

THE MANUFACTURING ANALYSIS



ANALYZING WHAT YOU'RE *capable of*

You understand where you want your business to be in the future, but what are your current production capabilities? After developing your business plan, the next step of the strategic planning process is to conduct a manufacturing analysis. The manufacturing analysis will let your team get into the nitty gritty of your current processes.

A thorough, seasoned understanding of food manufacturing and the marketplace is key to developing an accurate manufacturing analysis. It often helps to enlist an outside consultant so you can tap into an objective perspective on your company's current processes and capabilities. Turn toward those with expertise in your segment, as they can provide case studies and past experience with similar food companies for a more informed analysis.

A manufacturing analysis requires an in-depth understanding of processes related to manufacturing such as your:

- ▶ **Physical facility**
- ▶ **Materials**
- ▶ **Equipment**
- ▶ **Personnel**
- ▶ **Storage**
- ▶ **Logistics**

KEY GOALS FOR YOUR MANUFACTURING PLAN:

- ▶ Review the current-state manufacturing equipment utilization and bottlenecks
- ▶ Forecast the effect of projected growth on the utilization of existing equipment and systems
- ▶ Develop courses of action to effectively support projected growth

3 ELEMENTS OF A THOROUGH MANUFACTURING ANALYSIS

Your manufacturing analysis is the sum of **three overarching analyses** of your processes:

- 1 SITUATION ANALYSIS** — This involves a detailed review of your facility's physical space and plant layout. Your strategic planning team should analyze workflow among both process equipment and personnel. Seek to answer the questions within each area below.

SITE CONSIDERATIONS

- ▶ What utilities serve your plant's site?
- ▶ What are the zoning requirements?
- ▶ What are local emissions requirements?

PHYSICAL BUILDING AND STRUCTURE

- ▶ How will your building structure work with the necessary sanitation and food safety requirements? Consider sanitary design and hygienic zoning staff issues.

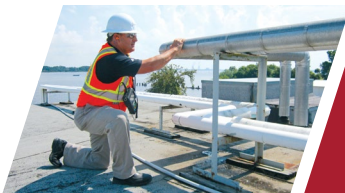


A large food client wanted to meet Safe Quality Food program standards to show customers its dedication to food safety. This involved spending several million to rip down walls, remove roof insulation and bring the physical structure and quality of its building to meet those standards.

- ▶ Is expansion or renovation possible?
- ▶ Is your building leased or newly built? If you're leasing, how will the lease impact your future operations? Keep involved with bringing your leased facility back to its original state (stripping building pieces, etc.)

UTILITY/PROCESS SYSTEMS

- ▶ What are your utility requirements for your plant's processes?
- ▶ What is the existing condition of the utility infrastructure?
- ▶ Do you have enough gas, electricity and water service?



For example, one of our food manufacturing clients was offered a great deal on a site from the state to build a new facility; however, upon looking at the utility requirements, the client realized this site would require bringing in a six-mile-long water line—a no-go.

CAPACITY



For example, if one process line can only produce 100 pounds of product per hour, but you're projecting to produce 500 pounds of product in three years, you'll need to optimize the line or add another. It's important to plan to spend capital to meet growth for your new projections.

- ▶ Will you need to upgrade your existing equipment? When?
- ▶ Should you refurbish or replace older equipment to increase capacity?
- ▶ Will you need additional equipment? When? Remember, this is more than just determining when your equipment will be outdated, it's about ensuring it will be able to handle future manufacturing capacity, as well.
- ▶ What capacity do current production lines have?

One food manufacturer had a timeline detailing when it needed to implement new equipment based on its growth projections.

For example, if production lines within your food plant can produce 100 pounds of product per hour, per day — will it be able to sustain the growth path for the next two years? If not, you need to plan to spend capital to upgrade that line to meet that projection.



MATERIAL HANDLING

- ▶ How will you handle material transfers within the facility?
- ▶ How do ingredients and raw materials flow to production lines?
- ▶ How does finished product move to shipping or storage?

STORAGE AND DISTRIBUTION

- ▶ How will you receive raw materials and ingredients?
- ▶ Will your storage be at the facility or will you store product offsite?
- ▶ How will you distribute finished product?

2 CURRENT-STATE VS. FUTURE-STATE ANALYSIS — Examine the gaps between where your facility is now and where you want your facility and/or operations to be in the future. Consider everything from your situation analysis, including personnel, building size and equipment.

3 RELATIONSHIP ANALYSIS, FACTORY FLOW AND EQUIPMENT LAYOUT — Analyze your current food processing company's workflow, production process lines and layout. Are there ways you could optimize these elements?