EQUIPPED TO WIN

Strategy, Product Management, and Marketing for High-Tech Capital Equipment Companies

Michael Chase

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"Unlike other product strategy and development books, *Equipped to Win* provides high-technology capital equipment managers with real life how-to steps and tools for managing products through their lifecycle. This handbook will be on tech leaders' desks, not their bookshelves!"

- Michael Luttati, Vice President of Global Services, Teradyne, Inc.

"Mike is one of the brightest marketing professionals I know. With *Equipped to Win*, he has given us an easy-to-read guide to the essentials and nuances of high-tech capital equipment product strategy, management, and marketing."

- Mitch Tyson, Chief Executive Officer, Advanced Electron Beams

"Mike Chase has written what our industry has needed for a long time - a straightforward guide that addresses the key issues facing high-tech capital equipment companies. It's a book you will appreciate immediately and revisit frequently."

- Greg Redinbo, Ph.D., Director of U.S. and Europe Sales, Varian Semiconductor Equipment Associates, Inc.

EQUIPPED TO WIN

Strategy, Product Management, and Marketing for High-Tech Capital Equipment Companies

By Michael Chase

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Introduction

If you are a high-tech capital equipment executive frustrated with general-purpose strategy and marketing texts, this book is for you.

The concept for this book came to me a couple of years ago when I was working with a freshly minted product manager named Erik at a semiconductor equipment company. Erik, a bright Ph.D. who after over ten years on the technology development side of the house was making the transition into the world of marketing and product management.

After working together for just a couple of months, Erik came to me and said, "I find all of this extremely frustrating. I've read at least four different marketing and strategy books. They all describe what other companies have done, but none of them actually tell you how to do it for yourself. Furthermore, none of them seem to have anything to do with the type of business that we're in."

From the moment Erik spoke those words, I knew how I would approach writing this book.

You have in your hands the first ever how-to book that specifically addresses the unique challenges of the high-technology capital equipment industry.

Inside you will find clear, straightforward strategies, tactics, and tools to help you address your toughest strategy, product management, and marketing challenges. These are the same methods that I have used over a twenty-year, high-technology capital equipment career and continue to use at my consulting firm, Tekcess International.

This book puts the capital equipment industry's best practices at your fingertips. Whether it's how to get the most out of your aftermarket business, train the sales force, collect competitive intelligence, or keep product development programs on track, it's all here plus much more in a straightforward, how-to format.

I recommend that you scan this book cover to cover at least once to become familiar with its scope and the help it can provide. Then keep it somewhere within arm's reach at all times, ready to be referenced the next time a strategy, product management, or marketing problem crops up.

I hope you find that by reading this book and implementing the ideas it contains, you are better equipped than ever to succeed in the high-technology capital equipment business.

Enjoy

PART I: STRATEGY

1. How to Be More Strategic

As a high-technology capital equipment general manager or product line manager, it is easy to be completely consumed with the day-to-day tactics of running your business or product line. When this happens, it is nearly impossible for you to provide the strategic leadership required to ensure sustained growth and competitive advantage. If you are going to be successful over the long term, you need to figure out how to be more strategic.

The secret to resolving this is to set up a system that virtually automates the management of the day-to-day operation of your business or product line. Once you have the day-to-day issues under control, you need to understand how to use your free time to be more strategic. See figure 1.

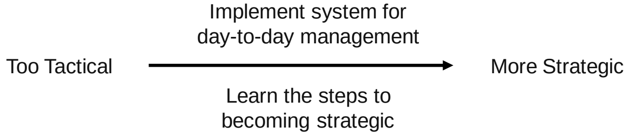

Figure 1: Process to Become More Strategic

Why It's Hard to Be Strategic

If you're like most general managers or product line managers of high-technology capital equipment companies, you spend most of your time chasing sales targets, solving customer issues, and tallying the quarter's numbers. You are probably spending precious little time developing competitive advantage, long-term growth strategy, or your organization.

Take a moment and think about it. How much time over the last month did you spend thinking about or working on strategic issues? If you find that you are consumed with the day-to-day, it's very possible that the processes and people capable of managing the tactical operations of your business haven't been fully developed. Until they are, you'll never be able to devote enough time to the things that will truly grow and improve your business.

The good news is that there are only five things you need to get under control. Once you do, you'll be able to spend more time solving the truly strategic issues facing your company.

First, Get the Day-to-Day Under Control

A high-technology business has only five core processes. Develop and implement the infrastructure to manage them, and you are on your way to spending more time working on growing your business. The five things are:

1. Financial Reporting
2. Sales
3. Revenue
4. Product Development
5. Customer Service

Financial reporting encompasses all of the management and external financial reporting required to run your business. Sales is made up of orders and the outlook for orders. The revenue process includes everything the organization does to turn an order into revenue such as manufacturing, testing, and shipping. Product development refers to the management and tracking of current development programs. And finally, customer service refers to all of the activity associated with making sure that customers are happy with your products once they receive them.

Effective businesses need to know the current status of each process at all times. For example, you always need to know where you stand against quarterly profit, sales, and revenue goals. Without a process in place that routinely produces this information, 100 percent of your time can be consumed with constantly trying to assemble the latest status.

The way out is to delegate the daily management of these processes to a competent, functional team and to establish a routine that consistently produces accurate and timely information. You must hire and develop a functional staff that you can truly rely on to manage the performance for each of the five processes. If you lack confidence in your team, you will find yourself drawn back into the tactical management of the daily operations. There is absolutely no substitute for hiring a functional staff that is 100 percent competent and comfortable managing these processes. Do not compromise here.

The next step is to build a business dashboard that will provide all of the key indicators for each of the five processes. Similar to the way a car's dashboard indicates the health of the car, your dashboard should indicate the health of your business. Your business or product line dashboard will vary depending on the nature of your specific operation, but it will typically contain elements like those in table 1.

Once you've established the elements required in each of the dashboards, have each functional owner create a concise report—often just one page—that will communicate the current status of the processes in their respective dashboards.

Often, the best approach is to utilize your weekly staff meeting to review performance on each of the five business processes. Your agenda literally becomes the five things with each owner presenting his or her dashboard.

Table 1: Business Process Dashboard Elements

Business Process	**Example Contents**
Financial Reporting	• Quarterly P&L versus Goal • Quarterly P&L versus Current Quarter Forecast
Sales	• Quarterly Bookings versus Goals • Quarterly Bookings versus Current Quarter Forecast
Revenue	• Quarterly Revenue versus Goal • Quarterly Revenue versus Current Quarter Forecast
Product Development	• Status versus Milestones • Status versus Success Criteria
Customer Service	• Installations Status • Customer Down Status and Action Plan

Hold your meeting on a regular schedule, and keep to the agenda without deep dives on technical issues, budget reviews, or customer issue resolution. Set up specific meetings to deal with anything outside of the five things. Your objective is to institutionalize a habit, set expectations, and establish accountability. Nothing does that better than being consistent and persistent. If you can't make your staff meeting for a legitimate reason, delegate the meeting to a staff member and insist on receiving the updated reports after the meeting. You must maintain the routine in order to create the organizational habit.

Keep refining the process until your organization has matured and can routinely and effortlessly produce accurate status on your dashboard. Issues will still be escalated to you, but these will be the exception, not the rule.

Imagine walking out of your staff meeting every week with the answers to everything that your CEO is likely to ask, and with the confidence that your team is managing the daily operations of your business. You should feel an immediate sense of control, and a sense of freedom to spend time on your strategic issues.

From Fire Fighter to Strategic Leader

You're now free to spend your time cultivating growth opportunities, resolving the truly critical issues, improving your competitive position, and developing your organization. But how do you get started?

To be strategic, you're still going to turn to the five processes, but look at them through the strategic lens, not the tactical lens. That lens is characterized by an external perspective and a time horizon greater than day-to-day. When you accomplish this, the questions that you worry about will change, as shown in table 2.

Since you've established the team and process that manages everything in the tactical column, you can now spend time thinking about the strategic issues affecting each part of your business. Of course, thinking about them isn't enough; you'll want to figure out what the most critical strategic issues are and act on them.

It's easy to be at a loss for how to get started. Strategic issues by their nature are not urgent, so there's no immediate pressure to resolve them. Shifting gears to a strategic mindset is actually pretty difficult, especially if you've grown accustomed to fighting the fire of the day and getting the instant gratification that comes with putting it out.

A product manager once said to me, "I'm so busy supporting day-to-day sales issues that I don't have time to be strategic."

I asked him, "If all of your sales support tasks were eliminated right this minute, so that you could immediately focus 100 percent on strategy, what's the first thing you'd do?"

Table 2: Tactical vs. Strategic Questions

Business Process	Instead of Tactical Questions …	Try Strategic Questions …
Financial Reporting	Are we going to make the quarter?	What's causing the margin erosion over the last three years in Asia?
Sales	What price is required to close this order?	Why are some customers willing to pay more for our system than others?
Revenue	Where is the last part we need in order to make the shipment on time?	Why are our competitor's inventory turns twice ours?
Product Development	Is the product demonstration ready to run this Friday?	What do we need to address for our customers' next generation devices?
Customer Service	How will we get that system in China back up and running?	How can we use service to create competitive barriers to entry?

"I don't know," he said.

The concept of strategic thinking can be so abstract that we're often not sure where to begin. What you need is a framework to guide you, so that you don't go back to your desk and just stare at your computer screen when the fire fighting stops. The straightforward, six-step process in table 3 will help you sort through your strategic issues and develop specific action plans to address them.

Table 3: Steps to Taking Action on Strategic Issues

Step	Action
1	Identify the strategic issues for each of the five business processes; write each down in the form of a question. For example, "How can we use service to create competitive barriers to entry?"
2	When finished, select which strategic issue(s) you need to tackle.
3	Determine what information is needed to understand the issue and figure out where you can get the information.
4	Gather the information and analyze it.
5	Create an objective statement for what must be done. For example, "Automate consumable parts replenishment and ordering for our five largest customers."
6	Develop an achievable action plan.

You're probably not going to breeze through the six steps on your own. What will happen, though, is that you'll start engaging the organization on matters of strategic importance instead of just the daily fire fighting. Whether it's identifying strategic issues, agreeing on the most important ones, or putting a team together to tackle one, you'll have made the transition from fire fighter to strategic leader.

2. Five Strategy Errors and How to Avoid Them

Defining and implementing a strategy is hard work. In the day-to-day battle with demanding customers and aggressive competitors, most of us don't get a chance to really perfect the strategic planning process. This chapter will get you off on the right foot by helping you recognize and avoid five of the most common strategy development and implementation errors that companies make. Those five errors are:

1. Confusing strategy with tactics
2. Working inside-out instead of outside-in
3. Operating with vague vision
4. Failing to identify the "won't do's"
5. Not instituting strategy management controls

Let's take a look at each of these in detail.

Confusing Strategy with Tactics

Every business has pressing issues, but which ones are actually strategic? Are falling sales a strategic issue? What about rising material costs? Or a new competitor?

Knowing how to distinguish between strategic and tactical issues is critical to any strategy development effort. Otherwise, your effort could be overrun by tactics and you may never produce anything that is actually strategic.

Perceptions of exactly what constitutes strategy can be very diverse even among a single management team. A single question about strategy can produce multiple perspectives that must be resolved before attempting to make any meaningful strategy decisions. The following story and dialogue with a Tekcess International client helps illustrate this point.

"In this year's strategic plan, I want to re-examine our sales compensation structure and understand why we spend so much on system demonstrations, and I want a new deal approval process in place."

That's the answer I got from a capital equipment company senior manager in response to the question, "What are the most important things to address in this year's strategic plan?"

Continuing my senior management interviews, I met with the Senior VP of Marketing and asked the same question.

His response: "That's easy. In two years, our customers will be manufacturing their next-generation device. This will make our current system obsolete. We will have a hole in our portfolio if we don't do something."

The marketing executive had a very different perspective on the year's strategic plan. The first executive looked internally to find the most important issues. On the other hand, the Marketing VP looked externally for emerging threats to the business.

A third executive answered the question this way.

"We're not going to do anything strategic this year. We need to work on our current business before we think about another acquisition."

With this third executive came yet a third perspective. In his view, an issue wasn't strategic unless it involved an acquisition, implying that any issues in the existing business must be tactical.

Why the three completely different perspectives on the same question? It's simple; the management team was asked to identify strategic issues before they had a common definition of the word "strategy."

An effective strategy definition should clearly distinguish between strategy and tactics. To that end, consider the following:

Strategy is the big decisions that senior managers make to respond to or anticipate changes in the market or the competitive environment. Everything else is tactics.

Notice that this definition lays out a much clearer concept of strategy than the typical "strategy is long term, and tactics are short term" paradigm. It sets strategy apart from tactics on two key dimensions:

1. Decisions vs. actions
2. External vs. internal perspective

A definition like this fosters a strategic mindset, and when used as a filter, it will help keep tactical issues from distracting your strategy development efforts.

If you're going to embark on a strategy development exercise, step one is to get everyone on the same page as to what the strategic issues are. First, ask your strategy team to write down all of the issues that need to be addressed during strategy development. Have them write each issue on a separate yellow sticky-note. Don't put any constraints on this step; let everyone get their issues on the table unfiltered. When they have finished, have them post all of the issues on one wall.

Then, present the strategy definition to the team.

Next, put the word "Tactics" on a large piece of flipchart paper and post it on another wall. Have everyone re-examine the original issues against your common definition of strategy.

Those issues that don't pass the "strategic" test get moved to the tactics wall. What remains are the strategic issues that need to be addressed during strategy development.

Remember to save the tactical issues. They still need to be addressed once the strategy is defined, and you start detailed action planning.

Working Inside-out Instead of Outside-in

Developing an effective strategy follows a deliberate sequence of phases. These phases start from the outside perspective and work their way inward to specific decisions that you must make. Strategy is all about deciding what to do about changes in your market and how your competitors are responding. If you get this process backward and work from the inside out, your strategy will end up describing what you can do rather than what you need to do. There's nothing wrong with knowing your capabilities and strengths, but it's critical to know what you need to do in order to beat the competition and meet market needs first.

In its simplest form, strategy development follows three phases, and in each, you're trying to answer just three fundamental questions. See table 4.

The answers to the first two questions frame the external or outside perspective that you need in order to develop an effective strategy. In the environment phase, you're looking for changes in market requirements and the potential technologies available to address them. In the situation phase, you're comparing your company's capability versus those market requirements and your competitors' ability to address them.

Table 4: Strategy Development Phases and Key Questions

Phase	Description	Question
1.	Environment	What are our opportunities and strategic issues?
2.	Situation	Where do we stand vs. those opportunities and issues?
3.	Strategy	What decisions must we make?

After these two questions are answered, you're ready to start developing your strategy. Figure 2 depicts the top-level, capital equipment strategic planning process used by Tekcess International. Notice that the steps associated with strategy development don't begin until after the external analysis in phases one and two is complete.

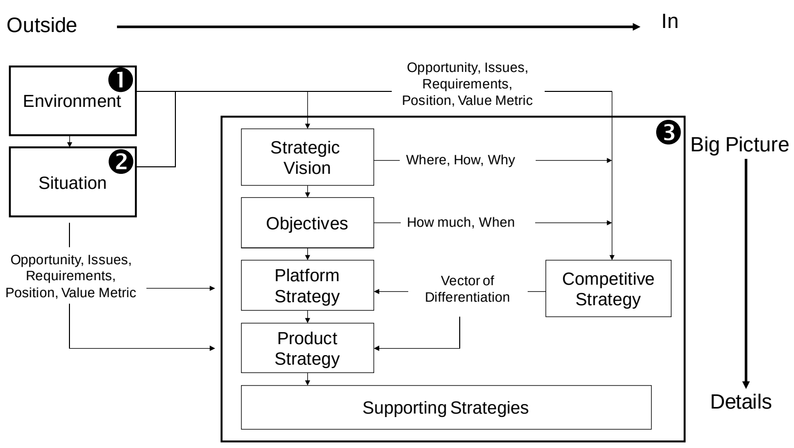

Figure 2: Strategy Development Process

When it comes to the strategy phase itself, the order of the strategy development steps is critical to ensure that the strategy is aligned to address your markets and attack your competitors.

Strategy is developed with increasing levels of specificity at each step, from strategic vision all the way down to detailed supporting strategies. This funnel approach serves two purposes. It forces big picture thinking before the conversations get cluttered with lower level details. It also forces detailed product and supporting strategies to fit a strategic framework.

If you execute these phases and steps in any other order or attempt to complete them in parallel, you'll find yourself trying to do just the opposite. You'll be trying to fit a strategic framework to your details, plans, and tactics. This will derail the process and keep your team from uncovering and attacking the true strategic issues that will determine your company's success.

Operating with Vague Vision

Many companies lose their way on the road to success because their strategic vision is so vague that it fails to provide a framework for strategy. Take for example the vision statement below, which is supposed to describe a company's future.

We will become a leading equipment supplier to the semiconductor industry by listening to our customers and meeting their needs. At the same time, we will maximize return to our shareholders and provide a rewarding work environment for our employees.

It sounds good, it reads well, and its core messages are easy to remember. But it lacks specific information and direction that employees need in order to move the company toward its desired state. It's full of feel-good thoughts, but distinctly silent on strategic direction.

A good strategic vision, however, is both destination and direction. It aligns the organization and focuses efforts to drive the success of the company. It also sets the framework for platform and product strategy. A good strategic vision outlines:

- Where you are going
- What path you will take

- Why you will win[i]

Take for example this vision statement:

We will:

- *Be the number one supplier of thin film deposition systems to the semiconductor market.*
- *Leverage our core competency in deposition source technologies across multiple semiconductor equipment platforms.*
- *Produce the fastest deposition rates and as a result, the lowest cost of ownership for our customers.*

Table 5 shows how this statement can be decomposed into the key components of good strategic vision.

Table 5: Vision Statement by Component

Component	Vision
Where you are going	We will be the number one supplier of thin film deposition systems to the semiconductor market.
What path you will take	We will leverage our core competency in deposition source technologies across multiple semiconductor equipment platforms.
Why you will win	We will produce the fastest deposition rates and as a result, the lowest cost of ownership for our customers.

Compared to the vague vision, this vision is clear and precise. It directs employees' actions and behaviors in very specific ways that will drive total organizational alignment. This vision statement also successfully establishes the framework for platform and product strategy. Just from the vision statement, you know that you'll be investing in deposition source technology to create multiple products to beat the competition with the fastest deposition rates and the lowest cost of ownership.

Notice also that this vision statement is written at a business-unit or market-segment level. Targeting vision statements at this level works best. Attempting to define a vision statement at the corporate level for a multi-segment company often results in a statement that's so watered down that it loses its ability to provide direction to the organization.

Failing to Identify the "Won't Do's"

It's common to see everyone's heads bobbing up and down with approving smiles as grand strategies are being formulated to beat the competition. However, smiles quickly turn to frowns when you start explicitly outlining the "won't do's" so that you can keep the organization focused on the strategy. Here's where the real tough decision making rears its head.

Doing everything is the antithesis of strategy. Strategy is as much about deciding what not to do as it is deciding what to do. Strategies don't really take on real meaning until the management team has reached consensus on what they will not do. It's those "won't do's" that really test the discipline of an organization. Failing to do this almost assures that some portion of your organization will be distracted from your core mission. Your strategy needs to identify:

- Markets or customers that you won't chase.
- Product features that you won't implement.
- Products that you won't continue to produce.

The test of an organization's strategic discipline is how they behave in the last week of the quarter when one of your "won't do" customers pops up to buy your "won't do" end-of-life product, requesting just a few small "won't do" product features.

Not Instituting Strategy Management Controls

When you ask managers the reason why they view strategic planning as a waste of time, one of the most common responses is, "Once the planning process is complete, it gets put on a shelf or sent to the board of directors, and then we go about fighting our daily fires as usual."

This is a common problem that most companies try to address with formal communication programs plus linked rewards and compensation plans. There's nothing wrong with this approach; however, it's usually not enough to keep the strategy on track. What's needed is strategy management and control integration with the management and control mechanisms that already exist in your company.

You probably already have a regular heartbeat of operations and product development reviews to make sure that you're meeting near-term targets. To avoid adding unnecessary overhead, try integrating strategy monitoring into an existing business or product line review instead of creating another meeting for strategy management. To integrate strategy control into an existing review, just add these elements to keep your strategy on track:

- Current multi-year market forecast
- Changes in market environment
- Outlook for market share
- Status on key accounts/markets needed to hit share goals
- Changes in competitive environment
- Product performance roadmap vs. competition
- Current development status on each product roadmap item

Adding a review of key strategy elements to your existing management and control systems not only creates the inspection point to make sure that things stay on track, but it also keeps the strategy and situation data current. As a result, you'll have a much more robust starting point when you hit the next planning cycle.

3. The Three Phases of Capital Equipment Industry Maturity

Are you the only game in town? Are you the only company that can meet your customers' most advanced requirements? If you are, consider yourself lucky, but don't get too comfortable.

High-technology capital equipment industries mature through three very predictable phases. These three phases can be described as:

1. Can you do it?
2. How fast can you do it?
3. Everything else.

Each phase has a different competitive environment, requires a different strategic approach, and produces a different profit profile. Business also gets tougher as markets mature, but there are ways to prepare your company to handle the challenges and opportunities in each phase.

So, let's take a look at how these three industry phases will drive changes in your strategy.

Phase 1: Can You Do It?

This occurs when you're the only supplier who can meet the market's technical requirements, the only player "who can do it." Living in this phase is usually the result of a technological breakthrough or market inflection, which redefines a market or enables a new one.

Profits are bountiful in this phase, because if you are the only solution, pricing tends toward the threshold of value brought to the market as opposed to an extremely competitive environment, where pricing tends toward minimal, acceptable margins.

The best companies recognize this and aim their competitive strategy to ensure that they thrive in this phase as long as possible. They do this by knowing their customers and their problems better than the competition. They develop solutions to those problems before their competitors even know that the problem exists. Then, they build intellectual property (IP) barriers around their solution to protect their position. The companies most successful at lingering in the "Can You Do It?" phase usually exhibit the following characteristics:

- Invest heavily in application and process engineering.
- Engage systematically with customers' technology development groups.
- Focus on IP strategy, both offensive and defensive.

The problem is that as your competitors are watching you rake in the profits, they become obsessed with getting a piece of the action. Because the profit potential is so tempting to competitors, your lifespan in this phase can be brief unless you are constantly investing to renew your position.

Phase 2: How Fast Can You Do It?

Eventually, one of your hungry competitors will figure out a way around your IP and develop an alternative solution. The second they do it, you've entered stage two of market maturity.

With more than one player able to meet key technical requirements, capital equipment suppliers will have to compete primarily on cost of ownership metrics, which are usually dominated by some measure of productivity or throughput. Productivity is defined as equipment output of your customer's product per unit of time. This is why Phase 2 gets the name, "How fast can you do it?"

Margins are still fairly decent if you can maintain a productivity advantage, since each increment in improved cost of ownership or throughput can be translated directly into value for the customer. In fact, pricing in this phase has a direct correlation to productivity. The least productive suppliers will typically achieve the minimally acceptable margin to keep their businesses operating. This sets the floor for pricing. More productive offerings will achieve a pricing premium over this level directly proportional to their productivity advantage. This relationship is shown in figure 3.

$$\frac{\overset{\substack{\text{Your}\\ \text{System}\\ \downarrow}}{\text{Throughput}}}{\text{Price}} = \frac{\overset{\substack{\text{Competitor's}\\ \text{System}\\ \downarrow}}{\text{Throughput}}}{\text{Price}}$$

Figure 3: Price and Throughput Relationship

This phase lasts until the throughput saturates, meaning the customer no longer benefits from further throughput improvements. For example, if you're an equipment manufacturer and your throughput is so high that a single machine in your customer's factory is sufficient, the customer won't value further throughput improvements. At this point, Phase 3 takes hold.

Phase 3: Everything Else.

Business starts to get tougher here. Now you are largely competing on the ownership experience. Pricing pressure is intense. Spare parts availability, ease of transaction, reliability, applications support, and customer service responsiveness all become critical. Margins shrink dramatically.

Typically, in this phase end markets are maturing and technological changes are slowing. You can tell if you're in the "Everything Else" phase by the following:

- Discussions around the office are more about operational efficiency than innovation.
- There is increased emphasis on aftermarket revenue.
- Your company has announced its first ever stock dividend.

This is the plateau of a high-technology industry or segment. The final phase of consolidation happens here, and the market share of the remaining participants is likely to stabilize. The last remaining players may make a decent living, but they will find themselves eliminated from growth fund managers' "Stocks-to-Watch" lists.

Know Where You Are; Set Strategy Accordingly

It's important to recognize where you are and to align your competitive strategies to address the challenges of each market phase.

If you are in the "Can You Do It?" phase, do everything you can to protect your position and prolong it. Brainstorm how a competitor may enter the space or circumvent your IP. Then, build a defensive IP barricade around those possibilities, even if you have no intention of implementing them. Also, invest to extend your current position and to keep your competitors perpetually a lap or two behind.

If you've moved on to the "How Fast Can You Do It?" phase, recognize that this is a cost of ownership play, and make sure that product strategies push for at least a 25 percent advantage over your competition. As a rule of thumb, this is the threshold needed to affect market share shifts and achieve a price premium. This is important because you are going to need commanding market share as you enter the final phase to ensure that you're the last company standing.

When you finally hit the "Everything Else" phase, you should be well down the path developing growth options outside your core business. You'll need a new growth engine to propel your company as your core business levels off. You need to defend your core business aggressively, but you also need to start diverting profits to fund the next big thing.

The strategies to drive your business in each the three phases is summarized in Table 6.

Table 6: Strategy by Industry Phase

Phase	**Compete on**	**Strategy**
Can you do it?	Unique capability	Develop defensive IP and other barriers to entry.
How fast can you do it?	Cost of ownership	Invest to maintain >25% productivity advantage.
Everything else.	Reliability, service levels, price	Shift R&D (Research and Development) spending to new growth options.

4. Strategic Issues and Disruptions

You've been there. The VP of Marketing is at the front of the room with the projector beam coloring her face different shades of blue, yellow, and red as she scrolls through chart after chart with northeast trending forecasts.

"Here we go again," you think to yourself. "We've seen this before, but we have real issues, and if we don't tackle them, all this talk of opportunity is senseless."

Too often, the strategic planning process focuses on the opportunities and possibilities for greatness with limited attention focused on addressing the true strategic issues and potential disruptions that can bring a company to its knees. When this happens, you run the risk that the whole strategic planning effort will end up a paper exercise, with little or no impact on the business.

To fully engage your team in the strategic planning process and make a fundamental difference to your business performance, you have to begin with identifying the issues and disruptions that your business needs to address.

What are Strategic Issues?

Strategic issues are those things that will prevent the organization from reaching its long-term goals. They are not the day-to-day fire fights like customer satisfaction hiccups or product problems. Strategic issues are caused by changes in the market or competitive environment that, over time, will impair the organization's ability to be successful. Examples of strategic issues might be:

- 90 percent of your business is in Asia where local competitors are emerging with lower cost structures, better cultural alignment, and better access to your customers.
- Your market growth rate has slowed to less than 8 percent, and if you don't find a way to renew growth, your stock value will decline as your company stock's price-to-earnings ratio contracts.
- Since your major competitor has entered the market, prices have significantly eroded; if this keeps up, you won't be able to sustain the research and development necessary to remain competitive.
- Your largest, fastest-growing market is China, but the government limits export of your products; your foreign competitors don't face this dilemma.

Notice that each example deals with a long-term macro, externally caused predicament. Unless you deal with these issues in the strategic planning process, they will get lost in the daily fire fighting.

Disruptions? What Disruptions?

Disruptions are those seismic shifts that fundamentally shake the relevance of your business. Most often, these disruptions are a result of technology changes. These usually come in two varieties:

- Disruptions to your end market that affect its size or existence
- Disruptions in the technologies that satisfy your market

The world of high technology is by nature full of disruptions. They must be anticipated and addressed in the strategic planning process, or you'll wake up one day and find your business facing obsolescence. Consider these examples:

- CD's displace cassette tapes.
- MP3's trump CD's.
- Fiber optic rolls over copper.
- VOIP obsoletes Ma Bell.
- Flash memory erases hard drives.
- Copper pushes aluminum out of CMOS.
- Compact Florescent Lights (CFL's) challenge incandescents.
- High Brightness LED's take on CFL's.

To get a jump start on your list of potential disruptions to your business:

- Review proceedings from recent technical conferences relevant to your marketplace.
- Make sure you know what your industry's leaders and most promising start-up companies are working on.

You need to pay attention to those new technologies that have a high probability of broad adoption and if adopted, would have significant impact on your business.

Defining Critical Issues and Disruptions

Most strategic planning processes start with an environmental analysis phase followed by a situation or competitive analysis. It's in these phases that the critical issues and disruptions are catalogued. Force each of these phases to conclude with a list of critical issues and disruptions that must be addressed in the strategic plan. Sample outlines for the first two planning phases are shown in figure 4.

Notice that both the environmental and situation analysis end with a summary of the most critical issues. This focuses the organization on those elements of the environment and your situation that must be addressed in your strategy. For each of these, it is necessary to spell out the implications to your company and the time frame in which it needs to be addressed. A sample template for this process is shown in figure 5.

Environmental Analysis Outline

- Customer's Environment
  - Market growth drivers
  - Market size, segments, and growth
  - Technology trends and disruptions
- Our Environment
  - Market growth drivers
  - Market size, segments, and growth
  - Market's top spenders
  - Technology trends and disruptions
- Summary
  - Most critical issues

Situation Analysis Outline

- Market Position
  - Historical financials
  - Historical market share
  - Position in top spenders
- Market Requirements
  - Position vs. market requirements
- Competition
  - Summary of competitors
  - Competitive position
  - IP position
- Summary
  - Most critical issues

Figure 4: Environmental and Situation Analysis Outline

Critical Issue or Disruption	Implications for <Company>	Timing		
		≤2011	2012 2013	>2013
1.				
2.				
3.				
4.				
N.				

Figure 5: Template for Recording Critical Issues and Implications

It is often effective to assign ownership for this process to the CTO or lead technologist in your organization along with the lead marketing executive. A thorough examination of each potential issue and disruption is required to determine the probability, likely timing, and potential repercussions for your business. Those that are likely to have an impact on your business make the final cut, and you need to assign key business leaders as owners for each.

In this initial phase of your planning, you won't try to address the specific issues and disruptions. That will come later in the process when you begin to define your strategy. Your objective at this phase is just to get your team's consensus on the definition of the key issues and a commitment to address them in the strategic plan.

Strategic Plan with Real Impact

By identifying and addressing the true strategic issues and potential disruptions to your business, you'll have a head start on a strategic plan that will drive your business in the right direction. These issues, combined with your strategic objectives and platform strategy, provide a framework for your product strategy.

Taking the time to identify the most critical strategic business issues will also align and energize your team because they'll know that they will be solving real problems that will show measurable results. As a result, you will be on your way to winning over your most cynical strategic-planning critics.

5. Less is More

Most companies have a vision that begins with a phrase like; "To be the leading supplier of product X to the Y market…."

Some realize their vision; some don't.

Those that do, usually have a very clearly defined target market. They understand its needs better than anyone and focus all of their efforts on satisfying them.

Those that don't, often have such a vague definition of their market that almost any prospect fits it. As a result, they end up burdened with a punch-list of disparate customer needs. In contrast, those that achieve market leadership understand the "Less is more" concept better than most.

Don't Chase Every Prospect

Guided by sales goals or fears of missing an opportunity, there's a temptation to try to capture any piece of business that enters the sales pipeline.

Imagine this scenario.

You're a process equipment manufacturer for the semiconductor industry. It's a cyclical industry and you happen to currently be in a deep downturn. Your target markets, mainstream memory and logic manufacturers, are just not buying.

Along comes a manufacturer of automotive devices. To make their devices, they use process equipment like yours, but they use a non-standard wafer type that will require you to design a special wafer handling option. Over the last fifteen years, this prospect has only purchased two systems like yours. But now, they have money and need a third.

Business is so slow that taking the order is very tempting because the order will generate short-term revenue and might even save the quarter.

Before taking the order, you need to think about the potential cost to your company by considering:

- Design and test costs for the special wafer option
- On-going field inventory carrying costs for the special spare parts
- Depreciation cost of an engineering test stand and support tooling
- Additional test development, documentation, and training costs
- On-going support for a special software configuration
- "End of life" management for the unique parts
- Opportunity costs of not focusing on your core business

I think you can see how every time you stray from your target market to capture short-term revenue, you create new long-term product performance and support obligations. Each one of these dilutes your ability to achieve your core vision. The more customers you're chasing and supporting that don't fit in your target market, the less likely you are to achieve a leadership position in any market.

Target and Non-Target Markets

Of course, you can't tell if a customer is in or out of your target market if you haven't clearly defined it. What you're looking for is a market segment big enough to support your financial objectives with lots of customers who have similar buying behaviors and product needs. Once you've found it, define it as precisely as possible.

Next, with the same precision, you need to define which segments you will not chase, because they are not as valuable, won't value your offering, or are better served by your competitors.

However, clearly defining target and non-target markets is only half the battle.

Let's use the previous example to prove the point. Let's assume this automotive device maker was not in your target market. You knew it, but really hadn't invested in making sure that the rest of the organization did. You have set the stage for the following to happen.

The sales manager will find this opportunity and contact inside sales to get a quote. They, in turn, will ask engineering to develop a design concept and cost estimate. While this is progressing and eating up resources and time, the sales manager will go back to the customer to let him know that the factory is working on a proposal. This flurry of activity will culminate with inside sales dropping the proposal on your desk for your signature.

You, of course, won't sign off because this customer, with his special request to handle a non-standard wafer, is outside your target market.

Two very bad things happen. First, a good-sized effort was put into chasing an order that the company never intended to accept. Second, the sales manager must now go back to the customer and explain that there has been a change in plans. The result of not having everyone on the same page is wasted effort and a stain on the company's credibility and reputation.

The second half of the battle is to get organizational consensus on both target and non-target markets. Once that's achieved, stop all work and prospecting in non-target markets, then align your whole organization to understand and serve your target market better than anybody else. It seems counter intuitive, but by doing less, you will actually achieve more.

It's a Matter of Leverage

The concept of leverage is to produce a large result from a small effort. This is also the essence of the "Less is more" concept. When a company chases a lot of small results, like the automotive device manufacturer in our example, the effort is not leveraged. Companies that are distracted by low leverage pursuits will fall behind their more focused competitors.

Let me try to illustrate again using our example.

The top five customers in your target market typically buy one hundred machines a year combined. They now have an emerging requirement for temperature-controlled processing. This new capability will be required by the whole market over the next two years, but customers are evaluating suppliers right now during the downturn. This new capability requires about the same effort as developing the non-standard wafer option for the automotive device manufacturer.

You and your competitor have typically split your target market right down the middle. The supplier that is first to market with a temperature-controlled processing solution stands to disrupt this historical 50-50 split. The stakes are high. Each of the top five customers is worth twenty system sales a year.

I think you're starting to get the picture. Meeting the automotive manufacturer's non-standard wafer requirement in our example will at most produce a system sale every five years. This is very low leverage. Beating your competition in the race to meet the new temperature-controlled process requirement in your target market produces twenty machines a year for every customer captured. This is very high leverage.

"Wait a minute," you say. "Why not do both?" You could. But who is likely to win the race to satisfy the new requirement in your target market? The company with laser beam focus, or the one chasing every opportunity? What if you lose?

Less Is More Case Study

When I started working with this particular capital equipment company, they were losing a lot of money, shedding market share, and trying to fix their abysmal product quality.

Not wanting to let any opportunity slip by, they were chasing six different market applications for their thin film deposition system. While each of these applications used their basic type of equipment, each had very different performance and configuration requirements. There were almost as many engineering projects as there were engineers.

After conducting a quick analysis, it became clear that one of the six markets was two times larger than the remaining five combined. And as luck would have it, the company's thin film system had fundamental competitive advantages in that one large market.

The direction that we needed to take seemed pretty clear. After achieving consensus with the leadership team, we:

- Stopped all work and put together a plan to unwind existing commitments in the five smaller market segments.
- Shifted all sales, marketing, and engineering efforts to the one large segment.

I can still remember being barraged with aggressive questions at the all-employee meeting where I unveiled the strategy. To the organization, it seemed heresy to narrow our prospects when we were in such bad shape. I fielded, "What about..." and, "Yeah, but…" questions for almost an hour before everyone got the idea that I was serious.

By everyone sticking to the plan and working on our best opportunity, we achieved the following results in short order.

- Reduced total expenses, but increased funding for target market projects.
- Fostered much better relationships with our customers than the competition had.
- Matured the product from a dog to a top performer.

One year after that all-employee meeting, the business turned profitable, market position was a strong number two, and instead of being a drag on the corporation, this business unit was one of its best prospects for growth.

Less really is more.

End of Free Sample