JA Titan Strategy Guide

Here in the JA Titan Strategy Guide you'll find a host of methods to strategize and fine-tune your decisions so that your company's performance is consistent and strong. This guide contains both a strategy basics section and sections covering the individual decisions for Pricing, Production, Marketing, R&D and Capital Investment numbers. Careful implementation of these blended strategies through each quarter will ensure game success.

Fun With Free-Market Fundamentals

Playing the Numbers Game

You should determine your Titan price/volume strategy before you begin the game. Decide whether you want to sell fewer Holo-Generators at a high price, a moderate number of Holo-Generators at a middle price, or a high volume of Holo-Generators at a low price. Reflect on your choices: Every number you put into the game will have consequences for profits and available cash.

The six decisions you make each quarter are interdependent. For example, if you choose a high price, you may want to be careful how high you set your production level. Higher prices result in less demand for your product—a caution against making drastic changes without seeing which way the winds of demand blow. You'll see that price has a substantial influence on demand, but you can also hedge your bets by investing heavily in marketing and R&D, which can give you an extra edge. Charitable Giving—donations from your company to worthy causes—will also influence market share (and thus company performance). Market timing and your own resources will naturally influence all funding decisions, but be sure to consider all counsel from your advisors.

It's Money That Matters

If you lower your price too much, you may not have enough revenue to cover your costs. Charging ten cents for a glass of lemonade that takes twelve cents' worth of lemons is a sour deal. Pay careful attention to your gross margin and overall profits. Each quarter's profits or losses are compiled to calculate the retained earnings. You'll be able to see these figures in the Company Report: the numbers don't lie, even if you'd like to lie about them.

Companies typically borrow to expand. If you choose to expand your capacity, watch your line of credit. Don't expand too rapidly or you may exhaust your ability to borrow and you'll incur the burden of high interest costs. You don't have to buy a Corvette when you could get across town with a compact. Conversely, high risks can lead to high rewards, but it's usually the disciplined hitters that make contact with the ball, not those that swing wildly at every pitch.

Remember that you can make a better Holo-Generator by investing in R&D. Sometimes the "latest and greatest" can sway a market. You could gain a competitive edge if you are a high-price Holo-Generator provider and want to create increased demand for your product by outfitting it with cutting-edge components. Demand for your product might be knocked down a notch by a price increase, but you can recoup it by increased spending on R&D. However, if other companies have bigger Marketing/R&D budgets, and are selling their Holo-Generators for much less, you might lose market share.

Of course, with increased demand, you have to be ready to change other allocations—such as production—as well.

Reporting for Duty

Look to the Industry Report to provide you with three essential pieces of information: your competitors' product prices, changes in the economic environment, and Performance Indexes.

The Company Report is especially helpful for tracking inventory. If you increase production, but don't sell your Holo-Generators, your inventory level will increase and you will incur an inventory charge—a blight on the bottom line. Your solution might be to lower prices and/or increase marketing to increase sales. Tinker with these factors to see how the market reacts.

Inventory Inventiveness

If your inventory levels are too high, don't halt production unless you want to incur a layoff charge! After all, if you aren't producing Holo-Generators, you have to lay off workers. You have to be careful of drastic moves, which could have drastic effects. A solution might be to gradually reduce production and decrease price and see what effect these decisions have on your bloated inventory. In simple terms:

- too much inventory is bad
- producing more than you sell creates inventory
- reducing production causes a layoff charge
- reducing prices will help you sell more products
- sell more than you produce to reduce inventory

Sometimes your moves might seem like a roll of the dice, but in Titan, clever allocation strategies let you roll those dice in your favor.

Check Your Competition

Once you get into the groove of the game, use the graphing feature to track trends. It gives you an at-a-glance comparison of your key statistics with those of your competitors. If you're trouncing them, don't rest on your laurels—one bad quarter could be your undoing. If you're slacking in the race, tighten up your thinking—see what they've done to do you in, and do it to them.

Decisions, Decisions

A couple of technical considerations:

- Double-check your figures on the decision form before you click "Submit Plan." A mistake here may cost you the game.
- In a timed game you can go back and resubmit decisions as many times as you'd like before the quarter closes.

Beyond the Basics

OK, you've gleaned all the goodies from the basics table. Those are just appetizers—go on to the main courses of Pricing, Production, R&D, Marketing and Capital Investment.

The Price Is Right ... or Is It?

All of your company policies and procedures aren't going to mean doodley if your Holo-Generators don't sell, and they won't if you don't determine their proper pricing. The two reports are key: The Company Report is essential to making proper pricing and production decisions; the Industry

Report gives you feedback on how your competitors' decisions affected your results. It also provides some clues on how the economy may perform in the next few quarters.

Generally, you want to set a unit price that ensures the sales of most, if not all the Holo-Generators your plant produces. There could be some strategic gain in building an inventory of unsold product that can be sold in future quarters, and that's addressed in the "Dynamic Dance" section below.

Consider raising the price as orders increase, so that the rising demand can result in bigger profits. However, you don't want to slam a growing market with price-gouging, so subtlety in raising your price is in order. Bad market reaction to higher prices could be a painful lesson.

Shaving Prices, Saving Customers

If you are consistently carrying too much inventory, lowering prices is one method to clear it out. It's a given that lower prices increase quantity demanded, but intrinsic to that is that the lower price also results in less profit. Pity, eh?

You'll want to frequently visit the Company Report to see how your price setting relates to orders you receive. The Industry Report displays your competitors' prices—you might need to adjust yours if you see that a competitor is trying to grab a market edge by some high- or low-pricing gambit.

Take what you learn from initial quarters to set pricing for quarters to come. You'll develop a keener sense of market flux, and maybe even pad your company's pocketbook.

Produce, but Stay Loose

Holo-Generator production, like all the factors that affect Titan performance, should be responsive to market factors and past results. You want your factories producing at the maximum efficiency—selling what you make—and you want to balance production costs, so that spending is in line with selling. As with other allocations, the Company and Industry reports can sharpen the production picture.

The Dynamic Dance of Make, Sell, Make, Sell

Ideally, you want to sell all of your Holo-Generators at the highest price the market will bear. (Keep in mind, there are occasional market tides that won't float the profit boat no matter your pricing.) There is a penalty for producing more than you can sell—an excess inventory fee that subtracts from your retained earnings. Except in special cases, you want to minimize inventory. An exception might be when you want products to sell in a future quarter without increasing factory capacity.

In the Company Report you can view factory capacity, which is the maximum number of generators that can be produced in the next quarter. Adding that capacity to inventory tells you what's available to sell.

That ever-useful Company Report also notes the factory costs in producing each Holo-Generator. Smart cookies like you probably don't need to be reminded that the lower that cost, the better.

The Beauties of Efficiency

Eighty percent is the magic number: Operate at that efficiency and you are producing generators at the lowest cost. Exceed that figure and there won't be time for maintenance and repairs, which raises costs per unit and—naturally—lowers profits. Even machines have to breathe now and then.

Produce below the 80% optimal figure and you have equipment and employees sitting idle. That decreases your efficiency and increases the unit cost of production.

Today's Almost-Painless Math Lesson

To find your lowest-cost production level, multiply your Holo-Generator factory's capacity by .80. That's your production target. To paraphrase, be frugal and multiply.

Marketing: the Golden Wrapper of Winning Words

Though some cynics might characterize it as putting an evening gown on a noontime pig, marketing does create demand for a product. Money allocated to marketing can work a bit differently than in other areas because other companies can gain from your marketing and you can benefit from theirs.

That's because regardless of who pays for the advertising, more consumers and businesses will learn about Holo-Generators. If you put more dollars behind your marketing pitches, more consumers should get the word on the special, can't-live-without features of the Holo-Generator that you produce.

First (and Somewhat Obvious) Rules of Marketing

If you spend less on marketing than you did in a prior quarter, your company can pocket the difference. But spending less might result in selling less. Thus, a successful marketing strategy results in profits greater than your marketing investment. You can fine-tune your marketing methods by clicking on the Marketing Sub-Decisions button on the main screen. Choose from a range of allocation options (from direct marketing to TV ads) to pitch your products. Some options will only be available if you've allocated enough money to your general Marketing funding. Note how the specific allocations affect sales and be ready to adjust for future quarters.

R&D: Little Initials, Big Potentials

Investment in Research and Development is a forward-thinking proposition: The future growth of your company is connected to spending on R&D. By investing in R&D, your next generation of Holo-Generators will have new features and advancements, and have greater market appeal. You can chart the impact of your R&D investment in the Company Report.

To This Quarter—and Beyond!

Don't be too results-antsy about R&D—market research and product development are long-term processes, and their effects are distributed over several quarters. Money invested in these two areas will increase sales in future quarters, though not independent of your pricing strategy. For example, R&D increases might raise demand +10%, but high prices might pull demand down -25%, with a net effect of -15% demand. Here are key points:

- R&D spending in Q3 will have an impact on demand in Q4.
- The impact of R&D spending persists over time, so you will still receive some R&D spending effect several quarters down the line.
- R&D spending has a positive effect on demand, though price is a stronger factor in gaining market share.
- R&D spending raises demand industry-wide, just like marketing spending. The percentage of that extra demand you get is directly proportional to what percentage of the industry R&D spending you're responsible for. Outspending all the other companies on R&D can boost interest in your company's Holo-Generators.

- Clicking on the R&D Sub-Decisions button on the main screen gives you the chance to select specific Holo-Gen features (at specific prices) to research. There you can also allocate R&D money to focus groups to spot demand for a feature in advance. Being first-to-market with a new feature can put you a small step ahead.

Reduced spending on R&D can reduce your expenses, but as seen above, increased spending can increase demand, and boost those ever-pleasurable profits. So, beware the bane of short-term benefits: if your company does not invest in R&D, your product will not improve. Once your R&D-heavy competitors produce some snappy new Holo-Generator that's high on the bells-and-whistles scale, you might never catch up.

Capitalizing on Your Capital

Capital Investment is the money you use to expand your production capability. These expenditures:

- add to the total amount of equipment you own
- replace and repair existing machinery,
- purchase more efficient equipment, and
- expand the physical size of the factory

It's the old—but compulsory—price of doing business. But you're getting what you pay for: Every Capital Investment dollar above your Depreciation figure increases your production capacity (the number of Holo-Generators you can produce in a quarter).

Since it takes time to purchase, install and test new equipment, the effect of any capital investment decision you make will be delayed one quarter. Look at it like this: popcorn tastes better when it's popped—but before you drown in misguided metaphors, just know here that your investments should be worth the wait.

An Appreciation of Depreciation

If you want to maintain your factory's current Holo-Generator capacity, you need to spend at least the amount listed for Depreciation. (Depreciation represents the value of equipment lost each quarter due to wear and tear.) Any amount you spend above your Depreciation will increase your factory capacity. Conversely, any amount you spend below Depreciation will decrease capacity, and you'll incur layoff charges.

To boldly go where bullet points rarely venture:

- Capital Investment matches Depreciation, your factory stays as is.
- If Capital Investment is more than Depreciation, you increase production capacity (your factory grows).
- If Capital Investment is less than Depreciation, your factory shrinks, which decreases your production capacity and causes layoffs.

Big Factories, Smaller Prices

Larger factories produce Holo-Generators at a lower cost per unit—a result of the old "economies of scale" concept. It costs $40 in Capital Investment to increase your factory's capacity to produce just one more Holo-Generator. Following that ratio, it costs $400 to produce 10 more Holo-Generators.

Can the Theories and Cut to the Chase

There—you are armed with the armchair knowledge that can make or break a company owner's career. Leave that chair and get out on the factory floor; touch your Holo-Generators; talk with your marketers, your researchers, and your money managers. Then go test your wits in the marketplace. It can be a cruel world, but the rewards make it all worthwhile. Prosper!

JA Titan Glossary

Balance Sheet
A financial statement summarizing a firm's assets, liabilities, and net worth at a given point in time.

Capital Investment
The money put into buildings, tools, and machines to create goods and services.

Cash Flow
The amount of money going into and out of a business during regular business operations.

Company Report
A report that contains private information about the inner working of a specific company.

Demand Curve
A graphic depiction of the quantity of a particular good or service that people are willing and able to buy at different possible prices at a particular time. A demand curve is usually downward sloping to the right. Typically price and quantity demanded move in opposite directions. As price decreases, the quantity demanded increases. If price increases, the quantity demanded (total orders) decreases.

Depreciation
The value lost in assets as they wear out or become obsolete. Depreciation is both an accounting expense and an economic concept. The rules of accounting in this simulation allow a company to expense 5 percent of its plant investment as a cost incurred in production. Depreciation is also an economic concept because the total cost of production includes not only labor, natural resources, and material, but also the wear and tear on production facilities. Economic depreciation may vary due to levels of production, maintenance, the age of the facility, and other factors.

Economies of Scale
Reductions in cost resulting from large-scale production. Economies of scale develop as a company increases its factory capacity and uses the latest technology and more efficient production processes. Thus, a company can lower its average cost by increasing plant capacity. Suppose you increase plant investment by $8,000 each quarter. As plant capacity increases, cost per unit falls at each level of capacity utilization.

Long-run average cost curves do not fall forever. Eventually, a company will hit its most efficient-scale plant. Further expansion may actually cause the long-run average cost curve to begin to increase which means a company has become too large.

Eighty percent of the plant capacity will continue to be the lowest-cost point on the short- run average cost curve at any level of factory investment.

Elasticity of Demand
A measure of the effect a price change has on the quantity demanded. The quantity demanded of a product with a highly elastic demand curve will change dramatically as a result of a small change in price. On the other hand, consumers will continue to purchase similar quantities of goods, regardless of price, if their demand curves are inelastic.

More precisely, demand is elastic if the percentage change in quantity purchased is greater than the percentage change in price. Demand is inelastic if the percentage change in price is greater than the percentagechange in quantity purchased.

An easy way to estimate the effects of a price change is to calculate the total revenues anticipated at various prices.

Total Revenue (TR) = Price X Quantity

Gross Margin
The difference between the total costs to manufacture and sell a product and the revenue from sales of the product.

Income Statement
A graphic depiction of the quantity of a particular good or service that people are willing and able to buy at different possible prices at a particular time. A demand curve is usually downward sloping to the right. Typically price and quantity demanded move in opposite directions. As price decreases, the quantity demanded increases. If price increases, the quantity demanded (total orders) decreases.
Industry Report
A report that summarizes the performance of an entire industry.

Interest
Payment for using someone else's money; income from allowing someone else to use one's capital. See also Interest (Income) or Interest (Expense).

Margin
The difference between the cost of production and the selling price.

Marketing
Everything that occurs between production and purchase.

New Loans
Additional funds a company borrows from the bank.

Oligopoly
A market structure in which a few large businesses supply most or all products. Breakfast cereals, major appliances, carbonated soft drinks, and the auto industry are examples of oligopolies.

Profit
The difference between a firm's total revenues and its total costs.

Repayments
Money a company spends to pay off a loan.

Retained Earnings
Undistributed profits.

Revenue
Income, as from sales, property, or taxes.

Plan Detail
Area of granular decision-making for specific funding uses for R&D and Marketing. R&D sub-decision funding can specify research funding for individual Holo-Gen features and focus group moneys. Marketing sub-decisions allow for choosing specific marketing campaigns, such as newspaper ads or billboard ads. Individual sub-decisions for both fields have different costs and levels of effectiveness based on overall plan designs.

Supply Curve
A graphic depiction of the quantity of a particular good or service that people are willing and able to provide at different possible prices at a particular time

Volume/Price Strategy
The decision of a company to produce a specified number of items at a particular price within a specific area of a market.