RIVERLOGIC
Real decisions. Optimized.

A Step-by-Step Guide to Driving Business Impact with Capacity Planning



Table of Contents

Overview 1

Part 1. The Minimum Capacity Plan is Feasible and Optimal 2

Part 2. Optimally Balance Supply and Demand for Profit 6

Part 3: Embed Your Plan into a Broader Planning Process 11

Driving True Business Impact 16

Closing Remarks 17

About River Logic 18



Overview

What Is Capacity Planning?

Capacity planning involves making medium to long-term decisions that establish a firm's overall level of resources. This primarily includes production and labor, but if relevant, it can also include inventory and storage. Capacity decisions affect a company's overall ability to compete through product availability/customer service levels, production lead times, customer responsiveness and operating cost. Capacity planning normally looks out 18-36 months and oftentimes is specified in weeks or months, since it's important to have sufficient time coverage to not only plan operational capacity but to also allow for investments. Let's dive deeper into the most important aspects of capacity planning in order to better understand the three key elements to making it successful in manufacturing.

What Are the Minimum Objectives of Capacity Planning?

The minimum objectives of any capacity plan should include:

- Maximize a company's ability to meet demand
- Minimize cost
- Manage Risk
- Efficiently allocate investments



Capacity planning involves making medium to long-term decisions that establish a firm's overall level of resources. This primarily includes production and labor, but if relevant, it can also include inventory and storage. Capacity decisions affect a company's overall ability to compete through product availability/customer service levels, production lead times, customer responsiveness and operating cost. Capacity planning normally looks out 18-36 months and oftentimes is specified in weeks or months, since it's important to have sufficient time coverage to not only plan operational capacity but to also allow for investments. Let's dive deeper into the most important aspects of capacity planning in order to better understand the three key elements to making it successful in manufacturing.

- The minimum capacity plan is feasible and optimal
- How to balance supply and demand for profit
- How to embed your plan into your broader planning process

Part 1. The Minimum Capacity Plan is Feasible and Optimal



Introduction

Capacity-or rough-cut capacity-planning is a monthly exercise that runs parallel with and provides a key input into the sales and operations planning (S&OP) process. While S&OP focuses on balancing demand and supply (ideally to maximize profit), capacity planning ensures the supply plan is both feasible and optimal. It also informs strategy planning by aligning and prioritizing investments in capacity and resources.

Key Decisions

Capacity planning thus focuses on both operational and capital allocation decisions, with the latter typically in the 12 to 36-month horizon. Key decisions typically include:

- **Shifts.**

  How many shifts should we run during the week? On Saturdays and Sundays?

- **Sourcing.**

  Where should we manufacture a certain product? When?

- **Inventory Planning.**

  How much inventory should we build for which products? In what time frame?

- **Investments.**

  What investments can increase the effective utilization of capacity, e.g., uptime, throughput, investments to reduce cost, greenfield, etc.?

Trade-offs and Constraints that Represent Business Realities

Of course, considering key decisions isn't enough for minimum capacity planning. Decisions must consider multiple trade-offs and constraints that represent business realties. Below are five trade-offs and constraints that play a part in minimal level capacity planning.



1 Capacity of assets.	Primarily, manufacturing lines, but also packaging, should be considered. This is often more complex than it seems. Uptime capacity is the percent of total hours available that the machines can run versus the time the machines are undergoing maintenance, broken down or in the middle of changeovers.. Production lines require labor, which must be allocated to production lines, and some lines require more or less of different skill sets. Labor is managed in broader pools typically at the shift level; most plants run 2 shifts, 5 days a week but some run 4 shifts, including on Saturdays and sometimes on Sundays. Labor costs more for overtime and typically on Saturdays and Sundays.
2 Throughput.	Throughput affects the effective capacity and changes the equation from strictly hours available to units per hour available. Therefore, production sourcing is an integral part of capacity planning.
3 Finished or near-finished goods inventory.	This is a critical consideration in capacity planning, as it is a valve that can be flexed in some situations to build enough product to meet seasonal or unpredictable demand. When properly deployed, it also creates an opportunity to balance expensive weekend/overtime production versus meeting demand. The analysis is specific to different businesses and must consider the cost of holding inventory, product perishability, etc. On the other side, firms won't want to take on too much risk, especially if there is a risk that the inventory may become obsolete.
4 Third parties.	These can also provide flex capacity, usually at a cost, requiring a minimum commitment from the manufacturer. When used wisely, these can help alleviate capacity constraints.is a risk that the inventory may become obsolete.
5 Investments.	Lastly, investments present further trade-offs, as they can help increase throughput, lower cost per unit and increase overall equipment effectiveness (OEE), but these also come at a cost.



Ensuring You Have a Feasible Plan

You've made sure that you have the minimum requirements to create your plan. But how good is your plan, really? More importantly, is it actually doable?

What Is a Feasible Capacity Plan?

Feasible plans are plans that can be executed within the realities of a business. This not only includes the constraints and trade-offs specified above but also the policies, regulations and financial requirements of the business. In contrast,infeasible plans are not actually doable, because they don't respect all the important constraints.

Commons Symptoms of an Infeasible Capacity Plan

So, how do you know if you have a feasible plan or not? Typically, if you're using rules to make decisions and you run a complex business (like CPG, chemicals, resource processing), your capacity plan may not be feasible 100% of the time…even if your people are really good.

Here's an example to help illustrate the limitations of some common capacity planning. Let's say a firm is using complex Excel spreadsheets or rules-based (aka heuristics-based) engines to plan their capacity. Their planning process would follow this kind of structure:

- Begin with demand by time period and region/location
- Work backwards to define the inventory needed at the DC, taking into account existing inventory
- Adjust inventory requirements for lead time
- Use inventory requirements to define manufacturing production requirements
- Assign production requirement into production lines, typically using some convoluted ruleset

- Assign production of product 1 first to line A, then if it overflows, go to line B, then C, etc.
- Assign production of product 2 first to line C, then if it overflows, go to line B, then D, etc.
- Aggregate production requirements into overall hours required to meet the plan
- Manually sift through the plan to identify weeks when capacity required exceeds 100% of capacity available
- Make manual adjustments to the existing capacity plan
- Work backwards to determine how many shifts are needed

Importantly, these rules are usually driven by the capacity of a line to produce x many units, not the mix of products that are being allocated to the line and the throughput of the line on each different product. This difference is key as it is one of the main drivers of capacity plans (and S&OP/supply plans) being infeasible.

At this point, the rules are typically so complex that they aren't able to properly consider the different allocation rules that assign labor to lines, the maintenance requirements in the lines, etc. For example, a plant may not be able to run all their lines simultaneously unless it uses overtime. This means that, while the plan may be doable from a physical standpoint, it almost certainly won't meet the financial expectations.

In contrast, a feasible plan will behave in such a way that it represents reality with a high degree of fidelity. It will respect all of the physical and labor constraints, inventory and service level policies and targets. It will also produce a financial forecast (revenue, COGS, gross profit) that is achievable. If you want to avoid surprises that leave you using overtime while running some lines under 50% utilization or those that cause you to miss out on revenue and service level targets, the first step is a feasible plan.

Ensuring You have the Optimal Plan

We now understand the requirements for creating a feasible plan and some good symptoms of an infeasible one. The next step in creating the best capacity plan is to determine whether your plans are indeed the best plans you can have or if they're merely some plan.

An optimal plan is not only feasible; it's the plan that allows the business to maximize or minimize the objectives it's trying to meet. There are multiple levels of optimization, and we'll dive into those further on in this white paper. For now, let's assume that an optimal plan delivers the maximum service levels at the lowest cost (subject to the relevant capacity, throughput, labor and inventory constraints of the business).

Determining whether your plan is optimal is actually easier than you may think—just ask your team the following questions:

- Are we using linear programming (LP) to define the plan or simply rules?
- If we are using an LP, what is the objective function?
- What decisions is the LP helping us make? These can include sourcing, optimizing shift configuration, forecasting inventory build ahead and even allocating capital investments (ideally, it includes all of them).

A word of advice: Pay special attention to how costs are specified in the LP. They need to include costs as they are incurred by the business, i.e., variable costs per unit, variable costs per hour, labor costs per shift, overtime labor cost, etc. Be concerned if costs are just rough estimates or if the team is using fully-loaded unit costs

The Importance of an Optimal, Feasible Plan

As we've outlined in the previous two sections, the only way to have a plan you can trust is to have an optimal and feasible plan. Working with a capacity plan you can trust to be sound helps drive value for shareholders by improving business performance, and it limits the potential for costly mistakes. Furthermore, it helps you and your team gain respect among colleagues and executives when things go well.

1 It Boosts Confidence in Your Team

The foundation of a solid, effective capacity plan is having confidence in it. This includes not only the ability to deliver but also labor management, investment allocation, financial expectations, etc. Just like a CFO, a manager that produces a plan with high confidence gains respect and the ability to effect further change in the business.

2 It Drives Performance

If the objective is to have a plan, regardless of whether it is feasible, then the business will be constantly fighting fires and spending significant effort force-fitting the plan to drive short term production scheduling (more on this in Part 3) .

In comparison, a feasible, optimal plan is not only attainable, but it can reduce cost and improve the ability to meet service level and inventory objectives. Firms with optimal plans can achieve dramatic reductions in production hours– most of them overtime – while increasing service levels almost to 100%.

Furthermore, a plan that is both feasible and optimal ultimately generates agility as the business can more easily adapt to changes. Those who work with an infeasible or sub-optimal plan are forced to constantly tweak rules as product mix, demand and supply realities change.

3 It Helps Avoid Costly Mistakes

There is no shortage of examples here from the rule that an incorrectly added comma resulted in a significant inventory shortage to a semiconductor that built a fab it didn't need. These days, it simply doesn't make sense to incur these types of career-limiting risks.

Part 2. Optimally Balance Supply and Demand for Profit

Introduction

As we saw in Part 1, capacity planning has traditionally focused on meeting demand at the lowest possible cost, sometimes including the evaluation of capital investments. However, this approach only tells a partial story and leaves significant money on the table, which is not so great for your shareholders!

With two simple changes, the impact can be significantly improved:

- Focus on maximum profit instead of minimum cost
- Extend the plan from trying to meet demand to balancing supply and demand

Evolve from "meeting the maximum demand at the lowest possible cost" (i.e., as specified in Part 1) to "meeting the right demand that maximizes overall profit," which is the focus of Part 2.

Plan for Profit vs. Minimum Cost

Planning for profit means changing the objective of capacity planning from minimizing production or cost of goods sold to maximizing gross profit. But this is not as simple as adding prices and revenue to the calculation, as it often also requires understanding how costs are actually calculated.

Most capacity plans measure cost in a way that is not truly reflective of how the business incurs cost. For example, in Part 1 we saw that rules-based engines strictly deal at the unit level. There, cost per unit is defined as the cost of making a product in a given production line, regardless of whether the line is fully utilized and whether it incurs overtime or not.

Changing How Costs Are Treated

Costs should be treated at the same level of detail as the business works from a capacity planning perspective. At a high level, this means:

- Cost of labor should be allocated to lines based on number, skill and cost of personnel required for each line.
- Labor should be modeled in shifts, differentiating overtime and weekend work that is typically more expensive. (It's easy to see that incurring overtime to produce 10 units will be much more punitive on cost per unit than incurring it to produce 1,000 units.)
- Costs of having a line active should be associated with that line, e.g., energy, but they should only be variable costs incurred for the line.
- Cost of production processes should include the input cost (per pound, etc.) as well as variable cost per unit (i.e., those that result from yield losses, etc.).
- Inventory costs should include storage, degradation and cost of capital.

There are many more costs, but this hopefully provides an initial picture of what is required. In the following section, we provide further examples.

Proactively Balancing Supply and Demand

Layering on profit requires understanding the revenue associated with demand. At a minimum, this means collecting information on net prices by product or SKU, location and time period.

Most capacity planning treats demand as fixed instead of focusing on delivering the highest possible service level (i.e., meeting as much demand as possible), subject to the constraints specified in Part 1. However, understanding demand should extend beyond simple average price per product where one simply adjusts supply to more proactively balancing supply and demand. This moves the capacity planning process one step closer to evolving the focus from minimum cost to maximum profit.

There are multiple ways in which capacity planning can deepen the understanding of demand to provide a more balanced alignment with supply. At a baseline level, this means understanding the financial and profit impact of meeting different demands.



Managing Service Level Shortages

Invariably, there will be situations where supply cannot meet demand. Unfortunately, most manufacturers today are not able to make trade-offs across products or regions to determine which products to short. Instead, they try to minimize the total units shorted and apply "fair share" rules to assign the shortage into their regions. In other words, they try to not short the same regions and customers multiple times in a row.

With the understanding of price and profitability, a new angle opens up for manufacturers to also understand which demand to short from a profit-contribution perspective. This means that they will not only be better at assigning the shortages, but they also might be able to make better trade-offs across products, i.e., favoring those that have a higher net contribution on the margin.

Understanding Product Profitability

When modeling revenue and capacity simultaneously, a company begins to understand the average and marginal contribution of each product in each region and across time periods. This understanding is a major value-add to manufacturing organizations. It gives supply chain planners a unique ability to drive value into the business by enabling the understanding of trade-offs from a financial perspective instead of simply the perspective of "we can/ cannot meet these requirements.



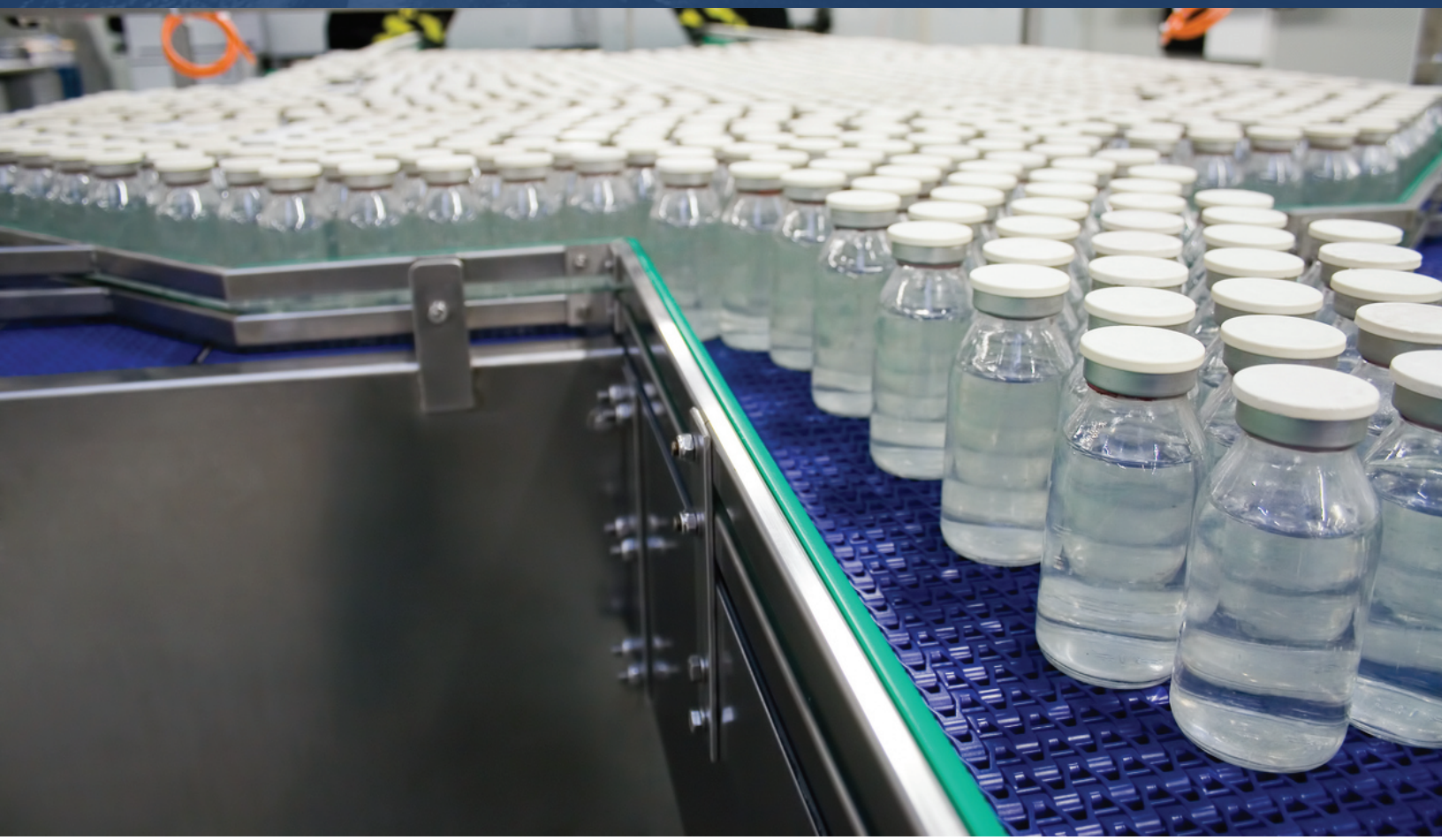
Demand Generation and Revenue Management

More advanced manufacturers think of capacity planning and revenue management as two sides of the same coin. They're able to simultaneously align demand generation initiatives with the allocation of capacity, all with the goal of maximizing profit impact on the enterprise.

Understanding demand generation requires deeper modeling of demand generation options, e.g. price, promotions and customer bids. There is a baseline demand; on top of this, bids, promotions and discounts are layered with their impact on demand.

Each option requires a different marginal price and volume impact. This analysis is not meant to be at the level of individual promotions or the smallest customer bids. Rather, it's to be on an aggregated level in order to represent the marginal impact on price and volume from pursuing different demand options. Nevertheless, the net input is a non-linear/step-like demand curve.

On the other side of the coin, capacity requirements are tied to demand. This includes the ability to understand the capacity impact of meeting more or less demand. Thus, the cost of capacity is modeled on the margin and can be tied to the marginal revenue from additional demand. The outcome is that revenue, capacity and profit impacts can be tied back to activities that generate revenue.



Revisiting Part 1: Improving Your Capacity Planning Analyses

Let's go back to all the capacity planning analyses we reviewed in Part 1 and see how they would be different if we considered them against profit and tied them more closely to demand.

Improved Baseline Capacity Plans

Shifts, Saturday/Sunday/overtime and sourcing would all be tied to profit and to the marginal demand generation activities. Below, we've outlined the impact of this on a few key industries.



CPG/FMCG

In CPG/FMCG, where demandis driven by promotions, the company would be able to see the true impact of their promotion dollar allocations on the margin. In those weeks where they may be running a BOGO (buy one, get one free), demand would be very high but the marginal price would be half. What if they also had to work overtime and on Sundays to meet this demand?



Building Products

In building products, demand is more driven by bids and contracts with wholesalers/large retailers like Home Depot. Instead of a BOGO, here we would analyze different bids and whether there are different options for making them more profitable.



Mining and Metals

In building products, demand is more driven by bids and contracts with wholesalers/large retailers like Home Depot. Instead of a BOGO, here we would analyze different bids and whether there are different options for making them more profitable.

Improved Inventory Management

Inventory management is another area that benefits from better understanding the relationship between demand, capacity and profit. In certain industries like semiconductor manufacturing, it is critical to manage build-to-stock vs. build-to-order to answer things like, "What is the real trade-off between lead time/customer penalties, likelihood of obsolescence, costs and profits?" The same analysis can be applied to any industry where capacity has a real impact on inventory lead time and ability to meet demand.

Investment Analysis

This area is extremely interesting. Imagine if, instead of evaluating investments against throughput or unit cost, you were able to truly see their marginal impact on your profit? By tying investment analyses in capacity to a deeper understanding of their impact on demand, revenues and costs on the margin, it is possible to actually determine the truly optimal mix of capacity investments across time periods.



Part 3. Embed Your Plan into a Broader Planning Process

Introduction

Capacity planning doesn't solely affect the traditional metrics, e.g., service levels, inventory and cost. If done properly (and as we outlined in Part 2), it also impacts gross profit and provides a unique perspective on contribution margin.

More broadly, capacity planning has a direct effect on a company's ability to meet corporate and business unit objectives, such as growth, return on assets, ability to meet sustainability targets and risk. In Part 3, we'll focus on embedding capacity planning into a business process in order to maximize the impact on attaining corporate and business unit objectives.

Capacity planning is a multi-user, collaborative monthly process that ties into S&OP. Ideally, it also guides strategy planning and execution. The planning horizon is typically 24-60 months, and depending on the industry's granularity, it is either weekly or monthly.

Figure 2 shows a best practice capacity planning process that a) supports all the key principles described in Parts 1 and 2 and b) ties into the key planning processes of strategy planning, S&OP and execution:

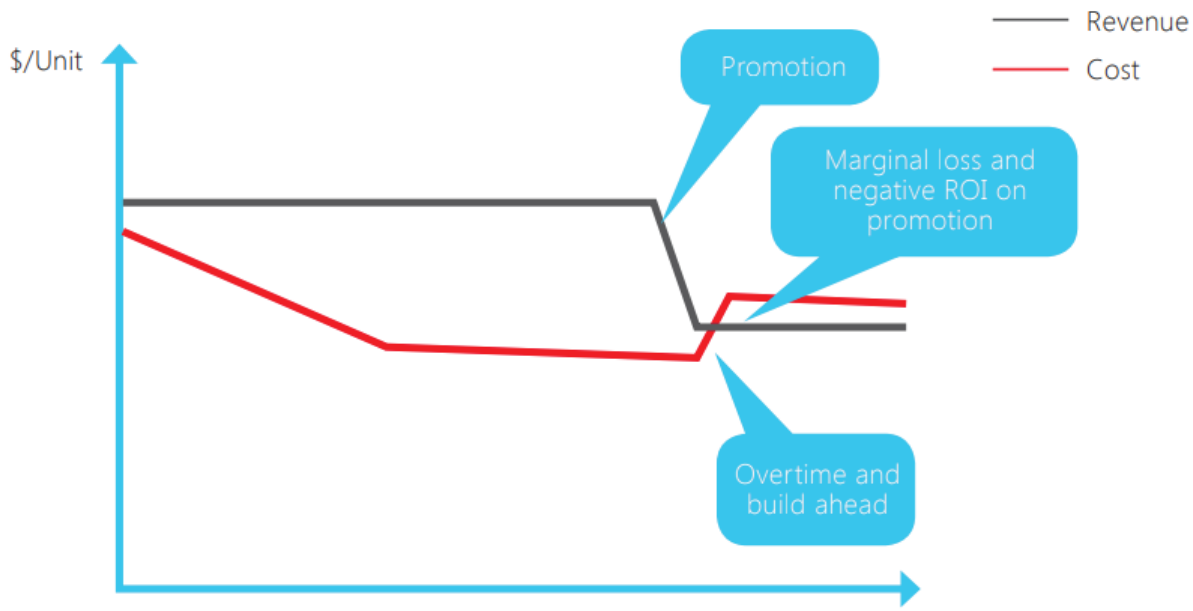


Figure 1 Best Practice: Embedding Capacity Panning into a Business Process to Impact Profitability

A Detailed Review: How to Gather the Input and Execute the Process

Keep in mind that the output of this process includes all the analyses and information laid out in Parts 1 and 2 of this paper. Against this context, let's examine the process in more detail.

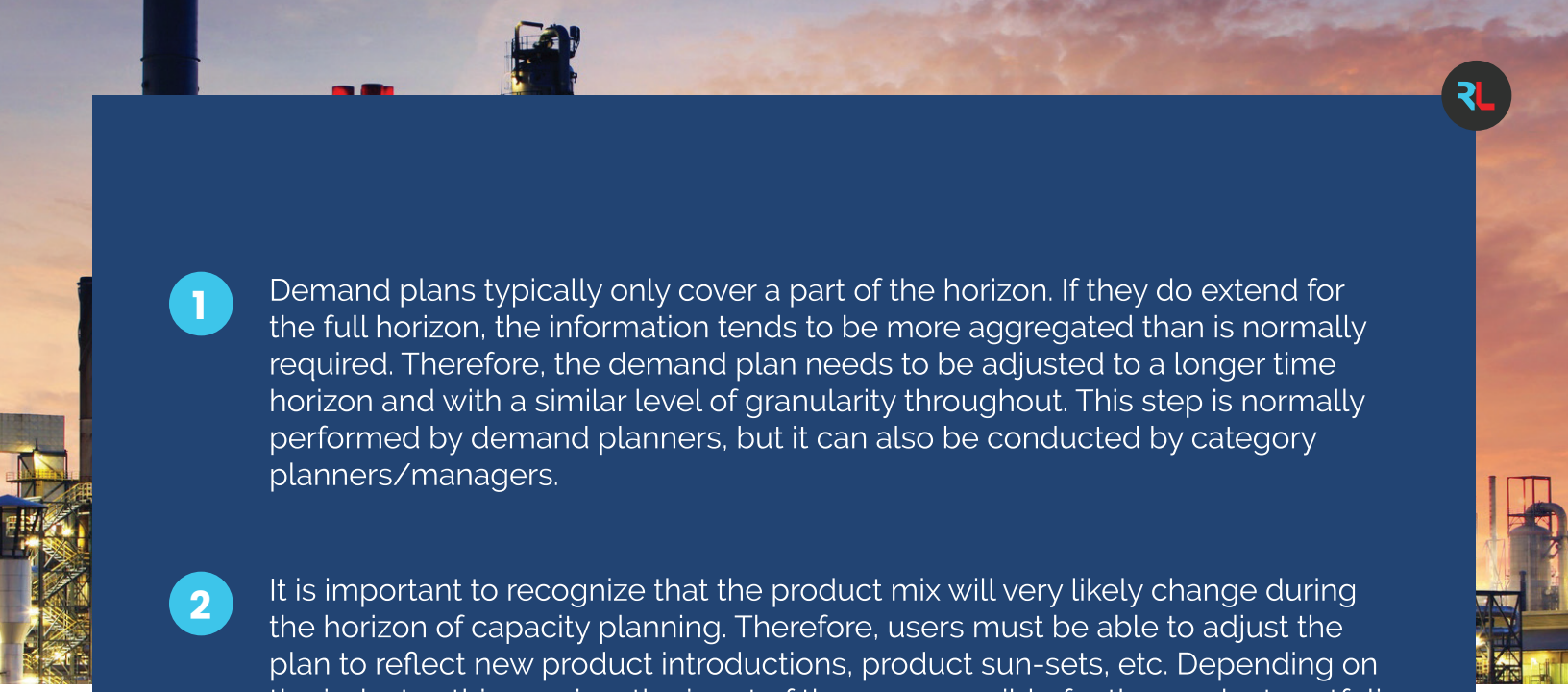
Gathering the Appropriate Input Variables

First, we'll focus on understanding the input of this best practice capacity planning process. This can include information about demand, the network, current inventory and costs. In each section, we provide the requirements of each and any relevant internal resources that may be required.



Demand Information

Capacity planning typically goes beyond existing demand plans to include additional information required for decision making. This information can require the participation of additional personnel who have relevant expertise. Below, we outline three key requirements your demand input must meet in order to work toward the best practice capacity planning process.



1. Demand plans typically only cover a part of the horizon. If they do extend for the full horizon, the information tends to be more aggregated than is normally required. Therefore, the demand plan needs to be adjusted to a longer time horizon and with a similar level of granularity throughout. This step is normally performed by demand planners, but it can also be conducted by category planners/managers.

2. It is important to recognize that the product mix will very likely change during the horizon of capacity planning. Therefore, users must be able to adjust the plan to reflect new product introductions, product sun-sets, etc. Depending on the industry, this requires the input of those responsible for the product portfolio (typically product or category managers).

3. To achieve the level of insight and impact required in Part 2 (i.e., prioritize the plan and demand for profit), the demand plan cannot solely include volume X, price X , location, etc. It should include baseline versus lift or upside demand that is associated with additional spend, discounts or other activities that drive demand. This information may be available in CRM or TPM systems, but it will also typically require some input from those managing these activities (i.e., revenue management, commercial teams).

Inventories

The second important set of variables are finished good inventories at the DCs and manufacturing plants. This information is crucial; it's the main difference between total demand and total required output. Furthermore, depending on where the inventory is, it may at times affect capacity planning strategy, especially for products with high levels of seasonality. Inventory information is typically maintained by inventory or supply planners.

The Supply Chain Network

The third set of input variables includes all the information related to the supply chain network. At a minimum, these include:

Product master

This is typically maintained by a team that includes category/product and supply planners. It can contain multiple types of information about products, such as the following:

1. **Product master and hierarchies:**

   Brands, size/pack/form, SKUs. In some industries, such as mining and chemicals, this may also include information about product substitution possibilities.

2. **Bill of materials (BOMs):**

   The recipes for manufacturing the products, and to the extent required also alternative BOMs.

3. **Routings:**

   The blueprints that define the process to manufacture the products. Most companies maintain primary and alternate routes, but the more advanced ones just maintain a roster of possibilities and allow their systems to optimize the allocation of products to routes.

Manufacturing capacity

This includes upstream reactors, production lines, packaging lines and anything else that affects the transformation of input into the company's products. Factory planners typically provide the following information:

1. **Manufacturing assets**

   including location, energy consumption, labor requirements to run, average or scheduled downtime.

2. **Production information**

   for each product and asset, the throughput, yield and related information associated with converting inputs into outputs.

3. **Labor**

   associated with each plant, and the rules that guide how labor can be consumed, i.e., one/two/three shifts, Saturday/ Sunday work, overtime work, etc.

Supply chain information.

This is a broader category that includes the allocation of plants to specific markets/DCs, the lead times from order to product arrival in different DCs/countries, unique information about suppliers (such as minimum commitments, volume discounts), etc. This information is typically maintained by supply planners.



Costs

The final set of input concerns costs. It is critical that costs be modeled at the same level of detail as the supply chain. This enables decisions to be aligned with corporate strategy and the ensuing insights on product profitability to be accurate. This information is provided by a variety of financial/ business analysts across the business. Typical costs include:

- **Input costs.**

  This includes cost per unit or cost per ton for key raw materials; any supplier discounts can be represented as well.

- **Labor costs.**

  This includes the cost to run the assets and is driven by capacity requirements. In other words, these represent the labor required to run a production line, reactor or machine center—measured as the cost of each shift (i.e., batch of hours)—where the marginal cost per hour is determined by whether it is a regular shift, a weekend shift or overtime.

- **Conversion costs.**

  These include the costs to run the assets, such as energy and maintenance as well as yield losses, etc.

- **Inventory costs—storage, degradation, cost of capital, etc.**

  For products with short shelf life or high storage costs (i.e., climate controlled, frozen), inventory is a significant consideration.

- **Transportation.**

  This includes data per truck, per ship, per aircraft, per shipment, etc.

Executing the Process

Once all the input has been turned in, the capacity planning team will begin processing the information. Below, we've outlined in detail the 3 steps: data management, scenario analysis and publication.

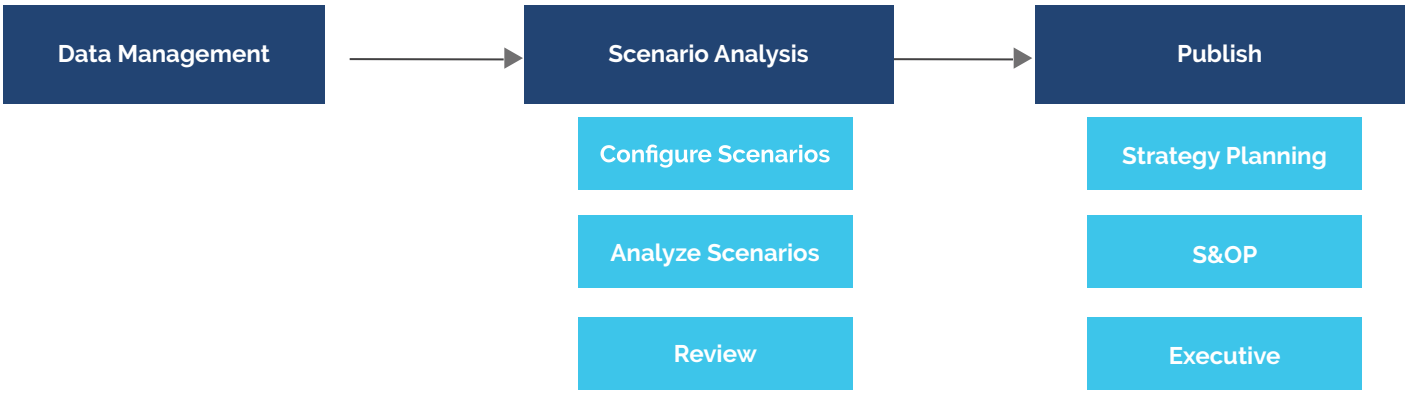


Figure 2 Executing the Capacity Planning Process

Step 1. Data Management

This step is performed by different planners that are typically still associated with different functions (i.e., demand/category planning, inventory, manufacturing), and the objective is to ensure the data is ready for the planning process.

Step 2. Scenario Analysis

In this step, the data is first processed to support analysis of different scenarios, enabling user collaboration around a recommended path. This includes planners evaluating scenarios as well as reviews with senior management. This step usually includes a few sub-steps:

- **Configuring the scenarios.** Ensuring the levers are set up to support the analysis. This includes not only the input data but also scenario parameters such as constraints, what-if variations and the objectives to minimize/maximize.
- **Analyzing scenarios.** Visualizing the output of different scenarios and comparing them side by side, through a collaboration process across users.
- **Reviewing.** This involves reviewing the top scenarios with management.

Step 3. Publish

Capacity planning should inform different processes within a company:

- **Strategy planning.** Capacity planning decisions impact the allocation of capital investments, as well as the expected product margins. This information should inform the strategic planning process.
- **S&OP.** Capacity planning impacts service levels, manufacturing, supply chain, inventory and even demand generation decisions. The timing of capacity planning decisions should be in lock-step to inform S&OP.
- **Executing.** In the short term, businesses must make decisions that manage disruptions and that build enough inventory for the medium term. Capacity planning can help balance short term activities to ensure maximum impact in the capacity planning horizon.

Driving True Business Impact

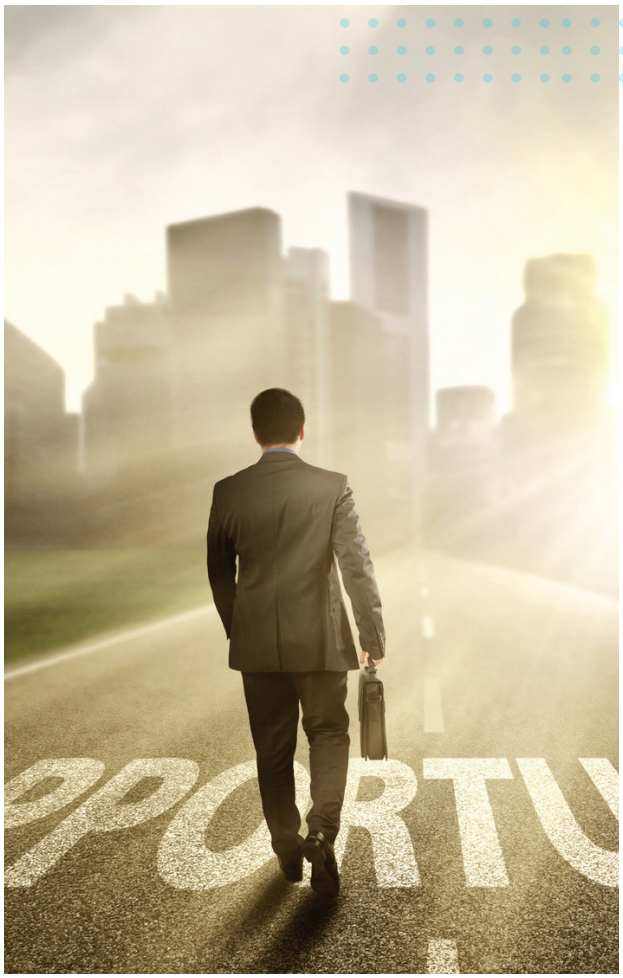
As companies evolve from capacity planning as an individual analyst activity with a super spreadsheet into a next generation process that brings multiple decisions together, the impact increases in multiple ways.

Shared Knowledge of Organization Rises

First, the shared knowledge in the organization rises. People across functions begin to understand the impact they can have on other functions, and they become more conscious of how the overall organization works. Furthermore, they develop a common set of semantics that become widely understood. This translates into incredible gains in business agility and stronger team performance.

Trust in Plans Rises Significantly

Second, as results become more predictable, the organizational bar for capital and resource allocation lowers. People are trusted to "meet their numbers" and they can have more impact as they demonstrate they know how to best use company resources.



Gross Profit Increases

Third, as we've seen in prior sections, the impact is significant. Companies that have deployed capacity planning as an ongoing, collaborative process that supports the decisions in accordance with Part 2 have seen significant improvements in gross profit, with as much as 2-5% of revenue translated to additional profit.

Closing Remarks

Change is always hard, but there are ways to get started that generate quick wins and help managers lead the way. The scope is manageable, as is the reach within the organization. It is possible to set up a targeted deployment in a matter of 6-8 weeks. Usually this will involve a combination of Part 1 and Part 2 capabilities, with a few user roles set up to contribute and manage the process.

The targeted implementation should yield results immediately, and within one or two planning cycles, one would expect the organization to ask for a broader deployment. By this point, the ROI will be well documented, as will the process of managing the data and adapting the process to support the broader organizational need.



About River Logic

River Logic is an experienced innovator in network design and optimization. Its flagship offering, Value Chain Optimization (VCO), is a comprehensive solution designed to quantify and optimize the full potential of your current and future network. It expands the scope of network design beyond the traditional transportation and logistics focus to provide insights that ensure supply chain strategy aligns with corporate objectives. This expert solution is powered by River Logic's Digital Planning Twin™ technology, uniquely capable of combining a more complete representation of operational variables and constraints with a more accurate understanding of both fixed and variable cost drivers.

VCO for STRATEGIC DECISIONS:

- Network Design.
- Production Strategy.
- Infrastructure Strategy & Capacity Planning.
- Business Continuity Planning.
- Sustainability Strategy.
- Corporate Strategy.

VCO for TACTICAL PLANNING:

- Production Planning.
- Order Allocation
- Vehicle Routing Optimization.
- Product/Customer Profitability.

GP Georgia-Pacific

"Georgia-Pacific worked closely with River Logic on supply optimization and values the collaborative partnership and tailored industry insights. River Logic's solution offered flexibility and ease of use that contributed to a rapid implementation process, allowing us to realize initial value faster."

That is why we are: REAL DECISIONS. OPTIMIZED.
Get in Touch with Us, we are Happy to help!

INFO@RIVERLOGIC.COM
WWW.RIVERLOGIC.COM

RIVERLOGIC
Real decisions. Optimized.