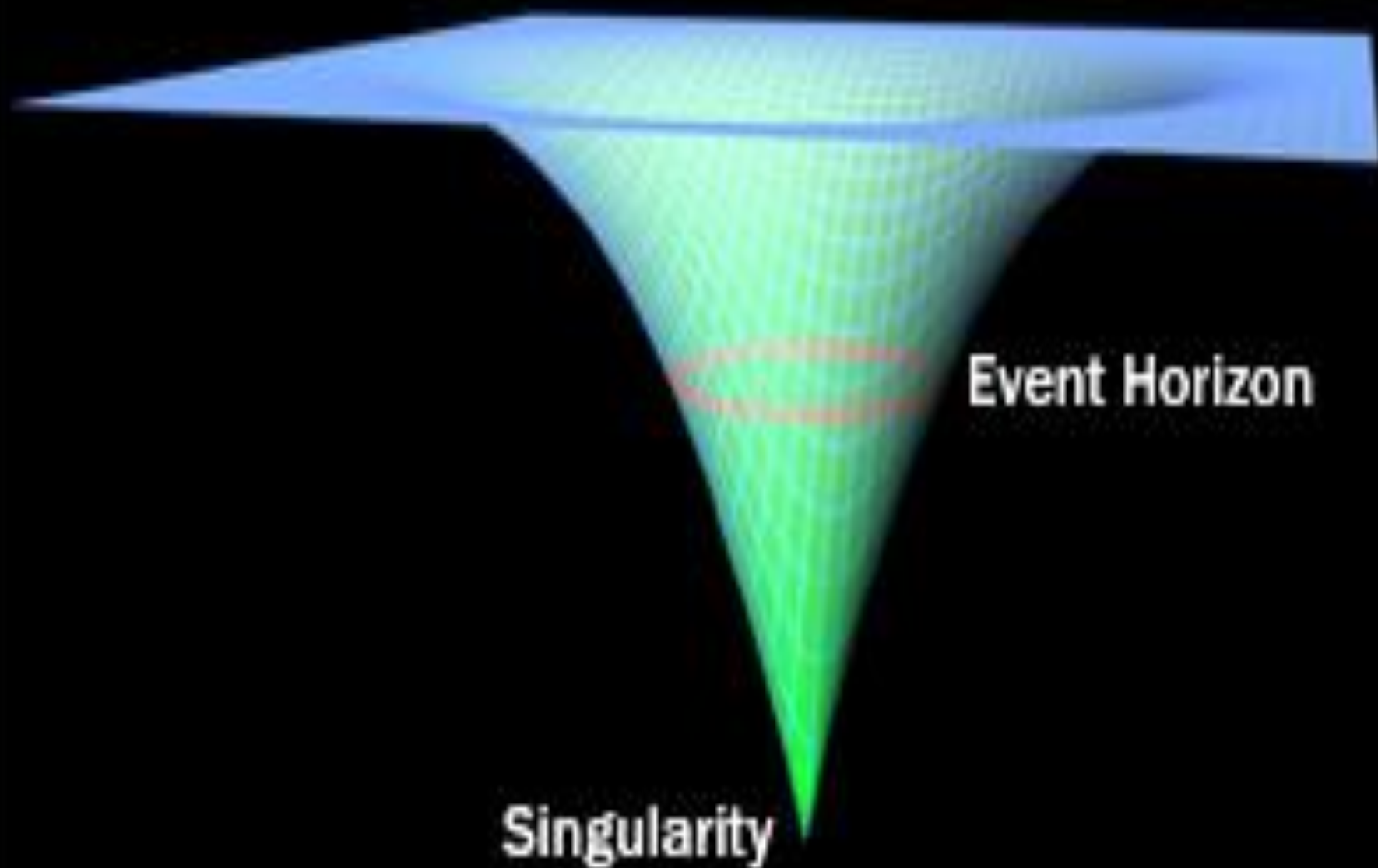


Data Horizons: Some Thoughts on the Future of Data

Mark Elliot
School of Social Sciences
University of Manchester
mark.elliott@manchester.ac.uk





BIG DATA

Volume

AMP

Structured

Unstructured data

Semi-Structured

Unstructured content

Useful Metadata

People driven Decision making

Zettabyte

Framework

Smart content database

Text analytics

Concept extraction

Semantic Metadata

Structured

Unstructured

Analysts

Petabytes

Data

Unstructured

Smart content database

VAST DATA







Data, data everywhere...

- Dramatic changes in the type and scope of data available for social research
- New types of data and new controllers/archives
 - Social media data growth
 - Commercial data



Data, data everywhere...

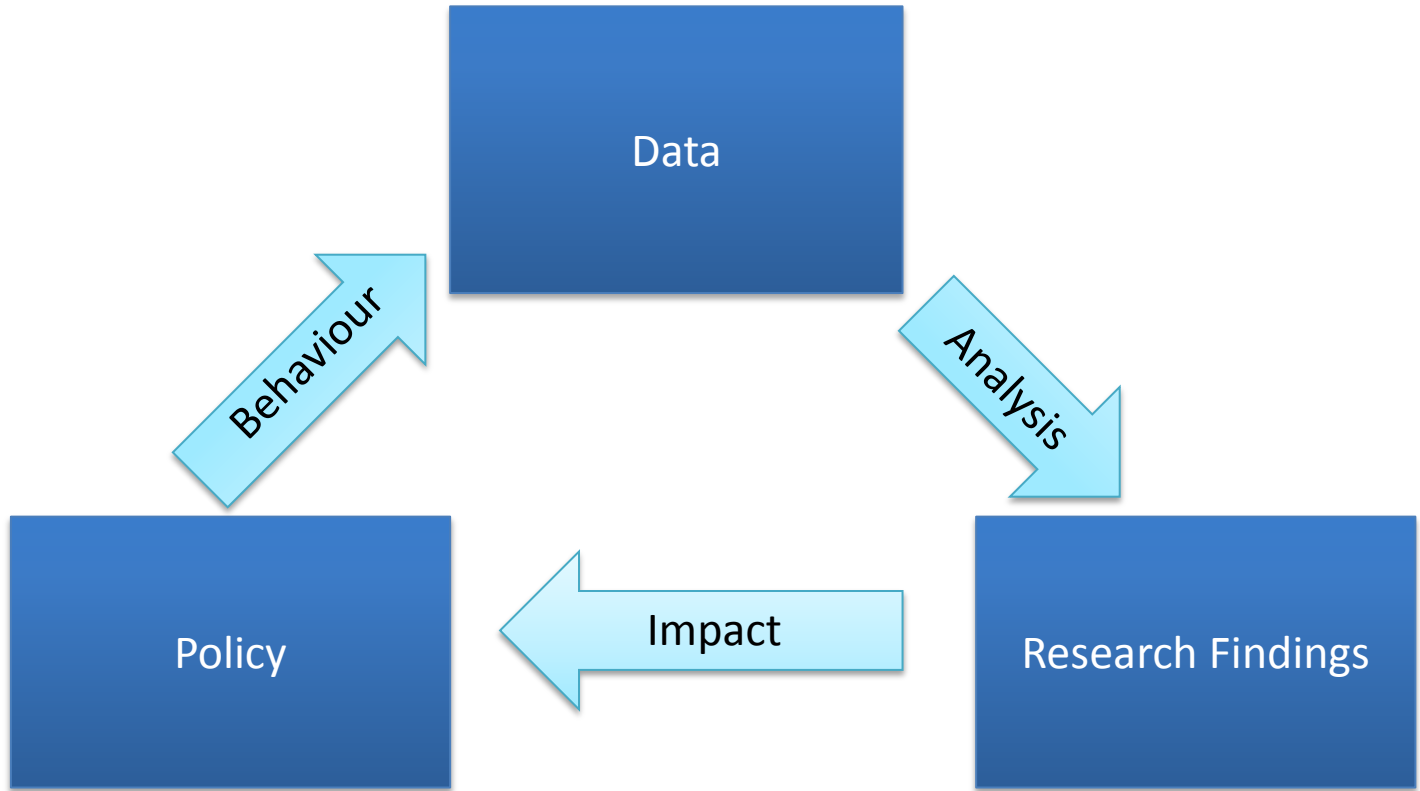
- Dramatic changes in the type and scope of data available for social research
- New types of data and new controllers/archives
 - Social media data growth
 - Commercial data
- New data linkage developments
 - New data being linked.
 - New forms of Combining, enhancing, fusing, linking, merging data

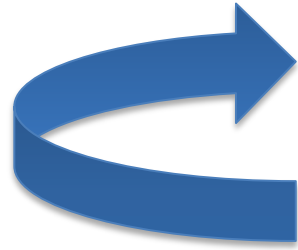
5.13	1.36	0.04	2.88%	0.0
1.01	2.74	-0.11	-0.73%	0.22
11.14	2.74	0.17	2.89%	-0.06
16.37	35.07	0.32	0.9%	0.38
12.36	73.79	-0.43	-0.58%	0.8
11.77	95.09	-0.46	-0.47%	-0.03
11.6	95.22	-0.83	-0.87%	-0.03
11.59	22.38	0.23	1.0%	0.0
19.06	96.78	-0.01	-0.02%	-0.06
19.16	4.26	-0.07	-1.66%	0.0
16.38	2.42	0.33	1.35%	-0.38
	5.84	-0.01	-0.18%	0.17



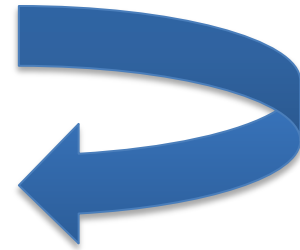
1.14	1.29	1.44	1.59	1.74	1.89	2.04	2.19	2.34	2.49	2.64	2.79	2.94	3.09	3.24	3.39	3.54	3.69	3.84	3.99	4.14	4.29	4.44	4.59	4.74	4.89	5.04	5.19	5.34	5.49	5.64	5.79	5.94	6.09	6.24	6.39	6.54	6.69	6.84	6.99	7.14	7.29	7.44	7.59	7.74	7.89	8.04	8.19	8.34	8.49	8.64	8.79	8.94	9.09	9.24	9.39	9.54	9.69	9.84	9.99	10.14	10.29	10.44	10.59	10.74	10.89	11.04	11.19	11.34	11.49	11.64	11.79	11.94	12.09	12.24	12.39	12.54	12.69	12.84	12.99	13.14	13.29	13.44	13.59	13.74	13.89	14.04	14.19	14.34	14.49	14.64	14.79	14.94	15.09	15.24	15.39	15.54	15.69	15.84	15.99	16.14	16.29	16.44	16.59	16.74	16.89	17.04	17.19	17.34	17.49	17.64	17.79	17.94	18.09	18.24	18.39	18.54	18.69	18.84	18.99	19.14	19.29	19.44	19.59	19.74	19.89	20.04	20.19	20.34	20.49	20.64	20.79	20.94	21.09	21.24	21.39	21.54	21.69	21.84	21.99	22.14	22.29	22.44	22.59	22.74	22.89	23.04	23.19	23.34	23.49	23.64	23.79	23.94	24.09	24.24	24.39	24.54	24.69	24.84	24.99	25.14	25.29	25.44	25.59	25.74	25.89	26.04	26.19	26.34	26.49	26.64	26.79	26.94	27.09	27.24	27.39	27.54	27.69	27.84	27.99	28.14	28.29	28.44	28.59	28.74	28.89	29.04	29.19	29.34	29.49	29.64	29.79	29.94	30.09
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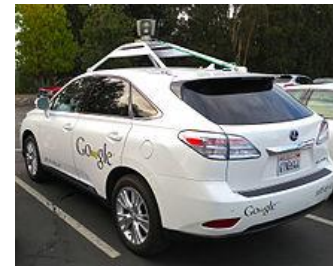
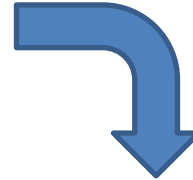


**Data
Policy**



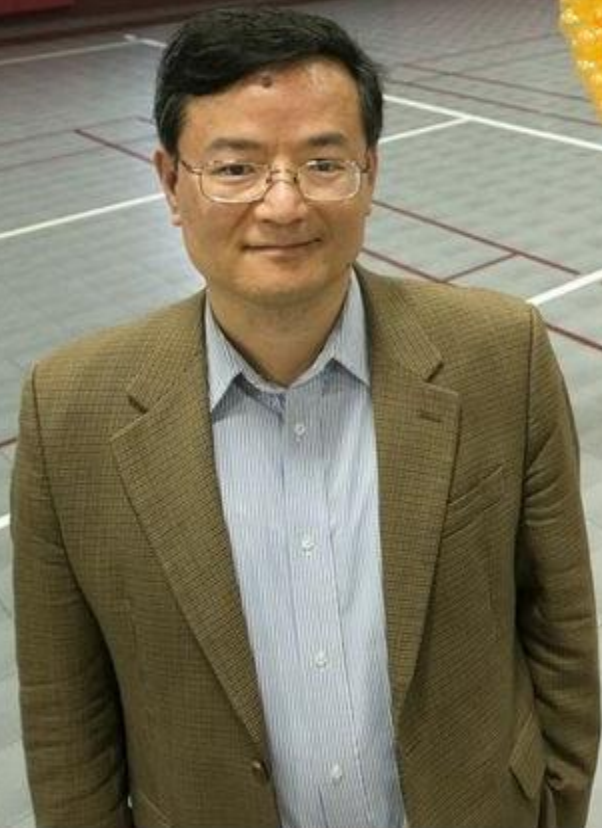
A close-up, high-angle photograph of a computer keyboard. The central focus is a single, vibrant blue key. On this key, the words "OPEN" and "DATA" are printed in a bold, sans-serif font. "OPEN" is in white, and "DATA" is in a bright yellow. The surrounding keys are a standard light grey or off-white color. The lighting creates soft shadows, giving the keys a three-dimensional appearance. The background is dark, making the keys stand out.

**OPEN
DATA**



The
INTERNET
of **THINGS**

The image features the title "The Internet of Things" in a blue color scheme. The word "The" is in a cursive font, "INTERNET" is in a bold, uppercase sans-serif font, and "of THINGS" is in a cursive font. Below the letters of "THINGS", vertical lines connect to various icons: an alarm clock under 'T', a train under 'H', a cow under 'I', a house under 'N', a footprint under 'G', and a leaf under 'S'.







I was anxious, irritable and felt insecure.

I felt so uncomfortable and insecure. CHINA: Mainland & Hong Kong

The anxiety and loneliness inside me were growing. I could hardly concentrate.

Music keeps me focused, like my ADD medication, and I had neither.

I went into absolute panic mode USA

It felt as though I was being tortured

In short, I believe that I have no

ARGENTINA

I feel empty. I feel isolated.

I felt so lonely... I could not sleep well without sharing or connecting to others.

I feel like a slave to media.

I sat in my bed and stared blankly. I had nothing to do.

I began going crazy.

I felt like a drug addict.

I felt a computer as if connected to a device telling me to check my texts and email, or go on Facebook.

I felt 'dead.'

hours.

I'm addicted to technology.

I felt so 'urged' to go online... I could barely practice self-control.

The feeling of nothing passed into my heart, a slight tension enveloped me. I felt like I had lost something important.

My anxiety took over me and I caved in.

I suffered 'withdrawals' and even unconsciously reached out for a calculator which is slightly shaped like my phone.

I felt a computer as if connected to a device telling me to check my texts and email, or go on Facebook.

was missing something.

helplessness of not communicating.

I find it necessary to be connected and updated all the time.

I realized my addiction to me

I felt as though everything I knew

I hope that I never again have such a

I had the feeling that my cell was vibrating... I began to feel

I began to feel

The anxiety continued for the

I feel paralyzed - almost handicapped in my ability to live.

Emptiness. Emptiness overwhelms me.

Unplugging my ethernet cable felt like turning off a life support system.

I panicked.

I felt incomplete.

My senses went numb and I felt paralyzed.

I had a raised heart rate, increased anxiety and was panicking.

I am addicted to social media - in particular Twitter.

I went to sleep at 8 pm so that I was not tempted to watch TV or listen to music. UGANDA

I felt like there was a problem with me.

This is the one word that sticks in my mind when I think of this whole thing: Isolated.

My dependence on the media is absolutely sickening. LEBANON

I kept hearing the sound of my Blackberry messenger ringing over and over in my ears.... It was haunting me!

I felt desperate and felt some kind of anguish.

My nerves were overwhelmed. CHILE

Even in my dreams I see myself chatting, using Skype, Twitter, adding people on Facebook.

I was tempted.

I felt so lonely.

I am so dependently tied to various forms of media.

I couldn't not listen to music. I listened to almost 40 seconds of a song and then I was 'satisfied.'

I am an addict of Blackberry Messenger.

I didn't realize it would be so isolating.

I felt uncomfortable, disconnected.

The silence was killing me.

I felt lonely.

Halfway through the day I felt I could not handle it any more.

I cannot imagine how life can be without using media.

I counted down minute by minute and made sure I did not exceed even a single second more!

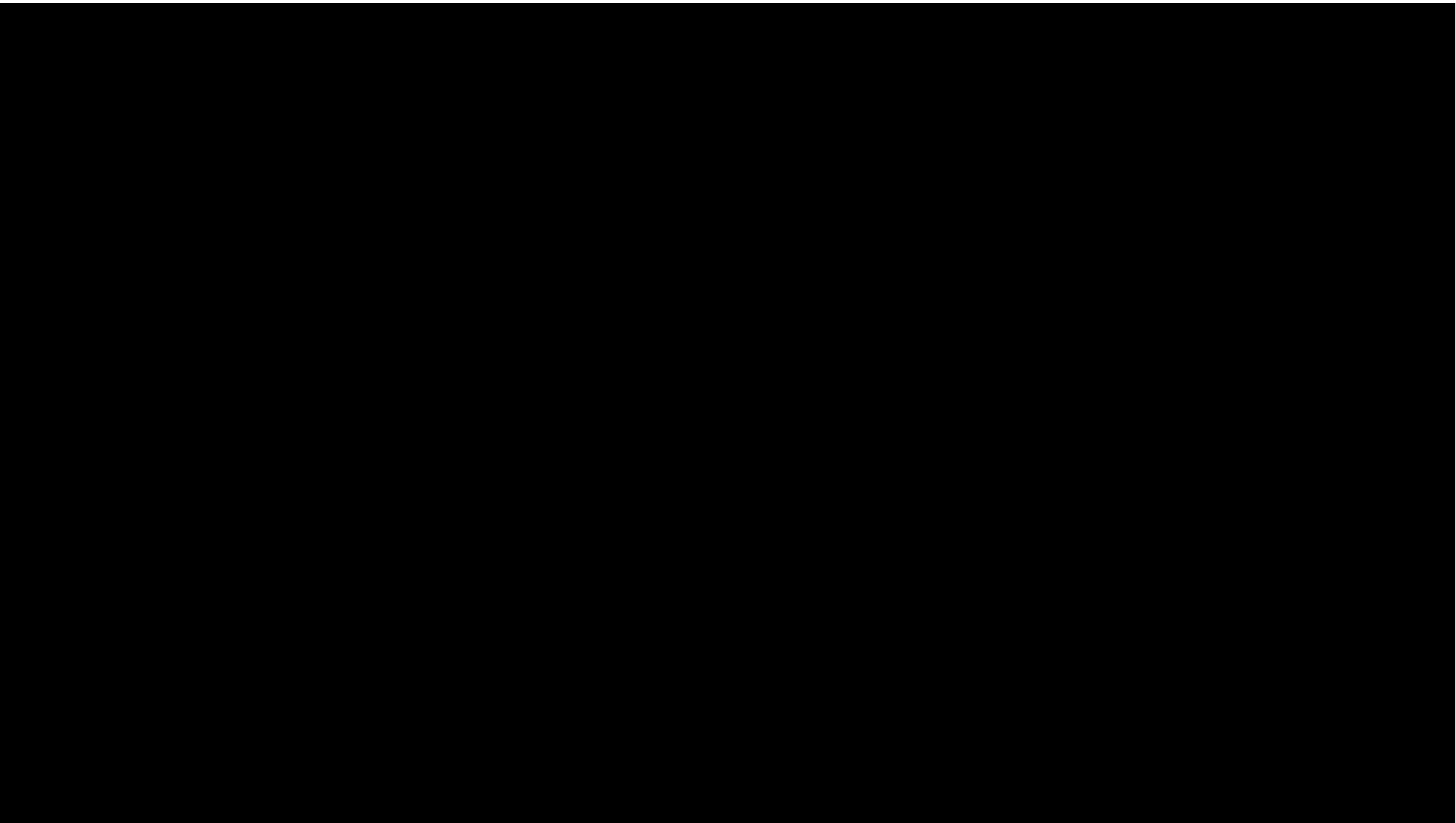
As soon as I left my phone... I kept looking back. I felt that I needed it at that second.

I didn't realize it would be so isolating.

I went on a walk... I felt the same.

I went on a walk... I felt the same.

It was a horrible day. I CAN'T LIVE WITHOUT MEDIA! I need my social network, my cell phone, my Mac, my mp3 always!



Ethical Conundrum

- Is privacy even possible?











The Social Science of Data

- *Our Data Our Selves:*
 - How does data impact on how we view our selves, our identity, our society?
 - How does ubiquitous data impact on our norms, attitudes and values?
 - How far and where will the investment of ourselves in the digital take us?

The Social Science of Data

- *Our Data Our Society:*
 - How do the control processes for data reflect and affect existing social structures and how does data disrupt the social structures?
 - How are data shaped by the institutions and objectives that produce them how are institutions and wider cultural processes affected by data about/within them?
 - (How) can social science affect the direction of travel?

The Social Science of Data

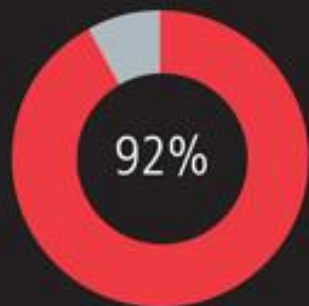
- *Our Data Our Research:*
 - How do we define ‘data’ in the social sciences?
 - Can social science adapt to use any form of social data?
 - Can a meaningful data ontology be developed?
 - Which intentional data sources do we still need?
 - How does ubiquitous data affect the centrality of theory?

- *“There is a growth of under theorised empiricism in social science...Uncritical use of data with limitations in coverage or definitions and the steering of research to things that happened to be measured”*. Survey respondent (Elliot, Purdam and Mackey 2013)

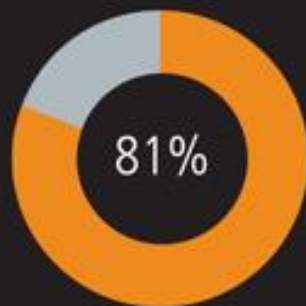
An Socio-ethical step change?



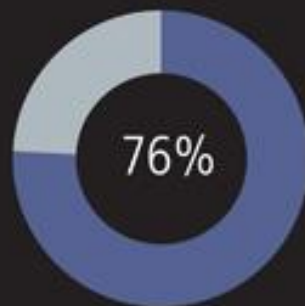
Privacy is a significant concern for most mobile users



are concerned about applications collecting their personal information without their consent

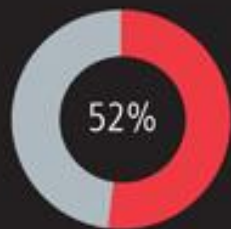


think safeguarding their personal information is very important



said they are very selective about who they give their information

Most mobile internet users have agreed to a privacy statement without reading it



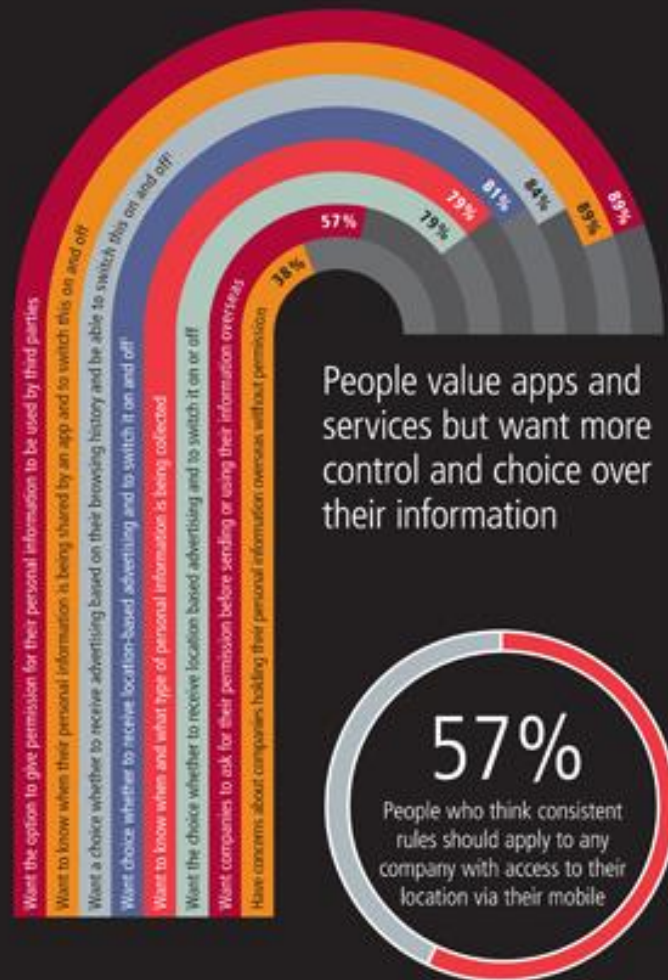
of these said it is because privacy statements are too long



of these said it is because they don't have time to read them



of mobile users believe that companies will carry on collecting their personal information even when they ask them to stop



Privacy and Disclosure

“There is a close connection between our ability to control of who has access to our information and our ability to create and maintain different sorts of social relationships with different people”;
Rachels(1970)





Disclosure and Identity

- Social Philosophy:
 - Identity is represented to others through self disclosure; Goffman
 - OTOH our identity is in part formed through our interactions with others and their representations to us; Mead

So Disclosure is:

- The mechanism by which we operate our privacy.
 - **Non-consensual disclosure subverts the psychologically critical process of self-disclosure.**
 - This - rather than the information - itself is why non-consensual disclosure is problematic.

And so information privacy is....

- Critical to our the formation of our identities
- “Personhood” rather “ownership”.
 - My data is not just about me it is me
- To understand the meaning of privacy in a cultural context one must refer to processes of
 - Autonomy
 - Locus of Control
- An “Information Society” presupposes “information Citizens”.

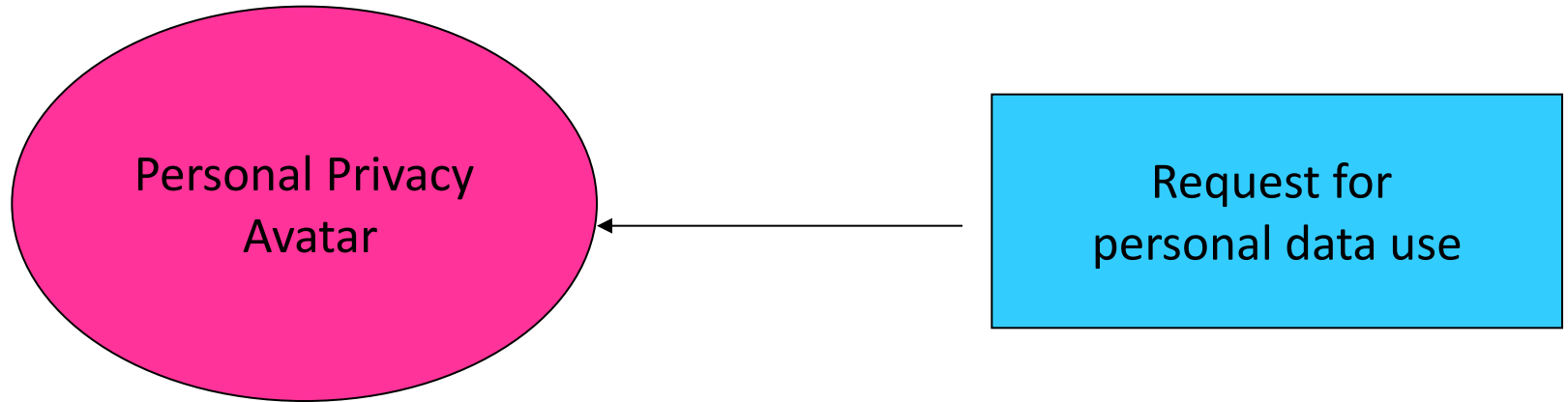
The Information Society

- Has always existed
- Informational relations are isomorphic the societal structures and processes.
- An “Information Society” presupposes “information Citizens”.
 - What sort of society/citizens do we want?
 - What sort of privacy do we want?

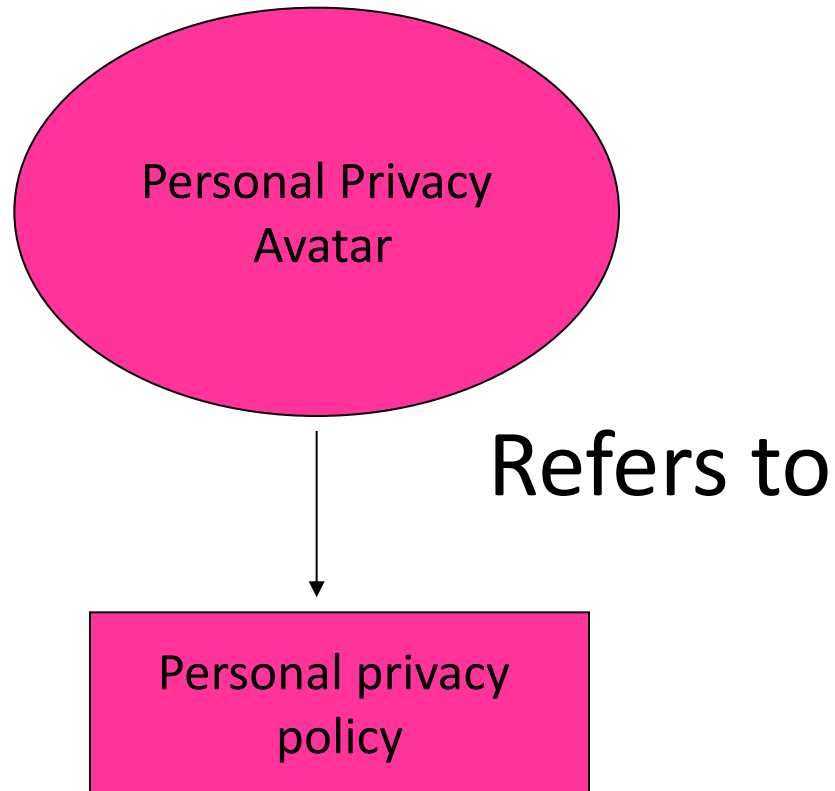
Resolutions

- Technical
 - Real time consent is a possibility

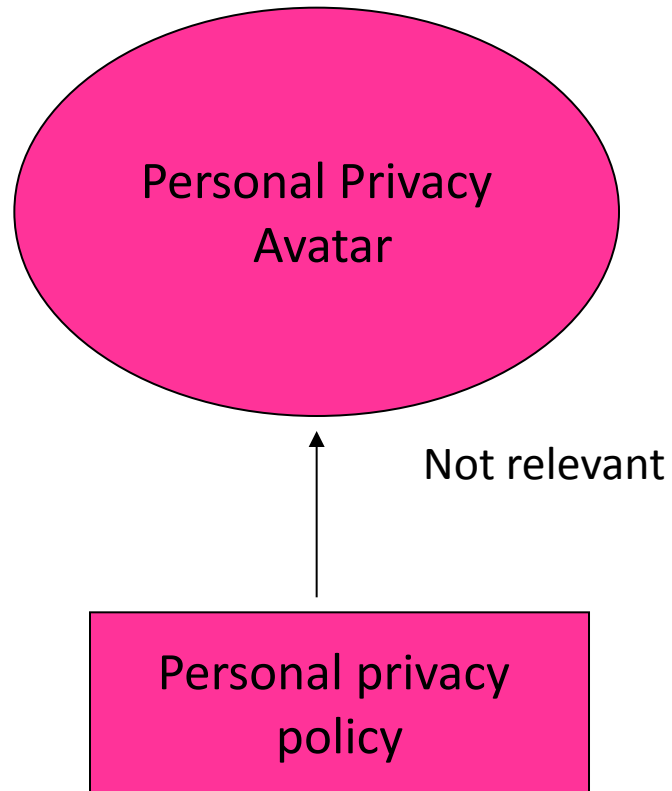
Privacy and Just in time consent



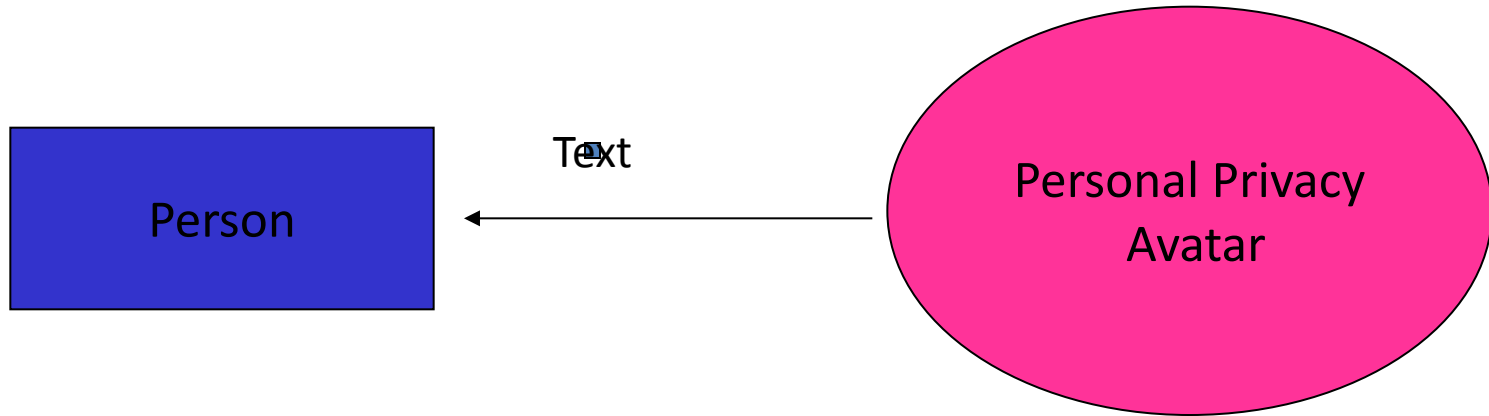
Privacy and Just in time consent



Privacy and Just in time consent



Privacy and Just in time consent



Resolutions

- Technical
 - Real time consent is a possibility
 - An economic model is one potential element
- Legal
 - New legal framework required
 - Data Abuse not Data Protection

To Sum up

- New technologies over the next 10 years will produce ever increasing types and quantities of data.
- New data change what we know about ourselves but also change *our selves*.
- Ethics in this **age of data** will a significant challenge.
- There is a pressing need for both a social science of data and a social data science.

- Salganik, M.J. (2017) Bit by Bit: Social Research in the Digital Age Princeton University Press, 448pp, £27.95
- Purdam K and Elliot M. J. (2015) 'The Changing Social Data Landscape' in Halfpenny, P. and Procter, R. (eds.) Innovation in Digital Research Methods. 25-58 London: Sage