Focus groups, meaning making and data quality

Patrizia Bertini

London School of Economics and Political Science

p.bertini@lse.ac.uk



EnCoRe

The EnCoRe project's aims are to:

- enable business to adopt scalable, cost effective and robust consent and revocation methods for controlling the use, storing, locating and sharing of personal data.
- benefit individuals by providing meaningful, intuitive mechanisms which will allow them to control the use of their personal information held by others.
- help restore individual confidence in participating in the digital economy and so, in turn, benefit the wider society.



Research question

(what keeps me awake during the night)

How do organisations define the concept of data quality and how do privacy concerns affect data quality practices?



EnCoRe

Data Quality and Privacy

...So the dimensions of data quality are, are integrally linked to the privacy aspect, because [...] there's almost like a causal relationship between the two in the sense that the minute you begin to degrade data quality you're beginning to impact, in one way or another, on the person's privacy...

[Senior Data Project Manager - Educational Governmental Agency]



The social constructivist approach

"All knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Crotty 1998)



The social constructivist approach

Institutional facts require human institutions to exist, they depend on the presence of other human beings since they “are typically objective facts, but [...] they are only facts by human agreement or acceptance"
(Searle 2010)



Focus groups

Focus groups are social events and consist of group discussions organised to explore some specific topics and collect participants' opinions in a permissive and non threatening environment, revealing not only what participants think, but also the reasons behind attitudes and behaviours.



Focus groups





EnCoRe

Adapting Focus groups

Preliminary Questionnaire

Pre-existing groups

Organisations' setting

Consensus Challenge

Post-workshop email



EnCoRe

Involving organisations

LinkedIn

4 Focus groups

15 professionals

16 years of experience (8 – 25 years)

Marketing, legal and technical backgrounds



EnCoRe

Organisations' involvement

Type of organ-isation	*FG length*	*Transcript size (words)*	*Number of utterances*	*Researcher generated utterances*	*Participants' generated utterances*
Geo-graphic Data [GEO]	1h28'	14464	295	22.70%	G1. Group Data Manager: 30.1% G2. Data Analyst Manager: 25% G3. Data Procurement Manager: 22%
Telecom-munica-tion [TEL]	1h37'	16549	357	19.60%	T1.Regional Head of Security: 10.6% T2. CISO: 23.8% T3. Principal Manager ICT security: 21% T4. Global Privacy Manager: 24.9%
Finance [FIN]	1h33'	13886	484	18.80%	F1. Enterprise Data Manager: 37.3% F2. Head of Customer and Market insight: 29.9% F3. Customer Segment Manager: 13.8%
Educa-tional Public Agency [PUB]	1h58'	18650	334	18.50%	P1. Head of Records and Rights: 16.4% P2. Senior Data Project Manager: 28.4% P3. Council Solicitor: 20.3% P4. Interim Head of Data Manager: 11.3% P5. Head of information authority[4]: 4.7%

Dimensions

- Free of error / accuracy
- Completeness
- Consistency
- Timeliness
- Believability
- Accessibility
- Relevancy
- Security
- Understandability
- Concise representation
- Ease of manipulation
- Appropriate amount of data



The case of accuracy

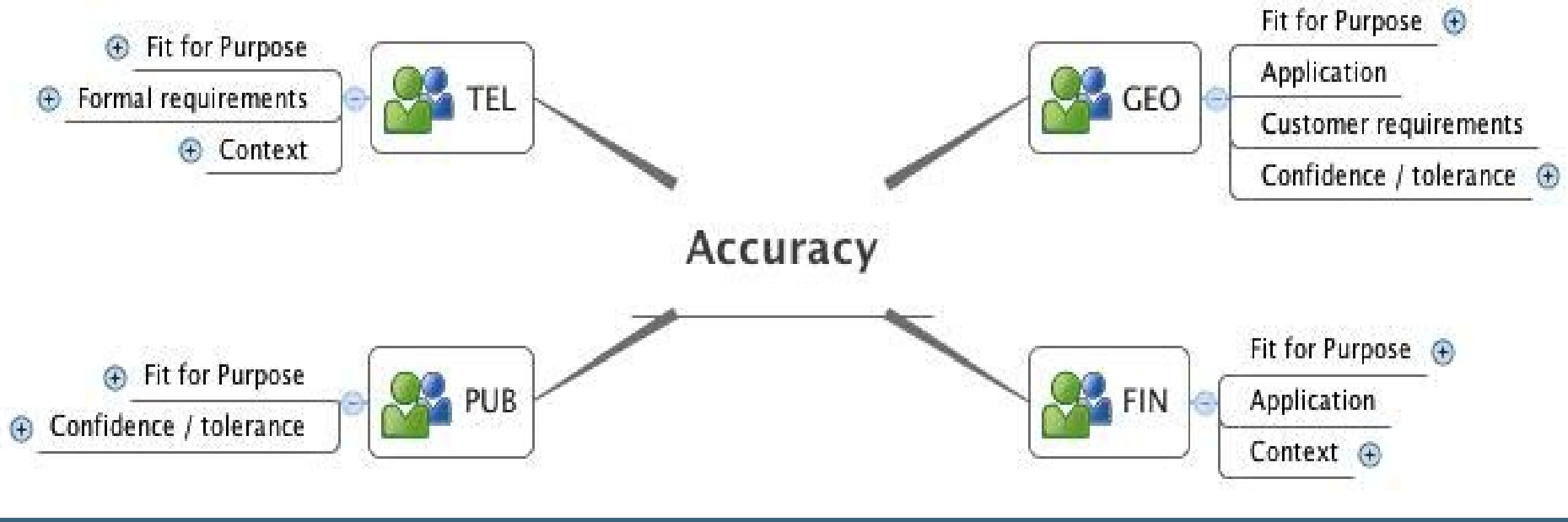
12 out of 15 selected Accuracy

11 out of 15 rated as n. 1

So accuracy doesn't mean it has to be 100% but it does mean to me you need to understand the accuracy you're looking at. *(Data Analyst Manager)*



Same results, Different arguments



How to construct meanings

[...] And consistency is an important one from my point of view, it's purely because if you don't have the consistency then the understandability goes out the window... (Enterprise data Manager)

Do you mean consistency of accuracy? Or propagation? (Head of Customer and Market insight)

Consistency of the fact that I've... [...]. So I have a consistency through the database of, you know, the same thing. It's closer I suppose in a way to conforming to a standard, but it is consistent...

It's about being reliable, isn't it? (Market Segmentation Manager)

Yes. And therefore understandable...



Exploratory Talk

Participants **share** and **explore** their different positions to build their shared knowledge **critically** by questioning and testing their viewpoint.

(Mercer 2000)



Cumulative Talk

Participants build their shared meaning in a **supportive** and **uncritical** way building on each others' contribution.

(Mercer 2000)



EnCoRe

Cumulative Talk

[...] So it doesn't have to be 100% correct, depending on the application (Enterprise data Manager)

[...] I would add to that it doesn't have to be 100% [accurate], but you need to know where it isn't (Head of Customer and Market insight)



Confusion



EnCoRe

Confusion

Yeah that was interesting coz you thought that and I was thinking completeness in terms of what fields there were that they were filled, I suppose. I was thinking of attributes [...] … (Group Data Manager)

Yeah it's true. I come from a geographical background so I was thinking geographical completeness and you were thinking attribute completeness… (Data Analyst Manager)



Definitions of Accuracy

Accuracy is defined as the closeness between a value v and a value v1, considered as the correct representation of the real-life phenomenon that v aims to represent. (Batini & Scannapieco 2006 :20)

Degree to which data accurately reflects the real world object. (Duran 2009 :33)

Data are free from errors (Vannan 2001 :56)



Definitions of Accuracy

Accuracy refers to whether the data values stored for an object are the correct values. To be correct, a data value must be the right value and must be represented in a consistent and unambiguous form. (Olson 2003 :29)

Accuracy refers to the quality of data in terms of how it was collected. (Kenett & Shmueli 2011)



Consensus



Consensus

Yeah, and I think going back to your question, you say, you know, can we pick and can we agree on three, I think the simple answer to that is no... [...] so I think, because of the <u>different approaches</u> we have, maybe these three could agree and I'll just sit on the side on this one.....(Council solicitor)



Consensus

I *think what we say is we struggle to agree on a second [dimension]. There's obviously pools in different people's areas here like [he] is our data quality champion internally, so conformance to a schemer so that the data remains accurate is obviously very close to his heart where other people...*

(CISO)



Conclusion

Focus group helped to:

- clarify meanings
- bring to surface misunderstandings
- construct meanings
- rise awareness about privacy and needs

Thanks to:

- diversity in composition
- constructivist process



Questions?...



In case

(you are shy...)

p.bertini@lse.ac.uk



EnCoRe

References

Batini, C., & Scannapieco, M. (2006). Data quality: concepts, methodologies and techniques. Berlin; New York: Springer.
Crotty, M. (1998). The foundations of social research. London: Sage.
Duran, E. (2009). Customer data management: the impacts of poor customer data quality on customer relationship management and organizations. Saarbrucken, Deutschland: VDM Verlag Dr. Muller.
Kenett, R. S., & Shmueli, G. (2011). On Information Quality. R. H. Smith School Research Paper No. 06-100.
Mercer, N. (2000). Words and minds: how we use language to think together. London: Routledge.
Olson, J. E. (2003). Data quality : the accuracy dimension. San Francisco, Calif. ; London: Morgan Kaufmann.
Searle, J. R. (2010). Making the social world. Oxford: Oxford University Press.
Vannan, E. (2001). Quality Data: An Improbable Dream? Educause Quarterly, 24(1), 56-58.

