Impact of Generative AI Tools on Grant-Based Basic Research Practices in Poland

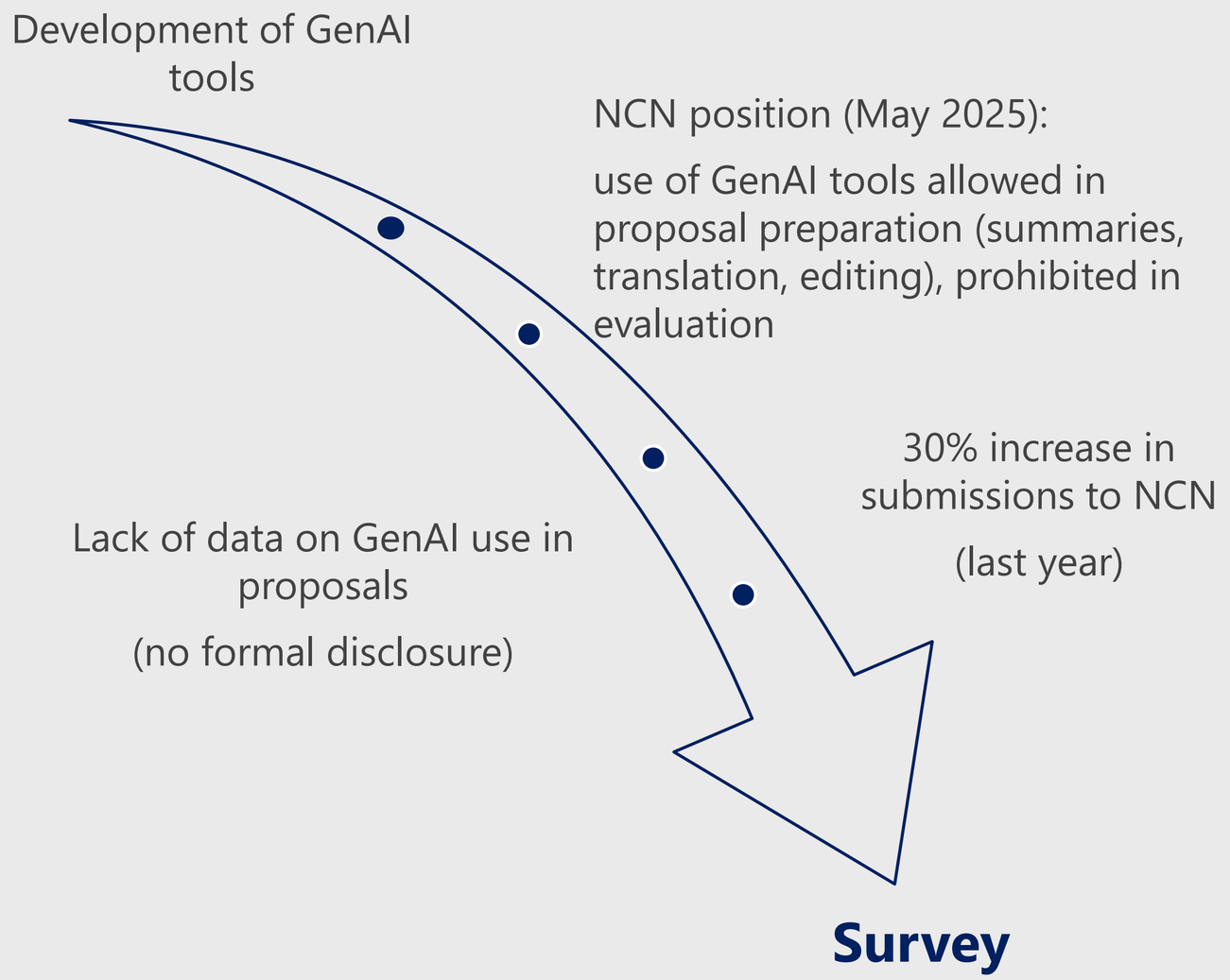
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Why now?

Generative artificial intelligence (GenAI)

form of artificial intelligence capable of generating text, images and other content based on the data on which it has been trained

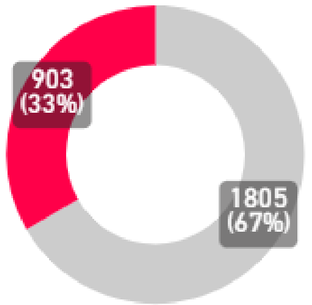


Who is behind the data?

Principal investigators (surveyed in October 2025)
Proposals submitted over the past two years (concluded calls)

Evaluation outcomes

Grantees
Unsuccessful applicants



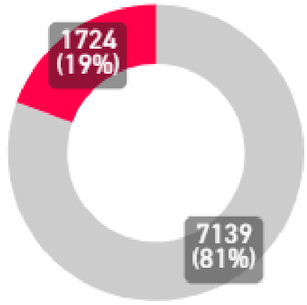
Structure of the sample and population

Sample
N
2708

Response rate
31%

Population
N
8863

	Sample N	Sample %	Population N	Population %
HS	751	41%	2456	18%
NZ	889	38%	2981	19%
ST	1068	39%	3426	20%



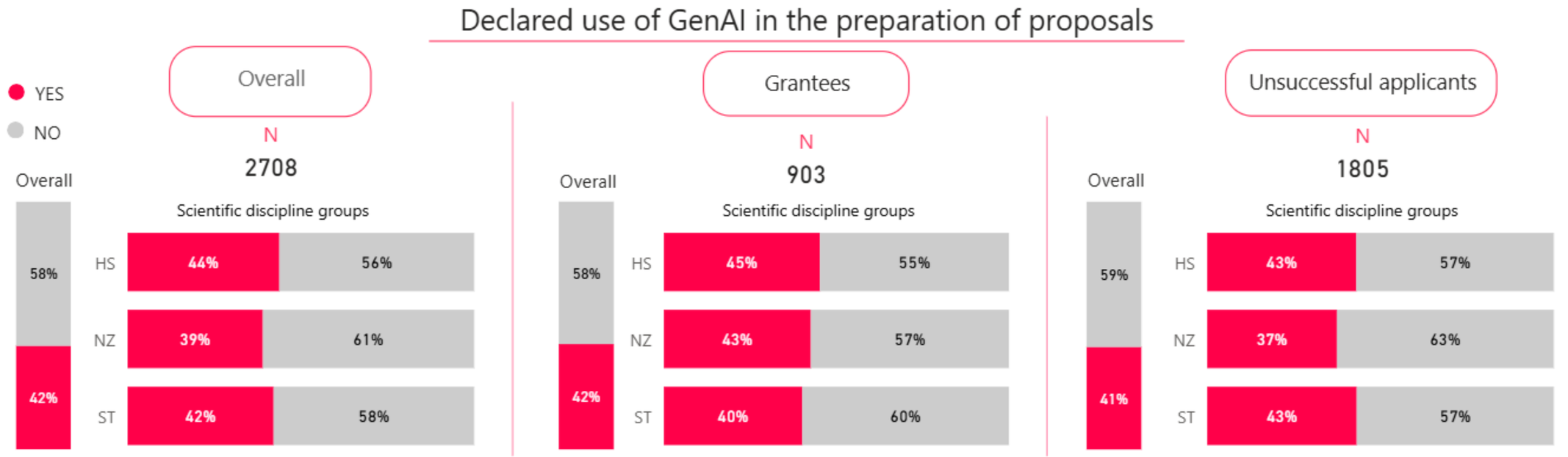
Field of research (NCN panels: HS, NZ, ST)

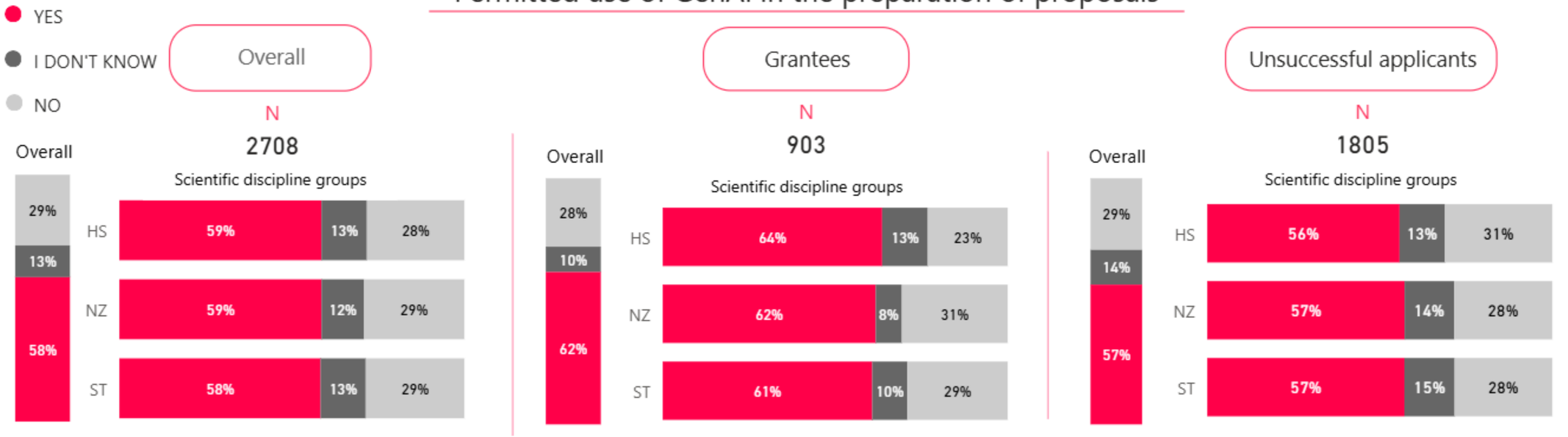
HS – Humanities, social sciences and art sciences

NZ – Life sciences

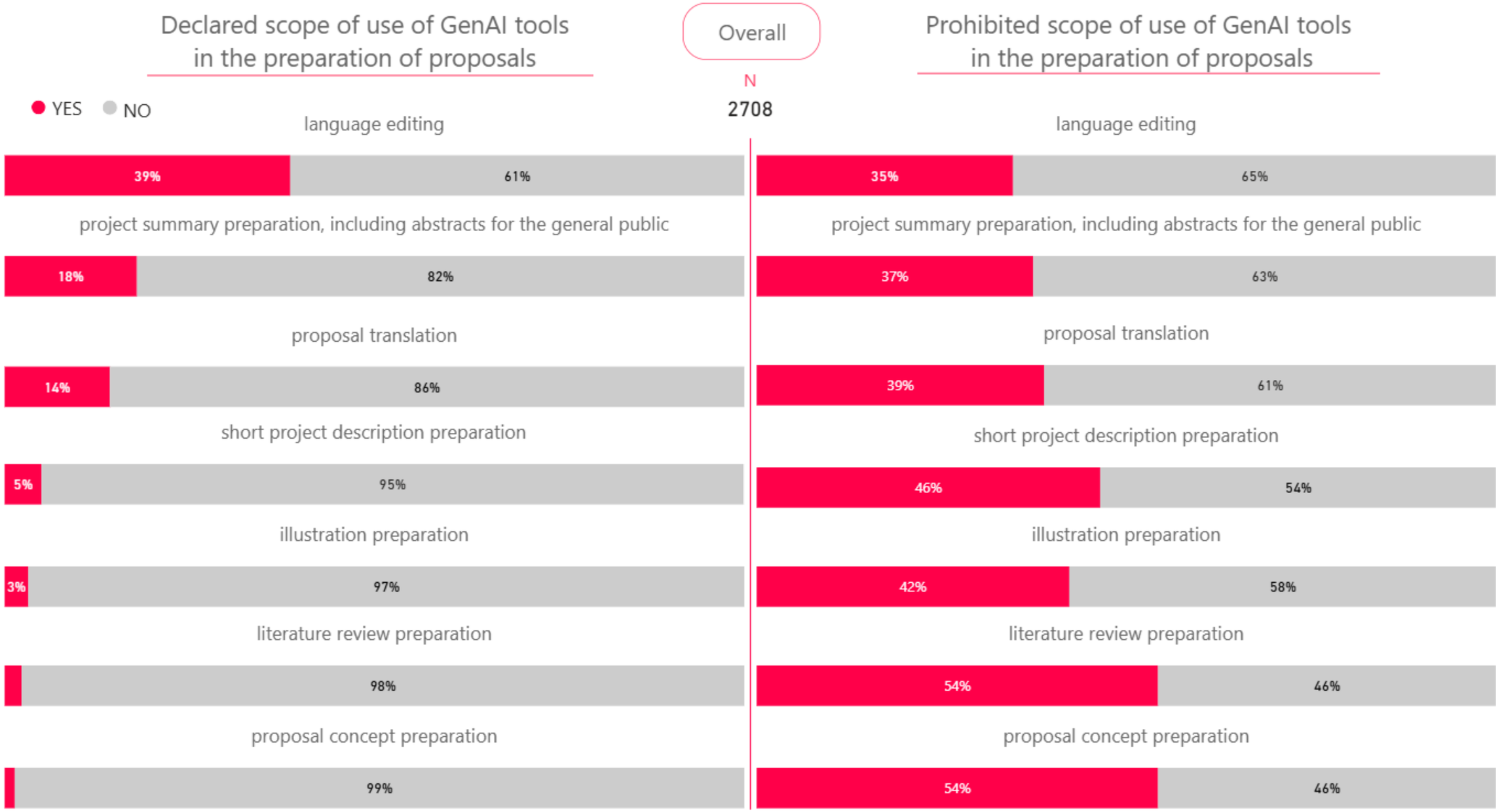
ST – Physical sciences and engineering

What did we learn?

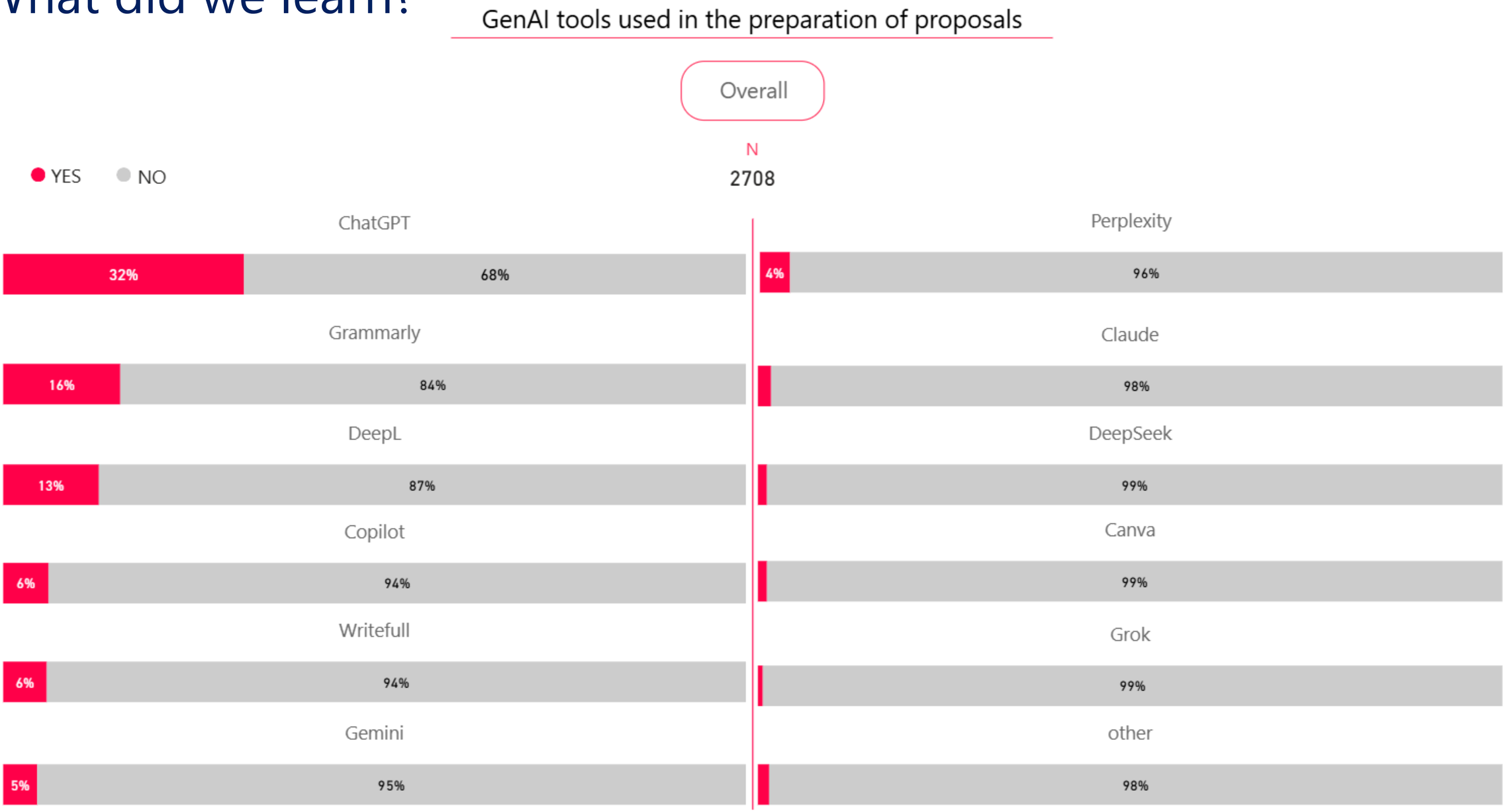




What did we learn?



What did we learn?



Three approaches: **1. Responsibility of the researcher**

(…) NCN should permit the use of GenAI in proposal submission and evaluation. It should also not impose excessive restrictions, as it is simply a tool which, when used properly, can significantly improve the quality of researchers' work. As in any case, misuse may occur, but no restriction is capable of effectively detecting and preventing this.

Survey participant opinion

The use of GenAI in the preparation of grant proposals should not be restricted in any way, as in practice such restrictions cannot be enforced. It should be emphasised, however, that the principal investigator bears full responsibility for the proposal content, regardless of whether GenAI was used.

Survey participant opinion

Delegating thinking to AI when writing is a bad idea. These tools can be useful for language editing, information retrieval, literature collection and generating summaries. Preparing a grant proposal, however, involves a substantial amount of original work that must be undertaken consciously. I doubt that NCN has the resources to verify proposals written using GenAI. The use of generative AI may blur the boundary between the author's original contribution and platitudes generated automatically. Who is the actual author then?
It does not matter. Platitudes will not succeed in competition.

Survey participant opinion

Three approaches: **2. Complete ban**

Projects submitted to NCN should be wholly the work of their authors, just as researchers should be guided by integrity in their work. I cannot imagine projects winning where the descriptions were written by GenAI to any extent.

Survey participant opinion

Developing a research concept and writing the proposal is a creative effort, intellectual work. In my view, the use of GenAI is cheating. Such a proposal does not reflect the capabilities of the team, does not constitute a work within the meaning the Act on Copyright and Related Rights, and is also unfair competition vis-à-vis other proposals prepared without GenAI tools.

Survey participant opinion

Athletes who engage in doping are excluded from competitions. Scientists should be treated in the same way.

Survey participant opinion

(...) The use of GenAI in the process of preparing grant proposals is unfair towards researchers who consistently develop their research craft, who are creative, who have the knowledge and experience necessary to carry out the research proposed in their projects. In my view, using GenAI in proposal preparation is unfair, leads to the misuse of public funds and promotes opportunistic behaviour in science. Such researchers will then go on to generate publications using GenAI, obtain academic degrees and titles and hinder the development of honest and intelligent researchers at all stages of their careers — ultimately leading to a civilisational crisis.

Survey participant opinion

Three approaches: **3. Middle ground**

(…) all types of AI should be taken into account in regulations concerning the use of AI in the preparation and evaluation of proposals at NCN While GenAI raises many controversies, the use of AI models designed for searching and extracting data and knowledge from the literature is rather widely accepted. In my opinion, GenAI in the proposal preparation phase should be allowed for creating schedules, budgets, illustrations and abstracts, provided that the applicant discloses the tool used and the extent of its use. The applicant should be required to fully review the proposal prepared in this way and bear full responsibility for its content . I believe that a complete ban on the use of GenAI will have negative consequences for the future of the institution.

Survey participant opinion

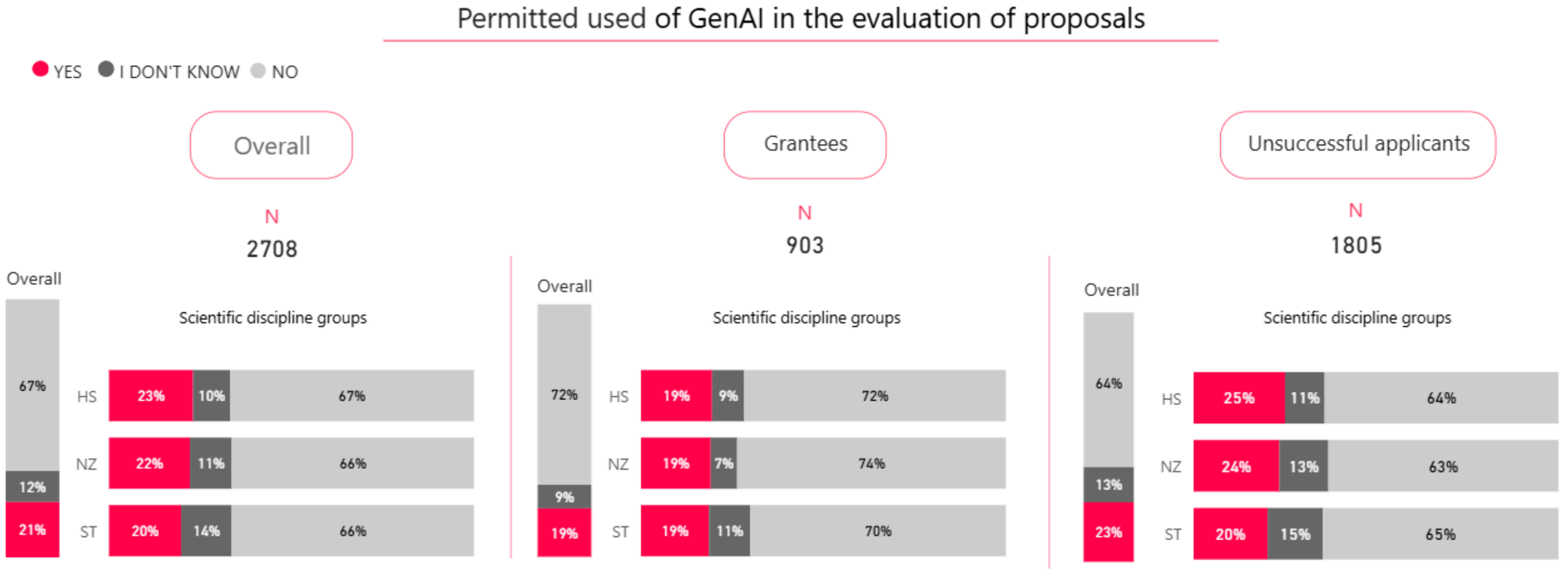
GenAI should be allowed only for the formal preparation of the proposal, without interfering with its substantive content. In science, GenAI should support and assist us, not replace us. Furthermore, transparency in the use of GenAI is also essential. Authors should indicate where AI has been used.

Survey participant opinion

I believe that using GenAI to search for information sources on the Internet, to edit text and make stylistic corrections, translate, or create simple graphics in the preparation of scientific work or grant proposals is not harmful, but rather a sign of the times and a major benefit and facilitation of our work. AI should be treated as a tool, like other tools used for years alongside the development of computer technology, such as online translators, search engines and academic databases. I do not consider it justified to restrict the use of GenAI in proposal preparation, but authors could be asked to declare whether they used AI when preparing the proposal, which is already a practice in some journals.

Survey participant opinion

What did we learn?



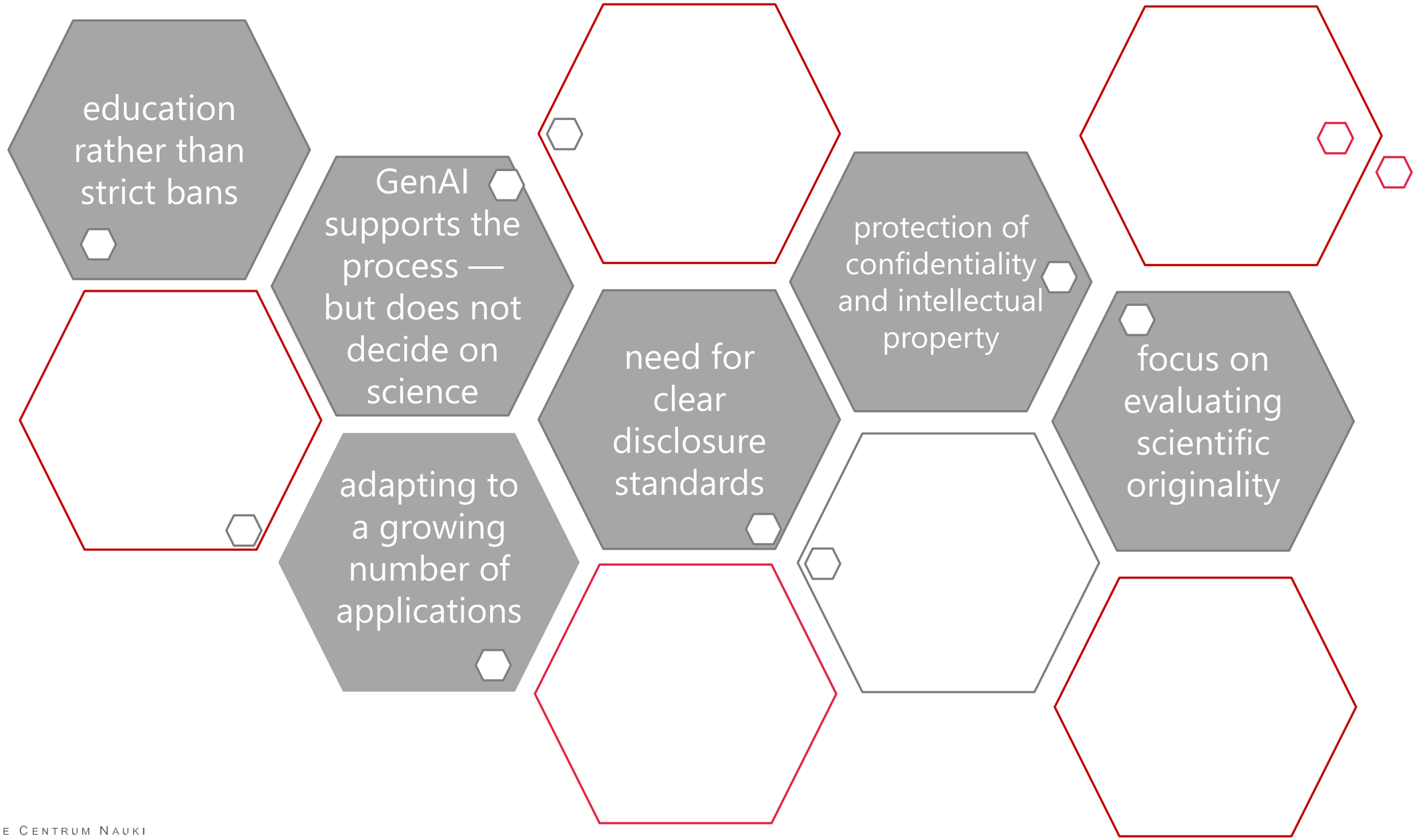
Granting research funding based on a photograph of the applicant and selecting them using children's counting-out rhymes would be fairer and more reasonable than using a technology known for generating false information, built on the mass appropriation of intellectual property and requiring unimaginable amounts of energy. It is a disgrace that NCN is even seriously asking such questions.

Survey participant opinion

How far can we trust GenAI?



What does this mean for NCN?



How can we build transparency and trust in the use of GenAI?

10 steps for transparency in the use of GenAI tools to build a culture of accountability and trust

1. Define the purpose of GenAI use. Specify what the tool is to be used for (e.g. language editing, abstract, diagram, other (please specify)).

2. Choose a secure environment. Use only on-premises tools, i.e. institutional tools or those with a “no data retention” policy. Avoid public GenAI models.

3. Record the tool and version. Record the name, version/model, mode (public vs. on-premises), and date of use.

4. Briefly describe the scope of use: editing, abridging, abstract, graphics, schedule, data analysis, other.

5. Record the prompt or context. Store the query (or its summary) to allow the process to be reconstructed.

6. Mark “substantial use” if GenAI generated substantive content or a synthesis of the literature. Indicate this in the declaration.

7. Verify quality. Describe how correctness was checked: manual fact-check, reading of sources, comparison of versions before and after.

8. Record decisions on what was accepted and what was rejected from GenAI outputs (in notes or in the system).

9. Complete the “GenAI disclosure” section in the proposal form: scope, tools, mode, verification method, and statement of responsibility.

10. Archive the trail. Store logs in a secure repository (university/NCN), available in case of audit.

Compiled based on survey participants' opinions

Thank you for your attention

Link to the report:
https://ncn.gov.pl/sites/default/files/pliki/raporty/2025-raport-z-sondazu-dot-wykorzystania-AI_ang.pdf