Information, data and metadata: why they need to be managed

Me

Soldier
Teacher
Data Manager
Engineer

Information Systems professional

Creating the IT Profession
Information, data and metadata: why they need to be managed

Agenda

Why the interest in information?
Information v data?
Data v metadata?
Why we need to manage data

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Key business resources

What is Missing?

People
Money
Buildings
Equipment

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Information is a business resource which supports:

- Operational tasks and activities
- Management of the business
- Strategic planning for the future
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Information must be:
- Up-to-date and complete
- Sufficiently accurate for the purpose
- Available when required

It is the quality of the information which determines whether it is an asset or a liability to the business.

Agenda

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Lawyers accuse evidence on abuse

Legal team warns data on death of Baha Mousa
High court urged to force army to reveal documents

Richard Horton-Taylor

Lawyers representing the families of Iraqis detained by British soldiers in Iraq accused the Ministry of Defence of not responding to requests for information and documents relating to the circumstances surrounding their detention, including advice given to senior army officers.

The Information Commissioner’s Office is the UK’s independent authority set up to promote access to official information and to protect personal information.

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Information = data in context
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Data is a re-interpretable representation of information in a formalised manner suitable for communication, interpretation or processing.

Information v Data?

- Knowledge about objects, etc.
- Representation of information
- Subject of information
- Interpretation of data
- Storage and processing

Why the interest in information?

Information v data?

Data v metadata?

Why we need to manage data
Information, data and metadata: why they need to be managed

What is Metadata?

"Metadata is data about data"

- metadata for data management
- metadata for content management
- metadata for describing data values

Data v metadata?

For a Librarian, this is Metadata

Author: GORDON, Keith
Title: Principles of Data Management: Facilitating Information Sharing
Publisher: British Computer Society
Publication date: August 2007
ISBN: 978-1-902505-84-8
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For a Data Manager, this is Metadata

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<tr>
<th>ISBN</th>
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<th>Pub</th>
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For a Librarian, this is Metadata
Information, data and metadata: why they need to be managed

Data v metadata?

Or, as data in a table:

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For a Data Manager, this is Data

For a Data Manager, this is Metadata

Describing values?

<table>
<thead>
<tr>
<th>Name</th>
<th>Picture</th>
<th>Hair Colour</th>
<th>Eye Colour</th>
<th>Spectacles</th>
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<td></td>
<td>Light Brown</td>
<td>Hazel</td>
<td>Yes</td>
<td>1943-12-05</td>
</tr>
</tbody>
</table>

Is this metadata?
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Data Problems?

Poor data definition → Inability to share data → Poor data quality

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A data problem?

Personnel
Customer
Sales
Marketing
Finance

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A data problem?

Order placed by placed of Customer

Each Customer may be placer of one or more Orders

Order placed by placed of Customer

Each Customer must be placer of one or more Orders

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A data problem?

ICT Department

plus 25 others!

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A data problem?

THPA_Code

Weapon_Count

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A data problem?

Call centres!

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A data problem?

Harrier?

Challenger?

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A data problem?

Friendly fire?

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Any questions?

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“The beginning of wisdom is the definition of terms”
Socrates

“There is nothing more difficult to take in hand, more perilous to conduct or more uncertain in its success than to take the lead in the introduction of a new order of things”
Niccolo Machiavelli, The Prince