Pyramid Principle

Idea In Short

The Pyramid Principle is a methodology for structured thinking and communication. Consultants are trained to crisply present a recommendation to busy executives. Often, they only have a few minutes to communicate their recommendation in a compelling and structured manner. Then, if their client executive was interested in digging deeper, they present the details.

Origin

Barbara Minto, who headed training for McKinsey & Company in the 1970s, created the Pyramid Principle. Upon graduating from Harvard Business School in 1963, Minto joined McKinsey & Company. On her business trips to the firm's offices in Paris and Düsseldorf, she encountered the same writing problems that she witnessed in the US and the UK - a frequent jumbling of information, presented in a manner that convoluted findings and conclusions, with neither leading to clear recommendations. According to Minto:

> The problem was the thinking, not the language. People were starting to write without working out their thinking in advance. But how does one go about figuring out one's thinking in advance?

Subsequently, she developed the Pyramid Principle using ideas from Aristotle's Rhetoric, Jean Piaget, Levi Strauss and the Bourbaki mathematicians, Talcott Parsons, Mortimer Adler, and Jacob Bronowski. She developed the Pyramid Principle into a course that she began teaching across McKinsey offices across the world. She also trained the straight-from-campus hires to expert consultants in a short duration. She honed this approach among her trainees to take large amounts of information, structure them and simplify the narrative, yet retain the details. According to Minto:

> The pyramid is a tool to help you find out what you think. The great value of the technique is that it forces you to pull out of your head information that you weren't aware was there, and then helps you to develop and shape it until the thinking is crystal clear. Until you do that, you can't make good decisions on slides or video.

Following her departure from McKinsey, she polished her original thinking, and in 1985, published book, "The Pyramid Principle: Logic in Writing and Thinking". The British publisher, Pearson purchased the publishing rights in 1987 and started mass-producing the book. Today, the Pyramid Principle is an essential component of consultants' toolbox. This approach works really well in high stakes problem-solving contexts, such as Management Consulting and Project Management as the underlying principles are derived from hypothesis-driven thinking.

The Pyramid Principle

The Pyramid is a visual representation of ideas and a framework for thinking about how information fits together. The best way to understand the Pyramid Principle is in two parts:

1. Bottom-up analysis, synthesis and sensemaking
2. Communicate top-down



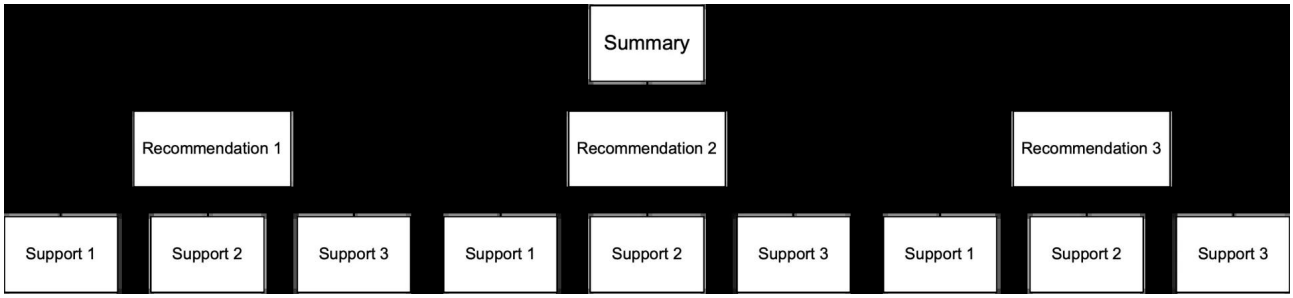
Pyramid Principle Structure

Bottom-up analysis, synthesis and sense making

The first step in the consulting process is to clearly define the customer problem and derive hypotheses for testing and validation. Subsequently, consultants conduct extensive research to gather data for analysis from surveys, reports, customers interviews, online [web] research, industry benchmarks, expert interviews, and so on. At this stage, the Pyramid has three levels:

1. **Lower Level** entails the research aspects of the engagement. This level comprises of raw data and information resulting from data analysis
2. **Middle Level** entails synthesized arguments that support or reject the hypotheses. This level comprises of a group of arguments that contribute to the overall recommendation
3. **Highest Level** entails the central recommendation or overall takeaway from all the analyses the consultants performed. This level comprises of the main story or key actionable insights that the customer stakeholders can execute upon

The Pyramid can be visually represented as:



Pyramid Principle Visualization

First Step: Information Gathering

The first step entails a sanity check on the customer's problem. Often, consultants re-define the problem to sharpen focus for analysis and generate hypotheses. Subsequently, consultants conduct initial research to validate the problem statement and hypotheses using public information, customer workshops, expert interviews, web research and other mechanisms to validate whether they are heading in the right direction and to appraise data adequacy for analysis. In practice, consultants understand that if they have invested adequate diligence in concretely defining the problem, their initial information scan validates whether they are headed in the right direction and data sufficiency. As they start collecting information, they constantly confirm or falsify the hypotheses they developed. At this stage, they also decode to abandon certain hypotheses in the light of new information before

conducting deeper analysis. All along the way, they document their findings and research in a structured manner, e.g., using tags and labels, while synchronously summarizing the key insights from their analyses.

Second Step: Group & Eliminate Irrelevant Information

As consultants delve deeper into their research, they derive a sharper understanding of what the key denominators and recurring themes are. Usually, they start experimenting with different structures to organize the data and insights in the context of an overall argument. In parallel, they start forging an executive narrative highlighting the few material recommendations and data-driven insights they wish to communicate to their customer stakeholder through a storyboard. A compelling story construct draws upon a few key principles, such as Bottom-line Upfront [BLUF], Audience-Intent-Message [AIM], etc. Amongst these fundamentals, eliminating excess and redundant information reigns supreme; executives and customer stakeholders are extremely busy people that juggle multiple priorities that compete for their most valuable resource – time and attention span. Hence, distilling the key insights into a handful of recommendations succors executive buy-in and support. While this can often be a hard thing to learn (especially if you are spending a large amount of information compiling data that eventually gets thrown out), it is one of the most powerful things you can do as you start to make sense of data.

Third Step: Identify The Key Insight

At this stage, consultants distill the core ideas i.e., key insights that emerge from their research. As consultants start grouping data and insights, they start seeing common themes that regularly surface. They label these groups with a noun or description:

> Data about Owls The Owl Population Is Shrinking

Or, they may assign more actionable titles as:

> Fund forest preservation programs to intervene owl population decline

Consultants don't worry about perfecting their message at this point. They focus on identifying the only those insights that comprehensively represent the elements below them

in the Pyramid structure. As Barbara Minto says, The point above has to be a summary of those below, because it is derived from them. You can't derive an idea from a grouping unless the ideas in the grouping are logically the same, and in logical order. [sic] As key themes emerge, consultants derive a good sense of what the central message will be. While they constantly revisit and test this message over and again throughout the engagement, consultants always derive a good sense of what it is. If they are working in a team, they also ensure that they brief all team members on their approach and findings, including the key message as well as invite debate to ensure the integrity, validity and accuracy of their recommendations.

The SCQA Approach

The SCQA framework provides the basis for cutting through noise using the Pyramid Principle. The central idea is the governing thought - the single most important idea in your story. It's the primary message the audience should understand. It covers the WHAT aspect of the content and serves as the introduction. The governing thought is occasionally followed by a framework that seeks to explain it better. SCQA stands for:

1. Situation
2. Complication
3. Question
4. Answer

Communicators start by knowing their audience. Then they arrange the information in a way that their audience can rapidly process. All these components work together to create an answer, which is the governing thought. Good stories begin by concisely describing a situation, thereby creating a mental picture in the mind of the audience. Then, the story introduces a complication to highlight the conflict, the problem or opportunity that impacts the situation. Then a question is posed to highlight the decision at hand, the moment of truth for the individual or company. The answer or recommendation is then provided as the resolution.

Situation

This is the simple truth contained within a governing thought. This is the context of the problem you are trying to solve and consists of the simple and indisputable truth of the

matter. It's the first step that involves looking beyond the symptoms since it answers the "why".

Complication

The complication addresses the so-what part of your governing thought. The reason behind the dilemma or difficulty. In this part, we assess the reason behind the problem. We call it "the so what' of the problem. It answers the "how".

Question

It serves as the follow-up to the complication. This part involves formulating a hypothesis, by asking questions. Here, you pose questions about the situation, eventually coming up with answers.

Answer

In this section, we come up with answers to the questions formulated in the previous section. After confirming your hypothesis to be true, you can begin to structure and arrange the information. This way, you can present it before an audience in chronological order. A governing thought is followed by supporting thoughts. These are facts and data that support the main point (governing thought). These facts, arguments and data should be mutually exclusive and collectively exhaustive, otherwise known in business lingo as MECE.

Mutually Exclusive, Collectively Exhaustive

Mutually Exclusive means breaking a whole down into distinct components that don't overlap. In other words, Mutually Exclusive means that each component is distinct, there is no overlap, and that you can address each part on its own without worrying about the other components. Collectively exhaustive means that the segments used to breakdown the overall population are comprehensive or, in other words, include all the relevant parts of the group being analyzed. In other words, Collectively Exhaustive means you have included every possible answer. According to the MECE Principle, a component of the Pyramid Principle, supporting thoughts should be mutually exclusive; independent of each other but enough to make an argument. Ensure that you don't dive into the facts and data while presenting your supporting thoughts. Aim for at least 3 supporting facts (see The Rule of Three). Accompany each supporting thought with data and facts. Explain your facts as

much as you can and ensure that each point carries weight to reinforce your governing thought. We see this in action when using horizontal and vertical logic while creating an introductory flow using the SCQA framework.

Horizontal and Vertical Logic

At the top of the pyramid is the point you're trying to make—the key takeaway. Underneath that are three arguments to support your idea. Each of those arguments should be built on reasons that support it. The top of your pyramid has to be actionable, and it is supported by the arguments that follow below. Essentially, you're starting with what you want and then supporting that with three reasons explaining why you want it. When presenting your arguments, put them in logical groupings. Rank your arguments in order of importance, and keep them in discrete groups. Presenting your ideas in this order lets you use both vertical and horizontal logic. The vertical logic represents the storyline (question-answer dialogue) and the horizontal logic is about the kind of reasoning.

Vertical Logic

Vertical logic is the storyline, the question-and-answer dialogue. As you travel down the Pyramid, you're starting with your main idea, posing questions, and answering them with your supporting arguments. Vertical logic ensures that all information is self-reinforcing and there isn't any extraneous or unrelated information. When compiling executive presentations using slideware, consultants spend much of their time deciding what to eliminate or push to the appendix. This is, by and far, the most important activity as the decision on content to retain helps distill the recommendations and sharpen their messaging to executives.

Horizontal Logic

The horizontal logic of the pyramid uses either inductive or deductive reasoning. Deductive reasoning is the method you're probably most familiar with. It involves making a general statement, and using specific examples to validate that statement:

> Ducks can swim. I can swim. Therefore, I am a duck.

Inductive reasoning is the opposite, inferring a specific statement from a set of general supporting arguments, as in:

> Athletes train a lot. They eat nourishing foods. Therefore, athletes must be strong.

When creating slide ware, consultants implement the horizontal logic across the titles of the individual slides. The idea is that executives can just read the title of each slide throughout the deck and, together, these snippets communicate the overarching story the consultants want to communicate. Hence, consultants toil to create action titles, rather than descriptive titles when enforcing this logic. Another strategy consultants use is to have an executive summary slide up front, with each bullet corresponding to a subsequent slide title in the same order. This primes the executives what to expect and then consultants take them through the presentation, providing supporting details and information wherever executives request them.

Communicate top-down

The default way of using the Pyramid Principle is to start with the answer. The reason is people do not remember new information. Furthermore, the curse of knowledge (also known as the curse of expertise) - a cognitive bias poses information asymmetry that determines the amount of information an individual could assimilate at any given instance. This bias occurs when an individual, who is communicating with other individuals, assumes that the other individuals have the background knowledge to understand. In the consulting context, consultants are at an advantage of knowing our material in a deep way. They underestimate how challenging some of the new content might be to someone unfamiliar with the material. Moreover, research shows that people can only hold four chunks of information in their working memory at any given time. Thinking back to the Pyramid Principle, if your audience can remember the main takeaway as well as your three key insights, this is probably the best-case scenario. To overcome these communication and psychological barriers, the Pyramid Principle advocates for top-down communication.

Start with the answer first

To communicate in a structured way with busy executives, consultants start with the answer to the executives' questions first and then list the supporting arguments. This top-down approach is counter-intuitive for many of us. For most people, it's natural to build up to a conclusion by first recounting the background information and data, analyses that were conducted, or reviewing all of the supporting ideas. Then they get to the key message i.e.,

the punch line. Consultants start with the answer first. When an executive asks a question — "What should we do?" — they start their response crisply and directly with, "You should do X". Only after answering this question do they present the supporting ideas and reasons. This approach has several benefits:

1. First, consultants want to effectively use their time with their audience. Executives are busy people, who are perpetually short on time, used to processing lots of information quickly and get impatient when they feel like someone isn't getting to the point. To get the most out of their short time with executives, consultants make their recommendation first. Sometimes, the executives may already mentally be at the conclusion they want them to reach. In such a case, they accept consultants' recommendation and move on without requiring detailed supporting arguments.
2. Second, most, if not all, executives think in a top-down They want to focus on the big picture — in this case the answer — and don't want to get bogged down by details. By delivering their recommendations in the answer first format, consultants are fitting into the executive's mental model. This allows executives to quickly process their consultants' recommendations.
3. Finally, you are more persuasive when you are direct. Consultants often use a plain, direct approach when addressing executives. By answering executives' questions first, they sound assertive and confident, rather than waver for reasons or words.

Group and summarize the supporting arguments

Generally, your audience — whether listeners or readers — naturally begin to group and summarize arguments and ideas to remember them. As a communicator, you could ease this process by structuring your arguments and making the overall message more effective and memorable. The Pyramid Principle advocates that:

> ideas in writing should always form a pyramid under a single thought

The single thought is the answer to the executive's question. After formulating this answer, consultants create a summary of their argument's main points. They use the rule of 3 to do this, starting with the strongest point. Underneath each thought, they group and summarize the next level of supporting ideas and arguments. Then, they further break each supporting idea or argument into more ideas or arguments till they have formed a Pyramid. The Pyramid Principle teaches that:

> Ideas at any level in the pyramid must always be summaries of the ideas grouped below them

Consequently, when you group and summarize your supporting arguments, it's easy to go from the single thought to the next level of ideas without getting too detailed right away.

Logically order the supporting ideas

Finally, consultants ensure that the ideas they bring together under each group actually belong together, are at the same level of importance and follow some logical structure. There are a few different ways of logically ordering ideas that belong in the same group:

1. **Time order:** if there is a sequence of events that form a cause-effect relationship, you should present the ideas in time order
2. **Structural order:** break a singular thought into its parts, ensuring that you have covered all of the major supporting ideas
3. **Degree / Order of importance or impact:**present supporting ideas in rank order of importance, most to least important

When combined with the Rule of 3, the Pyramid Principle becomes an extremely powerful structured communication tool for making recommendations to busy executives.

Rule of Three

Communicators advise that if you want something stuck in someone's head, put it in a sequence of three. When you present information in chunks of three, they tend to be absorbed and remembered. This is because most of us have been hard-wired to expect things in groups of 3. A Latin saying, Omne trium perfectum literally means that everything that comes in threes is perfect. It starts with childhood, when we heard fairy tales about things in groups of 3 as in Three Little Pigs, Goldilocks and the three bears, etc. Also, the popular stories and novel titles, Three Blind Mice, The Three Musketeers, Three Wise Men and Three Men in a Boat, etc. come in groups of three. Characters also sometimes come in threes, like Cinderella and her two stepsisters. Since then, we have been conditioned to expect concepts in groups of 3 as in blood, sweat, and tears or government of the people, by the people, and for the people or mind, body and spirit. Christianity has the Father, the

Son, and the Holy Spirit. Christ apparently died at 3 P.M. Historically, the US Declaration of Independence proudly proclaims: Life, Liberty, and the Pursuit of Happiness. The torch of the Olympics blazes in glory with its timeless motto, Citius, Altius, Fortius (faster, higher, stronger). Historical speeches are full of such trios. Roman Emperor Julius Caesar said, Veni, Vidi, Vici (I came, I saw, I conquered). When three parallel elements such as words or phrases come one after the other to communicate a message, they are called a tricolon. This type of Rule of Three is expressed in former US president Franklin D. Roosevelt's advice:

> Be sincere, be brief, be seated

The Rule of Three proves effective again when previous US president Barack Obama said in his keynote speech to the Democratic National Convention:

> Tonight, we gather to affirm the greatness of our nation—not because of the height of our skyscrapers, or the power of our military, or the size of our economy

Hence, this is a pattern that we are accustomed to and receptive towards. Furthermore, research on human psychology has found that our short-term working memory is best capable of remembering at most three to four chunks of information. Scientifically speaking, three is the smallest number of elements required to create a pattern. This power of three has culminated in the Rule of Three. Busy executives are no exception to this rule. They are often inundated with information, and with requests for decisions. Structuring the key arguments in groups of three gets their attention, allows them to quickly process and later remember the key recommendations from your argument.

Effectiveness of the Pyramid Principle

One of the reasons the Pyramid Principle is so effective is that it uses vertical relationships. The vertical relationship is important because it presents an idea, allows the reader to absorb it, and then provides answers and supporting evidence. The top of the pyramid is a statement, with the supporting base of the pyramid providing answers to the questions the statement invokes. Every piece of evidence, idea or information on the Pyramid base reinforces the argument above it, making the Pyramid's conclusion inescapable to the

audience. The base of one Pyramid can (and often does) become the tip of another, to maintain the ‘rule of 3' discussed above. Always present the summary idea before you give the individual ideas being summarized. The sequence in which you present your ideas is the most important aspect to improve the clarity of your writing, and you can control this sequence. In vertical relationships, the supporting arguments need to answer the question raised by the statement above. For horizontal relationships, the supporting arguments relate to each other, using either deductive or inductive reasoning.

Summary

The Pyramid Principle is not only a valuable for communicating with executives, but also an effective mechanism to communicate with anyone whom you wish to persuade with argument. As a consultant, manager or leader, you can effectively deploy this principle to persuasively communicate with your stakeholders. As a leader in an organization, you can use this principle to communicate with peers or project stakeholders to deliver impactful outcomes. By structuring your key messages in the order of priority and communicating top-down, you will experience enhanced stakeholder buy-in and support for major initiatives.