP, Logistics, HR & Global Payroll, and M&E MRO for Aviation.

Ramco provides an Integrated Logistics Solution that traverses the management of Transportation, Warehouse, Fleet, Hub, Billing, HR, and Finance. A tailor-made solution for Third Party Logistics, Freight Forwarders, and Courier Express & Parcel Service providers, the Logistics platform helps to manage the operations with ease and enables to swiftly respond to evolving imperatives of business, regulatory changes, and market conditions.

To know how Ramco can help you create business value for your organization, feel free to reach out to **contact@ramco.com**