

# CASE STUDY: CAPITAL EQUIPMENT STANDARDIZATION

## REDUCING LIFECYCLE COST OF CHROMATOGRAPHY EQUIPMENT

### Situation

Nearly 40 different models of chromatography equipment were being used at a company's two main research sites. While there were legitimate reasons to employ different models, personal preference was driving too much of the acquisition process. This represented a lost opportunity in volume discounting. It also had a lifecycle cost associated with maintenance and spare parts inventory. There was also a technology transfer issue when scientists or projects moved between labs.

### Action

A cross-functional team was formed, representing all stakeholders. Membership included representatives from several different scientific user groups: procurement, IT, business operations, capital planning, and engineering. A thorough inventory was taken to begin the process. Considerable time was then devoted to identify how many different models were required to support all scientific needs. The third step was to evaluate the lifecycle process to remove inefficiencies. The final step was to develop a communications plan to drive a high level of acceptance.

### Projected Result

The most important outcome was creation of a template which could be applied to all capital equipment and in any setting. We also shifted the scientific perception from negativism to advocacy for a process focused on all elements, not just first cost.

The following benefits were projected for chromatography:

- 10% reduction in initial acquisition cost
- Reduced abandonment expenses by extending equipment life from 7-8 to 9-10 years
- Maintenance expense reduced 10-20% with fewer models and smaller spare parts inventory
- Difficult to quantify but tech transfer would also be facilitated with fewer models



### What people are saying....

- *"Ed's greatest strength is his sincere interest in others, ability to analyze complex situations, and being a trusted advisor."\**
- *"I would say actively listening to others' views to build consensus. Ed is very adept at building relationships."\**
- *"To work inside what ever group/team he is involved in to achieve superior goals regardless of his management position within the group/team."\**
- *"Ed is a highly goal-oriented individual. When he decides to accomplish something he fully dedicates himself to the task in such a way that it is completed quickly and skillfully. He works fantastically with teams and is an excellent motivator because he is so friendly and inspiring. When watching him work on a project, others are encouraged to commit equally to the task, resulting in projects that are well designed and implemented."\**

\* Comments offered by colleagues and managers in an anonymous online survey.

### Keys to success:

- Financial constraints, combined with aging chromatography equipment created a sense of urgency.
- Tactical decisions, driven by first cost savings, created a very negative environment – forming a true “stakeholder team” and approaching the challenge patiently shifted critics to advocates.
- Cross-functional participants identified many new opportunities ranging from beta testing to an improved deployment process.
- The team selected standardized technology, with limited distinction between different manufacturers and models.
- Lifecycle cost was emphasized, including simplified deployment, extended life, beta testing, and technology transfer. The focus was on overall cost reduction with an accommodation for scientific curiosity.
- Participants were chosen for their knowledge not their willingness to reach consensus.