Visual Mini-Case Study
In Her Own Words: Angie Alvarado

District General Manager
Sears Product and Parts Repair
District 8368

When the corporate headquarters of Sears Home Services (Illinois) decided to launch visual order in its Product Repair Services division, the goal was to shave minutes off of each home visit 12,000 repair technicians made daily. The focus was the repair truck.

Each repair truck is akin to an entire department—everything the technician needs to make a repair is in it: parts, tools, manuals, the computer that to Sears home base. It's the technician life line.

Under the leadership of Frank Lopuszynski, division Director of Operations, District 8368 became the pilot for the visual rollout, the Sacramento (CA) Center. Angie Alvarado, who 18 years ago started as a Sears phone sales rep, has been District Service General Manager for eight years. Sacramento is her home base.

Photo 4.1: Frank Lopuszynski

Photo 4.2: Angie Alvarado

Photo 4.3: Sears Home Repair Trucks

District 8368

- **337 Trucks**
- **301 Technicians**
- **421 Total Associates**
- **376,574 Home Visits in 2003**
- **404,023 Home Visit in 2004**
- **On average of seven home visits per technician per day**

By Angie Alvarado

Productivity—more work with less payroll—is a major goal in all companies, and we at Sears Parts & Repair Services (Sacramento, CA) are no exception. One of our main productivity metrics revolves around technician repair times: how much time a technician actually spends in a customer's home, repairing appliances. Decreasing repair times had always been a goal. We talked about it daily, and our goals and recognition programs all circled around it. But our search to improve repair time without sacrificing repair quality found no answers.

Three years ago, my boss asked if I had every heard of 5S, because he needed a volunteer for a project. I had a book about 5S on my self, so I signed on, even though I was a little insulted. After all, I had the cleanest and most organized facility in the region.

Photo 4.4: The Sacramento Center

Three months later, Dr. G (Gwendolyn Galsworth) walked in with her crew of visual worker bees. We toured the facility together. I introduced her to some technicians and proudly announced our success on metric after metric. Dr. G listened, took time to ask for clarification, and praised us on our successes.

Dr. G and I spent the next year together. I learned that while 5S may start with being clean and organized, the *visual workplace* engages your employees to share information and make it readily accessible to others. Employees are assigned improvement time to improve their work space and (oh, yes) increase productivity.

Productivity—that brings us back to the repair time question. Well, the answer was there all along and it was not in training or more and better tools. The answer was in the workspace, the value field—the repair truck itself. The technician spends most of his day in the truck—driving to the customer's home, going back to the truck to locate a tool, and then one more time (we hope only one more time) to find a needed part.

So, was the answer to clean and organize the truck, as in "Let's have a Kaizen event and clean all the trucks"? No. Some of our techs had very clean and organized trucks (like our facility) and yet their repair times and productivity were no higher than anyone else's. The issue was visuality—all the neat, clean, and organized parts, for example, in near-identical little brown boxes with small labels and even smaller part numbers. The technicians could not tell the difference, so they decided to address the racks that held the parts. Smart move. Very visual.

Before: Trucks got pretty darn cluttered. Legend has it that one tech, in need of a screw, decided it would be quicker to take it off the truck body itself than to try to find it under all that jumble.

Technicians stopped fighting with their workspace and embraced it as their own. That's right. We did not dictate a standardized workspace. Instead, we asked each technician to decide what worked best for him/her. We wanted them to come up with new ways. Some technicians labeled the racks with pictures of the parts; others made binders with diagrams of the truck interior. Most used color coding.

The Visual Truck

▲Everything accessible, clear, safe, and visually ordered. This tech even decided to carpet her truck!

▲ The tech on this truck lists parts on these pink cards, crossing them out as consumed.
◄Each appliance brand on this washer dryer truck is visually order.

◄In addition to the orderliness, color-coded bins with bold addresses helped a lot.

My team and I set a course to embrace this new and exciting concept. The technicians came into the facility with their trucks once a month to show off their new visual ideas to management and each other. We kept lot of supplies on-hand in the Visual Corner so techs could run with any improvement idea they thought of—bins, baskets, tape, pre-cut door pegboard panels Velcro, hooks, and more. We developed recognition programs around this monthly event. We set criteria for visual concepts and gave cash awards to the best "visual truck".

Employee morale soared. Oh, and yes, productivity improved, too—15% across the board.

Trust was another unexpected result. Before visuality, we locked up pens and other supplies—because we were certain that people would steal them. As a result, all managers had to have a ton of keys or know somebody who did.

Photo 4.5: One of the two tech groups in the visual pilot

We don't do that anymore. All supplies are in their addressed locations, open to anyone who needs them. Supplies don't disappear. Employees don't hoard. And the company doesn't spend money on endless replenishments. People know where things are and they use what they need.

Repair time? Well, that measurement never improved—even though customer satisfaction, quality repair scores, and revenue all increased. Yes, the technicians were spending less time in their trucks looking for parts and tools and more time (saved time) with customers—listening, getting better information about the needed repair, and offering to fix other appliances.

Revenues went up by $1.5 million in a year. Customer satisfaction (which at Sears is rated exclusively on Perfect 10 scores) went up 300 basis points the same year. Reschedules and cancels went down by 28,000 customers—that meant we gained 28,000 customers that we would not have had because we had no capacity.

The year we launched workplace visuality, our district was 47 in a field of 67. Two years later, we were number one—in the nation!

When your entire "department" is a truck, space is a premium. The Sears techs did stunning applications (on their new blue trucks) of smart placement principles—especially the one that instructs us to store things, not air. Take a look.

◄The precut pegboard panels from the Visual Corner gave techs lots of idea on how to visually use the dead space on the back doors.
▼ Techs also made great use of dead space tucked up in the corner where doors open.

▲This set of visually ordered parts bins—mounted on a wooden frame—does more than you think. See the latch? Open it and the frame swings forward to the point of use, while also allowing the tech to access the shelves behind it. Close it and the items on those shelves stay safely in place.