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# Seminar II

## Field specific research ethics

### “Handling of research data”

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# 1. Dilemma

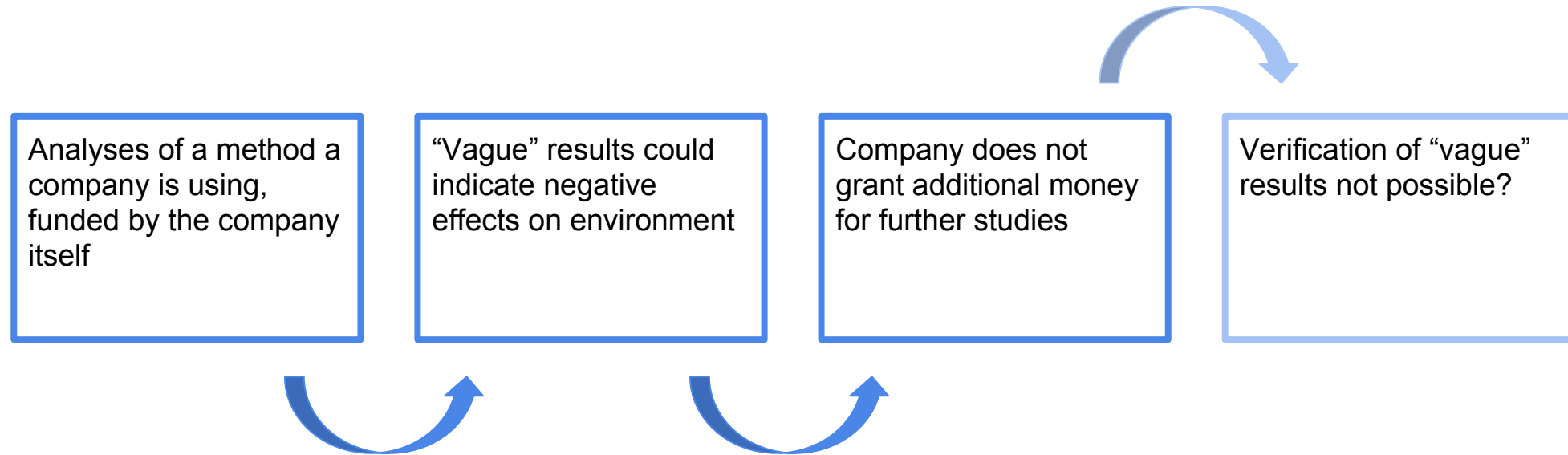
"A company is funding your research; you are supposed to study the environmental impact of some parameter related to the company. The outcome of the study will be used by the company to apply for a possible development of their activities.

Everything looks fine in the beginning; halfway into the project, after acquiring some initial data, you discover some effect that could have possible negative consequences for the environment and could hinder the development of the activities planned by the company. However, without acquiring a rather expensive instrument to study this effect, you can not scientifically confirm your hypothesis. The company does not agree to further funding."

*What do you do?*



# 1. Dilemma





# “Vague” results as basis for next study

Values/interests/...	Company	Researchers	Environment
+	<ul style="list-style-type: none"><li>• If vague results show no negative consequences; good investment</li></ul>	<ul style="list-style-type: none"><li>• Additional publications</li><li>• Increased knowledge</li></ul>	<ul style="list-style-type: none"><li>• Increased knowledge</li></ul>
-	<ul style="list-style-type: none"><li>• If vague results show negative consequences; bad investment</li></ul>	<ul style="list-style-type: none"><li>• Credibility of first study questioned if vague results are indeed negative</li></ul>	<ul style="list-style-type: none"><li>• Results from first study might be used before publication of next study; If vague results indeed have negative consequences = bad</li></ul>



# Publishing of “vague” results

Values/interests/..	Company	Researchers	Environment
+	<ul style="list-style-type: none"><li>• ?</li></ul>	<ul style="list-style-type: none"><li>• Clean conscience</li></ul>	<ul style="list-style-type: none"><li>• Someone else gets interested to verify the vague results</li></ul>
-	<ul style="list-style-type: none"><li>• Casts a damning light on the company (“bad” news stay in the head )</li><li>• They do not get the results of their order</li></ul>	<ul style="list-style-type: none"><li>• Impact of study might be reduced</li></ul>	<ul style="list-style-type: none"><li>• As results are not clear; “possible” bad consequences might harm the environment</li></ul>

# Collaboration



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Values/interests/...	Company	Researchers	Environment
+	<ul style="list-style-type: none"><li>• Reduces costs &amp; increases the knowledge</li></ul>	<ul style="list-style-type: none"><li>• Sharing of resources, more research in shorter time</li></ul>	<ul style="list-style-type: none"><li>• Increases knowledge, high possibility to find an “environmentally friendly” solution for the method</li></ul>
-	<ul style="list-style-type: none"><li>• Dependant of the results of further studies, time consuming</li></ul>	<ul style="list-style-type: none"><li>• Company could reject the involvement of a third party (fear of sharing the success (e.g. patent))</li></ul>	<ul style="list-style-type: none"><li>• ?</li></ul>



# Neglect “vague” results

Values/interests/...	Company	Researchers	Environment
+	<ul style="list-style-type: none"><li>• Good investment</li></ul>	<ul style="list-style-type: none"><li>• Study with good results and solid conclusions = publication in high impact journal?</li></ul>	<ul style="list-style-type: none"><li>• Studied method might be better than other methods currently in use; “best available technology” (BAT)</li></ul>
-	<ul style="list-style-type: none"><li>• Additional costs if vague results proved negative in the future</li></ul>	<ul style="list-style-type: none"><li>• Moral issue; knows there might be a problem</li></ul>	<ul style="list-style-type: none"><li>• Extent of (possible) negative results not determined; technology might in reality not be the BAT</li></ul>

# Discussion?



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# Our best possible solution

## Collaboration

- Comparison of risks and possibilities shows the best ratio
- “Morally good” for **us** and the **environment**
- Might be difficult to achieve this solution in practice