



## Big Data, Big Issues: Global Challenges and Effective Solutions

SCCE  
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Chicago

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### What we'll cover

- Big data as an opportunity and a threat
- The Science Bit...
- Attitude of courts & regulators to big data
- Use of data in diligence & investigations
- Privacy considerations
- Accuracy
- Practical tips

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### What is big data?

*"Big data is a broad term for data sets so large or complex that traditional data processing applications are inadequate. Challenges include analysis, capture, data curation, search, sharing, storage, transfer, visualisation and information privacy"*

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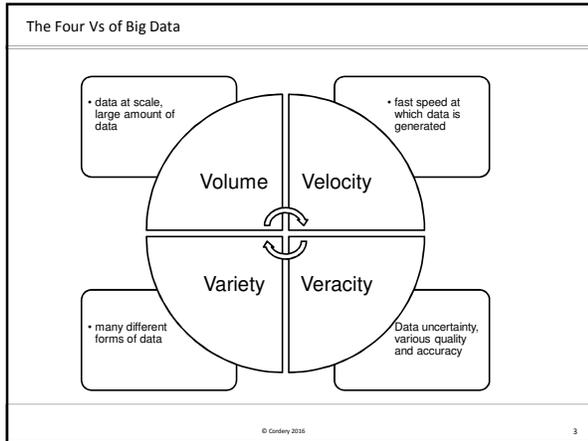
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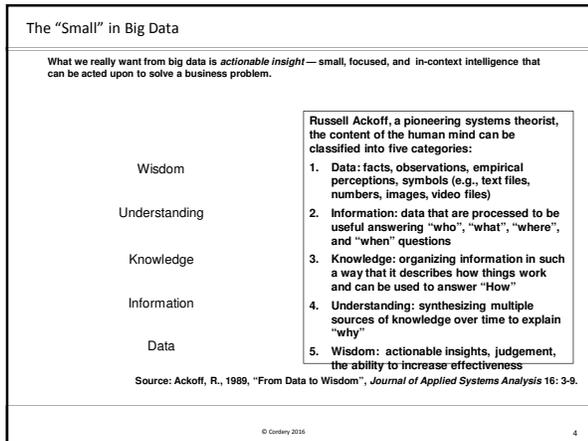
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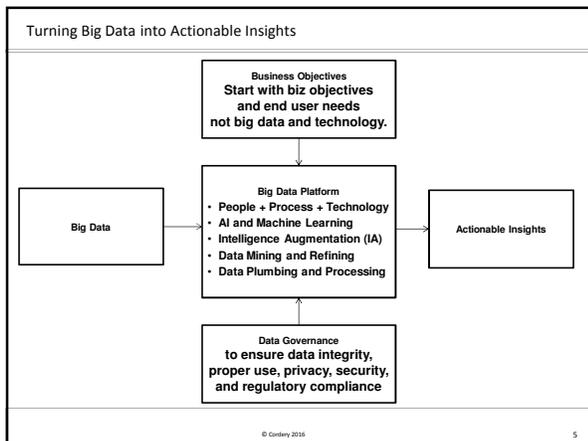
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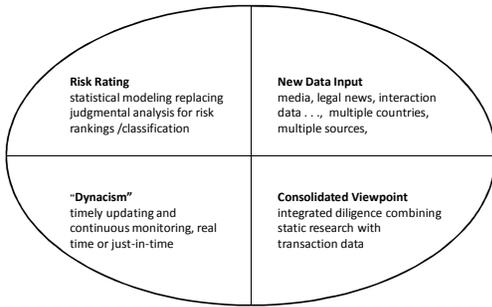
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Benefits for Diligence (Vendors, Customers, Patients, Third Party)



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The Hot Debate

ANONYMISATION V  
PSEUDONYMISATION

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Attitude of courts to big data

- Data privacy increasingly litigated
- Vidal-Hall case in UK
- Schrems litigation in Ireland, Austria – 2 new ECJ cases
- RTBF cases in Europe, Russia, Japan

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### Attempts to regulate use of Big Data

- Norway Datatilsynet Report September 2013
- US Executive Office of the President Report May 2014
- UK ICO consultation October 2014
- EDPS Opinion 7/2015 November 2015
- FTC report January 2016
- Japan Federation of Bar Associations objection to government GPS guidelines – August 2016
- EDPS conference – 29 September 2016

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### Example: Deutsche Bahn

- Monitoring employees as anti-corruption measures – c.173,000 employees affected
- Reconciliation of employee data with data on 80,000 suppliers
- Collection of bank data of employees
- Interception of email traffic
- Overall fines of €1.1m

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### EU – US Data Transfer

- Safe Harbor dead
- Privacy Shield born but under attack (e.g. Ireland, Germany)
- Standard Contractual Clauses under attack
- BCRs

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## GDPR

- Comes into force May 2018
- Regulates use of personal data
- Has extra-territorial effect
- Big data implications e.g. in health studies
- Fines of up to 4% of global annual turnover for breach
- Mandatory DPIAs
- Subject Access Requests
- Right to request algorithms etc.
- Right to Data Portability
- Increased consent requirements

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## Big Data and Transparency Laws

- Prosecutors (e.g. the DoJ or SFO) increasingly have more information at their disposal
- The growth in whistleblowers adds to that data pot
- Transparency laws oblige companies in high-risk sectors (e.g. mining, oil, gas, forestry etc.) to volunteer information to government including payments to overseas officials
- Pressure groups are increasingly reviewing data and using FOI requests e.g. UK Modern Slavery Act 2015
- Prosecutors are employing e-discovery platforms, big data experts & new techniques (e.g. TAR)

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## Example: UK SFO Annual Report 2015-2016

*“Once the new system is in place, the SFO plans to invest further in its data analysis capability, where it will seek to utilise Artificial Intelligence and machine learning ...”*

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However, is data always true?

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Whitley Bay murder accused in court over death of his former partner

18:30, 11 SEP 2016 BY ROB KENNEDY

Jonathan Armstrong is accused of killing a 32-year-old man in an alleged attack in Whitley Bay last week

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False whistleblowing

- Malicious
- Mistaken
- Money-grabbing
- Mad

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### What are the data privacy and compliance challenges?

- Increased focus on data privacy issues
- Right to be forgotten
- The impact of Snowden
- Employee screening legislation (e.g. Germany)
- Concerns over use of Big Data to drive behaviours
- Need for greater transparency

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### Example: Uber

- Uber users sign up to Uber's terms
- What data collection do they disclose?

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### Uber's terms (extract)

When you use our Services, we collect information about you in the following general categories:

**Location Information:** When you use the Services for transportation or delivery, we collect precise location data about the trip from the Uber app used by the Driver. If you permit the Uber app to access location services through the permission system used by your mobile operating system ("platform"), we may also collect the precise location of your device when the app is running in the foreground or background. We may also derive your approximate location from your IP address.

**Contacts Information:** If you permit the Uber app to access the address book on your device through the permission system used by your mobile platform, we may access and store names and contact information from your address book to facilitate social interactions through our Services and for other purposes described in this Statement or at the time of consent or collection.

**Transaction Information:** We collect transaction details related to your use of our Services, including the type of service requested, date and time the service was provided, amount charged, distance traveled, and other related transaction details. Additionally, if someone uses your promo code, we may associate your name with that person.

**Usage and Preference Information:** We collect information about how you and site visitors interact with our Services, preferences expressed, and settings chosen. In some cases we do this through the use of cookies, pixel tags, and similar technologies that create and maintain unique identifiers. To learn more about these technologies, please see our Cookie Statement.

**Device Information:** We may collect information about your mobile device, including, for example, the hardware model, operating system and version, software and file names and versions, preferred language, unique device identifier, advertising identifiers, serial number, device motion information, and mobile network information.

**Call and SMS Data :** Our Services facilitate communications between Users and Drivers. In connection with facilitating this service, we receive call data, including the date and time of the call or SMS message, the parties' phone numbers, and the content of the SMS message.

**Log Information:** When you interact with the Services, we collect server logs, which may include information like device IP address, access dates and times, app features or pages viewed, app crashes and other system activity, type of browser, and the third-party site or service you were using before interacting with our Services.

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### Example: Uber

- Uber users sign up to Uber's terms
- Lots of detail in the Big Data they collect
- No mention of battery power
- Battery usage reportedly collected and used to assess surge pricing resistance:  
*"one of the strongest predictors of whether or not you are going to be sensitive to surge"*

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### Key Big Data Things To Consider

- Plan strategically, implement incrementally
  - Become Better (incorporate new data sources and constant monitoring)
  - Become More Efficient (develop a consolidated view)
  - Build Toward the Future (introduce risk rating models)
- Develop a Privacy Compliance Map
  - Data point x data point
  - Country x country
  - Look at consents
  - Do DPIAs

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- Embrace the Principle of Parsimony
  - Parsimonious model, simple is optimal
  - Gathering requirements before gathering data
  - Data quality over data quantity
- Mature Your Cybersecurity Game Plan
  - Defense-in-depth security architecture
  - Network security, app security, data security
  - Penetration testing, vulnerability scanning
  - Monitoring and auditing
  - Policy, procedures, controls, and governance
  - Crisis Management Protocols – again GDPR adds pressure

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## Resources

- GDPR FAQs – <http://www.corderycompliance.com/eu-data-protection-regulation-fags-3/>
- Privacy Shield FAQs – <http://www.corderycompliance.com/privacy-shield-fags/>
- Glossary of terms - <http://www.corderycompliance.com/eu-data-protection-regulation-glossary/>
- GDPR Readiness Assessment - <http://www.corderycompliance.com/gdpr-readiness-test/>
- Modern Slavery FAQs - <http://www.corderycompliance.com/uk-modern-slavery-human-trafficking-fags/>
- Compliance films – [www.bit.ly/corderytv](http://www.bit.ly/corderytv)
- UK SFO Report re Big Data - <http://www.corderycompliance.com/uk-serious-fraud-office-annual-report-shows-continued-modest-progress-2/>

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## Questions

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