BRABANT HACK_26

TRACK Med Tech

IKNL

WWW.BRABANTHACK.AI

SMARTER CANCER INFORMATION ACCESS

Your mission: find a solution to inform people faster, better, and more reliably by connecting our distributed, trusted sources in a smarter, more accessible, and future proof way.

CASE CONTEXT

The way people search for information about cancer is changing rapidly. While trusted platforms such as kanker.nl have long served as important starting points, we see that traffic to these websites is decreasing. More and more people now turn directly to general AI systems because they are fast and easy to use. However, the reliability, nuance, and accuracy of those answers vary greatly, which is especially dangerous in a domain where incomplete information can have significant consequences.

At the same time, IKNL holds a rich collection of high-quality, evidence-based information. Yet this knowledge is spread across different websites and applications. As a result, users struggle to quickly find, combine, and understand the right information. Meanwhile, people increasingly expect fast, integrated, and contextual access to knowledge.

For IKNL, **ensuring access to reliable, validated cancer information** is a fundamental part of our mission. The fragmentation of knowledge (combined with shifting search behavior) calls for new ways of presenting and connecting information. We want a solution that:

- connects our existing sources more intelligently;
- aligns with how people nowadays seek information;
- creates better pathways to the right information for different target groups;
- and applies new AI and data techniques to help make information clearer and more accessible.

IKNL serves a wide range of target groups with very different needs: political and regulatory stakeholders (VWS, RIVM, ZiNL), the general public, patients and their loved ones, healthcare professionals, and partner/umbrella organizations such as hospitals and insurers. A solution that works well for patients may not fit the needs of policymakers or professionals, and vice versa. You and your team may decide for which target group you'll design, or how one concept could support multiple groups.

The envisioned objective of this case is:
A solution to inform people faster, better, and more reliably by connecting our distributed, trusted sources in a smarter, more accessible, and future proof way.

This challenge comes at a pivotal moment in cancer information provision: reliable knowledge does exist, but it is becoming increasingly difficult for users to find it. The rapid rise of AI will increasingly rely on information that is incomplete or not validated. By better connecting and presenting our core sources, we improve decision quality, reduce health disparities, and maintain our position as a leading and authoritative knowledge institute. At the same time, this case opens the door to innovative ideas with **direct societal impact.**

Bonus: Feedback as a Feature
IKNL also wants users to be able to provide feedback. For example when information is missing, when questions remain unanswered, or when they have suggestions for improvement. A strong prototype may therefore explore how user feedback can be collected in a structured way, enabling IKNL to continuously learn about evolving information needs and areas that require refinement. This supports ongoing quality improvement.

WHAT DO TEAMS BUILD?

Your are invited to create an innovative, technically relevant prototype. The format is fully open. For example (but not limited to):

- smart search or retrieval systems
- connected knowledge views
- visual navigation of sources
- AI-assisted summarization or linking
- interactive information journeys

It does not have to be a chatbot (though it can be).

WHAT DOES IKNL PROVIDE?

IKNL will provide teams with access to a curated set of trusted information sources and background information, that can support their prototype development. To make this as easy and structured as possible, we offer a **GitHub repository** where participants can find:

1. Trusted information sources:
    - **kanker.nl** – reliable patient and caregiver information
    - **iknl.nl** – oncology expertise, interpretation, and news
    - **nkr-cijfers.nl** – statistics and insights from the Netherlands Cancer Registry
    - **IKNL reports** – extensive analyses and big reports (https://iknl.nl/webshop#RAPPORTEN)
    - **kankeratlas.iknl.nl** – regional variation, incidence, and survival
    - richtlijnendatabase.nl – oncology guidelines
    - **scientific publications IKNL** – publications (https://iknl.nl/onderzoek/publicaties)

2. Additional information:
    - background information per source;
    - shared space (Github repo) for prototype code and notebooks.
      Teams are encouraged to use the shared repository so the community and IKNL can continue learning from the tools, techniques, and solutions developed during the hackathon.

SUCCESS CRITERIA

A solution is successful if it clearly demonstrates how reliable cancer information can be made more accessible, better connected, or easier to navigate through an innovative and technically meaningful approach. It should also show the value of AI based techniques, even for people who are not familiar with AI.

Core KPI:
The prototype must meaningfully improve the accessibility and connectedness of IKNL's trusted information sources (e.g., by linking, structuring, retrieving, visualizing, or contextualizing content).

Requirements / boundaries:

1. Information integrity / Correctness
   The prototype must:
   1. only use trusted IKNL sources
   2. avoid inventing, altering, or distorting medical information;
   3. clearly show source provenance and reliability;
   4. gracefully decline or redirect when it cannot provide an accurate answer.
2. Usability
   The solution should help users reach relevant information faster or with fewer steps compared to current IKNL websites (e.g., fewer clicks, smarter navigation, improved search, clearer summaries).
3. Comprehension
   The solution should meaningfully improve how users understand information and its context, for example through intelligent summaries, visualizations, or other clarity enhancing features.

Additional value for IKNL:
A solution is considered especially valuable if it:

- helps IKNL understand new techniques, tools, or approaches for connecting or presenting trusted cancer information;
- demo-able and technically insightful so that it can be shown to IKNL's MT and colleagues to spark discussion and understanding;
- can demonstrate potential for future implementation or further exploration within IKNL;
- offers trust in the use of new (AI) technologies for the general public good;
- includes a simple mechanism for collecting user feedback on missing or unclear information.

CONTACT

- Anja van Gestel – Senior Clinical Data Scientist (a.vangestel@iknl.nl)

WWW.BRABANTHACK.AI