

CASE STUDY

Lean Process Improvement

Seyer Industries

■ PROBLEM / CHALLENGE

Seyer designs and produces specialized aerospace products that require precision machining, welding and testing for commercial aircraft and the military. Each successful product requires an extensive back office set of processes. Seyer wanted to improve their “office” process efficiency and quality, which included the entire program cycle, excluding the manufacturing operations.

■ LEAN ASSESSMENT

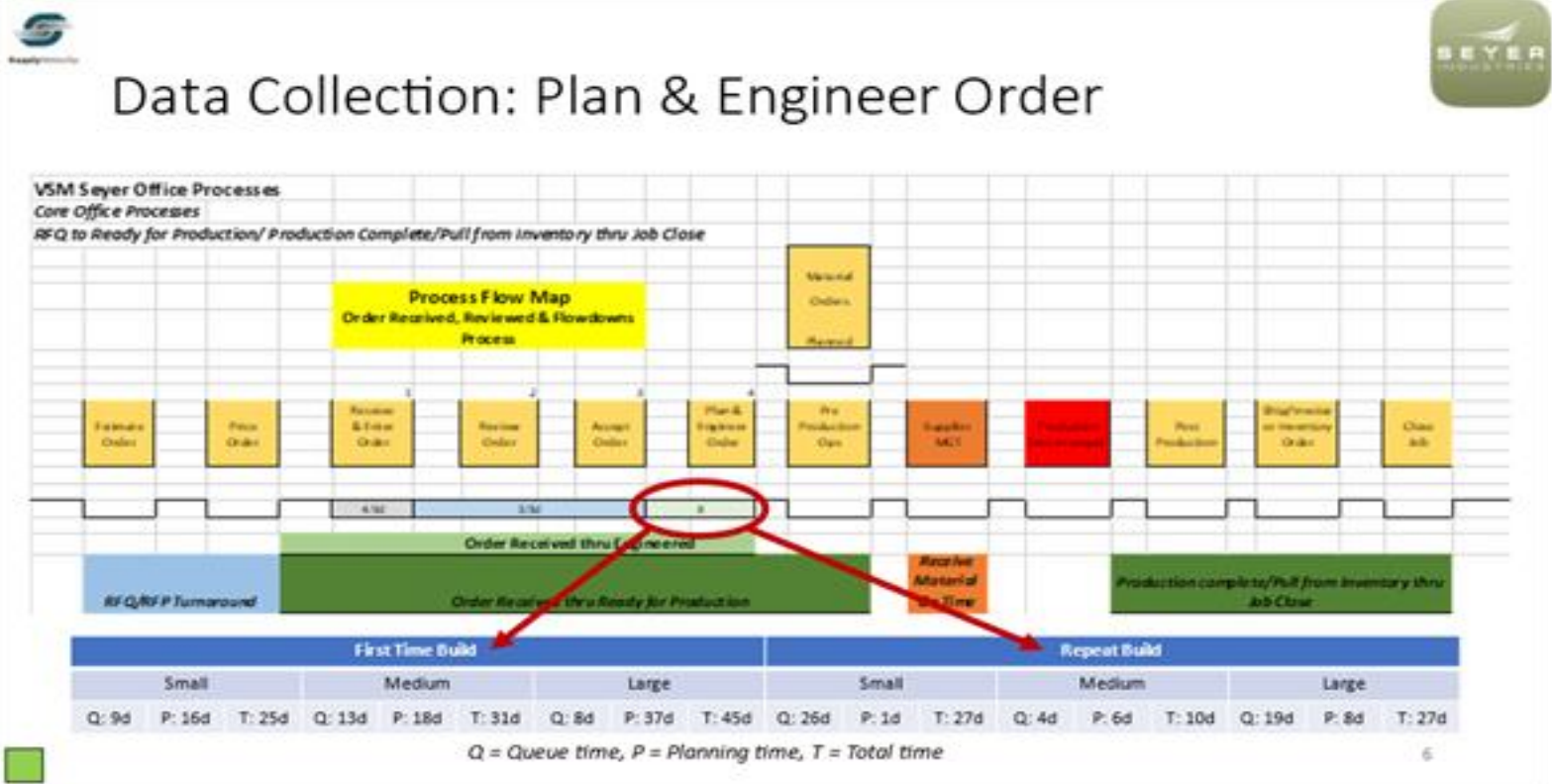
We conducted a 2-day Lean Assessment and it recommended Value Stream Mapping (VSM) and SIPOC for the program cycle, detailed Process Flow Mapping for the Contract Award thru Acceptance phase, creation of a weekly Project Visibility Dashboard/Meeting, and implementation of an Office Defects Tracking and Resolution process.

■ IMPLEMENTATION DETAILS: VSM, SIPOC, PFM & DASHBOARD

Created Value Stream Map (VSM) and SIPOC (Suppliers, Inputs, Processes, Outputs and Customers) to baseline the cycle times, clarify roles and responsibilities, identify gaps and constraints that would require a deeper understanding and resolution via Process Flow Mapping (PFM)

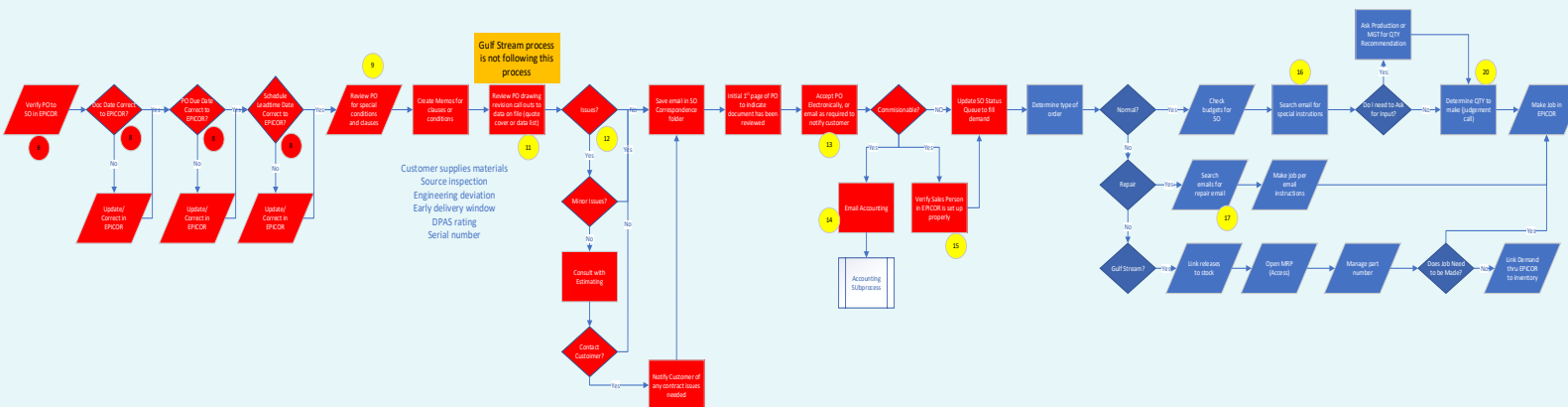
- Created VSM with baseline cycle times for complete “product cycle”, from Request for Quote thru Ready to Ship, but excluded manufacturing.
- Identified constraints and where to probe deeper with Process Flow Mapping
- Generated a SIPOC for each VSM high level step to identify organizational complexity, duplication and or gaps
- Created a “current state” Process Flow Map for the constraining process, Contract Award thru Acceptance
- Leveraging the VSM and SIPOC, developed “order visibility” dashboard to proactively address project flow issues in a “future state” weekly “Order Visibility Meetings”

VSM with CYCLE TIMES & TARGET PROCESS FLOW MAP AREA HIGHLIGHTED



VSM provided the office performance baseline cycle times and identified the constraining areas

PROCESS FLOW MAP (PORTION) WITH DOTTED STEPS TO BE IMPROVED



Current State PFM was very "serial" with lots of cycling back and forth between steps

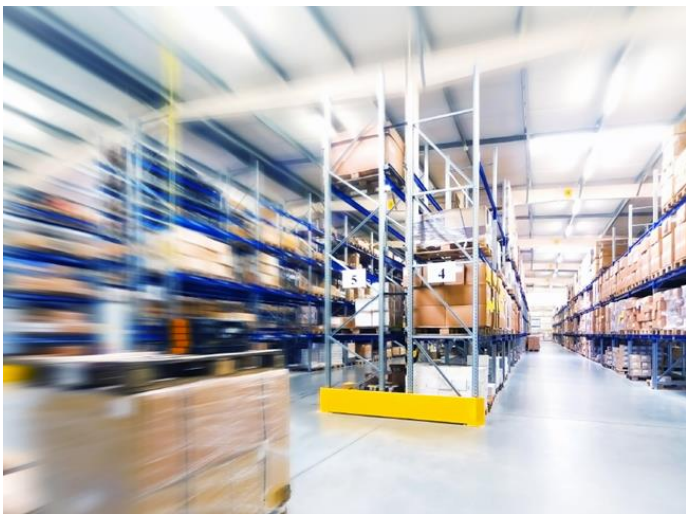
INITIAL DRAFT ORDER VISIBILITY DASHBOARD WITH VSM STEPS AS COLUMNS

SO#	SO Line	Customer	Contract Due Date	Current Dock Date	Lead Time	Product Group	Part In Stock	FAI Required	Unusual Clauses	New Requirements	Order Entered	Order Reviewed	Order Accepted	Order Planned	On Hold-SO	On Hold - Job	COMMENTS
SO123		ABC	01/01/23	01/01/23		N	Y	N	N								
SO124		XYZ	03/01/23	03/01/23		N	Y	Y	Y								Unusual clauses are a problem, need to
SO125		wbya	04/01/23	06/01/23		Y	N	N	N								
Codes Defined?																	
Product Group	What are the types?																
Part in Stock?	Yes or No																
FAI Required?	Yes or No																
	Full, partial or empty																
	Manual entry - possibly at the meeting?																
Unusual Clauses?	Yes or No																
	Does not appear this can be automatically populated?																
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Dashboard was developed based on the VSM and lessons learned from cycle times and SIPOC complexity issues

DIFFICULTIES ENCOUNTERED:

Balancing governmental requirements while trying to reduce redundancy of steps or duplication of organizational roles



RESULTS

- Baselined cycle time and created reporting to promote continuous improvement
- Reduced Contract Award thru Acceptance time by 20% and formalized the missing or ad hoc acceptance process
- Identified missing QA Compliance role and clarified process responsibilities
- Operationalized the improved office process and order-flow visibility and trained personnel
- Implemented "office defects" processes to better understand and analyze the root causes and improve performance

Reference: Chris Seyer, President
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