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## CONTEC

# How Implementing a Value Stream Mapping Approach into a Customer's Supply Chain Network Translated to Savings

White Paper



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8-14-2020

## Total Value Chain Approach

Great Execution has become “table stakes” for us as we manage our client’s Forward/Reverse Logistics, Automated Testing, OEM Authorized Repair, and Direct Fulfillment. Sustained great execution in an environment as dynamic as Reverse Logistics and Repair requires an almost maniacal focus on process metrics and SLA’s. We can, at times, become so focused on optimizing the activities within the “four walls” that we can lose sight of the big problems for our customers and the big opportunities to create value for them. At Contec, the antidote to “tunnel vision” has been to step back and look at the customer’s entire Supply Chain using Value Stream Mapping (VSM). Taking this approach has repeatedly yielded more value for our customers and a much stronger relationship than by merely focusing on the usual KPI’s.

As one of the fathers of Lean Manufacturing and master of the Toyota Production System, Shigeo Shingo said best, *“A relentless barrage of ‘why’s’ is the best way to prepare your mind to pierce the clouded veil of thinking caused by the status quo. Use it often.”*

Most recently, Contec had a barrage of ‘Why’s’ from both internal and external sources with one of our large MSO clients, something we believed only VSM could address.

## VSM Project: The Approach/Problem Definition

With this specific customer, we had been performing very well on daily/monthly KPI’s and were scoring very highly on Quarterly Business Review’s; however, several SLA misses were identified with asterisks next to them as misses that were out of our control due to a lack of available inventory. It is always easy to keep going, keep executing and dismiss the asterisks as out of our control; however, we strongly believe that true partnership is solving problems together. Below is a synopsis of the VSM performed for our client.

### The Why:

There was a recurring issue with repeated partial shipments due to inventory shortages. We felt strongly that these shortages were due to a lack of

available product being returned; however, the customer seemed convinced Contec had a capacity issue. The Contec team developed a plan to lean out and improve all the processes within its’ four walls, but an Ishikawa diagram revealed that the contributing causes were both internal to our SLA charter and external to us within the larger holistic customer supply chain. To achieve real improvement and value, the discussion had to change from compartmentalized functional elements to end-to-end problem solving.

### Team Formation:

Led by a Lean Six Sigma Master Black Belt, the team involved the following cross functional team:

- Executive Sponsor (CEO)
- 1 Lean Six Sigma Master Black Best (Leader)
- 2 Certified Lean Yellow Belts
- Cross-section of entire organization from Operations to IT and Sales to Engineering from the Front Line to senior leadership

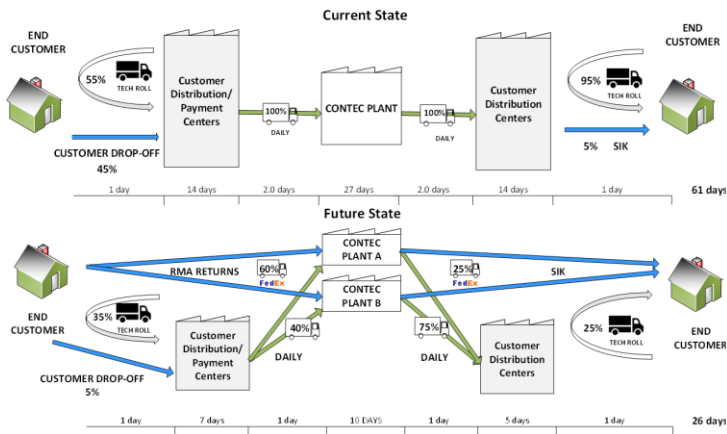
### VSM Timing & Process:

The team came up with a five-week plan and followed a rigorous meeting schedule with daily standups.

VSM Phase I Project Timeline	June	July
5S Planning & Exercise - Plantwide	[Gantt bar spanning June 1-15]	
Operate Pilot Line For Validation	[Gantt bar spanning June 15-30]	
Quote the Pick-To-Light Solution for Supermarket	[Gantt bar spanning June 15-30]	
Develop Cost Estimate for Full Implementation	[Gantt bar spanning June 25-30]	
Dev & Rev Phase 2 Implementation Plan w/ Sr.Team	[Gantt bar spanning July 1-5]	

After gathering data, performing several processes walk throughs and developing current and future state maps, the Team developed a clear picture of what was happening, and created action plans.

The current vs. future state highlighted a shift from tech truck roll bulk receipts (expensive) to a more RMA & Self Install Kit (SIK) centric program identifying significant potential savings. Best of all, an overall reduction of 61 days to 26 days in total process time was identified.



- Mapped end point ship to locations and split service to move a portion closer to end customer, saving approximately \$170K in freight costs annually

**Conclusion:**

Through a collaborative effort with internal and external stakeholders the VSM exercise identified tangible savings to both Contec and our customer. We invested \$50k resulting in an internal annual savings of \$150k and a potential annual savings for our customer of \$1.6M after twelve months enabling Contec to effectively position itself as a ‘Trusted Business Partner’ rather than just their repair provider.

Most of the time savings were to be realized by creating a Finished Good ‘Supermarket’, which is a group of pre-sized FIFO lanes to facilitate the movement of finished good parts.

**VSM Findings / Outcome & Savings**

**Internal to Contec:**

- Identified that less than 40% of existing process was truly value added
- Removed non-value added steps, speeding up internal processes by 62% thus significantly increasing inventory velocity
- Eliminated six headcount resulting in an annual savings of \$150k
- Transitioned into an in-cell Finished Goods Supermarket reducing manual handling by -4 touches
- Installed poka-yoke (mistake proofing) process features to reduce inspection, resorting and repacking

**External to Contec (Customer):**

- Identified opportunity to reduce complete forward and reverse logistics process with a 43% reduction in days to process a unit, which enables greater inventory velocity and in turn more available inventory for a total net savings of \$1.6M after twelve months
- Identified an opportunity to significantly reduce tech truck rolls by as much as 50% equating to an estimated monthly cost reduction of \$313k after twelve months

**WHY CONTEC Solutions:**

Contec, Technology’s Source for Logistics, Test & Repair, Operations & Engineering team is driving technology innovation & eliminating waste every day for our customers. With our Lean Six Sigma mentality and technology focused suite of automated testing solutions, we are consistently able to output a best in class quality product. Our customer focused solutions and program management team is delivering. To learn more, please visit us at [gocontec.com](http://gocontec.com)

**About the Author**

**Brett Gorchov** is a Senior Program Manager with a rich history in delivering and improving overall customer satisfaction. Brett started his career in the Cable industry, working for both content and content delivery companies such as HBO, Time Warner Cable and Spectrum.



Appendix: CONTEC Overview

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## Forward & Reverse Logistics

- B2B/B2C Fulfillment
- Hub Services
- RMA Returns
- Asset Recovery
- Kitting/Packaging
- Service Parts Logistics



## Test, Repair & Diagnostics

- Test & Diagnostics
- Automated Test HW/SW
- Product Triage
- CPI clear (Data Wipe)
- Cosmetic & Refurb
- L2-L4 Repair (BGA)

## Product Capabilities



Set Top  
Box/CPE



Parts  
Mgmt.



Security &  
Surveillance



Wireless  
Streaming



PC &  
Storage



Point of Sale



Connected  
Home



Audio



WIFI /  
Gateways



Accessories



Mobile



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