

## **The Power of PowerPoint: Providing MBAs a Leadership Edge**

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### **Abstract**

Edward Tufte (2003) argues that PowerPoint is so flawed that it is impossible to communicate anything meaningful using it. The medium is not flawed; the users are. Instead of condemning PowerPoint, we owe it to the MBAs to teach them how to use this powerful communication tool. Knowing how to use PowerPoint effectively can give MBAs a leadership edge. This article discusses what we should be teaching the MBAs to allow them to take advantage of PPT and use it to deliver powerful presentations.

### **Reviewing the Critics and the Supporters of PowerPoint**

PowerPoint has been attacked from every point of view. Visual experts, educators, psychologists, executives, and the news media have criticized PowerPoint (Guernsey, 2001; McKenzie, 2000; Norvig, 2003; Nunberg, 1999; Schwartz, 2003; Thompson, 2003; Tufte, 2003; Zuckerman, 1999). Even Vint Cerf, one of the inventors of the Internet, has been quoted as saying, “Power corrupts, PowerPoint corrupts absolutely” (2003).

The program has been accused of watering down thoughts, focusing on the medium instead of the message, distracting the presenter and the audience, inhibiting meaningful discussion, destroying our ability to think and present logically, and hindering creativity. According to one of its detractors, it makes us dumb, contributing to the times, when “manipulating facts is as important as presenting them clearly” (Thompson, 2003).

Some critics have attempted to make the program seem completely inadequate by creating parodies of famous speeches, such as King’s “I have a dream” and Lincoln’s Gettysburg address, and by demonstrating its inadequacy for creating poetry with a PowerPoint version of Frost’s “Stopping by Woods on a Snowy Evening” (Keller, 2003). It seems obvious to those of us who specialize in teaching business communication that PowerPoint is not the right medium for these kinds of speeches and certainly not for poetry, although David Byrne has attempted to make an artistic statement using it (Does PowerPoint make us stupid: Rock star David Byrne turns PowerPoint into art, 2003). Any presenter who has properly analyzed the audience and clarified his or her messages and intentions in delivering them would probably not select PowerPoint for a presentation relying primarily on the emotional appeals used in Lincoln’s or King’s speeches, and even fewer would use it for artistic purposes.

In addition, PowerPoint is criticized for shutting down discussion (Keller, 2003; Stewart, 2001; Goldstein, 2003), but that, too, may indicate that the speaker has selected the wrong forum and medium. If presenters desire an active discussion, they should probably consider holding a round-table meeting or other informal discussion session, instead of a stand-up PowerPoint presentation. Although PowerPoint will work for a discussion session if the speaker encourages questions and dialogue, the setting for a PowerPoint presentation is usually more formal, the lights in the room may be dimmed some for better projection, and the speaker may be more removed from the audience. A good presenter can still encourage interaction in such a setting, but he or she may want to consider an alternative forum and medium to encourage an active exchange of ideas.

Some have presented a more balanced discussion of PowerPoint and even defended it (Porter, 2001; Simons, 2004; Worley & Dyrud, 2004). One of the most complete defenses comes from Barbara Shwom and Karl Keller in their head-on rebuttal of Tufte. They argue, "PowerPoint is not the cause of poorly planned, disorganized presentation; instead, a bad PowerPoint presentation is a symptom of the writer's failure to employ simple slide design principles, basic communication skills, and – most importantly – fundamental rhetorical techniques" (2003).

### **Establishing a Rationale and Approach to Teaching PowerPoint**

PowerPoint is too widespread and too useful not to know how to use it. Students, particularly business students, who do not know how to use it are at a serious disadvantage in the workplace: "No one in business today could pretend to be facile in business communications without PowerPoint" Clark Caywood, associate professor of integrated marketing at Northwestern University, is quoted as saying (Keller, 2003). In another discussion of its importance to students, Dianne Porter (2001) says,

Today, graduates are expected to enter the business world with a good understanding of essential business practices and with decent communication skills as well. Early exposure to presentation technology, such as lighting, sound systems, video and PowerPoint slideshows, have been shown to increase not only understanding of the subject matter in question but students' ability to utilize those technologies themselves. . . . Companies hire people who can do the jobs they need done. Today, it is almost a necessity to have excellent public speaking skills and training in presentation technology.

We owe it to our students to teach them to use PowerPoint effectively. The dominant presentation/graphics package, it allows them to enrich their presentations with the visuals needed to reach most business audiences. By helping them to use PowerPoint effectively, we are helping them to be better presenters, which will provide them an advantage in the workplace and position them to lead others. Presentations with visual aids have a greater impact on the audience. Audiences are more likely to remember what they see versus what they hear. In addition, they are more likely to be persuaded by presentations with visuals. An early study by the University of Minnesota and 3M found that presentations using visual aids are "43% more persuasive than unaided presentations" (Vogel, Dickson, & Lehman, 1986).

Visuals improve presentations, particularly if the material is primarily quantitative, structural, pictorial, or so complicated that it can be illustrated more efficiently and more effectively with a visual aid than with words alone. As McKinsey & Company's resident graphics expert, Gene Zelazny, says in his *Say it with Charts*, "Charts are an important form of language. They're important because, when well conceived and designed, they help us communicate more quickly and more clearly than we would if we left the data in a tabular form" (2001). Even though it is clichéd to the point of exhaustion, the expression "a picture is worth a thousand words" conveys a powerful truth.

Effective presenters use visuals that are integral to the communication of their intended meanings and not ones simply added for show. When selected appropriately and designed carefully, visuals embody and carry the meanings that create the message. Knowing how to deliver messages effectively with words and pictures is a powerful combination. If one of the goals of communication instruction for MBAs is to prepare the students to be future leaders of their organizations, then they need to know how to use visual aids and how to take advantage of the presentation technology available to enhance their presentations. For today's students, that means using PowerPoint effectively.

To provide our MBAs with the leadership edge that the effective use of PowerPoint can provide, we need to teach them how to do the following:

1. Use slides for the right reasons.
2. Create meaningful, purposeful, and ethical content.
3. Employ logical, well-organized structure.
4. Follow design principles for the use of PowerPoint.
5. Deliver effectively with PowerPoint.

### **Using Slides for the Right Reasons**

Too often students create slides without a clear reason for doing so. We need to teach them that all slides should serve a specific purpose in a presentation. They need to know that the slide probably should not be included if it does not fulfill one of the following purposes:

1. Reinforce the message
2. Provide a roadmap to the structure of a presentation
3. Illustrate relationships and concepts visually
4. Support assertions
5. Emphasize important ideas
6. Maintain and enhance interest

### *Reinforcing the Message*

Reinforcing the message means that the slide captures and emphasizes the main ideas expressed by the speaker. Recognizing that many people are visually oriented, students should be taught to

reinforce their words with visuals so that their audience is more likely to remember what they say. Although they do not want to overuse text charts, even a simple one can help reinforce their message. They should ensure, however, that what is on the screen is consistent with what they are saying.

### *Providing a Roadmap to the Structure of a Presentation*

PowerPoint can be very effective in suggesting the structure of the presentation and keeping it in the audience's mind as the presenter moves through it. Used correctly, PowerPoint can give "visual shape to an argument," says Steven Pinker, author of *The Language Instinct* and psychology professor at MIT. He continues, "PowerPoint makes the logical structure of an argument more transparent. Two channels sending the same information are better than one" (quoted in Parker, 2001).

Using a text chart to establish the agenda or discussion topics is one very common method of establishing a roadmap for the structure of a business presentation. Students should be taught to think of the agenda as an executive summary of their presentation or as their story on a page. Students should be able to create a one-sentence summary of their presentation and use that to guide them in creating their agenda slide. If they can create a meaningful, logical sentence, then they probably have a logical story to tell.

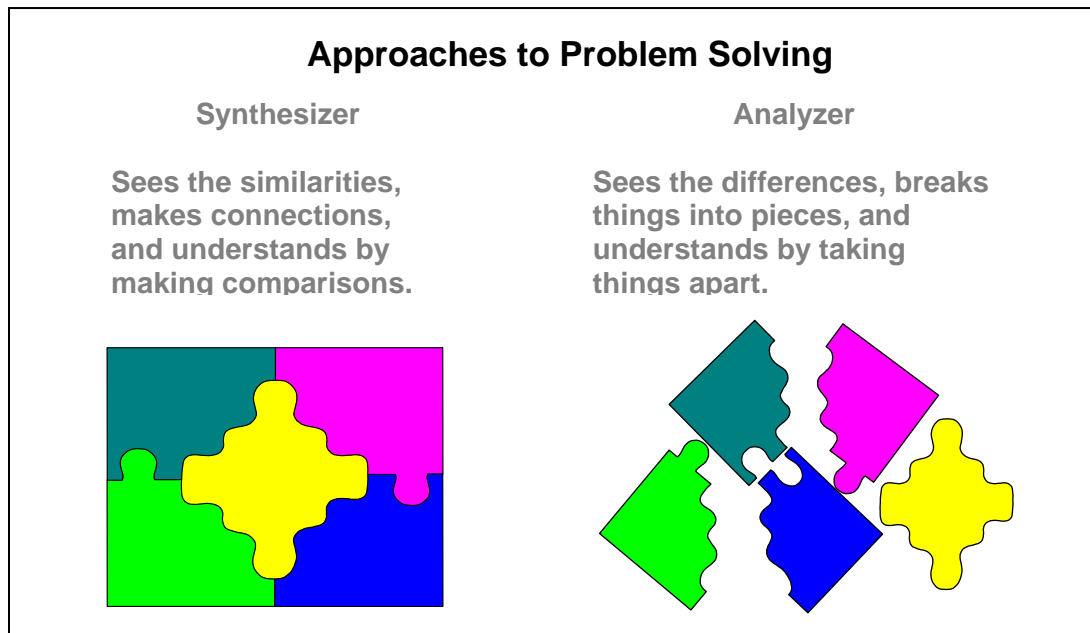
One technique used frequently in PowerPoint presentation is bringing the agenda slide back into the presentation before each major section as a tracker with the topic highlighted and the others dimmed in some way. Students should use this technique with caution, however, since in a shorter presentation, it can become irritating to the audience to see the agenda too frequently. Also, this technique sometimes reveals a poorly organized presentation that requires artificial means to suggest coherence.

Another approach to providing a roadmap for the presentation is to create a framework for the presentation and bring it back in at major shifts in topics. This method should be used cautiously as well, since it too can become monotonous. If the students decide to use the agenda or framework as a tracker throughout the presentation, they should not place it on each slide as is sometimes suggested, since it takes up precious slide space and is too small to communicate anything of meaning to the audience.

### *Illustrating Relationships or Concepts Visually*

Graphics usually work better than words to help an audience understand relationships or concepts. Concept graphics are useful in clarifying ideas and also in creating a mental picture for the audience. Exhibit 1 shows a standard Microsoft clip art of a puzzle being used to show different approaches to problem solving. On one side, is the "synthesizer" or the person who puts things together and sees similarities, and on the other, is the "analyzer," or the person who takes things apart and sees differences.

**Exhibit 1**  
*Concept Graphic*



The visual image, though simple, will help the audience understand and remember the concept.

*Supporting an Assertion*

Graphics to support assertions are usually quantitative charts; however, they may be qualitative charts as Exhibit 2 demonstrates. The chart supports the assertion that communication is a priority in performance reviews. It demonstrates how a student might use quotations from interviews to support findings and an overall conclusion.

## Exhibit 2

### *Example Qualitative Chart to Support an Assertion*

<b>Communication Important in Performance Reviews at ABC</b>	
<b>Interview Findings</b>	<b>Representative Quotations</b>
Employees think communication is important to management.	<ul style="list-style-type: none"><li>• “Communication effectiveness seems to be a high priority to management in reviews now.”</li><li>• “This is such a bottom-line company, I was surprised management put so much value on what I see as a soft skill—communication.</li></ul>
Employees evaluated as “high” in communication effectiveness are rewarded.	<ul style="list-style-type: none"><li>• “Employees who are rated high on communication in reviews receive the promotions.”</li><li>• “No matter what kind of deal maker they are, only the good communicators rise to the top in this organization.”</li></ul>

### *Emphasizing Important Ideas*

All presenters hope that orally emphasizing the important points, and maybe even repeating them, will fix them in the audience’s memory. Studies show, however, that audiences remember more of what they see than what they hear, although they do not retain much of that either. The common English expression indicating understanding suggests the importance of the visual as well: “I see.” Thus, if students want to emphasize important ideas, they should be taught to do so in words and in visual aids, whether word charts or graphics.

### *Maintaining and Enhancing Interest*

Students should be shown how to add in visuals and make presentations more interesting through the effective use of graphics, although they should also be warned to be cautious in using graphics to maintain and enhance interest. Essentially, adding interest means introducing some variety in the slides and looking for ways to make presentations graphically interesting; it does not mean to throw in wild colors, crazy cartoons, or superfluous animation just for the sake of doing so. As always, the most important rule for the use of graphics applies here: graphics should add to the presentation and the presenter and not detract in any way. Slides should never be gratuitous; they should always be purposeful. They should add to the content of the presentation. They must never detract from the presenter; they should supplement him or her.

## Creating Meaningful, Purposeful, and Ethical Content

Tufte says that PowerPoint's "cognitive style routinely disrupts, dominates, and trivializes content" (*The Cognitive Style of PowerPoint*, 2003). However, PowerPoint presentations can and do contain solid content and can and do communicate content effectively – but only if the content is solid to begin with and if the slides conspire fully in communicating the speaker's message. Quoting Tufte again, "Presentations largely stand or fall depending on the quality, relevance, and integrity of the content. The way to make big improvements in a presentation is to get better content" (2003). PowerPoint was not intended to be a replacement for thinking. It is a medium to help convey that thinking.

Just as with any effective communication, the sender of the message needs to have something meaningful to say. As Shwom and Keller write in their rebuttal of Tufte's attack of the poorly written slides of the engineers writing on the danger of the debris that hit Columbia's wing:

But PowerPoint did not cause such problems. Rather, the engineers apparently do not understand fundamental rhetorical principles. They don't ask themselves, 'What does my audience need to know? What point am I trying to make? How do I make that point clearly, thoroughly, transparently? And is the organization of the information effective for making my point clear and understandable?' The problem with this slide – indeed the problem with ANY piece of poorly organized writing – is that a reader must work too hard to decipher meaning. Tufte rails against PowerPoint when the failure here is one of clear thinking, clear writing, and clear organization (2003).

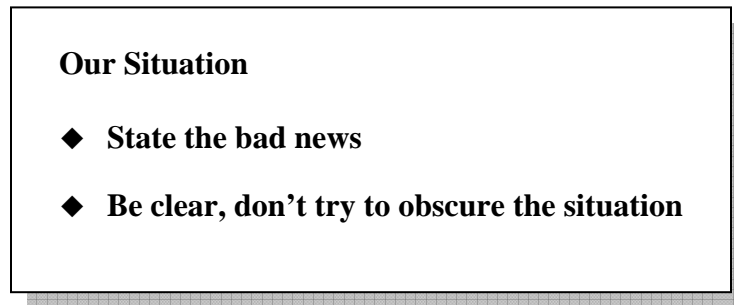
The presenter creates the content and is responsible for ensuring it is clear and meaningful. PowerPoint is simply a tool to deliver the content.

### *Using Templates and the AutoContent Wizard*

Using the standard PowerPoint templates to guide content creation encourages students to use few words and fairly simple graphics. For more complex messages, most presenters will need to modify the templates; however, even keeping the templates as they are, the presenter can create solid, thoughtful, and meaningful content. Presenters simply need to make sure their message is clear in their own mind and then make every word and every graphic count, ensuring they help to convey the message.

Some PowerPoint distracters blame the AutoContent Wizard for "dumbing down" presentations and creating presentations devoid of meaningful content (Parker, 2001; Keller, 2003). When Microsoft initially created the AutoContent Wizards, the creators saw the idea as "crazy" and the name as a joke (Parker, 2001). They knew (or certainly hoped) that presenters had their own content to put into the program, although after creating the AutoContent Wizards, they found that they did help those facing writer's block. Of course, presenters cannot provide meaningful content if they simply use a template instead of thinking up the content. The AutoContent template may help inspire ideas, but the substance depends on the presenter's development of the

ideas. For example, look at what an AutoContent slide provides for a presentation on communicating bad news:



Obviously, there is no content here. At most, the templates provide possible subject headings and suggestions on content even though most communication experts would question relying on PowerPoint to deliver highly emotional messages, such as the communication of bad news. Obviously, a presenter, if he or she decided PowerPoint were the best medium, would need to supply the content and have to decide if the topics and order of them made sense for their organization and the message they are delivering.

#### *Keeping Slides Simple but Meaningful*

Often instruction in creating and using graphics will include the adage of “less is more,” originally used by Ludwig Mies van der Rohe (1886-1969). We teach our students to keep slides simple, which is critical; however, we need to be careful that by “simple,” they do not misread this as superficial or without any substance. Effective presenters know to keep their slides simple enough for their audience to understand easily, yet they also know that the slides still need to communicate something. While we should emphasize that our students should strive for simplicity in whatever slides they create, they must avoid reducing the content on the slide so much that the meaning evaporates.

In addition, the content of slides, whether graphics or text, should never be mere decoration or embellishment. Empty pictures and hollow words add nothing and should not be part of any serious business presentation, so we should encourage our students to ask: Is the slide useful? Is it necessary? They have probably sat through presentations with slides that were little more than decorative pictures, objects, or cartoons that added little to the message. If the visual aid does not add to the presentation, they should cut it, no matter how attached they may be to the graphic or even how much time they spent creating it.

#### *Conveying One Message per Slide*

To help ensure their slides convey their message clearly, students should be encouraged to include only one primary message per slide. If they have too many messages, they risk losing their audience.



They should back away from the slide and ask themselves the following questions:

- What is it that I am trying to communicate?
- If the audience leaves with only one message from this slide, is it what I intend?
- Do the words convey this message?
- Do the graphics support this message?

### *Using Slide Titles Effectively*

To help ensure the content is meaningful to the audience and delivered as they intend, students should be taught to ask if their chart title captures the “so what?” The title on the chart should clearly announce their main message or provide adequate information for interpreting the graph. They have probably heard someone say, “The numbers speak for themselves.” In fact, the significance of numbers is seldom transparent, and numbers can be made to convey a range of potential meanings. Simply putting a graph up displaying some numbers does not ensure the audience will see them the way the presenters do. It is the presenter’s responsibility to make sure the numbers as configured and displayed carry the meaning they intend and that they cannot be interpreted otherwise. They can help ensure their audience interprets the numbers as they do by putting a title on the slide that tells the audience the meaning of the numbers or other data they are showing them.

### *Presenting Data Ethically*

The ethical representation of information applies to all slides our students create, but it is most important in teaching them to present data graphically since it is in the selection and design of graphics that they are most likely to make an ethical error, either intentionally or unintentionally. As Kienzler says in her article on visual ethics, “Whether from lack of skill or intentional ambiguity, creators of visuals can mislead their audience as surely as can creators of text. In fact, visuals can sometimes have more impact than their accompanying text” (1997). We need to emphasize to our students that (1) ethical presenters would not intentionally distort the data through manipulating the numbers or purposely designing graphs that mislead the audience, and that (2) they must be careful in the representation of their data so that they do not accidentally mislead their audience by using poorly designed graphs or incorrectly selected graphs or by taking or presenting information out of context.

Students should look at their graphics critically and test the integrity of them by asking the following questions:

1. Does the data completely support the message I wish to convey?
2. Have I provided or will I be able to provide enough context for the data to be interpreted accurately?
3. Are the numbers accurate and depicted honestly and accurately?
4. Does the design distort or hide the data in any way?

5. Are all axis and data accurately and adequately labeled?

As Tufte says, “Graphical excellence begins with telling the truth about the data” (1983). Students’ data charts or graphs should add to the substance of their presentations and should not distort, distract, or confuse the audience in any way. In addition to emphasizing that their content be meaningful, we need to emphasize to our students the importance of ensuring the content is honest.

To help our students create meaningful PowerPoint presentations, we need to reinforce constantly that they must establish a clear purpose and select all content very carefully and specifically to support that purpose. Good communication requires “hard mental work (not necessarily graphic design or typographical expertise), sharp analysis, clear thinking, and transparent communication. And it requires understanding how your tools can achieve those requirements” (Shwom & Keller, 2003). For any presentation of importance, students must think deeply and have their content solidified before attempting to create PowerPoint slides. If they have performed the necessary “hard mental work,” they should be able to create meaningful, purposeful, and ethical PowerPoint presentations.

### **Employing Logical, Well-Organized Structure**

Another common complaint about PowerPoint is that it results in weak logical structures, often ending up with topic after topic without logical connections. Students need to be coached in traditional organizational methods to help them avoid this common problem. Once they have clarified their purpose, they need to select the best structure for organizing their communication. As communication experts know well, the organization or structure of a presentation proceeds from the needs and interests of the audience, their purpose, and the demands of the subject matter, all of which needs to be determined before students can create an effective PowerPoint presentation (DuFrene & Lehman, 2004; Baker & Thompson, 2004; Vik, 2004).

Students should answer the following questions before they start to create slides:

- What is the most effective way to begin the presentation with **this** audience?
- How should I organize the content to ensure that **this** audience will be receptive and attentive?
- How should I organize it so that they can follow the argument easily and understand the main messages?
- How should I conclude so that they take away the main message and remember it?
- Finally, how can I use the PPT slides to reveal the logic and support it?

The emphasis should be on the organization that constantly reinforces the main messages, stays on topic, establishes relevance to the audience, and is organized to be immediately accessible to the audience and to the way they think and make decisions. How they start the presentation will depend on their purpose and their audience analysis, but in most cases, they will start with an agenda that reveals the story and the logic of the presentation.

Often, students spend too little time creating their agenda slide and end up with a slide that simply repeats each of their slide topics; such a laundry list suggests a poorly organized presentation. We need to emphasize to them that an agenda or set-up slide should be concise, logical, and meaningful. Ideally, it should consist of no more than a few bullet points corresponding to the main sections of the presentation or the story. If the agenda is set up as a story, it could be as few as three bullets, with the first bullet summarizing the current situation, the next one or two discussing any issues or complications, and the last suggesting a resolution. For example, using the storyboard below, the one sentence summary might be as follows:

ABC Corporation should launch a credit card in China immediately because the market analysis indicates widespread acceptance of credit cards, the economic analysis shows profitability the first year, and implementation will be easy and rapid given our experience in the region.

Even if students decide not to write the story on the agenda page, the audience should at least be able to determine what the story is by looking at the bullet points, and certainly, the logic of the entire presentation should be obvious to anyone when they see the agenda slide.

Also, we should teach our students to avoid using the words “Introduction,” “Conclusion,” and “Questions” as bullet points on the agenda. These take up space without communicating anything of substance to the audience. Every bullet should capture a “so what?” Exhibit 3 shows an example of what our students should not do and should do agenda when creating agenda slides.

**Exhibit 3**


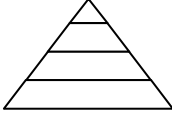
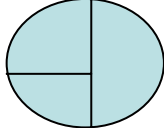
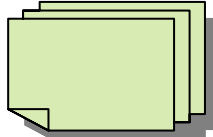
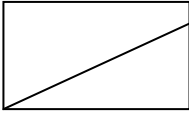
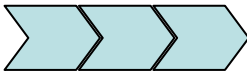
*Examples of Agenda Pages for a Presentation*

<b>How Not to Do an Agenda</b>	<b>How to Do an Agenda</b>
<p style="text-align: center;"><b>Today’s Agenda</b></p> <ul style="list-style-type: none"> <li>■ Introduction</li> <li>■ Understanding of current situation</li> <li>■ Competitive analysis</li> <li>■ Niche capabilities</li> <li>■ How they measure their success</li> <li>■ Project objectives</li> <li>■ Overview of approach</li> <li>■ Proposed approach</li> <li>■ Team Structure</li> <li>■ Next steps</li> <li>■ Conclusion</li> <li>■ Q &amp; A</li> </ul>	<p style="text-align: center;"><b>Today’s Agenda</b></p> <ul style="list-style-type: none"> <li>■ Understanding of current situation</li> <li>■ Project objectives and approach</li> <li>■ Team structure and our capabilities</li> <li>■ Next steps</li> </ul>

To help MBAs realize the array of structures available to them means reviewing traditional organizational methods, such as deduction, induction, chronological, cause and effect, comparison/contrast, and problem/solution. We need to require our student to establish a logical structure and think carefully about the organizational devices that work best with their audience for every presentation they create. Any good communication needs a tight, logical organization, which is facilitated by developing a plan or map of the argument, whether by using the pyramid principle (Minto, 1996), an outline, a decision tree, or a storyboard. For a PowerPoint presentation in particular, a storyboard allows them to see the logical flow and encourages them to think about the individual slides they need to support each section. (Exhibit 4).

**Exhibit 4**

*Example of a Storyboard for a Presentation*

<p>Launching a New Bank Card in China</p> <p>Marketing Task Force Report</p> <p>November 20, 2004</p>	<p>Agenda</p> <ul style="list-style-type: none"> <li>•Recommendation</li> <li>•Market analysis</li> <li>•Profitability</li> <li>•Implementation</li> </ul>	<p>Recommendation</p> <p>We should launch our new bankcard in China as soon as possible.</p>	<p>Market Analysis</p>
<p>Regional Demographics</p> 	<p>Cultural Profile</p> 	<p>Business Climate</p> <ul style="list-style-type: none"> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> </ul>	<p>Market Shares</p> 
<p>Profitability</p>	<p>Cost Summary</p> <ul style="list-style-type: none"> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> <li>•XXXXXXX</li> <li>•XXXXXXX</li> </ul>	<p>Cost Breakdown</p> 	<p>Revenue</p> 
<p>Implementation</p>	<p>Marketing Plan</p> <ul style="list-style-type: none"> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> </ul>	<p>Implementation Plan</p> 	<p>Next Steps</p> <ul style="list-style-type: none"> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> <li>•XXXXXXX</li> <li>•XXXXXXXXXX</li> </ul>

A PowerPoint presentation, just as with any other business communication genre, whether a memo, letter, proposal, or report, needs to be well organized to be effective. PowerPoint critics who condemn the program for poorly organized presentations are again missing the true source

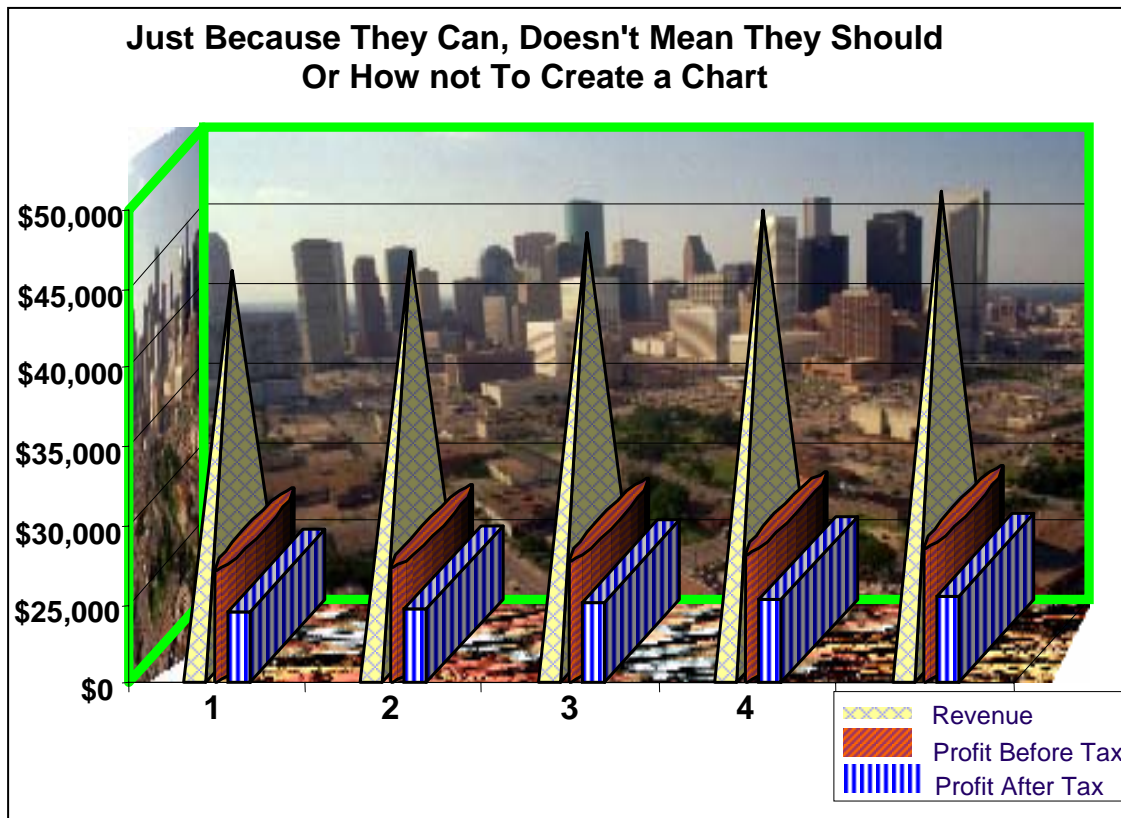
of the problem. Students must take the time to develop the logic of their presentations. The progression of slide after slide without a logical structure to pull it into a coherent whole is the fault of the presenter, not the PowerPoint program.

### Following Design Principles

Poorly designed slides, such as the one demonstrated in Exhibit 5, are responsible for much of the criticism and disdain for PowerPoint. This slide has too much “chart junk” or clutter (the zeroes, unnecessary graphic elements such as the background and the 3D effect). The 3D and the legend make it difficult to read; the skyline in the background only detracts from the message; and the axes are unlabeled. As a result, the slide is more distracting than useful in conveying a message.

### Exhibit 5

*An Example of a Poorly Designed PowerPoint Slide*



The slide is reproduced here as it appeared in a corporate presentation, with only the title changed to accommodate the message that just because PowerPoint provides all kinds of graphic augmentation for presentations, it does not mean that we should use them.

### *Deciding on Background and Layouts*

Students should be encouraged to create a simple basic template that they can use regularly for the background and layout of their presentations. Designing their own or modifying one of Microsoft's templates to make it their own is a better approach than using one of Microsoft's standard templates. They want the template to reflect their image, their personality, their sense of style, or to reinforce or suggest their message.

Also, creating their own template suggests they are willing to take the time to personalize the presentation and that they are not simply pulling something off the shelf that others could use. In addition, that so many others will use these templates will mean they will be one of many, and their presentation will not stand out, as they probably would want. Again, they do not want it to detract from their presentation or for the template to receive the audience's attention more than the message or them.

One way to personalize a template is to select a simple picture or their logo as the background. They do not want anything too complicated or showy since it could overshadow the content on the slides, as is the case in the cityscape background in Exhibit 5. They should check their slides in slide view to ensure the background does not overwhelm the foreground (any text or graphics).

If they are not comfortable creating their own template, they should select one of Microsoft's default templates that conforms to the recommended graphic design and legibility guidelines. They should select one with a dark background and light font. If the students complain that they use up their ink cartridges printing the slides with dark backgrounds, they should be informed that they can simply select "pure black and white" in the print options commands to print out a standard white background, dark font format. With the standard templates, they may also need to adjust the font size since it is often larger than it needs to be for most business presentation settings.

### *Selecting Effective Color Combinations*

The right colors and fonts can make a difference in how effective their PowerPoint presentation is. Selection should focus on colors and fonts that show up best when a presentation is projected. Often company logos determine colors and fonts; however, these are not always the best choices to make for entire presentations. To make effective decisions on colors, it will help them to know something about color psychology and graphic design. We usually need to provide them this information since few have had formal training in either.

Selecting the color combinations for their presentations should not be arbitrary or simply based on personal color preferences. As with all aspects of their presentation, they need to consider their message and the image they wish to project. Knowing the colors most color specialists consider "right" for presentations can be useful, as can color psychology in general. For instance, knowing that too much of a vivid yellow causes fatigue and even aggravation and that cool shades, such as blues and greens have a calming effect, could be important in supporting their

messages. In addition, they should be sensitive to the cultural associations for colors to ensure their colors do not deliver messages they do not intend.

Unless company colors dictate differently, it is usually best to stay with the traditional primary or secondary colors or their combinations for business presentations and to avoid pastels. The focus should be on selecting the colors that project best and promote legibility for the audience and on using the combination that draws the audience's eye to their most important message.

When deciding on color combinations, the greater the contrast, the better. Background and fonts that do not contrast sufficiently make the text difficult to read. One principle of color relationships to keep in mind is that a lighter color appears to move outward and a darker color recedes; therefore, the lighter fonts show up better on dark background than a dark font on a white background. This is particularly true in a room somewhat darkened as is usual with PowerPoint presentations.

### *Selecting the Most Effective Fonts*

With computer-projected presentations, recent studies have shown that a light font on a dark background (dark blue or black) is best; however, for overhead presentations, a dark font on a white background projects better in most settings. Some font colors are difficult to read on some backgrounds. For instance, red fonts on a blue background result in fuzzy images.

Even though our students should know that the font needs to be large enough to be read from the back of the room in which they are presenting, they always need reminding. Most of the time a font 20 points or larger will work for the text within the slides; however, when possible, presenters should check the room to be sure. Titles require a larger font, but the default for PowerPoint is larger than necessary and makes it difficult to have a title of any substance, so they will need to be reset (usually 28-points will work in most rooms).

Recent studies in readability have found that in addition to the size of the font, the style matters as well. A sans serif font (such as Arial) is cleaner and easier to read when projected than a serif font (such as Times Roman). Thus, our students should choose a sans serif font for their PowerPoint presentations (see Exhibit 6).

Capitalization is another element of font selection that they should handle carefully. They may be tempted to use all caps, thinking that this creates strong emphasis, but using all caps only makes the text difficult to read and gives the audience the sense that someone is shouting at them. Using initial caps on all words within bulleted lists also decreases readability. Finally, they should never underline their text since it cuts off the bottoms of letters and makes the text more difficult to read. They should use a larger font, bold, italics, or different colors for emphasis instead.

We should emphasize that the instruction on font selection is to help them make their presentations easy to read and as comfortable for their audience as possible. The goal should be legibility not simply aesthetics. Exhibit 6 provides a demonstration of the poor font selections discussed above.

## Exhibit 6

### *Examples of Poor Color and Font Selections*

**Black on white background does not show up well in computer projected presentations and should be avoided**

**as should a Serif font on any background.**

If the font is too small, no one can read it.

**ALL CAPS ARE HARD TO READ AND LOOK AS IF THEY ARE YELLING!**

**Initial Caps are Distracting and Difficult to read When Used for Text within Charts.**

Underlining clips off the lower part of letters.

**Red letters on blue backgrounds are fuzzy.**

### *Selecting and Designing Effective Data Charts*

The ability to create effective data charts is essential for MBAs. Although they may have someone to help design their graphics, particularly when they have reached a high level in an organization, they will find it useful as they manage others and oversee the creation of their presentations to possess some knowledge of the best types of graphs, as well as the best designs, to ensure the clarity and accuracy of the different kinds of data they will be conveying to their audiences.

Tufte emphasizes that graphs should be carefully selected and designed to ensure that the meaning of the numbers dominates not the method of analysis (1983). MBAs often get so caught up in the method of their analysis that they present too much of it and lose their audience in the process. Although again, audience analysis will affect what they show to their audience, they will usually want to focus only on the results in a presentation, leaving the discussion of the analytical process to a written report or the appendix of the report. Also, they need to be encouraged to keep graphs as simple as possible for all audiences. The goal of the graph should be to aid the audience in understanding the data and the central message.

Since some of the MBAs may not have had much exposure to the different types of graphs and their purposes, we should teach them when to use which type and also provide instruction in how



to show the graphs in PowerPoint to achieve the best effect. Exhibit 7 lists the most commonly used data graphs in business, explains when to select one or the other, and includes pointers on how to make them easier for the audience to grasp the content in a presentation.

## Exhibit 7

### *Selecting and Designing Graphs for Data Charts*

<b>Type</b>	<b>Guide to Use</b>	<b>Design Guidelines</b>
<b>Pie</b>	<ul style="list-style-type: none"> <li>- Compares proportions and relative amounts of components</li> <li>- Works well with non-specialists or executive audience</li> </ul>	<ul style="list-style-type: none"> <li>- Start with largest portion at 12:00</li> <li>- Avoid legends. Instead place numbers inside &amp; labels outside</li> <li>- Select outline around pie and between segments for printing</li> </ul>
<b>Bar or column</b>	<ul style="list-style-type: none"> <li>- Conveys absolute value data, relative sizes, or close comparisons</li> <li>- Emphasizes differences</li> <li>- Works well with most audiences</li> </ul>	<ul style="list-style-type: none"> <li>- Rotate y-axis label to horizontal position for easy reading</li> <li>- Keep space between bars smaller than width of bars</li> <li>- Avoid 3-D to allow easier line-up with numbers on y-axis</li> </ul>
<b>Line</b>	<ul style="list-style-type: none"> <li>- Demonstrates trends or interactions between variables</li> <li>- Good for showing movement over time</li> <li>- Useful for most audiences</li> </ul>	<ul style="list-style-type: none"> <li>- Avoid legends. Instead, place labels next to lines when possible</li> <li>- Rotate y-axis label to horizontal position for easy reading</li> <li>- Avoid using too many lines</li> </ul>
<b>Stacked bar</b>	<ul style="list-style-type: none"> <li>- Conveys differences</li> <li>- Captures a lot of data in a small space</li> <li>- More suited to technical or other analytical audiences</li> </ul>	<ul style="list-style-type: none"> <li>- When using colors in bars, ensure contrast shows when printed in black and white</li> <li>- Align numbers across as much as possible and align labels with numbers</li> </ul>
<b>Histogram</b>	<ul style="list-style-type: none"> <li>- Shows frequency distributions, indicating how many in each class are being measured</li> <li>- Not immediately intuitive for most people</li> <li>- Best used with statistically oriented audience</li> </ul>	<ul style="list-style-type: none"> <li>- Rotate labels for ease of reading</li> <li>- Avoid double y-axis if possible</li> </ul>
<b>Scatter plot</b>	<ul style="list-style-type: none"> <li>- Shows correlations, how well a variable follows the expected pattern</li> <li>- May need to be explained more than most charts making the title even more important in delivering the “so what?”</li> </ul>	<ul style="list-style-type: none"> <li>- Rotate y-axis label for ease of reading</li> <li>- Make sure title explains the meaning of content</li> </ul>

## Creating Effective Text Slides

Text slides are the staple for most presentations and, in fact, often overused. We should encourage our students to minimize their use; otherwise, their presentation appears to be no more than a document turned on its side. Of course, they cannot avoid them altogether. They should simply use them only when necessary and look for ways when they do use them to create variations on the traditional list of bullet points.

The goal with any text chart is to make it as readable as possible and to make sure that it contains meaningful content. Achieving both of these objectives is not always easy since to ensure legibility, the presenter must minimize the words, which means every word must count.

Students should be taught to follow the guidelines below when creating text charts (Exhibit 8 illustrates many of these guidelines):

1. **Limit the number of words on the slide.** They should not have too many bullets or too many words at each bullet. The size of the room and the font they can use will determine exactly how many bullets and how many words, although usually five to six bullets with six to eight words per line will work with 24-point font.
2. **Do not have only one bullet or sub-bullet as a category.** They should realize that the different levels of bullets are similar to an outline, and most students know they should not have an “A” without a “B” in an outline.
3. **Use hanging indents for text lists of more than one line.** If they have trouble aligning their bullets and the indentations, they should make their ruler visible in <View> and then, adjust the bullets. Each bullet level will adjust when they adjust one of them.
4. **Avoid having too many “widow words.”** They should cut words or decrease font to avoid them. They should be particularly careful not to have widow words in titles.
5. **Make sure all bulleted items are parallel in structure.** Although we teach them the importance of parallelism in lists and headings, we often need to remind them when they start creating slides.
6. **Maximize the impact of the title slide.** In addition to communicating the primary purpose or message of their presentation on the title slide, they should identify the audience and the presenter by name and include the date.
7. **Use some variation in how text slides are formatted.** Slide after slide of lists of bullets can become very monotonous. They should be encouraged to try variations, such as using two columns or using a graphic element to reinforce their messages.

## Exhibit 8

### Examples of Text Charts

#### A Basic Text Chart

##### Key Current Quarter Priorities

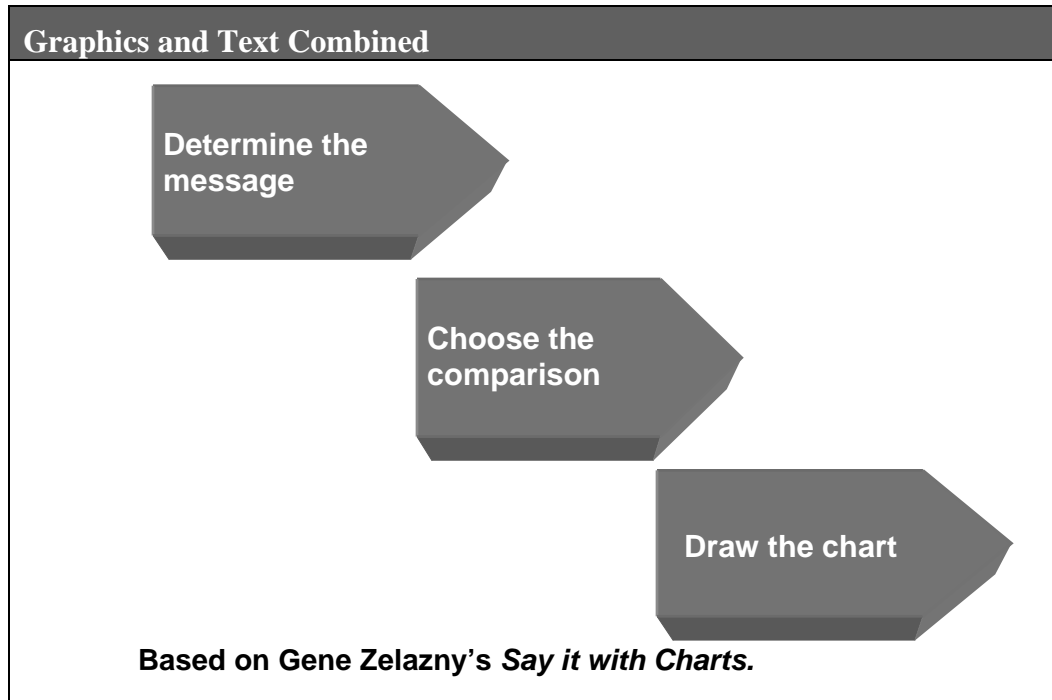
- ❑ **Global Division**
  - ❖ **Maintain consistent price pressure**
  - ❖ **Execute toward lower alternative targets**
  - ❖ **Implement new global/local philosophy**
  - ❖ **Increase/monitor attach rates**
- ❑ **Technical Division**
  - ❖ **Improve customer acceptance of New line**
  - ❖ **Achieve target market share**
  - ❖ **Increase channel sales on Newline families**

#### A Two Column Text Chart

##### Current Priorities by Division

<b>Division</b>	<b>Priority Actions</b>
<b>Global</b>	<ul style="list-style-type: none"><li>- <b>Implement global/local philosophy</b></li><li>- <b>Work with Area divisions to increase/ monitor attach rates</b></li></ul>
<b>Technical</b>	<ul style="list-style-type: none"><li>- <b>Use SWAT team to impact customer acceptance of Newline and families</b></li><li>- <b>Increase channel sales on Newline and families to achieve market share</b></li></ul>

**Exhibit 8 (continued)**  
*Examples of Text Charts*

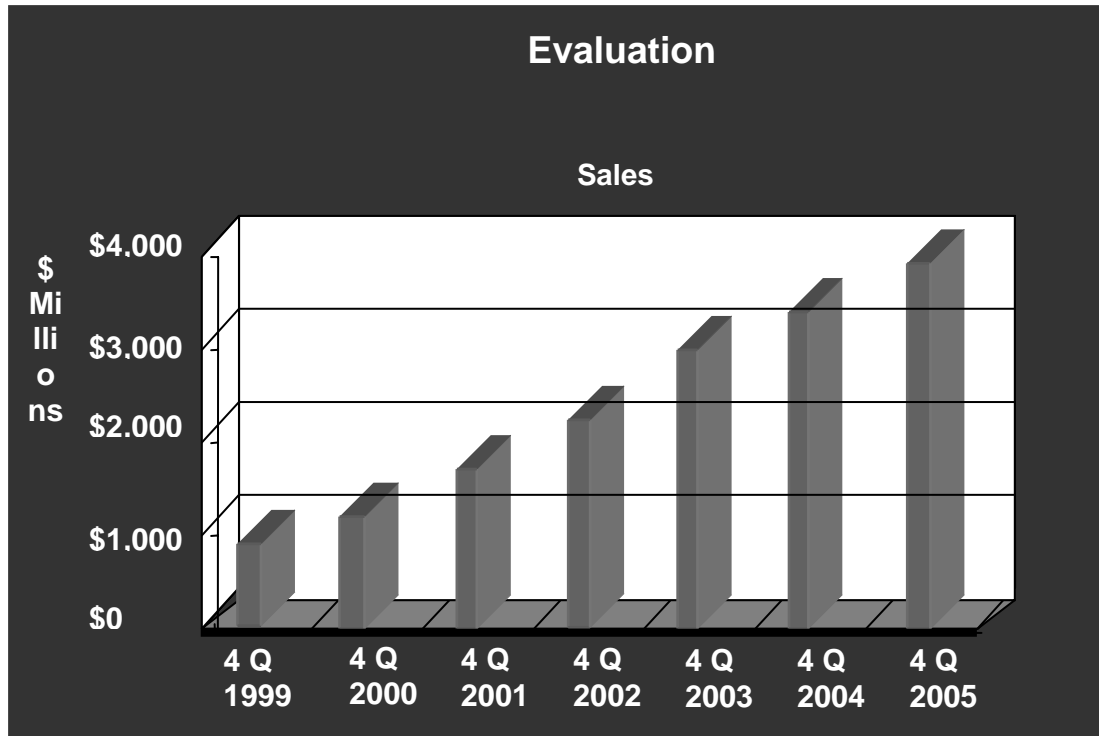


**Integrating Graphs and Other Imported Objects**

Many of the design faults that show up in PowerPoint presentations occur when people insert graphs or objects from other programs, Excel in particular. We need to teach our students that anything added to the presentation should be harmonious with it. The colors, fonts, and backgrounds should conform to the rest of the presentation. In addition, students need to know to remove the “chart junk” from graphs and reformat labels to make them easier to see. Exhibit 9 demonstrates a poorly designed graph for PowerPoint presentation purposes:

## Exhibit 9

### *Poorly Designed Graph Inserted Into PowerPoint from Excel*



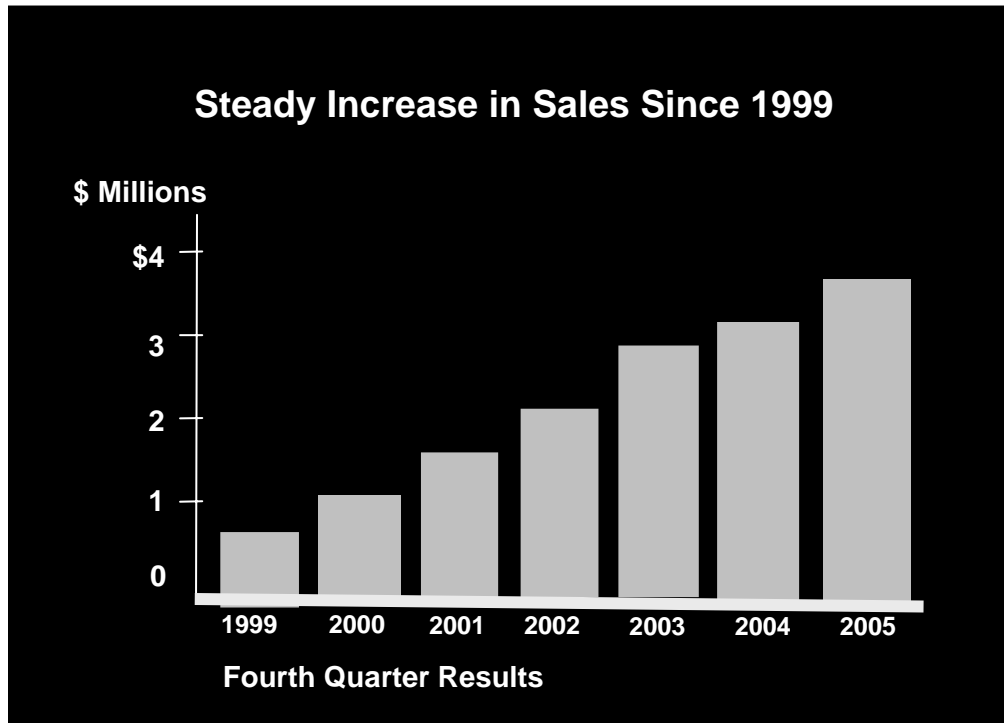
This graph demonstrates common problems when students import graphs into PowerPoint:

- The chart has two titles, the one given in Excel and the one used in PowerPoint
- Axis labels are not rotated to be read horizontally
- Bars are too narrow; the space between should be smaller than the width of the bars
- Use of 3D makes reading the locations of the tops of the bars difficult
- Chart junk clutters the exhibit: the zeroes and the repetition of 4 Q with each year
- The background of the graph is not consistent with the background of the presentation

The graphs should look as if they are part of the presentation, not pulled in at the last minute from Excel without concern for consistency in the formatting and clarity of the information being conveyed. Exhibit 10 shows the same graph reworked for projection in PowerPoint. It is now simple, clean, and easy to read.

## Exhibit 10

*Corrected Bar Graph Imported from Excel*



Although the changes create a graph that is more aesthetically pleasing, the main objective is legibility when the graph is projected. Students need to realize that taking the extra time to make the imported graphs easier to read and more attractive for a PowerPoint presentation is worth the effort; otherwise, it looks to their audience as if they are careless or not interested in the audience's ability to read what they are presenting.

They can, of course, make the graph even more appealing by effective use of color, and by following some of the design principles discussed above, but the primary goal when adjusting any inserted graph or object should be to make it easier for the audience to get the message while integrating the graph or other inserted object seamlessly with the rest of the presentation.

### Using Animation with Caution

Students need to understand that animation is a great tool if used effectively. Unfortunately, it is easily overused and misused. The following guidelines will help students use animation effectively so that it adds to the impact of their presentation by supporting their main messages:

1. Use animation to control the delivery of the message or help the audience with the message.
2. Do not overuse animation or add it needlessly.
3. Bring in text or AutoShapes from the most logical direction and the shortest distance.

4. Avoid using several different animation techniques in one presentation. Decide on one or two main techniques and stay with them.
5. Make sure to test the animation by running the presentation in slide view from beginning to end.

As with all design guidelines discussed in this article, they should use animation only if it adds to or helps them in delivering their message.

### **Delivering Effectively With PowerPoint**

We should teach our students that they want the audience to focus on them when presenting with PowerPoint, so their goal should be to make the handling of PowerPoint as unobtrusive as possible. The following provides some hints we should give them when delivering with PowerPoint.

#### *Maintaining Eye contact*

Students need to be taught to look at their audience, not back at the projection screen or down at their laptop screen when presenting with PowerPoint. Their goal should be to maintain their eye contact with their audience at all times. If they turn their back, they lose this contact and also their voice will be less audible since they will be projecting at the screen instead of out toward the audience. In most presentations, their delivery should proceed as if there were no projected images behind them or in front of them.

#### *Establishing a Secure Stance*

PowerPoint presenters should assume a firm stance and position themselves so that they are facing forward and have easy access to whatever device they are using to change their slides. They should be sure that they do not block the screen from the view of the audience in any part of the room. In the interests of good rapport, they should position themselves as close to their audience as possible and not back next to the screen, which is usually located too far from the audience.

#### *Keeping Adequate Volume Levels*

We should teach our students to be careful to maintain their volume when they move to change their slides. They should finish their thought on the current slide and complete their introduction to their next slide; then, stop talking for a second and change to the slide they have just introduced. Volume goes along with eye contact. Usually, maintaining strong eye contact will help them to maintain the right volume; it is when they look away from the audience that they are most likely to drop their volume.

### *Providing Transition Between Slides*

When using PowerPoint, presenters should make the transition from slide to slide as seamless as possible. One technique is to introduce each slide before they show it. Most presenters wait for the slide to appear and then start talking about it almost as if they do not know what is coming up until they see it. For a much more effective transition, they should introduce the “so what?” of the next slide before it appears. Displaying their slide only after they have introduced it will help make them appear more confident and their presentation flow more smoothly.

### *Obeying Time Limits*

A common problem that MBAs have is creating too many slides for the time allowed for the presentation. They should be held to very strict time limits and encouraged to practice their presentations with a timer. The rule of thumb is to allow at least 2 to 3 minutes per slide. They should be coached to give their audience time to absorb complex graphic information and be prepared to walk their audience through a slide if necessary. Also, they should avoid using the automatic timing in PowerPoint; it is next to impossible to make it match exactly their timing as they present. Having the slides advance ahead of them or even behind them will be distracting to them and to their audience.

### *Testing the Technology*

Students should be encouraged to test the technology and the room in advance, and if possible, schedule a practice session using the technology in the actual presentation setting. Not only do they need to make sure they know how to use the technology and that everything is working, they also need to see how their presentation projects. For example, they may find that the projector distorts their colors, and they will need to adjust them. They need to be sure that the font size is large enough for the audience to see all text from the back of the room. Finally, they will want to see where the screen, the projector, and the computer are positioned so that they will know where to stand to establish eye contact and the best rapport with their audience.

Improving their delivery with PowerPoint will require practice for most MBAs, but their success in using PowerPoint will come down to their ability to present effectively with it. They can master all of the other guidelines discussed in this article, but it will be in the execution that their abilities will be showcased.

In conclusion, we can help our students be more effective in using PowerPoint if we provide instruction in the guidelines discussed above, but they also need to be reinforced as often as possible through practice and feedback. Teaching the MBAs to use PowerPoint effectively takes time, but it is a necessary part of any presentation training for them. We owe it to our students to teach them how to make PowerPoint work for them, not against them. They should use it as support for them as presenters and use it as the tool it is intended to be. Used correctly, PowerPoint can help them be better presenters and help them deliver their messages more effectively, which will provide them a leadership edge in any organization that they join once they graduate.



## References

- Baker, W.H., & Thompson, M.P. (2004). Teaching presentation skills. *Business Communication Quarterly*, 67(2), 216-219.
- Cerf, V. (2003) quoted in Does PowerPoint make us stupid? Retrieved from the World Wide Web at <http://www.cnn.com/2003/TECH/ptech/12/30/byrne.powerpoint.ap/>.
- Does PowerPoint make us stupid? (2003). Retrieved from the World Wide Web at [www.cnn.com/2003/TECH/ptech/12/30/byrne.powerpoint.ap/](http://www.cnn.com/2003/TECH/ptech/12/30/byrne.powerpoint.ap/).
- DuFrene, D.D., & Lehman, C.M. (2004). Concept, content, construction, and contingencies: Getting the horse before the PowerPoint Cart. *Business Communication Quarterly*, 67(1), 84-88.
- Goldstein, M. (2003, February). It's alive? The audience, that is, but some presenters don't seem to know it. *Successful Meetings*, 52(2), 20.
- Guernsey, L. (2001, May 31). PowerPoint invades the classroom. The New York Times, Technology Section. Retrieved from the World Wide Web at <http://www.nytimes.com/2001/05/31/technology/31POWE.html?ex=1093147200&en=8807396b6c598e2e&ei=5070>.
- Keller, J. (2003, January 5). Killing me Microsoftly with PowerPoint. *Chicago Tribune: On-line Edition*. Retrieved from the World Wide Web at [www.chicagotribune.com/news/showcase/chi-0301050396jan05.story](http://www.chicagotribune.com/news/showcase/chi-0301050396jan05.story).
- Kienzler, D.S. (1997). Visual ethics. *The Journal of Business Communication*, 34(2), 171-87.
- McKenzie, J. (2000, September). Scoring Power Points. *From Now On: The Educational Technology Journal*. Retrieved from the World Wide Web at [www.fno.org/sept00/pwerpoints.html](http://www.fno.org/sept00/pwerpoints.html).
- Minto, B. (1996). *The pyramid principle: Logic in writing and thinking*. London. Minto International.
- Norvig, P. (2003, August 2). PowerPoint: Shot with its own bullets. *Lancet*, 362(9381), 343.
- Nunberg, G. (1999, December 20). The trouble with PowerPoint. *Fortune*, 330-334.
- Parker, I. (2001, May 28). Absolute PowerPoint: Can a software package edit our thoughts? *The New Yorker*, 76.
- Porter, D. (2001). Class working: How today's colleges and universities are preparing tomorrow's presenters. *Presentations*, 15(1), 38-46.
- Schwartz, J. (2003, September 28). The level of discourse continues to slide. The New York Times, Ideas & Trends Section 4, p. 12, Column 1. Retrieved from the World Wide Web at <http://query.nytimes.com/gst/abstract.html?res=FA0C13FB38590C7B8EDDA00894DB404482>.
- Shwom, B.L., & Keller, K.P. (2003). A response to Edward R. Tufte's "The cognitive style of PowerPoint." *Communication Insight*. Retrieved from the World Wide Web at [www.communipartners.com](http://www.communipartners.com).
- Simons, T. (2004). Does PowerPoint make you stupid? *Presentations*, 18(3), 24.
- Stewart, T.A. (2001, February 5). Ban it now! Friends don't let friends use PowerPoint. *Fortune*, 210.
- Thompson, C. (2003, December 14). PowerPoint makes you dumb. The New York Times. Technology Section. Retrieved from the World Wide Web at <http://www.nytimes.com/2003/12/14/magazine/14POWER.html?ex=1093147200&en=0938508c2ce125cb&ei=5070&ex=1071982800&en=799ad449b398c2d7&ei=5062&partner=GOOGLE>.

Tufte, E.R. (1983). *The visual display of quantitative information*. Cheshire, CT: Graphics Press.

Tufte, E.R. (2003). *The cognitive style of PowerPoint*. Cheshire, CT: Graphics Press.

Vik, G.N. (2004). Breaking bad habits: Teaching effective PowerPoint use to working graduate students. *Business Communication Quarterly*, 67(2), 225 -228.

Vogel, D., Dickson, G. & Lehman, J. A. (1986). *Persuasion and the role of visual presentation support*. Study sponsored by the University of Minnesota and 3M Corporation. The presentersuniversity.com site claims that “the human brain processes visuals 400,000 times faster than text [and] visual aids have been found to improve learning by up to 400 percent.” [www.presentersuniversity.com/visuals.php](http://www.presentersuniversity.com/visuals.php). They cite Knowledge Industry Publications, 1998, although the original reference could not be located and the numbers could not be verified.

Worley, R.B., & Dyrud, M.A. (2004). Presentations and the PowerPoint problem – Part I. *Business Communication Quarterly*, 67(1). Presentations and the PowerPoint problem – Part II. *Business Communication Quarterly*, 67(2). Special “Focus on Teaching” with several articles on how to use PowerPoint effectively in the classroom.

Zelazny, G. (2001) *Say it with charts: The executive’s guide to visual communication*. New York: McGraw-Hill.

Zuckerman, L. (1999, April 17). Words go right to the brain, but can they stir the heart? Some say popular software debases public speaking. *The New York Times*, Technology Section. Retrieved from the World Wide Web at <http://www.nytimes.com/library/tech/99/04/biztech/articles/17power.html>.

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