LeanCor TRAINING AND EDUCATION

Georgia Tech Supply Chain & Logistics Institute

Applying Project Management Methodologies to the Supply Chain Environment

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Prepare your people

Agenda

- *LeanCor Overview*
- *PMBOK and the Project Methodology*
- *Project Management in the Supply Chain*
- *Course Series Concepts & What's Covered*

About LeanCor Supply Chain Group

Trusted partner with three *integrated* divisions that specialize in lean principles to advance supply chains.

"We Teach. We Consult. We Do."

LeanCor TRAINING AND EDUCATION

Lean, Supply Chain, Six Sigma, Leadership Courses

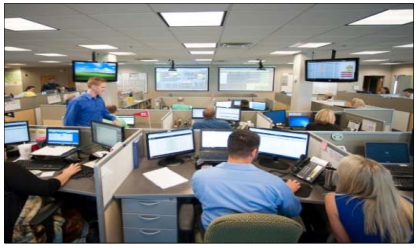
Public, Private, Online Settings

LeanCor CONSULTING

End-to-End Supply Chain Advancement Solutions

Diagnostic, Assessment, Design and Deployment

LeanCor LOGISTICS



Full-Service 3PL Solutions

Logistics Engineering, Transportation Management, Warehousing

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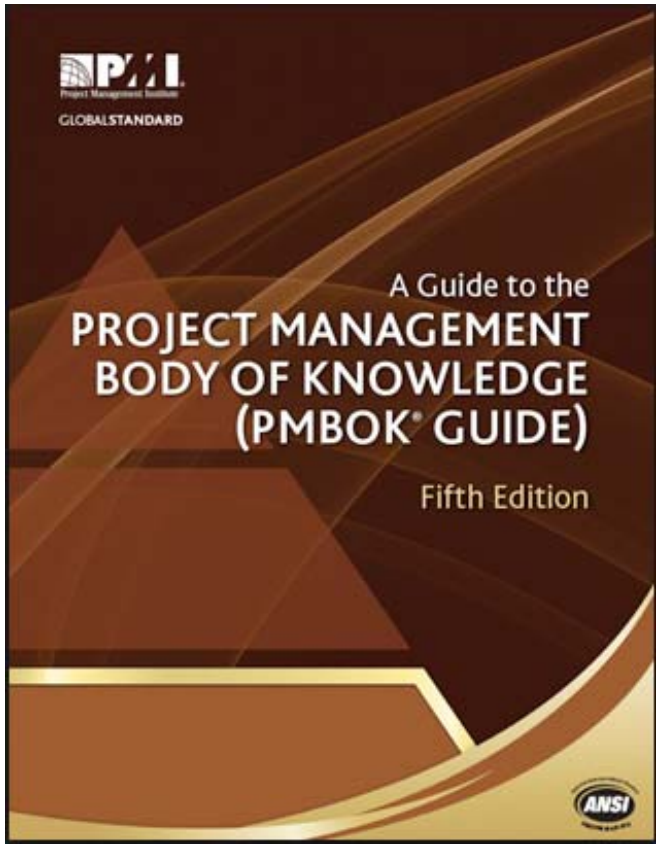
PMBOK and the Project Management Methodology

This course follows the methodology developed by the Project Management Institute (PMI) – the most recognized association for project management professionals.

This general purpose project management guide outlines the best practices around

- Initiation of a project
- Planning for the project execution
- Execution of the project
- Project monitoring and controlling
- Closing a project

The PMBOK is a detailed collection of general processes and best practices… but what's that mean for us as supply chain practitioners?



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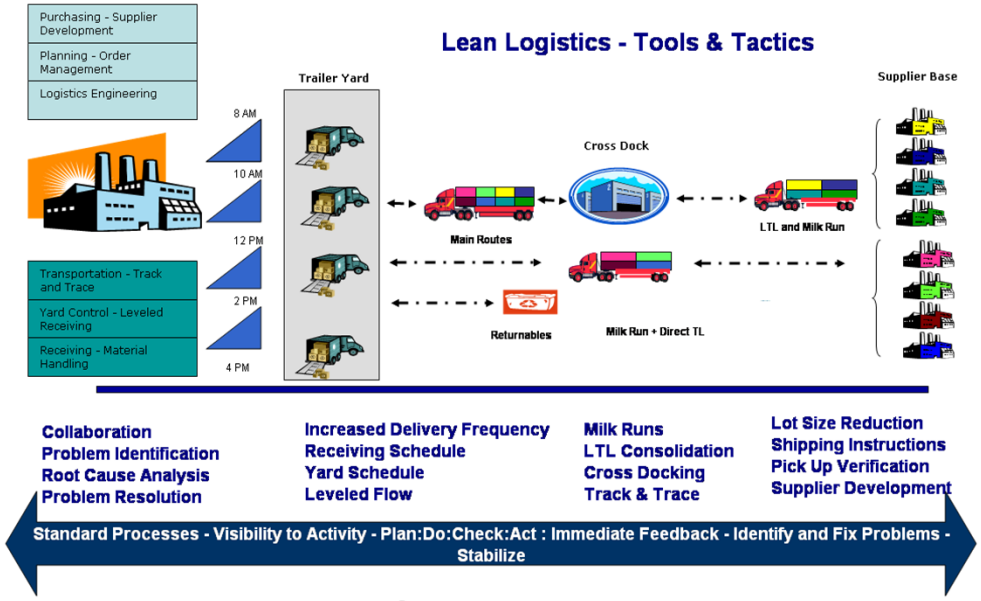
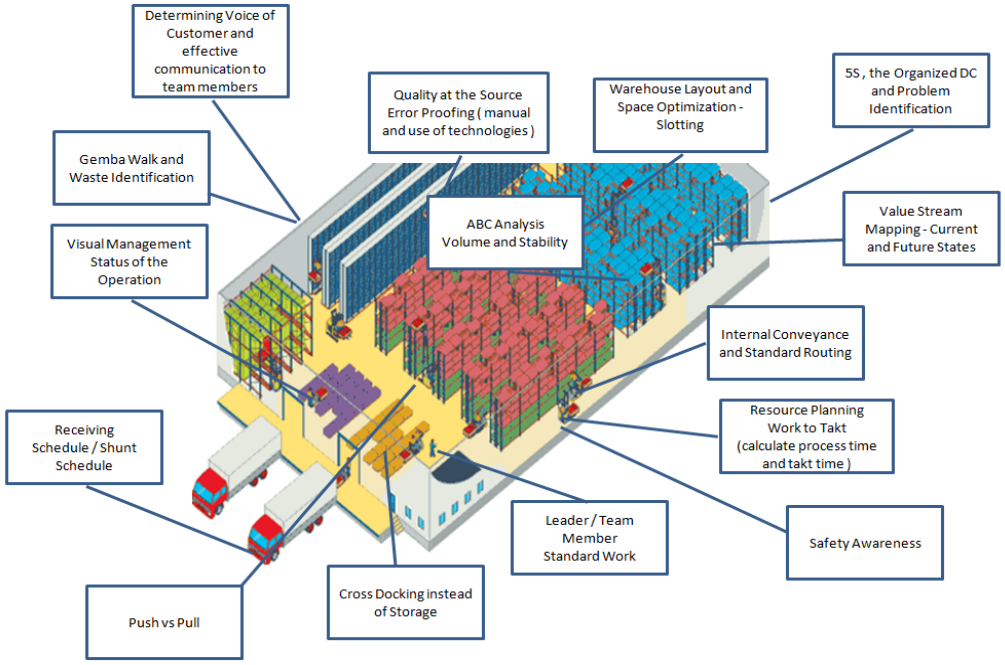
Project Management in the Supply Chain

The PMBOK is a great tool for experienced project managers, but it is a general guide.

Understanding how to apply this methodology to Supply Chain projects requires knowledge of the terminology, principles, and processes used in strategic and operational supply chain operations.





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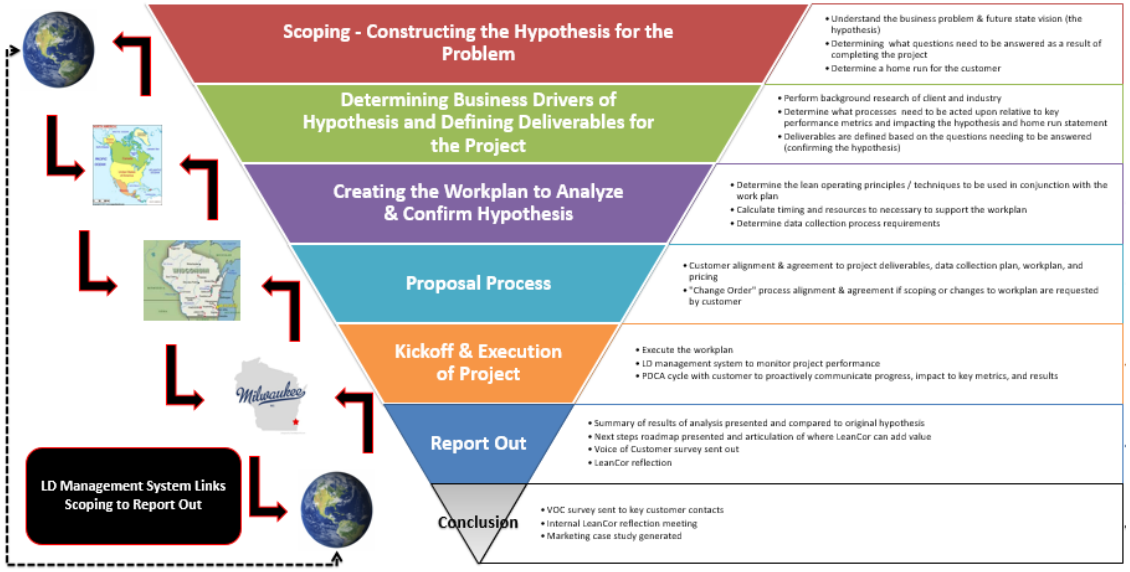
Course Concepts & What's Included

These courses are designed to take the framework established by PMI and convert it into relatable Supply Chain Project Processes.

We will draw on our established Supply Chain project experience, featuring the methodologies and tools used in historical LeanCor customer engagements.

Included in the course:

- Overview of supply chain concepts
- Configuring PMBOK to Supply Chain
- Deep dive into project processes
- Supply Chain project case studies
- Interactive supply chain exercises
- Project plan kit w/applicable Excel tools



LeanCor Project Management Process

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Case Study – Warehouse Design

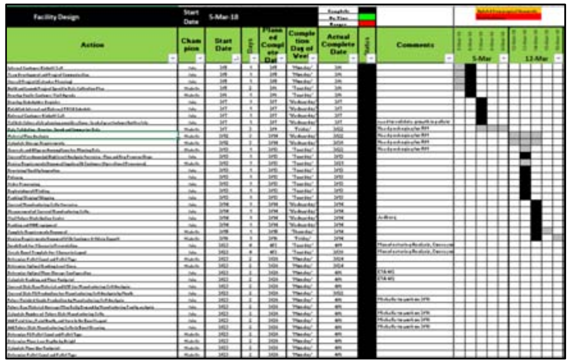
PROJECT SCOPING DOCUMENT

Project Theme	Customer Name	Customer Contact
Warehouse Design		

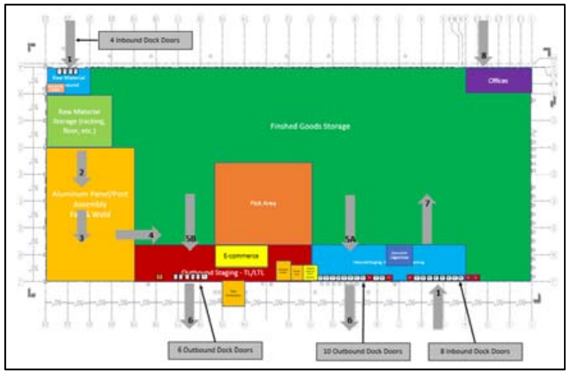
Current State

- *What is the background and context?*
  - Moving to a larger facility
  - Manufacturing inside the building
  - Garage dock – trans-loading material
- *Describe the current challenges.*
  - 1 – Existing business has moderate growth (instore fixed asset stores – Home Depot, Walmart, Tractor Supply) – business is going to continue to shift direct to consumer (e-commerce) – going to have to be prepared for that shift to take place
  - 2 - Internet based product line that still goes to the store not consumer. In the fture they will have to respond to a Lowes website to the consumer. In far future, Chinese shipments from their factory to customer
  - 3 – Manufacturing – process capability for inbound raw material, WIP and Finished Goods (traditional distribution layout or e-commerce layout environment)
  - 90-95% of products are palletized today. Palletized racking picked down and a single item is pulled?
  - Direct shipments from China into receiving, and products that are manufactured
  - Challenges – not having a clear FIFO system that they need to address, do not have a good WMS (placement has complicated FIFO)
  - Starting out with a smaller ecommerce area that will eventually quadruple in the next three to five years

Project Scoping



Project Planning



High Level Layout

Operational Element	1st Shift (Non- Peak)									
	Receiving	Putaway	Full Pallet Picking	Mixed Pallet Picking	E-Commerce	Replen.	Shipping	Manu. RM Receiving	Manu. RM Replen.	Manu. FG Putaway
Average Requirements (pallets)	362	362	222	136	142	136	367	9	9	28
Total Available Working Time/Shift	8	8	8	8	8	8	8	8	8	8
Average Processing Time (min)	9	2	2	20	5	5	1	2	5	2
Average Travel Time (min)	0	1	1	4	1	1	0	0	1	2
Productivity (pallets per hour)	7	21	22	3	11	10	38	27	10	17
Optimal Material Handlers / Shift	8	3	2	8	2	2	1	0	0	0
Actual Number of Material Handlers	9	3	2	8	2	2	2	1		
Total Number of Material Handlers	29									

Operational Expenses

- End Rider Electric Pallet Jack used for:
  - Receiving & Pallet building
  - Mixed Pallet Picking
  - E-Commerce Picking
- Electric Reach Truck
  - Putaway
  - Full Pallet Picking
  - Replenishment
  - All Manufacturing Material Handling
- Electric Counterbalance Forklifts:
  - Shipping

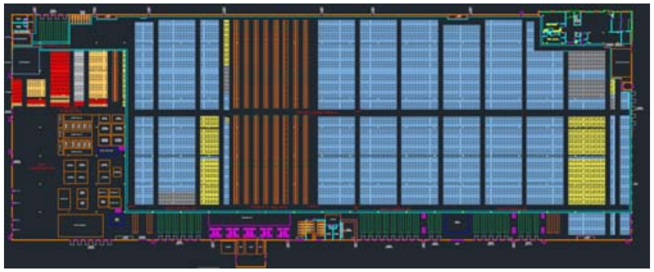
Item	Cost Each	Count	Total Cost
Single Deep Selective Racking	$60	6,908	$414,480
Automated Stretch Wrap Turntable	$18,714	3	$56,142
E commerce Work Station	$1,149	10	$11,490
Total			$482,112

* Need total 15 stretch wrap machines, current 12 will be used and 3 more need to be purchased

Item	Least Cost Each	1 Shift Operation	
		Count	Total Cost
Electric Single Deep Reach truck	$6,432	Regular - 13 Peak - 1	$85,760
End Rider Electric Pallet Jack	$3,120	Regular - 1 Peak - 0	$3,120
4 Stage Mast Forklift	$6,288	Regular - 5 Peak - 1	$33,536
Total			$122,416

*Excludes Preventative Maintenance Costs

Capital Expenses



Warehouse Design

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Course Series Concepts

Supply Chain Project Management Series

https://www.scl.gatech.edu/SCPM

Supply Chain Project Management: Fundamentals

June 5–7, 2018

Georgia Tech Savannah Campus

Supply Chain Project Management: Vendor Selection & Management

June 12–14, 2018

Georgia Tech Savannah Campus

Supply Chain Project Management: Effectively Managing Transformation Projects

June 19–21, 2018

Georgia Tech Savannah Campus

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Thank You!

Questions?

event@scl.gatech.edu

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