

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 second level 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



Lesson schedule

1. Characteristics of the infodemic during Covid-19 pandemic
2. The conflictual relationship between journalism and science
3. The WHO process for infodemic management
4. Motivation, needs and behavioral change

Let's start



Infodemic definition (just a reminder)

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

Infodemic and social media

- Infodemics thrive in virtual space
- Managing the infodemic has become more challenging with the rapid spread of disinformation and misinformation through social media
- Infodemic management is key to managing the pandemic



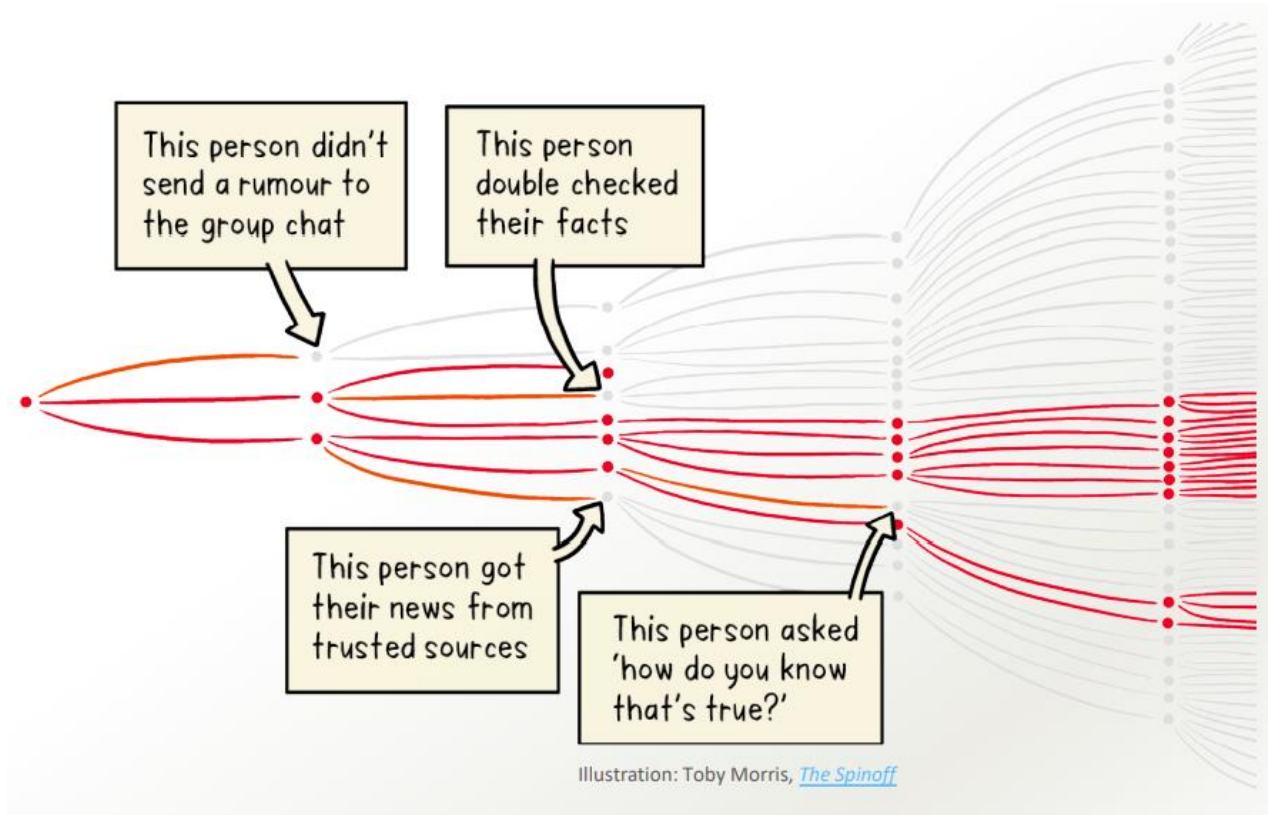
How big is the problem

- A study released in May by Britain's Institute for Strategic Dialogue identified a core group of 34 extremist right-wing websites disseminating Covid disinformation or linked to established health misinformation hubs now focused on Covid-19. From January to April of 2020, public Facebook posts linking to these websites garnered 80 million interactions, while posts linking to the W.H.O.'s website received 6.2 million interactions, and the Centers for Disease Control and Prevention received 6.4 million.
- An Avaaz study released in August exposed 82 websites spreading Covid misinformation reaching a peak of nearly half a billion Facebook views in April. Content from the 10 most popular websites drew about 300 million Facebook views, compared with 70 million for 10 leading health institutions. Facebook's modest content moderation efforts were no match for its own machine systems engineered for epistemic chaos.
- In October a report from the National Center for Disaster Preparedness at Columbia University estimated the number of avoidable Covid-19 deaths. More than 217,000 Americans had died. Tragically, the analysis concluded that at least 130,000 of those deaths could have been avoided.

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How to stop misinformation



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Biases, again!

- Order of magnitude bias: difficulty in understanding the difference in scale size when going from tens to hundreds or thousands
- Late answer bias: difficulty in assessing that the data on deaths depend on what happened on average at least two weeks earlier
- Exponential growth bias: difficulty in understanding the real speed of growth of an exponential phenomenon (i.e. infections)



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Too many voices



"It's like a flu"



"The virus is clinically disappeared"



"Vaccines are not safe"

(<https://thispersondoesnotexist.com/>)



"Our vaccine is 95% effective"



"hyperimmune plasma heals from the virus"

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Journalism and science

Journalists can be an **key resource** to fight infodemic but scientific journalism is DIFFICULT!



- The inability to explain what science is, the principles on which it is based, the mechanisms of its functioning
- The lack of knowledge on the historical evolution of science
- Science tends to be in constant flux
- The importance to understand the distinction between "possible" and "probable", being the basis of any correct reasoning.
- Difference in timing
- A misconception of fairness

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Almost any newspaper has an online version



Advertising revenue is critical to the survival of newspapers



Click-Through Rate

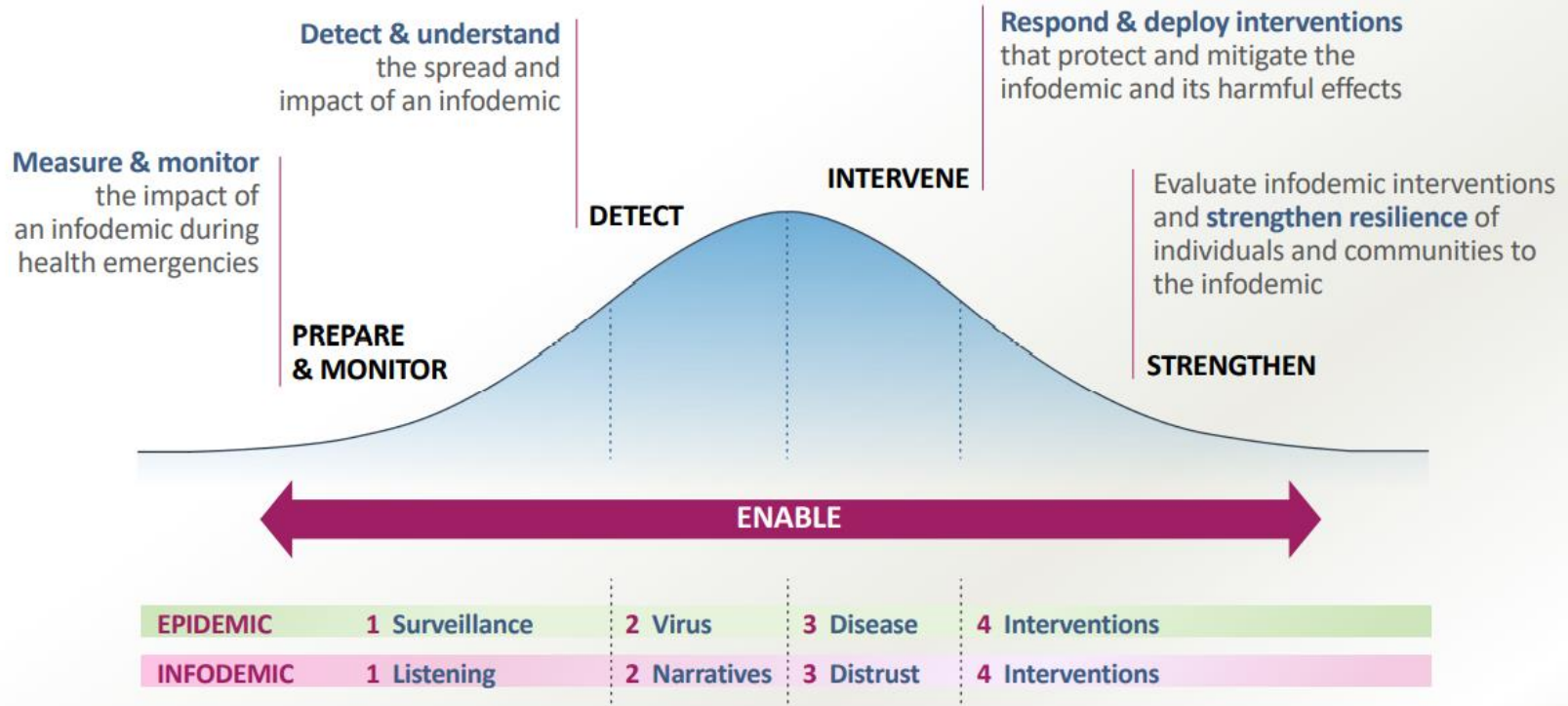
SEO

(Search Engine Optimization)



Sensational title

Managing infodemic



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Credits: Who

The ideal management process for infodemic

- Social listening
- Provide high-quality health-related information
- Intervene
- Fight mis- and disinformation
- Monitor the environment and the response to our activities
- Support healthy behaviour and the resilience to bad information
 - At individual level
 - At community level
 - At society level
- Reinforce our preparedness to respond to pandemic events

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Social listening

- Be where the people are
- Respect people and stay calm
- Be the first to seize opportunities (anchor effect)
- Answer the questions
- Limit yourself to the facts
- Focus on the situation, topic or behavior, not on the person
- Scan the horizon

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Inoculation

Spread high-quality information



Inoculate

<https://gateway.euro.who.int/>
<https://scholar.google.com/>
<https://plos.org/>
<https://www.medrxiv.org/>
<https://www.ecdc.europa.eu/en>
<http://www.healthdata.org/>

Fact-check

<https://www.factcheck.org/articles/>
<https://www.poynter.org/ifcn/>
<https://www.snopes.com/>
<https://www.politifact.com/truth-o-meter/>

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Intervention

- The intervention is not ONE TANTUM, but a classic Deming PLAN, DO, CHECK, ACT cycle
- The approach is at least multidisciplinary, if not even transdisciplinary
- The intervention phase must already provide for the collection of indicators to verify effectiveness

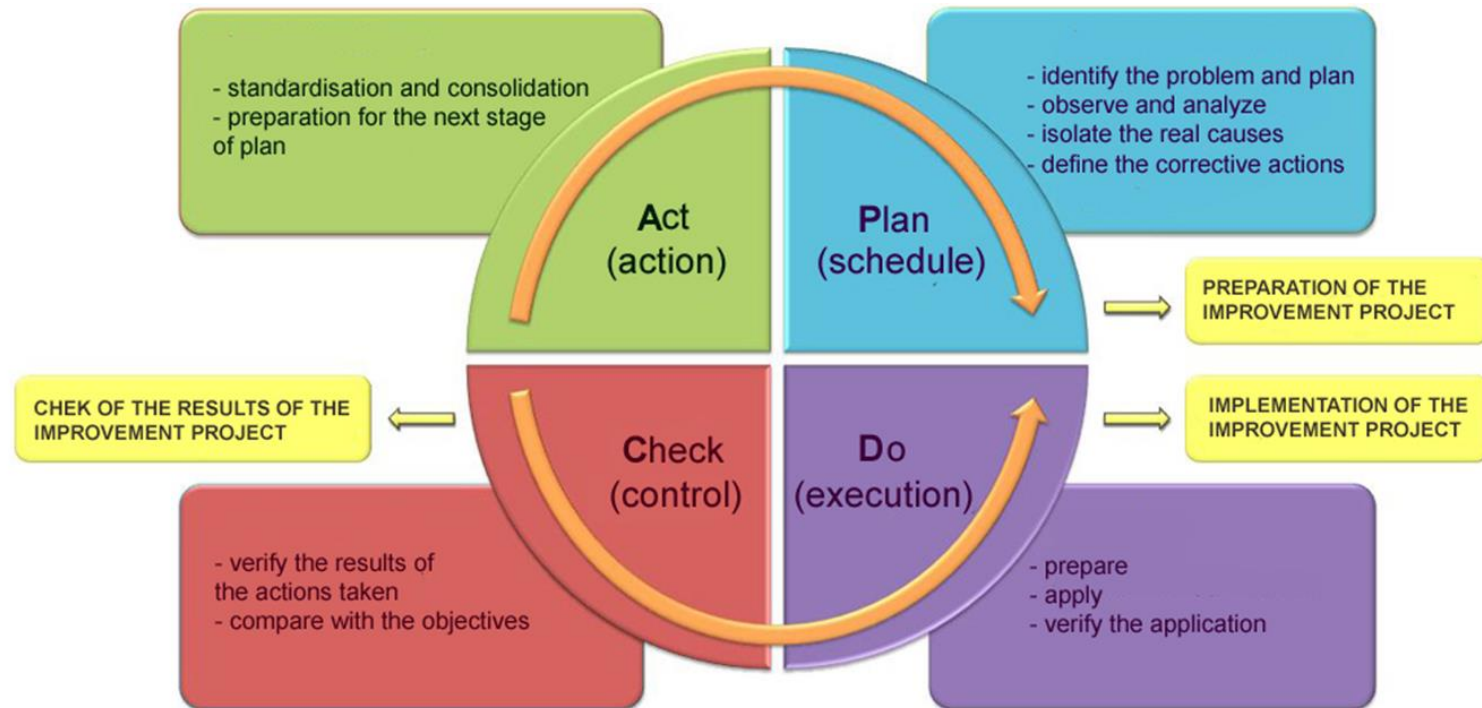


(Credits: Sam Bradd)

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A little reminder: the Deming cycle



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Fight mis- and disinformation

- The goal is to **convince the undecided**. The fight against fake news and conspiracy theories requires commitment at a higher level, which also involves national strategies for education
- It is ethically **necessary** to leave a trace of the truth



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Monitoring

- KAP (Knowledge, Attitude and Practices) surveys: is a quantitative method (predefined questions formatted in standardized questionnaires) that provides access to quantitative and qualitative information and detects misconceptions or misunderstandings that may represent obstacles to the activities we would like to implement and potential barriers to behavior change.
- KPI (Key Performance Indicators: They must be defined already in the analysis phase and must be:
 - Quantitative: we need numbers that can be compared
 - Meaningful: we need indicators that capture the nature of the phenomenon
 - Measurable: if we can't measure them, we can't use them!

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Careful with KAP

1. From 1 to 10, how much have you been happy during the last three months?
2. How many dates have you had in the last three months?



Correlation: 0,00

Correlation: 0,66



1. How many dates have you had in the last three months?
2. From 1 to 10, how much have you been happy during the last three months?

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Careful with KPI

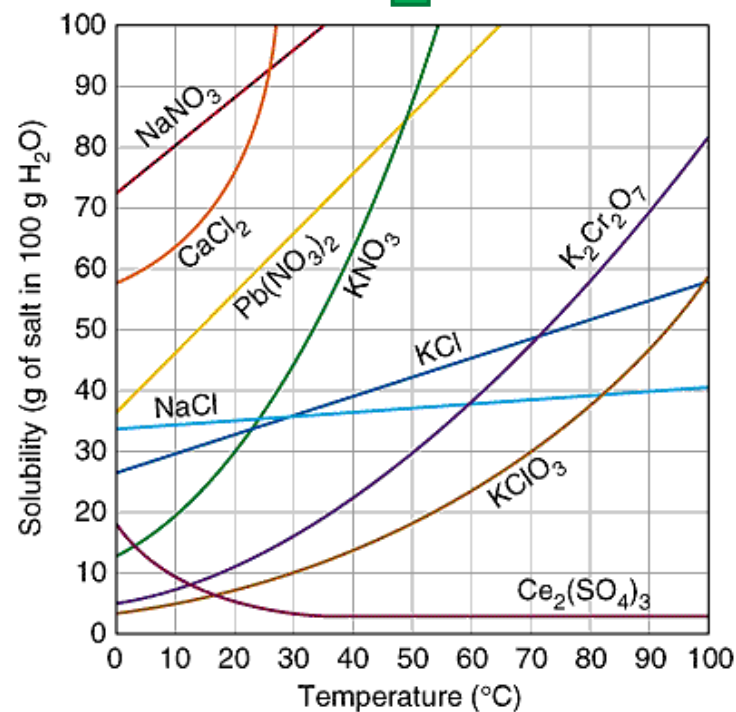


Temperature

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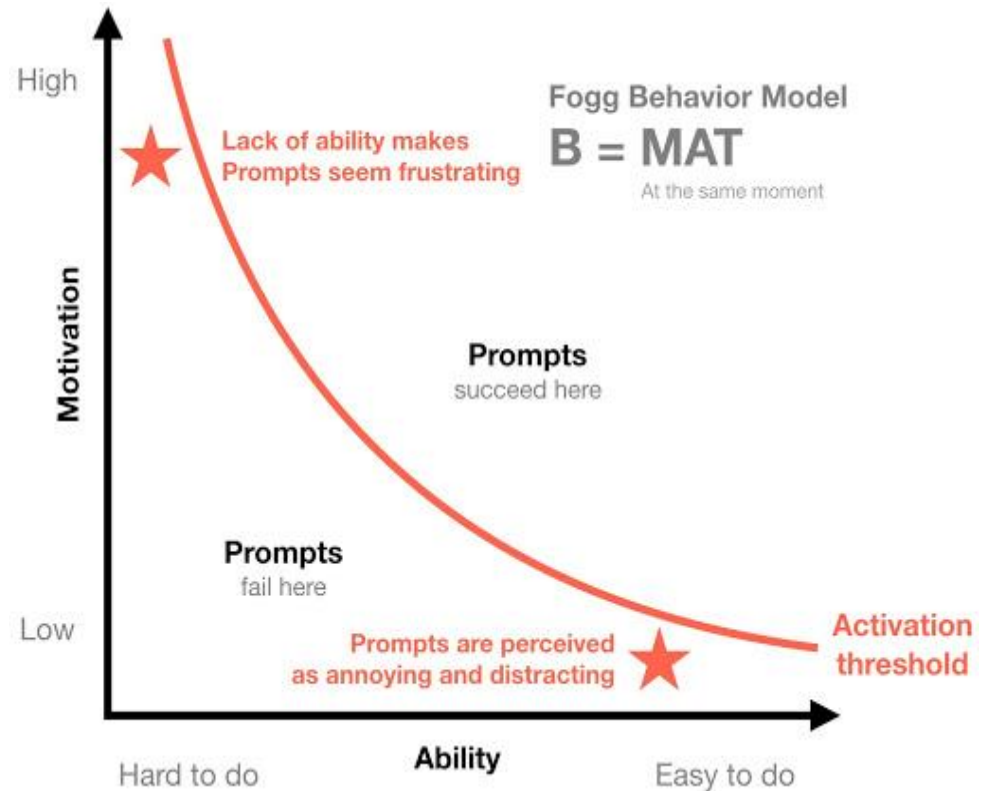
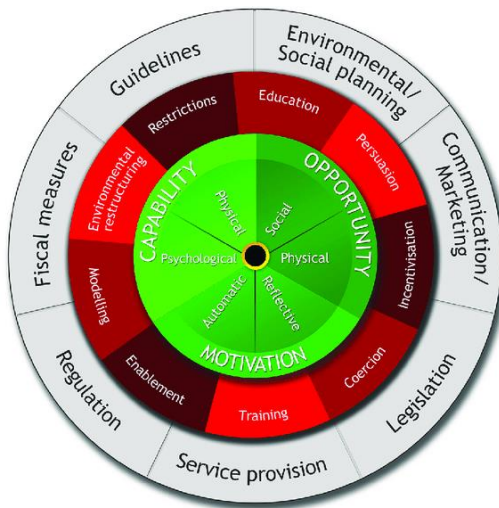
Temperature



Behaviour change

BCW

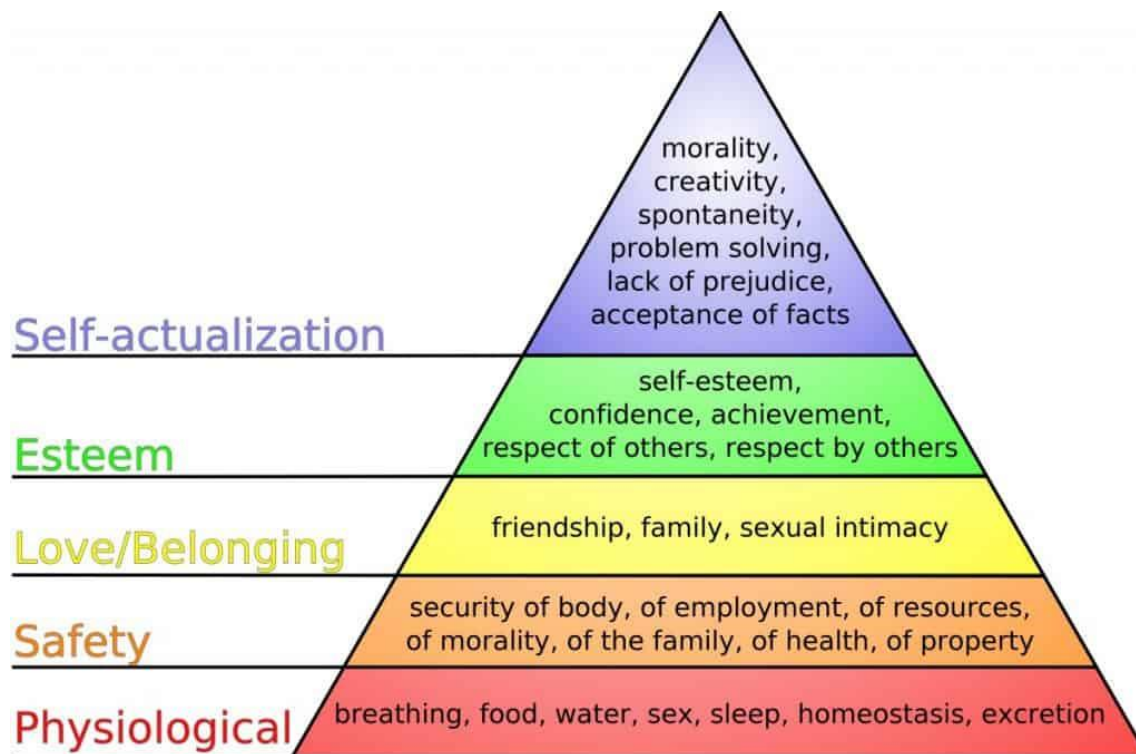
- Sources of behaviour
- Intervention functions
- Policy categories



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Act on needs



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Thank you!



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