What have we made?

Changes. The most dramatic changes in the recent 30 years, for both the warehouse and the manufacturing department at Sloan Valve, the world leading manufacturer and global distributor of commercial valves and plumbing fixtures.

Why was the work?

1. Predictive/preventative maintenance (PPM)

Sloan Valve needed to start a new maintenance program for their machines. In the old system, the machines kept running until breakdown; this practice called REACTIVE MAINTENANCE is unproductive: machine downtime results in much loss in productivity. The new maintenance program, “PREDICTIVE/PREVENTATIVE MAINTENANCE (PPM),” can significantly help reduce the risk of machine failure.

2. Warehouse Management System (WMS)

Also, Sloan Valve determined that manufacturing and distribution required separate processes. It wanted to develop streamlined processes that were more aligned with a distribution center than a manufacturer. In addition, having been using an INVENTORY MANAGEMENT (IM) module from SAP, Sloan Valve wanted to develop a more powerful system that worked in conjunction with the IM module. Thus another project for IPRO 306: WAREHOUSE MANAGEMENT SYSTEM (WMS) improvement.

When?

In the spring 2010 semester, the IPRO 306 team worked on Sloan’s projects from mid January to late April, 2010, for about fifteen weeks.

Where?

The major part of work was done at Sloan’s headquarter office in Franklin Park, IL.

However, the impact is expected to be on Sloan’s branches world wide, for example, the ones in Mexico, Argentina, China, and more.
How?

As there were two independent projects to work on, the IPRO 306 team divided itself into two subgroups: PPM project team and WMS project team.

Each subgroup worked on site at Sloan for at least one day per week, collaborating with managers, business analysts, and operators from Sloan on the projects.

In addition, the whole team met on IIT campus during 5-6 pm every Thursday, brainstorming for solutions to any problems and sharing project experiences.

The customer & the team

The customer: Sloan Valve Company

- a world leading producer of flush valves, faucets, bathroom fixtures and accessories
- holding 80% of market share in the US
- having been sponsoring IPRO of IIT for years

The IPRO 306 team

- Cong Sun: Overall Team Leader. MS, Technical Communication and Info Design
- Kunal Sharangdhar: WMS Team Leader. MS, Industrial Technology and Management
- Arthur Wilas: PPM Team Leader. BS, Mechanical Engineering
- Nilesh Malpekar: Agenda Maker. BS, Computer Programming and Engineering
- Jutarop (Ben) Limpinyakul: Time Keeper. BS, Mechanical Engineering
- David Skiba: Minute Taker. BS, Mechanical Engineering
- Abhishek Chandnani: BS, Mechanical & Aerospace Engineering
- Anand Thukral: BS, Mechanical Engineering
- Anurag Kotha: BS, Aerospace Engineering
- Arun Devalam: BS, Computer Science
- Tomas Bergland: BS, Architectural Engineering
- Djordje Lukic: BS, Industrial Technology and Management
- Suni Smith: BS, Industrial Technology and Management /Electrical Engineering