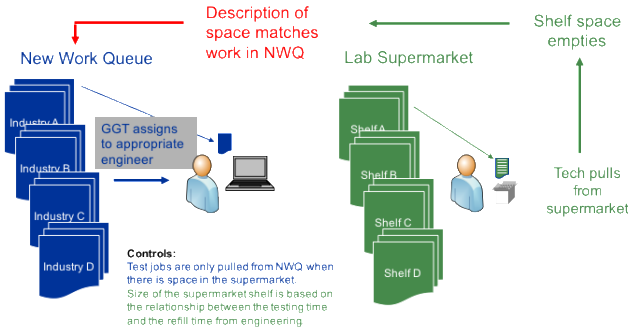
Title: *Where, oh where, should my sample go?*

Problem:

Customers from all over the world required testing which could be performed at any one of six labs. The lab managers did their best to test any samples that arrived at their labs, but often found themselves with some test capabilities underutilized while others were overbooked. They spent hours every day trying to figure out which samples to send where to assure that promise dates could be met.

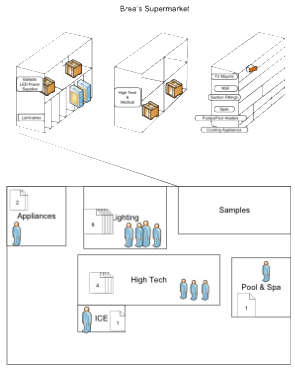
Analysis:

Takt time analysis based on global capacity gave us targets. However, we found that the lab managers were uncomfortable with the values, and it was difficult to match test capabilities with actual samples. The managers had a good sense of what created an overload condition, and it was different for each lab. Different combinations of types and numbers of samples caused challenges for the different labs. We established trigger levels for the unique "shelf contents" for each of the six labs.



Countermeasure:

With this analytical knowledge in mind, we established sample holding areas that were grouped by test capability at each lab. In addition, the holding areas limited the number of samples that could be housed. This indicated to the lab manager exactly what capacity was available and what was overloaded. An electronic duplicate version allowed the managers to "see" into the other labs around the globe. All that was required was a quick confirming phone call or e-mail to say "ship me this, and I'll ship you that" to maximize the capacity in all the labs.



- Supermarket is organized by Lab Team
- One shelf represents a particular group of capabilities and skill sets.
- Workload in lab and inventory in supermarket represents a real snapshot of work in Lab one day in January 2010. Next GGT run would look for:
  - 4 Luminaires
  - 2 High Tech and/or Medical
  - 3 Cooking Appliances
  - 3 Pumps/Pool heaters
  - 2 Spas
  - 1 NSF-temperature device
  - 1 Suction fitting

Results:

Lab managers coordinated workload without extensive cross-time zone communications, significantly reducing sample shipments.

Next Target