



Minto Pyramid Principle

for writing Equity research reports, Business plan,
Strategy reports and other consulting Assignments

Logic in Writing, Thinking, & Problem Solving

Contents

- Introduction
- The Pyramid Logic Structure: What is It ?
- The Pyramid Logic Structure: Why Use It ?
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Traditionally, Presentations Lack a Cohesive Theme

- Presentations are typically a summary of fact-based analysis
 - ✓ Major sections of document are not clearly linked together
 - ✓ Individual slides are not clearly linked to each other or a common theme
 - ✓ Individual slides lack a clearly defined or articulated main point or “headline”

Presentations Require a Cohesive Theme To Be Persuasive and Inspire Action

- Presentations should make a strong recommendation, provide facts and conclusions in support of the desired option, and present the rationale for not selecting other alternatives
- Presentations should create client alignment around our recommendation and convince the client that action is necessary
- Presentations should convey information to build client knowledge regarding the desired outcome
- Presentations should become an integral part of the client's decision-making process

A Hypothesis-Driven Logic Flow Will Help Create this Cohesive Theme



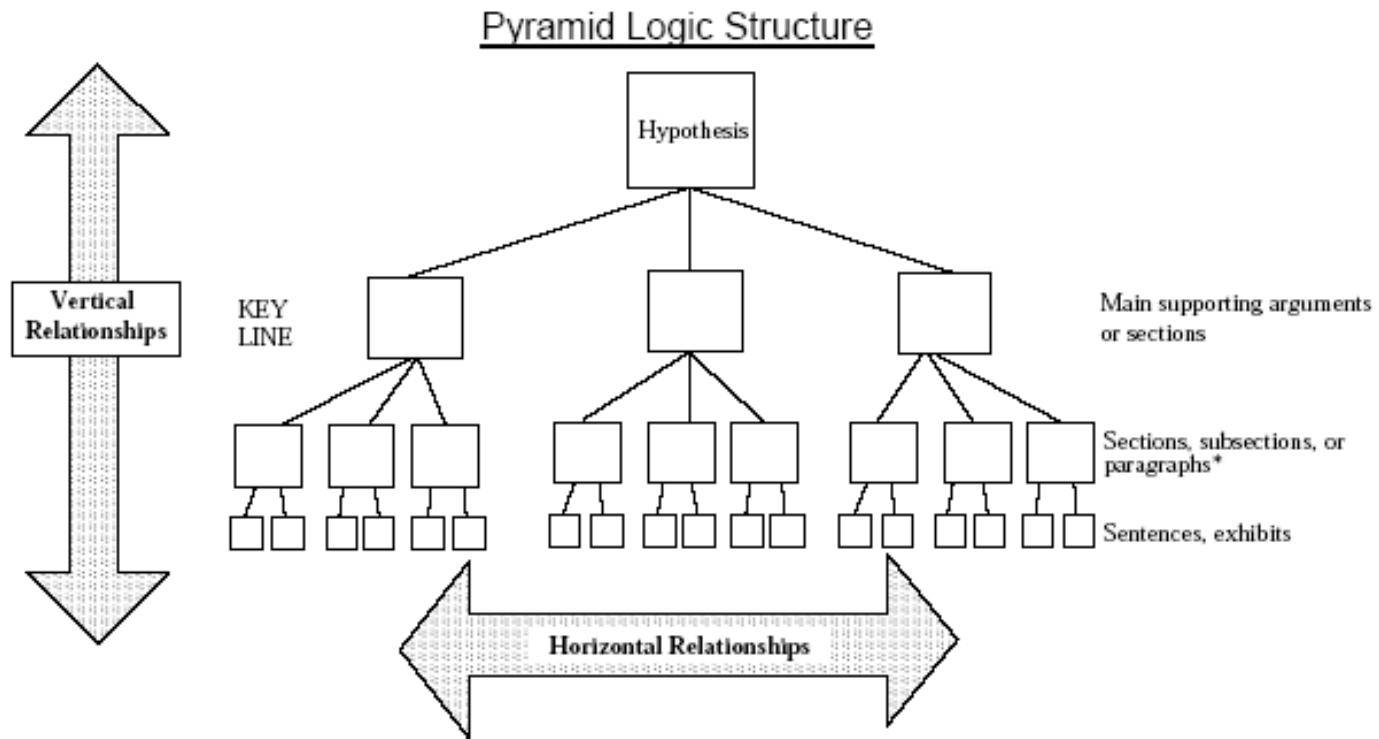
- Directs the reader's attention to the question that does or should exist in his/her mind
- States a hypothesis to answer that question
- Develops the context for the more detailed information to come

- Build the logic to support the hypothesis
 - ✓ Introduce facts
 - ✓ Draw conclusions

- Draw logical conclusions
- "Prove" the hypothesis

The Pyramid Logic Structure: What is It ?

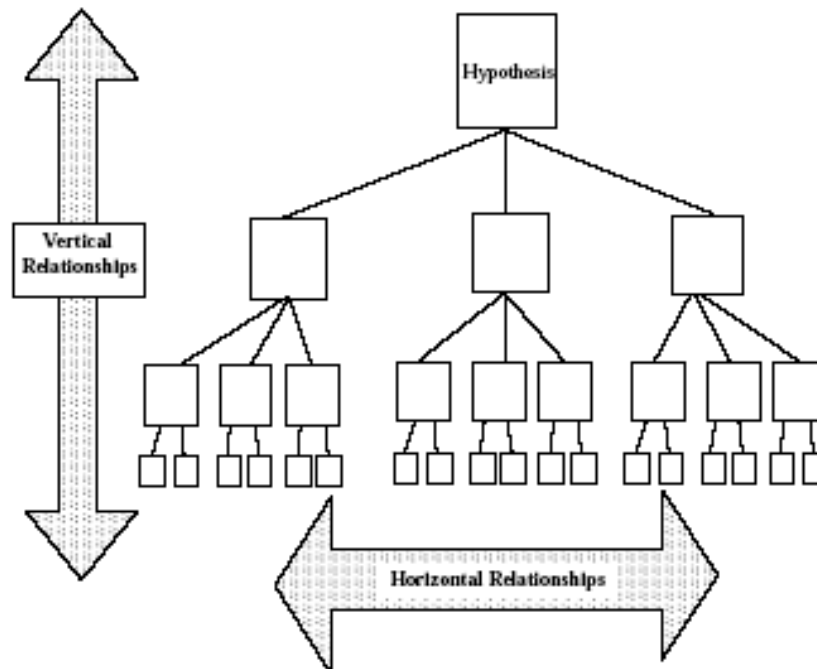
This Hypothesis-Driven Logic Flow Is Referred to as the Pyramid Logic Structure (PLS)



- * The pyramid will have as many levels as needed to support the logical hierarchy
- Source: Barbara Minto, *The Pyramid Principle: Logic in Writing and Thinking* (London: Minto International, 1996)

In the PLS, Ideas Supporting the Hypothesis Are Related Both Vertically and Horizontally

Pyramid Logic Structure



Vertical Relationship Rules

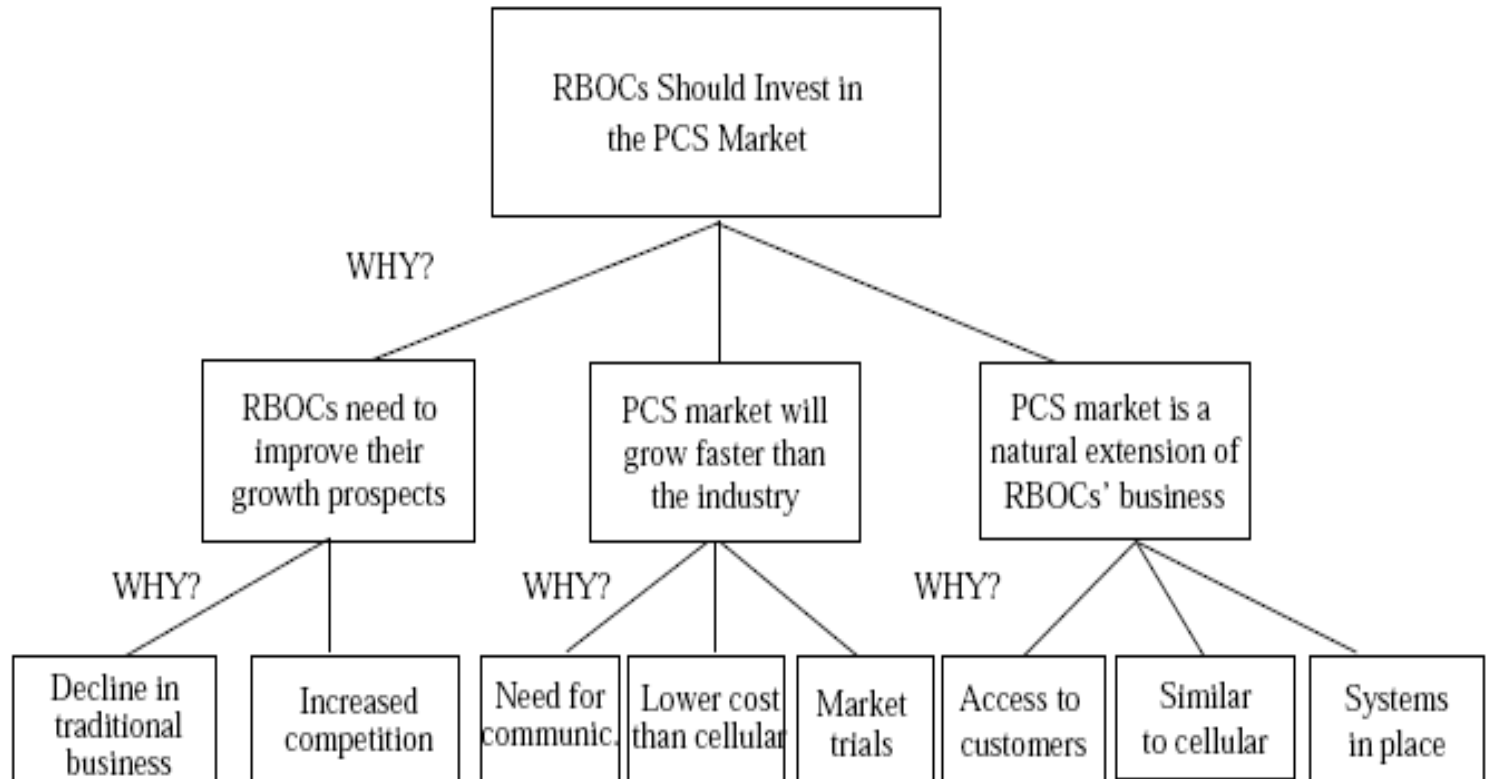
- Ideas at any level in the pyramid must always be summaries of the ideas grouped below them
- Ideas with support always have at least two supporting points
- Supporting points must be necessary and sufficient to logically "prove" the summary point

Horizontal Relationship Rules

- Ideas in each grouping must be the same type of idea (e.g., inductive, deductive)
- Ideas should be grouped with similar ideas, and each grouping of ideas should be distinct
- Each grouping of ideas should be comprehensive, and the logic used in across groupings must be consistent

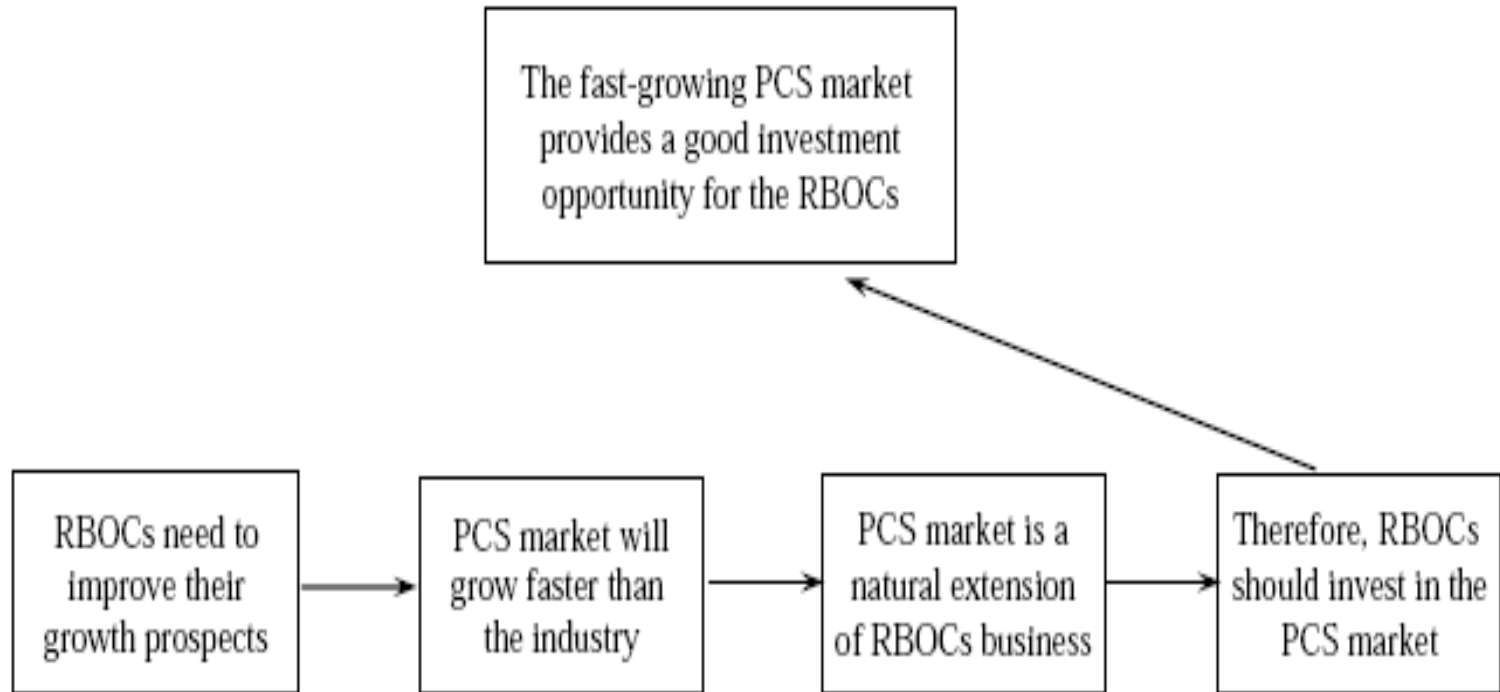
Vertical Relationships Support the Hypothesis by Establishing a Question/Answer Dialogue

Example of Vertically Related Ideas



Horizontal Relationships Support the Summary Point by Logically Relating Facts or Ideas

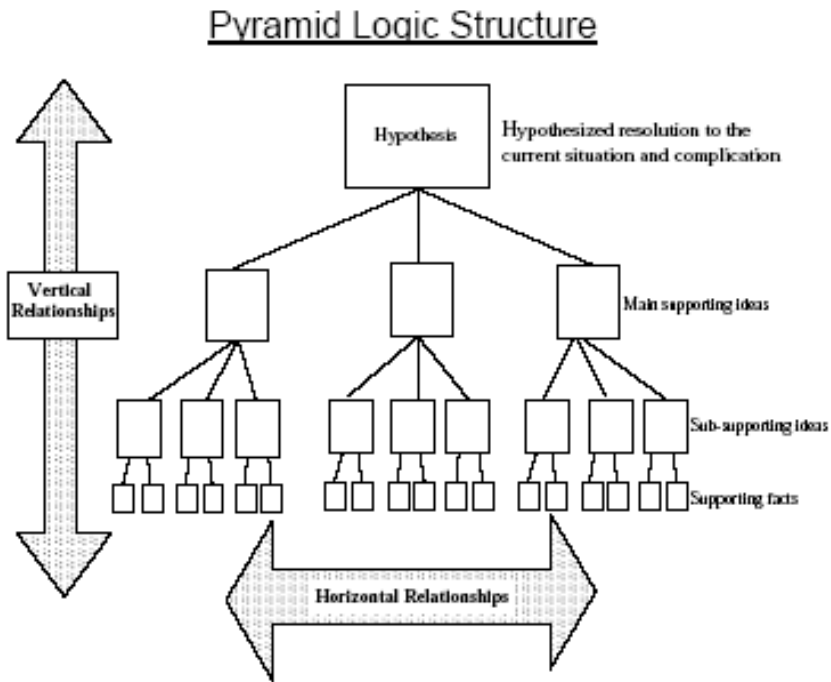
Example of a Horizontal Relationship



These Horizontal and Vertical Relationships Are Linked in the Pyramid Logic Structure

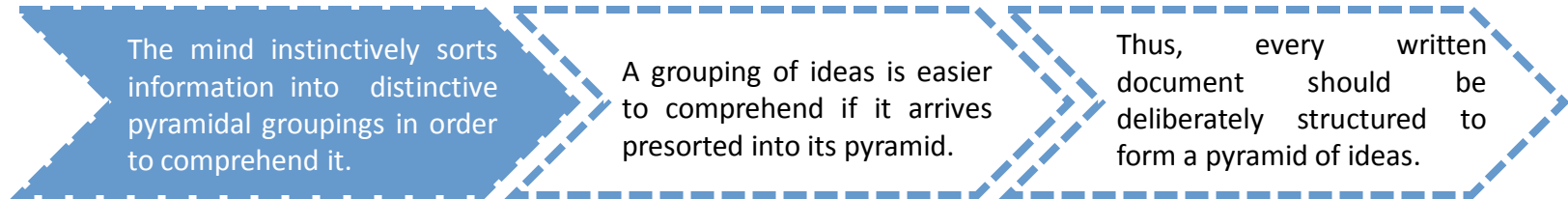
Summary

- Pyramid logic structure builds support for the main hypothesis by linking vertical and horizontal relationships
- Vertical relationships support the main hypothesis or summary point
- Horizontal relationships build the logic to support each summary point



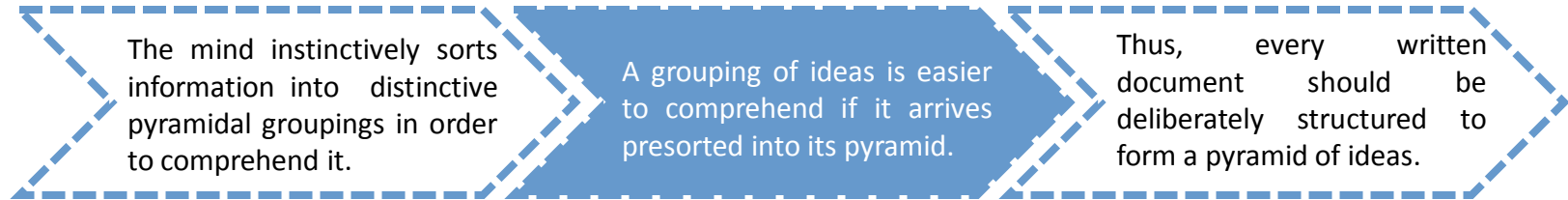
The Pyramid Logic Structure: Why Use It ?

The PLS Complements the Thought Processes of the Human Mind



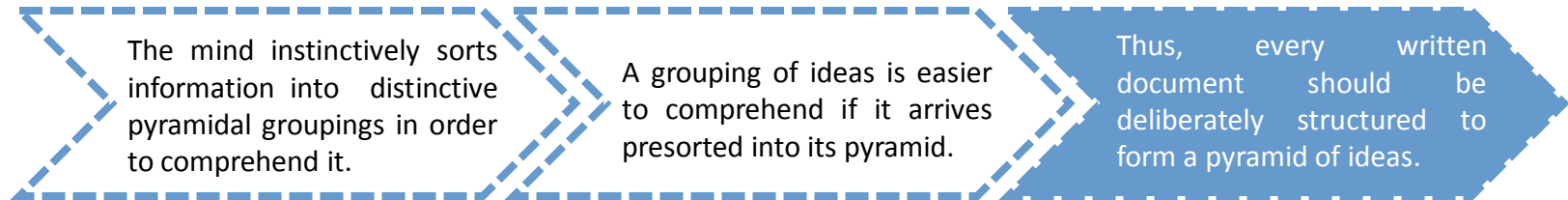
- The mind attempts to impose order on everything it perceives
- The mind tends to consider any sequence of things that occur together as belonging together (this also applies to listening to or reading ideas)
- The pattern for ideas is shaped like a pyramid
 - ✓ The pyramid states the logic of the relationships of ideas
 - ✓ Ideas are grouped into a logical hierarchy and the logic of the relationships is shown
 - ✓ A thought at one level suggests the thoughts below it
 - ✓ Thoughts at one level suggest the idea above them
- It meets the mind's needs to stop at the "magical" number seven
 - ✓ There is a limit to the number of ideas a person can comprehend at any one time
 - ✓ The mind cannot hold more than about seven items in its short-term memory at any one time (some can hold as many as nine, others can hold only five -- a convenient number is three)

All Mental Processes Utilize Pyramids To Categorize Information



- All mental processes (e.g., thinking, remembering, problem-solving) utilize the grouping and summarizing process
- Information in the mind can be considered as organized into a large conglomeration of related pyramids
- To communicate most easily to another mind, it is best to ensure that the message fits somewhere into existing pyramids
 - ✓ The reader can clearly grasp the reasoning
 - ✓ The reader can focus more on whether he/she agrees with it than on trying to comprehend it
 - ✓ The reader can more easily raise logical questions regarding the message

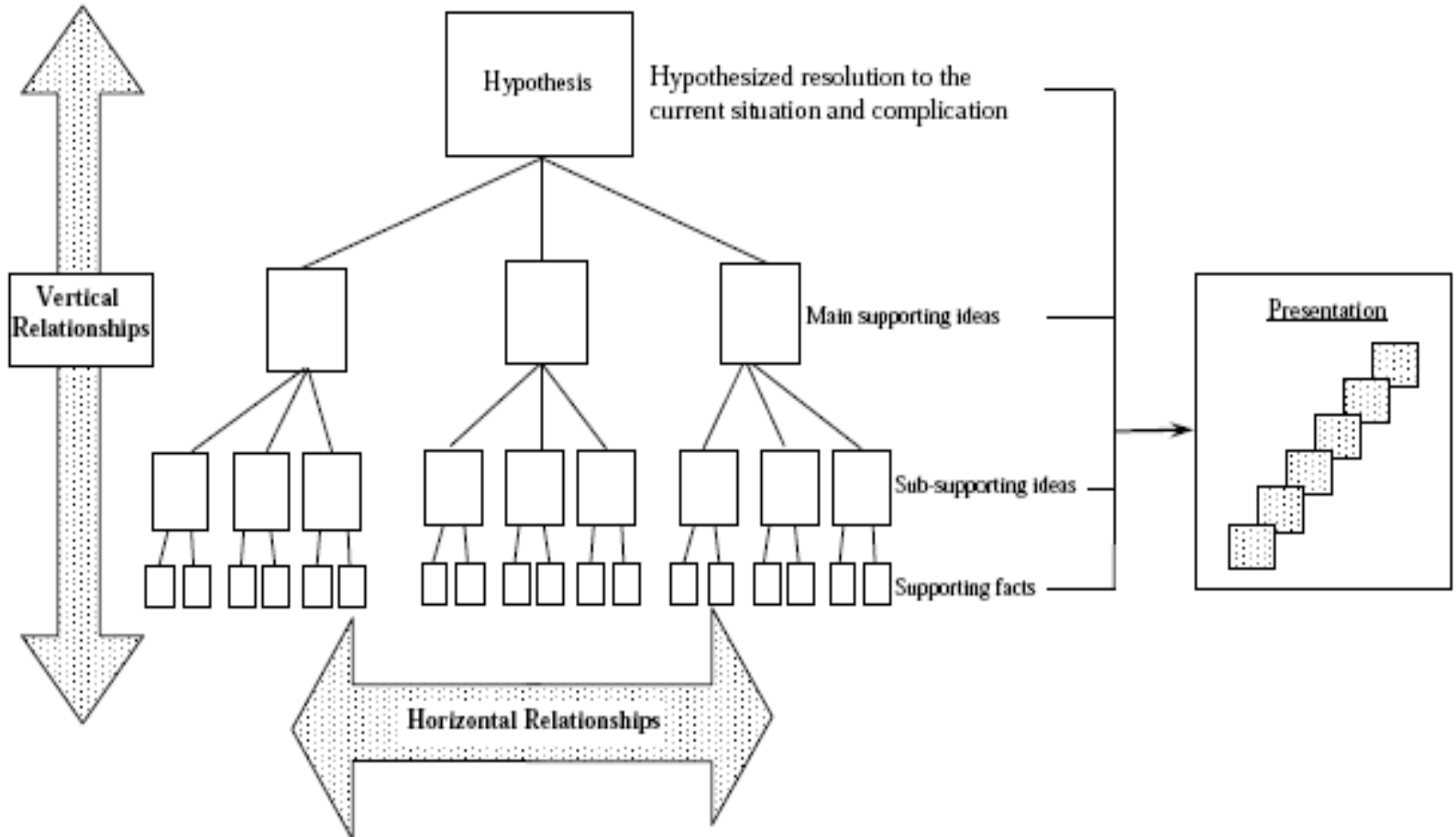
The Effectiveness of Communication Is Improved by the PLS



- The structure helps the reader to "see" the groupings of ideas the same way the author intended, increasing communication effectiveness
- Use of the pyramid structure provides other benefits for the writer and reader as well
 - ✓ Reduces time needed to produce a quality final draft
 - ✓ Decreases the length of final drafts
 - ✓ Ensures that the argument and support are complete and logical

Thus, the Pyramid Logic Structure Results in a Well - Organized, Persuasive Presentation

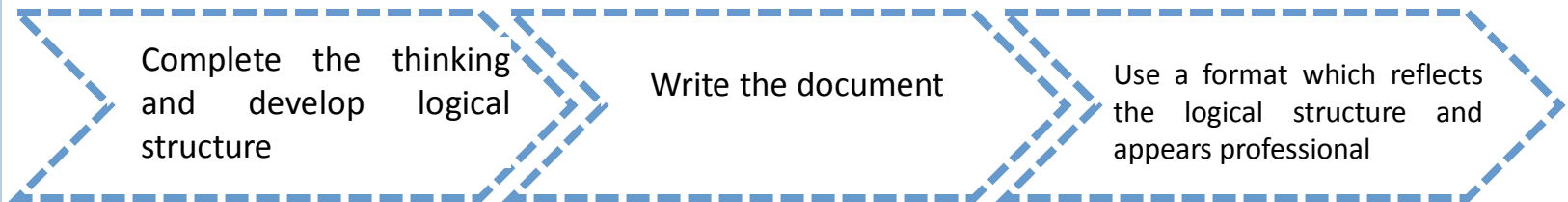
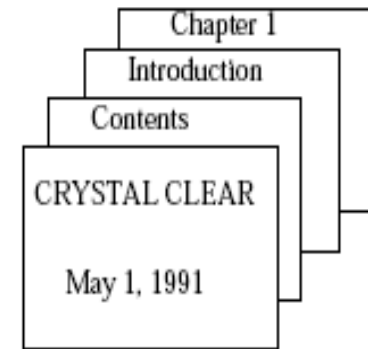
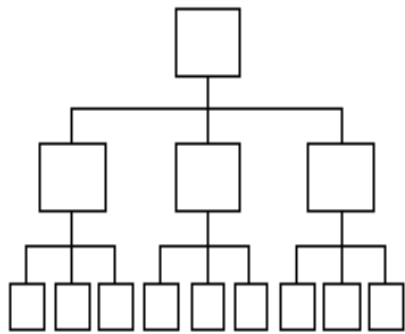
Pyramid Logic Structure



The Pyramid Logic Structure: Application

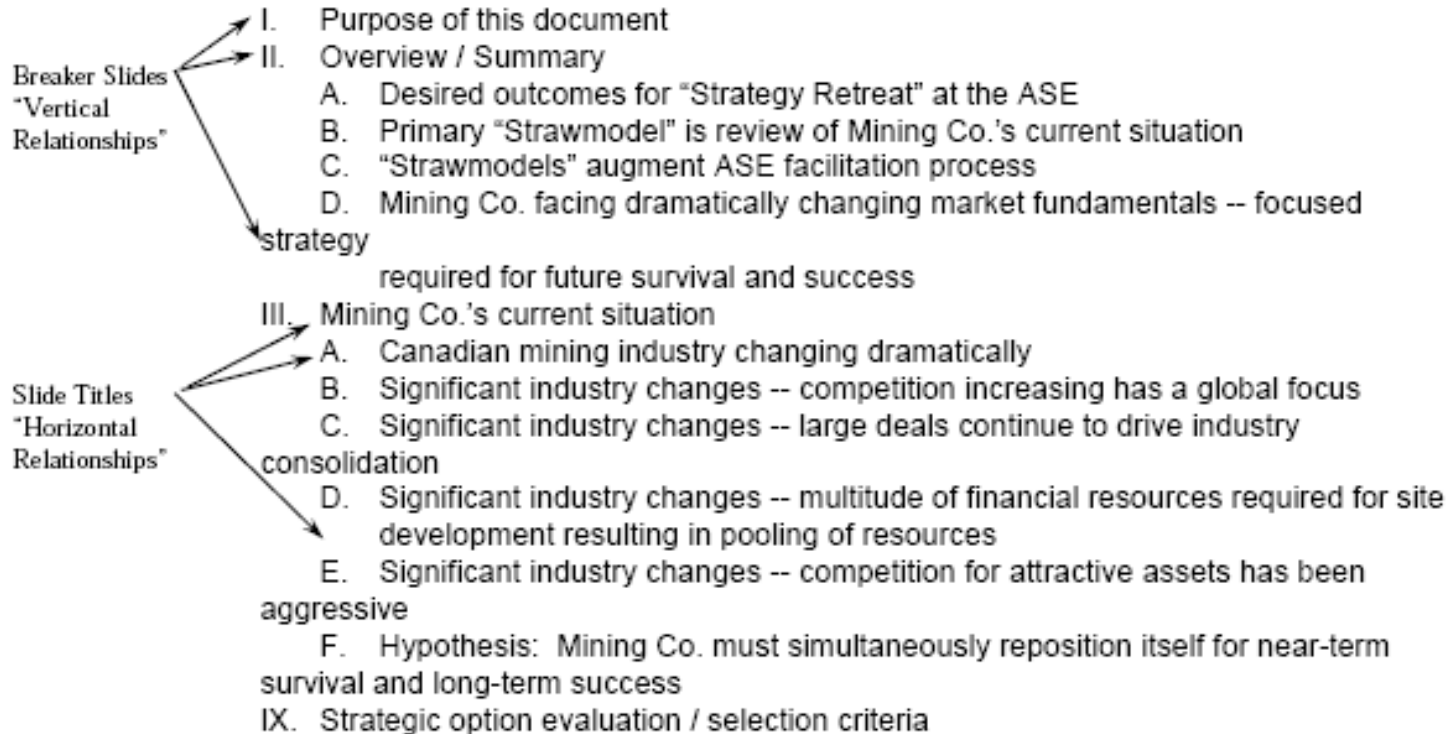
Using the Pyramid Logic Structure Requires Separating the “Thinking” and “Writing” Processes

Separate Thinking and Writing Processes



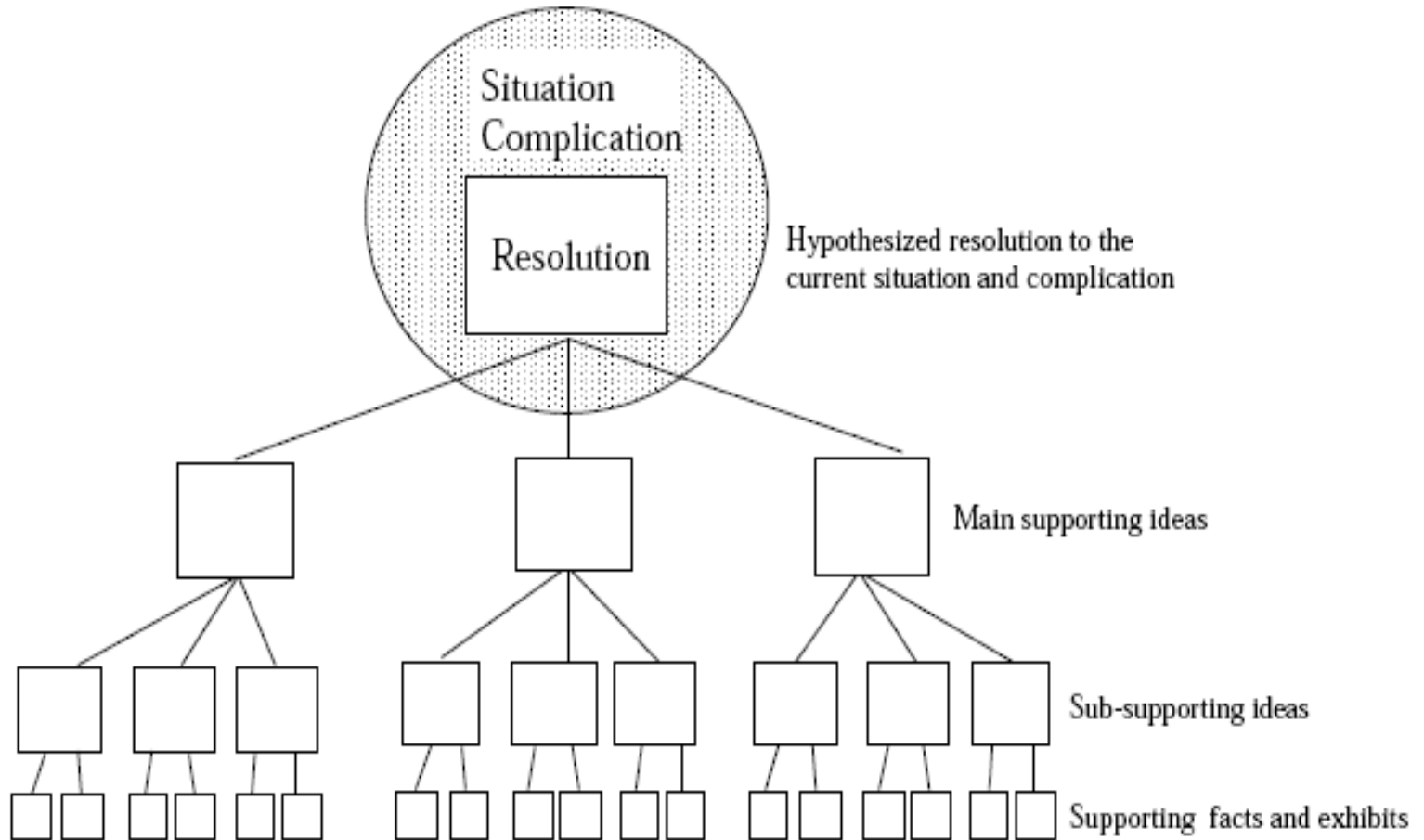
When “Thinking” About a Presentation, Use the Pyramid Logic Structure To Create an Outline

Hypothesis: Mining Co. must simultaneously reposition itself for near-term survival and long-term success Illustrative

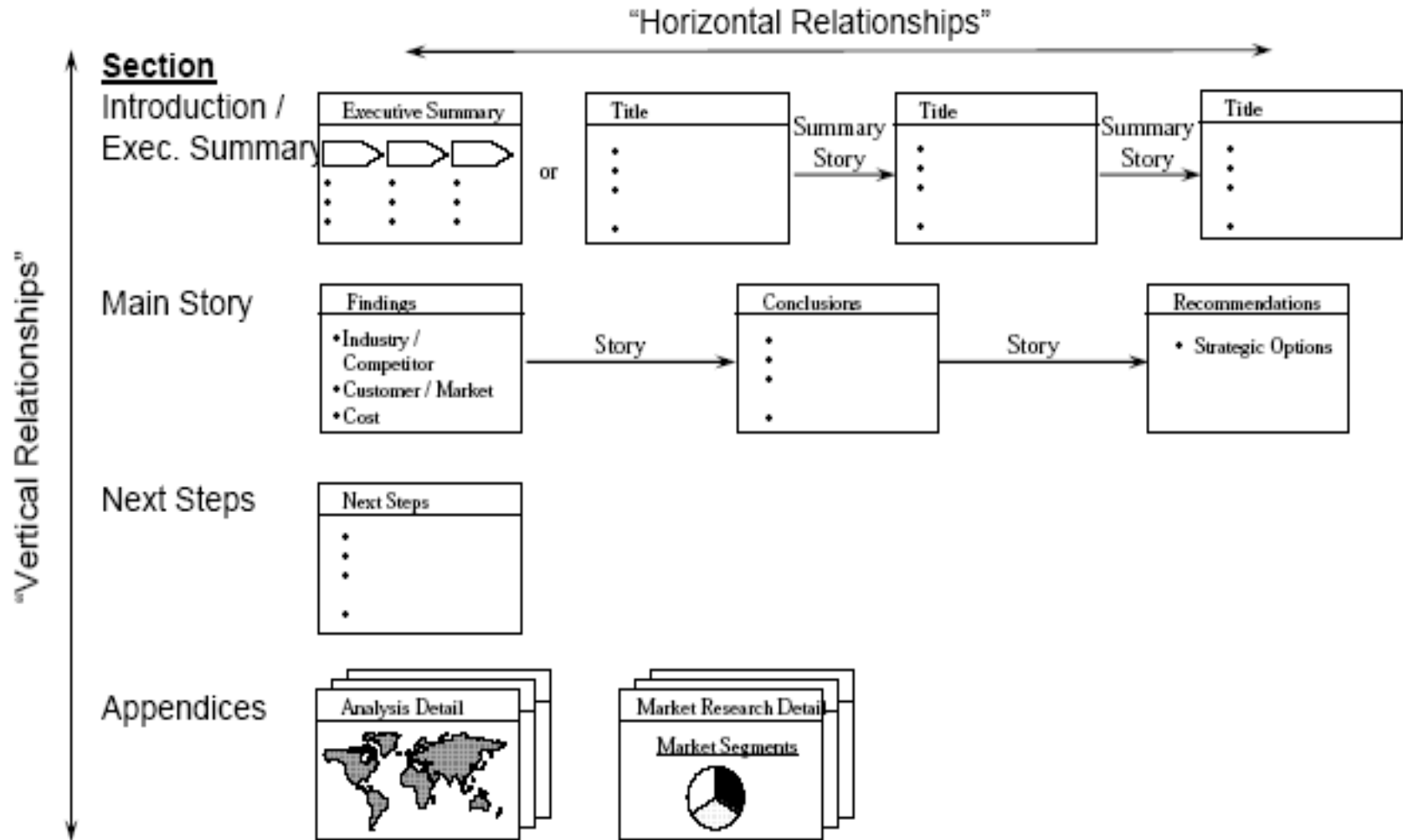


This Outline Should Organize the Facts that Support the Resolution

Pyramid Logic Structure



Using this Outline, a Storyboard Should Be Created To Begin “Writing” the Presentation



The Introduction Should Convey the Situation, Complication and Resolution

- Situation:
 - ✓ Revenue growth for the Regional Bell Operating Companies (RBOCs) has been slowing over the past five years
 - ✓ The majority of the RBOCs revenues come from access fees paid by long-distance service Providers
- Complication / Question:
 - ✓ The FCC is considering an auction of additional radio spectrum to be used for short-distance cellular telephone service (personal communication service -- PCS)
 - ✓ This additional radio spectrum will allow long-distance carriers to bypass the RBOCs in gaining access to customers
 - ✓ The RBOCs must improve their growth prospects to increase their stock price
- Resolution / Hypothesis*:
 - ✓ The RBOCs should invest in the PCS market to improve their growth prospects and avoid losing additional market share

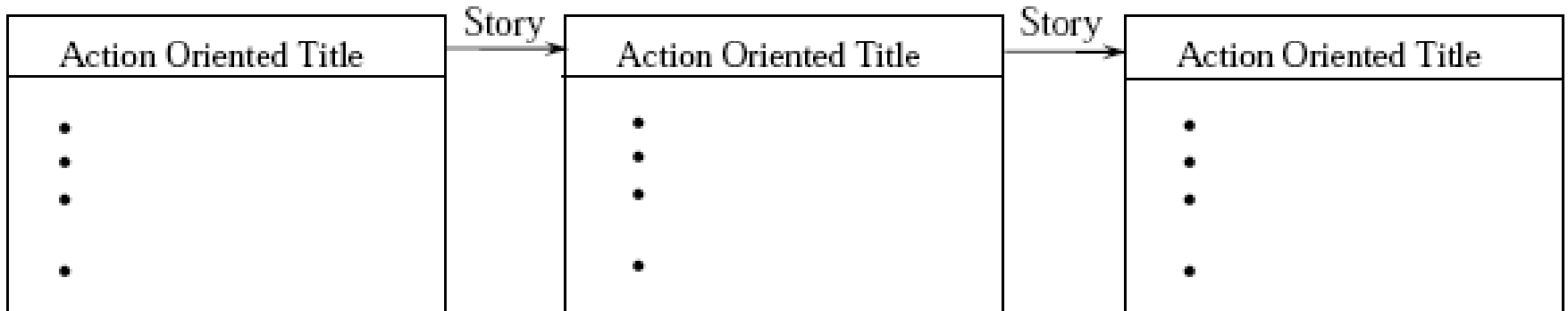
The Introduction Sets the Tone for the Presentation Consider Three Alternatives

- Three Approaches to Introductions

Order	Effect	Example
Situation Complication Resolution	Relaxed Considered	Concert Hall was built to be a home for the City Symphony Orchestra. Recently, however, Concert Hall has sponsored, promoted, and managed a number of visiting productions, none of which covered their costs. In view of the Hall's financial situation and the risks involved in such visiting productions, the wisdom of the Concert Hall's impresario role must be questioned. This document presents a program for bringing visiting productions to the city without risk to the Hall.
Resolution Situation Complication	Direct No-nonsense	Concert Hall must consider ending its sponsorship of visiting productions. Originally built to house the City Symphony Orchestra, the Hall has recently presented a number of visiting groups under its sponsorship. However, none of these sponsored productions covered their costs, and this aggravated the Hall's continuing financial problems. This document presents...
Complication Situation Resolution	Urgent Concerned	In the last year, Concert Hall has lost money on all 20 of the visiting productions it sponsored. Sponsorship of these productions is a departure from the Hall's original role as the home of the City Symphony Orchestra. Since the Hall now faces a growing deficit, the time has come to decide whether it can afford to act as impresario for the city. This document presents...

The Slide Titles Should Tell the “Main Story” by Developing Horizontal Relationships

Titles Create “Horizontal Logic”



There Four Possible Logic Groupings for Building these Horizontal Relationships

Logic Groupings	Usage	Sequence	Example
Deductive / Inductive	Making deductive arguments	<ol style="list-style-type: none"> 1. Major premise 2. Minor premise 3. Conclusion 	<ol style="list-style-type: none"> 1. RBOCs need revenue growth 2. PCS market is growing 3. RBOCs should invest in PCS
Chronological	<p>Grouping steps that represent a process or system</p> <p>Grouping the causes of an effect</p>	<ol style="list-style-type: none"> 1. First in time 2. Second in time 3. Third in time 	<ol style="list-style-type: none"> 1. RBOCs growth slowing 2. RBOCs stock price will fall 3. RBOCs unable to compete for access to customer
Structural	Dividing a whole into its component parts (e.g., company organization, geographic areas)	<ol style="list-style-type: none"> 1. Part A* 2. Part B 3. Part C 	<ol style="list-style-type: none"> 1. Need for communications 2. PCS is lower cost cellular 3. Trials have shown potential
Comparative	Classifying/ranking similar items/ideas (order of magnitude, importance, degree, urgency)	<ol style="list-style-type: none"> 1. First most important 2. Second most important 3. Third most important 	<ol style="list-style-type: none"> 1. RBOCs growth prospects dim 2. FCC auctioning spectrum 3. Competitors entering market

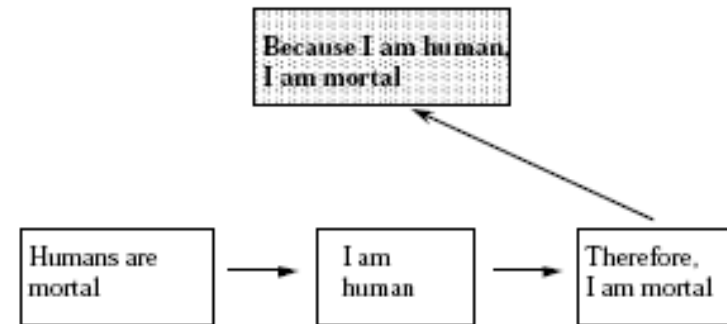
The Two Horizontal Logic Groupings Used Most Frequently Are Inductive and Deductive Logic

Inductive Grouping



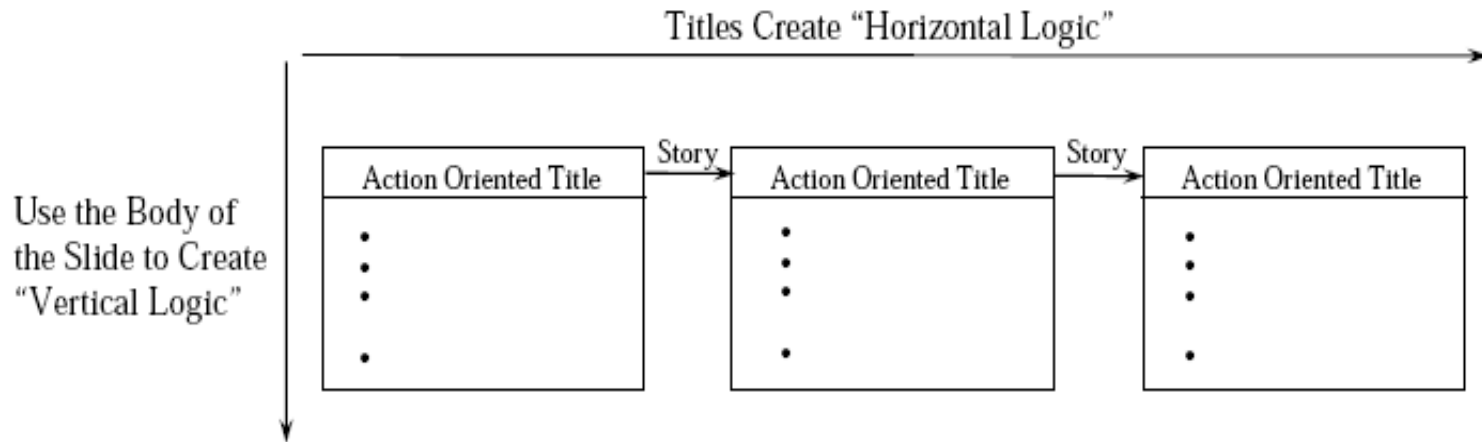
- A set of ideas related by a similar topic
 - Subject or predicate remains same while other varies
 - Ideas can be clearly labeled with a plural noun (e.g., reasons, steps)
- The summary statement draws an inference based on what is similar about the points, or states the effect that a group of causes would create

Deductive Grouping



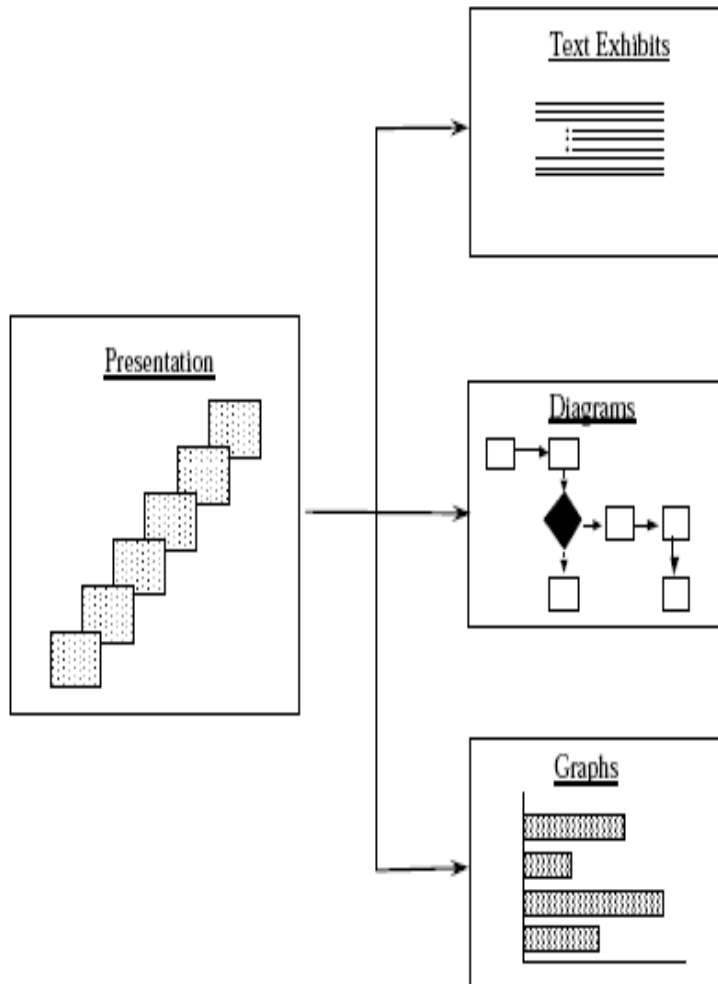
- Successive steps in an argument
 - First idea makes a statement about an existing situation
 - Second idea comments on the subject or predicate of the first idea
 - Third idea states the implication of those two situations existing at the same time
- The summary statement relies heavily on the final point

The Body of Each Slide Should Develop the “Supporting Story” for the Slide Title



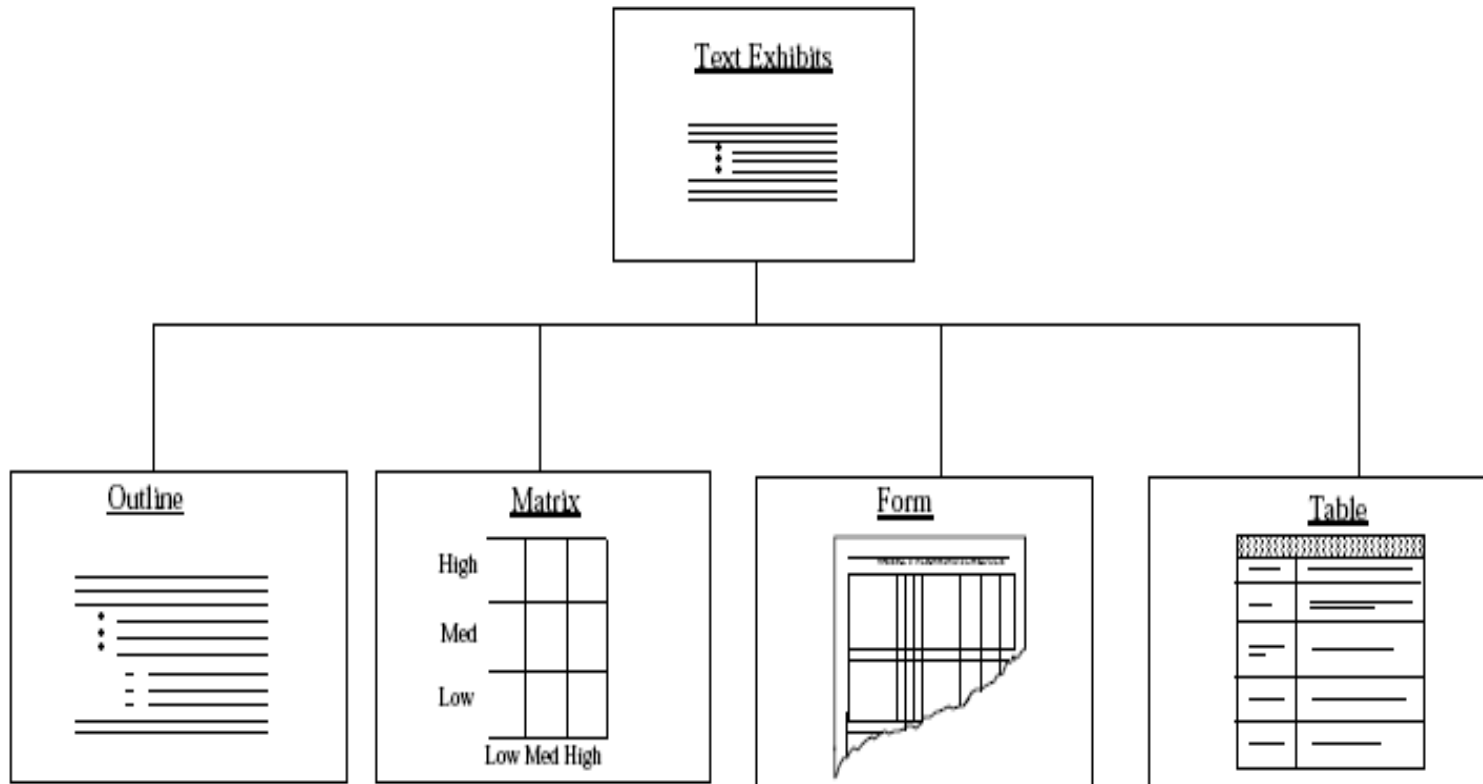
There Are Three Basic Types of Content Slides To Help Develop this “Supporting Story”

Slide Categories



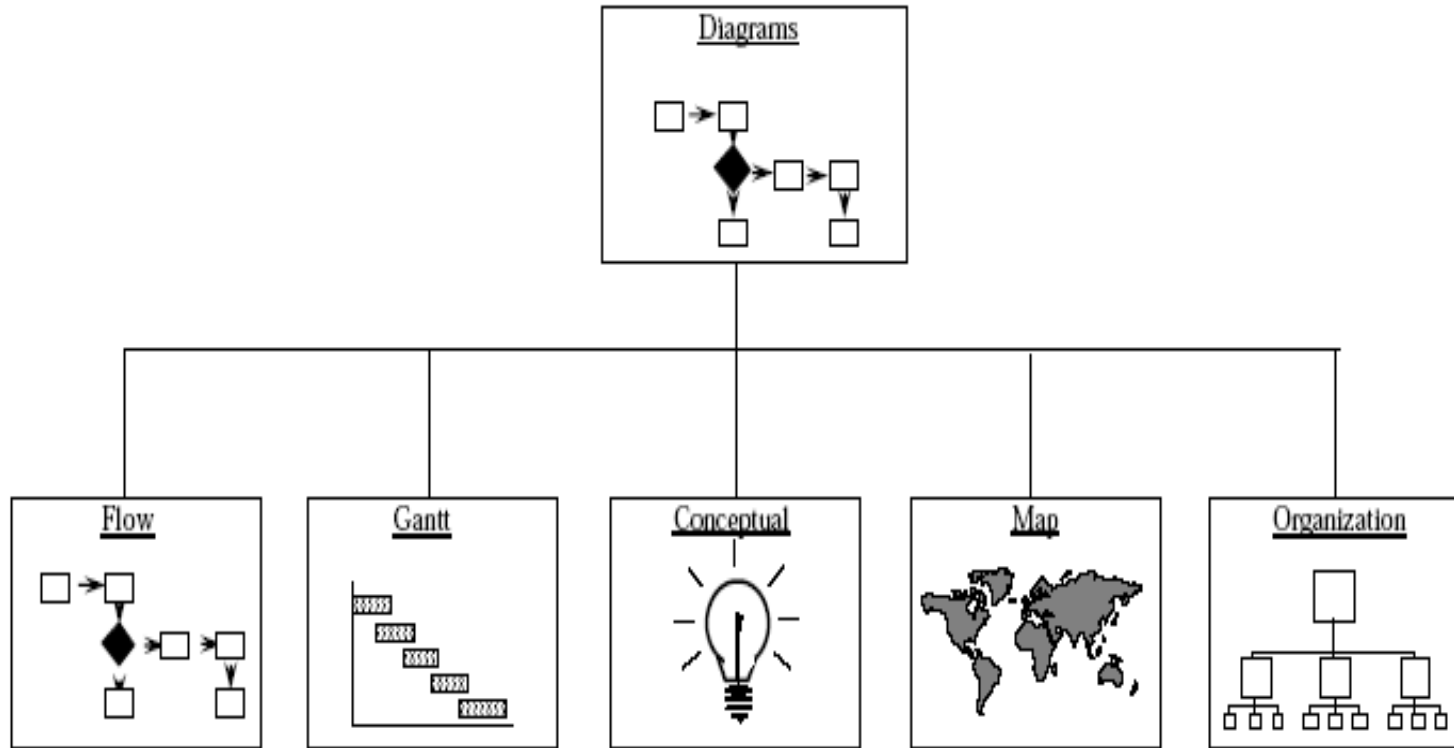
- Text Exhibits:
 - ✓ Convey specific facts or ideas
 - ✓ Eliminate errors in interpretation of the information presented
 - ✓ Summarize information on previous or subsequent slides
 - ✓ Organize large amounts of information
- Diagrams:
 - ✓ Convey cause / effect, sequential relationships between observations
 - ✓ Organize information
 - ✓ Explain conceptual ideas
- Graphs:
 - ✓ Summarize numerical data
 - ✓ Draw attention to specific facts
 - ✓ Explain trends in underlying data

Text Exhibits Are Useful for Organizing Large Amounts of Information



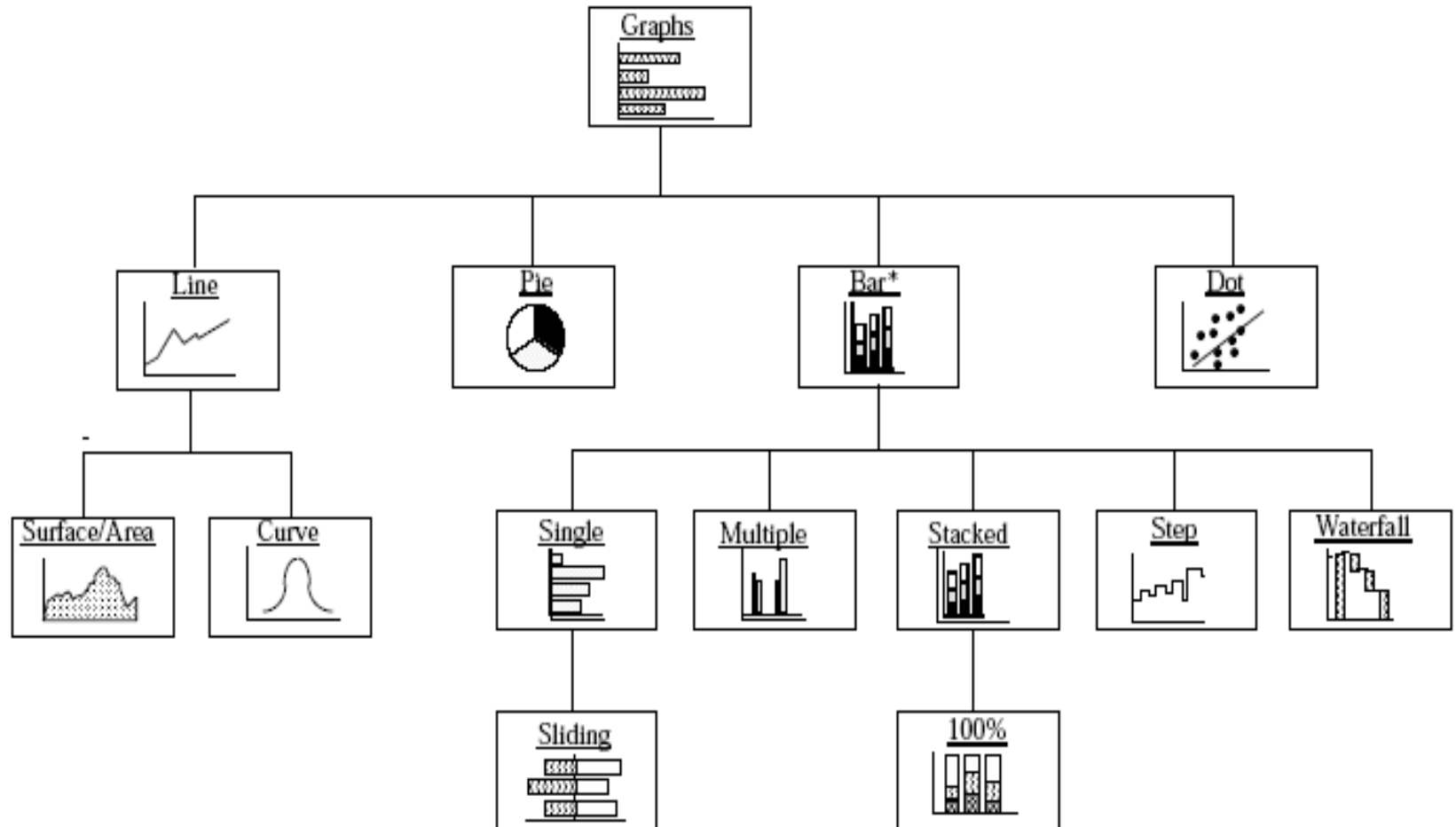
Diagrams Are Used To Demonstrate Sequential, Cause and-Effect and Dependency Relationships

Diagram Slide Types



Graphs Help Draw Attention to Underlying Trends or Relationships in Data Series

Graph Slide Types



The Selection of the Appropriate Graph Is Critical To Accurately Conveying the Message



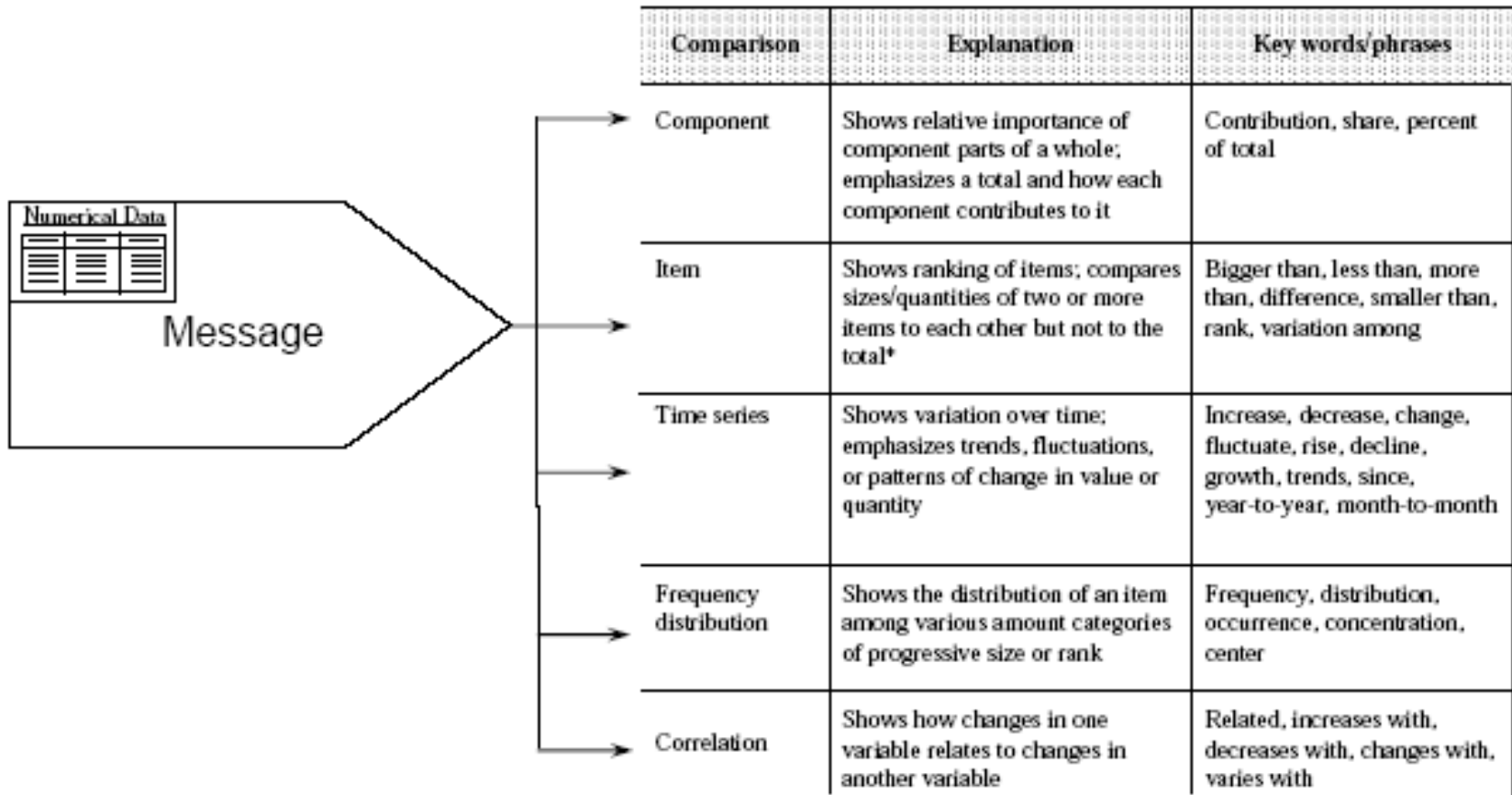
- Identify the specific point you want to make
- Should be clear and distinct

- Message selected implies one of five types of comparison:
 - Component
 - Item
 - Time series
 - Frequency distribution
 - Correlation



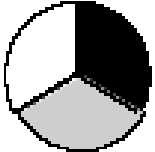
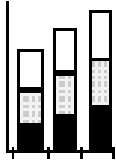
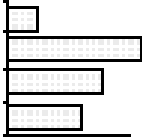
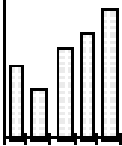
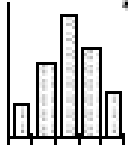
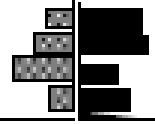
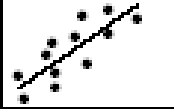
- Select the graph to best depict the comparison you are trying to make
- There are several alternative chart forms

The Message Drives the Selection of a Specific Type of Comparison

Five Comparison Types



... and the Comparison Drives the Selection of the Graph Type Used in the Presentation

		Comparison Type				
		Component	Item	Time Series	Frequency	Correlation
Basic Graph Types	Line					
	Pie					
	Bar					
	Dot					

Regardless of the Graph, There Are Several Presentation Guidelines Graphs Should Follow

Data Graphing Rules of Thumb

- The selected graph should be as simple as possible to convey the message
- Axis labels should all be horizontal to enable easy reading
- Zeros should omitted from axis scales and legends
- No more than one decimal point of detail should be presented in graphs
- Colors (or darker shading) can be used to emphasize points of interest and increase the effectiveness of the graphic selected (the same color or shading should be used for each company throughout the presentation)

. . . and Several Slide Writing Rules of Thumb

- Action titles and subtitles should be short and punchy
 - ✓ Target should be 7 +/- 2 words for the length of your title
 - ✓ Limit all forms of the verb “to be” (am / is / are; was / were) to save room
 - ✓ Focus on the core message of each slide
 - ✓ Points conveyed should be a high level summary of detailed information
 - ✓ Titles should be all “caps”, except for prepositions and connectors
 - ✓ All verbs are capitalized, including “is”, “are”, “can” and “be”
 - ✓ If “to” is part of a verb (To Reengineer) it is capitalized; If “to” is part of a preposition (to the client) it is not capitalized
- Slides should be limited to three or fewer key messages
- Slides should be organized hierarchically
 - ✓ Logic should flow through slide, from general premises to specific implications
 - ✓ Move from easy-to-grasp ideas to hard-to-understand ideas
 - ✓ Make logic parallel
 - ✓ Select words carefully, know your audience

These Additional Rules of Thumb Should Be Considered When Writing Slides

- Graphs and diagrams should be used to convey points where possible
 - ✓ Attempt to move beyond basic bullet point slides
 - ✓ Think about alternative ways to present information
- All sources of data, ideas, and quotes should be identified
 - ✓ Attributing sources builds credibility for the presentation
 - ✓ Sources should be identified with enough detail to enable specificity if asked
- Footnotes should be used to provide additional detail or explanation for a point made in the body
- of the slide
 - ✓ Most commonly used to supplement quantitative analysis
 - ✓ Including footnotes builds credibility for the presentation
- Bulleted text outlines are easier to read when written as columns
- Always ensure consistency of font type, font sizes on a page (when possible), table shadings, table style, line and arrow thickness, shadows off-setting, shadow color, font color throughout any document

Summary

Using the Pyramid Involves Checking the Vertical and Horizontal Relationships

Ensure that sub-points fit their summary point (check vertical relationships)

- Sub-points must answer the question the summary point raises, amplifying, clarifying or providing context for the summary point
 - ✓ The answers to "why" questions are reasons
 - ✓ The answers to "how" questions are steps
- Sub-points must provide necessary and sufficient logical support to show that the summary statement follows from the sub-points
- In chart documents, exhibits also must support their headlines

Ensure that the groupings are logical (check horizontal relationships)

- Class groupings must be properly defined and grouped
 - ✓ No misfit ideas - those that are at a different level of abstraction or that do not point to the same conclusion
 - ✓ No overlaps (confused logic)
 - ✓ No gaps (incomplete thinking)
- Order of the grouping must be validated
- Opportunities for further grouping must be explored (esp. if there are more than six points in an inductive grouping or four points in chained deductive argument)

There Are Two Ways To Communicate Ideas and Their Groupings in the Pyramid Structure

Communication Methods

Method of Communicating	Description	Best Application	Comments
From the top down	<p>Presenting categories (framework) first and then the items (support) underneath</p> <p>Discussing actions before the arguments for those actions</p>	<p>Communicating directly and clearly</p> <p>Providing understanding</p>	<p>Most effective manner to communicate in most circumstances</p>
From the bottom up	<p>Grouping ideas by logical relationships (i.e., those ideas that are needed to express the single idea of the grouping – their summary statement)</p> <p>Going up one level of abstraction and thinking of the grouping as having one point rather than several</p> <p>Grouping ideas at this level by logical relationships (needed to express the next higher level of abstraction)</p> <p>Continuing this process until the structure supports only one single thought (the major point)</p>	<p>Thinking (mystery-solving)</p> <p>Communicating when the reader will disagree strongly with the conclusion and must be conditioned in order to accept it</p> <p>Communicating when the reader is incapable of understanding the action without prior explanation, so the reasoning that underlies it must be presented (e.g., paper on how to do risk analysis)</p>	<p>Reader/listener may interpret groupings differently than the author</p> <ul style="list-style-type: none"> · People are diverse in background and understanding · Reader will search for his or her own structure for the grouping <p>Reading/listening is made more difficult because reader must "build" the logic structure as he/she proceeds</p>

The Pyramid Logic Structure Alone Will Not Ensure a Well-Organized Presentations

Tips for Effective Presentation Writing

- Create a story line and outline before you write new slides
 - ✓ Storyboard the presentation
 - ✓ Focus on developing logic to reach the “so what”
 - ✓ Remember: All of your analysis does not have to be included
- Use the storyboard to drive the presentation
 - ✓ Draft slide titles to tell the story
 - ✓ Create blank slides with titles, fill in exhibit or text when available
- Be aware of your audience
 - ✓ Identify “hot buttons”
 - ✓ Adapt presentation style to the client’s culture (e.g., data vs. clip art)
- Be aware of your medium
 - ✓ Detailed graphics do not work well on overheads
 - ✓ Some colors do not appear well on overheads or data displays (e.g., yellow)

These Slide Writing Conventions, with the Pyramid Structure, Will Improve Presentations

Final Thoughts

- The Pyramid Logic Structure enables persuasive, hypothesis-driven presentations to be written
- A storyboard of each presentation should be created before any slides are written to build the logic for the Pyramid Structure
- The slide titles should tell the complete story by laying out the horizontal logic of the Pyramid
- The information included in the body of each slide, as well as the groupings of these slides into sections, should create the vertical logic of the Pyramid
- Following these slide writing and graph selection rules of thumb will ensure a persuasive, actionable presentation is created