



Business and Local Government  
Data Research Centre

# Transform your **business** through data

Brought to you by the Business and Local Government Data Research Centre

EXPLORING DATA  
ENHANCING KNOWLEDGE  
EMPOWERING SOCIETY



University of Essex



E·S·R·C  
ECONOMIC  
& SOCIAL  
RESEARCH  
COUNCIL

Economic and Social Research Council  
Shaping Society

EXPLORING DATA  
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# Our core mission

Combining fundamental research with applied, for impact that influences policy and informs practice.

- Methodologies and techniques for data science and artificial intelligence
- Local economic growth
- Supporting vulnerable people

Research community



Public sector



Businesses





# Leading experts

Specialist team of internationally renowned researchers and data analysts.

Keep up to date on our work and the latest publication visit <http://www.blgdataresearch.org/>

Join in the conversation online. Follow us on:

@BLGDataResearch  
#Data2Life



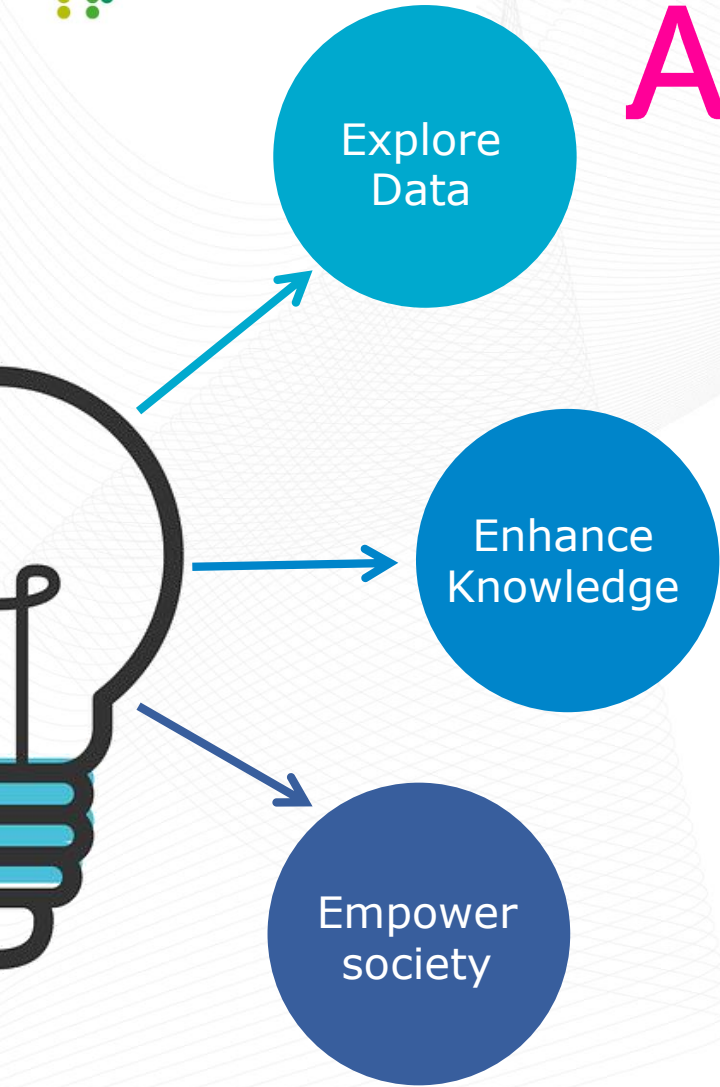


# Already benefiting

Since 2014, we have worked with private, public sector and not-for-profit organisations. By bringing the latest insights out of the university and into society, we have been part of solving real world problems.



These collaborations influence and inform best practice all over the world.



# A place for ideas and conversations that matter





# Turning data into knowledge

Data analysis can help your organisation enhance customer engagement

A.I. and machine learning can complement human interventions to reduce risk and manage demand

Internal data can allow you to make savings and improve efficiencies

Data can provide greater market and demographic insight



Open data can be used allow organisations to be true innovators

Data can demonstrate impact in order to secure future funding

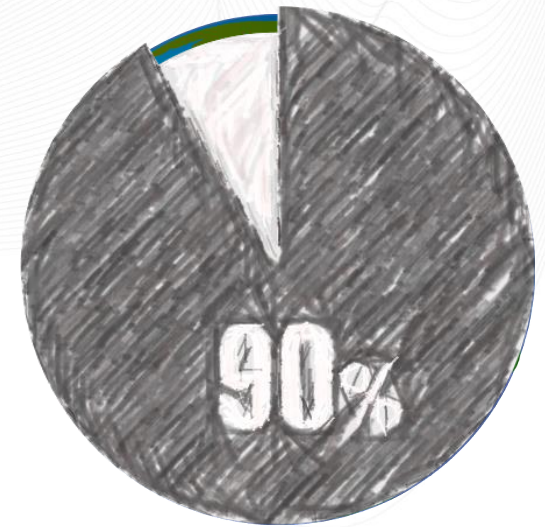
Data can measure project success and outcomes

Data analysis can predict future trends and gaps in the market





# Why data underpins success







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# Data at your finger tips

DATA

ACCOUNT  
SEARCH  
APPLICATION  
COMMUNICATION  
WEBSITE  
RESOURCE  
CONTENT  
NETWORK  
CONTENT

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# What are data?

The many forms of data...

- 1 - Big data
- 2 - Structured, unstructured, semi-structured data
- 3 - Time-stamped data
- 4 - Machine data
- 5 - Spatiotemporal data
- 6 - Open data
- 7 - Dark data
- 8 - Real time data
- 9 - Genomics data
- 10 - Operational data
- 11 - High-dimensional data
- 12 - Unverified outdated data
- 13 - Transactional Data

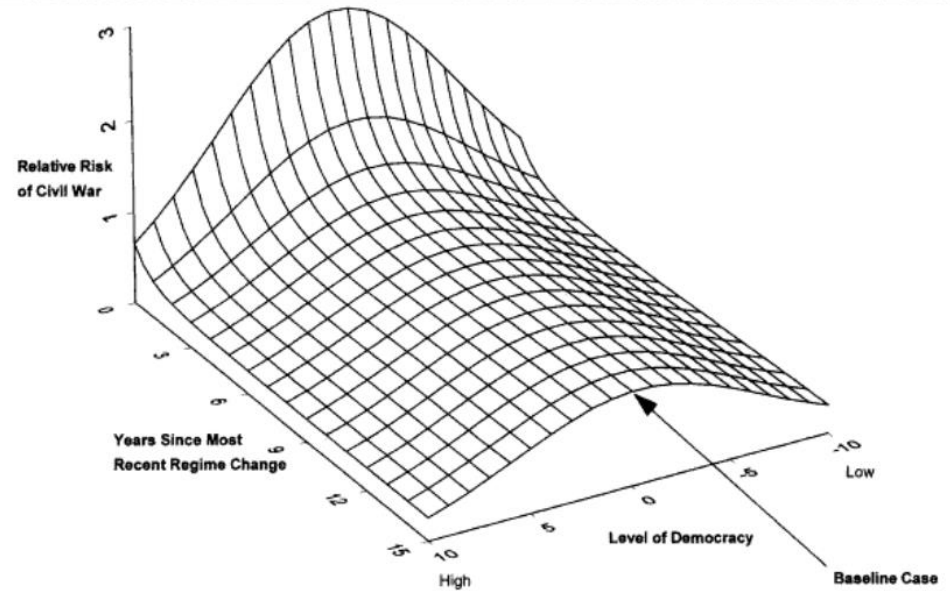
# What are data really?

- Excel
- Database
- Word documents
- Paper files
- Bespoke software
- Sales reports
- Feedback forms
- Social media
- Quotes
- Website hits
- Case studies
- Number of calls
- Pathway analysis
- Budgets
- Grants
- Marketing services
- Projects and services
- Supply chain reports
- Emails
- Resource costings



# Data can be a chart

**FIGURE 1. Relative Risk of Civil War as a Function of Democracy and Time since Most Recent Regime Change, 1816–1992**





# Data can be live and interactive

## 28 day summary with change over previous period



Feb 2020 • 25 days so far...

### TWEET HIGHLIGHTS

#### Top Tweet earned 3,004 impressions

We will be [@BESTGrowthHub](#) [#BESTGHS2020](#) on 27.2.2020. Register online & visit our stand to find out more about [#grantfunding](#) [#data](#) [#DataAnalytics](#) [#BusinessSupport](#) [eventbrite.co.uk/e/best-growth-...](http://eventbrite.co.uk/e/best-growth-...) [pic.twitter.com/fNgaZtsf4r](https://pic.twitter.com/fNgaZtsf4r)



4 3

View Tweet activity

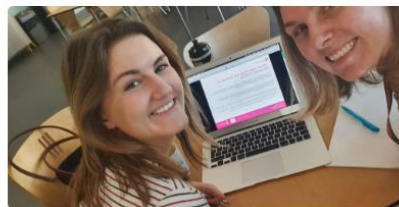
View all Tweet activity

#### Top mention earned 168 engagements



**LMC**  
@Imnotcynthia - Feb 7

Listening to [@BLGDataResearch](#) webinar. Excited to find out how we can work together to use our data to make Essex a safer place to live, work and travel [#data2life](#) [pic.twitter.com/3S4Hc7bkCC](https://pic.twitter.com/3S4Hc7bkCC)



2 2 13

View Tweet

### ADVERTISE ON TWITTER

#### Get your Tweets in front of more people



Promoted Tweets and content open up your reach on Twitter to more people.

Get started

### FEB 2020 SUMMARY

Tweets 88	Tweet impressions 46.1K
Profile visits 205	Mentions 192
New followers 29	



# Data can be a words



**DataKindUK**

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# COVID19: Data analytics in the fight to keep people safe



Powered by data, chatbots  
offer support and advice

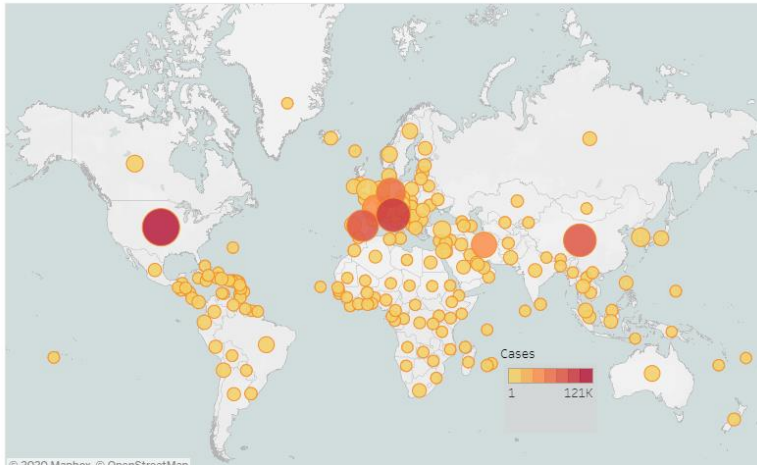






# COVID19: Data analytics in the fight to keep people safe

Live dashboard showing trends



© 2020 Mapbox © OpenStreetMap

Ref: <https://www.kff.org/>





# COVID19: Data analytics in the fight to keep people safe



Mobile phones data to track and  
monitor behaviour to fight the  
spread of coronavirus



Ref: <https://www.theguardian.com/>





# COVID19: Data analytics in the fight to keep people safe

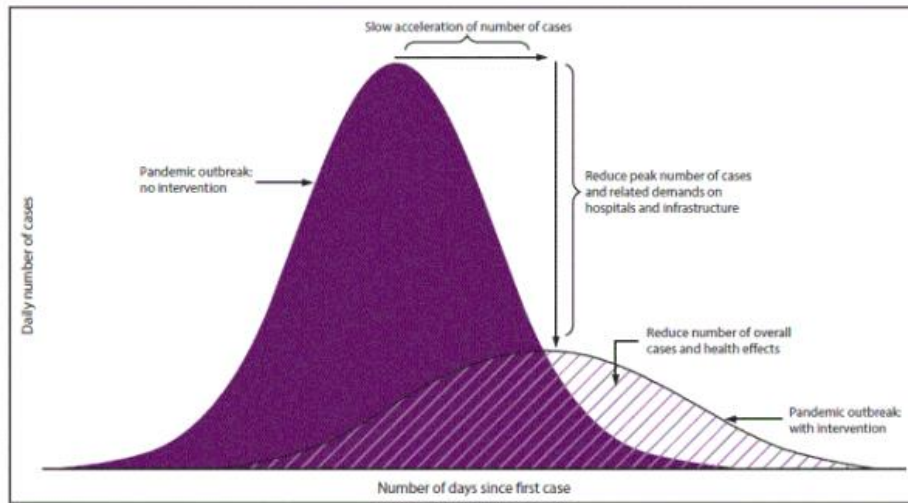
AI and its computing power fast  
track research into a cure





# COVID19: Data analytics in the fight to keep people safe

## Predicting trends and managing healthcare capacity



Ref: <https://www.livescience.com/>





# Case Study: East Sussex Highways

Ability to predict  
road/pathway deterioration,  
allowing resources and  
funding to be allocated  
more effectively.

Cost and time savings.





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# How we can help you



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# Data Analytics Innovation Vouchers

Forward-looking organisations are beginning to realise that it is not enough to analyse their data; they must also act on it.

- We provide grant funding to renowned researchers to solve real-life challenges
- Maximising your data by collecting, organising, linking and analysing various datasets
- Creating proof of concepts, feasibility studies and sharing best practice





# Enhancing knowledge

## Free training and workshops

Improving data analytics skills across the commercial, public and charity sector

Equipping you with the skills required to use data more effectively.

Impact assessment

Data driven marketing

Data analytics techniques







# Enhancing knowledge

**BEST GrowthHub**  
@BESTGrowthHub

Great to see so many fantastic businesses at the Data Driven marketing event we held today with @BLGDataResearch at the great facilities at @UoE\_Business #gro #data2life #support

**emma Wakeling**  
@EmmaWakeling  
Exhibiting @EIRA\_eARC and having lots of conversations with a purpose at @BLGDataResearch Data Driven Marketing event. Full house and everyone super engaged! Kasia currently getting everyone excited rather than worried about using their data!  
[twitter.com/abifairhall/st...](https://twitter.com/abifairhall/status/1161111111)



**Footprint Digital**  
@FootprintDigit  
Tom B was helping bring #data2life today, explaining how we use data and why it is essential to your business. A packed room and they were all very up for a little game as well 😊

#DigitalMarketing #DataAnalytics



Great opening presentation at The Data Behind Business Success: Data Driven Marketing event jointly hosted by the ESRC Business and Local Data Research Center and BEST  
#DataResearch #data2life

**BLGdataresearch** @BLGDataResearch  
Welcoming organisations from across the east of England to our workshop in partnership with @BESTGrowthHub Data Driven Marketing event.  
#Data2Life

10:06am · 5 Sep 2019 · Twitter for iPad  
4 Retweets 4 Likes



10:46pm · 5 Sep 2019 · Twitter for iPhone  
4 Retweets 7 Likes

**BLGdataresearch** @BLGDataResearch  
Up next on stage is @sherbetlemon007 presenting on how to become #socialmedia savvy. Top tips from an industry insider & researcher #Data2Life #DigitalMarketing #MarketingData #SME #Essex @ESRC @Uni\_of\_Essex @ResearchEssex

**5 TIPS**  
TO WRITE A GOOD SOCIAL MEDIA POST THAT CAN PROPEL YOUR ORGANISATION'S MARKETING STRATEGY

**BLGdataresearch** @BLGDataResearch  
A buzzing room of attendees at today's workshop, entrepreneur, charities & business owners across #Essex – a thriving community keeping Essex at the forefront of #business innovation #Data2Life @ESRC

Providing business knowledge and empowerment for business



4:57pm · 5 Sep 2019 · Twitter Web App  
1 Retweet 6 Likes

**Suffolk CU Manager** @Suffolk\_CU  
@BLGDataResearch #Data2Life #ThursdayMotivation

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# Challenge labs

- Tackling your data dilemmas.
- For creative thinkers and innovators.
- A workshop with a difference.





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We support  
organisations to  
bring data to life

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# What is a data strategy?

A data strategy is a vision for how an organisation will collect, store, manage, share and use data.

"Aligns and prioritises data and analytics activities with key organisational priorities, goals and objectives." ([Micheline Casey, CDO LLC](#))

"A coherent strategy for organising, governing, analysing, and deploying an organisation's information assets that can be applied across industries and levels of data maturity." ([DalleMule and Davenport, Harvard Business Review](#))

"Concepts of standards, collaboration and reuse applied to data to support improved accuracy, access, sharing and reuse." ([SAS](#))

"Intentional action & prioritisation plan" ([Braden J. Hosch, Stony Brook University](#))



# Why is a data strategy important?



1

Helps you use resources  
efficiently





# Why is a data strategy important?



2

Improves data  
management across  
your organisation





# Why is a data strategy important?



The volume of data is  
increasing every year





# Why is a data strategy important?



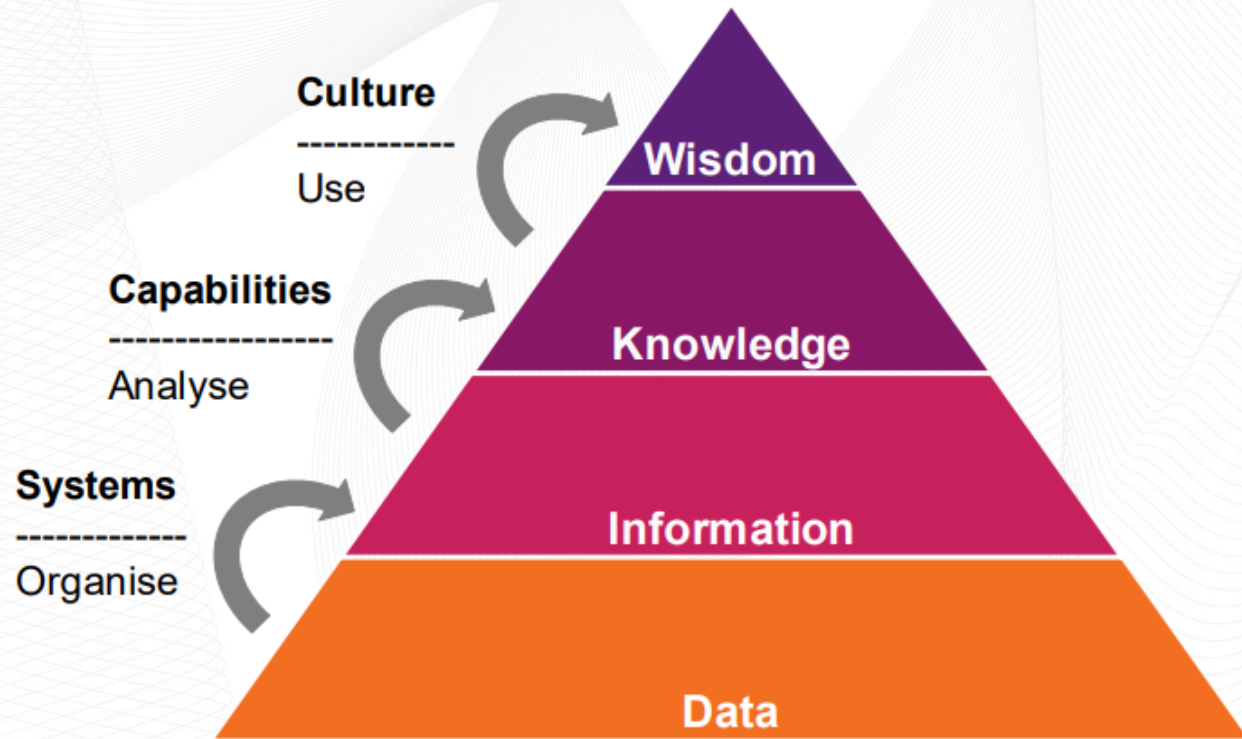
Helps unlock the  
power of data







# Transforming data into wisdom



Ref: <https://www.thinknpc.org/>





# Transforming data into wisdom

Stage one: Data - Collecting **good quality** data

Engagement data

Feedback data

User data

Impact data

Outcome data



Data





# Transforming data into wisdom

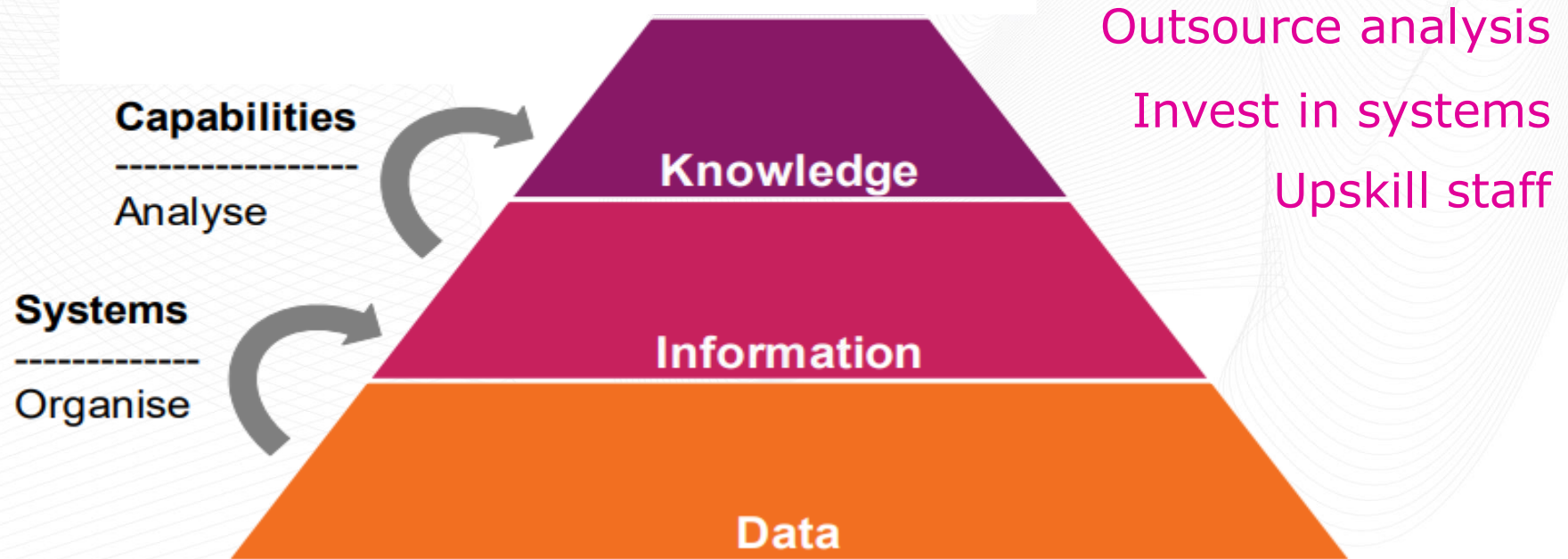
Stage two: Raw data collated and organised





# Transforming data into wisdom

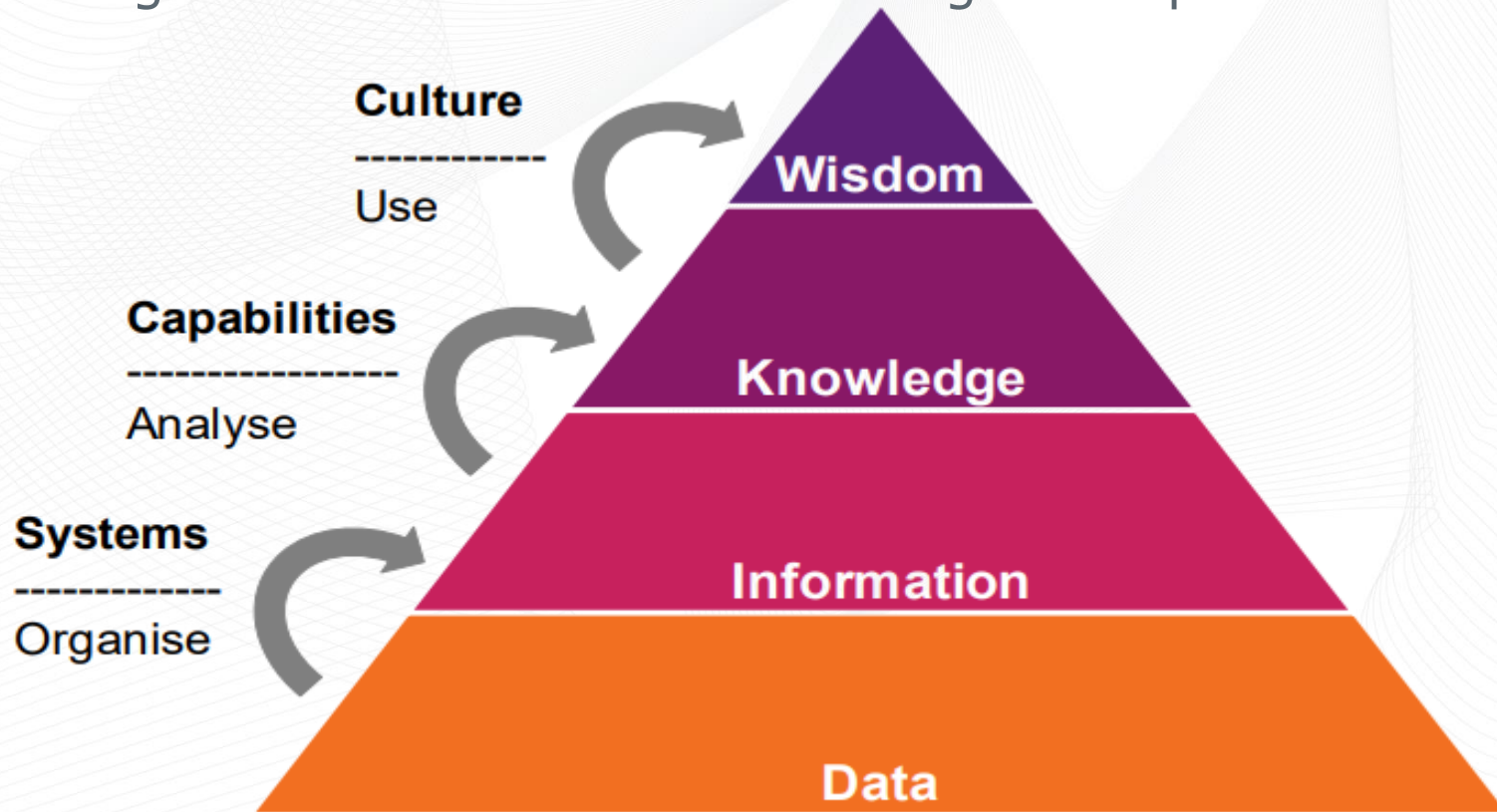
Stage three: Turning information into knowledge





# Transforming data into wisdom

Stage four: Use this new knowledge to improve





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# What's missing?



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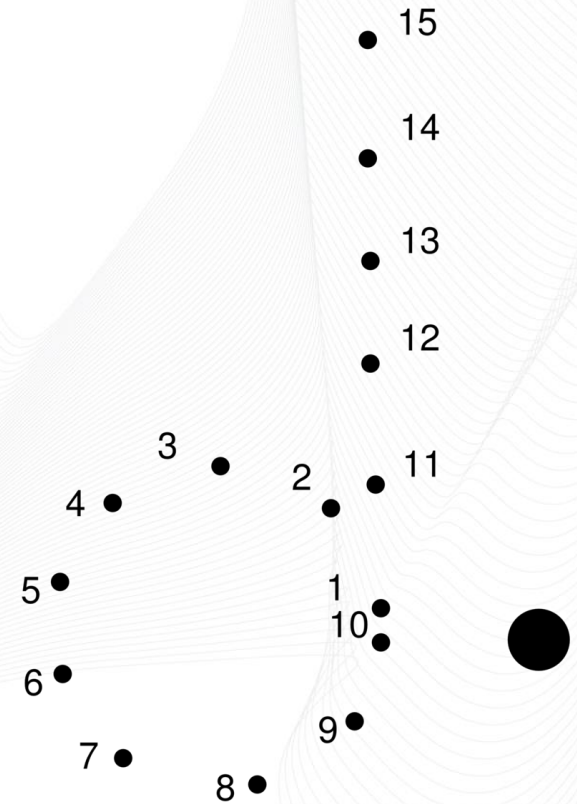
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# Joining up the dots





## Beware of barriers

- Privacy Regulations - GDPR
- Silos and siloed culture
- Lack of data integrity & data availability
- Skills gap
- Identifying the relevant technologies







# Data is changing the world







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# CYBERSECURITY AMID COVID19

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**13th May 2020**  
**10.00 a.m. – 11.00 a.m.**

A growing number of cybercriminals are exploiting the COVID-19 outbreak and security agencies across the world are issuing COVID-19 cybersecurity threat updates as more organisations are falling victim.

Now is the time to protect yourself and your organisation.

Learn from home with our virtual workshop delivered by Dr. Audrey Guinchard, a leading expert working at the intersection between cybercrime, data protection, and cybersecurity.

**Register online [here](#)**





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# SOCIAL MEDIA DURING SOCIAL ISOLATION

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**18th May 2020  
1.00 p.m.-2.00 p.m.**

Join us for a lunch and learn discussion, as we explore the changing role of social media during COVID-19.

Research shows the detrimental impact that isolation and loneliness can have on mental health. Within the context of COVID19 lockdown, we ask the important questions on everyone's mind...

Has social media added fuel to the panic over COVID-19 or acted as a tool to connect communities during the lockdown?

Featuring renowned vlogger and social media researcher Shaaba Lotun.

**Register online [here](#).**





# Thank you

Join in the conversation online:

@BLGDataResearch #Data2Life



LinkedIn: ESRC Business and Local Government  
Data Research Centre



YouTube: ESRC Business and Local Government Data  
Research Centre



Email: [BLGDataResearch@essex.ac.uk](mailto:BLGDataResearch@essex.ac.uk)

