Tim’s 5S Project:
My Laundry Room
Badnormal Situation Overview

- Space used for laundry and storage.
- Room opens into kitchen.
  - Enclosed by two folding doors (which stay open… always).
  - Kitchen used for cooking and entertaining (mostly myself).
- Original clothing flow:
  - BR Dresser → Body → BR Basket
  - K Floor → Washer → Dryer
  - K Basket → BR Dresser.
- Current clothing flow is:
  - Body → K Floor → Washer
  - Dryer → Body.
- Storage areas last organized / cleaned in Aug ‘07.
Unique Considerations

- Substandard housing conditions.
  - Aged electrical infrastructure limits simultaneous operation of appliances.
  - Relevant information discovered on floor behind washing machine...
  - …only after causing significant inconvenience to neighbors.
  - Warning remains behind washer.

- Smallest washer ever conceived by (wo)man.

- Together these issues make laundry a lengthy, continuous process, contributing to the (disturbing) change in clothing flow.
Issues

- LIP (Laundry in Process) overflow into kitchen.
  - Complicates processes completely unrelated to laundry and occasionally contributes to increased clothing contamination.
- Clean clothes stored in dryer (wrinkled articles and rework).
- Items stored but belonging to others (barstools, jacket on floor, etc.).
- Infrequently used items (e.g., prior roommate’s detergent, misc. hardware, etc.).
- Dryer expels lint (buildup helps identify preceding, but constant cleanup).
- Peculiar behavior, even for a bachelor… (e.g., dressing and undressing in kitchen).
- System dependent on tribal knowledge (electrical warnings).
- Aesthetics.
Sorting Process

- Room also serves as primary storage area and necessarily contains items unrelated to laundry.

- Discarded:
  - 2 old bath mats, 1 paper towel rack, 2 storage sacks for folding chairs, 1 can of shirt starch.
  - Items not used in last year and/or in very poor condition.

- Returned:
  - 1 jacket on the floor belonging to a friend.

- Sold:
  - 2 bar stools belonging to prior roommate in North Carolina (proceeds remitted to him, less 3-year storage fee).

- Consumed:
  - Roommate’s old liquid laundry detergent inventory (I only use Tide powder… Mountain Spring scent).

- Consolidated:
  - Partly consumed hardware items (lightbulb boxes).

- Found:
  - My old Dirt Devil vacuum cleaner from college.

- Sorting process freed equivalent of one shelf, allowing me to remove all items from floor.
Set In Order

- Frequency of use drove decision-making as I replaced sorted items.
  - Ex. Laundry detergent and fabric softener on middle shelf closest to appliances.

- “L” bracket discovered during sort affixed to wall to hang shirts awaiting ironing.
  - Freed a 2nd smaller laundry basket to be incorporated in standardization of process.

- Marked location for laundry basket during process.
  - On dryer… not kitchen floor.

- Posted warning sign, standard laundry procedures, and conditions of use to inform other users.
Shine

- All laundry room surfaces covered in ~1/4” of lint emanating from dryer.
- Thorough vacuuming of surfaces was surprisingly painless.
- For over 1 year, I accepted the lint problem as an unavoidable fact of living in tenement conditions with miserable appliances.
  - “That’s just the way it is… there’s nothing I can do.”
- However, in a moment of kaizen nirvana, I undertook a quick root cause analysis:
  - “Why is lint spewing out the back of my dryer?”
  - “Because the ducting is not connected.”
  - “Because the ducting is torn in several places.”
  - “Because the ducting empties into a plastic container, rather than outside.”
- Reaffixed and repaired ducting to prevent recurring lint issues.
  - Plastic lint repository still leaks, but situation is greatly improved.
Standardization

- Revision of process still subject to two important constraints limiting cycle time:
  - Washer and dryer cannot operate simultaneously, and
  - Each appliance has very limited capacity.
- Having freed smaller laundry basket from storing unironed shirts, I was inspired by the possibility of a one batch flow system.
  1. Dirty laundry stored in bedroom closet. Small batches periodically transferred to small basket for processing.
  2. Place basket on dryer in designated area.
  3. Transfer clothes to washer and run.
  4. Check and clean dryer lint filter.
  5. Transfer clothes to dryer and run.
  6. Fold clothes and place in basket.
  7. Return clothing upstairs to appropriate dresser drawer, and repeat if necessary.
- Smaller batches are much more manageable and ensure LIP inventory does not accumulate in kitchen.
To help sustain the improvements, I imposed two conditions on users of the laundry area, which, if not satisfied, will result in severe, undisclosed repercussions:

1. Floorspace must remain clear at all times.
2. Laundry room doors must remain closed while machines are operating.

These conditions are nearly impossible to achieve under the old large batch system.

New standard procedure is somewhat self-sustaining, since it is easier:

- I am more likely to process one small batch to completion than the larger batches… more laundry is getting done more quickly.
- No longer tread through dirty clothes in kitchen.

A certain visitor has claimed that written procedures are symptomatic of previously undiscovered psychological “baggage”.

- Peer criticism could topple system w/o discipline.
Outcome

- The most obvious improvements and primary reasons for initiating this 5S project are the clear kitchen floor and closed laundry room doors.
  - Significant aesthetic improvement.
  - Allows unencumbered use of kitchen area.
- Laundry is being processed more quickly and efficiently.
  - Processing one small batch through to completion is much less daunting than spending a full day cleaning half my wardrobe.
  - On average, dresser drawers contain an estimated 1/3 more clean, folded clothes than prior.
- A more rational clothing flow has been restored:
  - BR Dresser Body BR Basket Batch Basket (placed on dryer)
  - Washer Dryer Batch Basket BR Dresser.
- Increased and organized storage capacity during the “Sort” stage.
  - No items interfere with laundry process and items are more accessible.
- Identified and addressed root cause of lint contamination issue, reducing future maintenance and cleaning needs.