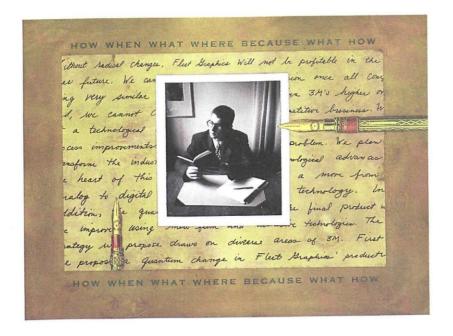


Transforming a business plan from a list of bullet points into a story tells everyone not only what the goals are but also how to reach them.

### Strategic Stories: How 3M Is Rewriting Business Planning



by Gordon Shaw, Robert Brown, and Philip Bromiley

AT 3M, WE TELL STORIES. Everyone knows that, in our earliest days, a share of 3M stock was worth a shot of whiskey in a local St. Paul bar. We tell stories about how we failed with our first abrasive products and stories about how we invented masking tape and Wetordry sandpaper. More recently, we've been telling the story about one of our scientists who, while singing in a choir, wished he had bookmarks that wouldn't fall out of the hymnal—and later created Post-it Notes.

#### THE SCIENCE OF STORIES

Stories are central to human intelligence and memory. Cognitive scientist William Calvin describes how we gradually acquire the ability to formulate plans through the stories we hear in childhood. From stories, a child learns to "imagine a course of action, imagine its effects on others, and decide whether or not to do it" (Scientific American, October 1994). In a very fundamental way, then, storytelling and planning are related.

Stories also play an important role in learning. Language researchers studying how high school students learn found that the story-based style of *Time* and *Newsweek* was the best way to learn and remember. When the researchers translated American history textbooks into this format, they found that students recalled up to three times more

than they did after reading traditional textbooks.

Cognitive psychologists have established that lists, in contrast, are remarkably hard to remember because of what is referred to as the *recency* and *primacy* effects: people mainly remember the first and the last items on a list but not the rest of it, and—more dangerous yet—their memory is guided by their interests. They remember what they like or find interesting, they do not recall the whole.

A good story (and a good strategic plan) defines relationships, a sequence of events, cause and effect, and a priority among items—and those elements are likely to be remembered as a complex whole. That likelihood, supported by a substantial amount of cognitive science, argues strongly for strategic planning through storytelling.

We train our sales representatives to paint stories through word pictures so that customers will see how using a 3M product can help them succeed. At employee award ceremonies, we tell stories about the programs and people being recognized to explain what happened and why it's significant.

Maybe our story-intensive culture is just an accident, but we don't think so. We sense that it's central to our identity—part of the way we see ourselves and explain ourselves to one another. Stories are a habit of mind at 3M, and it's through them—through the way they make us see ourselves and our business operations in complex, multidimensional forms—that we're able to discover opportunities for strategic change. Stories give us ways to form ideas about winning.

So it's remarkable that we typically discard storytelling when we do our strategic planning. After all, that's the formal process by which we lay out how we're going to win.

At one level it's odd, but at another level it isn't at all, since virtually all businesspeople plan using lists, outlines, and bullets. In any event, over the course of several years overseeing strategic planning at 3M, Gordon Shaw, the lead author of this article, became uncomfortably aware that 3M's business plans failed to reflect deep thought or to inspire commitment. They were usually just lists of "good things to do" that made 3M functionally stronger but failed to explain the logic or rationale of winning in the marketplace.

He began to suspect that the familiar, bullet-list format of the plans was a big part of the problem. After critiquing hundreds of plans, he

started to look for a more coherent, compelling way to present them. With *strategic narratives*, he found that form. (See the insert "The Science of Stories.") Individuals in parts of 3M now use strategic narratives in their planning processes, not only to clarify the thinking behind their plans but also to capture the imagination and the excitement of the people in their organizations.

#### What's Wrong with Bullets?

In every company we know, planning follows the standard format of the bullet outline. It fits the way we're used to writing and presenting information. It's economical. It reduces complex business situations to a few, apparently clean points. It allows for conversation around the issues and gives presenters the freedom to move, modify, clarify, and revise on the fly. In a sense, the bullet list may be an artifact of the way business takes place in the course of strategic planning: it mirrors the character of meetings and the highpressure pace of the manager or planner who must reduce the complex to the short and clear.

So what's the problem?

If the language we use in writing strategic planning reports were only a matter of presentation, of the way we package ideas and offer them to others, it would not matter much how we wrote them. But writing is thinking. Bullets allow us to skip the thinking step, genially tricking ourselves into supposing that we have planned when, in fact, we've only listed some good things to do.

Bullet lists encourage us to be intellectually lazy in three specific, and related, ways.

Bullet lists are typically too generic; that is, they offer a series of things to do that could apply to any business. They fail to focus an organization on the specifics of how it

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will win in its particular market. Witness this selection from a planning document submitted by a 3M business unit. The planners proposed three "major strategies":

- Reduce high delivered costs:
  - Reduce international parent head count by three,
  - Explore sales cost reductions,
  - Determine vision for traditional products and appropriately staff,
  - Continue to reduce factory costs
  - Refine unit cost management system,
  - Reduce process and product costs.
- Accelerate development and introduction of new products.
- Increase responsiveness.

What's proposed is so general that it could fit any business at any point in its maturity, and, by the way, the bullet points are not vague because we've disguised proprietary information. This is a typical level of detail for business plans. Basically, these planners propose to keep doing good things faster, cheaper, and with more attention to the market.

The problem here is not incompetence; good managers drafted this plan. They know their business unit and, if asked, could probably provide the detail to turn an empty phrase like "determine vision for traditional products" into a story about market analysis, positioning, and strategic action. But we can't tell that from their plan.

Neither can their executive reviewers. And, more critical, neither norm in this business is to be late and unpredictable. But we certainly can't tell that from this plan.

Bullets leave critical relationships unspecified. Lists can communicate only three logical relationships: sequence (first to last in time); priority (least to most important or vice versa); or simple membership in a set (these items relate to one another in some way, but the nature of that relationship remains unstated). And a list can show only one of those relationships at a time. When we present a list, either orally or in writing, we leave other critical relationships unspecified. Our audience can fill in the blanks from their own view of things, or we can do it, adjusting what we say to the responses we receive from them.

Sometimes, this approach can be politically savvy, making the list palatable to a variety of people who may have different points of view. Lists leave us room to move and, in moving, to protect our sense of mastery, certainty, and control. However, in the end, lists present only an illusion of clarity—and it can be an expensive illusion. If the plan doesn't specify critical relationships among issues, it can't demonstrate that we really know what we're doing or where we're going. We can't see the whole picture.

Bullets leave critical assumptions about how the business works unstated. Consider these major objectives from a standard five-year strategic plan:

- Increase market share by 25%.
- Increase profits by 30%.
- Increase new-product introductions to ten a year.

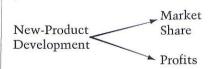
Implicit in this plan is a complex but unexplained vision of the organization, the market, and the customer. However, we cannot extrapolate that vision from the bullet list.

The plan does not tell us how these objectives tie together and, in fact, many radically different strategies could be represented by these three simple points.

Does improved marketing (for example) increase market share, which results in increased profits (perhaps from economies of scale), thus providing funds for increased new-product development?

Market → Profits → New-Product Share Development

Or maybe new-product development will result in both increased profits and market share at once:



Alternatively, perhaps windfall profits will let us just buy market share by stepping up advertising and new-product development:

 $\begin{array}{c} \text{Profits} \longrightarrow \begin{array}{c} \text{New-Product} \\ \text{Development} \end{array} \longrightarrow \begin{array}{c} \text{Market} \\ \text{Share} \end{array}$ 

These different models make radically different assumptions about how the world works. Indeed, these three simple items-profit, market share, and new-product development - can relate in many other plausible ways as well. Without being clear about which set of assumptions they favor, planners cannot seriously think through their plans. Without knowing which assumptions the planners are making, senior managers cannot seriously evaluate or modify the plans. And without understanding the business assumptions, subordinates face just another list of objectives without any confidence that those goals can be reached-and without an essential sense of excitement.

#### The Narrative Logic Of Strategic Stories

Planning by narrative is a lot like traditional storytelling. Like a good storyteller, the strategic planner needs to set the stage-define the current situation in an insightful, coherent manner. That involves analyzing the industry's economics, its key success factors, and the forces that drive change. It also involves defining basic tensions and relationships: Which capabilities and objectives do we have and which do the other players have? What do we believe the other players intend to do? How do our key success factors compare with those of our competitors?

## Bullet lists present only an illusion of clarity—and it can be an expensive illusion.

can the people who need to get behind the plan and make it happen.

But any of these abstract proposals could be part of a powerful strategic plan. If "increase responsiveness" means "improve on-time delivery," for example, it might set a company apart from its competition—if the

#### BUILDING A STORY THAT WORKS

Robert Brullo, a 23-year 3M veteran, needed to figure out what to do about his division's relationship with Hoechst, the German chemical company. Since the early 1980s, his fluoropolymer group had enjoyed a cordial, arm's-length relationship with Hoechst, which had been first a supplier, then a manufacturer, for 3M. That arrangement had worked well for a long time, but it was no longer enough.

Hoechst had recently developed a new resin, called THV, that remained flexible at very low temperatures. It was a product with huge potential. Hoechst, however, did not have the skills necessary to develop or market applications. 3M did. Simply acquiring THV did not make sense for 3M; the cost was too high, and Hoechst already had a manufacturing facility, which 3M would not want to duplicate. A joint venture between the two organizations might ultimately have made the most sense, but Brullo knew that 3M does not enter into such agreements easily or often.

Brullo thought about how to resolve the business issue facing his division. Whatever he decided, getting senior management behind him would be a challenge. He realized that a bullet-style plan could not elicit, or reflect, the serious thinking he needed to do. He decided to write a narrative-style plan instead.

I said to myself, I'm going to write this like a book—make it like a story—so that anybody can pick up the plan, read it, and understand our situation.

Brullo talked with subordinates and read related business plans. He wrote the plan on his own, though. His description of writing that first draft captures

the painful, exhilarating process of thinking through a difficult problem:

I'd sit there knowing it wasn't coming, and then all of a sudden I'd have a flash of brilliance. I spent two days at home just getting my thoughts down on paper. I had sheets and sheets full of ideas. Finally, I started writing out the actual story.

Brullo spent two weeks working on his plan. Once he'd written a 30-page draft, his subordinates critiqued it, and he rewrote it more than once, preparing to present the plan to the company's senior management.

On the day of his presentation, he began by turning off the overhead projector and saying, "I'm going to have fun today." Top managers started whispering that they could see a disaster coming. The business unit involved highly complex science, and it competed in a highly complex industry, so following a detailed plan would have been challenging for the audience had they been listening to a less talented storyteller. However, Brullo walked them easily through descriptions of the players, the critical issues, and the proposed resolution. He knew the material cold; his carefully crafted stories had become part of him.

By the end of the presentation, top management was on board. Brullo's presentation became the foundation for a joint venture between 3M and Hoechst. An observer at the presentation reported later:

When Bob got up and presented, I could see the strategies to win. I could see these strategies changing the basis of competition. I could see the critical issues being identified, and I could see the key success factors for that part of the business. People could see the connections as he went from one section of his presentation to the next. They could see how the business was evolving, and they could see, ultimately, how the business was going to win.

#### Brullo says:

To me, the point is to communicate an insight, not simply a bunch of numbers or a bunch of bullet points. It keeps coming down to the same thing – you have to be able to show that the insight is there.

Dyneon, the new joint venture, was formed in August 1996. Managers developing the new organization over the coming months met with far less mistrust and misunderstanding than most international joint ventures involve. The narrative allowed them to identify potential problems. For example, the strategic story highlighted the importance of addressing specific needs of users in the automotive and semiconductor industries. From its inception, Dyneon jumped on those issues, establishing teams that included people from both companies.

Today Brullo leads Dyneon as its first president. The 600-employee, \$350 million business is almost two years into the joint-venture agreement. 3M is the majority owner. Thus far, Dyneon's financial and operational performance has surpassed expectations. Brullo has used the narrative format in subsequent strategic plans as the basis for two other joint-venture proposals. One of those joint ventures has just been completed.

Some of these factors are straightforward, but others involve complex analysis.

Next, the strategic planner must introduce the dramatic conflict. What challenges does the company face in this situation? What critical issues stand as obstacles to success? In some cases, the main challenge will be exploiting new technological opportunities. In other cases, it will be coping with high costs in a commodity market.

Finally, the story must reach resolution in a satisfying, convincing manner. The plan must tell us how the company can overcome obstacles and win. The conclusion requires a logical, concise argument that is specific to the situation and leads to the desired outcomes.

Requiring that a plan have a narrative logic forces to the surface the writer's buried assumptions about cause and effect. The act of writing a full, logical statement encourages clear thinking and brings out the subtlety and complexity of ideas.

Indeed, sometimes we sit down to write believing we have a clear idea, but our difficulty in getting it down on paper exposes the flaws in our thinking.

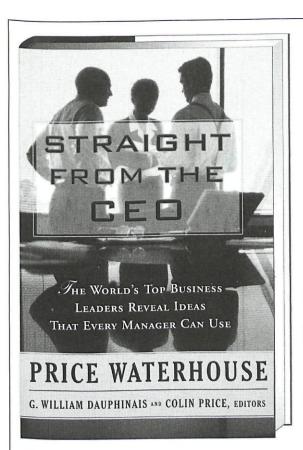
Presenting a plan in narrative creates a richer picture of strategy not only for the plan's authors but also for its intended audience. Readers are made privy to the author's thought processes, so they know far more than they would if they read a bullet list. When assumptions are made explicit, they can be discussed and held up against senior managers' own mental models. Executives are in a better position to evaluate the plan critically, ask more penetrating and insightful questions, and offer more useful advice. As one 3M manager said, "If you read just bullet points, you may not get it, but if you read a narrative plan, you will. If there's a flaw in the logic, it glares right out at you. With bullets, you don't know if the insight is really there or if the planner has merely given you a shopping list."

A word of caution. For this approach to work, the story can't be just a list of bullets connected by "and then, and then, and then..." Rather, it must be a recasting and rethinking of the parts of the plan and their relationships with one another. It must tell a story of a struggle between opponents in which the good guy triumphs by doing a series of smart things in the right order.

#### Bullets Versus Strategic Stories: an Example

A good story has a point that becomes clear through the telling. Likewise, a good plan lays out a vision—not just a generic platitude, but a fully enunciated statement of how the business creates value. Rather than reflecting an inward focus (for example, "to be the leading supplier of widgets"), the vision says how we will make a significant contribution to the customer.

Consider, as an example, our Global Fleet Graphics Division. Once upon a time, the substantive



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#### Just some of the wisdom from Straight from the CEO:

"Be careful about focusing on your industry's market leaders, particularly if they're losing market share. Your market intelligence needs to extend beyond the traditional boundaries of your industry and its current products. Your traditional competitors will often be the wrong place to look for signs of fundamental change."

—ECKHARD PFEIFFER,

**Compaq Computer Corporation** 

piece of the 1992 business plan for the division might have looked something like this:

- Increase our market share from 40% to 50%.
- Regain product-development leadership position.
- Increase sales closings by 50%.

Today we would craft the plan in the form of a narrative. Although what follows is highly condensed, and it is partly disguised (all the numbers have been changed, for example), it illustrates the value of telling a strategic story:

[Setting the Stage] Global Fleet Graphics makes premium, durable graphic-marking systems for buildings, signs, vehicles, and heavy equipment. The corporate logos and graphics we see on fleets of package delivery trucks, tractor trailers, and airplanes are typical examples.

Fleet Graphics now faces more demanding customers and more aggressive competitors than it has in previous years. Customers want design flexibility and larger graphics without higher cost. Some customers want easy-to-remove products, while others want durable ones. Bus operators want graphics that cover the windows yet still allow passengers to see out. Total sales of graphic materials have increased, but sales of traditional, painted graphics have declined due to their high cost. 3M has 40% of the market and for some years has been the technological leader.

Fleet Graphics faces three major competitors: AmeriGraphics, GraphDesign, and FleetGlobal. AmeriGraphics has begun to expand its product line by using our older technologies as the patents expire. Its global share has grown from 10% in 1982 to 16% today. GraphDesign uses direct distribution and new manufacturing capability to compete on price but has experienced quality problems. Its market share has dropped from

18% to 15% in the last ten years. The quality of FleetGlobal's products is comparable to ours, but they sell at a lower price. Its share has grown from 24% in 1982 to 28% today.

In short, we are losing our patent advantages at the same time that we face three strong competitors that are using low-cost strategies.

[Dramatic Conflict] Without radical changes, Fleet Graphics will not be profitable in the near future. We can expect rapid price erosion once all competitors bring very similar products to market. Given 3M's higher overhead, we cannot compete in a price-competitive business without a technological advantage.

Our vision: Incremental product or process improvements will not solve this problem. We plan to transform the industry through several technological advances. At the heart of this transformation will be a move from analog to digi-



Although there's something to be said for getting ahead, the new Navigator has more to do with getting away. And taking life's luxuries with you.

tal printing-and-storage technology. In addition, the quality and economics of the final product will be improved using new film and adhesive technologies. The strategy we propose draws on diverse areas of 3M.

First, we propose a quantum change in Global Fleet Graphics' production system that will allow us to deliver products much more quickly and at a competitive price. Rather than focus on cost reduction through incremental process changes, we have tried to rethink the entire way we produce fleet graphics. We have contacted numerous R&D areas at both the corporate and divisional levels to locate appropriate and adaptable technologies. The search has resulted in a radical plan for a new, more flexible, lower cost graphicsproduction system.

Many graphics will be produced and stored digitally. We will convert manual, analog, silk-screen printing into digital form by scanning the art and cleaning it up on a computer screen. We will then be able to send it digitally anywhere in the world. Global Fleet Graphics will create a central repository of images that can be electronically transmitted to production facilities worldwide. IT estimates that the system will cost \$3 million and be operational in 24 months.

The repository dramatically decreases product delivery time from as much as four weeks to as little as three hours. It also drastically reduces inventory.

Second, we propose development of a new generation of patented technologies and products to differentiate our offerings from competitors'. Three such products are already in the works. We are in the late stages of developing adhesives and films that can cover windows but allow people to see out. Only the final product-definition and design work still need to be done; design should be completed in five months. Manu-

facturing has begun to work on production facilities to ensure adequate capacity worldwide.

In addition, we are now close to answering our customers' need for graphics that can be applied to many nontraditional surfaces (such as corrugated truck sidings) and flexing surfaces (such as European trucks with canvas sides). Films for these applications already exist in our labs.

Last but not least, new adhesives will make graphics easier to install. The Adhesives Division has a product that remains tacky for a time so that graphics can be positioned and repositioned. When the placement is correct, a second adhesive system is activated to bond the graphics in place. The repositioning capacity decreases installation time by 30%, resulting in substantial cost savings.

Third, we need to upgrade our sales and marketing staffs' skills to match their capabilities with the technology-driven strategy.



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We will put substantial effort into field testing and marketing. Technical, marketing, and sales personnel will field-test the new products both domestically and overseas. Simultaneously, we will develop and test modifications to the product as well as produce sales and other supporting documentation.

Before we launch the new products, sales, marketing, and technical-service personnel will train all sales reps in how to use and sell the new technology. Training will include both technical and communication skills related to calling on top-level executives: reps will receive intensive training in how to talk those customers' language, and they will also be able to handle technical questions on their own. Training will begin one year from now, and we expect it to take six months.

[Resolution: How We Win] To summarize, Global Fleet Graphics has drawn on diverse technological skills at 3M to create a proposal for transforming its business. What has been a hard-copy, analog, design-materials business will become a more fully global, digital, electronic-imaging and repository business. Combining new films with new adhesives will create substantial value and reduce overall cost in both the

manufacturing and application of graphics. By these means, Global Fleet Graphics will maintain and enhance its profitability and its industry leadership.

We believe that this new graphics system will radically transform the industry in a manner consistent with 3M's overall corporate strategy - regaining technological advantage on both the product and process fronts. The competition may duplicate some parts of this strategy (for example, the electronic storage of graphic images), but that will take time. We should have an advantage for several years even in those areas. Other areas have patent protection, and our advantages can be sustained for a decade or more.

Even such a condensed narrative demonstrates the relative complexity that a strategic story reveals. When readers finish the complete narrative, they will know how 3M intends to increase its market share from 40% to 50%. They will know which product and process developments should, when combined, launch a new generation of fleet graphics. And they will be able to imagine that, given those new products and processes, as well as new training opportunities, sales representatives might well improve their performance by 50%. Just as important, readers will understand that hundreds and hundreds of players must contribute in order for the plan to succeed.

In a recent 3M survey, employees asked management to "allow us to get excited about where we are going" and to provide evidence of management's confidence and excitement about 3M's future. We believe that casting our plans for the future as compelling stories can help us do just that. The ultimate success of our plans depends on how effectively we inspire the people who make those plans happen.

This final role of narrative plans generating excitement and commitment in both superiors and subordinates-may be the most important. A well-written narrative strategy that shows a difficult situation and an innovative solution leading to improved market share can be galvanizing-and it is certainly more engaging than a bulleted mandate to "increase market share by 5%." When people can locate themselves in the story, their sense of commitment and involvement is enhanced. By conveying a powerful impression of the process of winning, narrative plans can motivate and mobilize an entire organization.

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