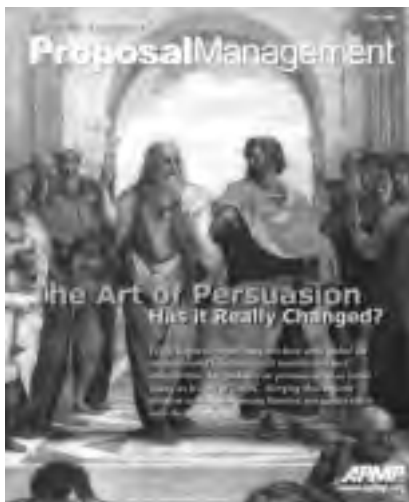# In This Issue

of PROPOSAL Management

ABOUT THE COVER

Aristotle and Plato are featured in this detail from "The School of Athens" by Raphael, a fresco in the Vatican.

After deciding to honor Aristotle as a primary inspiration for this issue, we were attracted to Raphael's lifelike depiction. We can almost imagine Aristotle stepping forward to engage us in spirited debate.

Cover Design by Doron Krinetz

From the Editor

R. Dennis Green

The Art of Persuasion—has it really changed? We tackle this question in the journal's second issue and discover strong arguments to say yes. And no.

In the process, we pay homage to Aristotle (350 BC), patent proposal writers of the 19th century, the famous and shocking Milgram experiments (1960s), a scholar's view on power, and several contemporary practitioners of persuasion in industry today. Collectively, they give us compelling arguments and perspectives for persuasive text-based, oral and graphic presentations.

We also initiate a new feature, the personality profile. This issue introduces our readers to Steven Myers, a legend in the proposal management profession, certainly a great persuader in his own right, and CEO of the world's largest proposal services firm.

It's enough to keep you contemplating the dynamics of persuasion for days and days.

Take another look at our cover art from the Stanza della Segnatura (The School of Athens) fresco at The Vatican. Aristotle and Plato are featured at the center (Aristotle stands to your right), surrounded by a number of important, ancient Greek philosophers. Imagine, in a Vonnegut-like twist on time, that Aristotle and Plato are discussing this very issue of *Proposal Management*. What might they

be saying? I imagine Aristotle's satisfaction upon learning how enduring and ultimately valid his treatise on *Rhetoric* has remained. I also imagine he would have an inclination to expand this treatise, for Aristotle equated happiness (in part) with the active life of a rational being putting all his soul's intellectual, moral, and nutritional faculties to use.

Though we may never begin to achieve the great philosopher's persuasiveness, clarity of thought, and literary accomplishment, all of us in this professional community can relish in its daily pursuit.

Onward and upward!

RDG

Your Mail

Thanks to all the enthusiastic readers who flooded us with complimentary e-mails about the premier issue, thanks for reading the Journal, and keep those cards and letters coming. We love you too! — *Editor and Staff*

Proposal Management Software Roots

First, congratulations on a first rate inaugural issue. Tom Boren's "A Personal Look Back" was especially informative, but it understated an important trend—automated proposal management software programs. (Though tools were discussed in Roger Dean's excellent "Trends and Views" and the "Proposal Automation Products Matrix" in the Proposal Products column.)

As noted in the products matrix, the first automated proposal software tool was Ransone Associates' Proposals Organized to Win (POW), predating all others listed by at least five years. Its history is worth noting.

In November, 1984, I joined Mike Ianelli, MJI Associates, Inc., to become his Vice President, Systems Development. One of my first tasks was to computerize his TheSYS proposal system. Use of an Apple II computer was considered, but no suitable relational database management software existed for the Apple at that time. So I bought a Compaq Portable with meager 640 Kb of RAM and a 10 Mb hard drive and installed Smart, Version 1.0, a DOS-based integrated program of RDBM, spreadsheet, and word processor. The automated version of TheSYS worked, sort of, but not exactly the way that Mike envisioned. Even so, I believe he deserves credit for having the foresight to computerize the proposal management process in the first place.

After incorporating Ransone Associates in 1986, I began a period of automated system development, and completed evolving versions of POW over the next two years. POW was first marketed in 1987, but hit a brick wall when proposal people asked us, "Why do we need to computerize our process? It works just fine as it is."

By 1989, however, the reaction had changed dramatically: Proposal people wanted the world! They wanted to slip their RFP into the floppy drive slot and have the finished proposal come out of the printer! We resisted this urge, believing that the proposal manager needed to actually have control over the proposal process. Several competing programs were marketed in the early 1990s that provided more automation, but users found many to be too inflexible to meet their specific needs.

POW provided this flexibility, but–being a DOS-based program without mouse support – was less user-friendly. Only one person bought that version of POW (in 1990) — Tom Hickman, Proposals Administrator at Vought. And he continued to use it, searching for a better replacement, until we released POW95™, hosted in Microsoft Access, in the summer of 1997.

The long delay in re-hosting POW onto a Windows-based architecture was because no available RDBM software could do what the old, DOS-based Smart software could do. We waited for software with an open architecture that offered large data fields, an automated counter function, and the ability to repeat data entries from a previous record.

Now there is a wide variety of proposal management software available, as can be seen from the Proposal Products listing. The programs offer proposal managers a broad spectrum of automation, features, functions, benefits, and compromises, and work on many different platforms. There is no reason that a proposal organization cannot find a program that meets its needs.

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More Story On Storyboards

The earliest proposal application of storyboarding, to my knowledge, dates back to the 1960s and the Hughes STOP modular proposal. Here, the storyboard was little more than a shorthand version of the final modular product (a series of 2-page modules). Each module typically consisted of a left-hand page of text explaining (or augmented by) a facing page of graphics; each module displayed a theme, generally included as the caption of the graphic. While the STOP modular format is often considered too constraining or too stylized for general proposal use, the generic form of the storyboard (verbal highlights and key graphic(s) (endures in nearly every contemporary proposal system.

Early in 1972, I was working for Hy Silver, then Manager of Proposal Operations at North American Rockwell, Space Division in Seal Beach, CA. We had recently finished a yearlong proposal that won the Space Shuttle program for the company. We were faced with another massive proposal, the Station phase B, I believe, and we were seeking an alternative to the usual proposal preparation process (kick off meeting, no visible progress for two or more weeks, and a painfully inadequate first draft in the 11th hour). That process obviously left little to be desired.

We wanted a tool that could be progressively developed from volume to section to topic levels to give reviewers and book managers an early (pre-draft) insight into the author's content, flow, responsiveness and sales emphasis of the technical/management proposal within 7-10 days of the Kickoff Meeting.

We developed a simplistic storyboard format which we christened the Scenario. It consisted of a one-page guide for text and an accompanying worksheet for graphics. The text guide included blocks for the RFP

requirements, major/minor themes, opening, roadmap and conclusion paragraphs, and an annotated outline. The graphics guide, Scenario Sheet 2, was merely a blank worksheet with space for up to six quick-and-dirty sketches of figures or tables—complete with action captions—to accompany the text.

The objective of the Scenario was to cover a single proposal topic and stay within a two-page format. Within these constraints a completed Scenario would cover 8-10 finished pages of material. It yielded a comprehensive snapshot of the evolving proposal draft. This tool enabled timely and effective review before the authors invested time and effort generating drafts. It also facilitated an early start on important graphics.

Combined author and management team involvement in the Scenario allowed it to function as a super storyboard. Wall mounting completed Scenarios often paved the way for effective and early Pink Team reviews.

There have been innumerable variations and permutations of this tool in the intervening 26 years including Hy Silver's Scenario III and my own Enhanced Working Outline (EWO). Many early Silver clients (e.g., RCA/GE, Lockheed Electronics, Gould/Martin/Lockheed Martin and others) generated their own versions with varying degrees of proprietary tailoring. Jim Beveridge described Scenarios in Appendix C of his first book devoted to proposals, "Creating Superior Proposals." His version was remarkably similar to Silver's though he used it only to convey top down direction, still referring to Storyboards as "the page-by-page blueprint of the volume, chapter, or section." It is interesting to note that Jim's signature following the preface to this book is dated "Winter of 1977," some five years after Silver and I introduced the tool to the Rockwell proposal teams.

But the final word on plagiarizing versus claims for originating proposal development tools, systems and the like, also comes from Jim Beveridge in his acknowledgments for *Creating Superior Proposals*: "We all hitchhike along the pathway of learning together."

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Proposal Pioneers (and Storyboards too)

Wow!!! What a really great and informative issue! It shows a great deal of hard work by your staff.

Regarding "Storyboard Folklore" and the question of who-dunnit first, I recall from my days at Vitro Labs, Silver Spring, Maryland, in the late 1980s, that we bought and used a customized STEP/STOP process from another true pioneer and pace-setter, Michael J. Ianelli (also referenced in Boren's "A Personal Look Back"). Ianelli linked the storyboard techniques to Disney as a production continuity tool, which was observed by the always innovative Howard Hughes for Hughes Aircraft production continuity, and also for Hughes Tool Company, with the oil field drilling self-lubricating drill bit you may recall from boom days in California and Texas oil fields. Film footage of Disney illustrators and production managers going over the story line to "Snow White" still exist. Some Hughes biographer may well have photos/footage of HH storyboarding. Good luck tracking them down.

One additional pioneer Boren could have mentioned was Stanley Ireland, author of "How to Prepare Proposals That Sell" (1967, Dartnell Press). His book was a benchmark in the evolution of effective proposal processes. Its 16-step process for technical marketing and business development is as relevant today as it was when he wrote it more than 30 years ago.

Tim Whalen Author, "Winning Oral Presentations" (1997) and "Managing Winning Technical Proposals" (3rd edition). Arlington, Virginia Nashhorn44@aol.com

More Science, Less Art

We've all seen instances where proposal presentation folklore is created and evolves without adequate basis in fact. To some degree, subjectivity is justified. As defined in the *Franklin-Covey Style Guide* (1997), "Successful persuasion is 50 percent emotion and only 50 percent facts. Without the emotion and the subjectivity, logic and facts just don't convince."

Even so, opinions expressed with great emotion do not make it so. When you hear something that resembles proposal folklore, ask for proof.

Here are three examples I've heard where the facts did not fully support the claim: "The U.S. Air Force prefers Helvetica font in its proposals." "Justify the left margin, never the right." And, "All proposal sections should be two-page modules of approximately 500 words."

All the examples given here were lacking factual integrity. The first example was traced to an encounter with a two-star Air Force general who remarked (without elaboration), "The XYZ Proposal looked good." The proposal coordinator who heard this comment, an advocate of Helvetica, extrapolated a preference, falsely, due to the use of that font in the text.

The second example was based on a workshop facilitator's contrived justification, viewing proposals as "semi-formal" documents—i.e., less formal than formal documents (where both left and right margins are justified), but more formal than informal documents (where no justification is specified). Though readability studies agree with a preference for left-justification, the facilitator used a bogus rationale.

The third example was found in an *IEEE Journal* article on the modular STOP approach. The author said a natural argument is 500 words in length, explaining only that this can be traced to the ancient Greek philosophers. Unfortunately, any meaningful or proposal-specific justification was missing in this instance.

We all hear subjective comments that—in the absence of constructive explanation—can hurt or mislead as much as they help. "Awkward. Rewrite." "The bullets are too large [or too small]." "You have too many visuals [or too few]." And so forth.

As we continue to raise the professionalism of our profession, let's rely more on research and data as a basis for our opinion. Let's try for a little more science and less art.

Larry Newman
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A Message from the CEO

WINNERS! — A CALL TO LEAD

The publication of the first issue of *Proposal Management* was a critical milestone for APMP. With this journal, APMP enhances its ability to increase each member's perceived level of professionalism among the industries and companies we support. This is important and we will all gain true benefits from it, benefits far beyond national conferences, symposia, newsletters, and journals. As perceived levels of professionalism rise, so do the value to our industries and companies, respect, compensation, and personal satisfaction in doing what we all know to be one of the most difficult jobs in any industry.

That is what APMP and this journal are all about, and that is why I am especially proud to be the CEO at this time. But implicit in the achievement of this milestone is the knowledge that we must do more to promote our profession and its effects upon our various industries.

Ours is a vulnerable profession. I have seen the vulnerability of rampant consolidations reflected in mergers and acquisitions in many industries over the past three years. I have seen proposal operations disbanded on the Federal side with no clear vision of what will replace them. I have seen commercial proposal operations start, stop and start again, and achieve high levels of efficiency and performance. I have also seen mergers occur that leave people wondering where they fit into the new company's business acquisition operations.

These are most exciting times. They are exciting because we have the opportunity to recreate, or even to create, what we want our profession to be and how we want it to be represented to our industries, our companies, and the public. We have escaped the artificial boundaries that have defined the proposal professional, boundaries that have been around for the 22 years I have been in the business. We all know what happens to organizations without growth. We now have the opportunity to spur that growth, by defining ourselves as corporate keepers of our organizations' new business acquisition knowledge and capability.

Take the challenge! Help define our profession with your contributions to *Proposal Management*, to your company, and to your industry. Lead the way to new business success through your vision, skills, and perseverance. Become the professional you would like to see recognized throughout our industries, and engender the respect we all deserve through your example.

Eric Gregory

Trends & Views

THE MORE THINGS CHANGE, THE MORE THEY STAY THE SAME

What does it take to be persuasive?

By Roger Dean

Persuasion. We all do it, right from birth. Babies persuade their parents to feed and change them, teenagers persuade their parents to loan the family car for a date, and parents persuade their kids (sometimes) to clean up their rooms. To some of us, persuasion comes naturally, so we work on proposals. Others have to struggle to be persuasive. But we all must do it, just to make our way through life. What, exactly, is it that we all do? What does it take to be "persuasive?" The answers—the basic elements of persuasion—have not changed throughout the centuries of human interaction.

Aristotle, in his treatise on *Rhetoric* written about 350 BC, set the Western foundation for understanding persuasion. He recognized that there are two fundamentally different modes of persuasion: one that comes from the ability to apply some sort of force (that might be called the "mafioso method") and one that relies on language alone (the original definition of "rhetoric"). Rhetorical persuasion is fundamentally different from persuasion effected through oaths, contracts, torture, and the like. As much as some of us might, at times, wish otherwise, rhetorical persuasion is all we have when it comes to proposals. We must use language to draw our evaluators in to our way of thinking and to convince them to choose us instead of our competitors.

> Rhetorical persuasion depends on the character of the speaker, the mindset of the audience, and the logic of the argument.

While Aristotle could never have anticipated the complexities of today's business world, his guidance on rhetorical persuasion is as valid today as it was more than 23 centuries ago. He identified three elements essential to rhetorical persuasion: the character of the speaker, the mindset of the audience, and the logic of the argument. In proposals—written and oral—you must be perceived as *credible* from the start, you must appeal to what is *important to your audience*, and you must present a *logically consistent argument*, including adequate supporting evidence.
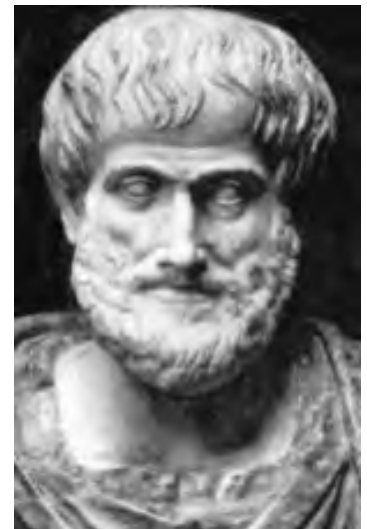
Aristotle

CREDIBILITY

Aristotle wrote, "We believe good men more fully and more readily than others: this is true generally whatever the question is, and absolutely true where exact certainty is impossible and opinions are divided." Certainly this describes proposal evaluations, especially those called "best value!" But how do you achieve credibility? There are, perhaps surprisingly, two entirely different means. The most obvious is through having favorable past performance. The other is simply by sounding and acting credible.

> Acknowledge past problems rather than hide them.

When it comes to past performance, the easiest starting point is one where you have an outstanding track record and are known in your industry for excellent work, fair prices, responsiveness to customer concerns, and the ability

to react quickly and correctly to the occasional but inevitable problems. But not all of us are so fortunate. In these cases, we must find ways to highlight the positive aspects of our past performance. The first rule here is to acknowledge past problems rather than hide them. Any good evaluator will already know about your past problems anyway, especially if you are bidding on a large or exceptionally visible project. But don't just acknowledge them, explain what lessons these experiences taught you and how you will apply these lessons learned to prevent future problems. Turn lemons into lemonade!

Take the trouble to speak and write clearly.

The second part of achieving credibility is usually less obvious: Like it or not, you'll be considered credible if you take the trouble to speak and write clearly. In fact, in many cases—and especially in oral proposals—*how* you say things is even more important than *what* you say! This may not seem fair, but any professional speaker will tell you it is certainly true. To be credible in a presentation, say what you mean so that all evaluators, management and technical experts will understand.

Take the time and effort to polish your presentation, regardless of whether it is a written proposal or a briefing. Once you get past the first or second draft, let a professional writer create the finished text. Then review the work to make sure it says exactly what you want it to say. Finally, have the "finished" text refined by a really good editor. With orals, take the same trouble. Make your presentation materials clear. Then take the time and effort to coach your speakers on good presentation techniques. Remember Aristotle: "Persuasion is achieved by the speaker's personal character when the speech is so spoken as to make us think him credible."

IMPORTANCE TO AUDIENCE

The second facet of persuasion is one that few consider: Your ability to convince someone and motivate them to action is, in at least one way, independent of you and your messages. *Your audience, by itself, has a large impact on your ability to persuade*. So to be really persuasive, you must understand your audience. Aristotle knew this when he wrote: "Secondly, persuasion may come through the hearers, when the speech stirs their emotions. Our judgments when we are pleased and friendly are not the same as when we are pained and hostile."

Audience knowledge and attitude are both very real elements in proposal evaluations. Even though most solicitations have clearly delineated criteria by which evaluators are supposed to recommend the winner, there are still lots of "hidden" criteria that you won't find written in any Request for Proposal (RFP). Many of these are unique to individual evaluators (including personal experiences with particular technologies, companies, or people), and will shape how they view both the explicit criteria and your responses. Evaluators, like all people, pay closest attention to those things that are important to them.

So how do you know what is important to your evaluators? By developing a sound understanding of both the RFP and the competitive landscape.

A proposal is not "your story"; it is "answers to their questions."

Most RFPs do a good job of telling you what is important to the customer. The obvious place to look is the evaluation criteria, but all the other sections of the RFP also contribute to the overall picture. Study the *entire* RFP, and then do what your customer asks you to do. Not some different technical solution that you think is better. Not a different organization that makes for a better story. Not some different pricing structure that allows you to hide certain costs. A proposal is not "your story"; it is "answers to their questions." So answer their questions. All of them.

But in answering your customer's questions, don't forget the importance of your competitive insight. Learn the background behind the program, the requirements, and the RFP so you can better understand what your customer really wants. Study how the various elements of your customer community (the entire community, not just the procuring agency) relate to one another so you can reconcile the occasional inconsistent requirement. Try to project who will evaluate your proposal, who will make the ultimate decision, and what methodology will be used, so you can predict how each evaluator is likely to react to your proposal. Proposals are evaluated by people, not machines. And people, no matter how diligent or conscientious, have experiences, opinions, and feelings that affect their views, their reactions, and their decisions.

LOGICAL, AIRTIGHT ARGUMENT

The last part of being persuasive is one we understand intuitively, but sometimes have trouble actually implementing at proposal time. You persuade through a sound, logical

argument that is constructed to lead your evaluators from facts they already know and accept to conclusions that you want them to reach. Again, from *Rhetoric*: "Persuasion is effected through the speech itself when we have proved a truth or an apparent truth by means of the persuasive arguments suitable to the case in question… A statement is persuasive and credible either because it is directly self-evident or because it appears to be proved from other statements that are so."

THE IMPORTANCE OF ARISTOTLE'S WORDS: SIDE-BY-SIDE COMPARATIVE TRANSLATIONS
This manuscript in Latin from the 13th century shows three separate translations of the same passage of Aristotle's Rhetoric*. The first translation is from Greek, the second and third columns are from two different Arabic copies.*

What we must do in proposals, in addition to addressing what is important to the evaluators and presenting our arguments in good English, is to create arguments that will lead evaluators step-by-step to the conclusions we want them to reach. But just as with the language we use, the form and logic of the argument must accommodate all evaluators—not just the real experts but also the informed non-experts and the pseudo-experts (those who think they know but really do not).

To build an airtight argument that will be credible on its own merit to all evaluators, begin your argument with either accepted fact or your interpretation of accepted fact. This "understanding of the problem" is the same understanding that ensures you appeal to what is important to your customer, but it also gives you a foundation of agreement on which to build the logic of your argument.

Don't take too big a leap!

When the foundation of your argument is set, make certain that each step in the argument is logically connected to the one before it. Don't take too big a leap, or most of the evaluators won't be able to follow you. Make it so that anyone, even those only familiar with the subject area, can understand—and accept—your argument. But don't make the steps between points too small, either, because you run the risk of sounding tutorial.

Support the steps in your argument with adequate evidence. The greater the leap from point to point, or the more unfamiliar or controversial your conclusion, the more evidence you need. With large leaps from point to point, you will also need stronger evidence. Good graphics can be especially helpful to the persuasiveness of your argument. They are a different form of communication, and force different parts of the brain to work together, thus providing another indirect means of enhancing persuasiveness, and they allow you to capture lots of evidence quickly.

YOU CAN'T PUSH ON A ROPE

Educated as an engineer, there is an old adage that I learned early: You can't push on a rope. Knowing this helps engineers design bridges that don't collapse when you drive over them. But knowing that you must pull, not push, on the rope is as true in proposals as it is in engineering. When it comes to persuading evaluators, we cannot push them into choosing our proposals over others. We cannot command or intimidate our customers into selecting us. Rhetorical persuasion is all we have, and we must very carefully pull evaluators along to our point of view. We must convince evaluators and move them to action using principles that have been around for over two thousand years. We must rely on the credibility of our presentation, our knowledge of our audience, and the logic of our argument.

There is certainly much more to proposal persuasion than the few things suggested here, but one sure key is always true: You can't push on the proposal rope. **APMP**

Note: All quotations are from Aristotle's *Rhetoric,* translated by W. Rys Roberts (NY: Modern Library, 1954).

PROFILE

Steven Myers

CHAIRMAN AND CEO, SM&A CORPORATION

Proposal Management interviews the driving force behind the profession's largest proposal management support services firm.

By R. Dennis Green

Steve Myers is a living legend. In the proposal management services industry, he has few peers. His firm, SM&A Corporation, has long been the largest and most successful proposal management company in the world.

Since its creation in 1982, his proposal management business has generated more than $200 million in revenue for SM&A, and won more than $90 billion worth of new contracts for clients like Lockheed Martin, Hughes, Raytheon, Boeing, Bechtel and Motorola. It pegs its 17-year win rate at 89.7%.

SM&A trades under the symbol WINS on the Nasdaq stock exchange. After going public in January 1998, it began to acquire systems engineering and information technology firms. During the last 18 months, its workforce has increased from 160 to more than 720.

SM&A's facility resources now include more than 200,000 square feet in four primary locations. Revenues in 1998 were $68.5 million. Analysts predict that for calendar year 1999, revenues will exceed $110 million. Proposal management activities now constitute about 40 percent of the total revenue base, and an estimated 180 employees.

It's no wonder that proposal management colleagues and competitors view the firm and the man who drives it with a combination of awe and respect. But Myers proved to be both accessible and charming when I met with him recently at the company's headquarters in Newport Beach,

California. He arrived for work in casual slacks and a sport shirt. Nothing in Myers personality is casual or reserved, however. He regards himself as one of the industry's great persuaders. His energy, optimism and confidence are very pronounced. In discussion, he is as candid as he is provocative. The only time he resisted a question was when I asked him his golf handicap.

> The only time he resisted a question was when I asked him his golf handicap.

PERSUASION CHARM SCHOOL

Myers' professional resume begins with four years in the U.S. Air Force, including a stint at NORAD Headquarters. He later attended Stanford University and earned a BS in Mathematics. While at Stanford, he spent his summers working at the Jet Propulsion Laboratory (JPL) in the Telecommunications Division. After college his career progressed from microwave component engineering to systems engineering to project management and finally marketing, over the course of nine years and four companies: Watkins Johnson, Fairchild Space and Electronics, Ball Aerospace, and Loral. He founded SM&A in 1982.

Steven Myers is an industry titan and one of its leading visionaries. His Newport Beach office overlooks Orange County's John Wayne airport, home to Myers's aviation charter business and fleet of jets.

STEVEN MYERS AT A GLANCE	
Position:	Chairman and CEO, SM&A Corporation, world's largest proposal support services company
Age:	53
Family:	Wife, Paula, was a major business partner in the firm for eight years. Four children (ages 11 to 21).
Avocation:	Flying. Myers is a 4,000-hour pilot (ATP); six turbojet ratings.
Hobbies:	Photography, skiing, golf and rock collecting.
Favorite Sayings:	Woody Allen: 80% of life is just showing up. Steve Myers: Life is a mystery to be lived, not a problem to be solved.
Last Book Read:	Tom Clancy's *Rainbow Six*.
APMP:	One of the 46 founding members; Member #6.

Watkins Johnson recognized both his engineering skills and his aptitude for working with customers. In 1974, they sent him to a "Persuasion" charm school offered by Max Sax, who taught the importance of overcoming customer fears, uncertainties and doubts—an idea he called FUD. Myers's recollection is self-effacing. "They sent me to charm school because they thought I worked really well with the customers, but they also thought I was more than a little on the obnoxious side."

The foundation of Myers's philosophy about proposals and persuasion began in this charm school. He learned that you can't make a sale until you overcome your customer's objections. He also learned to apply Sax's teachings to the sale of complex systems.

"Those lessons from 1974 are as true today as they were then," said Myers. "Nothing's changed. It's just the sophistication with which you apply them. If you take a complex system and break it down, you're not selling one thing, but many things. You've got a whole long series of sales that have to occur."

He also learned and eventually perfected Sax's concept of the five-time close. It suggests that if you, as a sales person, have enough strong arguments to approach your prospect five successive times, you are likely to prevail.

"There are very few people who can stand up to logical persuasion that's five layers deep," said Myers. "From a statistical perspective, you're way past the three sigma point in terms of peoples' ability to say 'no.' The key to this approach, of course, is that you really do have to have

something meaningful to sell, understand how to sell it, and—most important—have the tenacity to stick with it."

At Fairchild, Myers became intimately involved with the development of complex programs. At one point he was the proposal manager for something called the multi-mission modular spacecraft, or MMS, a NASA Goddard idea. The program would become an early bench test of Myers' persuasion skills. "They wanted to develop a standard spacecraft bus for all NASA and DoD payloads and force a degree of standardization using the same building blocks. It was conceived as a way to reduce cost and promote an increase in the number of satellite programs. But it was a very questionable concept from a systems engineering perspective. More importantly, the other prime contractors all hated it. It was going to increase their payload costs and threaten their program control."

> ## There are few people who can stand up to logical persuasion that's five layers deep.

When Fairchild won the Solar Maximum Mission and the Landsat D, it—and Myers—became NASA's agent for selling MMS to the world. "I was the one who had to go around to all the aerospace contractors and DoD, make presentations, answer all their questions, and sort through all the technical issues. As a result there was a point in time when I knew more generally about what was going on in every program in the country than anyone else… It laid the foundation for my future success."

BAPTISM BY FIRE

Myers had a type of baptism by fire when he led Fairchild's unsuccessful attempt to unseat TRW on a JPL opportunity called the International Solar Polar Mission (or ISPM). "I discovered that due to an unusual set of circumstances, TRW was the only bidder," said Myers. "I persuaded the Fairchild management that we could beat them for the contract… But, frankly we did a lot more things wrong than right. As we got more and more involved in the competitive process, I began to understand that the whole process of competing through proposing was incredibly broken! I didn't know at the time how to fix it, so I had to do what everyone else did… I had to gut it out."

Over the next three years, he had the opportunity to think a great deal about the proposal problem. "Everywhere I'd go, people had a different process. Quite frankly, between what I saw the contractors and consultants doing, I didn't think anyone had the right answer. They all seemed to be focusing on treating the symptoms of bad proposals, rather than curing the disease."

> ## Everywhere I'd go, people had a different process.

Myers saw the problem in a very different context. "The critical epiphany for me came when I realized that all of the processes—as they existed and to a large extent exist today—were built around the idea of "packaging" a proposal. Or, that we *write* proposals. In fact, it's quite common for people to talk about *writing* proposals. It's a natural part of our language. Proposals were viewed as a kind of essay contest. I think the conventional paradigm was, 'Well, we'll get through the proposal, and after we win, we'll figure out what we're really going to do.' I used to hear that phrase all the time."

THE SYSTEMS ENGINEERING MANTRA

Myers began to view proposal development as a natural extension of systems engineering disciplines. The Air Force's Systems Engineering Handbook, MIL-STD-490, became his mantra. It defined the process for developing a system.

"I began to think of a proposal as kind of a surrogate for a system. And then I started asking some very simple questions: 'What are we going to do? Why are we going to do it? How are we going to do it? Who's going to do it? When are we going to do it? Where are we going to do it? What's it going to cost?' The problem of course was, and still is, that there's no such thing as a proposal effort that knows these answers going in. What was needed was a process that understood that the act of proposing is in fact 'discovering' what we're going to propose."

To those who say that pre-proposal 'win strategy' development is designed to answer those kinds of questions, Myers articulates an evolutionary approach.

"A win strategy isn't a static position," he explains. "Getting the win strategy right is absolutely critical, but to my way of thinking it's kind of like a scientific hypothesis. If done right, the win strategy will describe a set of conditions, such that, if you can make them true, you win. But over my career, changing times have called for very different kinds of win strategies."

"For example, in the early days of aerospace, the issue was 'can it be done at all?' Technology was what mattered. And

Myers flies about 300 hours a year (120,000 miles). Here in the cockpit of his Hawker 800 XP, he says he hasn't ridden in a commercial airplane in years.

frankly, whether it could be done at all dwarfed what it cost, or how long it would take. It would take however long it would to get it done, and that was that."

"But as the aerospace industry has matured, things have changed completely. Certainly in the decade of the 90's where we have fiscal constraints, you rarely see a situation where a competitor wins because of technical superiority. But, even now we get started on a new proposal effort, and the first thing the client tells us is how we're going to win because they've got some 'framistat' or 'whiz bang widget' that's going to give our side an insurmountable technical advantage. It just doesn't happen very often."

So how did people respond when Myers first linked systems engineering processes and proposal development processes into a unified principle?

"One of the biggest challenges was, and still is, getting people over their fear that a systems engineering-driven approach wouldn't produce a quality proposal soon enough. There is inevitable pressure from upper management to get a 'red team draft' together by some arbitrary date. Of course, this is the result of an expectation that the product will be lousy, and that they'll need plenty of time to fix it. This mentality leads to wasting lots of time and money. I saw that enormous amounts of money, in fact 80 percent of all the money that was being spent on competing, was being spent on design engineering, as opposed to figuring out how to be really responsive top down."

The problem Myers wanted to solve was how to describe a programmatic solution that would be compelling and persuasive to the customer, because it clearly demonstrated that it was the most responsive to their needs. "Traditional approaches not only couldn't do that, they were using up all the money in the process. Traditional approaches are about

documenting techno-babble, and there is no way you're going to be able to *edit* your way into the 'right answer' because you can't know what the 'right answer' is! It is only through using a systems engineering-driven approach that you can produce the 'right answer' and know it when you have it."

> There is no way you're going to be able to edit your way into the 'right answer'.

PERFECTING A MODERN METHODOLOGY

Myers' consulting career and the practice that evolved into the modern-day SM&A Corporation began in 1982. After completing a six-month proposal manager assignment with General Electric, he was introduced to Lockheed management in Sunnyvale, California, and persuaded them that he should be given a lead role on Milstar—a monstrous proposal preparation challenge.

"I spent the next nine months working in Sunnyvale on the proposal that really launched SM&A. It was the largest proposal I think anyone had ever prepared up to that time. We delivered it in about 50 two-drawer Mosler safes in a convoy of tractor trailers."

Myers evolved and demonstrated his proposal development methodology there. "When I got to Lockheed and began working on Milstar, I was finally able to perfect a system for marrying the application of top-down systems engineering principles to the strategic issues, the production environment—which was non-trivial—and the psychological issues affecting the behavior of the participants."

Myers believes that the most serious issues that we face in competing and winning are really driven by psychological behavior. "Overcoming the innate behavior of our clients is the biggest challenge," he said. "Changing their short-term behavior is really at the heart of what has to occur in order to win. On Milstar I was able to work over a concerted period of time on how to get people to do what needed to be done, as opposed to what they wanted to do."

Even the best-intentioned clients bring habits and routines that are counter-productive in a proposal environment. "What's in the way (of an effective process) is a lifetime of prejudices and convictions that people in every industry develop. This is called conventional wisdom. The irony is that conventional wisdom just happens to be wrong when it

comes to competing. Virtually everything of importance that people believe about competing is wrong."

Myers points to a typical prejudice. "What we know fundamentally is that every client believes that the reason that they're going to win is because of their superior technical capabilities. These perceptions are so rooted that it can't be overcome by internal methodologies or seminars. Why people believe what they believe is of course at the heart of their pride. For example, the aerospace industry is made up of people who are high in self esteem and well educated. They put their hearts and souls into developing their 'superior' capabilities. And when it comes to a competitive situation, they want to believe that simply proposing a great technical solution is going to win. There is no evidence whatsoever to substantiate that this is true."

> The more you invest in design detail, without thinking it through, the more you've squandered your resources.

Myers acknowledges that technical capability is critical to getting the job done, but says that it's only a component. "In fact, you can't really win technically. You lose technically by being inferior. You can't win technically, because the customers have an expectation that you have the technical capability to do the job, or you wouldn't be bidding in the first place."

"The consequence is to put people in the position of investing an enormous amount of their discretionary resources in advancing their design in every competition to try to win through technical dominance. 'The more design detail we have, the more mature our design, the lower the risk, and therefore the more likely that we will win.' But in point of fact, it's death. The more you invest in design detail, without thinking it through, the more you've squandered your resources on things that may or may not even be relevant."

"What I realized back then," Myers said, "and it's as true today as 30 years ago, is that competitions aren't so much about selecting designs as they are about selecting contractors. The process is about the customer deciding whom they can work with, and after the selection is made, sit down to work with on the details."

INCOMPARABLE GROWTH AND AN IPO

Things changed dramatically for SM&A in 1988 when it managed the Lockheed-Aerojet proposal for the Advanced Solid Rocket Motor Program (ASRM) — one of the largest proposals that the aerospace industry has ever produced. "When Lockheed and Aerojet hired me, they had literally no resources of any kind to do the job. We had to build up to a 350-person proposal team in less than 30 days."

Though the ASRM win certainly increased SM&A's marketability, Myers gives the greatest credit for subsequent growth — ironically — to the end of the cold war. "I think there was an expectation by everyone that they'd have to hunker down," he said, but SM&A would prove those predictions false. "Between 1989 and 1993, the aerospace and defense industry was reduced by a factor of two. And while that was occurring, SM&A tripled in size. And then from 1993 to 1997, we more than tripled again."

Steve Myers founded SM&A in 1982. Its headquarters is shown at left. He had a different paradigm for how proposals should be developed. "Virtually everything of importance that people believe about competing through proposing is wrong."

A corporate initiative started in 1993 would eventually lead to the firm's going public in 1998. In addition to supporting clients during the proposal effort, it began to support its clients after the contracts were won.

"In 1995, we did about $21 million in revenue. That year our contract services grew 500 percent while our proposal work grew 37 percent. Then, in 1997 our contract work grew 118 percent while our proposal work grew 44 percent. These are incredible statistics. But, we realized that we wouldn't be able to continue to meet the unmet needs of our customers if we didn't do something dramatic. And so we went public to create the financing needed to begin acquiring high value systems engineering and IT services firms, and create the pool of people to support this work."

When Myers launched his IPO, he was very surprised and delighted to find that the underwriters, analysts, and institutional investors seemed to grasp what SM&A was all about. "They had no problem understanding that what we had was a very high value services business. We had strong management, were stable, and had a very strong client base."

We love the proposal business.

"They also really liked our 'franchise' in the proposal business, but our diversification plans were recognized by everyone as the key to our continuing rapid growth."

Myers' new focus on the contract services arena has been a shrewd one and acknowledges the inherent limits to growth in the proposal management field. "We love the proposal business," he said. "It's our anchor, but it's got an upper limit to its growth. My challenge has been to leverage the proposal business to create the distribution channel for other high value services that can take advantage of our client access."

SM&A DISCRIMINATORS—A UNIQUELY INVASIVE APPROACH

SM&A is occasionally referred to—even by those within the firm—as the industry's 2,000 pound gorilla. The corporation may be involved with as many as 20 to 30 proposal engagements at a time.

Its management style is very invasive. It won't accept a proposal engagement unless it comes with full management responsibility. All assigned client staff report to SM&A personnel. The rationale is tied in part to the SM&A belief that changing a client's short-term behavior is necessary to win.

"You're not going to come in as a facilitator, as an administrator, as a writer, and do more than document what it is that they tell you to document. If you're going to influence a client's behavior, first you're going to have to command their respect and earn their trust."

Myers is a man of unbounded enthusiasm. He loves his work and the organization that propels it. He thrives on the daily challenges of running a hundred million dollar enterprise with 700 employees growing at more than 20 percent per year.

"I'm creating an enterprise and a culture that is built around being adaptable, being flexible, and being responsive to our customers. It involves figuring out every day in every way, how to deliver more value."

You know he's not joking when he says, "It is fun!" **APMP**

"Rather than viewing ourselves as a proposal management firm that happens to do systems engineering, we're really a systems engineering firm that does proposal management because that is the most obvious place to apply our capabilities."
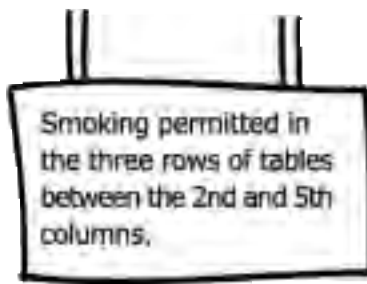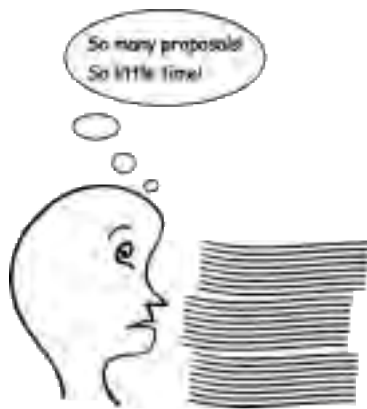—Myers

Picture-Perfect Proposals

PUTTING VISUAL LITERACY TO WORK

Good proposals are both visually and textually appealing. Using the right type of graphics to present concepts can inform and persuade your readers, and help ensure that your proposal is noticed, understood, trusted, and remembered.

By William and Katherine Horton

Sign found in a mall food court.

WHAT'S THE POINT?

Before they read your proposal, they see your proposal.

We are a visual species. Our perceptions are formed more by what we see than by what we hear, smell, or feel. Even spoken and written language pays homage to visuals. We speak of someone as being far-sighted, visionary, a seer. When we agree, we see eye-to-eye. We are on the lookout for bargains and we relish the sight for sore eyes. Something that gets our attention is eye catching or eye opening. We trust eyewitnesses and hire private eyes. After looking into something, we develop our own viewpoint.

Some ideas simply defy words. Others, although they can be expressed in words, are more efficient in pictures. Still other ideas must be translated into visual images before they can be understood, even though they are expressed in words. Take a look at this sign found in an eating area of a local mall.

Pictures help "lock in" conceptual information. They can influence emotions, help create a favorable opinion, elicit trust, and "seduce" a reluctant reader. The most important point for proposal professionals is that a good graphic can make clear what pages of text cannot.

Working from the premise that your proposal is well-written, follows the guidelines, and meets your client's needs, what can graphics do for you? They can help ensure that your proposal is noticed, understood, trusted, and remembered (Tufte, *Envisioning Information*, 1998).

BE NOTICED

The first thing reviewers will do with your proposal is scan it—flip through it quickly from front to back to see what it's like. Here is your chance to get their attention and arouse their curiosity, to quickly show them that you are not part of the pack, and to preview the main points of your proposal. To be *noticed*, you want to make your document "scannable."

As page designers, we need to do everything we can to promote successful scanning, making it easier for reviewers to grasp the important points of our proposal at a glance.
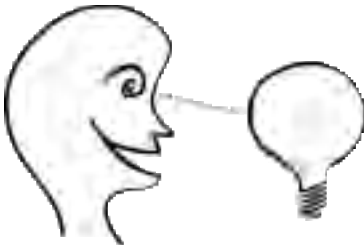
HOW CAN WE ENABLE SUCCESSFUL SCANNING?

After you have completed your first draft, start by giving your document the squint test. Lay it out on the floor. While looking at each two-page spread, squint your eyes so that you can no longer read the text. What stands out? What's blacker, heavier, or more prominent than the surrounding areas? Does the most prominent item represent the most important idea on the page? If it does, good! Open your eyes a little further and see whether the next things you notice are next in importance.

If the wrong things stand out, the reader may become confused or miss the point. If nothing stands out and all you see is a sea of gray, then that is how your reader may view your document—no clear message. On the other hand, if too many areas vie for your attention, you may need to reexamine your visual hierarchy. Here are some techniques to help your proposal pass the squint test.

Make your organization clear

Look at your titles, headings, lists, and body text. They are graphical elements, too, and act as signposts that readers need to navigate the document. Do they communicate the relative importance of the ideas and information you want to convey?

As a general rule, for titles, headings, and body text to be effective signposts, the reader must perceive at least a 30 percent difference in their appearance. The difference may include type size, characteristics like bolding or italics, rules, and indentation.

Consider using icons or symbols to flag recurring types of content such as warnings, sidebar information, or cross-referenced material.

Maintain a consistent graphical style

If there is a picture on the page, the reader's eyes will go right to it. We want that picture to provide a lot of information to the

Page with clear organization.

reviewer in one glance, not cause them to pause because it is stylistically different from the other graphics.

Just like the style sheet for your word processor helps maintain a consistent page layout, a graphical style sheet will help maintain graphical continuity. A graphical style sheet specifies things like:

Overall stylistic approach—Will you use full-color photographs, detailed renderings, abstract line art, cartoons, or a combination of several styles? It is important to establish a "look," or theme, to tie the proposal together. A consistent theme will enhance the likelihood that the proposal will be trusted and remembered (both issues are discussed later).

A graphical hierarchy—Decide how you will use the graphics. For instance, will you have a preview graphic for each section of the proposal? Will you have a summary graphic for each point you wish to make? Will you use icons or symbols to flag important information or ideas?

A color pallet—If you are able to use color in the proposal, it is essential to establish a color scheme for artwork, icons or symbols, and text. It will ensure that the overall effect is harmonious. But, more importantly, it will reinforce the signposts used by the reader to chunk and abstract information from the text.

BE UNDERSTOOD

We have the reviewer's attention. Now, how can graphics ensure our message is understood?

Properly designed graphics make their main point at a glance. Because they do not have to be read, analyzed, and interpreted, graphics improve the speed and accuracy of learning and processing (Arnheim, 1974; Benson, 1985). With graphics, comparisons become automatic and relationships obvious (Booher, 1975). Furthermore, graphics that reinforce the meaning of text increase comprehension (Levy, 1982).

Just a picture is not enough, though. It must be the right picture—the *right* amount of complexity for your audience, the *right* graphical form for your message, and the *right* format for the display medium.

How complex can the graphic be?

The right amount of complexity depends on your audience. Who will be reading the proposal? What are their technical backgrounds, language skills, cultural heritage, and even their emotional states? True, you may not know exactly who your readers will be, but you still need to make some assumptions to ensure consistency throughout the proposal.

Technical specialization of the readers: Are they *professionals* (people who develop or refine a technology or methodology), *technicians* (people involved with implementing a technology or a methodology), or busy *executives* (people who may have little time or just have a general knowledge of a technology or methodology)?

Professionals—You can safely use technical graphics that show abstract relationships (as long as the topic is in their area of expertise). You can also use specialized symbols as long as they are known throughout the profession. Examples include formulas, syntax diagrams, and pivot charts.

Technicians—Use semi-technical graphics that show concrete, job-related subjects. If the graphics include symbols, make sure they are already familiar to the reader (include a key, if necessary). Examples include exploded-parts diagrams, cutaways, bar graphs, and pie charts.

Busy executives—Use semi-technical or non-technical graphics. Reduce reliance on symbols and technology-specific diagrams. With this group, the conclusions to be drawn from the graphic need to be easily grasped.

Language skills of the readers: Graphics do not usually stand alone without text. They have captions, call-outs, and labels.

The way and extent to which you use text with graphics depends on the language skills of the reader.

Reads English (or substitute your language) as a first language—Use text freely.

Reads English as a second, or even third language—Use text sparingly. Use only common verbs and concrete nouns. Avoid words with multiple meanings.

Does not read English—Avoid using text if possible. Otherwise translate the text into the target language.

Will receive a translated version of the proposal—Use common, concrete words and simple structure to promote a more accurate translation.

Culture of the readers: Cultural issues may bar understanding and multilingual graphics alone may not breach these barriers. Suppress unimportant details. Details that could inform one audience can confuse or distract another. For international symbols, design objects that are abstract enough to avoid cultural associations. There is a fine line between making an image recognizable and making it culturally-specific. Pick graphics your international readers can identify, but take care to include only those details that enhance recognition. Some suggestions are:

- Disguise or diminish national differences, like the national clothing styles or the shape of power plugs.
- Hide audience-specific details by carefully choosing the viewpoint.
- Use an icon or simplified drawing instead of a realistic drawing or photograph.
- Obscure or omit textual labels. For instance, show keyboards with blank keys. Indicate particular function keys by position, not by name or label.
- Show all possible instances if you cannot disguise variable features.
- Watch out for symbols. The symbols we may use to encode meaning or to decorate a graphic can have vastly

different associations in different cultures. We must ensure that the different associations do not contradict our intended meaning. Here are some simple guidelines:

— Every hand gesture is obscene or rude somewhere in the world. Projecting fingers (any finger, any number of fingers) and clenched fists vary in meaning from culture to culture.

— Avoid gods, angels, demons, and other mythological creatures. We do not all share the same religious and mythological heritage.

— Do not use images of animals for symbolic associations. From prehistoric times, we have used animals as symbols.

By adopting an animal as a totem, we attribute desirable characteristics of the animal, like courage, intelligence, or speed, to ourselves. The problem with using animals as symbols is that we do not all agree on which of its characteristics the animal represents.
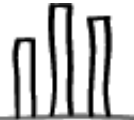
— Do not casually diminish the flag, currency, coat of arms or other emblems of a country. This can often happen quite innocently. Imagine a symbol of European economic unity that shows a businessman wearing a suit made of the flags of the European countries. Somebody is the lapels and somebody else the seat of the pants.
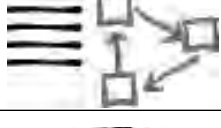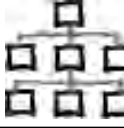
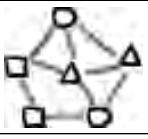## USE THE RIGHT TYPE OF GRAPHIC FOR A CONCEPT
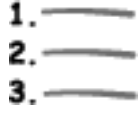
In addition to considering our audience and how complex our graphics can be, we need to consider the nature of the content we want to explain. Each graphic should be designed to communicate a certain type of information, and to do so in a simple, clear way. More than any other factor, the type of information determines the most appropriate format for the purpose at hand, as shown in the following table.

Numerical values. Numbers rate, rank, quantify, and describe. The type of graphic best qualified to show numerical values depends on whether you want to show exact quantities or only general ratios. It also depends on how many numbers are involved.
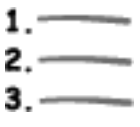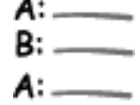
Basic Graphic Types — *Information often correlates to an optimum graphic type.*

For this type information		Use this type of graphic	Example
Exact Values	Few	Chart annoted with values	
	Many	Table	
Relative Values	Absolute	Bar or column chart	
	Proportion	Pie chart	
Correlation		Scatter chart with a correlation line	
Trend		Line chart	

Logical relationships. *Several types of graphics are dedicated to showing the logical relationships among objects and concepts.*

For this type information	Use this type of graphic	Example
Logical arguments, cause to effect	Words, supplemented with a diagram	
Logical analysis, effect to cause	Words, supplemented with a diagram	
Parts-whole relationships	Tree diagram, box-within-box diagram, indented list, organizational chart	
Interrelationships	Network diagram	
Relative importance	Numbered list, ladder, levels	
Decision rules — Single, simple decision	Bulleted list	
Decision rules — Single, complex decision	Decision table, tree	
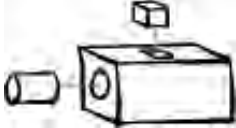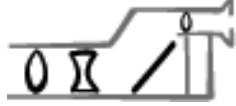
Procedures and processes. *Another class of graphics tells us how to do something or how something is made or done.*

For this type information		Use this type of graphic	Example
Action sequence	Performed in particular order	Numbered list	
	Performed in any order, but all required	Checklist	
	Performed by more than one person	Playscript	
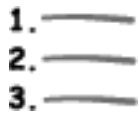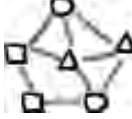
Procedures and processes. *(Continued)*

For this type information		Use this type of graphic	Example
Decisions	Series of simple, independent decisions	Decision tree, indented list	
	Network of simple, interrelated decisions	Flowchart	
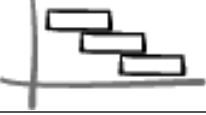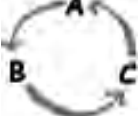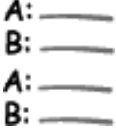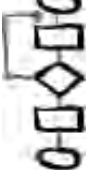
Visual and spatial characteristics. *Many graphics simply show what something looks like or where it is located.*

For this type information		Use this type of graphic	Example
Appearance	Simple subject	Photograph	
	Complex subject	Line drawing	
Shapes		Rendering	
Spatial relationships	In two dimensions	Map	
	In three dimensions	Line drawing	
Internal components	For general information and a non-technical audience	Cut away	
	For showing technician how to assemble an object	Exploded diagram	
	For showing a professional how something is designed	Cross-section	

Organizational relationships. *Organizational relationships concern how parts make up a system. Graphics can help us see how various parts form a pattern of relationships. Four patterns are common: series, grids, hierarchies, and webs.*

For this type information		Use this type of graphic	Example
Series	Unordered	Bullet list	
	Ordered or ranked	Numbered list, levels, ladder	
Grid		Table	
Hierarchy		Indented list, tree diagram, organization chart, Chinese-box diagram	
Web		Network diagram	

Temporal relationships. *Time is a powerful organizing principle, and many graphics are dedicated to showing how things change as time passes.*

For this type information		Use this type of graphic	Example
Trend		Line chart	
Simultaneous events		Timeline	
Repeated patterns	Cyclic	Cycle diagram	
	Alternating	Playscript	
Narratives		Words, flowchart	

ENSURE THAT THE GRAPHIC FITS THE DISPLAY MEDIUM

We have been talking mainly about how to design graphics for a paper proposal. However, more proposals are being delivered and read electronically. Producing illustrations for an online proposal employs different tools, requires different priorities, and imposes different limitations than paper documents. This topic is an article in itself, but here are some basic principles to remember in electronic proposals:

Online displays are grainier. Resolution, the sharpness of displayed characters and lines, determines the minimum legible text size and limits the detail displayable in graphics. Resolution is usually defined as the spacing between pixels on the screen and is expressed as the number of dots per unit of distance or of area. Even the resolution of "high-resolution" computer screens is low compared to typeset paper pages or even laser-printed pages.

Remember that online graphics cannot show any feature smaller than a single pixel or any line less than one pixel wide. Gradations must be whole multiples of pixels.

Online displays are smaller. The typical display window on a computer shows about $1/2$ to $3/4$ of a paper page. Whenever possible, take this fact into consideration as you design graphics for the computer screen. Try to avoid large graphics that span scrolling zones. Here are some things you can try to compensate for the limitations of the screen:

- Reduce the number of parts in each illustration and avoid fine lines and tiny text.
- Reduce the size of the graphic. If you can do so without reducing legibility, make the graphic smaller by shrinking it or by reducing the size of the text or other elements.
- Divide a complex illustration into several separate, simpler graphics. Be sure to include an overview so that the reader can see how each of the separate graphics relates to the whole.

- Let the reader click on portions of the overview graphic to zoom in and display more detailed information. In this instance, the interactivity available with the computer makes up for the reduced screen space.

Online color is different. Online and paper documents may have different sets of colors available. Even when the same colors are available, these colors may appear different on screen than on paper.

24-bit (full-color) display capabilities are not unusual, but keep in mind that some readers may not have their monitors set to display the maximum number of colors or they may have to print out the proposal on a grayscale printer.
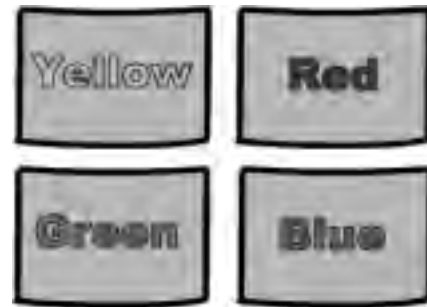
Make sure your graphic has adequate light-dark contrast.

As you incorporate colors into your design, select ones that maintain light-dark contrast. These high-contrast designs work well over a wide range of colors and gray levels. Graphics designed without sufficient contrast lose legibility when displayed on systems with fewer colors, or printed on a standard inkjet or laser printer.

The upshot is that you need to view your graphics on a variety of computer screens and print them on a variety of printers. It is essential to print the graphic on a Postscript and non-Postscript printer, especially if the text is embedded within the graphic.

Graphic has too much detail to display well on a computer screen.

Allow the viewer to zoom in for more detail.

BE TRUSTED

Graphics should never lie, mislead, or confuse. Yet many graphics do—some intentionally, but most through ignorance and sloppiness. Though these distortions are most common in the sort of statistical graphics we find in political advertisements, annual reports, and government propaganda, proposals are not immune to them. As honest communicators, we must take care to eliminate them from our works (Tufte, *Visual Explanations*, 1997).

COMPARE LIKE ITEMS

To avoid misleading your viewer, express all information in common units. Dollars are not dollars, unless you first compensate for inflation, for instance. Other factors that can change the basis of measurement include population growth and decline, changes in foreign exchange rates, and shifts in the book value of certain assets.

Other deceptive comparisons include:

- Comparing before-and-after photographs that compare more than claim.
- Comparing only selected items, such as your best product and your competitor's worst.
- Comparing only over a selected ranges of values.
- Comparing unequal ranges, spans, or units.
- Failing to distinguish between missing data and data with a numeric value of zero (Bertin, 1983).

REPRESENT INFORMATION DIRECTLY AND SIMPLY

Graphical lies frequently happen when the method of representing meaning is complex. This situation occurs when the size of the graphic is not a clear, visually obvious multiple of the number it represents. For instance, in a bar graphic composed of cubes whose edges represent the value of a variable, a tripling of the value results in a 27-fold increase in the volume of the cube.

Avoid selective deception.

Avoid graphical exaggeration.

LABEL AND ANNOTATE

Labels, annotations, and posted values cannot eliminate graphical ambiguity or distortion. They can, however, compensate for any graphic fuzziness by clarifying apparent contradictions, pointing out special cases, explaining exceptions, qualifying conclusions, and designating optional features.
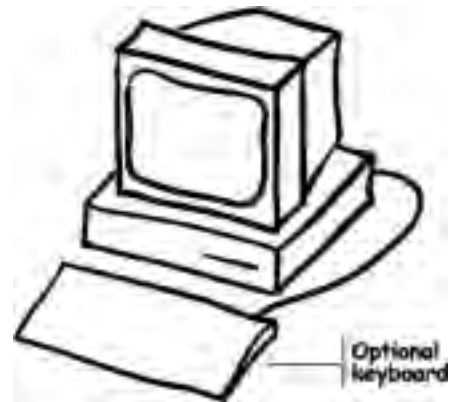
Annotation clarifies features.

BE SOCIALLY RESPONSIBLE

All documents, even proposals, are read in the larger context of work and society at large, and therefore must conform to the values, norms, and laws of those societies. They also need to reflect appropriate corporate and social values and to avoid stereotyping or demeaning groups or individuals. To be socially responsible:

Dress people modestly—Use common conservative business attire as your model. Avoid loud patterns, bright colors, high fashion, or overly casual wear. A hemline that is chic in Paris may be "blatant sexist exploitation" in San Francisco and "pornographic" in Dhahran.

Minimize indicators of social and economic class—Again, use simple business attire and avoid accessories that imply wealth or position, such as jewelry, furs, exotic cars, etc. Avoid emblems of religious value.

Beware perpetuating outmoded gender roles—Do not unconsciously show people performing stereotypical jobs, for instance women as secretaries and men as managers. Make sure your examples reflect positive social values. Likewise, avoid exaggerated political correctness.

Keep relationships between people simple—Show people interacting in a polite and not too casual way. Make clear that the power to make decisions stems from job assignment or recognized expertise, not merely gender, social laws, or age.

Keep hands generic—When showing an operation involving the use of a hand, make the hand as generic as possible. Minimize racial and gender differences. Even better, use a cartoon hand. The idea is to keep people from speculating on who the hand might belong to rather than the task that is being performed. Oh, by the way, if only one hand is to be shown, make it the right hand, because in many countries the left hand is reserved for toilet tasks.

Use cartoon characters when appropriate—With cartoons you can avoid problems associated with race and gender. One word of caution: because of their frequent use for humor, cartoons may not be appropriate for highly formal situations.

In avoiding racial, ethnic, and sexual stereotypes, you must walk a fine line between what is and what should be. If your management team for a particular project is all white males, you can't ethically hide the fact. You could, however, substitute a photograph of the whole development team in a way that emphasizes the contributions of all members without denying the makeup of your management team.

BE REMEMBERED

Graphics can help the reviewer remember the main points of the proposal and act upon it (positively, we hope).

Do you, like most other people, remember faces better than names? Tests have shown that we have almost unlimited recognition memory for graphic images

and that concepts remembered visually are recalled better than those just encoded verbally or textually.

We remember what we form a mental image of. We can recall more objects presented as pictures than presented merely as words (Kosslyn, 1983). In addition, we remember 20 percent of what we hear but 50 percent of what we both hear and see (Gatlin, 1988). A study by the University of Minnesota in 1989 showed that adding visuals to presentations increased recall by 43 percent (Morrison, 1989). In another test, creating strong associative images increased recall 2.5 times over mere verbal repetition (80 percent versus 33 percent). When the images were distinct and vivid, recall soared to 95 percent (Bower, 1972).

CAREFULLY DESIGN YOUR GRAPHICS

Although you may not personally be drawing the graphics, you need to work closely with the artist during the design phase. Graphics must immediately and automatically make the most important point, then present secondary points, and with study reveal details (Neurath, 1984). They must organize information into a clear visual hierarchy.

A visual hierarchy assigns elements of the graphic to various levels of conspicuousness. It lets the eye explore the graphic in an orderly way without being overwhelmed with detail. Before composing the graphic, plan its visual hierarchy, assigning various parts of the graphic to definite levels of conspicuousness (Martin, 1988). Using a visual hierarchy will help make graphics a persuasive element in your proposal.

Start by identifying the most important information in the graphic. This is what you want the viewer to notice first. Allow no more than three to seven objects at this top level. Ideally, identify a single object to dominate the graphic.

Next, identify objects at the second level of importance. These will appear at the next level of conspicuousness.

Design a visual hierarchy of concepts

Repeat for the third, and possibly fourth level.

Review your choices of objects for each level of the hierarchy. The hierarchy should have a pyramid shape with a few objects at the top level, more at the second level, and more still at each additional level.

CLEARLY ORGANIZE YOUR GRAPHIC

It's not the heat, it's the humidity. It's not the density, its the entropy (disorder). That is, it is seldom simply the amount of information in a graphic that makes it difficult to understand. We can comprehend large, detailed, dense graphics—provided they are well organized. Organizing information lets the viewer grasp the main idea instantly and understand secondary ideas with minimal effort. Organization also makes graphics more memorable (Kosslyn, 1983).
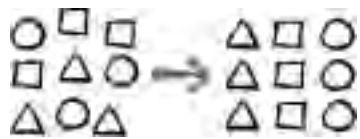
Reclassify and reorder objects to produce simpler, clearer images (Galitz, 1989; Bertin, 1983).

Average, generalize, and consolidate closely related items while preserving distinctions essential to the meaning of the graphic (Mays, 1982).
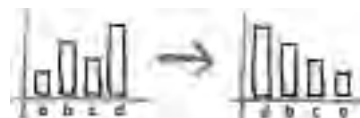
Order quantitative information by value to simplify the overall pattern. This is called diagonalization (Bertin, 1983).
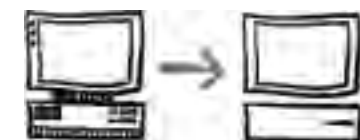
Retouch graphics to eliminate clutter, to remove irrelevant objects, to subdue the background, and to juxtapose related objects (Hill, 1977). Don't make graphical distinctions that are not important to your viewer or to your purpose. Use the simplest of the many variations possible for an object (Arnheim, 1974).

USE GRAPHICS AND LABELS TO SUMMARIZE THE DOCUMENT

What is the proper mix of text and graphics? Pictures alone are understood quickly, but not accurately. Words alone are understood accurately, but not quickly. The best combination of speed and accuracy of understanding often results from using pictures first and words second (Booher, 1975). A visible format allows selective learning and enables efficient skimming by letting readers identify what is most important to them (Rude, 1985).

Profit from what *Scientific American* discovered: readers are more likely to scan articles, looking at the pictures and captions, than they are to read all the text. With that in mind, *Scientific American* makes sure that each major concept is summarized in a clearly designed graphic. Further, each caption is well written and informative.

Design a graphic that either introduces or summarizes each main point in your proposal.

Carefully label the graphic. Labels provide information about parts of the graphic. They draw attention to important components, answer questions the viewer may have, and remove ambiguity in the graphic. Labels are typically words or phrases that identify specific parts. They can also be sentences that describe and explain parts. These longer, more extensive labels are called annotations.

Place graphics and text according to their relationship. Readers are more likely to refer to a graphic if it occurs right after it is mentioned in the body of the text. To avoid confusing and sidetracking readers, never place a supporting graphic before the spread in which it is mentioned (Knecht, 1989).

If the graphic summarizes or recalls information in the text, place the graphic after the text. Doing so provides a context for the graphic, reduces possible misinterpretations, and encourages the user to review the text and thus remember more (Brody, 1982).

IN CLOSING …

Graphics can ensure that reviewers notice, understand, trust, and (most importantly) favorably remember your proposal.

Where words alone can often fail to show the structure underlying our proposal, graphics can step in and help readers see and comprehend complex information.

Graphics help reviewers who often skim, skip, and zoom in and out. They can provide these readers with a global map of the document as well as flags to critical information. The map lets the reader grasp the organization of the document and plan a strategy for finding information. The local flags identify blocks of text so readers can find them quickly. They also remind readers of the larger context of the document (Waller, 1982).

As you design graphics, use this checklist to ensure that they will accomplish their purpose. Points to check include:

- ❏ Is the primary idea of the graphic clear and immediately obvious?
- ❏ Do all details in the graphic support the main idea?
- ❏ Does the subject matter stand out from background and annotation?
- ❏ Is this the best type of graphic (table, chart, diagram, etc) for the purpose?
- ❏ Will skeptical viewers trust the graphic?
- ❏ Is every point, line, symbol, and word necessary?
- ❏ Is the graphic legible under actual viewing conditions?
- ❏ Can you reproduce or display it clearly, economically, and reliably?
- ❏ Does the graphic follow conventions familiar to viewers?
- ❏ Is the graphic consistent with the text and other graphics?
- ❏ Is the graphic pleasing to look at?

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Note

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The Darker Side of Persuasion:

STANLEY MILGRAM'S EXPERIMENTS ON OBEDIENCE TO AUTHORITY

By Dr. Jayme A. Sokolow

In the 1960s, psychologist Stanley Milgram carried out a series of innovative electric shock experiments that dramatically showed how persuasion in modern society can result from obedience to authority. His laboratory experiments have profound implications for proposal professionals.

VARIETIES OF PERSUASION

From ancient times to the present, the art of persuasion has been hotly debated. In classical Athens, Plato and Aristotle lampooned the Sophists, who were the Dale Carnegies of their time. The Sophists believed that ordinary men could be taught to be persuasive orators and effective legislators, for a fee. Aristotle, in contrast, argued that rhetorical persuasion was a difficult skill to master because it usually developed out of a combination of emotional empathy, logical and factual arguments, and style, "since it is not enough to know what to say (one must also know how to say it."

Although most proposal professionals have not read Aristotle's *Rhetoric*, they would probably agree with him. Successful proposals usually present solutions to vendors that are carefully organized, confident, and filled with plenty of factual evidence to support their arguments.

Today, the debate continues. When problems are routine and easily recognized, persuasion is often unnecessary because the solutions are obvious. When problems become more difficult and there is no widespread agreement about solutions, persuasion becomes a more complex art.

Persuasion usually involves conflict, for if people agree, they do not need to be persuaded. To overcome conflict and reach agreement, as Aristotle pointed out, people must demonstrate to each other that they share a common viewpoint. In other words, identification is an important element of persuasion.
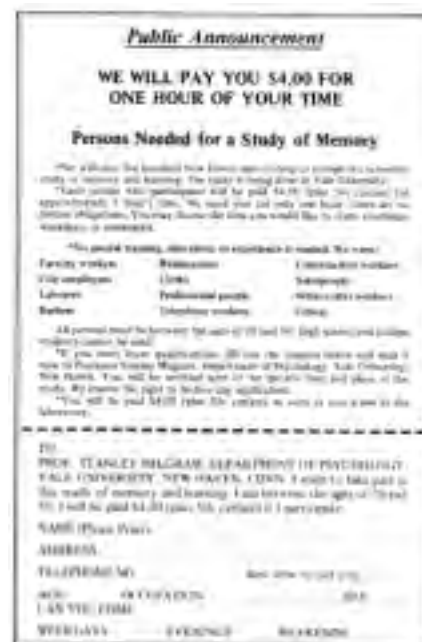
Milgram's Recruitment Advertisement

THE MILGRAM EXPERIMENTS

Stanley Milgram (1933-84), a social psychologist, performed a series of experiments in the 1960s about persuasion and obedience that upset many people because they grimly illustrated the darker side of persuasion that we believe cannot occur among free people in a democratic society. According to him, persuasion often occurs simply because we identify with an authority figure, whom Milgram defines as someone who appears to have a legitimate right to exercise control over us.

His experiments involved adult volunteers who carried out a series of painful acts in clear conflict with their consciences. Milgram wanted to know how far participants would comply with the experimenter's instructions before refusing to inflict further pain upon someone else.

To his chagrin, he discovered that "ordinary people, simply doing their jobs, and without any particular hostility on their part, can become agents in a terrible destructive process." Based on his famous experiments, Milgram concluded that when we are asked "to carry out actions incompatible with fundamental standards of morality, relatively few people have the resources to resist authority."

At Harvard, Yale, and the City University of New York, Milgram spent more than two decades studying group behavior in cities, the nature of conformity, and the impact of television on social behavior. His interest in conformity led him to devise a series of experiments about obedience that were memorably described in *Obedience to Authority: An Experimental View* (1974).

Milgram's first experiment was conducted at the Interaction Laboratory of Yale University. Through a newspaper advertisement, he recruited 40 men from New Haven, Connecticut, to participate in a "scientific study of memory and learning." The experiment took one hour, and volunteers received four dollars plus fifty cents for carfare. Forty percent of the volunteers were professionals, another 40 percent were white-collar workers, and the remainder were skilled and unskilled workers. Forty percent of them were in their forties, 40 percent were in their thirties, and the rest were in their twenties.

After two people arrived at the laboratory, an impassive 31-year-old man in a gray laboratory coat firmly explained that the study would be concerned with the effects of punish-

"Could you hurt me?" Surprisingly, the study showed that most people could.

ment on learning. This man, whom Milgram called the experimenter, announced that one of them would be designated the teacher and the other the learner. With his scientific dress, impassive demeanor, and control over the experiment, he was Milgram's authority figure. The experimenter had the two people draw lots to determine their roles, but volunteers did not know that the drawing had been rigged so that the volunteer would always be the teacher.

A portly and mild-mannered 47-year-old accountant played the role of the learner in Milgram's experiments. The experimenter led him into a room separated from the volunteer by a glass partition. He sat down in a chair while the experimenter strapped his arms to prevent excessive movement, attached an electrode to his wrist, and applied an electrode

SHOCK GENERATOR
TYPE ZLB
DYSON INSTRUMENT COMPANY
WALTHAM, MASS.

OUTPUT 15 VOLTS - 450 VOLTS

The Laboratory setting had a sophisticated array of test equipment.
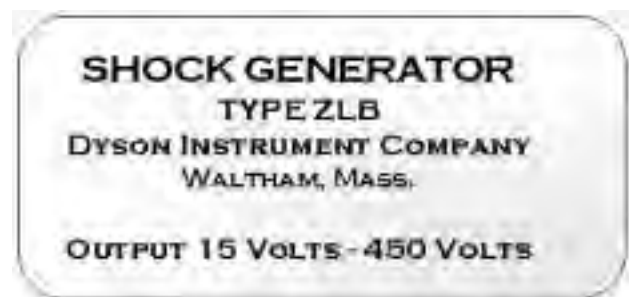
paste to "avoid blisters and burns." The experimenter told him that he was supposed to learn a list of word pairs. Whenever the learner made an error, the teacher would give him progressively stronger electronic shocks.
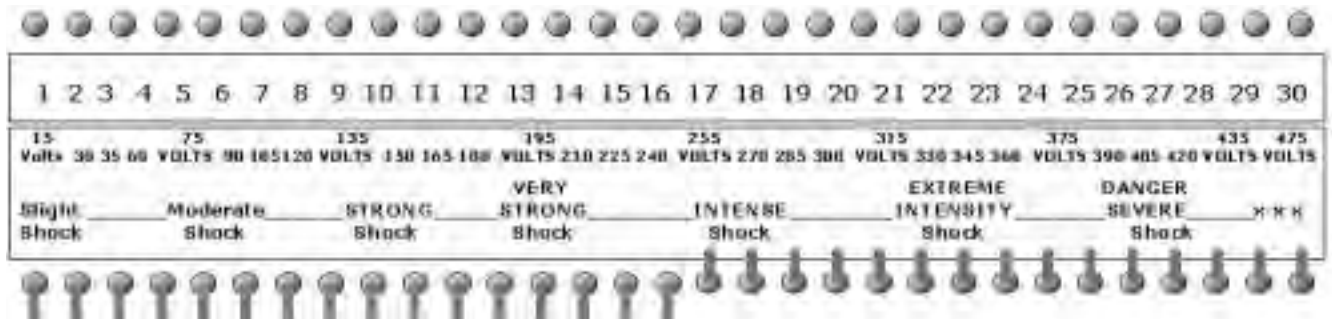
An illustration of Milgram's Shock Generator Face.

Volunteers were seated at a table in front of a large generator that had 30 lever switches labeled in 15-volt increments from 15 to 450 volts. At the upper left-hand corner, the device was labeled "SHOCK GENERATOR: TYPE ZLB, DYSON INSTRUMENT COMPANY, WALTHAM, MASS. OUTPUT 15 VOLTS—450 VOLTS."

Every four switches had the following descriptions above them in ascending order of voltage: Slight Shock, Moderate Shock, Strong Shock, Very Strong Shock, Intense Shock, Extreme Intensity Shock, and Danger: Severe Shock. Two more switches were marked XXX. When volunteers hit a switch, a bright red light would show above it. They also heard an electronic buzzing sound, saw an electric blue light flashing that was labeled "voltage energizer," heard relay clicks, and saw a voltage meter swing to the right as the voltage increased.

Before the test began, the teacher received a sample 45-volt shock on his wrist by hitting the third switch on the generator. Milgram devised this part of the experiment to show teachers that the generator was real. The generator, however, was not actually connected to the learner, who had been trained to act as if he were being shocked by it.

The teacher read a series of word pairs with four terms to the learner, who indicated which of the four terms had been paired with the first word by pressing one of four switches that lit up numbers in an answer box above the generator. The experimenter told the teacher to administer a shock to the learner each time he gave an incorrect response.

Teachers were also advised to "move one level higher on the shock generator each time the learner gives a wrong answer" and to announce the voltage level right before they administered the shock. When teachers reached 450 volts, the experimenter instructed them to continue shocking the learner two more times. Only then would the experiment conclude.
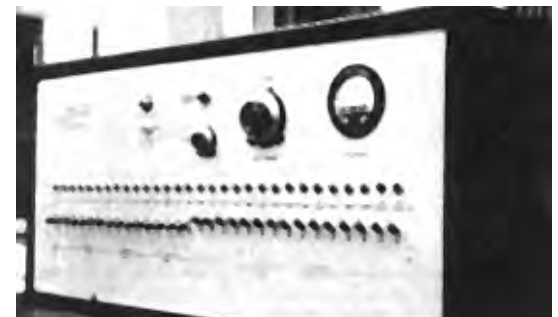
Milgram's Shock Generator.

The "Victim" is strapped down and the electrodes are applied.

The "Subject" is given a sample shock of 45 volts.

"Shocking" the learner.

If teachers asked whether they should continue, the experimenter would always respond in the following sequence:

"Please continue" or "Please go on."

"The experiment requires that you continue."

"It is absolutely essential that you continue."

"You have no other choice, you must go on."

After a 300-volt shock, he stopped answering questions.

In each experiment, the learner gave a predetermined response to the word pair test of three wrong answers to one correct answer. At first, Milgram thought that the learner would not need to say anything when shocked because the lights and noise from the generator would stop teachers from increasing the voltage. When this did not occur, Milgram had the learner respond when a 75-volt shock occurred with simple grunts for the lower shocks to anguished cries at 120 volts. At 180 volts, the learner cried out, "I can't stand the pain," and at 270 volts, he screamed. After a 300-volt shock, he stopped answering questions.

At the end of each session, volunteers learned that they had not really administered any electrical shocks. Those who obeyed the experimenter were told that their reactions were perfectly normal while disobedient volunteers were commended for not shocking the learner. All of them received a written report that described the experiment along with a follow-up questionnaire.

THE RESULTS

Milgram designed the experiment to present volunteers with a stark dilemma. They could administer increasing stronger shocks by identifying with the experimenter or end the experiment by identifying with the learner.

Before Milgram first began his experiments, he asked 39 psychiatrists, 31 Yale students, and 40 middle class adults to predict how volunteers would respond to his experiment. All three groups estimated that volunteers would respond with a mean maximum shock level ranging from about 120 to 150 volts and then stop. Only four people predicted that volunteers would administer shocks as high as 300 volts.

In the first experiment, where the learner uttered no sounds, all 40 volunteers administered electrical shocks ranging from 300 volts (Intense Shock) to 450 volts (XXX). Twenty-six of them, or 65 percent, were willing to administer the highest voltage. With voice feedback from the learner, the mean maximum shock and obedience levels dropped only slightly. When volunteers heard the learner, eight of them stopped before 195 volts (Strong Shock), but 25 were still willing to administer 450 volts in response to incorrect answers.

Milgram designed 18 basic situations to determine a volunteer's willingness to obey the experimenter. Seventeen of the situations involved men. In the only experiment involving women, 14 of them administered shocks between 150 and 330 volts while 26 were willing to give the learner a 450-volt shock. Even when Milgram moved from prestigious Yale University to a shabby office in downtown Bridgeport, Connecticut, volunteers continued to use the high shock levers.

Almost 93 percent of the volunteers administered 450-volt shocks.

The highest rate of obedience occurred in an experiment with two teachers, one of which had been coached to administer high intensity shocks. Almost 93 percent of the volunteers (37 out of 40) followed by administering 450-volt shocks.

MILGRAM'S CONCLUSIONS

Milgram's experiments elicited howls of protests. Critics complained that he had deliberately deceived his volunteers and unethically exploited them. Milgram responded by arguing that people disliked his experiments primarily because of their results. "If everyone had broken off at light or moderate shock," he argued, "this would be a very reassuring finding, and who would protest?"

Milgram pointed out that his volunteers were not sadists but ordinary men and women. They disliked participating in the experiments and were greatly relieved to discover that the learners had not really been shocked.

For example, when one volunteer administered a 180-volt shock, he shook his head and had this conversation with the experimenter:

Volunteer: *"I can't stand it. I'm not going to kill that man in there. You hear him hollering?"*

Experimenter: *"As I told you before, the shocks may be painful, but—"*

Volunteer: *"But he's hollering. He can't stand it. What's going to happen to him?"*

Experimenter: *"The experiment requires that you continue, Teacher."*

Volunteer: *"Aah, but, unh, I'm not going to get that man sick in there.... know what I mean?"*

Experimenter: *"Whether the learner likes it or not, we must go on, through all the word pairs."*

Volunteer: *"I refuse to take the responsibility. He's in there hollering!"*

Experimenter: *"It's absolutely essential that you continue, Teacher."*

Volunteer: *"There's too many left here [referring to the word pairs]; I mean, Jeez, if he gets them wrong, there's too many of them left. I mean, who's going to take the responsibility if anything happens to that gentleman?"*

Experimenter: *"I'm responsible for anything that happens to him. Continue, please."*

Volunteer: *"All right. . . ."*

Based on his experiments, Milgram came to a disheartening conclusion. "With numbing regularity good people were seen to knuckle under to the demands of authority and perform actions that were callous and severe. Men who are in everyday life responsible and decent were seduced by the trappings of authority, by the control of their perceptions, and by the uncritical acceptance of the experimenter's definition of the situation into performing harsh acts."

Milgram further argued that in modern society people tended to identify with authority as long as it was considered legitimate. For him, this was the real meaning of morality in modern society—the abrogation of individual will to authority, regardless of its consequences.

Milgram discovered that there were occasions when volunteers would defy the experimenter. They were more likely to disobey under the following conditions:

- Close proximity to the learner (40 percent administered 450 volts).

- Touch proximity to the learner (30 percent administered 450 volts).

- Experimenter absent from the room during the test (20 percent administered 450 volts).

- Volunteers choose their own shock levels (2.5 percent administered 450 volts).

- Learner demands to be shocked (all volunteers stopped at 150 volts).

- Ordinary man acts as experimenter (20 percent administered 450 volts).

- Experimenter demonstrates how the test works (all volunteers stopped at 150 volts).

- Two experimenters issue contradictory commands (all volunteers stopped at 165 volts).

- Three volunteers administer the test with two rebelling against the experimenter (10 percent administered 450 volts).

In a 1976 interview in *Psychology Today*, Milgram discussed the implications of his experiments. According to him, "in order to have civilization you must have some degree of authority. Once that authority is established, it does not matter much whether the system is called a democracy or a dictatorship: the common person responds to governmental policies with expected obedience, whether in Nazi Germany or democratic America."

In order to have civilization you must have some degree of authority.

Every society, Milgram pointed out, must have some structure of authority, but the range of freedom varies from place to place. The Holocaust "demonstrated the worst excess of obedience we've seen. But American democracy also has instituted policies that were severe and inhumane: the destruction of American Indians, the enslavement of blacks, the incarceration of the Japanese during the Second World War, [and] Vietnam. There are always people who

obey, who carry out the policies. When authority goes awry, individuals do not seem to have enough resources to put on the brakes… Morality, as well as blind obedience, comes from authority."

Despite our propensity to identify with authority regardless of its malevolence, Milgram thought we might be able to control its excesses. He argued that we had to become more aware of the "problem of indiscriminate submission to authority," which he hoped would be better understood as a result of his experiments. Since people will obey even depraved authorities, Milgram felt that we had a special obligation to "place in positions of authority those most likely to be humane and wise." Milgram also believed that people were quite inventive and hoped that we might one day develop a political structure that would give "conscience a better chance against errant authority."

Although Milgram sounded cautiously optimistic in his interview, his experiments can hardly engender much hope. In his laboratory he discovered what the German refugee and political philosopher Hannah Arendt called the "banality of evil" when describing Adolf Eichmann and his fellow Nazis.

Both Arendt and Milgram argued that our vaunted morality is really rather ephemeral. Ordinary people can become extraordinarily inhumane when obeying others. We are not all potential Nazis, but too many of us will blindly identify with authority.

MILGRAM'S EXPERIMENTS AND PROPOSAL PROFESSIONALS

In our better moments, we would like to believe that persuasion is part of a rational dialogue that leads to agreement. Logic, factual evidence, and style, as Aristotle might say, should be important elements in any persuasive argument.

Nonetheless, most proposal professionals have probably experienced their own versions of Milgram's experiments. Abusive management styles are sometimes used in the workplace. Are they appropriate?

> In this high-pressured environment, sometimes we may treat our proposal teams in ways we later regret.

In our more candid moments, we might see a part of ourselves in Milgram's experimenter. When we manage proposals, we are authority figures to those around us. Proposal development is often a highly stressful activity with its pressing deadlines, long hours of work, and huge

contracts at stake. In this high-pressured environment, sometimes we may treat our proposal teams in ways we later regret.

Finally, there is a more controversial and profound issue for proposal professionals that goes to the heart of Arendt and Milgram's deepest concerns—we can be discretely silent or very inventive when obeying authority. How many of us have ever had moral qualms about the Statements of Work in our proposals and brought them to the attention of our superiors? How many proposal teams have resigned because they did not want to become involved in doing proposals to make napalm, guided missiles, nuclear bombs, or nerve gas? And, how many proposal teams have devised persuasive arguments for vendors to purchase products or services that actually harm the environment or injure people?

To raise these unsettling questions is not to equate proposal professionals with Nazis. In fact, Milgram argued that the best way to avoid unthinking obedience to authority is to be aware of the problem and to raise these kinds of questions in the workplace. Undoubtedly, some proposal professionals struggle with them on a daily basis.

Based on his experiments, Milgram concluded that obedience to authority does not usually "take the form of a dramatic confrontation of opposed wills or philosophies but is embedded in a larger atmosphere where social relationships, career aspirations, and technical routines set the dominant tone." All of us have developed very practical inhibitions against disobeying authority. How do we develop similar inhibitions against obeying abusive or malevolent authority? This is the question Milgram wanted us to constantly ask ourselves.

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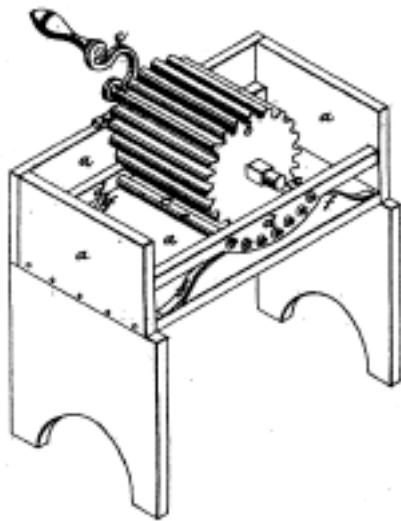
It All Comes Out in the Wash

PERSUASION IN TECHNICAL PROPOSALS— NINETEENTH-CENTURY WASHING MACHINE APPLICATIONS TO THE US PATENT AND TRADEMARK OFFICE

In the 19th century, more technical proposals were submitted to the U.S. Patent and Trademark Office than to any other federal agency. Over time, the persuasive techniques applicants used to convince patent examiners to grant them patents became widely used in technical proposals to all government agencies.

By Katherine T. Durack

One important function of the federal government, in the words of Article I, Section VIII of the U.S. Constitution, is to "promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." This language has resulted in today's intellectual property laws, protecting authors and inventors through copyrights and patents. The Founding Fathers considered this protection so important to the economic success of the newly formed United States that the first U.S. patent law was enacted in 1790, only seven years after the end of the Revolutionary War. In 1802, a separate official in the Department of State known as the Superintendent of Patents was placed in charge of patents. In 1836, this office was reorganized and the official in charge was designated the Commissioner of Patents and Trademarks.

Between 1790 and 1793, patents were directly examined by Cabinet members, who made up the Patent Board. This practice was soon abandoned because of the burden on Cabinet members (Skolnik, 1979) and complaints about the difficulty of securing a patent (Lubar, 1991). In 1793, formal examination was eliminated, and from 1793 to 1836 obtaining a patent involved submitting an application, getting through a waiting period, and then withstanding any legal challenges that arose either before or after the patent was granted.

Not surprisingly, lawsuits proliferated, and in 1836 the examination system was reinstated with the formation of the Patent and Trademark Office. Patent numbering also started at this time, and since the first patent number was issued in 1836, almost 6 million patents have been approved by the U.S. government. Throughout the 19th century, independent inventors submitted most of the applications. Today, however, the most important U.S. patents are typically the property of large corporations.

There are four basic reasons why proposal professionals should be interested in patent applications. First, applications to the Patent and Trademark Office are a classic example of technical government proposals. In fact, over the past 200 years far more technical proposals have been submitted to this office than to any other U.S. government agency or department.

Second, since 1836 the persuasive challenge in these technical proposals has remained relatively consistent
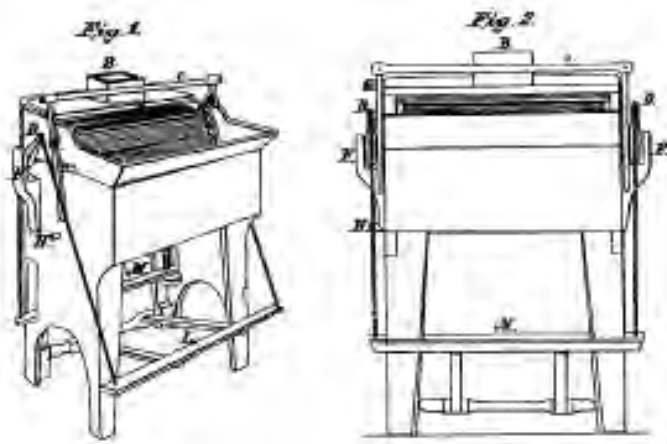
Example 19th century washing machine patent illustrations.

(Brockmann 1998). Applicants have had to convince a board of examiners that an invention is novel (never invented before), original (the invention originated with the applicant), and that it is sufficiently clear and detailed "so as to enable any person skilled in the art or science to which it appertains…to make, construct, compound, and use the same" (per Section 4888 of the 1874 Patent Act).

Third, patents and federal government proposals serve both technical and legal functions. A proposal, which can be incorporated into the winning contract, articulates how and on what schedule goods and services will be provided. A patent defines a technology (or process or design) and when granted, the application itself *becomes* the "patent" (Bazerman, 1999, Pressman, 1999). Both patents and proposals undergo a review process (by a patent examiner and a Source Selection Board, respectively), which ultimately determines the success of the document as measured by the grant of the patent or the selection of a vendor.

And fourth, patents commonly result from federally funded projects (Van Nostrand, 1997). Because many documents related to federally funded projects are available to the public under the Freedom of Information Act (5 U.S.C. 552, as amended), they can compromise a company's future ability to apply for a patent (Campbell, 1999; Myers and Robinson, 1998). A publication describing an invention before a patent application is submitted can actually bar the granting of a patent (Wright, 1979).

There is much we can learn about persuasiveness in technical documents from the records of the U.S. Patent System. Over 100 years of continuous records are available from the U.S. Patent and Trademark Office, and even though a fire in 1836 destroyed the majority of the earliest records, a number of them were reconstructed after the fire

and are available from the Cartographic Division of the National Archives.

The common washing machine has been the subject of patents since 1793.

There are few examples of technologies that have continued to inspire numerous inventions over this enormous time span, but surprisingly there is at least one device that has always claimed the attention of inventors. The common washing machine has been the subject of patents since 1793, only three years after the enactment of the first U.S. patent law. This continuity of subject matter in the record affords a unique glimpse into how different persuasive techniques were introduced and tested in 19th century technical proposals to the federal government.

PERSUASIVE STRATEGIES IN NINETEENTH-CENTURY PATENTS

There are four types of persuasive strategies useful for today's proposal manager that were commonly used in 19th century patent applications. These strategies include persuasion by:

1. Statement of advantages.
2. Detailed, directed description.
3. Explicit statement of claims.
4. Naming.

Each of these persuasion strategies represents an idea some 19th century patent writer used that succeeded, was copied by others, and eventually came to be adopted into

contemporary requirements and standard advice. One constant persuasive requirement has been the need to distinguish one invention from another, something which seems obvious but can be challenging when inventions are very similar. This is akin to a challenge faced by proposal managers: distinguishing yourself from your competitors even when your proposed solutions will be similar. One of the earliest persuasive techniques employed by 19th century patent writers was persuasion by a statement of advantages.

MINE IS BETTER THAN YOURS— AND THIS IS WHY

A truism of positioning your technical solution is "know your competition." Why? When you know your competition, you know their weaknesses and how your solution will likely fare in a comparative analysis. Even if you know your competition well, you usually cannot state explicitly that "our solution is better than Joe Competitor's because of X" if you want to avoid legal conflict with Joe Competitor. So what can you do? Here again, the patent record is instructive.

In many of the patents granted after 1836 when examination was reinstated, inventors began to make explicit claims about the advantages their inventions offered. In most cases, something about the invention was described and the inventor simply stated that the feature was advantageous. For instance, in 1866 Hiram Nash intermixed statements of advantage with the technical description of his machine. After describing at length the arrangement of several parts, in one case he simply stated that "the advantage of this arrangement is obvious." In the next instance, Nash was more specific: "The advantage of this arrangement is that I am enabled to give the reciprocating action to the traveling rubber [presser] by simply operating the levers."

A more sophisticated approach appeared in Jonathan Chase's 1834 description of his washing machine. Chase claimed that with his washing machine:

- Clothes could be cleansed "*thoroughly in less time and with much less labour than any other machine that I have examined*."

- Coverlets, quilts or woolen garments could be washed without injury as easily as items made of cotton or linen.

- Washing with his machine was simple, cheap, and powerful.
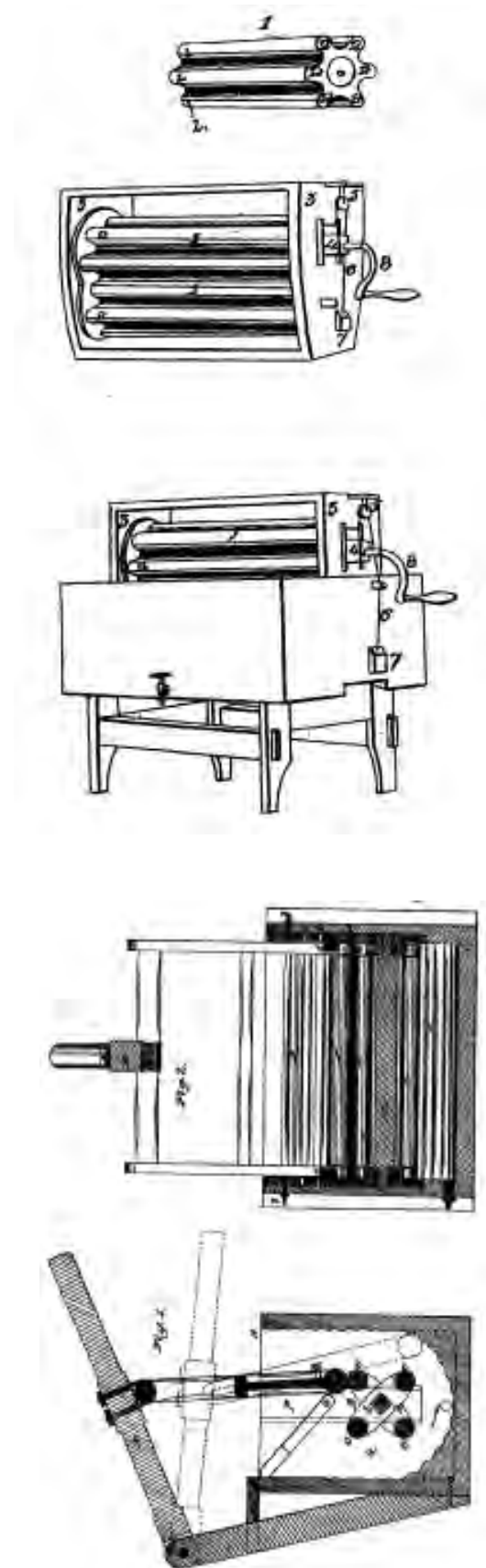
These statements imply problems with other washing machines by inverting his statements:

- Washing with other machines was too time consuming and labor-intensive.
- Certain types of items and materials were subject to harm when washed by other machines.

- Washing with other machines was more complex and more expensive.
- Other machines were less powerful.

Defining the problem with a technological solution was more explicit in Fabius Lawton's patent of 1869. He described the particular arrangement of a stirrup used to

UNITED STATES PATENT OFFICE.

HIRAM NASH, OF CINCINNATI, OHIO.

WASHING-MACHINE.

Specification forming part of Letters Patent No. **51,958**, dated January 9, 1866.

To all whom it may concern:

Be it known that I, HIRAM NASH, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a side elevation of my improved machine; Fig. 2, a central vertical section; Figs. 3 and 4, longitudinal and cross-sectional views, respectively, of the spring arrangement for producing pressure on the rubber or presser.

Like letters of reference indicate corresponding parts in all the figures.

My improved machine is of that class in which a traveling rubber or presser is employed, moving from one end to the other over a horizontal bed, the action being more a pressing than a rubbing one.

The invention consists, essentially, in the spring arrangement for producing pressure on the rubber in all positions of its traveling action, and in the lever arrangement for operating the rubber, and also forming the rubber in the form of a segment of a circle, and so arranging it that at one end of the bed it may be turned up to admit the clothes.

As represented in the drawings, A is a suitable receptacle or box, in which is situated a washing-bed, B, composed of ribs or corrugations a a. On this bed the clothes to be washed are placed. Above this bed is situated a rubber or presser, C, forming a segment of a cylinder. This rubber is also provided with ribs or corrugations b b with openings c c between. The axis d of the rubber extends through from side to side, and has at opposite extremities, respectively, friction-rollers f f, which run upon ways g g, Fig. 4, extending the whole length of the machine. On top the rollers rest bars D D, which are pressed down by springs h h reacting against rigid portions j j of the receptacle. The bars D D are made to extend the whole length, or nearly so, of the machine. The springs h h may be made of the elliptical form shown, or of any other that will accomplish the desired purpose. Spiral or india-rubber springs might be employed. The advantage of this arrangement is obvious. The action of the machine

is a pressing rather than a rubbing one, and in order to give the requisite pressure to the rubber C considerable force is necessary on top. The employment of the springs h h and bars D D resting on the friction-rollers produces this pressure at all positions, whether in the center of the machine or at the extremities. At the same time the friction-rollers allow the rubber to be moved beneath the pressure with great ease.

I am aware that it is common to allow an ordinary rubber simply swinging on its axis a certain degree of elasticity or yieldingness; but I am not aware that this effect has ever been accomplished in a machine where the rubber or presser travels from one end to the other.

On opposite sides of the machine the axis d of the rubber is jointed to connecting-rods i i', which connect at the opposite end in a similar manner with operating levers or handles G G', situated, also, respectively, on opposite sides of the machine, and connected by the common axis k. The advantage of this arrangement is that I am enabled to give the reciprocating action to the traveling rubber by simply operating the levers. To do this the operator can stand at the end of the machine and operate either one or both of the levers, or he can stand at either side and accomplish the same result. This arrangement of the levers and connecting-rods have a particular combination and relation with the traveling rubber, for as the latter passes from end to end of the machine its axis or shaft will move with it, and therefore, if a crank or lever were connected directly therewith, the action from end to end of the stroke would be great; but the double action of the levers and connecting-rods obviates this difficulty, and at the same time enables me to operate from the end or either side.

Machines are in use in which an entire roller or cylinder of considerable weight travels over the clothes, being operated from one end by a handle or handles. By making the rubber C of only a segment of a cylinder it turns up away from the bed B at each end of the machine, as indicated by red lines in Fig. 2, and the whole space over the bed is thus left free and unobstructed, so that the clothes may be inserted or removed without any difficulty
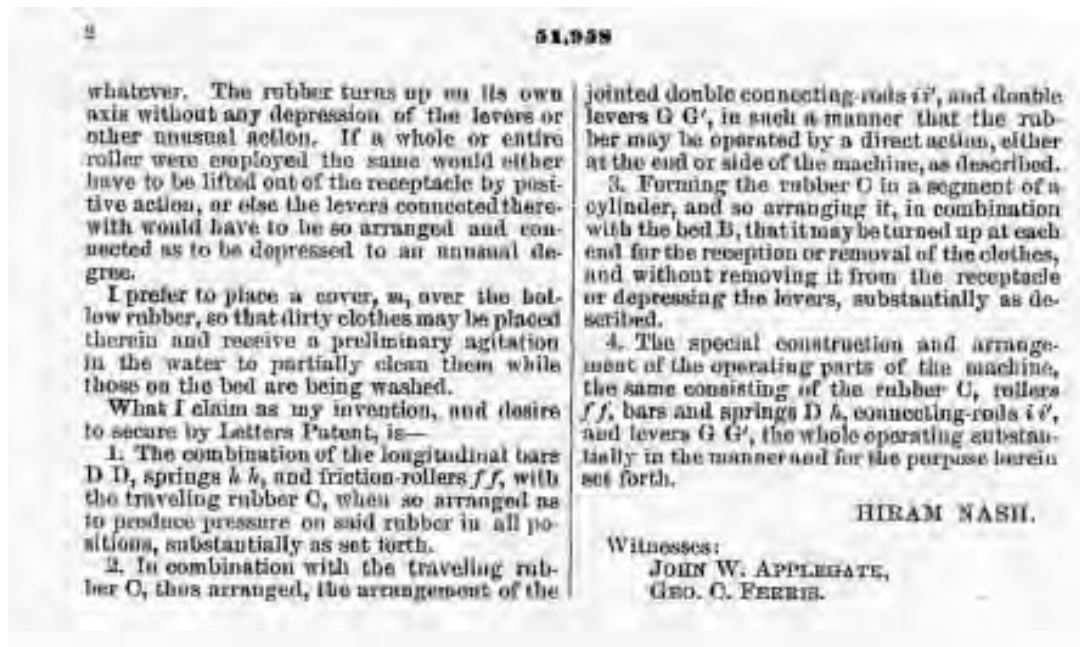
apply pressure to clothes during washing in contrast to other arrangements in use:

"This arrangement of the flexible stirrup *c…*, it will be seen, is a very easy method of bringing the rubber [presser] into action with the requisite degree of pressure, because it allows the foot to rest directly upon the ground…and is, therefore, a great relief to the limb of the operator, in avoiding the constant strain, which is necessary with the treadle heretofore in use in this class of washing-machines."

The problem identified by Lawton was operator fatigue, which he solved by the introduction of the flexible stirrup. Lawton described the advantages of his machine by comparing his invention to other machines and by framing differences in a highly specific problem/solution structure. By doing so, he created the opportunity to demonstrate unique insight into the problem and to frame the current need so that his solution appeared superior.

> Technical writing should be clear and concise… In apparent conflict with this advice is the fact that extensive detail can bolster persuasiveness.

As Van Nostrand has observed, "problems do not just happen; they are constructed" (1997, p.157). This problem/solution

structure is a special type of comparison that both differentiates and argues for the superiority of one technology over another or of one solution over another.

THE DEVIL IS IN THE DETAILS

Technical writing should be clear and concise, whether the text at hand is a patent or a proposal. In apparent conflict with this advice is the fact that extensive detail can bolster persuasiveness. "Explaining is one way of persuading," Van Nostrand states (1997, p. 62). Throughout the 19th century, prospective washing machine patentees had to include considerably more extensive details to be successful. Features such as detailed descriptions of figures and long lists of parts gradually became conventional.

Together, an overview description of figures and the detailed explication of parts serve at least two persuasive functions. First, they draw the reader's attention to specific, significant details of an invention. And second, they also orient the reader to the image and help explain away any distortions, such as perspective or cross-sections. This includes adding descriptive details not perceivable in a drawing, thereby making the invention more concrete and believable.

For example, Andrew F. Lapham's 1860 patent reported three figures, one view in perspective and two "vertical longitudinal sections." Following this orienting description was a list of all parts of the machine identified by letters in the accompanying drawing:
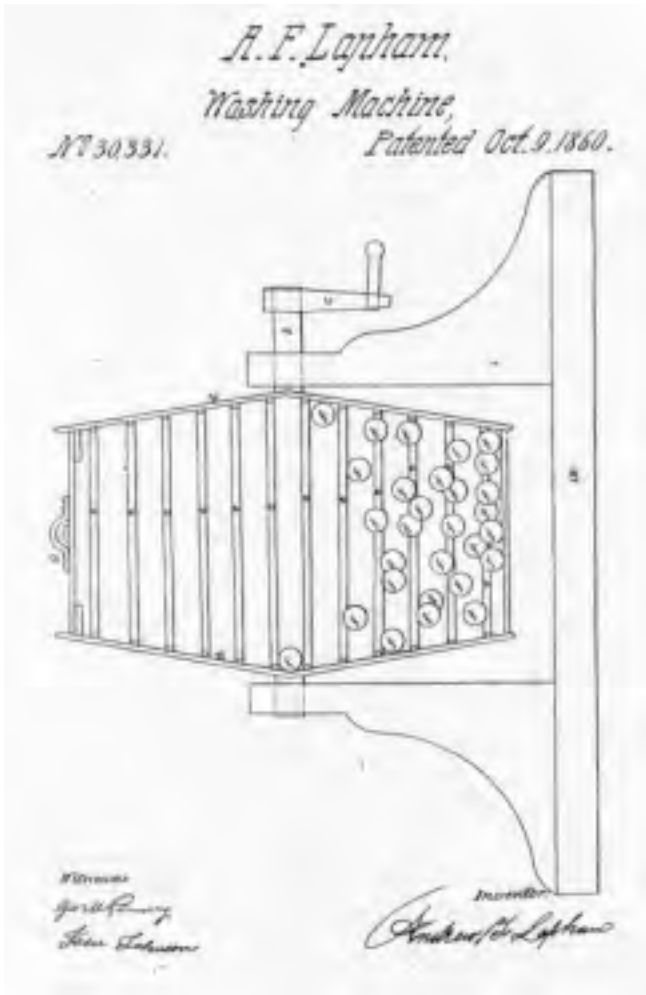
a　*represents the frame*

b　*represents the axis, or axis upon which and around which the washing apparatus is made to revolve*

c　*is the crank and handle.*

Lawton's patent application used repetition to describe each part and to link it to some purpose. "*A* represents the tub or box…lined with zinc, so as to render it water tight… Immediately above the concave bed of rollers *C*, the rubber and presser are arranged…so that the rollers of the presser may move over and in contact with the concave bed of rollers. The suspending arms *F* of the presser are provided with spiral springs *f*, so as to allow the presser to rise and fall independent of the motion of the frame."

These patent applications provide considerable detail that carefully focused attention on something the applicants wished to highlight. These details also might have been included to distract the patent examiner's attention away from other features that may have made their proposals less competitive.

BOUNDARY CONDITIONS: STATEMENTS OF CLAIMS

Perhaps the most important increase in the details of 19th century washing machine patents appears in the section stating claims, which "by the law of 1870…marked out the boundary of the territory protected by the patent" (Bazerman, 1999). As Dood (p. 1000, 1991) explains, "claims were intended to serve two purposes. First, by specifying exactly what the invention was, they were to provide the basis for determining whether the invention was in fact novel, hence patentable. Second, they were to provide the basis by which others could determine whether they were infringing on the patentee's exclusive rights."

I claim everything
I described previously.

Not all 19th century washing machine patents had claims statements, and before 1870, the claims statement might be a simple declaration of the sort "I claim everything I described previously," including by reference all preceding text and information in the patent application. However as claims took on increasing legal significance, it became important that they include more detail and withstand any challenges. Over time, the claims developed into numbered lists that might refer by letter to machine parts, describe particular aspects of a machine's construction and operation, and specify what aspects of an alleged invention the inventor claimed as novel and patentable.

Jonathan Chase's claim in his 1834 application served more purposes than just delineating the patentable features of the invention. It explained in general terms the aspects of the machine to be protected by patent, stated that experiments with the machine had demonstrated its advantages in comparison to others, and asserted that the machine would have commercial value. "I claim as my improvement the general form and operation of the machine with the rails or cross bars as above described, and the particular operation of the crank and cog wheels well satisfied by actual experiments that it possesses many advantages over any other machine in operation and that its simplicity and cheapness and power of cleansing will make it a valuable improvement."

Amos C. Haniford's claim in his 1835 application was quite different, exhibiting a narrower focus on defining the intellectual property described in his patent. Haniford stated first what was not claimed. "I do not claim as my invention

any of the parts of this machine taken separately, nor do I claim the performing of the operation of washing simultaneously, this having been before effected." He followed this statement, however, with a very expansive positive claim. "But what I do claim is the general construction and arrangement of the washing part, consisting of the two feet and the two half circles constructed in the manner and operating upon the principle herein before set forth, without regard however to any particular dimentions [sic] or materials or to the precise form given to the respective parts."

The claim, then, was the summative conclusion to a reasonable argument in the sense that Van Nostrand (1997) describes: the selection and arrangement of information to organize a series of assertions to support a goal. Although the claims statements standard in patents might seem painfully redundant, this redundancy was essential for purposes of legal clarity. The claims statements bear a similar relationship in a patent application that the Statement of Work bears to a proposal.

WHAT'S IN A NAME?

Names and titles are important when it comes to selling any product. Sometimes names are euphemistic to avoid literal association with socially unpleasant realities such as death and dying. The 10-warhead MX missile is called the *Peacekeeper* and a machine gun is referred to as a *sewing machine* (Allan and Burridge, 1991). Such creative naming practices can be effective in differentiating your technical solution from a competitor's.

Other than euphemism, the patent record indicates there are additional ways where naming technical solutions can be persuasive. When it comes to naming or titling a patent, it is important today to capture the essence of the invention in as few words as possible (Pressman, 1999). There are at least two techniques: choosing words with a positive association (as opposed to neutral or negative language), and describing inventions with impressive language.

Many patents have been issued for *changes* made to existing technologies. This was true of early washing machine patents. Instead of characterizing these changes as mere differences, they were defined as "improvements" in the first few lines of each patent or, in one case, in the title of the 1823 invention, "Leavitt's Improved Washing Machine." By referring to the invention as an "improvement" rather than merely a "change," several things occur.

First, the term implies usefulness by an indirect reference to previous types of washing machines and patents. It is an *improvement* because the invention eliminates some defect or weakness in existing ways of washing by machine.
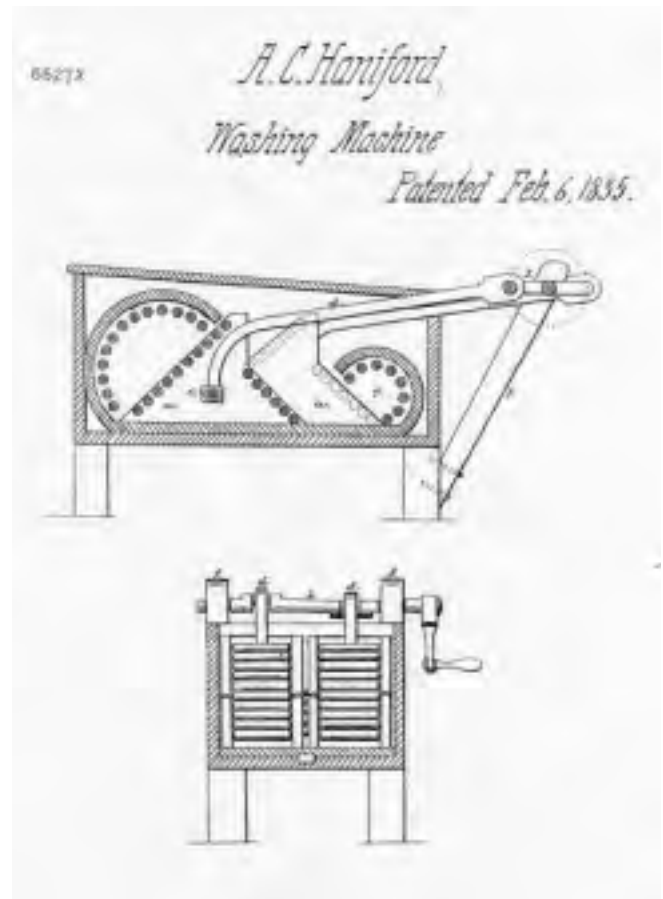
Second, the term "improvement" also supports the inventor's claim to have invented something new by bounding the invention. It is something different from and better than other existing machines for washing.

Ironically, the compound nouns that sometimes create ambiguity in text and that are the bane of clear prose (Williams, 1995) can also be used to persuade by identifying technical solutions. For instance, in 1860 Andrew Lapham defined his invention as a "revolving reversible double inclined cylindrical ribbed washing board." This dazzling, packed description calling to mind the numerous ways his invention differed from the typical washing board (how many other types of revolving reversible double inclined cylindrical ribbed washing boards could there be?).

Although superlatives are generally discouraged in proposal writing (Tepper, 1990), naming with compound nouns is consistent with accepted language practice in some environments. When meaning is not impaired, this technique may be employed to good effect, implicitly signaling "insider status" with the funding organization.

CONCLUSION

Effective persuasion involves two forms of understanding. First, the writers of a document need to understand the requirements that it must meet to be accepted. And second, to be accepted, documents must address the current perspectives and circumstances of the document's readers, who will decide if it is sufficiently persuasive. In the case of patents, we know they represent agreement between the inventor and examiner that an application completely and accurately defines a new and original invention.

When the goal is securing the intellectual property rights granted by a patent, the inventor must describe an invention so convincingly that the examiner concludes it meets certain statutory requirements. Passing through procedures, the rhetorical goal common to patents after the reinstatement of examination in 1836, entails understanding the changing requirements of the genre and the circumstances of the examiner (Bazerman, 1999).

Like technical proposals, patents can play a key role in a company's strategic position in the marketplace. The object of expert examination and close scrutiny, patents must be both persuasive and able to withstand legal challenge, as increasingly is the case with proposals.

In the case of patents, over the 19th century the "inherent accountability" of written discourse (Paradis, 1991) led applicants over time to increase the content and level of detail to persuade examiners to grant them patents. The persuasive techniques inventors employed in their applications have become widely used in technical proposals to all government agencies today, even when not about new and improved washing machines. **APMP**

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Persuasive Oral Proposal Presentations

By Gregory W. Pease

The federal government's shift to oral presentations as part of the procurement process has forced many companies to rethink their proposal efforts. Many companies still struggle with the creation and conduct of an effective oral presentation, and likely will for a long time. In that struggle, these same companies abandon many proposal skills and tools they have honed over years of developing written proposals. This article concentrates on trends that have developed in proposal presentations, and presents ideas to help make proposals more persuasive.

START WITH A GOOD FRAMEWORK

When I arrive at a company's proposal center, I am often presented with several hundred slides to review for a rather brief presentation. Of course I want to grimace. This is the same problem we proposal managers face when developing written presentations. "Just give me a section to write, and let me get started!" Very few companies think about the presentation before developing slides; in essence, they are storyboarding the presentation. I call this developing a presentation framework. If you develop a good framework (and they are easy to develop), you build slides just once. This reduces stress on your team and conserves your precious bid and proposal budget.

Using a whiteboard, I typically develop my framework to identify the topic, number of slides, time allocation, and presenter levels. From that framework, I can then figure out where I will insert persuasion points and where my themes, features/benefits, and discriminators will fall. The framework also helps me decide where to change presenters and when to introduce demonstrations or examples. Try it. It is a powerful tool.

HOW TO BE PERSUASIVE?

Here are some ideas that work:

✔ Provide a Framework

✔ Use Teamwork

✔ Think of Your Customer

✔ Provide Plain, Clear Messages

✔ Integrate Your Presentation

✔ Challenge Your Thinking

✔ Create Sensations in Show and Tell

✔ Be Relaxed When You Handle Questions and Answers

✔ Use A Coach

THINK TEAMWORK

One of the primary reasons we present oral proposals to government agencies is to help them answer the question, "*Is this the team that I want to work with for the next 'n' years?*" We often neglect the power of teamwork in developing and delivering effective and persuasive oral presentations.

From a presentation perspective, you can change the energy in the room just by changing presenters. You will refresh the customers, cause them to shift in their seats, and wake them up. You can change presenters to rest your lead presenter before delivering a persuasive and powerful summary. Changing the presenter also allows you to showcase the talent and diversity of your company or team of companies.

Your team must appear confident and poised.

Delivering a team presentation (even one that lasts an hour with three presenters) greatly helps the customer answer the government's primary question—but your team must appear confident and poised. Executing an effective team presentation requires coaching, rehearsal, and some choreography. It can make all the difference in the world.

THINK OF YOUR CUSTOMER

When reviewing presentations, you should assume the role of audience member and ask important questions like "So what?" "How does your customer view the world?" and "What does this mean to me, your customer?" Imagine your customer walking out of the presentation room and into a bank of microphones to answer media questions. If asked the question, "What do you remember about this presentation," your customer should be able to rattle off the presentation's four or five key messages.

View the world from their perspective.

Streamline voluminous irrelevant presentations into crisp presentations that sing. How can you do this? Start with the framework. Detail your key messages and where you want them to appear. Remember, in a one-hour presentation, you can only deliver about four or five clean, crisp messages. Show that you understand your customers by viewing the world from their perspective. Make sure that everything you present is tied to the customer, the procurement, and the challenge. If you think of your customer when you develop and deliver your presentation, your connection with your customer will begin and remain strong.

DON'T ENCRYPT YOUR MESSAGES

All too frequently, proposal professionals "bundle" a presentation message inside many layers of encryption, throw it at the audience, and unconsciously tell them "If you can peel back the encryption, my message will be evident." The problem is that you can't expect the audience to infer the message. You must deliver it plainly and openly to them. You have to clearly state the features of your proposal, and each feature's benefits to the customer. You have to tell them how each feature lowers their risk or saves them money, and you have to relate your experience to their current requirements.

INTEGRATE YOUR PRESENTATION

Developing a team presentation is much like developing a presentation volume. Many hands will start out contributing, then fewer, and then fewer still until the presenters are the only people left with the authority to change the content. Your presenters should always oversee the development of the media they will use. This ensures ownership by the presentation team. You cannot deliver an effective and persuasive team presentation if you develop its elements in isolation and deliver it with brick walls separating its elements. Effective oral presentations constantly refer to other elements of the presentation to demonstrate organization and unity. Technical areas should point to management and past experience, and the presentation should refer to accompanying written volumes, if any. This requires big-picture attention and begins very early in the development process and the framework.

CHALLENGE YOUR THINKING

When developing the presentation, start challenging your thinking when you first develop your framework. This should be well before your first or second interim reviews. Always invite outside critiques of your framework and presentation, and always go back to your framework before you decide to make a change in the presentation to determine impact across the presentation.

There is a right way to red team or critique the presentation. Many companies fall into the trap of rehearsing oral presentations during the proposal development cycle as a red team. They think that the rehearsal will help with the evaluation, when all it really does is showcase a tired (and possibly angry) presentation and proposal team who will

The "Murphy Foiler" Checklist

FOR WINNING PRESENTATIONS

By Thomas Leech

Whenever you are preparing an oral proposal presentation, the universe of Murphy's laws seems to mysteriously expand. This "Murphy Foiler" checklist was created by author and consultant Thomas Leech for all those facing the anxiety of planning a presentation or making a speech.

Thomas Leech is Principal of Thomas Leech & Associates, a consulting firm started in 1980 following Mr. Leech's 20-year career in business development, engineering and communications with General Dynamics. Based in San Diego, California, Leech provides presentation coaching, training seminars and conference programs to major organizations nationwide. He is the author of *How to Prepare, Stage & Deliver Winning Presentations*, joint author of *The Nine Keys to Winning Proposals*, and is a faculty member of University of California at San Diego Extension Executive Programs. Phone 619-74-5668. E-mail: winpres@aol.com.

✔ **Verify 1-7 days before:**

- ❏ Logistics (time, place, directions, parking)
- ❏ Gear (audiovisual, remotes, screens, sound/mike)
- ❏ Lectern, support tables, projector stands
- ❏ Layout (seating/gear), power, controls
- ❏ Projection visibility, lighting, obstructions
- ❏ Incidentals (refreshments, name tags, etc.)

✔ **Take with you:**

- ❏ A/V material (slides, viewgraphs, demos, cassettes, backups)
- ❏ Delivery notes, manuscript
- ❏ Distribution (literature, charts, brochures, forms, notepads)
- ❏ Gadgets (pointer, markers, timer, signal cards)
- ❏ Feedback/evaluation forms
- ❏ Business cards

✔ **Test 1 day before:**

- ❏ Materials and equipment
- ❏ Operations/Delivery
- ❏ Timing

✔ **Showtime—30-60 min. Check:**

- ❏ Projectors (power, alignment, backup bulbs, controls)
- ❏ Visibility (lighting, dimming, controls)
- ❏ Comfort (thermostat, ventilation)
- ❏ Sound (PA, mike, controls)
- ❏ Room layout, lectern

never deliver the presentation effectively. Does that mean you shouldn't red team the presentation? Of course not. You should perform the red team review, but focus that review on compliance checks of the presentation media that challenge your thinking. Submit the proposal, then conduct presentation training and coached rehearsals with a fully rested presentation staff.

Don't script your presentation. You will not maintain a persuasive connection with your audience if you read a script. Coaching will help you say what you want to say, and when and how you want to say it.

SHOW AND TELL

The retail industry constantly researches their consumers to note trends and gain advantages in the marketplace. This industry notes every year that customers are more likely to buy when they can employ more senses in the buying process—touch, sight, hearing, etc. We who develop and deliver presentations can learn a key lesson from retailers. Presenters should demonstrate features and benefits, hand out materials, and provide vivid examples. This method of Show and Tell in the presentation can be a powerful discriminator. Holding up a product, handing out a product or document, or demonstrating a system will all help the customer reach a better understand of our presentation. This approach increases customer security, making them more likely to buy. It also helps bring life to our presentations and adds a valuable dimension.

QUESTIONS AND ANSWERS

You can win or lose your proposal based on how you handle the question and answer session. The chance to interact with the audience and evaluation board can add greatly to your presentation's strength and persuasiveness. How do you pull off a strong question and answer session?

- First, RELAX.
- Second, keep it informal and conversational. Be aware of body language and the energy exchange that occurs between your presentation team and the evaluation board.
- Third, rehearse. During every presentation rehearsal, also rehearse the question and answer session. Your team will get an idea of just how tired they may become.
- Fourth, remember teamwork. Answer questions as a team. You should spend almost as much time rehearsing the question and answer session as you do the presentation. You should immediately

address the embarrassing questions to ensure that your team knows how to react.

GET A COACH

If your company has trouble developing and delivering a winning, persuasive oral presentation, using a presentation coach may help you win.

Be aware, however, that there is an iceberg effect at work here. The techniques discussed above constitute only about five percent of a winning presentation. A winning presentation consists of much more than slides, presenters, and a facility. To win, your team must have control over all aspects of the presentation and know what to do and when to do it. However, you can deliver a winning presentation that persuades your audience if you exercise control over all presentation aspects, and concisely deliver your messages.

Gregory W. Pease brings over ten years oral presentation and proposal experience to serve customers in all industries. A graduate of the U.S. Naval Academy (BS) and Johns Hopkins University (MS), he combines his technical, management, and proposal/ presentation skills to develop and coach winning oral presentations. He can be reached at mycoach@bellatlantic.net.

Conquer Speaking Faults and Succeed as a Team

Your role as a speaker is to make your information and your message interesting and meaningful to your listeners. The more interesting your message, the more people will listen. The more meaningful the message, the more persuasive it will be. Any team that embraces and perfects these concepts will be a winning team.

By Dorothy Leeds

How does a basketball team win a game? By making the most baskets, of course. How do they do that? There are two basic factors to a basketball team's success—each individual player's ability, and the cohesiveness of all players as a team. It is the individual that scores the points, but it is the team that passes the ball, guards, and blocks. Every player on the court is dependent on the others. One player can score many points, but only a team can win a game.

Like a basketball team, the individuals on a proposal presentation team have a common goal—winning. If each person plays his part well, the team will win. The tough part for both kinds of teams is achieving unity and congruence.

This is usually the downfall of most teams. Although it is much harder to deliver a team presentation, less time is devoted to the team effort. People think they have less responsibility in a team presentation than if they were presenting on their own. What's the reality? The individual presenters must be persuasive and powerful on their own, but they must also work to the greater purpose.

This dichotomy makes giving persuasive team presentations a difficult, but not insurmountable, task. It takes much planning and practice. The effect each presenter has on the audience must be evaluated along with the effect of the entire presentation.

In this article, I will concentrate first on how a speaker (alone or as a member of a team) can be more persuasive by avoiding six major speaking faults. I will then focus on key strategies after the team is assembled. As a group, the faults usually lie in a lack of preparation and practice, and in not realizing the amount of stage managing and planning involved. I will give you tips on how to be well-rehearsed and persuasive.

THE SIX MAJOR SPEAKING FAULTS

In a team presentation, each speaker must be excellent. This is easier said than done. The media pressures us all to be better presenters, whether our presentations are stand-alone or team efforts. Audience expectations are greater today, and no matter what our job titles, we must be a better communicator than we were in years past. Attention spans are shorter today, with audience members weaned on the refined presentation styles and fantastic visual effects of modern movies and television. To gain and keep our audience's attention, we must use new and different methods.

Our research and experience show that six major speaking faults occur over and over again. They are committed by individual presenters and teams alike. If any one of these faults is present—even if you are doing everything else

right—your talk loses most of its effectiveness. This fault system works because people learn just as effectively, and often more quickly, if they focus on what to avoid, rather than study a long list of things they need to do right.

Fault #1: An Unclear Purpose

A well-thought out purpose is so elemental it is often overlooked. Have you ever sat in an audience and asked yourself when the speaker was going to get to the point? Have you ever heard a speech just drift on and on—along with the audience? The subject may be compelling, the speaker even charismatic, but without the focus of a clear purpose, the speaker fails to lead the audience.

The purpose of your presentation is what you want to leave in the minds of your audience, and what you want them to do as a result of hearing you. Don't confuse purpose with title or subject. They can be very different. For example:

Title:	Use a Hard Hat and Save Your Life
Subject:	The benefits of XYZ Hard Hats and the importance of following safety procedures on the job
Purpose:	Convince people to purchase and wear XYZ hard hats in all designated areas.

On a general level, the six main purposes of a speech are to:

1. Inform.
2. Instruct.
3. Entertain.
4. Stimulate.
5. Convince.
6. Activate.

It's quite possible your purpose will involve a combination of these goals. If so, which one is paramount? And how does the purpose defined for the team flow down to the purpose for each individual presenter?

Before you give your next in-house talk or chair a meeting, write a sentence that you feel describes your purpose. After you deliver your presentation, ask the listeners what your purpose was. See how closely what they say matches what you wrote. If it doesn't match, you need to work harder on making the content of your presentation support and evoke the purpose you had in mind.

Fault #2: Lack Of Clear Organization and Leadership

Do your presentations flow logically from one point to another? A poorly organized presentation wreaks havoc with even the most compelling ideas. Nothing lessens your leadership potential faster than disorganization. Good organization also helps prevent audience boredom; the people in your audience don't have to wonder where you are going if they see that you are proceeding there logically. They remain focused on your ideas and don't get sidetracked. They put themselves in your hands much more willingly if they sense that you know where you're going, and how you're going to get there.

The best way to organize your speech is to start with a good outline. An outline compels you to analyze your logic, by revealing any gaps in your reasoning.

You may be tempted to cover many items, all seeming to be of equal importance (see Fault #3 below). That's an understandable impulse; you don't want to leave out key facts or topics. Nevertheless, you must establish priorities. First identify the three or four major points that need to be covered; then, in your outline, establish subheads to provide the framework people can use to absorb information about each point.

Fault #3: Too Much Information

Trying to "stuff" too much information into one presentation is the fault committed more than any other. Faced with an expectant audience, speakers feel they have to provide as much detailed information as they can. However, audience overload occurs very quickly. The fact is that people retain 3 or 4 main points—illustrated and explained—better than they do myriad bits of supporting information. Instead of bolstering your listeners, excess facts just bog them down.

For practice, take out your last presentation. Imagine you are the last speaker of the day and have only three minutes to deliver it. Jot down each key point you must make, and note what you can eliminate.

Short is best. The next time you are even tempted to cover too much remember that the Gettysburg Address has only 264 words.

Fault #4: Not Enough Support for Your Ideas, Concepts and Information

In America they say you can never be too thin or too rich. As speakers we need to be thin in information but rich in support for that information. It's hard to sustain your listeners' involvement if you go straight through your presentation making point after point. In order to sustain interest, you need to support your major points with examples, anecdotes, and other devices throughout your talk. Vivid language, colorful stories, and famous sources wake up your listeners and earn their attention.

Here is an important, simple to use piece of information that will really aid you in speaking powerfully. For all your major points, do this: Make your point, give a descriptive example, and then remake the point as creatively as possible. That's the PEP formula for success: Point, Example, Point. You're taking advantage of how people learn: through repetition and illustration. Recently I was reading an article about a probe going up to Jupiter at one hundred and six thousand miles an hour. It seemed incomprehensible, and my interest might have been lost. But the writer used PEP and the next sentence grabbed me right back—that's like going from NY to San Francisco in a minute and a half. Wow! What a vivid example.

You keep listeners involved during your presentation if you apply PEP every three or four minutes.

Fault #5: Monotonous Voice and Sloppy Speech

Many business people—even top executives—have monotonous voices. Our voices are our calling cards. Over the phone, they are responsible for the entire impression we make on our listeners. Yet the sound of our voices is something we rarely consider. A monotonous tone, mumbling, lack of clarity, and poor enunciation leave the listener noticing the voice and not the words. Although there are many voice pitfalls we can fall into, there are also many steps we can use to assure us of clear and effective communications:

- Use a warm, resonant voice. Strive for a clear, ringing tone and speak with vigor.

- Build your point vocally. Add emphasis and drama by stressing the most important words and phrases.

- Vary your pitch, force, volume, rate, and rhythm.

- Have enough breath to finish each sentence on a strong note.

- Do not drop consonants (e.g., gonna, runnin', etc.).

- Avoid "oh," "uh," "OK" and "you know."

- Use pauses for emphasis, effect, and mood.

- Make sure your voice rises when you ask questions and falls when you make statements.

- Use emphasis, pauses, inflections, changing pitch, and loudness to shade what you have to say.

- Use colorful language, which helps your voice become more lively. It is hard to say "bamboozled" in a boring way.

Women have a major advantage here, for we tend to have more varied and interesting voices. Clearly this is one area where we don't want to emulate men, for many of them have what I call "cultural lockjaw." They imitate the Clint Eastwood style of speaking and hardly move their articulators, which results in a boring and monotonous voice. Men, do not be daunted—you do have a major vocal advantage! Male voices are deeper and more commanding, which can only help in the business of persuading.

Always follow my motto: Never Be Boring. If you are boring, you are not communicating.

Fault #6: Not Meeting the Real Needs of Your Audience

I once heard a woman at a conference give a speech on what new associations could do to grow and be valuable to members. She had an audience that really cared about the topic; people had signed up for it specifically. She did herself a disser-

vice by meandering, going off on tangents, and seldom finishing a thought. She said "You know" about 75 times in a 45 minute presentation. But because she met the needs of her audience, she got a standing ovation. They felt she cared about them and understood what interested them. That is how important it is to be tuned in to your audience: If you are, even a poorly delivered speech can be well received; if you're not, even a polished one can fall flat.

A surprising number of presentations simply don't meet the real needs of the listeners. The chief reason: the speaker feels it is enough to tell people something the speaker thinks they need to know—whether or not it matches the listeners' interest. Your listeners are potential skeptics, and your task is to win them over.

Since people do things for their own reasons, you must motivate them from their perspective, not from yours. If you speak to *their* real needs, they'll be compelled to listen. Every person you talk to is thinking, "Why should I listen to this?" You can anticipate this built-in bias by always thinking, "What benefit(s) can I offer these particular listeners?"

Now that you know the six major speaking faults, you can work to correct each one and never worry again about losing your audience. These faults are closely linked; improve in one area and you almost automatically improve in the next. Of course, it takes patience and practice to truly hone your speaking abilities. But recognizing and eliminating these six major speaking faults will give you a competitive edge and help you to make an impact each time you speak, whether it is on the phone to one client or on a team in front of hundreds.

TEAMING WITH PERSUASIVE IDEAS

Now that each speaker has added power and persuasion to his/her own presentation skills, the team needs to bring all that wonderful speaking ability together and turn it into a powerful, persuasive team presentation. The advantages to team presentations are endless. Not only do you have the brains of many people, you also have their collective talent. If one person falls short in a certain area of presenting (for example, he isn't able to deliver financial reports and be engaging at the same time), another can pick up. But that doesn't lessen each individual's responsibility to the team. A team presentation can be quite a time commitment, but it is imperative to the success and persuasiveness of the presentation that the group meets regularly to plan and rehearse.

The Plan's The Thing

Without planning, the group members will lose direction. Without planning, it is easy to wind up with many separate presentations, rather than one that is strong and cohesive.

When the group is assembled for planning, these are the points to cover:

Define Team Purpose: Each person should know the purpose of the team presentation. Why you are working together should be clear. This includes the people who assist you behind the scenes.

Delegate Roles: The group should assess each member's abilities, strengths, weaknesses, and background. A serious, monotoned speaker cannot be expected to deliver the rousing and memorable conclusion; a more energetic member of the crew should do that.

Define Individual Purposes: As a group, help each team member develop his/her individual purpose, and how that purpose contributes to the overall purpose.

Map Out A Logical Agenda: Decide who goes when and for how long. Keep in mind your audience, the group's time restraints, which part is the most important, and what needs to be said.

Orchestrate Introductions: You have several options for introducing speakers. You can introduce everyone at the beginning or wait until individual presenters are about to begin. You can briefly introduce everyone in the beginning, and then do a more in-depth introduction right before each person speaks. Introducing a speaker right before his speech serves as a good transition between speakers. "Here is Joan Smith. She will enhance the points Jack made and how they apply specifically to your situation. She is highly qualified to do this since she was a client of ours and knows how this applies across the board" serves both as an introduction and a transition.

Vary Your Visual Aids: The visual aids for all team members should look like they were designed by one person. It is not good to have catchy, computerized visual aids for one person if hand-drawn transparencies are used by someone else. Consistency is important! Here are some key points to remember when designing and using your visual aids:

- Don't read the visual aids — editorialize them.

- If you want to maintain maximum eye contact with your audience, you must know your visual so well that you talk to your listeners, not to it.

- Transitions before and after a visual aid must be interesting, varied, and directive.

- Vary your visual aids. Don't follow a pattern. Provide some change in the design of your visuals every 3-4 minutes.

Leadership As A Function Of Power

Gary Yukl's research on leadership provides us with insights into the use of power and how its components can influence the behavior of subordinates and peers.

By R. Dennis Green

How can power be used to influence behavior? How many types of power exist? Which are most likely to produce the compliance and commitment we seek from subordinates and peers? These kinds of questions have been studied and discussed for centuries. A scholarly analysis of recent research is offered by Gary A. Yukl, State University of New York at Albany, in his several textbooks on leadership. Specifically, his textbook, *Leadership in Organizations*, Second Edition, published in 1989, reviewed the research to date on power and how it influences behavior and leadership effectiveness. Two of his tables on the subject and selected short excerpts are included here.

Yukl considered whether effective leaders have more power or different sources of power than ineffective leaders, and whether they exercise power in different ways. His findings are particularly germane to proposal management professionals who may correlate persuasion and influence as one and the same.

RESEARCH ON POWER AND EFFECTIVENESS

Yukl found that most research classified five different types of leader power, relying upon the power taxonomy proposed by French and Raven in their *Studies of Social Power*. Their classifications are listed in Table 1 on the following page.

Table 1. **Power Taxonomy**

Type of Power	Description
Reward power	The target person complies in order to obtain rewards he or she believes are controlled by the agent.
Coercive power	The target person complies in order to avoid punishments he or she believes are controlled by the agent.
Legitimate power	The target person complies because he or she believes the agent has the right to make the request and the target person has the obligation to comply.
Expert power	The target person complies because he or she believes that the agent has special knowledge about the best way to do something.
Referent power	The target person complies because he or she admires or identifies with the agent and wants to gain the agent's approval.

Taxonomy from J. French & B.H. Raven, *Studies of Social Power*, Institute for Social Research, Ann Arbor, MI (1959).

GUIDELINES FOR INFLUENCING SUBORDINATES

How do these types of power influence behavior and what type of outcome does each produce? Yukl's findings are summarized in Table 2. "By drawing upon a diverse literature in the social sciences that includes research on power, leader behavior, motivation, communication, counseling, supervision, and conflict resolution, it is possible to develop some tentative guidelines for leaders," he writes. "These guidelines vary in degree of empirical support; some are fairly well supported, while others are mostly speculative. However, for managers faced with the immediate necessity of influencing others, the guidelines provide the best advice possible… The guidelines are usually phrased in terms of leader influence attempts with subordinates… but most of the principles' underlying guidelines apply equally well to influence attempts with peers, and many apply to influence attempts with superiors."

Clearly, as persuaders, we have an interest in gaining compliance with our requests and objectives. **Compliance** is one of three potential outcomes. The two types of power most likely to produce compliance are *reward power* and *legitimate* or *position power*, such as that attendant to positions of manager or chief.

In the context of **legitimate power**, Yukl explains that authority is exercised by making a legitimate request, either verbally or in written form. A polite request is more effective than an arrogant demand. Compliance with the request is more likely if it is perceived to be within the leader's scope of authority. An illegitimate request is likely to be ignored, or otherwise resisted, especially if the requested

activity is tedious, dangerous, or unpleasant. Legitimate requests should be made in a clear, concise manner, using language that the target person can easily understand.

Reward power is most commonly used by making an explicit or implicit promise to give a person something under the leader's control for carrying out a request or performing a task. Compliance is most likely if the reward is something valued by the target person. Recent research also suggests that effective managers provide sincere, public recognition to subordinates in the form of awards, ceremonies and special symbols. Significant rewards accompany the recognition, but the focus is on the person's contributions and achievements, not on the reward. Used in this way, reward power can be a source of increased referent power over time.

Commitment is an even more desirable outcome because of the trust and emotional pledge that it engenders. Commitment is most likely when the powers used are expert and referential.

Expert power "is commonly exercised in the form of rational persuasion. The leader presents logical arguments and supporting evidence for a particular proposal, plan, or request. Success depends on the leader's credibility and persuasive communication skills in addition to technical knowledge and logical or analytical ability. Proposals or requests should be made in a confident manner, and the leader should avoid making contradictory statements or vacillating between inconsistent positions."

Expert power is based on a knowledge differential between the leader and the target person. Rational persuasion is most effective when the target person shares the leader's objectives.

Table 2. **Sources of Leader Influence over Subordinates and Likely Outcomes**

Source of Leader Influence	Type of Outcome		
	Commitment	Compliance	Resistance
Reward Power	Possible—if used in a subtle, very personal way	LIKELY*—if used in a mechanical, impersonal way	Possible—if used in a manipulative, arrogant way
Coercive Power	Very unlikely	Possible—if used in a helpful, non-punitive way	LIKELY*—if used in a hostile or manipulative way
Legitimate Power (or "Position" Power)	Possible—if request is polite and very appropriate	LIKELY*—if request or order is seen as legitimate	Possible—if arrogant demands are made or request does not appear proper
Expert Power (or "Skill" Power)	LIKELY*—if request is persuasive and subordinates share leader's task goals	Possible—if request is persuasive but subordinates are apathetic about task goals	Possible—if leader is arrogant and insulting, or sub ordinates oppose task goals
Referent Power (or "Friendship")	LIKELY*—if request is believed to be important to leader	Possible—if request is perceived to be unimportant to leader	Possible—if request is for something that will bring harm to leader

*Indicates most common outcome.

"The most common way to exercise *referent power* is merely to ask the target person with whom one has a friendship to do something… It is useful to indicate the importance of the request because a request that is important to the leader is more likely to result in subordinate commitment."

Resistance is the most likely outcome when *coercive power* is used by a leader. "It is best to avoid using coercion except when absolutely necessary, because it is difficult to use and it is likely to result in undesirable side effects such as anxiety and resentment. In work organizations, the most appropriate use of coercion is to deter behavior that is very detrimental to the organization, such as illegal activities, theft, violation of safety rules, reckless behavior that endangers others, and direct disobedience of legitimate requests."

YUKL'S SUMMARY

"Research on the use of different forms of power by leaders suggests that effective leaders rely more on personal power than on position power. Nevertheless, position power is still important, and it interacts in complex ways with personal power to determine a leader's influence on subordinates. The potential to use position power for influence attempts with peers or superiors is much more limited, and here personal power is clearly the predominant source of influence."

"Descriptive research on influence behavior usually deals with influence tactics such as rational persuasion, exchange tactics, pressure tactics, legitimate requests, and personal

appeals (including ingratiation). The research finds that the selection of influence tactics varies with the relative status of the target person and the purpose of the influence attempt."

"The success of an influence attempt depends greatly on the manner in which power is exercised. Effective leaders are likely to use power in a subtle, careful fashion that minimizes status differentials and avoids threats to the target person's self esteem. In contrast, leaders who exercise power in an arrogant, manipulative, domineering manner are likely to engender resistance."

"The amount of position power necessary for leader effectiveness depends on the nature of the organization, task, and subordinates. A leader with extensive reward and coercive power is tempted to rely on them excessively, instead of using referent and expert power. This path leads to resentment and rebellion. On the other hand, a leader lacking sufficient position power to reward competent subordinates, make necessary changes, and punish chronic troublemakers will find it difficult to develop a high-performing group." **APMP**

- If you can, build suspense through your transitions. Be like the author at the end of each chapter in a mystery or thriller. Attention will be greater.

- Follow the PEP formula for each major point made.

- Since your voice is so important, add additional vocal power and variety when using visual aids.

Most important, remember that each visual aid or page in your proposal is a mini-presentation. It demands an opening and a closing. Fully orient your audience to the visual before showing it. You are not there to read the visual aid! Visual aids are an aid to your presentation. They do not stand alone.

Handle Questions and Interruptions: It is good to maintain consistency throughout the team presentation. A team captain should be in charge of the questioning procedure. He/she should field questions appropriately. If the client is flexible, your group can accept questions all at once at the very end of the entire presentation, or after each individual speaks. A more challenging but often effective option is to handle questions as they arise. Similar options apply for your handouts. Decide beforehand when and how handouts will be distributed, and by whom. It will help to determine whether audience members will be free to come and go as they please (this may be unavoidable in a client's busy office), or whether they intend to remain throughout the presentation.

Plan Transitions: Comfortable and impacting transitions ("or passing the baton") can make the difference between a so-so presentation and an outstanding one. There are three types of transition: Verbal, Vocal, and Visual. Personnel introductions are an example of verbal transitions. Vocally, you can pause or raise or lower your voice. If you want a visual transition, try moving to a different part of the stage, or taking off your glasses and looking directly at the audience.

Regular group meetings are a must, and they should happen well in advance of the actual presentation. Team members should come to these meetings prepared to give a report on their progress; inform the group about their part's outline; identify any numbers, stories, or examples they will be using; and state how they will start and end their section. Each part should flow easily and subtly into the next section. These meetings are the time to make sure they do.

Rehearse, Run Through, and Repeat

How do you get to Carnegie Hall? Practice. Practice. Practice. How do you give a great presentation? Pay special attention to the presentation's introduction and conclusion, and the transitions between each section. Practice not only presenting the talk, but also standing and moving during it. Team members don't want to be bumbling and bumping into one another. That looks unprofessional and disorganized.

Audiences will note and appreciate effective, seamless transitions. When time is lost rearranging visual aids or microphones, or walking around one another, the attention of your audience can be lost.

Look, act, practice, and perform like a team. The entire team should be "onstage" throughout the presentation. A winning team is one on which every team member contributes. Support each other at all times if you want the audience to see you as a coherent, professional group. Don't talk on the side or engage in distracting actions when your teammates have the stage.

Test your presentation in front of an audience of co-workers and colleagues—as long as they are not connected in any way to your presentation. They must also be a group of people who will not feel hesitant about offering constructive criticism. Before you rehearse your presentation in front of them, ask them to write down their expectations for the talk. Afterwards, have an evaluation form on hand to fill out. Make sure it covers whether their expectations were met, what the purpose of the presentation was from their perspective, and if there was any information they thought was excessive or left out. Videotape the rehearsal and play it back, so you can see how you are perceived and fix any trouble spots.

If team members hone their personal presenting skills and avoid the six major speaking faults, they will be persuasive and powerful presenters. If the team as a whole plans thoroughly, meets regularly, rehearses vigorously, and delivers persuasively, the team's presentation will outshine the competition, and you will be in a great position to win the contract. **APMP**

Dorothy Leeds is President of Organization Technologies, Inc., a management and sales consulting firm based in New York City. She is author of *PowerSpeak* and *Smart Questions: A New Strategy for Successful Managers*. Her experience includes 18 years of teaching and more than 15 years consulting with professionals. She has given hundreds of workshops and trained more than 10,000 executives. She can be reached through her office at 800 West End Avenue, Suite 10A, New York, New York 10025. Phone 212-864-2424.

Book Reviews

Nancy Brome and Paul Giguere

Book Review Editors

This issue features books on the visual display of information, proposal strategies for small business and style. All books have been reviewed by a member of APMP. The opinions expressed by reviewers are their own and do not represent the views of the Association of Proposal Management Professionals. Book review recommendations are welcomed by the book review editors.

SUCCESSFUL PROPOSAL STRATEGIES FOR SMALL BUSINESSES

Reviewed by Nancy J. Brome

Sr. Proposal Coordinator, Blue Cross and Blue Shield of New Hampshire

Successful Proposal Strategies for Small Businesses: Winning Government, Private Sector, and International Contracts, by Robert S. Frey, Norwood, MA: Artech House, Inc., 1997, 302 pp. $59.00, 0-89006-935-2

Robert S. Frey has more than 10 years of proposal writing experience. His experience is primarily in the federal contracting arena, specifically under the Small Business Administration's 8(a) program. Clearly, Frey has the background and knowledge to be considered an expert in his field. This, Frey's fourth book, makes a valuable contribution in revealing the mystery of government proposals. Frey states that the book serves as "a users manual consulted frequently for suggestions and guidance throughout the proposal planning and response process." His book is perfectly suited to acting as a reference document. It includes explanations of the many regulations that oversee government response documents.

This easy and fun to read book does a fine job explaining the importance of proposals as sales tools, and how proposals relate to the corporate bottom line. A theme running through the entire book is summarized by the following quote: "A proposal is, first and foremost, a sales document. To be sure, it includes a host of technical, programmatic, institutional, pricing, and certification information, but it must remain sales oriented." Starting with this premise, the text then walks the reader through the maze that comprises federal/government acquisitions. Frey presents this knowledge in an interesting introduction, 15 chapters, 5 appendices, and a helpful list of acronyms. Chapter subjects include business strategies, the federal acquisition process, proposal components, proposal costs, and writing and editing. Included in each chapter are many well thought out, well placed figures that complement the chapter verbiage. Useful figures include sample government forms/solicitations, timelines, proposal components, and other practical visuals.

This book is best suited for proposal managers in small businesses who respond to government RFPs.

Chapter 8, *The Role of the Proposal Manager*, will be of particular interest to companies who have an undersized proposal staff. This chapter covers the unique challenges that small proposal units face.

The review process is fully explained in Chapter 5, wherein all "color" teams are defined by stating their purpose and appropriate team members.

International proposals are covered very briefly in Chapter 9. Although "international" is listed in the title of the book, this chapter provides only a high level, general overview of international proposals. An organization engaged in global proposal responses will need to supplement Chapter 9 to fully understand the foreign market place.

Overall, I enjoyed reading *Successful Proposal Strategies for Small Businesses (Winning Government, Private Sector, and International Contracts)*. It takes a talented and knowledgeable author to turn the government proposal process into pleasurable reading. I recommend this book for anyone hoping to do business with the federal government.

FRANKLIN COVEY STYLE GUIDE

Reviewed by Paul M. Giguere

Proposal Development Coordinator, Blue Cross and Blue Shield of New Hampshire

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Franklin Covey Style Guide for Business and Technical Communication, Salt Lake City, UT: Franklin Covey Co: July 1997 (Second Printing). 440 pp. $49.95 0-9652481-1-9

A style guide is an important tool for proposal writers. It helps guide us through the many and difficult rules of the English language, and above all, assists us in communicating a clear message to potential clients.

Selecting a style guide is no easy task. There are many to choose from, and all follow the same grammar basics. Style guides range from the *American Writers Association's Style Guide* to the *Chicago Manual of Style*, and from the *Longman Handbook for Writers and Readers* to *The Complete Idiots Guide to Grammar and Style*, to name but a few of the many available. A key word search using "style" and "guide" of the Barnes and Noble online database (www.barnesandnoble.com) produces more than 60 different style guides.

I recently had the pleasure of becoming familiar with the *Style Guide* by Franklin Covey Publishing Company, formerly known as the *Shipley Associates Style Guide*. This guide is specifically designed for the proposal writer. Topics are arranged alphabeti-

cally and in a user-friendly format for quick reference.

In an easy to use format, each section contains a list of grammar rules pertaining to the given topic (e.g., capitals, commas, semi-colons, etc.). With each rule, the guide presents clear and precise examples for quick reader comprehension. A summary of the covered topic's rules is outlined in a shaded area on the page for quick review.

In addition to grammar and punctuation rules (as many realize, the rules of punctuation differ slightly from industry to industry, and even from writer to writer), the guide addresses other areas of interest to the proposal writer. Writing techniques such as repetition, bias-free language, formal versus informal writing, and redundancies in writing are among the topics addressed. The guide also describes rules governing lists, numbers, paragraphs, tables of contents, photographs, and color schemes. Twenty-three pages are dedicated to the effective use of graphics in proposals. The editor states that "Graphics are one of the best devices writers have to emphasize information," and provides complete details on the use of graphics in documents and presentations.

The guide also discusses proper telephone and meeting skills. It covers techniques for memos, letters, online documentation, page layout, oral presentations, and project management. Furthermore, the guide provides a section on writing summaries. While the guide provides excellent details on how to write an executive summary, I wish it had provided examples of executive summaries to complement the techniques presented.

The guide also provides a nicely detailed section on Intellectual Property. It provides a clear understanding for the proposal writer about when to use the various symbols (TM, ®, ©, and SM) and the rules governing the use of copyrighted materials.

Many other topics and techniques are covered. For a modest price of $49.95, the *Franklin Covey Style Guide* is a nice investment for a proposal writer's reference library.

VISUAL EXPLANATIONS

Reviewed by Dr. Jayme A. Sokolow

President, The Development Source, Inc.

Visual Explanations: Images and Quantities, Evidence and Narrative By Edward R. Tufte, Cheshire, CT: Graphics Press, 1997. 156pp. $45.00 09613921-2-8

Over the last decade, Edward R. Tufte has developed a national reputation for his original and handsomely illustrated books on the visual display of information. In each book, his goal is the same: to help people depict information visually in insightful ways.

Tufte, who teaches statistical evidence and information design at Yale University, states that *Visual Explanations* "is about *pictures of verbs*, the representation of mechanism and motion, of process and dynamics, of causes and effects, of explanation and narrative. Since such displays are often used to reach conclusions and make decisions, there is a special concern with the integrity of the content and design."

His guiding principle is deceptively simple. According to him, "clarity and excellence in thinking is very much like clarity and excellence in the display of data. When principles of design

replicate principles of thought, the act of arranging information becomes an act of insight." From cave painters to the present, Tufte thinks that the most profound and central issue in the depiction of information is the challenge of representing three or more dimensions of data on a two-dimensional surface. *Visual Explanations* is designed to help us address this challenge.

After an introductory chapter on the display of quantitative evidence, Tufte devotes most of his book to two topics: 1) displaying statistical evidence to make decisions, and 2) pictorial instructions. His first major example comes from Dr. John Snow's *On the Mode of Communication of Cholera* (1855), a study of the great 1854 London cholera epidemic. Tufte shows how Dr. Snow brilliantly used maps and other forms of visual evidence to demonstrate that cholera was being spread from a single community pump in a bad neighborhood. Once Dr. Snow convinced the Board of Guardians of St. James's Parish, the Board removed the pump-handle and the epidemic quickly subsided.

Tufte's second example comes from a more recent event—the January 28, 1986 explosion of the Challenger space shuttle. Seven astronauts died when two rubber O-rings leaked due to cold weather. Tufte explains how the engineers who designed the rocket tried to convince NASA to abort the launch by using visuals. They failed, he argues, because the visual evidence they presented was neither clear nor compelling. In their charts and graphs, the engineers failed to make a clear connection between the probable degradation of the O-ring seal and the outside temperature.

Finally, on a lighter note Tufte takes an admiring look at magicians' manuals. He considers them a model for the visual display of information because they teach the art of illusion by using pictures and diagrams with such success.

The basic theme of *Visual Explanations* is that there are effective and ineffective ways to display data. Some reveal relationships, others do not.

After reading Tufte, proposal managers will never look at information in the same way again. In *Visual Explanations*, there is a fascinating illustration and an insightful explanation on almost every page. This very entertaining and informative book can help proposal managers use visual evidence to develop more persuasive arguments.

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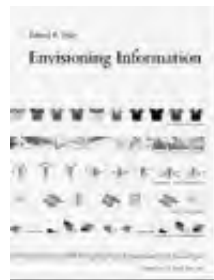
ENVISIONING INFORMATION

Reviewed by Dr. Jayme A. Sokolow

President,
The Development Source, Inc.

Envisioning Information by Edward R. Tufte, Cheshire, CT: Graphics Press, 1990. Sixth Printing February 1998, 126pp. $48.00, 0-9613921-1-8

According to Edward Tufte, *Envisioning Information* "is about pictures of nouns (maps and aerial photographs, for example, consist of a great many nouns lying on the ground). Envisioning also deals with visual strategies for design: color, layering, and interaction effects."

Tufte presents his readers with a deceptively simple goal. On paper, all communications take place in a static and staid two-dimensional environment he calls flatland. But the world is complex, dynamic, and multidimensional. Tufte's solution is to escape flatland by using pictures effectively.

Tufte is very creative when it comes to the display of visual evidence. *Envisioning Information* contains numerous examples from such sources as train schedules, pictorial guides to Japanese shrines, 16th century illustrations about Euclid's geometry, patterns of Renaissance dances, and charts of contemporary law school aptitude test results. The result is dizzying. The entire visual world is Tufte's oyster, and he uses an incredibly wide variety of pictures to make his points in original ways.

According to Tufte, the history of information display and statistical graphics centers around ways to present information in all its density, complexity, and beauty. Good visual displays, he passionately argues, should encourage a diversity of viewer understandings. In his words, "unlike speech, visual displays are simultaneously a wideband and a perceiver-controllable channel."

Tufte illustrates this point by examining five kinds of visual displays: micro/macro readings; layering and separation; small multiples; color and information; and narratives of space and time. Through his analysis, Tufte shows us why some visual displays are more persuasive and memorable than others.

Although Tufte never addresses proposals in his book, his guidance is relevant to those in our profession.

Our task, he would argue, is to create informative visual approaches to display the huge amounts of information found in our proposals. After reading *Envisioning Information*, this task becomes a little easier. **APMP**

Proposal Products

ANOTHER GREAT PROPOSAL AUTOMATION TOOL

In addition to the vendors and products featured in our Spring 1999 issue, here is another product you should look into — ProPricer from Executive Business Services. ProPricer has been a leading cost volume generation software program since its introduction in 1984. Consider this product as another potential solution when assessing your own internal product needs.

Product Name	ProPricer v.8.3
VENDOR	Executive Business Services 5473 Kearny Villa Road, Suite 210 San Diego, CA 92123 Voice: 858-279-6005 Fax: 858-279-6183 Email: fjordan@propricer.com Web: www.propricer.com
PLATFORM / CONFIGURATION	Windows, Windows NT, Novell: Standalone or Network
DESCRIPTION	ProPricer is a cost volume preparation software package designed for unlimited data, SOW, BOE, WBS, materials, CERs factors and libraries. ProPricer uses a unique user interface designed to give the user the flexibility of a spreadsheet while maintaining the power of COTS software.
INTRODUCTION/MATURITY	First introduced in 1984. Current version: 8.3. Installed customer base: 300+
TRAINING AND SUPPORT	Customer service available 24 hours a day, 365 days a year Product guaranteed to be free from program defects
FEATURES / CAPABILITIES	Software estimating capability Materials/hardware estimating capability Work breakdown structure (WBS) correlation Correlation/link to standard applications (Microsoft Office) Both Government and commercial applications
PRICING	Base price: $9,700 single user / Multi-user prices vary, based on number of users.
REMARKS	Information considered reliable but not guaranteed. Prices current as of August 1999. Please contact vendor for additional information, pricing, and features specific to your need.

Proposal Room Wall Hanging Systems – Tailor to Suit

Proposal managers have long known the benefits of displaying their evolving proposals on the wall. Managers can audit completion, assess maturity, and identify missing components at a glance. Fellow team members and authors can perform data integrity and cross-reference checks just by going to the walls. These benefits accrue whether your proposal is at the storyboard stage, midway through development, or close to completion.

By Nancy L. Nix-Karnakis

While the advantages of hanging a proposal are well known, it is often troublesome to find the wall space and configure the walls to display lots of paper in an easily manageable way. If your only experience is using tape on dry wall, you know how the tape can pull off paint or the wall's surface layer. Trying to remove tape from paper can also produce disastrous results.

The good news is that hanging paper is not a new problem and there are many possible solutions. Even better news is that a well-managed, up-to-the-minute proposal room wall can actually increase productivity by enticing proposal team members into the "war room." Done right, companies can create work areas where people want to come to work—even to work on proposals. Well-designed war room spaces reflect a company's respect for and appreciation of the work the proposal team does to win business.

DECISION DRIVERS

Some of the most common factors associated with selecting war room wall surfaces are listed in Table 1. The considerations reference permanent alternatives (Grip-a-Strip, magnetic walls, whiteboard walls, carpet-covered walls, and tackable fabric-covered wall panels), economical alternatives (foam core or cork panel walls), and low-cost alternatives (pushpins, scotch tape, Versaclip, and StikkiClips). These alternatives are detailed in Table 2

Table 1. **Selection Factors To Consider for Wall Hanging System**

| Selection Criteria | Consideration Note that alternatives correlate to Table 2. | | | |
	Factors	Permanent Alternatives	Economical Alternatives	Low-cost Alternatives
Degree of Permanence—is war room a dedicated, permanent area or to be used once or for a limited period of time, then disbanded?	Dedicated Spaces	✔		
	Temporary		✔	✔
Level of Proposal Activity—do you have enough proposal activity to keep your war rooms booked all the time?	Full-time Use	✔		✔
	Part-time Use	✔ See Note 1		✔ See Note 2
Need for Flexibility—when not being used for a proposal, can the war rooms remain idle or must they be made available for other uses?	Proposal Use Only	✔	✔	
	Proposal & Meeting Use	✔ See Note 1, 3		✔ See Note 2
Support Requirements—does all proposal work come to a dedicated, central location (or limited number of dedicated locations) or do space and location requirements vary?	Centralized Proposal Center / Location	✔	✔	
	Varied Geographic Needs		✔	✔
Team Collocation—are your proposal teams typically collocated or connected electronically in a virtual proposal center model?	Teams Collocated	✔	✔	✔
	Teams Disbursed & Linked Virtually	See Note 4	See Note 4	See Note 4
Similarity of Proposal Efforts—are most of your proposals unique and complex or is wall visibility less important due to common repetition of proposal material?	Complex, Unique (Visibility Most Helpful)	✔	✔	
	Repetitive Content (Visibility Less Helpful)	✔ See Note 1		✔
Budget—how much do you have to spend on your war room?	High, Open Budget	✔		
	Moderate Budget		✔	
	No Budget			✔

Note 1—Use tackable fabric-covered panels or carpet-covered walls to create a multi-function room suitable for executive or visitor meetings.

Note 2—Use a low-cost alternative that does not mark the walls.

Note 3—Using magnetic walls, white board walls, Grip-a-Strip, foam-core panels, or cork panels limits room reuse to internal working meetings.

Note 4—Virtual collocation not specifically addressed in this article; various electronic tools may more effectively serve the purpose than fixed-wall solutions.

PRODUCT CHOICES

Table 2 identifies and describes commonly used alternatives, and includes where each product can be obtained, pros and cons, and associated costs. While the table includes an extensive list of products, the list is not all inclusive. Several manufacturers make other products that are suitable for wall hanging systems that have not been included in Table 2. For example, if you like the strip look of the

Grip-a-Strip but are put off by the cost, Advantus makes a cork-panel strip that is far more economical. The Internet is a wonderful resource for identifying additional distributors and other product alternatives.

To be able to compare apples to apples, Table 2 includes the cost for an 8' x 20' wall for each product. For the most part, prices noted are retail.

Various discounts, such as government pricing and quantity discounts, are available on some of the products. For example, one manufacturer of tackable, fabric-covered panels indicated that when large quantities of the panels are ordered, the price per panel comes down so that the cost per 8' x 20' wall drops to $1,000 or less. The bottom line is to be sure to ask about discounts.

Table 2. **Commonly-Used Products For Proposal Room Wall Hanging Systems**

Product Name	Description	Manufacturer or Distributor	Pros and Cons	Cost (Approximate)
PERMANENT, INDUSTRIAL-STRENGTH SOLUTIONS				
Grip-a-Strip	Metal strip that uses rollers to adjust and hold inserted sheets of paper; papers are removed easily by lifting the bottom edge of the paper upwards (see Figure 1).	Advantus Corp. Orange Park, FL 32067 1-800-771-0529 Available through selected distributors including: Viking Office Products 1-800-421-1222, some Office Depots 562-426-2236, Quill Office Products 1-800-789-1331	**PROS:** Functional work environment Neat, organized appearance Easy to use Eliminates need for tape, tacks, pins **CONS:** Highest Cost Fixed arrangement of rows of strips Oversized documents must drape documents across multiple rows	How sold: $75 per 12' strip; 4 strips per carton 8' x 20' wall: $6,000 (4 rows of 20 strips with rows spaced 15' apart)
Magnetic Walls	Magnetic, metal wall panels that can be painted to coordinate with color scheme. Papers affixed to wall with magnets or magnetic strips. Color-coded magnetic strips can be used to communicate status.	Available through commercial building contractors or specialty commercial office suppliers	**PROS:** Functional work environment Flexibility to arrange documents on walls as needed for each proposal Clean, neat appearance Eliminates need for pushpins Can be used in Sensitive Compartmented Information Facility (SCIF) environments **CONS:** High Cost Permanent (less flexible) Alternate use limited to internal working meetings Requires magnets, magnetic strips, or StikkiClips to attach papers to wall	How sold: $25 per square foot; costs vary depending on size from $500 for a 4' x 6' panel to $2,500 for an 8' x 12' panel 8' x 20' wall: $4,000 (160 square feet)
Magnetic White Board	White board wall panels of porcelain enamel steel that can be used as either war room walls or brainstorming boards. Papers affixed to wall with magnets, magnetic strips, tape, or StikkiClips. Panels up to 4' x 4' can be mounted as a 4-track moveable and reversible system.	Available through commercial building contractor or specialty commercial office suppliers including: Egan Visual Systems 1-800-263-2387 Tri-Best Visual Display Products 8620 Red Oak St. Rancho, Cucamonga, CA 91730 1-800-281-3411	**PROS:** Functional, multi-purpose work environ-ment (war room, training room, internal working meeting room) Flexibility to arrange documents on walls as needed for each proposal Clean, neat appearance Eliminates need for pushpins Walls do double duty when brainstorming MultiTrack mounting is ideal for rooms with limited wall space **CONS:** High Cost Permanent (less flexible) Requires magnets, magnetic strips, or StikkiClips to attach papers to wall	How sold: $230 for 2' x 3' panel to $610 for a 4' x 8' panel 8' x 20' wall: $3,050 (5 4' x 8' panels)
Carpet-covered Wall	A short pile, indoor-outdoor carpet is mounted on the wall. Padding behind the carpet permits easy insertion of pushpins. Carpeting available in various colors and textures.	Available through commercial building contractors or contractors that mount acoustical paneling or similar material	**PROS:** Functional, multi-purpose work environment Clean, neat appearance Finished appearance that lets war room double as an executive or visitor confer-ence room Flexibility to arrange documents on walls as needed for each proposal Carpet absorbs noise, containing discus-sions in war room Moderately priced **CONS:** If carpet is not padded, push pins are hard to push into wall and sometimes fall out Permanent	How sold: $35 - $50 per square yard; cost dependent on carpet selected 8' x 20' wall: $1,100, $900 for the carpet plus $200 for fasteners (18 square yards of carpet at $50 per square yard)

Table 2. **Commonly-Used Products For Proposal Room Wall Hanging Systems** *(Continued)*

Product Name	Description	Manufacturer or Distributor	Pros and Cons	Cost (Approximate)
PERMANENT, INDUSTRIAL-STRENGTH SOLUTIONS continued from previous page.				
Tackable Fabric-covered Panels (author's choice)	Tackable walls are created with fabric-covered padded panels that are affixed permanently to the wall surface on tracks or with pins directly into the wall. Customized panels come in wide variety of sizes, permitting coverage of even the most unusual spaces. Fabric comes in a wide range of colors and textures that permit the creation of a finished, attractive workspace. Acoustical panels can be specified Panels up to 4' x 4' can be mounted on a moveable track system. (see Figure 2)	Available through commercial building contractor or specialty commercial office suppliers such as: Egan Visual Systems 1-800-263-2387 Working Walls 100 Hayes Dr., Suite B Cleveland, OH 44131 216-749-7850 Executive Wall Concepts 1224 North Post Oak Rd Houston, TX 77055 1-888-EWC-0808	**PROS:** Attractive, functional, multi-purpose work environment If acoustical panels are specified, the room can be used for teleconferencing Many colors and textures available; coordinates with office furniture from multiple manufacturers Finished appearance that lets war room double as an upscale conference room suitable for executive or visitor meetings Flexibility to arrange walls as needed for each proposal Padding absorb noise, containing discussions in war room MultiTrack mounting is ideal for rooms with limited wall space **CONS:** Permanent Cost	How sold: $440 per 4' x 8' panel; panel price based on panel size and number ordered 8' x 20' wall: $2,200 (5 4' x 8' panels)
ECNOMICAL, MODERATELY-PRICED SOLUTIONS				
Foam Core Panels	Panels of white foam core are tacked/nailed to the wall. Seams are brought together with clear packing tape. This surface permits the tacking up of papers using pushpins.	Available from Office Depot, Art Supply, or similar supplier	**PROS:** Functional work environment Easy to mount panels Flexibility to arrange walls as needed for each proposal Cost effective **CONS:** Semi-permanent Repeated use of pushpins requires periodic replacement of panels Requires packing tape to cover seams Can look make-shift	How sold: $13 per package of 3 panels (3/16' thick) to $16 for a 40' x 60' panel 8' x 20' wall: $128 (8 40' x 60' panels)
Cork Panels	Like the foam core, panels of cork are mounted on the wall to permit the use of pushpins for posting proposal products. Office supply stores have framed corkboards. Lumber yards and building suppliers have the sheet panels of cork.	Tri-Best Visual Display Products 8620 Red Oak St. Rancho, Cucamonga, CA 91730 1-800-281-3411 Also available through: Office Depot or similar provider Lumber yard, hardware store, or building supplier	**PROS:** Functional work environment Finished appearance Cork panels are cost effective; cork boards are moderately expensive **CONS:** Permanent Cork deteriorates over time and must be replaced Natural cork gives off an odor Requires adhesives to affix panels or squares to walls Cork panels may be hard to find Panel frame may give the room a makeshift look	How sold: Cork board framed in wood or metal ranging in price and size from $30 for a 1' x 2' board to $200 for a 4' x 8' board $18 for a 4' x 8' homasote-backed cork panel; $1/2$" thickness 8' x 20' wall: $1,000 (5 4' x 8' aluminum-framed panels): $90 (5 4' x 8' panels)

Table 2. **Commonly-Used Products For Proposal Room Wall Hanging Systems** *(Continued)*

Product Name	Description	Manufacturer or Distributor	Pros and Cons	Cost (Approximate)
LOW-COST SOLUTIONS				
Pushpins in Drywall	Pushpins are used to affix proposal documents directly to the drywall or other tack-able surface.	Available from office supply stores	**PROS:** Low cost Workable for temporary war rooms **CONS:** Repeated use of pushpins requires repair and repaint of walls	How sold: $2 per box of 100 8' x 20' wall: $10 (500 pushpins/5 boxes) Also consider possible cost to repair and repaint wall: $500 estimated.
Scotch Tape on Walls	Scotch single-sided magic tape and double-sided tape can be used to attach proposal documents to various wall surfaces (painted wall, cork panels, white board).	3M www.3M.com 1-800-3M-HELPS Available from office supply stores	**PROS:** Low cost Workable for temporary war rooms **CONS:** Scotch tape sometimes sticks to walls and removes paint Requires extra handling to avoid pages sticking together. Each time a paper is removed from the wall the scotch tape has to be folded over	How sold: $13 for 4 rolls of $3/4$" scotch tape 8' x 20' wall: $26 (8 rolls of tape, cost of dispenser not included) Also consider possible cost to repaint wall: $300 estimated.
Versaclip	An adhesive-backed plastic clip that attaches to any surface (Item number: 75305).	Advantus Corp. Orange Park, FL 32067 1-800-771-0529 Available through selected suppliers including Reprint Supplies (1-800-628-6250) and School Specialties (1-888-388-3224)	**PROS:** Each clip holds up to 40 sheets Versatile and economical **CONS:** Considered permanent; may damage surface when removed	How sold: $4.50 per pack of 4 clips (24 4-packs per carton) 8' x 20' wall: $540 (480 clips, 120 packs) Also consider possible cost to repair and repaint wall: $500 est.
StikkiClip	Wax-backed plastic clip that mounts to any surface and is removed with a simple twist (See Figure 3).	StikkiWorks Co. Glendale Heights, IL 60139 1-800-582-5477 Available from the Container Store, Office Max, and similar office supply stores; call 1-800-582-5477 for nearest retailer and get a factory rebate coupon	**PROS:** Sturdy, economical, and versatile Sticks to almost any surface (wood, glass, metal, whiteboard, wallpaper, etc.) Comes in 17 colors and 15 shapes including plain, arrows, computers, and telephones **CONS:** Requires multiple clips to hold heavier documents Does not stick to rough fabric surfaces May leave a slight wax residue on walls, especially if left in place for an extended period of time May remove some wall papers and paints when removed from wall	How sold: $2 per 10-clip pack; $3 per 20-clip pack 8' x 20' wall: $75 (500 clips/25 packages)
Post-it Easel Pads	Adhesive-backed flip chart sheets (25' x 30') that affix to almost any surface.	3M www.3M.com 1-800-3M-HELPS Available from Office Depot or similar supplier	**PROS:** Good for brainstorming ideas **CONS:** Not recommended as war room wall surface Must use scotch tape to mount proposal documents to post-it easel sheets Adhesive does not stick to all surfaces Weight of documents affixed to post-it easel sheets may cause easel sheets to fall from the wall	How sold: $55 per 2-pad pack; each pad contains 30 25' x 30 $1/2$" sheets 8' x 20' wall: N/A

VARIOUS LOOKS

Different wall hanging system products give different looks to your war room space. The systems pictured here show a sampling of the different looks that can be achieved. It is best to see and sample the alternatives you are considering before making your final decision.

DIFFERENT REQUIREMENTS, DIFFERENT CHOICES

The author has learned that different companies use a wide variety of products to create and support their proposal environments. For example: Lockheed Martin in Marietta, Georgia, used cork panels until they built their dedicated proposal center. After looking at a number of alternatives, they selected Grip-a-Strip *(See Figure 1)* for the walls in their proposal center. Northrop Grumman uses different materials in different locations. Their B-2 Program in Pico Rivera, California, uses painted magnetic walls for proposal rooms. Teams use color-coded magnetic strips to communicate the status of documents mounted on the wall. This alternative gives them flexibility to easily accommodate oversized as well as standard-sized documents. By using larger versions of tackable fabric-covered panels *(See Figure 2)* for executive conference rooms in their Long Island offices, the conference rooms can easily double as proposal war room space. Their Logicon, Inc. subsidiary in Herndon, Virginia, uses carpet covering on the walls. This is a very durable surface. PRC in McLean, Virginia, has carpet-walled conference rooms that often double as war rooms. TRW in Fairfax, Virginia, also used carpet to cover the walls of their SCIF-capable war rooms. TRW added padding under the carpet to make insertion of pushpins easier.

Optym Professional Services in McLean, Virginia, uses foam-core panels nailed

Figure 1. GRIP-A-STRIP — One of several permanent, industrial-strength solutions. War rooms typically use multiple rows of Grip-a-strips, spaced approximately 15 inches apart. The diagram inserts at upper left and lower right show how easy it is to insert and remove documents from the Grip-a-Strip.
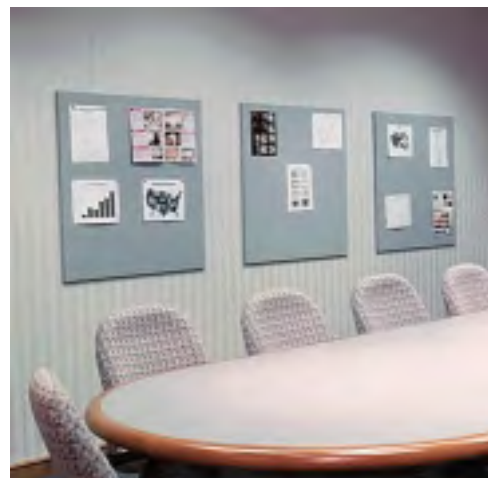
Figure 2. TACKABLE WALL PANELS—An attractive, flexible solution that is also functional. In a war room, the panels typically abut each other, often covering the wall floor to ceiling. When only a band of tackable wall panels 4' to 5' in height is used, the wall space above and/or below the tackable wall panels is either painted or wallpapered to coordinate with the fabric selected for the tackable panels.

to the war room walls. BDM, before it was acquired by TRW, also used foam core panels in its McLean, Virginia, proposal center. While FDC is planing its war room space, they use a variety of temporary alternatives including Scotch magic tape and pushpins. Even Hyatt Hotels has gotten into the act. They distribute StikkiClips *(See Figure 3)* to conventioneers for posting convention materials to the walls.

CONCLUSIONS

Looking at the per-wall cost data in Table 2, observations such as the following become clear:

Tackable fabric-covered panels are an attractive permanent alternative that provide multi-use flexibility at a moderate cost. Grip-a-Strip provides an orderly but less flexible and more costly fixed wall hanging system.

Using foam core panels and cork panels, while not as slick as the permanent alternatives, are as economical as semi-permanent alternatives.

Even when there are no war rooms per se, StikkiClips or Scotch magic tape can be used to create a very low cost, temporary war room wall solution. Pushpins are also inexpensive, but may damage the walls.

There are war room wall alternatives to accommodate a wide range of proposal support requirements, space considerations, and budgets. This author is most impressed with the tackable fabric-covered panels because of the reasonably priced, professional look that can be achieved while affording multi-purpose functionality. However, with the varied options available, the only limitation is your imagination and your company's commitment to the space. **APMP**

Figure 3. STIKKI CLIPS— One of the low-cost solutions. These wax-backed clips stick to nearly any surface. They come in many shapes and colors that can be used to communicate document status or visually separate document volumes.

Editorial Statement and Guidelines for Authors

Proposal Management, the professional journal of the APMP, publishes articles and original and innovative studies about proposal development and proposal management.

EDITORIAL STATEMENT

Proposal Management, the official journal of the Association for Proposal Management Professionals (APMP), invites authors to submit their best research for peer review. Manuscripts may be of practical or scholarly importance to APMP's audience of proposal development, acquisition, procurement, business development, sales, and program management professionals.

CONTENT

Proposal Management publishes the following types of peer-reviewed articles:

- Results of original research on proposal-related topics.
- Original contributions to proposal-related theory.
- Case studies of solutions to proposal-related problems.
- Tutorials on proposal-related processes or procedures that respond to new laws, standards, requirements, techniques, or technologies.
- Reviews of proposal-related research, products, books, bibliographies, and bibliographic essays.
- Views and commentary.

The journal promotes APMP and its goals through the timely publication of articles, reviews, and references. The journal is a medium for promoting constructive, intelligent discussion and debate about proposal development and management. Because the primary audience of the APMP professional journal is informed practitioners in the private, government, and nonprofit sectors, manuscripts reporting the results of research or proposing theories about topics should include descriptions of or suggestions for practical applications.

SUBMISSIONS

The following are requirements for article manuscripts submitted to the APMP professional journal:

- Articles not more than 30 pages (15 pages single-spaced) including exhibits, printed on 8 1/2" by 11" paper.
- 12-point font and at least one-inch margins on all four sides.
- Double-spaced throughout, including references.
- Submit both a hard copy and an electronic file of your article on a 3 1/2-inch disk (high density format) or via e-mail. Microsoft Word or Corel WordPerfect are preferred electronic formats; a Rich Text Format (RTF) or ASCII file format is also acceptable.
- In addition to the text file, submit one electronic file for each figure in TIF or JPG format. Screenshots are preferred to be captured and output should be 6 inches (width) by 4.5 inches (height) for full screens. Because illustrations will be reproduced in black and white, they are best captured in grayscale rather than in color.
- Submit four copies of the article to Proposal Management's Managing Editor or the Chair of the Editorial Advisory Board. (General inquiries can be made to the APMP Executive Director at 909-659-0789.)

Note: We also solicit guest commentators for contributions to Trends and Views. Such contributions should be coordinated with the Trends and Views column editor.

MANUSCRIPT PREPARATION

The following guidelines should be followed in preparing manuscripts for submission to the APMP professional journal:

- Provide the manuscript's title and name(s) of the author(s) at the beginning of the paper and text file.
- Next include an informative abstract labeled "Summary" of approximately 150 words.
- Use up to four levels of headings in your article, and use the wordprocessor's stylesheets when possible.
- Place all exhibits in the text with a descriptive caption.
- Bibliographic references should be indicated in the text by the last name and year of publication in parenthesis (i.e., (Jones, 1978)). At the end of the text, provide a complete list of works cited (labeled "References") using full names of the authors.
- All citations in References should conform to standard academic practices. Conformance with *The Chicago Manual of Style*, 14th Edition, pp. 640-699, is preferred.
- At the end of the text file, include a biographical sketch labeled "Author(s)" of no more than 100 words for each author. Describe each contributor's professional experience, education, institutional affiliation, professional organizations, and other relevant information. Include an e-mail address (if applicable) and a telephone number where you can be reached during business hours.

STYLE

Proposal Management articles must be well-organized and readable. Write clearly and avoid jargon and acronyms. Use the first person and the active voice. Avoid language that might be construed as sexist, and write with the journal's nationwide audience in mind.

Spelling and usage should conform to *The American Heritage Dictionary,* 3rd edition. Punctuation, format, and citation style should conform to *The Chicago Manual of Style*, 14th edition.

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Submissions, if they conform to the above specifications, will be reviewed by the journal's Editorial Advisory Board in accordance with the Board's internal procedures for review. In general, articles will be evaluated in terms of the relevance of the topic; its potential contribution to our understanding of proposal development and management or complementary areas; and its readability. When appropriate, the Board may provide the author with constructive suggestions on how the article might be improved to increase its accuracy, quality, or impact.

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