# Abstract

With growing demand for E.J. Gallo spirit brands, the cramped and cluttered facility allocated to the spirit-makers does not provide an adequate work environment to design and test new hard alcohols. E.J. Gallo winery want to relocate the spirit-makers to a new facility located near the brandy production floor for under 200,000 dollars. In order to do this, a revised systematic approach to facility design is used. In this process, the departments are first defined, then the relationships between these departments and the space requirements are documented. Once these planning steps are complete, alternative layouts are constructed and analyzed until a layout is chosen. Then, the costs of installation such as utilities are gathered and a cost analysis is formed to see if the final cost is less than the originally stated 200,000 dollars. If so, the installation of the facility is then simulated to check for potential issues when the complete structure is installed.

This revised systematic approach provides a fully analyzed facility design, taking into consideration the needs of the customer, the constraints of the company, and the total cost of the project. In addition, the material and personnel transportation cost savings are presented to show the monetary justification of the facility relocation. Once all the steps of the revised systematic approach are complete, the paperwork for the installation has to pass through numerous E.J. Gallo departments to eventually become a physical structure.