

Identifying nodes and graphs of perpetrators in human trafficking data: use case

The FAIRification of unstructured data holds a lot of potential for discovering new insights and allowing analytics. Unstructured data, such as interview data, requires intensive time investment to analyse. By making it FAIR, patterns in the data can be more easily observed. This was tested on

FAIR stands for **F**indable, **A**ccessible, **I**nteroperable and **R**eusable. By making data FAIR, data reuse is improved, by ensuring that one can easily find and access data, and that the data is interoperable so that it is usable in different places and systems.

human trafficking data collected through interviews with the aim of identifying key perpetrator networks and patterns, including trafficker movements and trafficking hotspots. This data was FAIRified through the creation of a FAIR-based ontology, allowing the analysis of this complex data. This approach also allows the visualisation of the data, its networks and patterns.

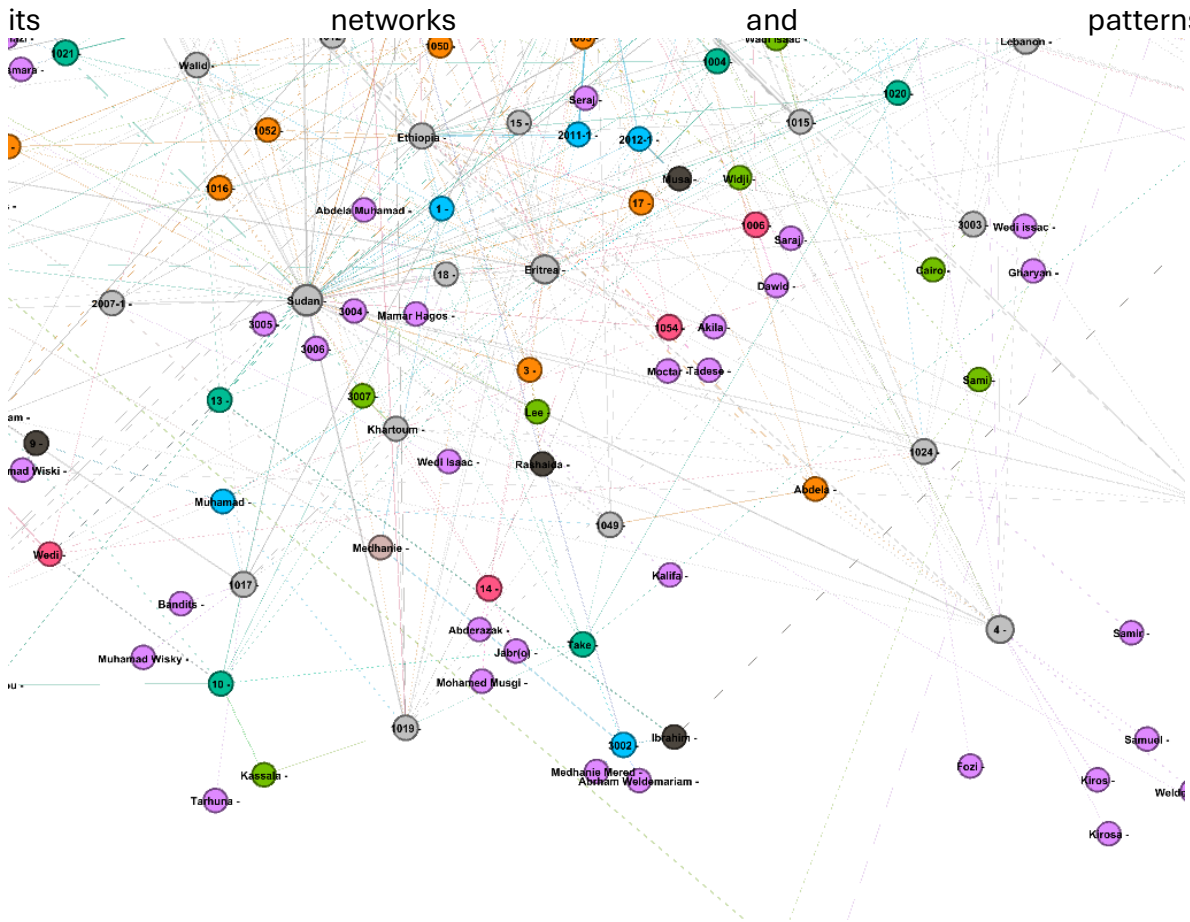


Figure 1. Visualisation of the human trafficking data.

Human trafficking data is very sensitive data, comprising a lot of risk for research participants and interviewees. It is therefore crucial that the data is kept secure and privacy is ensured. The FAIR infrastructure enables this, by facilitating the use of data insights without access to the entire data.

RECOMMENDATIONS

1. Create a multi-stakeholder collaboration framework that includes law enforcement, NGOs, research institutions, and international organizations. This framework should facilitate secure data-sharing and collaborative analysis of human trafficking data using FAIR principles, while maintaining privacy and ethical standards.
2. Provide funding and incentives for the development of machine learning models capable of detecting early signs of trafficking networks, movements, and hotspots from unstructured interview data. Establish guidelines to ensure that these models are transparent, explainable, and do not introduce biases