

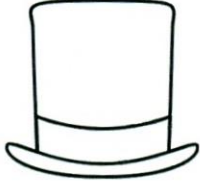
My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) Open science sparks innovation, cooperation instead of competition. Open science has a good reputation and is in line with the current "zeitgeist".	2. YELLOW HAT (BENEFITS) I can profit a lot from the work of others. I can save a lot of time or do things otherwise impossible. I can improve my science by getting feedback. My research can become more visible.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weaknesses? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) I fear, I might lose control. I fear, I might reveal errors I have made. I feel the warmth of people helping each other. I fear others might be stealing my ideas. I fear I might do sth. illegal if my sources are not open.	4. BLACK HAT (CAUTIONS) Some might take more than they give. It relies on solidarity and fair use. Others might take and work and use it commercially in a closed (proprietary way) (although that might be illegal). It takes a lot of time and effort to make research open and transparent.

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 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Be brave and ^{confident} make rules (e.g. licences) Be kind and make good example. Stand for a different culture. Promote it.	Go Go through your research with a checklist. Decide on licences.
What's your conclusion? It's worth it.	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- requirement for international funding	- faster integration of relevant stakeholders in the project design - less risk of one-sided politically motivated "lock-in" ↳ fast feedback - better communicability of research result ↳ quicker dissemination
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weaknesses? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- overwhelmed as an individual - mistrust: "Yet another label"	- risk of making processes rigid and inflexible - increased managerial effort even for small project stages ↳ legal issues ...

black

- opens the door for „loosing“ knowledge



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

- organizing RRI-projects in smaller subunits*
- develop shared-standards platforms

* modules

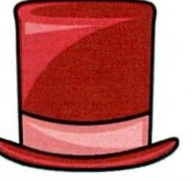
6. BLUE HAT (PLANNING)

- OS requires specific organizational structures and processes
 - trad. project organ. not enough
 - requires a well-formed net-work-like cooperation structure

What's your conclusion?

I think this is a great to way to democratize public-linked research and innovation

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1. WHITE HAT (FACTS) ◦ conditional of funding programs? ◦ where to find condensed information ◦ are there different levels of implementation? ◦ examples how it is done	2. YELLOW HAT (BENEFITS) ◦ higher visibility of projects ◦ broader acceptance from society ◦ more sustainable use of resources, greater responsibility for future ◦ dialogue with stakeholders make it possible to view from different angles ↳ higher level of understanding of the whole problem ◦
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) ◦ pride for support of transparency movement ◦ fear not to fully fulfil expectations ◦ fear of greater complexity because of differing viewpoints, opinions ◦ hopeful) → trying to find a better solution	4. BLACK HAT (CAUTIONS) ◦ danger to lose funding if conditions are not meeting requirements/expectations ◦ additional time requirement could lead to delays for delivering scientific results ◦ defocusing of 'the real' problem

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5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
◦ exploring new opinions and methods ◦ contact to new stakeholder groups and interesting personalities.	◦ new approach to be considered ◦ expectations regarding time requirements
What's your conclusion? openness and information or concept is required, but could greatly enhance research	

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→ maybe write down as a more concrete question...?

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Science needs <u>communication</u>, - Data needs to become knowledge (<u>translations</u>) - You need <u>money</u> to actively be an open scientist	- It will make my project better, more pluralistic in views - It will change the world for the better - We will have better effects, dissolve the science vs. real life divide
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- I might feel controlled / suffocated - I might have a lot of fun!!!	- people will be disappointed - I have more important work to do - Where to start / What does open mean anyway

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- push it from open science to open scientific cooperation - pay citizens to co-work in science projects - introduce clear measurements for public engagement - extra budgets for all those things	- starting with the basics - asking farmers (cattles, descriptors etc.) for data - think about data protection/ security - publish good open science outcomes more actively! www.biotopress.net :-) (my own publishing project...)
What's your conclusion? There are a lot of possibilities, a lot of challenges, but it's necessary. Science needs to change & the our time.	

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- Various definitions of RRI exist - definitions not clear enough to follow them - RRI / Open Science Research is asked for in certain Programmes / approaches - Many facts to realise RRI have to be developed by yourself	- It will make results more "socially robust" - results are more accepted - improves transparency - improves results - "epistemically robust" (practical knowledge considered) - results fit to the purpose (s. also Probst-Franke et al. (2015): Improving Energy Decisions)
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weaknesses? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- better fitting solutions for society - positive contribution of science strengthened	- complex issue to consider non-scientific expertise - how to realise, what expertise? - issue needs to be taken serious! - scientific solutions are often far away from practical / societal problems

	- distinguish normative and descriptive elements sharply - distinguish decisions/interests from factual analyses
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
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Other approaches ^{already} exist which are followed: - Technology assessment - Focus ethics of Techniques an	- I did elaborated together with other experts specific challenges in the field of energy transition ("Improving Energy decisions") ↳ robust solutions as ^{spring} aim - Reaching tools to tackle those challenges (ETLab, ^{specific} system analyses...) XXXXXXXXXX
What's your conclusion? We are on a good way currently. Testes, Methods, Tools etc. needed to implement RRI / ^{Require robust} Solutions	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
	- fosters research - U.S.P. for the project - matrix for future research projects
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- ambitious - scared - where does my research go to? - Am I really ready for change? - Do I really want citizens to intervene?	- exchange of data - data protection - Citizens have no profound access to research

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 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
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What's your conclusion?	

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FP9 PREREQUISITE	RIND EXPERTISE / PARTNERS CITIZEN SCIENCE GROWTH TO EMPOWER (SMALL) GROUP. + FOSTER SCIENCE EDUCATION
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
I LIKE COLLABORATIONS. I LIKE PROMOTING MY ESS TO EVERYONE	GENDER ACTIONS MAY REDUCE QUALITY. OPEN ACCESS PUBLICATION LESS RECOGNITION

	EXPLOITATION AT RISK? WHY LIMITED FOR C.S.
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
CAN WE ACCEPT BY USING MALE/FEMALE DIFFERENCES IN COMMUNICATION ON CROWDSHIP?	TALK TO PEOPLE, WHO ARE SAYING (it) ALONG / Decision taken
What's your conclusion?	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
	open concept is pushed by new generations new technologies for sharing knowledge
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
forced to follow this way without understanding it deeply	limited scope → easier in basic science, more difficult in applied and engineering mix of odd concepts : "open", gender, engagement,

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
	the project is a personall challenge, I will learn
What's your conclusion?	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Open Licenses / knowledge about Networks Tools to realise it ↳ Platforms ↳ open editors	open science networks projects public relations
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
	egoism, "that's mine" "it worked that out" licences not compatible, people are not interested

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
public money public good → it's enough that you are payed you don't have to be mentioned! CCO	• my engineers team includes as much women as men • our tools are all open source • pushing early open up of research (open peer-review) • supporting others to open up • bringing open tools together
What's your conclusion?	

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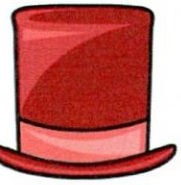
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1. WHITE HAT (FACTS) • Become familiar with the concepts and terminology • Understand the real logic behind RRI	2. YELLOW HAT (BENEFITS) • Fastest spread of knowledge and interactions • Increased competitiveness • All people is aligned for a good cause. • More projection of our work. (work) • Work for what citizens need.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) • it will consume time I need for research • how do I fund it after the project finishes • needs good informatics (IT) • is expensive • what if only Europe do it and not China nor US	4. BLACK HAT (CAUTIONS) • problem with IP rights • what if other copy my ideas • not enough people involved • hard to be globally accepted

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• open journals make money of it.	
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- keep the traditional format: - solutions: dedicated personnel: do not overload researchers with extra work -	• Study Open notebooks • Use Open Source software • try to learn from others • involve students, so they are ready for the future.
What's your conclusion?	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
EUROPE WANTS IT. DOES NOT WORK FOR "ISOLATED RESEARCH": PUBLIC FUNDING WANTS TO SOLVE PUBLIC CHALLENGES	CONSCIOUS THAT WHAT I AM DOING IS <u>USEFUL</u>
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
IT LINKS WITH MY PASSION: IMPACT POSITIVELY ON SOCIETY	- LACK OF TIME -- LACK OF CAPABILITIES! (MANY ASPECTS, GOOD FOR A TEAM, NOT FOR A PERSON) - WHO IS REPRESENTING SOCIETY? HOW TO AVOID SOMEONE / SOME GROUP TAKING THE PLACE OF "SOCIETY" REPRESENTATION

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
CROSS LINK OF IDEAS	SUPPORT IN PROJECT DEFINITION AND DEVELOPMENT
What's your conclusion? LET'S GO FOR IT!	

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1. WHITE HAT (FACTS) - The whole way research is evaluated is ^{contrary} to RRI. - People are demanding it. - Sociological examples show that when people are treated justly they are more productive and specially more creative. - Women have been suppressed for too long. Gender equality is necessary in all contexts. - It's obvious that open access/open data allows science to spread.	2. YELLOW HAT (BENEFITS) - I will get funding easily because the funding agencies like it - I will feel better - My team will feel better - I will help to gender equality - My research will have more diffusion in open access.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) - Proud to contribute to this type of change - A bit "exploited" because it's a new trend that now I	4. BLACK HAT (CAUTIONS) - It can all become a show (hypocritical) - It can increase the already huge work load of scientists.

also have to follow and have work for, beside all the older trends. - I feel a bit skeptic about citizen science.	- If we feel that think that the public has to "decide" what research is funded, some topics could be abandoned for wrong reasons (although with other methods also)
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- Total democracy in the labs	- It looks like doing what is planned in Greco is a good start 😊
What's your conclusion? I think it's worth trying	

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3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)

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5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
I see two opportunities in the sector of PV: An open market (energy) and encourage people to use it For 1: low taxes for 2: information, helps and education	
What's your conclusion?	

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Other experiences from researchers implementing RRI Specialized journals on open science, RRI, citizen science...	I guess I should read a lot to know what works. I need to find sources of knowledge in applying RRI in fields similar to mine. Is it worth it? Is it just a new dress for an old way of behaving responsibly? I believe my group could benefit from a better gender balance, open collaboration, of course behaving ethically...
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
I feel insecure. I don't have the right background, the right thinking framework. I feel excited to apply a novel methodology that could engage society and be a good example for other researchers.	I don't want to be in the tale of the new clothes of the emperor. I don't want to create an emperor just because of talking about the clothes. I want to be real, to make a real impact. Please let's make sure that we do meaningful actions with an impact.

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I would like to trade organizational values or to find appropriate and meaningful metrics about how the RRI approach influences our research, our group, our values...	
What's your conclusion?	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
How information needed about the different approaches available, leaving time to research about it.	Open to change the methodologies, embracing changes and implementing it very fast.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Happy to take part of this project.	Changing to much the RRI an losing research identity, become homogenous.

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
<i>Take advantages of approaches and methods of completely different fields of research/work.</i>	<i>Evaluation → Experimentation</i> 
What's your conclusion?	

Kick-off meeting, Madrid 24th and 25th June 2018

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
This approach is new for me I don't know much about it	Help the society overcome major challenges Bring people together Speed up innovation Learn from others
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Fear that it might be an overhead, add complexity	Risk that IP is not protected/enforced Competitors might use this against us

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Partnerships with institutes/industry players working in the same field	Control what can be shared and what cannot
What's your conclusion? RRI is probably useful and beneficial but some concerns need to be addressed	

Kick-off meeting, Madrid 24th and 25th June 2018

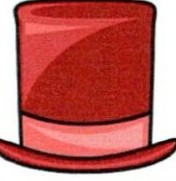
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• know: RRI founded in drive to carry out research more ethically / open • find out: good examples / best practices for RRI in science → <u>who can we learn from?</u> TERMINOLOGY	• faster and easier exchange of scientific <u>data</u> / notes • there is a benefit in sharing results for everyone • more transparency (ethics) • enables others to continue evaluating / interpreting <u>data</u> • adopt common measurement software • gives more equal opportunity to scientists from with less resources
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• excited / anxious (this is a very cool challenge) (is it too challenging?)	• premature "publication" of research data • conflict of interest with patenting / economic usage? • implementation difficult

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
• open Data: can we make the implementation easy by the right software / database (change organizing all data in one database but being able to choose the status / setting from "private" to "public"?)	• contact with startup that might provide perfect solution
What's your conclusion?	

**Kick-off meeting, Madrid 24th and 25th June 2018**

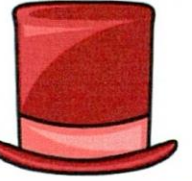
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Why RRI RRI is a new way of doing research	Combining different aspect to achieved a single goal.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
	- There are difficulties moving from the traditional way to a more open way of doing research

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
	<i>Including RRI in the EC programmes and projects.</i>
What's your conclusion?	

**Kick-off meeting, Madrid 24th and 25th June 2018**

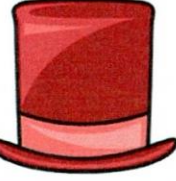
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
The society wants us to do this. We have to learn how to do it in the best way	I have been working with SMEs, companies, administration and end-users from a long time. This can be useful to apply methodologies to work with them
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weaknesses? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Is it going to mean more work? You need to know about: - PV - Management - Economics - technology transfer - Spin-offs - and now RII	- Researchers do this effort but the rest of the quadruple helix? - We have been long time doing this but now we are obliged to adopt new words for old practices

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
?	I am disposed to learn, to make this novelty on my own, to translate the concepts in practical actions
What's your conclusion?	

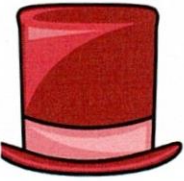
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
I have no information yet! I'll try to find information in internet.	Exchange of knowledge and experience. Second opinion always is helpful.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
No feelings in my work	The risk is! slow acceptance!

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
New discussions and exchange of opinions	To prepare questions for my team to discuss!
What's your conclusion? Positive	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
<u>Open our review:</u> Instead of doing only a literature (review), also do a review on: - real situation - technical papers - journalistic papers (news)	we are going to grow better and probably because we will have to deal with multi-disciplinary teams.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
IT WILL be more challenging when we go to the "open" place The risk averse can be changed	we must take the risk and ask for help when we see walls.

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Many times what people think that is a solution, it is not. So, we have to think about and come up with good ideas. letter	we must do a plan together with the stakeholders.
What's your conclusion? WORK TOGETHER IS ALWAYS THE BEST IDEA.	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Estoy terminando mi tesis en architecture hospitalaria y desde el principio he introducido el concepto de investigación responsable sin saberlo, solo por sentido común. - La primera fase de la tesis consistió en vivir en un hospital durante tres meses para conocer mejor a las ^{personas} usuarias y el funcionamiento del edificio.	- la experiencia en el hospital fue muy positiva y determinante para el desarrollo de la tesis. - Los pacientes no me aportaron mucha información pero el personal de enfermería. - El haber estudiado con las personas usuarias desde el principio le da un carácter diferencial a mi tesis. - Voy a publicar un artículo sobre esta experiencia porque los arquitectos/as no suelen analizar los edificios en uso.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Me motiva trabajar con las personas usuarias. - Me ayuda a comprometerme con la sociedad.	- los indicadores de calidad de la investigación, no incluyen aspectos de responsabilidad. Como estoy empezando mi carrera académica/investigadora me centro en los criterios

RED

BLACK

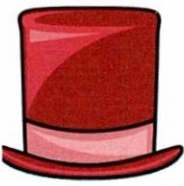
	de evaluación de la ANECA y su programa PEP. - Este proyecto (GRECO) debería proponer indicadores de evaluación para que la investigación responsable no se penalice por otros organismos más tradicionales.
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
	- Cuando termine el documento de la tesis, lo quiero adaptar a otros formatos más divulgativos: pequeños artículos en revistas no científicas y charlas en los hospitales que he estudiado.
What's your conclusion?	

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- la energía fotovoltaica desprende mucho interés social, cada vez tiene menos el estigma de "ser cara". - Hacer mucha cultura sobre "Open Research": qué hay que compartir (y qué no) y en qué medios puede hacerse.	- Si cubro una demanda social, la comercialización del producto debería ser más fácil. - Si cumplo los estándares de RRI, me será más fácil obtener financiación de la Comisión Europea
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Entusiasmo (creo que el RRI es muy necesario en Europa y puede ser muy beneficioso) - Escepticismo (muchas veces las palabras no se traducen en acciones)	- Podría perder la propiedad intelectual de mi trabajo si no aplico bien la idea de "Open Research"

	- Podría confundir los intereses de la sociedad con los de la industria, que no siempre son los mismos - Estas publicaciones podrían perder reputación importancia (menor índice de impacto) a favor de una mayor visibilidad.
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- Plataformas de consulta ciudadana, dirigidas por las instituciones y que compartan resultados con la industria y las universidades. - Videos divulgativos de los distintos fases de la investigación, para despertar el interés de la sociedad.	- Mi tesis doctoral está enfocada en el proyecto GRECO, con lo que recibiré ayuda para poder implementar todas estas nuevas ideas. - He enviado un artículo a una revista "open-review", a pesar de que tuviere un índice de impacto menor que nuestras revistas de referencia.
What's your conclusion?	El concepto de RRI es muy atractivo y puede ser muy beneficioso, pero hace falta concretar metodologías, obligaciones y limitaciones para facilitar su implementación.

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• ENCUENTRO LA INFORMACIÓN EN BIBLIOGRAFÍA ESPECÍFICA • DESARROLLO MI IPES, ME PREGUNTO DÓNDE QUIERO LLEGAR • BUSCO EMPRESAS QUE PUEDAN AYUDARME EN MI INVESTIGACIÓN • BUSCO FINANCIACIÓN • COMIENZO LA INVESTIGACIÓN • OBTENGO RESULTADOS	• INVOLUCRAR A EMPRESAS RELACIONADAS, • AYUDAR A CANALIZAR AYUDAS INSTITUCIONALES •
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• MAYOR AYUDA EN LA INVESTIGACIÓN • AL SER ADIENTA, PUEDO COLABORAR Y COMPARTIR RESULTADOS CON INVESTIGADORES QUE TRABAJAN EN TEMAS PARECIDOS	• NO PODER BENEFICIARME (ECONOM.) DEL RESULTADO DE MI INVESTIGACIÓN AL SER PÚBLICO

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
• AUNQUE SEA PÚBLICO, CREAR UN SISTEMA QUE GARANTICE QUE NI INVESTI- GACION SE VA A REPORTAR LOS BENEFICIOS ECONÓMICOS ESPERADOS	
What's your conclusion?	

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ENERGÍA SOLAR FOTOVOLTAICA

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) • Debo contactar con otros profesionales que hagan mejor ciertas tareas: diseminación de la información, publicitación, investigaciones complementarias a las mías •	2. YELLOW HAT (BENEFITS) • Cuanto más se extienda entre todos los ciudadanos las bondades de la investigación y su repercusión, más trabajo tendremos • Mejor visión de los investigadores por parte de la población
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) • ¿Más burocracia? • ¿Mucho más trabajo para conseguir resultados similares a los que obtendríamos sin adoptar estas novedades?	4. BLACK HAT (CAUTIONS) • Yo desarrollo la idea, pero después el beneficio no lo obtengo yo • Yo colaboro pero otros no colaboran en el mismo grado que yo.

- ¿Mis publicaciones en open access afectan a la calidad de mi CV al ser evaluados por comisiones de selección?



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.

5. GREEN HAT (CREATIVE)



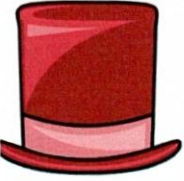
How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

6. BLUE HAT (PLANNING)

What's your conclusion?

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
How do I get the funds for publishing in open access? Which Journals make this possible? What tool is good for open notebook?	Open access will make my work accessible for everyone, which is nice and may also also enhance citations
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
There might be a large amount of additional work. However, I like the idea	At least for the doctorate programme, I have to publish in Journals listed in JCR, adding the restriction on open access and open peer review will make the amount of eligible

	Journals even smaller
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
A change in the publication system might be necessary.	
What's your conclusion?	

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 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Nuevos conceptos, muchos de ellos abstractos. Formación	Fuentes de la innovación Introducción de nuevos conocimientos Aplicación de la investigación para solucionar problemas sociales y ambientales Transparencia. Democratización del conocimiento y acceso a los recursos, tanto económicos como materiales. Creación de sinergias
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Puede ser agobiante introducir nuevas formas de trabajar pero a la vez apasionante conocer nuevas iniciativas y saber que haces una aportación.	Pérdida de las aportaciones. Autonomía? Un aumento de las tareas en los proyectos de investigación

a la sociedad y el entorno.



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?
Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

Usar tecnología para solucionar los problemas de autarca de los proyectos y para interactuar con los distintos grupos de interés que están involucrados en el proyecto.

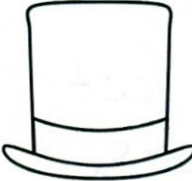
6. BLUE HAT (PLANNING)

- Identificar el problema.
- Contar con los agentes implicados en dicho problema
- Establecer redes de colaboración
- Preparar una solución donde todos los agentes se encuentren identificados.
- Desarrollar dicha aplicación.
- Establecer un plan de seguimiento para conocer si se han alcanzado los objetivos.

What's your conclusion?

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

My thesis : palm oil biodiesel sustainability in Indonesia

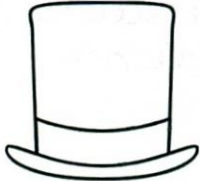
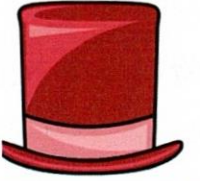
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
palm oil industry in Indonesia involves deforestation due to Land use change. My studies try to find out how to make this industry more sustainable. Very applicable to my studies, actually totally in line.	The benefits are global, reduction of deforestation, CO₂ emissions. Open it up to more people will allow the problem to be acknowledged. People can pull the demand of more responsible products.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
We need to do something to change actual trends of developing countries	Developing countries just care about costs. sustainability should be

We are destroying the earth. We better work fast. This is a very good way!	match with efficiency and feasibility. Might not work out as many interests are involved
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
We can open up the research. We can share ^{it} with people overseas. Try not to impose but to integrate stakeholders.	I have already tried to think how to do things more sustainably. I need to open more the ideas. Get more feedback from society, stakeholders.
What's your conclusion? We need to try to do things more sustainably, even there is a cost or opposition.	



~~DOCTEPA~~

My **PROBLEM** today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Solo contro la sistema de informacion científica oficial. por eso es importante Llevo 5 años de investigación y aún no me habían hablado de las metodologías RRI El enfoque de género y la responsabilidad social son conceptos que cada día están más presentes en el día a día.	Cualquier investigación debe tener un beneficio por la sociedad, por lo que cualquier iniciativa al respecto es muy positiva. open access significa no solo que el mundo tiene acceso a tu trabajo, sino que tú tienes acceso al mundo.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
creo creo que <u>todo</u> debería hacerse con responsabilidad creo	Propiedad intelectual → cómo se controla en open access? ¿Hay sistemas de control y prevención por asegurar la propiedad intelectual?

SOMBRETO NEGRO ↓

¿Toda la open access son en ambas direcciones? Me refiero a que si alguien de otro sistema organizativo, país, etc. puede acceder a un suma de compartir datos ¿cómo aseguro que no volitaré esos datos en otro sistema al que yo no tengo acceso?

SOMBRETO ROJO ↓

La investigación se está valiendo por la sociedad en general porque ~~es~~ que lo ~~se~~ ~~comunica~~ bien como la investigación ha influido en nuestra vida diaria.



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

Convenir a la gente que está fuera del círculo investigador de los beneficios que la investigación supone
→ más información en espacios públicos

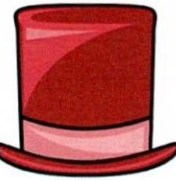
6. BLUE HAT (PLANNING)

Participo en todas la cosas que sea posible ~~en~~ en las que se comparte información
Foro no especializado por divulgación científica a distintos grupos de la sociedad
Concienciación de género en la investigación

What's your conclusion?

Responsabilidad debería ser un concepto asumido de vez. Open access sí, pero con garantías. Fundamental la divulgación a todos los niveles.

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Necesitamos saber las necesidades del usuario final. - Estar presente en foros, en reuniones de las comunidades de usuarios finales. - Reunir con la banca y entidades públicas (gobierno, ...) de modo a saber lo que piensan.	- Si el usuario final es parte de la decisión entonces hay una elevada posibilidad de aceptación. - Market uptake.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Saber que lo que estamos investigando tendrá algún significado.	- Defraudar al usuario final, si no conseguimos <u>atingir</u> lo que nos proponemos.

- No pensar por nosotros. Seguimos lo que la industria quiere y eso puede ser perjudicial.

- ~~Los datos en abierto son~~
- Los datos con acceso abierto sino están bien explicados puede conllevar a problemas de interpretación.



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

6. BLUE HAT (PLANNING)

- ~~Estos datos~~
- Intentar atraer toda la sociedad y no sólo la comunidad de usuarios finales.

- Estar presente en reuniones, foros con entidades responsables y usuarios finales.

What's your conclusion?

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Lo que hace falta en la sociedad - Participar en reuniones, foros, conferencias y entender la sociedad y sus necesidades	- Hacer lo que quiere el usuario final - Contribuir para el desarrollo de la sociedad - Hacer prototipos o demostradores reales y obtener la aceptación de los usuarios y no de los investigadores
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Contribuir para una mejor sociedad - Compartir todo el trabajo - Compartir todos los desarrollos	- Mayor competencia - Puede ser un problema para las empresas pues hay la necesidad de compartir todo - Hay que hacer lo que quiere

- Otras universidades tendrían
casi a todos que antes
serían confidenciales

la sociedad y no lo que
quieren los investigadores



What are other alternatives? What
new ideas are possible? How can this
be changed or improved? What else
can I do?. Solutions to back hat
concerns. Provocations.
Be creative!.



How do I approach the problem?
What have you done so far? What do
you do next?

Thinking about thinking. Action
plan.

5. GREEN HAT (CREATIVE)

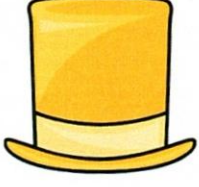
6. BLUE HAT (PLANNING)

- Participación de la
sociedad

- Escuchar a todas las
personas (usuarios finales,
organismos públicos,
empresas privadas)
- Hay que hacer lo que todas
las entidades consideran
más relevante

What's your conclusion?

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Barreras a abrir la información no publicada. - Grandes organizaciones en busca de información-conocimiento de bajo costo. - El conocimiento es <u>poder</u>.	+ Mejor utilización de los recursos. + Avance más rápido en la solución de problemas <u>reales</u>.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
→ Esperanzado	+ Posible robo de información + Eliminación de presupuestos para investigación en algunos lugares.

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
→ Capacitación, divulgación y mercadeo de la idea en aquellos actores resistentes al cambio. (Países, Gobiernos, empresas).	- Reglas claras de todos los actores. + Una cuota de participación para todos los que se benefician con el proceso.
What's your conclusion? Es necesario la utilización del RRI, en especial en países donde los recursos para la investigación son muy escasos.	

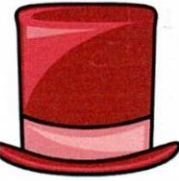
My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

Mejoran la conducción, ayudas, evita accidentes

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Tomar datos de conducción real para abarcar todas las posibilidades - Estudiar como mejoran el propio coche para que sea más seguro - Leer que hace el resto del mundo, integrar soluciones - Digan los resultados a algo ya existente en la empresa privada para su comercialización	- Beneficio social - Menos muertes - Carreteras mas seguras - Desarrollo de mi carrera como investigadora - Doctorado - Networking con otros investigadores
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Contribución a la sociedad - Satisfacción - Auto realización - Miedo de que falle o no sea exitoso - Emoción, expectación - Frustración cuando no sale como debería o cuando los procesos son lentos.	- Que no sirva para nada porque hay muchos euros y no sea útil - Que no guste a la sociedad - Que tenga dificultades para publicar - Que no tenga aceptación por parte de mi superior

	What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.
	How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- Medio esfuerzo - Trabaja duro - Conocer otras investigaciones que puedan ayudarnos a ser más productiva. - Tratar un plan para ser más eficiente	- Ir a congresos y a reuniones de <u>networking</u> - Invertir horas de Trabajo - Compartir ^{poros} y difundir mi investigación
What's your conclusion?	

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 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- La importancia de los 'datos' en general, cada día toma más importancia, y por tanto, el hecho de poder disponer de ellos. - Una investigación entosa debe ser atractiva al público y para llevarse a cabo, muchas veces se necesita la involucración de la empresa	- Poder acceder fácilmente a bases de datos públicas, repositorios, entender mejor el background de una investigación, que de otra manera sólo se accedía mediante un paper. - A veces, el soporte de empresas privadas a la investigación pública agiliza notablemente el proceso.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Peligro de caídas en todo aquello denominado OPEN	- Publicar resultados en revistas open access denominadas depredadoras.

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- Avanzar con cautela hacia el mundo más "OPEN". Tener conciencia de compartir información de calidad.	- Promover proyectos interesantes para la sociedad en colaboración con otros grupos (internacionales a poder ser) para obtener diferentes enfoques, a la vez que fomentar la colaboración entre distintos equipos.
What's your conclusion? Avanzar hacia una investigación responsable pero con conocimiento del campo.	

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
I am a forestry engineer, but currently I am doing a PhD on Forest Conservation systems. I know a lot about trees, about management, but I don't know how to manage my time. I do use web of science in order to find articles for literature review, but I don't know how to classify all the articles in Mendeley for example.	what usually works is to ask my other colleagues, because they usually have some experience in the think I'm looking for not in my topic, but in the methods and strategies. Some forums are helpful as well, there is always someone who had the same problem as me and he can give me feed back.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
I feel proud that I am doing research, because I think that I am contributing somehow to add more knowledge (even	I think that trying to do always the same thing in the same way doesn't work.

if it's just little) but I feel that it might help in the future to solve a problem, or to open a gate.

But many times I feel depressed or desperate when I am blocked, or when I don't find the funding to do my research.



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.

5. GREEN HAT (CREATIVE)

~~Tener una estrategia de como~~

To get a time management strategy, and a RRI handbook.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

6. BLUE HAT (PLANNING)

I usually do a planning of what to do in my thesis, but I never get to reach the deadlines.

1

What's your conclusion?

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) - Open Science is going to be mandatory for next calls of research programs. - If industry is not considered, we will not do a research that gets the market - If end-users are not involved in the research, we will not produce results satisfying their needs. - The European Commission wants that the citizens know how their money is used by researchers	2. YELLOW HAT (BENEFITS) - The collaboration with industry will be made easier with Open Innovation, and this is a key point for a researcher. - Open science will allow to orientate the research to the end-user needs and this will facilitate to the market uptake of the innovative products.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) - To share the research data is going to make us to loose competitiveness in our field! - Industry is not going to want to make the results of the research open.	4. BLACK HAT (CAUTIONS) - Europeans will do open research but not the Chinese or the Americans: they are going to copy us. - Publications in open journals is going to be more expensive for us.

- The procedure of making open research is going to be more difficult and plenty of bureaucracy.	
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- Collaboration with industry and end-users does not mean to do the research open but centered on their needs. Results may not be opened but the researcher's mind must be open	- My practice doing research during the last years has been open from the point of view of taking into account the needs of end-users and industry. Greco is an opportunity to make it in a systematic way and with appropriate terminology and concepts.
What's your conclusion?	

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• It reduces double work • It enables reproducibility •	• This is one of the possible solutions to really fight climate change. • It opens the ivory tower
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• I feel empowered and am happy to empower others.	• I don't have time for that • Who pays the extra time I need to do all that • In this capitalistic system, only money counts

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- The human being is in the focus, not the ideal price or the bulged of the institutions.



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

6. BLUE HAT (PLANNING)

- Include new technologies (IT)
- Break down monopolies
- Combine science and society

- Build communities
- Share everything
- Stay (critical) skeptical

What's your conclusion?

Just do it. And help others to do it.

misstatements (OS = free of charge)

	- Less honour research - reputation due to worse journals (journal with low impact points) - PhD are concerned of their habilitation
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What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

Chance perspective from me to us as a society.
/ humans on earth

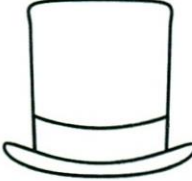
6. BLUE HAT (PLANNING)

• Main part of our work is open. OD Participatory OS
→ Keep going with this.
• Political work:
Change of thinking on four founding sources

What's your conclusion?

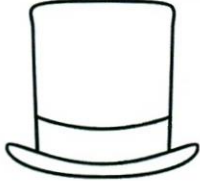
Altruistic mindset helps to overcome hesitations.
→ Do not make a scientific reputation.

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
RR takes more time on documentation OS ^{gives} allows better chances on funding OS motivates young people OS allows more people to benefit on research results	Shared work ↳ faster & better Equality Decentralisation
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
The fear of getting innovations/ideas stolen → Me/My institute is not acknowledged → I/we do not get r.p. anymore	Economy drive Stakeholders hesitate to participate → less communication with possibilities to validate

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My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Open science is a trend. - Open Science has strong bottom-up support at our own institute. -	- openness increases transparency, participation, emancipation - Open science leads to less "waste" of resources
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- I worry about the academic merits of open science: Are they as high as in "closed" (conventional) science? - It has a generally sympathetic sympathetic appeal.	- Pursuing the open science makes it harder to have a conventional academic career

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Open science can be - the adoption of Open Science could be helped by making more legal advice about the topic <u>publicly</u> available - open science adoption would be helped by a set of academic standards about it.	- Talk to more people about open science. - Find out how "conventional" research institutes deal with open science -
What's your conclusion? It need to find out more about it, specially from the "traditional" scientific community.	

- a feeling of solidarity / community



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

- subsidies for people / organizations / Companies that work openly
- Open peer review as a standard in scientific research

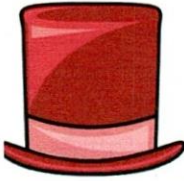
6. BLUE HAT (PLANNING)

so far: I was writing open code which is really easy using f.e. github.

I am planning to be more strict with myself: f.e. it can be ~~it~~ "lots of" work (or at least more work) to correctly cite pictures in presentations (or find pictures that you are allowed to use). Nevertheless, I want that procedure to become a standard for me.

What's your conclusion?

My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
There are projects we specifically get to work on, because we are using Open Sciences → f.e. GRECO: The E E. Commission gives funds for this topic.	- gathering of resources of several researchers ↳ finding bugs, working together leads to outcomes with higher quality
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
It makes me feel good to share knowledge and to work together with lots of different people (I might not even know).	Being aware of how to handle Open Sciences according to the law → like licenses.

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1. WHITE HAT (FACTS) - openscience makes my research available for everyone → open access - other people can profit from my results - open data is not available (often) or the open data that is available is not as good as other data (private) - there is different ways of "openness": e.g. 'green' and 'gold' open access, open peer review, open code, open discussions etc.	2. YELLOW HAT (BENEFITS) - research can move farther, because researchers can profit from once another results/codes etc. - researchers can work together over long distance more easily - citizens can take part in the discussion → more democratic
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) - 'i'm worried that the quality of research will suffer, if there is no institution checking what's makes sense and what doesn't (overflow of information on the internet)	4. BLACK HAT (CAUTIONS) - people take advantage of my open published works/papers/data/code and get the profit for it - companies seldomly allow to publish their data openly because of competition

- I'm happy about more transparency and broader reflection on science	- if everyone can open publish openly maybe the quality will suffer. - how do we differentiate between real 'science' and just people who contribute their opinion (→ quality)
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
- open science if could make research much more effective, because it's not in the hand of companies anymore but of the people → more democracy	- only work with open data & - always post my code openly - find papers which allow open peer review - develop open source and work in a community open
What's your conclusion?	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• There are many frameworks and definitions on the concept. • Many projects have addressed the impact of RRI into the research. • (there is not) until very recently the open science values are actually integrating in the research practice.	Science integration in society. • Alignment of society's values with the research process. • Reduce the "rejection" or fear towards science. • Empowering the society to improve the thinking.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• Optimistic • Responsible ~ • Critical. • Creative.	- The concept is still too broad. - & therefore it could lead to misunderstanding. - open science is <u>not</u> only open data. I think there's a risk

	on staying only there. • Scientists don't see the engagement activities as part of their work, but someone else's. • There is not enough reward. • The current S&T system goes against open science values. (too much competition, publications and patents are a goal "itself," time
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
• Doing transdisciplinary and interdisciplinary projects like GRECO. • Devoting finding to both the integration into actual research projects and the academic discussion on (how it) the "theory". • Dialoguing.	• Redefining the RRI approaches ^{concept} as it is too broad and has not really managed to integrate into R&I system. Nowadays very important to understand what Scientist think and feel regarding on how that is taken to their practice in order to better define an "operational RRI".
What's your conclusion? It's a long way, but we are going ...	

excited.

open up global exchange of information flow between scientists, citizens, politicians and industrial stakeholders.

is society ready to join in on high level debates about new technical solutions when they might not have the capability to foresee the benefit?



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

6. BLUE HAT (PLANNING)

RRI needs to be implemented so that using the principles has clear benefit and solutions will be easier to use than not to use.

Making all results/findings open will expose them to more criticism.

- start making validated data sets available for others.
- take different steps to implement Open Science practice and involve research team for direct feedback and discussions

What's your conclusion?

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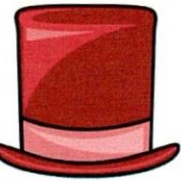
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Research is carried out all over the world; there is an increasing amount of research results generated & published. We need means to ensure progress in knowledge & understanding has a direct positive effect on humanity.	Increase impact and visibility/ access to my research results. Publish research faster by making datasets available A more "open" scientific community will also be a more honest scientific community. Enforces our responsibility towards society /tax payers
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Insecure do I know enough to apply OpenX principles correctly?	Could lead to idea-drain unproven (wrong) data could flood the internet making it hard to tell truth from false

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
How do others structure their data.	With open science we don't need to repeat work but can instead use information from the whole field.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Excited, interested. Engaged in other peoples work.	Too much data that doesn't make sense without context. Improper databases making data mining impossible. Some data is too specific and useless without exact same criterias.

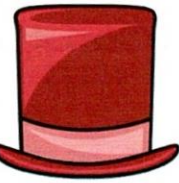
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Platforms for finding collaborators. Limit sharing of raw data. Share raw data together with analysis algorithm instead. Reward verification of existing data.	Trying to find optimal way to structure our data so that it makes sense to others. Find existing standards to not invent the wheel again.
What's your conclusion?	

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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
RRI is not our main focus, despite being at non-profit research institution. Not clear what "gender action" in my field of research even mean.	Harmonization of data & methodology
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
Open science feel feels right, working in with black boxes doesn't.	Confidential data cannot go public, (politically) We could be blamed for errors etc. in our models/calculations.

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
<i>separate</i>	<i>Stepwise approach, getting more and more responsible. Stakeholder engagement, some public data etc.</i>
What's your conclusion?	

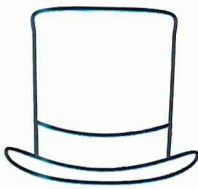
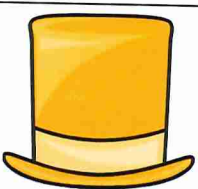
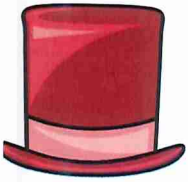
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Yes I have started the change of doing research. I have checked internet websites for this topic. The fact is - To look around and to listen for public opinion before making a decision.	The benefit for me is participation in bigger projects and extending the scale of my research work.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
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Feelings are positive as a new partnership and friendship	The risk is timespan. losing too much time in coordination of collective decision.

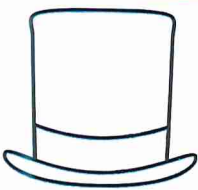
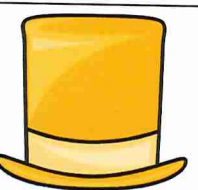
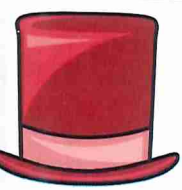
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5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Maybe to involve some form of artificial intelligence and computer simulations	Next step is to participate in discussions and to investigate further the development of the processes
What's your conclusion? <i>Positive</i>	



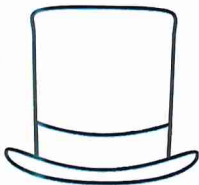
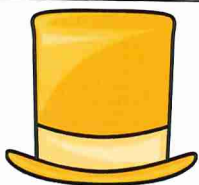
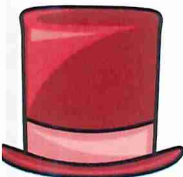
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1. WHITE HAT (FACTS) • Projetos de desenvolvimento e pesquisa, alguns têm cláusulas de confidencialidade/sigilo.	2. YELLOW HAT (BENEFITS) • Poder ter ^{acesso} acesso a artigos e revista de maneira gratuita. • Ter acesso a abordagem que não funcionaram e assim eu não perder o tempo por seguir um mau caminho.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) • Posso perder a originalidade da minha pesquisa. • Preocupação que outros pesquisadores se aproveitem das meus dados e eu não ter o devido reconhecimento ou crédito por meu trabalho.	4. BLACK HAT (CAUTIONS) • Violação de direitos autorais. • Perda de competitividade • Quem vai a financiar pesquisa de esse jeito?

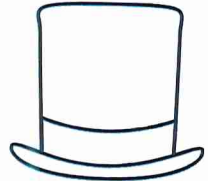
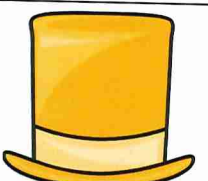
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Electrificación rural, - necesidad de agua potable - necesidad de gelo para conservación de pescado.	- Con trabajos de investigación focados para estas comunidades contribuiremos con esta pequeña parte de la población caribañada. - Fomentar y propiciar la formulación de políticas públicas para ayudar a estas poblaciones. - Contribuir con conocimiento para desarrollar sistemas de producción de gelo, sistemas de bombeo e sistemas de generación eléctrica, toda de fabricación nacional.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Compartir la información de investigación con las empresas para que ellos puedan fabricar equipos dentro del país.	- Hacer los contratos de bien detallados con las empresas - Como distribuir los beneficios después de obtener los resultados para que no haya conflictos de interés.

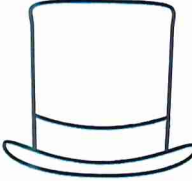
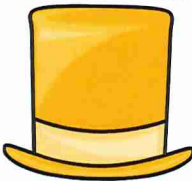
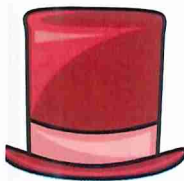
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1. WHITE HAT (FACTS) The access to information will be an issue. Actually I work with the investigation of the optimal tilt angle in with which the sailing is reduced.	2. YELLOW HAT (BENEFITS) The quantity of the available data data will be exponentially increased. It will make possible to compare mine data with others from similar places and see if the results are similar have some similarities.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) It can be very exciting to be able to see data from others researchers that are working in projects in the same area.	4. BLACK HAT (CAUTIONS) The quantity of data will increase, but the quality has to be checked. The data with can be

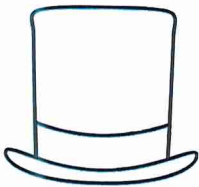
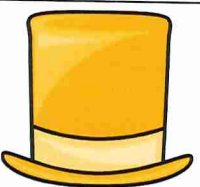
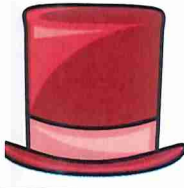
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1. WHITE HAT (FACTS) <i>Necessita:</i> - conhecer o real problema no campo - conhecer os atores envolvidos para obter informações do local onde quero trabalhar, das formas de trabalho, das consequências do projeto em todas as áreas.	2. YELLOW HAT (BENEFITS) <i>As vantagens do projeto adotando RRI serão um maior conhecimento das áreas envolvidas para a realização do projeto, bem como das áreas e atores beneficiados. Um benefício maior será o conhecimento da real penetração do projeto em todas as áreas a que se propõe.</i>
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) <i>provavelmente terei mais trabalho em áreas de não domínio, terei que requisitar a ajuda de profissionais</i>	4. BLACK HAT (CAUTIONS) <i>- Não encontrar profissionais de outras áreas ou depender muito tempo para isso - que o projeto tenda a desenvolver-se mais</i>

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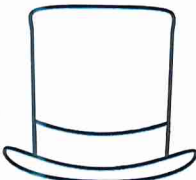
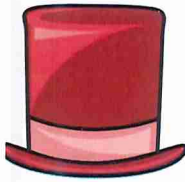
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- There is a cost for developing research; - We only provide information when requested; - We get information to resolve our problem and not to learn about other people research;	- An open platform is easier to get the information needed. - Should be open at school be expected - Less bureaucracy for publishing papers
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Makes me feel as part of something that is in fact contributing to society	- Legal rights about the research - Sponsorship - Credibility of the researches

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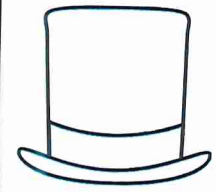
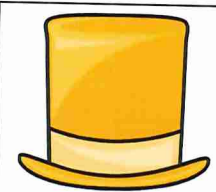
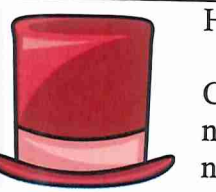
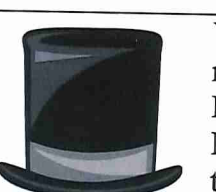
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• Projeto interessante • Pouca informação • Pesquisar os atores do projeto	• Acesso aos dados (banco de informações) • Troca de informações
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• Curioso	• Falta de controle da informação • Perda de dados • Roubo de ideias



My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

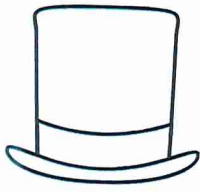
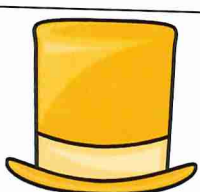
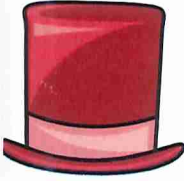
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• novas formas e novos focos na pesquisa • maior comunicação entre a academia e a sociedade. • necessita de mudanças mudanças na estrutura de cobrança no mundo acadêmico •	• A ciência aberta pode proporcionar benefícios, apresentar não apenas os resultados positivos, mas também os resultados negativos de algumas dúvidas que surgiram no decorrer da pesquisa, podem servir de suporte para novas pesquisas. • A conversa com a sociedade, pode culminar com a resolução de problemas que a academia não consegue, por não estar inserido neste meio.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• Sanar as demandas do sociedade e maior comunicação entre a academia e a sociedade civil pode trazer grandes benefícios e aplicações que gerem a salvacao	• Algumas pesquisas recebem aporte financeiro, e os dados devem ser sigilosos. Apenas parte das informações podem ser divulgadas. • A mudança de paradigma deve ocorrer de forma homogênea, pois os pesquisadores são cobrados pelas

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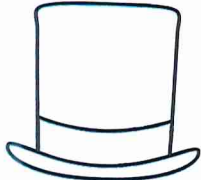
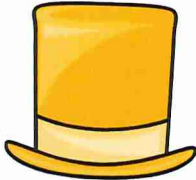
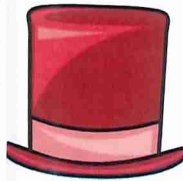
	What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings.		What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you.
1. WHITE HAT (FACTS)		2. YELLOW HAT (BENEFITS)	
O objetivo do trabalho que realizo é verificar se os módulos atingem a potência e se tem segurança elétrica conforme potência fornecida.		Garantia ao consumidor final que ele tenha a garantia do produto.	
	How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.		What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)		4. BLACK HAT (CAUTIONS)	
A médio e longo prazo os módulos começaram a apresentar problemas, então sabemos se o objetivo da potência 0.04 Watts Vai realmente ajudar os consumidores		Provavelmente não vejo como o trabalho que realizo possa prejudicar a sociedade.	



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 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) <i>Feelings are parts fundamental for good results!</i>	2. YELLOW HAT (BENEFITS) <i>Benefits are cooperation</i>
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) <i>Considering logical reasons ethic actions here fundame ntals</i>	4. BLACK HAT (CAUTIONS) <i>Difficulties here is natural</i>

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	What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where?		What works? What are the strengths? How will it help me? What are the benefits? Why will it work?
Just facts.	Information, questions, facts Be neutral. No opinions. No feelings.	Be positive.	Explore value and benefits for you.
1. WHITE HAT (FACTS)		2. YELLOW HAT (BENEFITS)	
Qualificação de componentes fotovoltaicos.		Maior segurança para as empresas e sociedade em relação aos produtos comercializados no mercado.	
	How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.		What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)		4. BLACK HAT (CAUTIONS)	
Tendência de aproximar fabricantes e uma rede de pessoas envolvidas neste setor, filtrando produtos pela sua qualidade.		Penalizar pequenas indústrias em detrimento a grandes companhias multinacionais, adivindas que possuem maior estrutura e capital.	

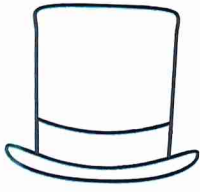
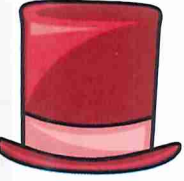


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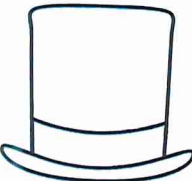
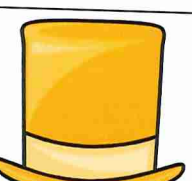
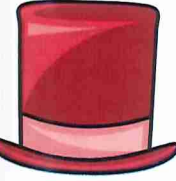
	What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where?		What works? What are the strengths? How will it help me? What are the benefits? Why will it work?
Just facts.	Information, questions, facts Be neutral. No opinions. No feelings.	Be positive.	Explore value and benefits for you.
1. WHITE HAT (FACTS)		2. YELLOW HAT (BENEFITS)	
Research on the root aspects of RRI (without judging them yet- Keep an open mind about it)		Having open knowledge is beneficial as well as the inclusion of a broader group of people into science	
	How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.		What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)		4. BLACK HAT (CAUTIONS)	
It makes me feel feel skeptical. For sure there are benefits, but I worry about the feasibility of the project		- More work for no clear reward (at least in the short run) - Especially for young researchers it would be hard to only to publish in open access	



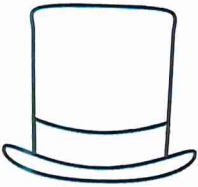
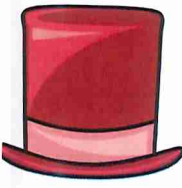
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1. WHITE HAT (FACTS) - há a necessidade de socializar a informação.	2. YELLOW HAT (BENEFITS) - reduzir tempo para obter resultados. - incrementar a participação com outros grupos
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) - maior impacto social - preocupar com os indicadores de produção científica e redução de competitividade.	4. BLACK HAT (CAUTIONS) - contratos de I+D possuem cláusulas de confidencialidade

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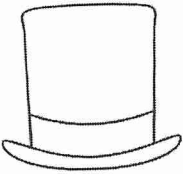
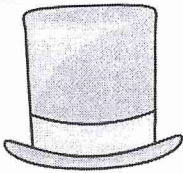
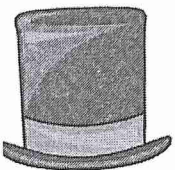
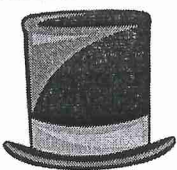
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
- Science results must be widespread to society - Science is a key factor to help poor countries develop. - Large inequalities between science supports from country to country - In some poor countries (e.g. Brazil) education is privilege. How to give that education? - How governments should act to make education/science more democratic?	- Access to data could help on the research guidelines and conclusions. - Small universities and new research groups needs that kind of support. - Closer relation between universities and industry. - Open workspace saves research time - Growing interest on academic research
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
- Insecure about giving away data. - Concerned about information of bad quality	- Misuse of research results. - Lack of credibility with peer review. - Widespread of fake science

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 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) - PLANING AND EXECUTING A PROJECT WILL TAKE LONGER - PEOPLE WITH DIFFERENT KNOWLEDGES WILL HAVE TO WORK TOGETHER	2. YELLOW HAT (BENEFITS) - MOST OF THE RESEARCH WILL WILL BE INCORPORATED INTO THE SOCIETY - BETTER ACCESS TO PREVIOUS RESEARCH DATA WILL EASY FUTURE RESEARCH
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) - IF ONE "GIVES AWAY" THEIR ALL THEIR FINDINGS, THEY MIGHT LOSE THEIR THEIR POSITION IN RESEARCH OR MARKET AREAS	4. BLACK HAT (CAUTIONS) - IT COULD BE DIFFICULT TO ACKNOWLEDGE THE THE RESEARCHER WHO ACTUALLY MADE A DISCOVERY



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 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) • I need to include RRI in my projects if I want to have access to more funding opportunities • I ask the coordinator for information every time, this is how I get the information and know what to do	2. YELLOW HAT (BENEFITS) • It will help me to feel myself as a better person • I have learned learnt new tools in the process, mainly collaborative ones (Open Notebooks etc) • You can get a competitive advantage over other groups if you learn how to play the game.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) • Too time consuming. • Waste of resources • Politicians don't know what to do and make our life more complicated • Bored	4. BLACK HAT (CAUTIONS) • It is expensive • It overloads researchers • It has created a problem in the way researchers worked before where there was no problem before • A lot of people has to agree and know the use of the same tool: this is technically difficult



• although, apparently, there are a lot of sociologists, psychologists, etc. involved, at the end, there are the researchers the ones that have to provide the solutions

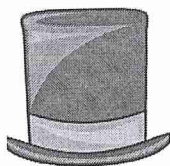
• gender, impact, awareness, prediction of future... when ~~more~~ = more paperwork and less science
RRI developers defend themselves as kids, as they

• There is a lot of people making money of this that wouldn't get it otherwise.

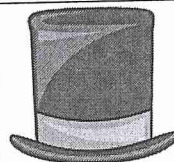
• We are being competitive in our research

• This is becoming a kind of ~~religious~~ dogma in which you cannot disagree without being pointed.

would have never been responsible or interested in society.



What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do? Solutions to back hat concerns. Provocations. Be creative!



How do I approach the problem? What have you done so far? What do you do next?

Thinking about thinking. Action plan.

5. GREEN HAT (CREATIVE)

- @ I don't see ~~where was~~ what was the problem before. Do we need a solution to what? To a fictitious problem?

- Study in the ~~proposed~~ call of the proposed these topics, don't make researchers do it ~~for~~ the work of the politicians

6. BLUE HAT (PLANNING)

• I have tried to understand the problem

• I will resist as long as I can

• I will be politically correct.

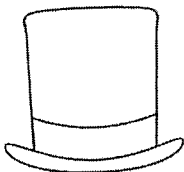
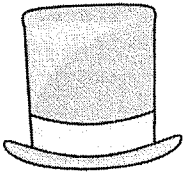
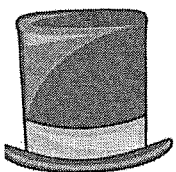
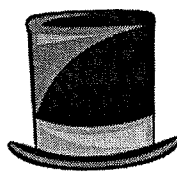
• @ Include open RRI in the school so next generation can ~~to know~~ be educated ~~the tools~~ the tools they need.

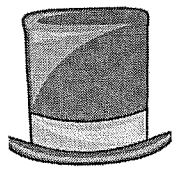
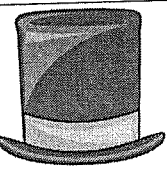
What's your conclusion?

I do this for money, not because I am really interested and think it is beneficial for what it costs.

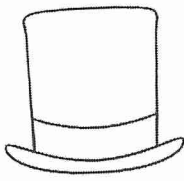
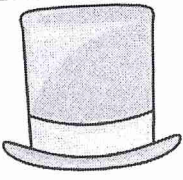
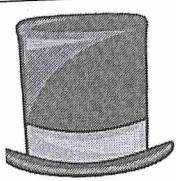


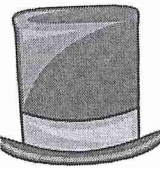
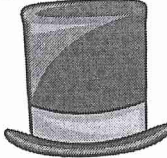
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• My organization fosters open science access/science • There is an office that can support my choices in publications/ rights on data, ... • There is another office that can support my choices for a proposal.	• My activity should be more robust and based on "up to date".
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
• It make me feel more satisfied with my activity, because I take care of people (e.g. final users of my activity)	• Everything could be wrong, but starting with RRI would help me to do better next time.

• It makes me feel a bit "extired" in advance, because I imagine that the RRI path could take more time. (e.g. more time/energy consuming,...)	
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
• Gender is one dimension of RRI. • Probably it is better even better to speak about Gender, also Diversity and Inclusion. • I would suggest to explore perceptions/needs of other countries. • Multicultural.	• I have started reading here and there about RRI, looking up taking part to surveys.... • I would need a "Toolkit", a sort of checklist to be applied in my activity/research proposal, to test if if I am "RRI compliant" • I would benefit from the experience of other projects (MML)
What's your conclusion? RRI is unavoidable. I would learn from others. It would take time.	

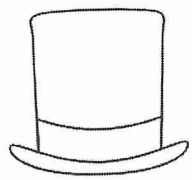
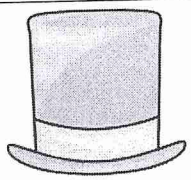
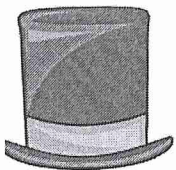
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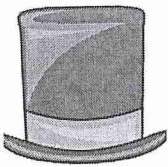
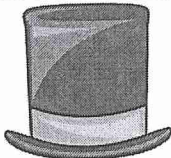
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS) There are projects which publish information for free because the things are paid from government	2. YELLOW HAT (BENEFITS) It creates more knowledge and intensifies research activities. It helps me to reach cheap information and to distinguish the lies
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS) it gives me sense of freedom.	4. BLACK HAT (CAUTIONS) There are too much information. We can go in wrong direction

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
creating an information sieve but not censorship	Spending more time for checking different sources
What's your conclusion?	



My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

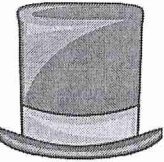
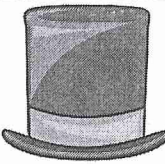
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
<i>This idea is a new for our research.</i>	<i>Maybe some Socially acceptable innovative solutions</i>
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
<i>Positive for global science.</i>	<i>One weaknesses is the funding. It's difficult for applied science.</i>

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
<i>The open Science will bring the useful lifetime of the systems.</i>	<i>Promote dialogue among involved stakeholders.</i>
What's your conclusion? <i>let's try new future horizons</i>	

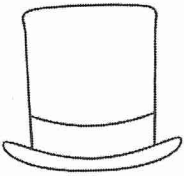
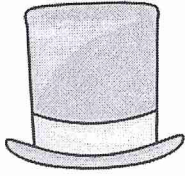
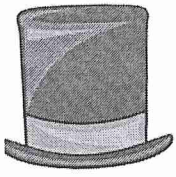


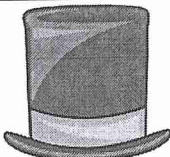
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	What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings.		What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you.
1. WHITE HAT (FACTS)		2. YELLOW HAT (BENEFITS)	
		• Increased visibility • Secure life for data	
	How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.		What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)		4. BLACK HAT (CAUTIONS)	
• I fear that I will be forced to spend much time organising bad data instead of doing new samples. • I fear that I can not be supported because I have the wrong gender.		- It is an extra workload - Sometimes the benefits may be small compared to the benefits. - A risk with open review is that a lot of papers never will be reviewed.	

• I fear that so much of my time will be spent on administration that I no longer can do relevant science. • I fear that forced open science workloads will decrease my productivity and that this will be the thing that prevent me from securing a career in science.	- Sometimes I will not have enough funding for publishing open access, should I then be punished for that?
 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
• Introduce resource management as a keystone • Put more of the open science workload on the funding agencies, and let researchers use their strong sides and do the things they are really good at.	
What's your conclusion?	

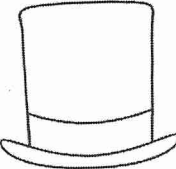
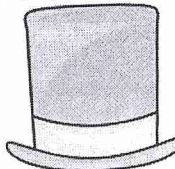
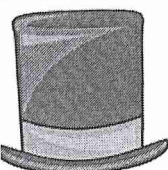
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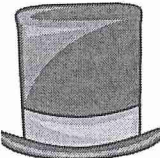
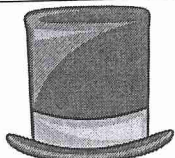
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
New concept	Explore new horizon
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
No feelings yet.	funding is a problem

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
<i>New solutions</i>	<i>to development new thing</i>
What's your conclusion?	



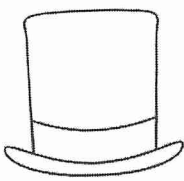
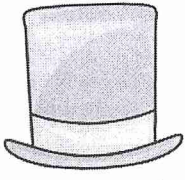
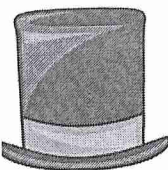
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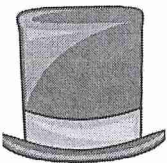
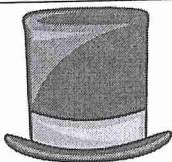
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
For the first time we encounter the concept of open science.	Time will tell whether there will be any benefits.
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
confused	I don't know how funding organisation will react on it.

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
A good alternatives is to totally ignore the public opinion	see point 1.
What's your conclusion? I am moderate pessimistic about the concept.	



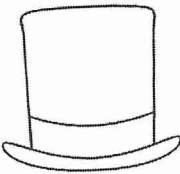
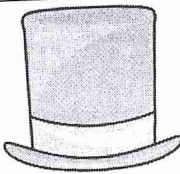
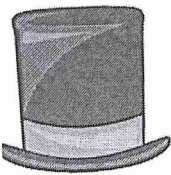
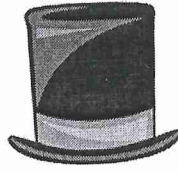
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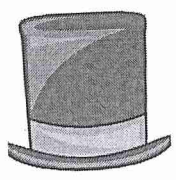
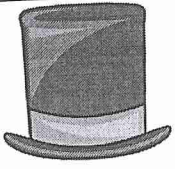
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
<i>This is new concept for me</i>	<i>create science</i>
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
<i>No feelings yet</i>	<i>The funding</i>

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
New solutions	Explore new horizons
What's your conclusion?	

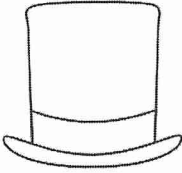
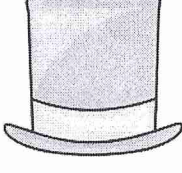
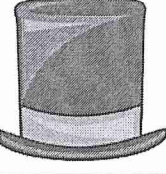


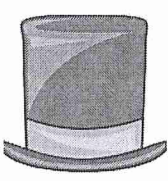
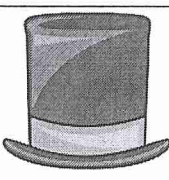
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
Huge problem is the acces to Info	More groups with more peoples who work it leads to more projects and more possibility to exchange the Info
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
negativ	The Line betwin producers (factory) and science. For them the work of scientist are very expensive

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
<i>Work, Work, Work</i>	
What's your conclusion?	

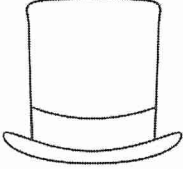
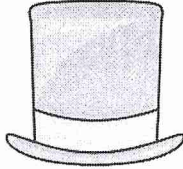
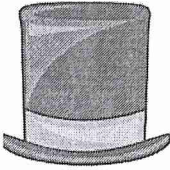
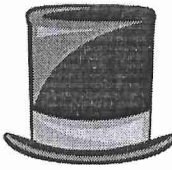
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1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
scihub	scihub
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
happy	To stop scihub

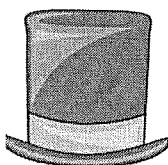
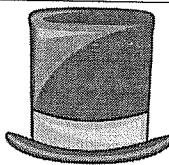
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5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
<i>Open access - everywhere Government Journal with IF</i>	
What's your conclusion?	



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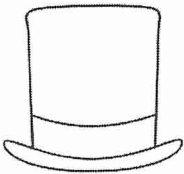
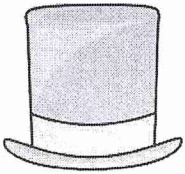
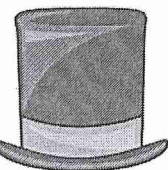
 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
-if paid for open acces I will use it	more - access more information
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
-	- to steal ideas

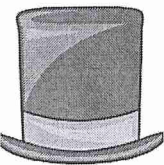
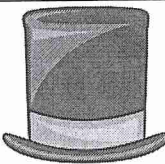


	What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.
5. GREEN HAT (CREATIVE)	
	How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
6. BLUE HAT (PLANNING)	
What's your conclusion?	



My PROBLEM today is to decide if I start the change of my traditional way of doing research and adopt RRI methodologies: gender actions, ethic actions, open access, open data, open notebooks, open software, public engagement, citizen science..

 What do you know? What do I need to find out? How will I get the information I need? What are the facts about? Who, When, Where? Information, questions, facts Be neutral. No opinions. No feelings. Just facts.	 What works? What are the strengths? How will it help me? What are the benefits? Why will it work? Explore value and benefits for you. Be positive.
1. WHITE HAT (FACTS)	2. YELLOW HAT (BENEFITS)
• The national public engagement	• More knowledge
 How does it make me feel? Considers feelings, both positive and negative. No logical reasons are needed here.	 What could be wrong? What does not work? What are weakness? Difficulties, weaknesses, dangers. Logical reasons are given. Spotting the risks,
3. RED HAT (FEELINGS)	4. BLACK HAT (CAUTIONS)
I feel negative, hopeless	• less information to scientists • Conflict of interests

 What are other alternatives? What new ideas are possible? How can this be changed or improved? What else can I do?. Solutions to back hat concerns. Provocations. Be creative!.	 How do I approach the problem? What have you done so far? What do you do next? Thinking about thinking. Action plan.
5. GREEN HAT (CREATIVE)	6. BLUE HAT (PLANNING)
Open access supported by government	
What's your conclusion?	