

03 CIPHER

CIPHER is a tool to help categorize signals from information gathered during a fringe sketch. Contradictions, inflections, and practices are the most common. Hacks and extremes tend to be outliers or strong trends when they appear. Rarities are unusual, so we tend to pay close attention to their influence when we see them.

CIPHER can be performed computationally or heuristically.

Some examples from each category:

- **Contradiction:** Stock market hitting new highs while other economic indicators are down
- **Inflection:** mRNA used as a vaccine for Covid and now other vaccines
- **Practices:** Voice-only social media
- **Hacks:** # in Twitter
- **Extremes:** Grinders (biohackers)
- **Rarities:** Global pandemics

C	Contradictions	Examples that demonstrate opposing or incongruous forces at play simultaneously
I	Inflections	Occurrences that mark a major turning point or establish a new paradigm
P	Practices	Emerging behaviors that are becoming more pronounced or gaining in popularity
H	Hacks	Inventive, unintended uses for tools, technologies, and systems
E	Extremes	Instances of technologies, functions, or concepts being pushed to new limits that might change the nature of their use
R	Rarities	Highly unlikely or unexpected events and phenomena

03

CIPHER - Quantitative Best Practices

Highlight key areas of alignment, misalignment, shared internal/ external beliefs

Sourcing

- Most projects will require different data sets.
- Industry datasets, WIPO, PR release databases, datasets from regulators, datasets from preprint servers, and consumer insights datasets are all useful sources for quantitative data.

Automation + AI

- Automate data scraping whenever possible
- Use ML/ NLP to identify original patterns (i.e.: patterns you are not explicitly looking for).
- Generate a list of indicators for each project; develop a taxonomy in advance.

Analysis

- Build models or sets of criteria to determine important themes. Opportunities include: distribution (look for variables across different characteristics); relationships between variables (number of connections between nodes you're evaluating in fringe sketch activities, correlation between two or more variables); regression/ multiple regressions.
- Dynamic factor analysis (DFA): Look for latent themes in data sets. Develop a model to infer and project dynamic factors. Given the model parameters, determine indicators and map to variables. Filter out random/ systematic errors, but note that outliers can be strong signals of change.