



Strategic Master Planning Supports Long-Term Goals

by: Edward J. Tannebaum, AIA

A comprehensive, well-conceived master plan can help guide a company to the most logical, cost-efficient solution for its long-term strategic business needs. In any industry, master planning is necessary to ensure that facilities meet current and projected needs, including capital availability and new or expanded production capabilities. The nature of the pharmaceutical industry -including a regulated environment, rapidly changing product lines and the need for an exceptionally high level of integration between the process and the facility - makes master planning especially critical - and uniquely challenging.

Sound Master Planning Can Save Capital

In recent years, an increasing number of companies have discovered the significant benefits of involving a third party in the master planning process.

- A **packaging company** was blister-packing a blockbuster product, which threatened to overwhelm its business. IPS developed a master planning tool that offered the company alternative methods to accommodate the increasing volume for five to six years before additional capital investment became necessary.
- A **specialty drug manufacturer** targeted expansion to create a new facility to produce higher grade products with a much higher profit margin. IPS recommended a phased approach that included development of a prototype manufacturing operation. A review of the innovative approach proven through the prototype led to major adjustments to the original plan to optimize operations before rolling it out on a larger scale.
- A **large pharmaceutical company** developed a capacity model in-house, in conjunction with a third-party consultant that indicated a significant growth in capital spending for new processing equipment. IPS reviewed the plan and discovered that it was based on several incorrect assumptions. Within two weeks, IPS totally reconstructed the model, recommending changes to batch sizes, cleaning methods and optimizing operational inefficiencies. As a result, the company was able to postpone capital equipment expenditures for more than two years without sacrificing capacity capabilities.

Success Requires an Objective, Global View of the Organization

Dynamics in any organization make it difficult for internal resources to reach the objectivity necessary to develop a plan that supports company-wide initiatives. Doing so is an even greater challenge in the pharmaceutical industry, when master planning must often meet the needs of laboratory, production of substances ranging from liquids to tablets and capsules to dry powder inhalants, packaging, maintenance, operations, etc. An outside party brings a fresh perspective and the unfettered ability to question long-held organizational assumptions. The caveat is that this outside investigation is only successful to the degree that the consultant has experience with and an understanding of the nuances of the pharmaceutical industry.

In order to be most valuable, the master plan must also be aligned with the company's strategic business goals. To achieve this, the planning process should involve high level decision-makers within the organization. This level of participation is necessary to ensure that the master plan supports the new product pipeline, planned acquisitions, cash flow requirements and similar strategic issues.

Look for a Partner with Pharmaceutical and Biotech Experience

When selecting a partner to develop a master plan, extensive pharmaceutical experience - preferably on the owners' side - is key. The firm should have a global vision of needs and whether past concepts have worked successfully. The firm should also have a comprehensive range of skill sets - including capacity modeling, product development and early stage conceptual master planning - as well as the proven experience over hundreds of projects. Longevity of client relationships is another sign that the firm can successfully challenge and focus the client to achieve a sound, common-sense master plan that meets the needs of all stakeholder groups and helps the organization meet its strategic goals.

About the Author

Edward J. Tannebaum, AIA, Senior Vice President, Project Delivery & Principal - Ed has focused on design, master planning, strategic planning, facility management and construction expertise for technically complex projects. Throughout his 37+ year career, Ed has established a comprehensive, highly effective and efficient approach for master planning that has positively impacted a vast array of pharmaceutical and biotechnology companies. In addition, he has provided senior management leadership at several major construction service firms and large pharmaceutical companies.