Title: *Visual Workload and Inventory Management*

Problem:

Even with an extended work day (staff working overlapping shifts), throughput from a lab could not match demand. Backlogs built up until management approved overtime to catch up.

Analysis:

Takt time analysis showed that working 8.5 hours each day would allow staff to match demand. This could be achieved with the shift schedule, but required that all the time in the lab was testing time. The team analyzed the activities that supported testing and that the tests required. They discovered that when a technician walked into the lab to work a shift, there was a lot of start up activity beyond the handling of samples for testing.

Countermeasure:

There were two areas for improvement:

1. *Clearly identify the samples and tests to be done. Admin staff organized the samples and test packages in shift-sized batches. This gave the technicians the opportunity to walk in, grab the next batch, and start testing.*
2. *Manage the consumables in the lab so testing would not be interrupted. Again, admin staff were tasked with managing the consumables for testing Templates were created that marked when new consumables needed to be prepared and placed in the lab for testing.*

Results:

The lab increased its throughput to meet takt time. Samples were tested promptly, eliminating "no test", which also resulted in lost revenue. Overall revenue increased by $187,500 after 3 days of work.

Measure	Before	After
Cycle Time	30	30
Production hrs/day	11	8.5
Check tests	9%	1%
WIP	6	2
Inventory	38	17-34