

# Introduction to Infodemic Management

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# Who am I

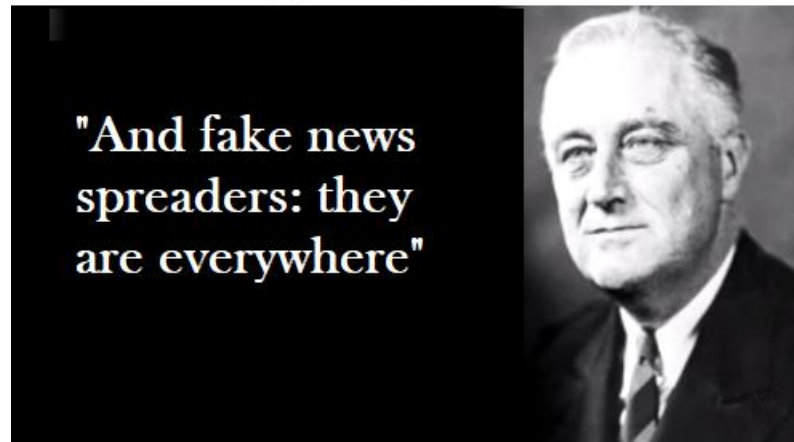
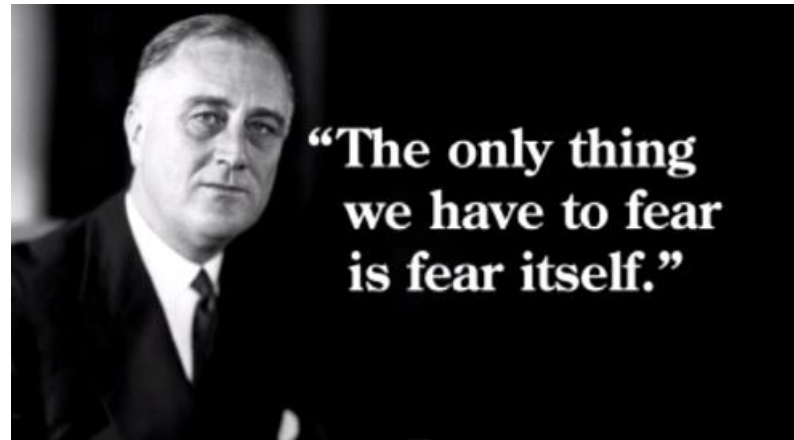
- ❑ I work for the Italian Prime Minister Office
- ❑ Computer Science Degree (University of Salerno)
- ❑ Post-University Specialization course and Master in «Quality for Public Administration» (University Roma tre)
- ❑ First and second level Masters in CBRNe emergency management (University of Roma – Tor Vergata)
- ❑ Organization Master by National School of Public Administration
- ❑ Infodemic manager – WHO certified
- ❑ I was in the national ski team



# Lesson schedule

1. Definition of infodemic
2. Mechanisms related to the dissemination of information
3. Mechanisms related to the perception of reality
4. Mechanisms related to social media platforms

# Let's start



An infodemic is an **overabundance** of information - **good or bad** - that makes it difficult for people to make decisions about their own health.



We're not just fighting an epidemic; we're fighting an infodemic. Fake news spreads faster and more easily than this virus, and is just as dangerous.

Tedros Adhanom Ghebreyesus  
Director-General, World Health Organization

# Some useful definitions

- **Misinformation:** an information that is false or inaccurate
- **Disinformation:** an information that is false or inaccurate, spread with the intent to cause damage
- **Fake news:**
  - false or misleading information presented as news. It often has the aim of damaging the reputation of a person or entity, or making money through advertising revenue (Wikipedia)
  - news or stories on the internet that are not true. There are two kinds of fake news: False stories that are deliberately published or sent around, in order to make people believe something untrue or to get lots of people to visit a website (BBC).
- **Conspiracy theories:**
  - a belief that some covert but influential organization is responsible for an unexplained event (Oxford Languages)
  - a belief that an event or situation is the result of a secret plan made by powerful people (Cambridge dictionary)

# Information overload

- Was born with the advent of the internet and, in particular, of search engines
- Seeking information is a “pull” process
- Social media make it difficult to escape information (“push”)



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# Disintermediation

- **From fact to news**
  - The news itself does not exist in nature. Above all, news and facts hardly ever coincide. The news should, in fact, be the story of a fact. As such, its reality is necessarily mediated and interpreted by those who tell that fact. Sometimes, it even happens that the news even refers to an event that never happened
- **Citizen journalism**
  - Today anyone can post an article, a video, write their own thoughts, potentially having the same audience as a Nobel Prize winner or a Pulitzer journalist.



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# Overton window

- *unthinkable*
- *radical*
- *acceptable*
- *Sensible*
- *popular*
- *policy*



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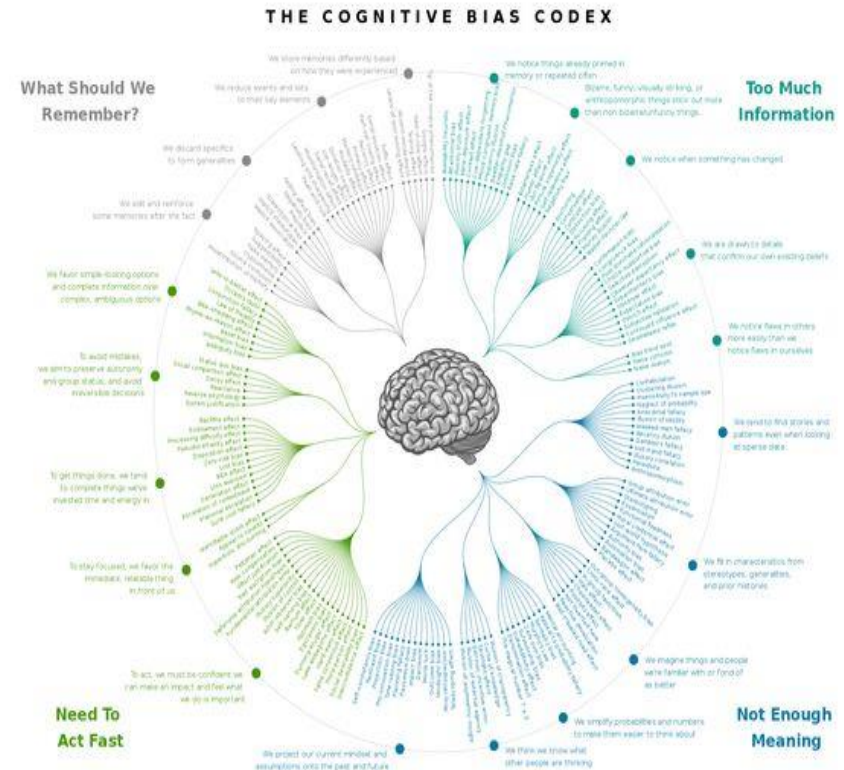
# Cognitive biases

A **cognitive bias** is a **systematic** pattern of deviation from the norm or rationality in judgment.

Using this pattern, each of us creates their **own** subjective reality based on the interpretation of the information they possess, even if they are not logically connected to each other.

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# Dunning-Kruger

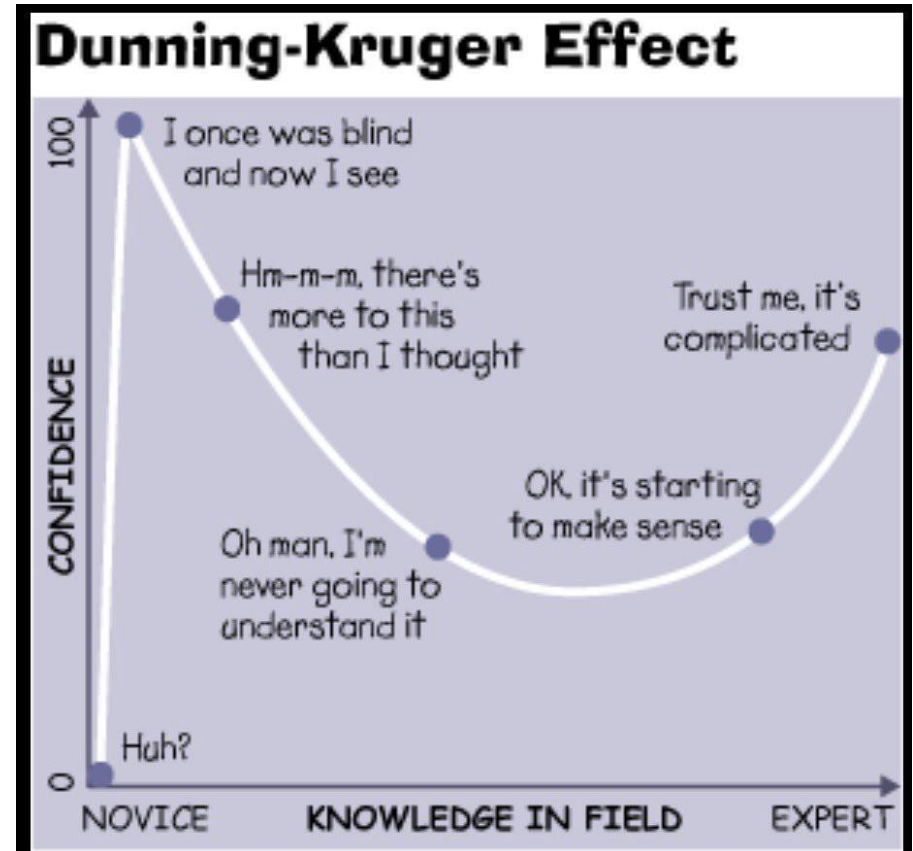
The **Dunning–Kruger effect** is a hypothetical cognitive bias stating that people with low ability at a task overestimate their ability.



“The miscalibration of the incompetent stems from an error about the self, whereas the miscalibration of the highly competent stems from an error about others”

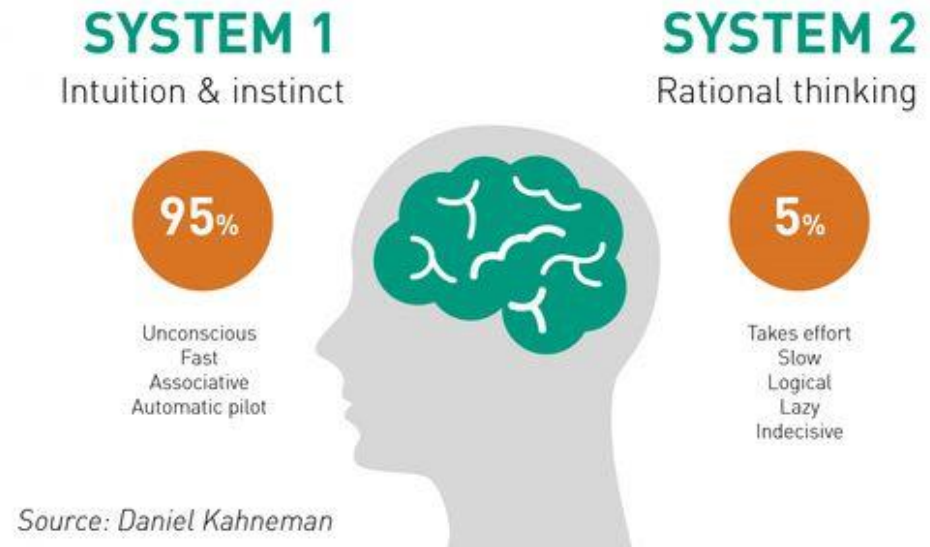
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# Slow and fast thinking

- “A reliable way to make people believe in falsehoods is frequent repetition, because familiarity is not easily distinguished from truth”
- “Our comforting conviction that the world makes sense rests on a secure foundation: our almost unlimited ability to ignore our ignorance”
- “The idea that the future is unpredictable is undermined every day by the ease with which the past is explained.”
- “This is the essence of intuitive heuristics: when faced with a difficult question, we often answer an easier one instead, usually without noticing the substitution.”
- “The confidence that individuals have in their beliefs depends mostly on the quality of the story they can tell about what they see, even if they see little.”
- “We are prone to overestimate how much we understand about the world and to underestimate the role of chance in events.”
- “we can be blind to the obvious, and we are also blind to our blindness.”
- “The world makes much less sense than you think. The coherence comes mostly from the way your mind works.”



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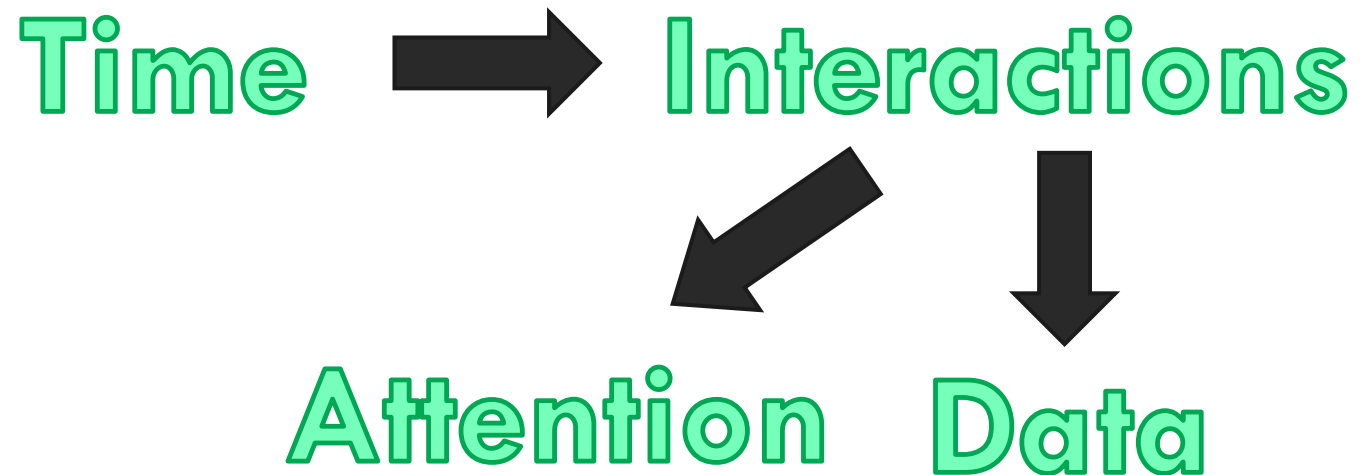
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“Acquisition of skills requires a regular environment, an adequate opportunity to practice, and rapid and unequivocal feedback about the correctness of thoughts and actions.”

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# The level of engagement



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# Information bubbles and echo chambers

- An **information bubble** is a state of intellectual or ideological **isolation** that may result from algorithms feeding us information we agree with, based on our past behaviour and search history.
- An **echo chamber** is an environment in which a person encounters only beliefs or opinions that coincide with their own, so that their existing views are reinforced and alternative ideas are not considered.



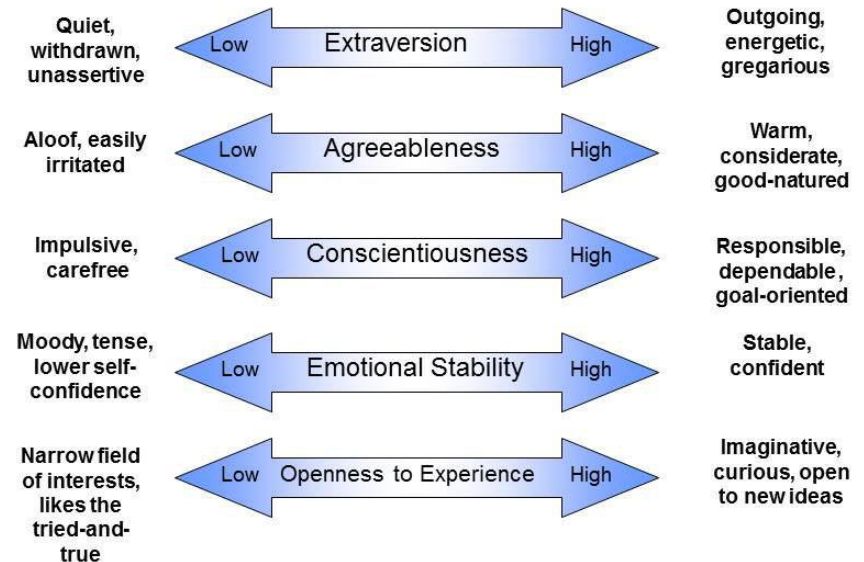
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# Profiling

- More than 500 information for user
  - Updated almost in real time
  - Identification of easily influenced psychological profiles
- Use of simulation models previously used to simulate complex systems in physics
- What-if analysis and prediction

## The Big Five Personality Dimensions



(Tupes & Christal, 1961, as cited by Daft, 2007)

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# Microtargeting

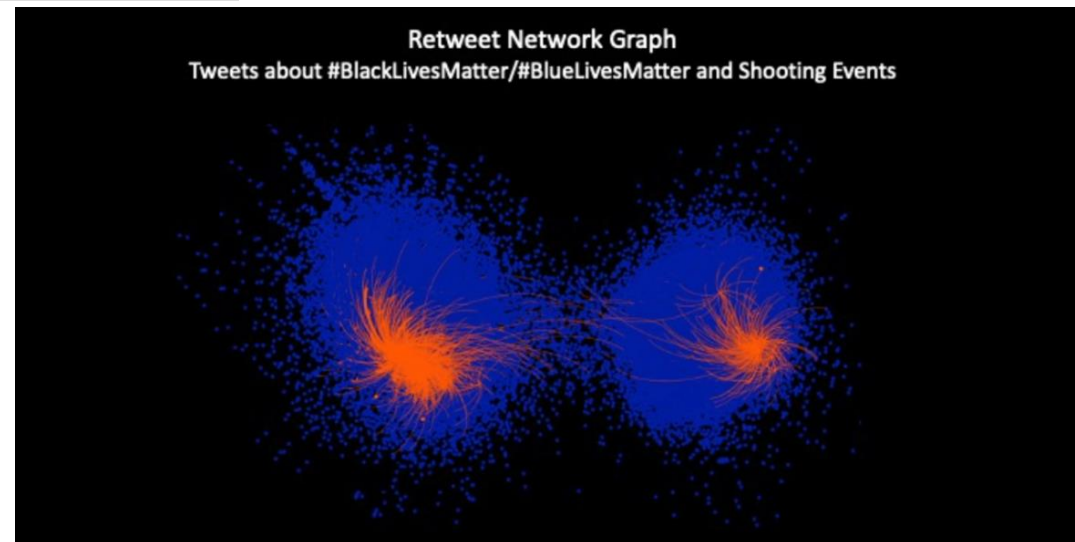
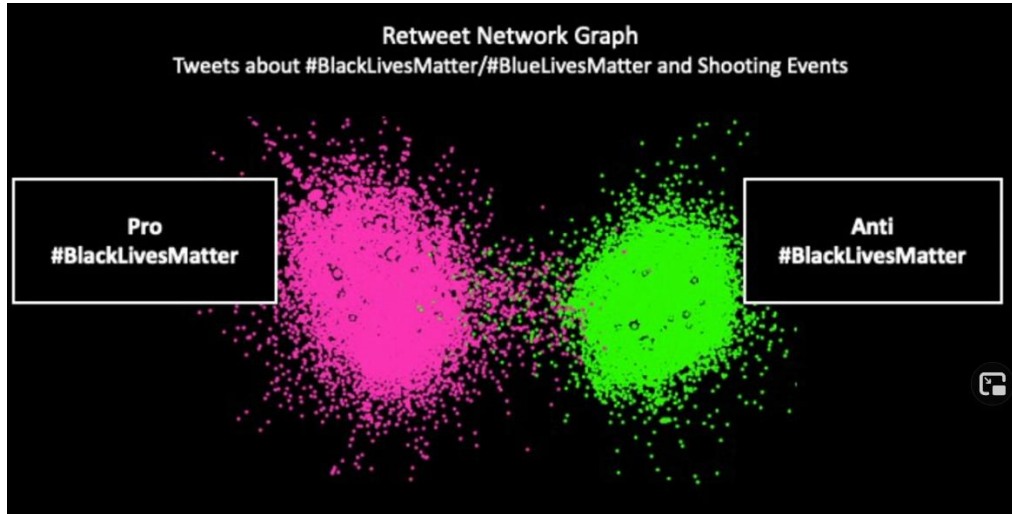
- **Microtargeting** is a marketing strategy that **uses consumer data** and demographics **to** identify the interests of specific individuals or very small groups of like-minded individuals and **influence their thoughts** or actions.



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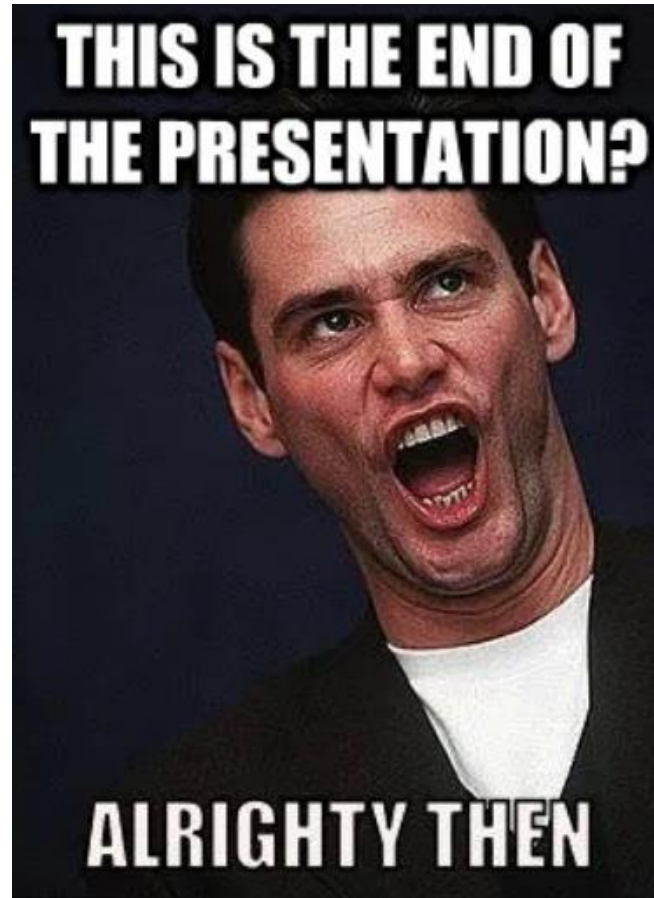
# Summarizing...



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# Thank you!



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