The organisation of Bring Your Own Data (BYOD) workshops to make life science data linkable at the source

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Abstract

Functionally interlinking datasets is essential for knowledge discovery. The 'Bring Your Own Data' workshop (BYOD) has proven an excellent tool for the adoption of techniques to achieve this. It provides a mechanism for data owners who would like to add value to their data by preparing them for data integration and computational analysis, but are unfamiliar with basic techniques to make data Findable, Accessible, Interoperable, and Reusable for humans and computers (FAIR). Using linked data and associated technologies, data owners, domain experts, and linked data experts collaborate to make owner's data linkable and explore possibilities to answer questions across multiple data sources. Momentarily, BYODs play a critical role in establishing a robust and sustainable infrastructure of linkable data sources where the responsibility for FAIR data stewardship starts at the source. We present the organisational roadmap of the three-day workshop and the latest insights into making BYODs more productive, including standard objectives to produce FAIR data, refine guidelines, and discover knowledge. Previous BYODs, such as with the Human Protein Atlas, plant breeding data, and data from rare disease registries and biobanks, have shaped the roadmap. Although every BYOD is uniquely tailored, they contain at least a preparatory phase with at least two webinars for data owners and domain experts, an execution phase for the BYOD itself, and a follow-up phase to foster the results of the BYOD by telephone conferences with participants. A BYOD is also a learning experience that helps domain experts to endorse the approach in their domain.

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Keywords

FAIR data principles; Life science data; Training; Hackathon; Linked Data; BYOD; Workshop; Organisation