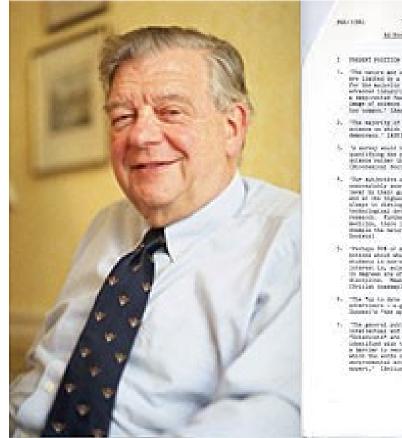
# Scientific Engagement and Outreach

Jadranka Jezeršek Turnes, Kontekst Institute

# The Past:



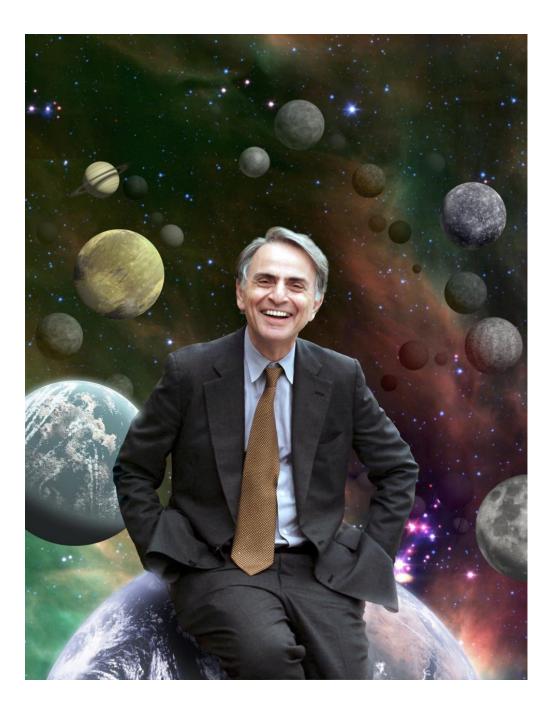
#### THE ROYAL SOCIETY PREFECTIONS. hi for from an fixit's Personnenting of Jennes.

STRUCTURE OF REPORTS CONTINUES.

- 1. The second and bettern of potents extendenting of adjacent and betterlings ore limited by a protect last of scherolyte description and are included. For the society of the period of a part of model under the so-stances (theoryme) meterstry. May of the new enteriors constantly income a magnetized have of exceeds and the metric part of workers. The image of mineres as a torrest, and the metric part of an enterior may is not too comment? Discontation for Interest Standard.
- 3. The report of an even beauty take a very hervic advected by of . monator on phase to have their destances of the av industrial and department, 7, 13001
- 5. Is served would be tractedity, particularly if it were to be addressed to mantifung the public's services of the printing of pressure of sciences where the last the fact template a service pressure form." Citizenterminal Addition (
- 1. The addression assumes to star for paints as taken has an converticity new convergencing of minutes, as achieved at the insta-ment in their goldlenity to every from of generic-minutific mortalism. and in the highest by the fullers of antisy damagness) and government alongs to distinguish because the relationly postheterus sector of teritorilegical development and the providential ration of Paraganets research. Environment, or recently in the survey, prints of initiality modeling, there is only discovered confering should submittly model, for many in the network of an objective trial of al approximate." (Including) Dept. start 1.
- "Portage RPA of more of people in this county note acts the expect means about shak assume to or of that scientificate by, the eventy. states is accustor adjust far my little charteling of at interest in, editors ... from these specializing in entropy of a local or in Regions the effect of its science of the location restituations of testconsidered. Restaurable more trapped and to the second sec Thursday transmit
- In 1754 Au to dote satur? Also of saturds in, of copyer, exploring to administrative of a ground by a product of the property of beauty? and Descent in Post applicance of adjustry (1) (Destate strategy)
- "The general points longs of "subsect some to by that it is a bights interfactors and aptentions without well encoded from encoding (17). "Second and the second and the second particle of the second and described with the these in the second of the second program and second at an is hardler to recretional the MIDI presidenty resume of the recretipue while the works might an . There is a diffusion approach to striktenentel attenden in saint, may often, surplus to thought to be at movers," Detrois teneration for the distances of Asternal

# THE ROYAL **SOCIETY**

#### Sir Walter Bodmer, 1985



The Present:

Communicating Science -Who Should Take Initiative? Researchers? Research Institutions?

# ...so Let's Take a Look What the Swedish Pole Says...

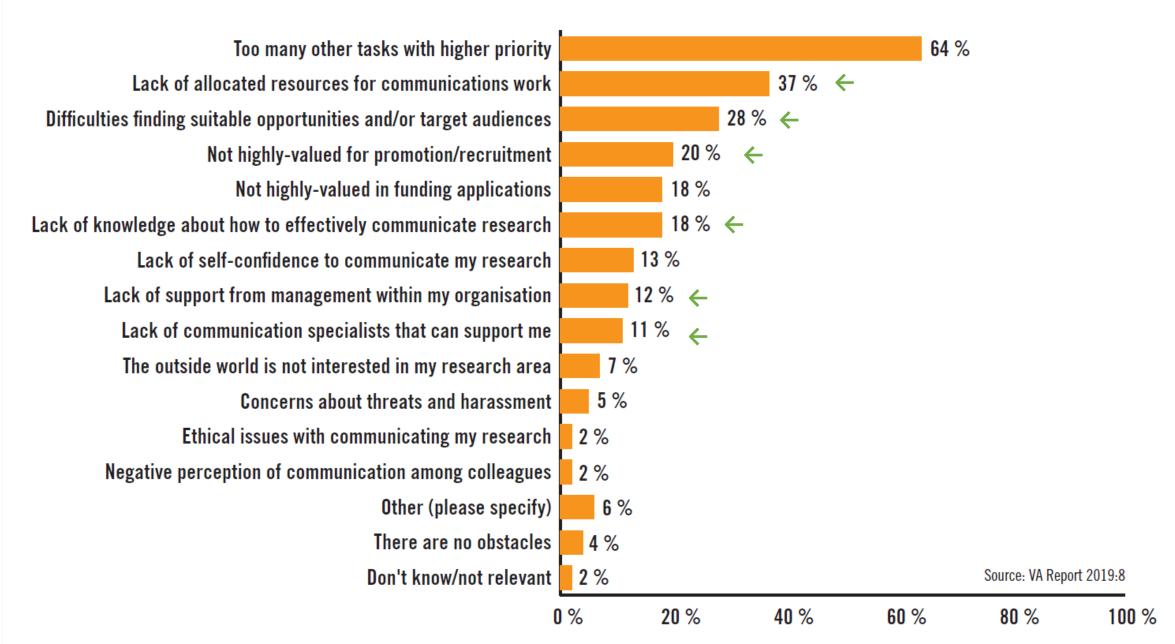
- Visibility, consensus, trust
- Dialogue with society, policy makers, business, peers, future researchers,...

#### But,

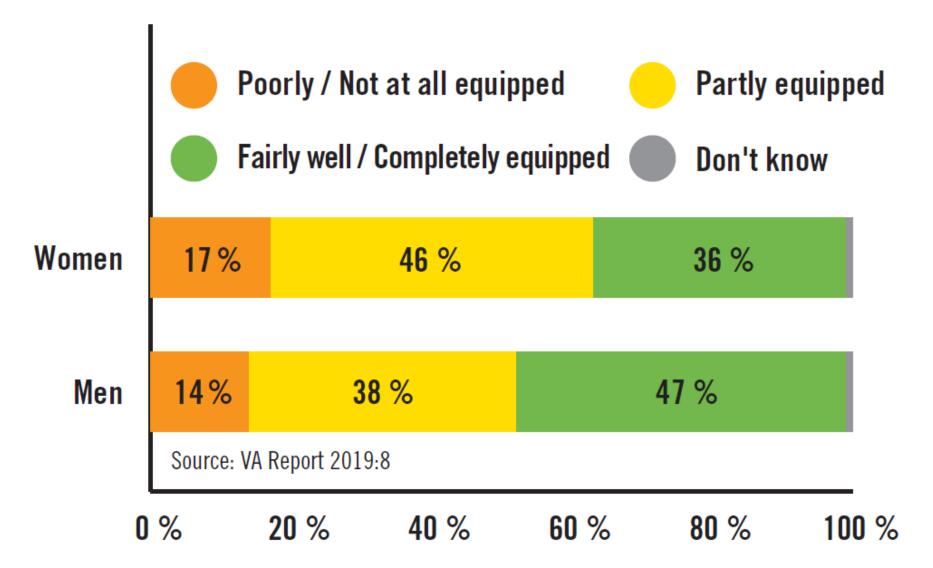
- do scientists know how to do it?
- do RI have strategies for implementation?
- do RI know how to engage with a dialogue when there is a risk?
- can RI deal with pseudoscience? How?

VA Report, 2019

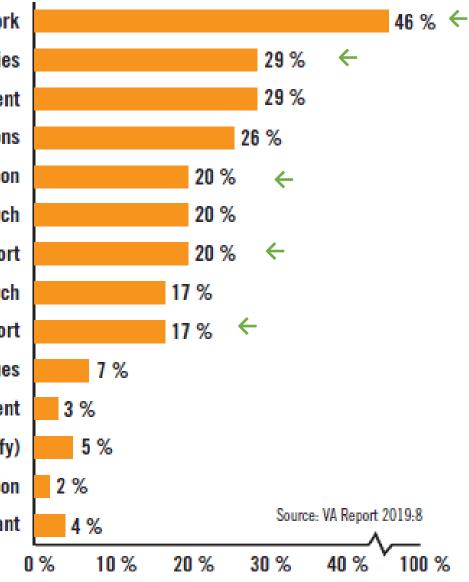
## WHAT ARE THE BIGGEST BARRIERS YOU FACE WHEN COMMUNICATING YOUR RESEARCH WITH THE OUTSIDE WORLD? SELECT UP TO THREE (3) OPTIONS. NUMBER OF RESPONDENTS = 3,699



OVERALL, HOW WELL EQUIPPED DO YOU FEEL YOU ARE TO COMMUNICATE YOUR RESEARCH WITH THE OUTSIDE WORLD? NUMBER OF RESPONDENTS IN EACH GROUP: MEN = 1,929, WOMEN = 1,637



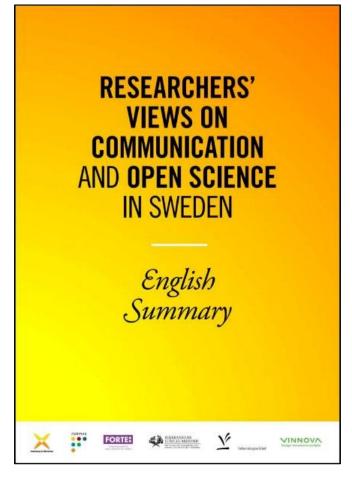
#### WHAT WOULD ENCOURAGE YOU TO SPEND MORE TIME ON COMMUNICATION WITH THE OUTSIDE WORLD? SELECT UP TO THREE (3) OPTIONS. NUMBER OF RESPONDENTS = 3,699



If there were specifically allocated resources available for communications work If there were more invitations to participate in communication activities If it was valued more at promotion/recruitment If it was valued more in funding applications If I had more personal knowledge about how to do communication If it was more use/benefit to my research If the management of my institution provided more support If the outside world was more interested in my research If the communication unit (or similar) provided more support If there was more encouragement/support from my colleagues If there was more support against threats and harassment Other (please specify) There are no factors that would encourage me to spend more time on communication Don't know/not relevant

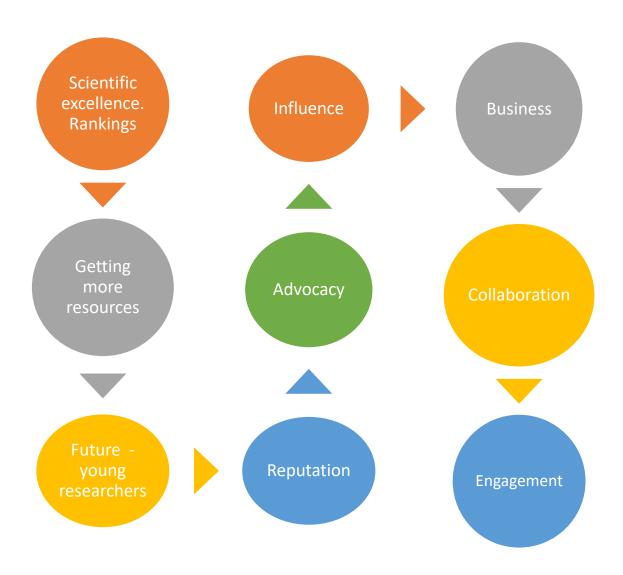
#### **Key Findings**

- Researchers want to communicate!
- Support and training are needed.
- Female researchers need it more than male according to themselves.
- Suitable opportunities to communicate are lacking.



#### What is the Objective? Why Engage with Science?

This is what science and RI has to tell about itself.



#### Sci. Comm is Not (Only) About the News....





## What Are the Tools?

- 1. Context
- 2. Research
- 3. Research Environment

Association	Sci.	Digital	Sci.
Engagement	Publications	Engagement	Events
Visits	Sci.	Sci.	KOL
	Liasons	Conferences	Engagement
Professional Development	Sci. Advisory Boards	NGO Pressure groups	Regulators' Engagement
Public	Sci.	Position	Non Sci.
Engagement	Newsletters	Papers	Events

#### Different Levels: Different Scientific Engagement. Different Skills and Competences

Level it.

Criteria: Strategy or Plan.

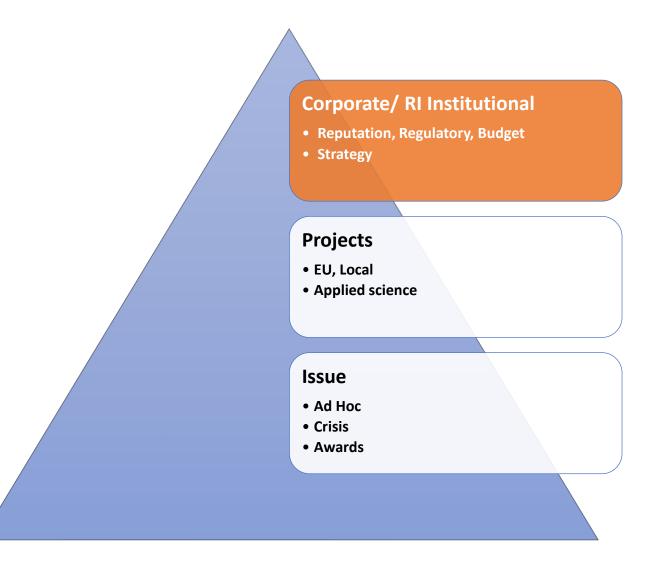
Research Content!

**Research Environment!** 

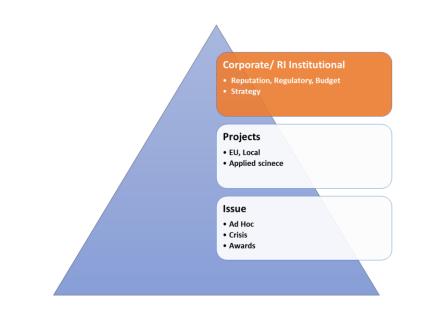
Reputation Management.



1. Level is Institutional: the Corporate Level of Sci. Comm. of RI

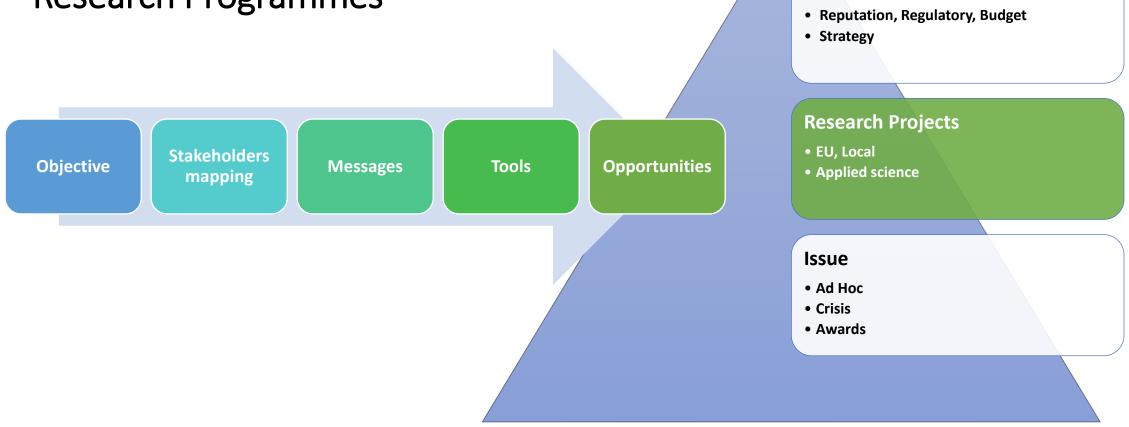


#### Key Words: Building Reputation and Implement Strategy



- Strategic Positioning
- Opportunities
- Proactive for Building Reputation
- Embracing internal and external relationships
- Regular Event Engagements
- Communicating Research Achievements

#### 2. Second Level of Sci. Comm relates with Research Projects or Research Programmes



**Corporate/ RI Institutional** 

#### **Research Project** Needs a **Communication Plan**

Strategy Plan!

If proactive, than controlled

Operational

Partners

Endorsment (KOL)

Task/objective oriented – dissemination

Shorter term

Defined audiences



## Toolbox: Stakeholders Mapping

HIGH

INFLUENCE

LOW

Think how to meet their needs. → Increase thier level of interest

Key players! →Involve and engage!

Not important, but observe them! → Inform via general Show consideration! → Involve and see the developoment!

**SUPPORT** 

# Toolbox: The Questions

Audience	Who I am addressing? Who they are? Are they familiar with the topic? Do they have opinion ( motivation, concirn, hope, interes, value system,)?
Surprise Element	Does my sci topic triggers imagination, visualisation, images? What kind?
Importancy	Why my topic has a wide social context? Where is the potential for it? What my discovery will change?
Emotions	Which emotins trigger / address my sci topic?
Contextualization	How my sci topic is relevant for their everyday life?
Understanding	Do/ How (audience) understand the messages? How can I present them to make it as clear as possible and easy to understand?
Comm Tools	How shall I present it? Which communication tools shall I use? To what extand shall we be creative and how?
Support material	Printed background, Q&A,

l'm a programmar l'm a programer l'm a programmor l'm a programmor l write code

#### Story planning. Storytelling! What I would like to explain?

Who is audience? / Who we are addressing?

What will be my message?

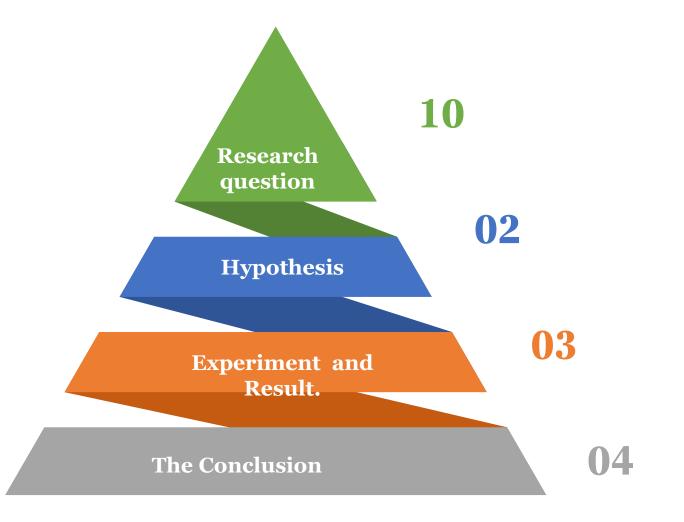
What are my advantages and why?

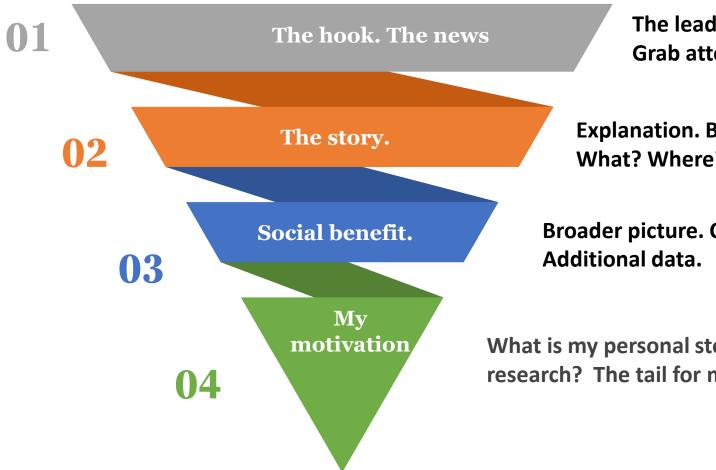
Where I have to be careful (demage control)?



#### Toolbox: Reverse Pyramid

Scientific Method is Like a pyramid.





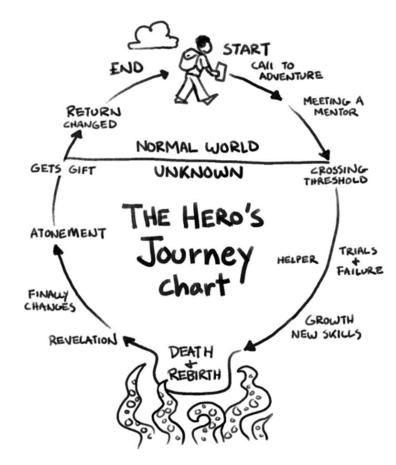
The lead: 30 most important words. Grab attention.

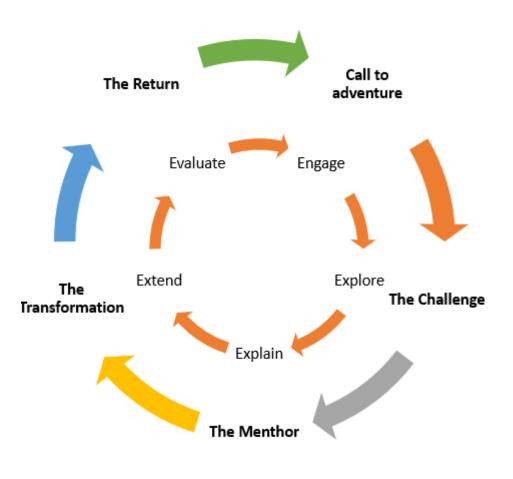
**Explanation. Build Anticipation. Who?** What? Where? Why?

Broader picture. Call to action.

What is my personal storty behind my research? The tail for more info.

#### Toolbox: The Hero's Journey



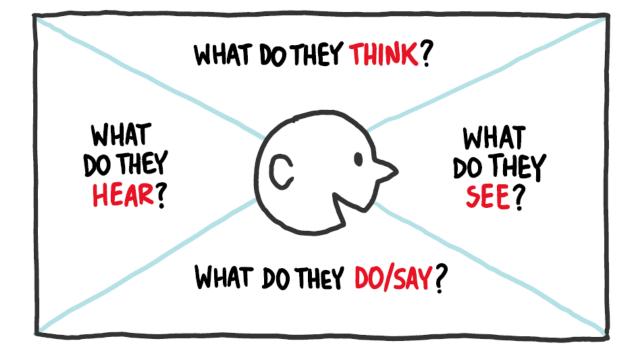


#### Toolbox: The Empathy Map

## THE AUDIENCE

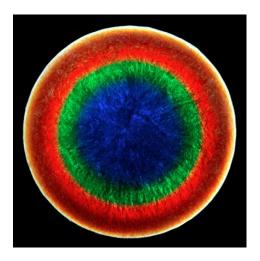
Emotions

Values



## Toolbox: Visuals

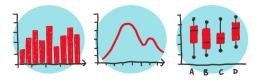
Create understanding Save time Enhance attention Help control timing and nervousness





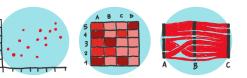
#### Toolbox: Can a Graph Tell Your Story?

CONFRONTATION



Quantitative (continuous values and

distributions)



Quantitative (correlation)





RELATIONSHIP



Conceptual

**Physical** 

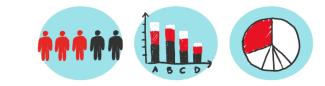
#### SUCCESSION OR EVOLUTION THROUGH TIME





Qualitative

A XXXXXXXXXX B 00000000 0000



Quantitative (absolute values)

Quantitative (proportions and part-to-the-whole)

#### Outreach: Media? Yes, But Learn the Skills!

Peer pressure

Training!

Messaging!

Cognitive bias

Fact - sheets



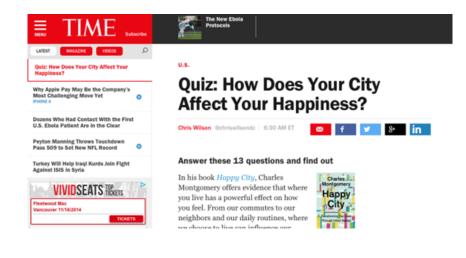
Think well Regarding! When and How to Include Media



- Press conference? Event?
- Presentation? Workshop?
- Shall we mix audiences?
- When involve social networks?
- Radio
- TV = Digital
- Print

## Toolbox: My questions for the journalist

What readers want? The news!



- Who writes? Do I know her/ him?
- How do she/ he write? Experienced in science reporting?
- How she/ he is prepared?
- How much time do we have?
- Who decides?

Media: What's the news?

- Is it newsworthy?
- Can we avoid black & white scenario?
- With one or mulitiple information sources?
- What is the story format?
- Interaction?



# Voice

- Key words
- Voice range: volume (hands up) vs. whisper
- Pauses
- Diaphragm
- Silence
- Voice modulation

When planning for a year, plant corn. When planning for a decade, plant trees. When planning for life, educate and train people.

#### Presentation. Body Language:



- Breath relax smile
- Body language or body noise
- Moving? Or, finding i-spot
- Do not lock arms
- Eye contact
- 1,2,3

How to Evaluate Sci.	Association	Sci.	Digital	Sci.
Engagement?	Engagement	Publications	Engagement	Events
0012013	Visits	Sci. Liasons	Sci. Conferences	KOL Engagement
OUTCOMES ?	Professional Development	Sci. Advisory Boards	NGO Pressure groups	Regulators' Engagement
IMPACT ?	Public	Sci.	Position	Non Sci.
	Engagement	Newsletters	Papers	Events

Outcomes are Results of Activities. Impacts Relate to Longer Term Change.

#### **Outcomes – immediate!**

- Increased understanding of the topic
- Skills development
- Attitudinal change
- Inspiration, creativity
- New experiences

#### Impacts – arising over time!

- Conceptual (awareness, new knowledge, new understanding of the things)
- Capacity building impact (skills developomen, participation)
- Instrumental impact ( change of policies)



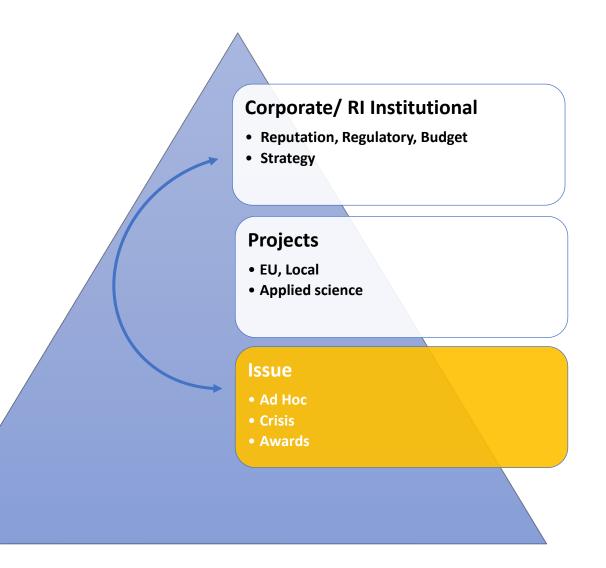
## 3. Level Single Issue Engagement

It happens!

Extrenal concirn: bacj up your reputation! Internal concirn: Explain and control.

The role of transparency and transparent communication.

The role of controling the narrative.



#### Contra Publics. Who Are They?



Have own social identity and beliefs –

confirmation bias of the tribes we belong to

- Use same social media
- Dominated by a few commentators
- Chanting to the choir
- Not listening

#### Step Into the Shoes of "a Critical Friend":

Not only facts, they need to understand the scientific method Listen rather than talking

If people feel they have been heard, they are more open to changing their views and behaviours

Acknowledge their input has limitations

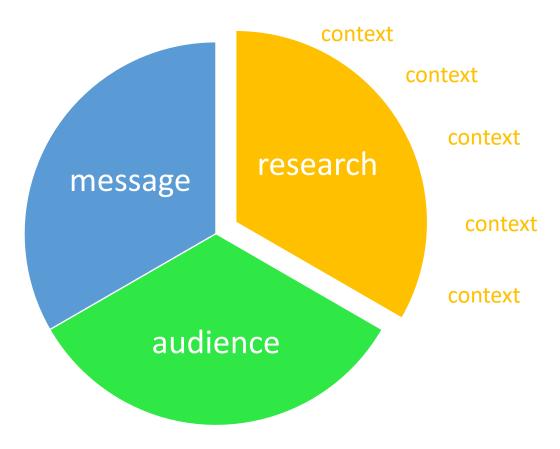
science

Acknowledge uncertainty in

Develop relationship



# Conclusion...



- Your RI has to have a corporate communication infrastucture
- It is a social capital for RI and you
- It's a skill, so you need training
- There is no "copy-paste" to use
- It is about:
  - science, evidence based dialoge
  - influence on a society
  - reputation of RI.



Kontekst Institute, Institute for Science Communication Jadranka Jezeršek Turnes jadranka.jezersek@kontekst-svetovanje.si www.kontekst-svetovanje.si

Tel + 386 30 300 620