

White Paper 2017-14

How Different Supply Chain Management is in Project-Driven Organizations

Supply Chain Management in projects is different. This is not obvious and not always identified by procurement specialists who stem from other industries such as manufacturing or operations. The main issues are the uniqueness of the purchases due to the specifics of the project deliverables, Client unique specifications/requirements and the driving delivery time factor relating to actual project progress. In this White Paper we detail the reasons for these differences and what particular activities need to be emphasized in projects. It is a first Paper in a series on Supply Chain Management on Projects.

Supply Chain Management in

Projects requires a particular

focus on post-award activities

Procurement or Supply Chain Management? What it should cover

In terms of terminology, both terms are often used in organizations. We prefer the term 'Supply Chain Management' because we believe it describes better the fact that the entire chain leading to the delivery of material or service is of concern, and not the simple act of buying.

Organizations using the Procurement' terminology put generally more the focus on the Award activity when

organizations using the 'Supply Chain Management' terminology are generally extending the scope to other activities such as subcontract, post award management during the goods

manufacturing and even sometimes material or warehouse management.

Different roles in 'Procurement' or 'Supply Chain Management' organizations

- In 'Procurement' organizations, the Procurement Specialists cover the full scope spectrum from requisition receipt to final delivery. Their involvement during the post award is generally limited to the commercial and invoice management and require a separate technical person responsible to manage the supplier manufacturing process. The Contract department is separately in charge of the subcontract formalization and administration.
- In 'Supply Chain Management' organizations, the Procurement specialist role is restricted to the material procurement and some other job role specialists are developed to manage and taking the lead for the logistic, the expediting and the subcontract activity and covering and taking the lead during both pre-award and post-award stage.

Comprehensive coverage of Supply Chain Management

Therefore, Supply Chain Management covers the full cycle:

- Vendor sourcing and qualification
- Pre-award activities such as producing Requests for Quotations, evaluation and selection process, negotiating contracts and formally awarding them
- Post-award activities such as expediting, quality inspection management, logistics management, subcontract management, material tracking and warehouse management

How Project Supply-Chain needs to be particularly focused on Post-Award Management

Procurement departments in other industries such as manufacturing or facility operations are generally heavily weighted towards pre-award activities. Their central concern is developing category strategy, supplier networks and get the best deals. The items and services procured are generally repetitive and commoditized, which allows for clear codification, strong benchmarks

and continuous improvement initiatives, as well as initiatives to benefit from series effect, volume savings and discounts. Post-award is often not too much a concern, because some storage buffers

often exist at the point of utilization. In some extreme cases such as lean manufacturing, the supplier takes the responsibility of adequate logistics, based on repetitive cycles, and the establishment of close-by production facilities justified by the volumes.

On the contrary in Projects, because the items or services bought are unique, pre-award activities cannot be so well optimized. On the other hand, availability at the right moment on site to allow the project to proceed is extremely critical. This is compounded by the fact that many industrial projects happen in remote or difficult to reach places, or involve inter-continental transportation of large equipment. Therefore, post-award management should be the focus of Project Supply Chain.

We observe typically the need for this mental shift when Procurement Managers that stem from manufacturing or operations are assigned to Projects. They often need some time and some disasters to realize how much the post-award activities need to be strengthened.

In the following sections we will focus specifically on the specifics of post-award activities for Projects.

World-wide supply chain

In Large, Complex Projects the supply-chain is often surprisingly global, spanning often 2 or 3 continents, or more. This is due to the fact that there are generally only a few word-class specialists of certain particular equipment or items. These niche suppliers can sometimes be rather small companies that may not be entirely used to working globally in English, which is even more challenging.

Expediting

Expediting is a role of particular importance focused on post-award activities in projects. Significant projects will have full-time expeditors at office and supplier location which role is to follow-up and order from award to delivery, monitoring supplier activity and updating as needed the associated dates. A lot of the work involves contacting the suppliers for updates, organizing reports, facilitating technical exchanges and transmission of documents, and making sure inspections are planned adequately with production.

Expediting needs to play the essential role of warning when the delivery of items will be later than the required date and might jeopardize the smooth progress of the project. It also plays a key role in ensuring the documentation related to the items (as-built dossiers, material traceability) is available soonest after its delivery.

Inspection management

The proper management of the inspection activity is essential to ensure all project requirements are fully implemented. As industrial projects often involve parts that will be difficult to replace (due to their size or remoteness) or that may be involved in harsh

environments or safety-critical equipment, quality inspection plays an essential role. It needs to be embedded in the entire supply chain cycle. Inspection plans need to be developed that are consistent with the criticality of the items. Inspections need to be triggered when required by expediting.

An essential moment is the delivery of items at the manufacturing facility where sufficient Factory Acceptance Tests need to be performed. Participation by commissioning personnel and future operators is important.

Logistics management

Contrary to most instances in other industries, in projects logistics from the manufacturing facility is often organized by the project and not by the supplier. This is due to the specifics of single orders, the timing of projects and the need to manage storage sites, remoteness of project sites or size of the items. Because of the massive nature of the items procured in terms of size, quantity or weight specific transportation needs to arranged and the duration of such transit can be significant. Therefore, logistics has an essential to play to ensure the timeliness of delivery. Specifics aspects such as customs clearance and paperwork are essential aspects that need to be carefully planned to avoid unexpected delays.

Subcontract management

For the procurement of services, an essential success factor is proper and close subcontract management after its award. This has to happen both to ensure a proper quality of service and sufficient project control of cost and schedule. This subcontract management needs to be performed actively and with anticipation for the sake of project delivery.

The interest to have Subcontract specialists under Supply Chain Management is mainly to have a better commercial and closer subcontractor management than a Contract department which is generally more inclined to administrate the Contract independently of its technical content or its relationship with project delivery.

Material tracking and warehouse management

In projects, it is essential to retain full traceability and accountability for the material purchased when it arrives on site. This is important both for cost and quality (traceability) purpose.

This covers three distinct activities:

- On-site receipt of the material, and confirmation of any damage or quantity shortage, and the availability of all required documentation;
- Warehousing/ storage including proper preservation if required by the material and/or the local conditions;
- Provision to the construction site when required, and link with the ultimate location of utilization on

the project.

This process requires strong coding and tracking systems to be put in place, in particular for bulk material that can be cut in segments that are used

for different purpose.

Interfaces with the rest of the

project is essential in Project

Supply-Chain Management

The link with the rest of the project – key interfaces

One particular aspect of Supply Chain Management in projects is also its interfaces with the rest of the project. There are far more interfaces expectations with other departments than in other industries, due to the nonstandard nature of many items or services procured and the need to cater for the needs of the construction site in the end.

Key interfaces include engineering for the specifications and the follow-up of manufacturing, construction for the delivery and logistics, commissioning and operations for acceptance of equipment, project control for forecasting, contract, quality and HSE for compliance, etc.

Conclusion

Supply Chain Management in projects encompasses some specific aspects that need to be considered. There is much more focus on post-award management that in most other industries and this needs to be fully understood by the Supply Chain Managers. Also, it requires more and stronger interfaces with other project disciplines and working as team is essential.

In following White Papers we will develop some specific aspects of Project Supply Chain Management.

