

Data visualisation – balancing potential and risk

EXECUTIVE SUMMARY

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Problem and context

This learning story details the implementation of a new visualisation tool for educational data, highlighting the conducted Data Protection Impact Assessment (DPIA) and risk assessments in accordance with GDPR. Four high-risk scenarios were identified: data links sent to the wrong person, incorrect handling of permissions, incorrect tool usage and data being obtained by foreign powers. To mitigate these risks, security measures such as electronic identification access, user responsibility for protecting privacy, two-factor authentication and user logging have been implemented.

The tool aims to improve understanding of educational challenges and student performance, particularly in vulnerable areas. It will be continuously evaluated to ensure it meets its purpose and allows for adjustments based on user feedback.

Key findings and lessons learned include the need for open APIs between systems, selective data presentation and storage, clear definitions of data and indicators, and the involvement of a broad range of competencies. The benefits of using the GIS tool for visualising data outweigh the identified risks, and strict security principles have been upheld to protect sensitive information.

Risks

Four high-risk scenarios have been identified: data links sent to the wrong person, mishandling of permissions, incorrect use of the tool and data obtained by foreign powers. To minimise these risks, security measures such as electronic identification, user responsibility to protect integrity, two-factor authentication, and user logging have been implemented.

Benefits and opportunities

Using the GIS tool to visualise data has many advantages, including improved understanding of educational challenges and student performance, especially in vulnerable areas. The tool offers enhanced data visualisation through intuitive and interactive maps, making complex data more accessible and understandable. It also helps with resource allocation by identifying areas needing attention, optimising the distribution of educational resources, and enabling ongoing tracking of student performance and educational outcomes to allow for quick interventions and assessments.



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