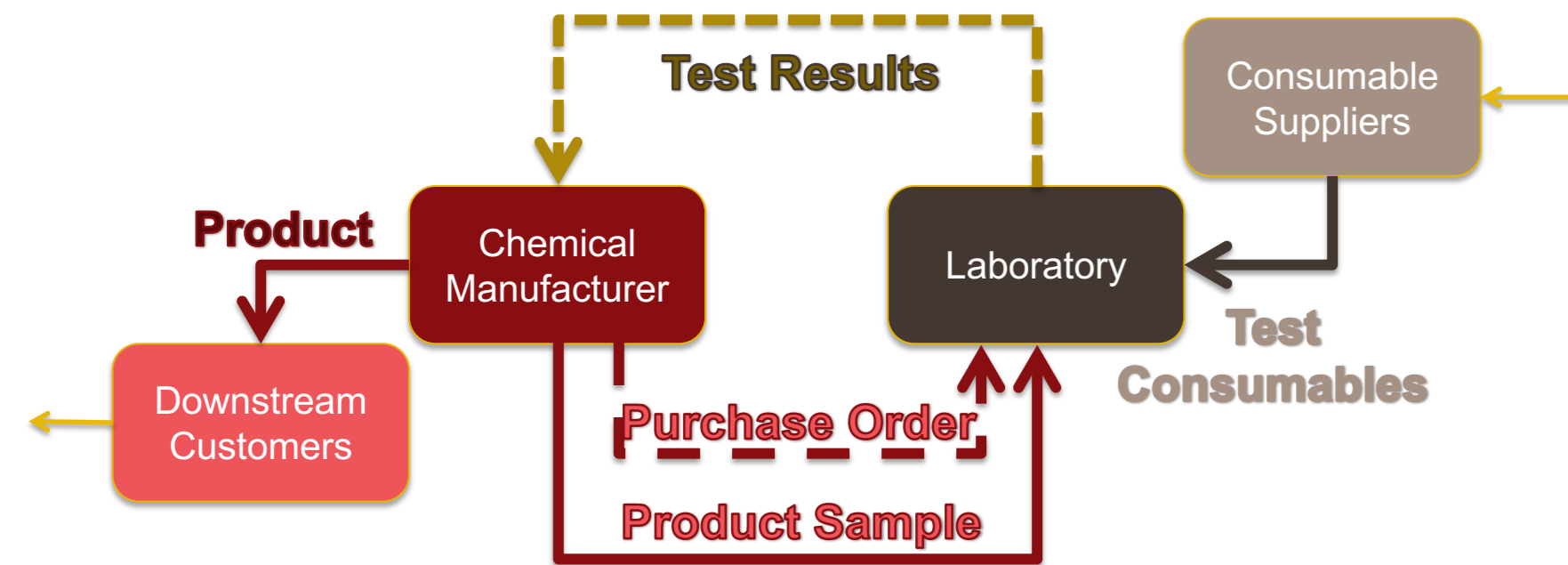


Managing a Service SC from Views into Downstream Drivers of Demand

Motivation / Background

- Fuels, lubricants, and greases used in the aerospace industry must pass a litany of regulatory testing.
- Testing laboratories in the industry require agile service supply chains offering a wide array of testing services.
- Testing services exhibit a high level of demand uncertainty.



Key Question / Hypothesis

How can managing the production of testing services mitigate the effects of demand uncertainty in the service supply chain of an independent laboratory testing company and its chemical manufacturing customers?

Relevant Literature

- Chase, Richard B., and David A. Garvin. The Service Factory. *Harvard Business Review*, Jul.—Aug. 1989, pp. 61–69.
- Maull, Roger, et al. Service Supply Chains: A Customer Perspective. *Journal of Supply Chain Management*, vol. 48, no. 4, 2012, pp. 72–86.
- Ellram, Lisa M., et al. Understanding and Managing the Services Supply Chain. *The Journal of Supply Chain Management*, vol. 40, no. 4, 2004, pp. 17–32.
- Mason-Jones, Rachel, and Denis R Towill. Total Cycle Time Compression and the Agile Supply Chain. *International Journal of Production Economics*, vol. 62, no. 1-2, 1999, pp. 61–73.



Downstream Demand Customer Service Provider

The Problem

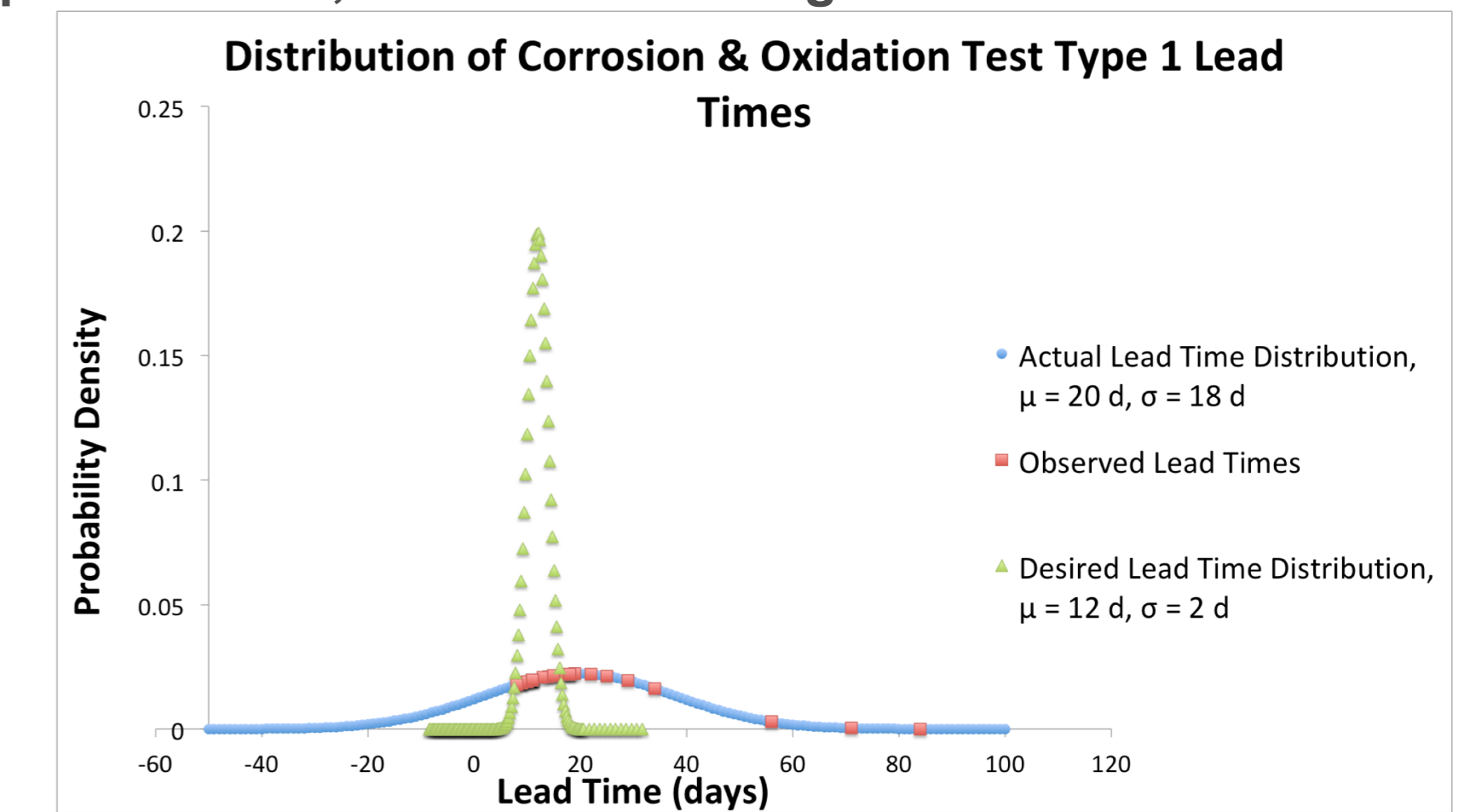
- Demand uncertainty across hundreds of different testing services results in highly variable demand for some tests and sparse, infrequent demand for others.
- Batch orders for testing cause intermittent surges in demand leading to overutilization of testing capacity.
- Unexpected test samples arriving at the lab limit process steps from being completed in anticipation of their arrival.

Methodology

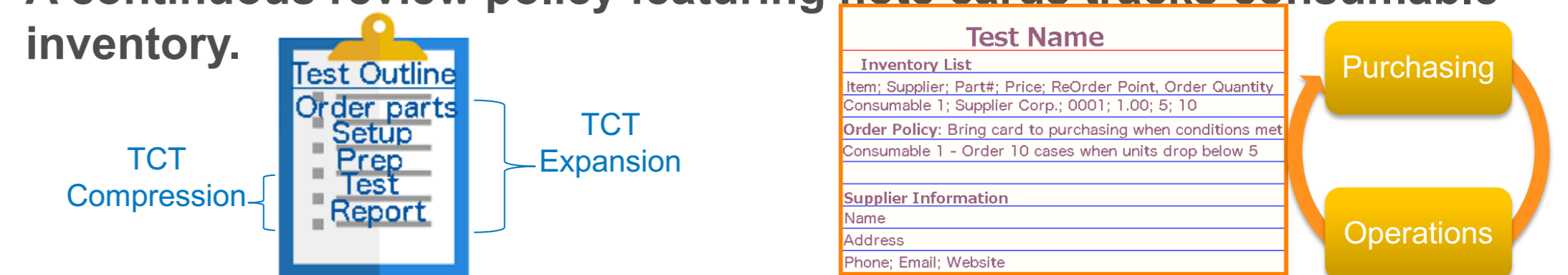


Initial Results

- 25 different testing services revealed highly variable lead times, frequent re-runs, and lack of management.



- Configurable procedural outlines control total cycle time and track labor costs.
- A continuous review policy featuring note cards tracks consumable inventory.



Expected Contribution

- Develop a practical framework for managing a service supply chain using the management levers unique to services.
- Innovate new business models between service providers and their customers.
- Transform communication with customers into efficient actions in the service supply chain.
- Apply the results in other service industries to enable the systematic management of various service supply chains.

Michael Chee-Awai



Joel Semel

