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Unleashing The Power of Your Master Linkage Map – Is There A Role For Business Intelligence Tools In Supporting Data Linkage?

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Background with rationale

Business Intelligence (BI) software applications collect and process large amounts of data from one or more sources, and for a variety of purposes. These can include generating operational or sales reports, developing dashboards and data visualisations, and for ad-hoc analysis and querying of enterprise databases.

Main aim

The TDLU is using a BI solution to visually represent data stored in its Master Linkage Map (MLM) for a variety of purposes. These include quickly identifying total links stored in datasets, generating cross tabulation reports showing total and unique linkage keys across datasets, and identifying total numbers of unit records stored for one or more datasets.

Methods/Approach

In deciding to develop a series of dashboards to visually represent data stored in its MLM, the TDLU identified routine requests for these data and critically examined existing techniques for extracting data from its MLM. Traditionally Structured Query Language (SQL) queries were developed and used for a single purpose. By critically analysing limitations with this approach, the TDLU identified the power of BI tools and ease of use for both technical and non-technical staff.

Results

Implementing a BI tool is enabling quick and accurate production of a comprehensive array of information. Such information assists with cohort size estimation, producing data for routine and ad-hoc reporting, identifying data quality issues, and to answer questions from prospective users of linked data services including instantly producing estimates of links stored across disparate datasets.

Conclusion

BI tools are not traditionally considered integral to the operations of data linkage units. However, the TDLU has successfully applied the use of a BI tool to enable a rich set of data locked in its MLM to be quickly made available in multiple, easy to use formats and by technical and non-technical staff.

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