

# Analytical Acumen - The Science

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## Analytical Acumen – The Science



## Analytical Acumen – The Science

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\*\*010 Let's now delve into analytical acumen as a science. This is the component of the human element in the middle of the framework of the Cyber Intelligence Framework where we channel our art.

## Analytical Acumen – The Science

- Science: The outlets used to best channel the art
- Examples
- Conceptual frameworks
  - Analytic methodologies
  - Structured analytical techniques



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\*\*011 Again, analytical acumen, the science, it means the outlets that cyber intelligence use to channel the art, and these can be conceptual frameworks, analytical methodologies, and even structured analytical techniques.

# Structured Analytic Techniques -1

- **Analytical Method (Technique)** – Procedure or a method for the analysis of some problem, status or fact.
- **Structured Analytic Techniques** – Aim to challenge judgments, spur innovation, understand mental mindsets and manage uncertainty in complexity
- **Mental Models** – Experience base constructs of assumptions and expectations about the world

<https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/Tradecraft%20Primer-apr09.pdf>  
<https://managementmania.com/en/analyses-analytical-techniques>



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\*\*012 So according to a company called Management Mania, an analytical method is a procedure or method to analyze some problem, some status, or some fact, and what we find from the CIA website is a well-known document that gives examples of structured analytical techniques. Structured analytical techniques aim to challenge judgments, generate innovation, and understand mental mindsets and manage uncertainty and complexity.

A quick comment about managing uncertainty. How you respond to uncertainty is important professionally. In other words, what is your instinctive reaction? Do you panic? Do you get stressed out? Do you get nervous or anxious, and do you freeze? Or are you calm? Can you take a step back and think?

One's ability to navigate through ambiguity and uncertainty, not just in the cyber intelligence world but everywhere, is a critical skill and it's not easy, but it's something that comes with time and practice, and this is really important and relevant today. There have been presentations at major cyber conferences regarding stress for cybersecurity and intelligence professionals. In the cyber intelligence world, and certainly in the intelligence world, these analytical methodologies can help you.

So mental models. As Richards Heuer points out in his book, these are sometimes called frames, or mindsets. These are experience-based constructs of assumptions and expectations both about the world in general and in more specific domains. These mental modes are a good thing because they help us process information we receive and get through things, yet at the same time these mental models could work against us as analysts and people in general, because they can make us miss, reject, or forget information.

# Structured Analytic Techniques -2

- **Analytic Techniques binned by purpose...**
  - **Diagnostic** Techniques - Aim at making analytic arguments, assumptions, or intelligence gaps **more transparent**
  - **Contrarian** Techniques - Explicitly challenge current thinking
  - **Imaginative** Thinking techniques – Seek new insights, different perspectives and/or develop alternative outcomes.

<https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/books-and-monographs/Tradecraft%20Primer-apr09.pdf>



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\*\*013 So let's talk about structured analytical techniques a little bit more. I should state that an important comment that the application of these techniques alone is no guarantee of an analytical precision or accuracy of judgment. It does, however, if done correctly, improve the sophistication and credibility of intelligence assessments as well as their usefulness for policymakers. Today they should be done in conjunction with working with data scientists.

An example of structured analytical techniques are usually categorized into three separate areas, three types of major techniques. The first is diagnostic techniques. These aim at making analytical arguments or assumptions or intelligence gaps more transparent. Another type of

technique is called contrarian techniques, which are used to explicitly challenge current thinking. And the last major bucket is called imaginative thinking techniques. These techniques seek to find new insights or different perspective and to develop new alternative outcomes.

## Notices

# Notices

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