

The background of the slide is a complex, abstract image featuring various financial data visualizations. It includes candlestick charts with bars in shades of orange, yellow, and blue. Overlaid on these are several line graphs with dashed trend lines. A prominent white line graph with a peak and trough is visible in the center. The overall color palette is dominated by dark blues, oranges, and yellows, creating a high-tech, data-driven aesthetic.

**FUTURE  
AGENDA**

Open Foresight

## **Delivering Value Through Data**

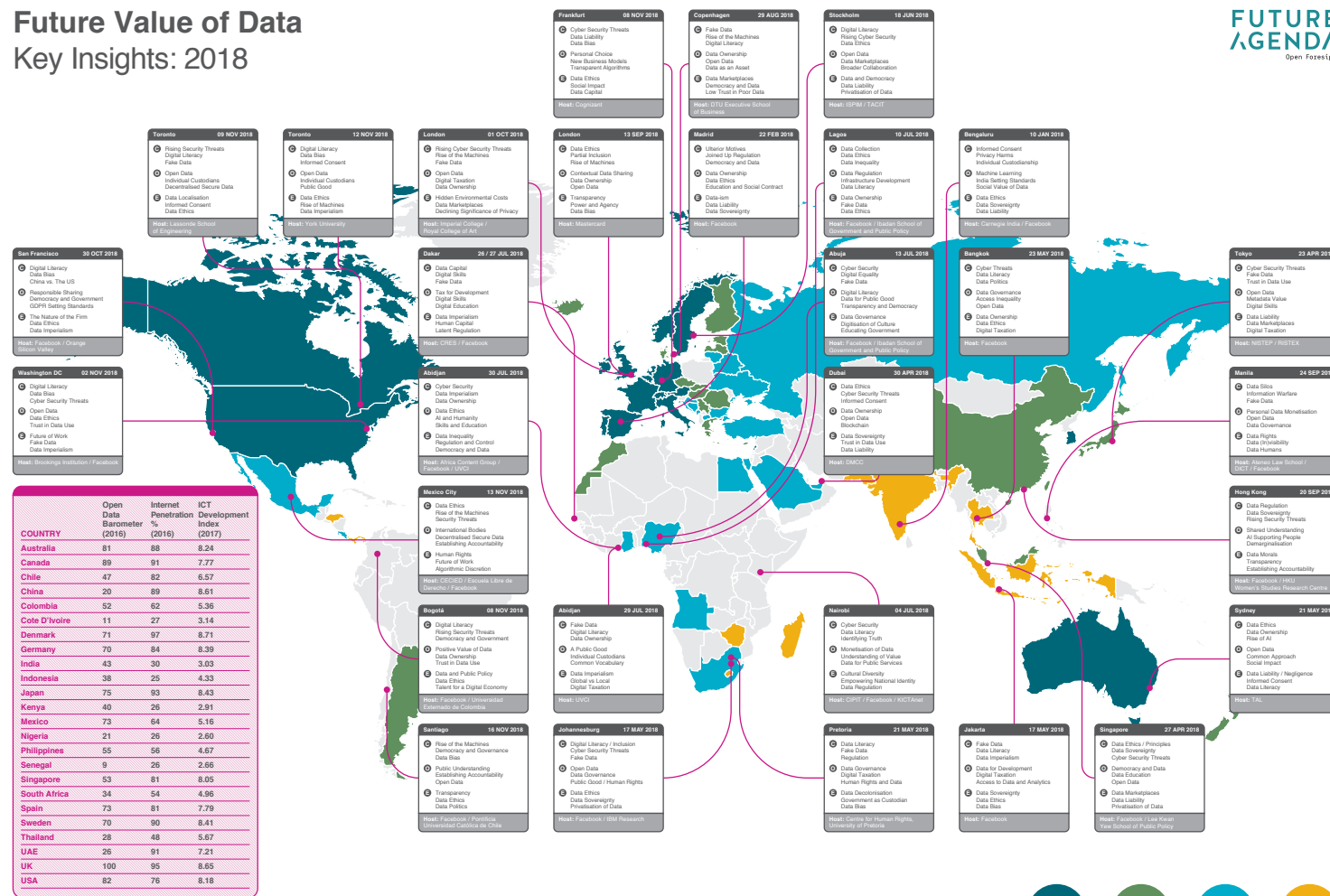
Insights From Multiple Expert Discussions Around The World

December 2019

 **creative  
commons**

## Future Value of Data Key Insights: 2018

**FUTURE  
AGENDA**  
Open Foresight



Open Data Barometer — <https://opendatabarometer.org/>  
Internet Penetration — <https://data.worldbank.org/indicator/IT.NET.USER.ZS>  
ICT Development Index (2017) — <http://www.itu.int/net4/ITU-D/IDI/2017/>

C Top 3 Challenges O Top 3 Opportunities E Top 3 Emerging Issues

Level of Privacy Regulation: DLA Piper  
<https://www.dlapiperdataprotection.com>

Heavy Robust Moderate Limited

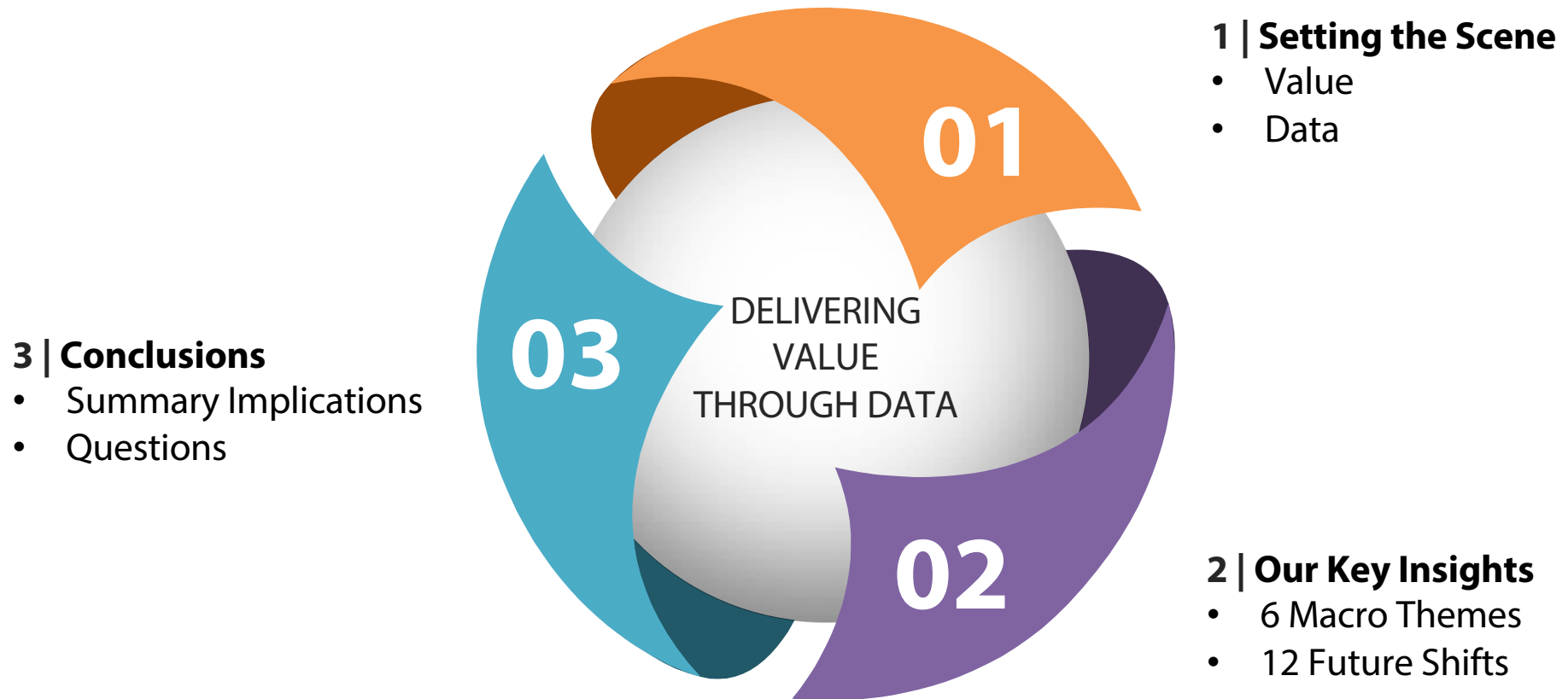
## Context

Based on insights from 30 expert workshops, this summary shares global and regional views on the shifts likely to take place around the 'value of data' over the next decade - and identifies areas that could drive change.



## Project Partners

This global research programme was undertaken in partnership with 34 different organisations that (co)hosted the varied workshops. We thank them and all the participants who gave their time and insight.







## SETTING THE SCENE






## **A Value for Data**

The promises and possibilities of big data have led many organisations to believe that 'more is better' - many have rushed to grab as much of it as possible. However, understanding where its real value lies is, as yet, unclear.



The background of the slide is a dark, abstract image featuring a complex network of glowing orange lines and nodes, resembling a digital or neural network structure. The lines connect various points, some of which are highlighted with bright orange light, creating a sense of depth and connectivity.

**The Unique Quality of Data**  
As with knowledge and ideas, when data is used it doesn't get "used up".  
Far from being a depleting resource it is an accumulating one. This challenges both the possibilities data creates and the dilemmas it generates.



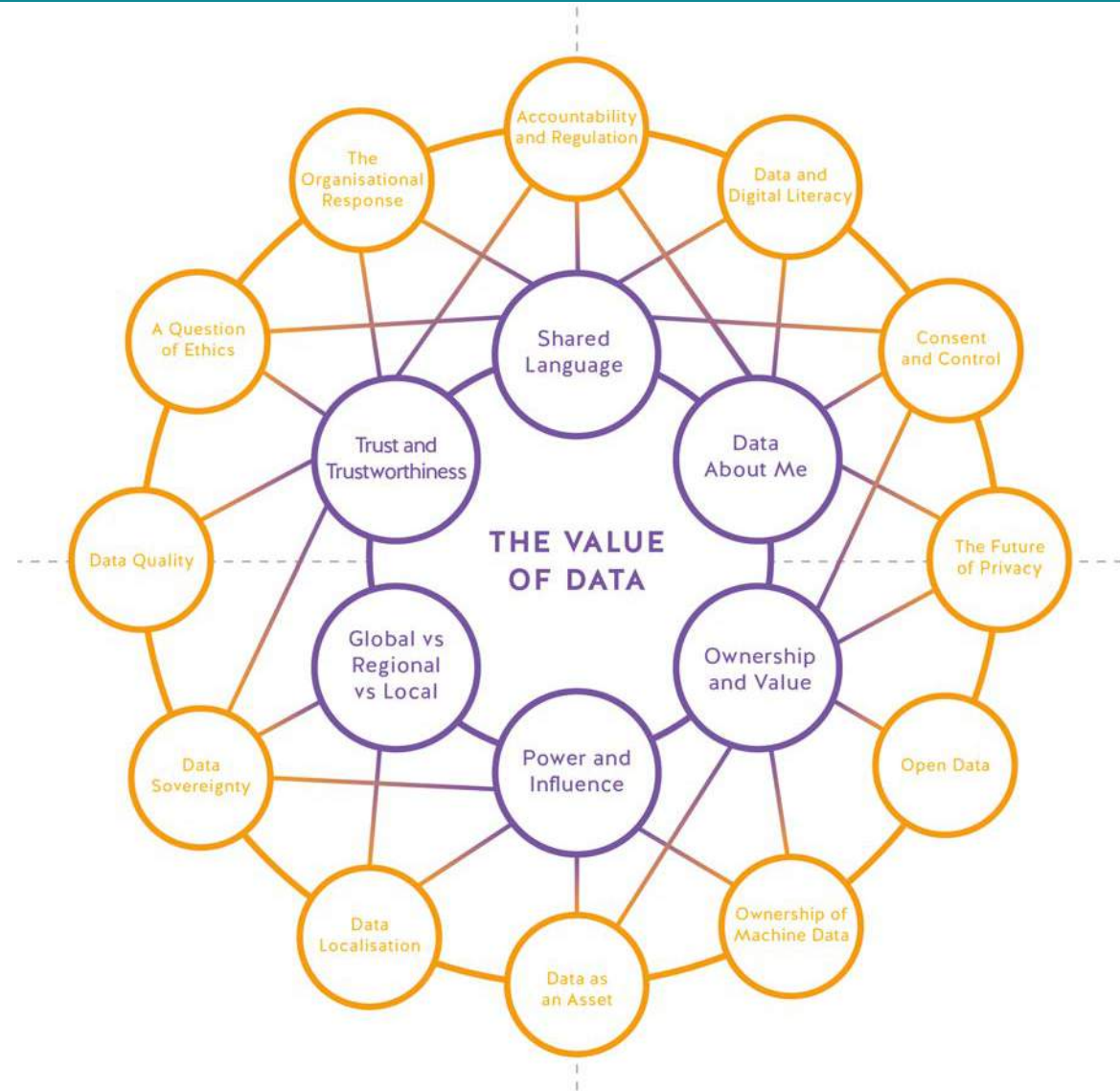
## How to Look at Value

The value of data (both positive and negative) lies in how it is used and / or exchanged. Many agree that, rather than focus solely on the economics, we should take a more holistic view. But how to do this is undecided.





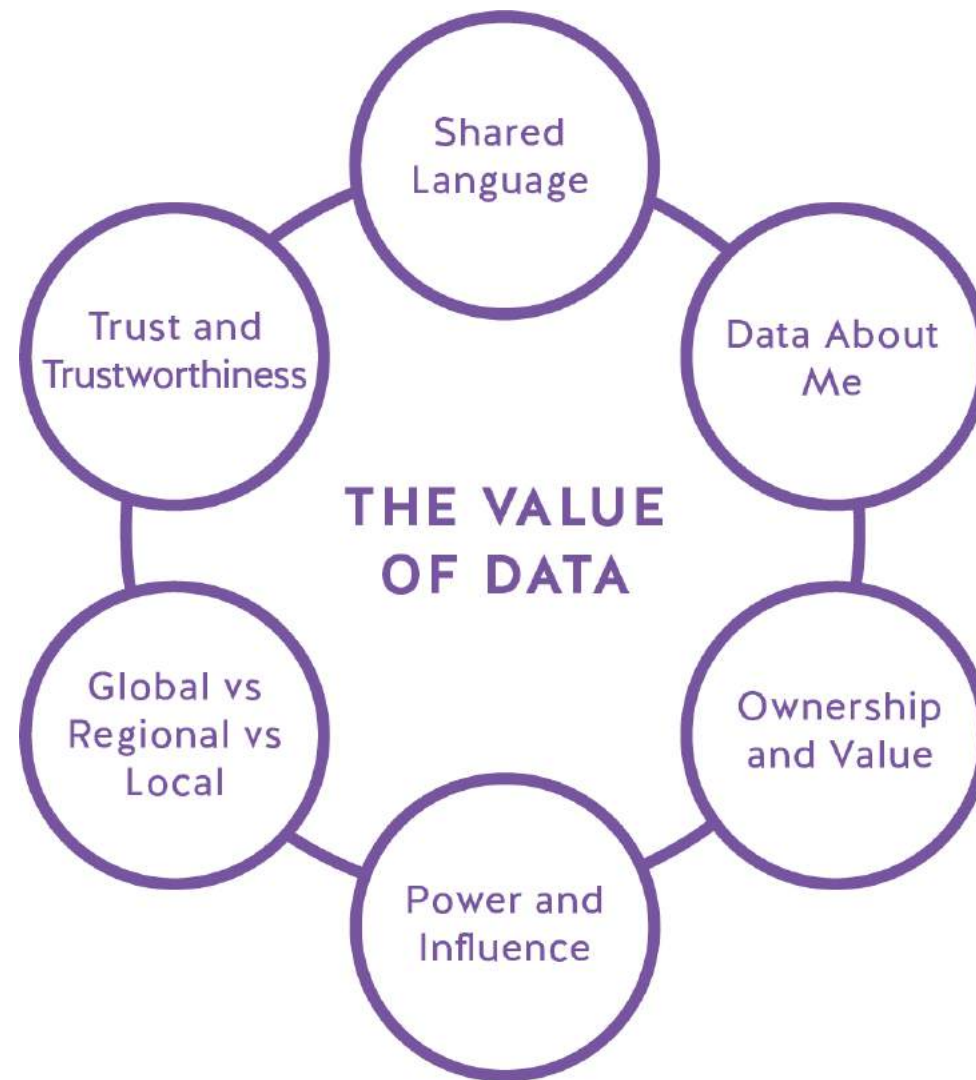
## OUR KEY INSIGHTS



## Drivers of Change

We see 12 key shifts underway that are impacting the future value of data. These, in turn, group and link to six overarching macro themes.







## **Data About Me**

Rising concerns about personal data collection and use cover many issues. Pressure for solutions that inform and 'empower' individuals strengthens.





## **Ownership and Value**

Ownership and rights to value extracted from data are inextricably linked. As traditional notions of ownership don't apply new models are sought and tested.



## **Power and Influence**

Data is a means of exercising power as well as a focus for multiple struggles for power. Regulation focuses on rebalancing influence from companies to society.





### **Global vs Regional vs Local**

While many support more globalisation of data, others seek to assert stronger regional and national control to protect citizens and strengthen economies.

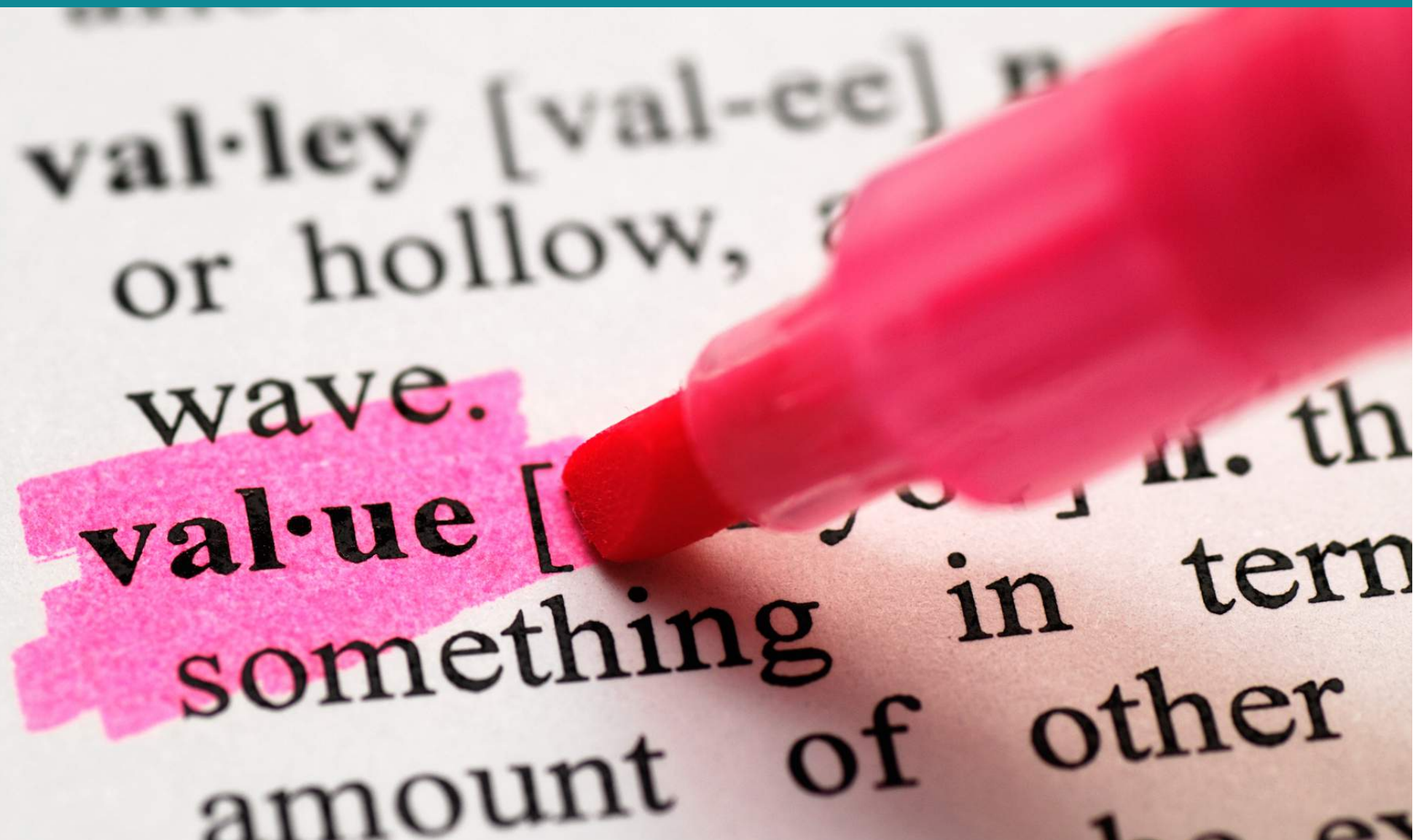




## Trust and Trustworthiness

Organisations seek to build trust in data use. This is increasingly about being more 'trustworthy' which is focused on being truthful and more transparent.

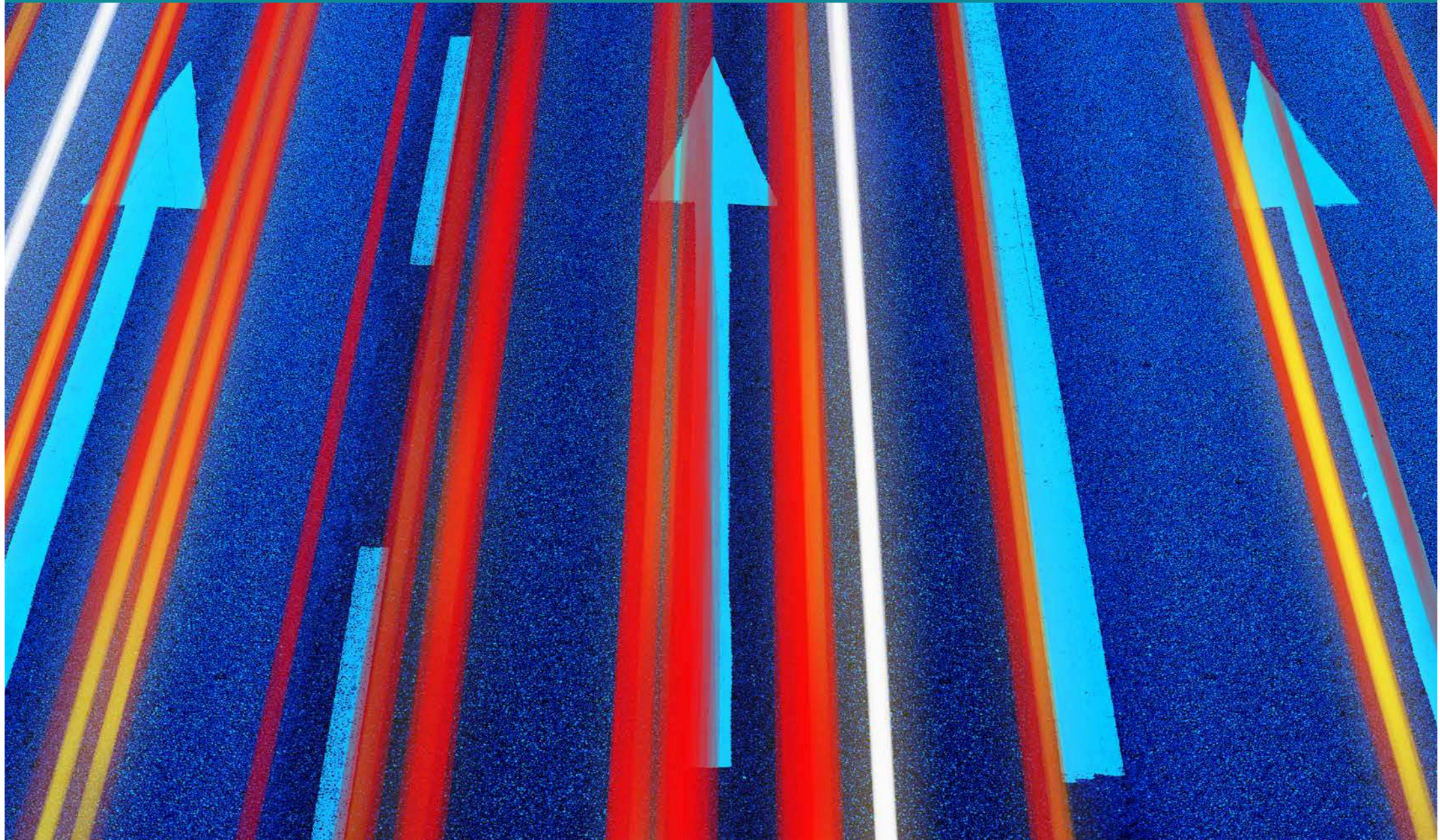




### Shared Language

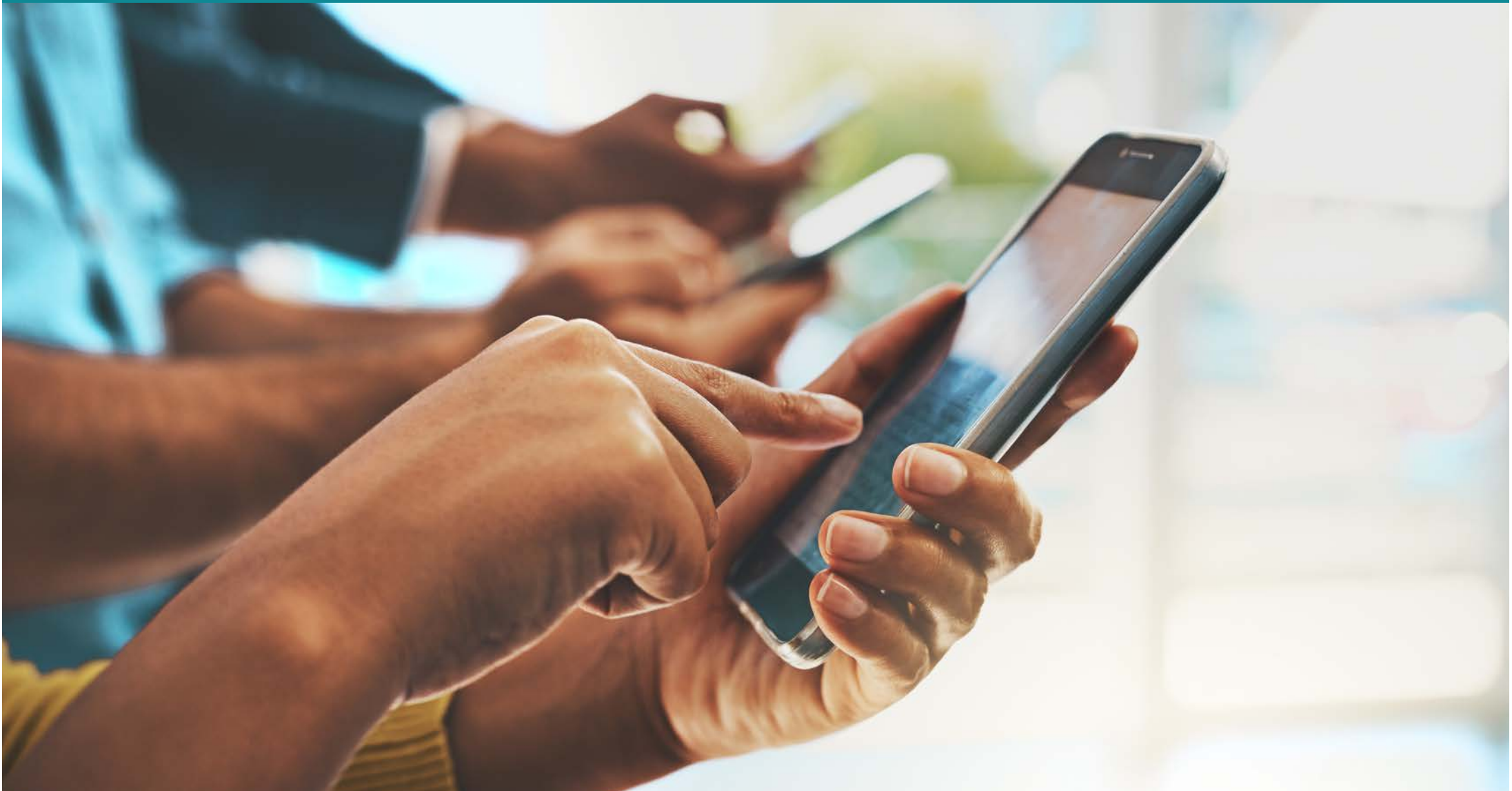
People are unclear on where the value in data comes from or what form it takes. A key step is a common language about data that provides clarity about terms.





12 FUTURE SHIFTS





## **Data and Digital Literacy**

An informed perspective of data, how it is acquired and used, increases public confidence, overcomes misunderstanding and aids better decision-making.



## **Culture Governance and Privacy**

Differences in culture and governance drive attitudes towards privacy. Some believe in a right to privacy; others see it as a contradictory, outdated concept.





### **Consent and Control**

Depending on informed consent as the basis for processing data is unworkable:  
Rethinking our view of what it is designed to achieve drives a new approach.





## Open Data

Momentum around open data is constrained by the privatisation of public data and increased security concerns. This limits the potential of data for good.





## Ownership of Machine Data

Debates on who has what rights to which data escalate. Questions on title, control and usage of data lead to many sectors taking different views.





### **Data as an Asset**

Organisations are obliged to account for what data they own or access. They are required to report their full data portfolio and are taxed on this.





## **Data Localisation**

Nations see benefit in copies of all citizen and machine data in regional centres. Government and local companies can access data held by foreign corporations.





## Data Sovereignty

More governments see control of national data as a way to protect citizens' rights, develop the economy, and maintain a sense of cultural identity.





## **Data Quality**

As we seek better insight, concern about biased, poor and false data grows. Cleaning and validating data is a social, political and commercial battleground.



## **A Question of Ethics**

Ethical data use grows as a concern, but we struggle to agree a global approach. Sectors set their own standards and try to align on some common principles.





## **The Organisational Response**

The management of data needs a 21<sup>st</sup> not a 19<sup>th</sup> century approach to business.  
With digital the norm we evolve from principles based on physical products.

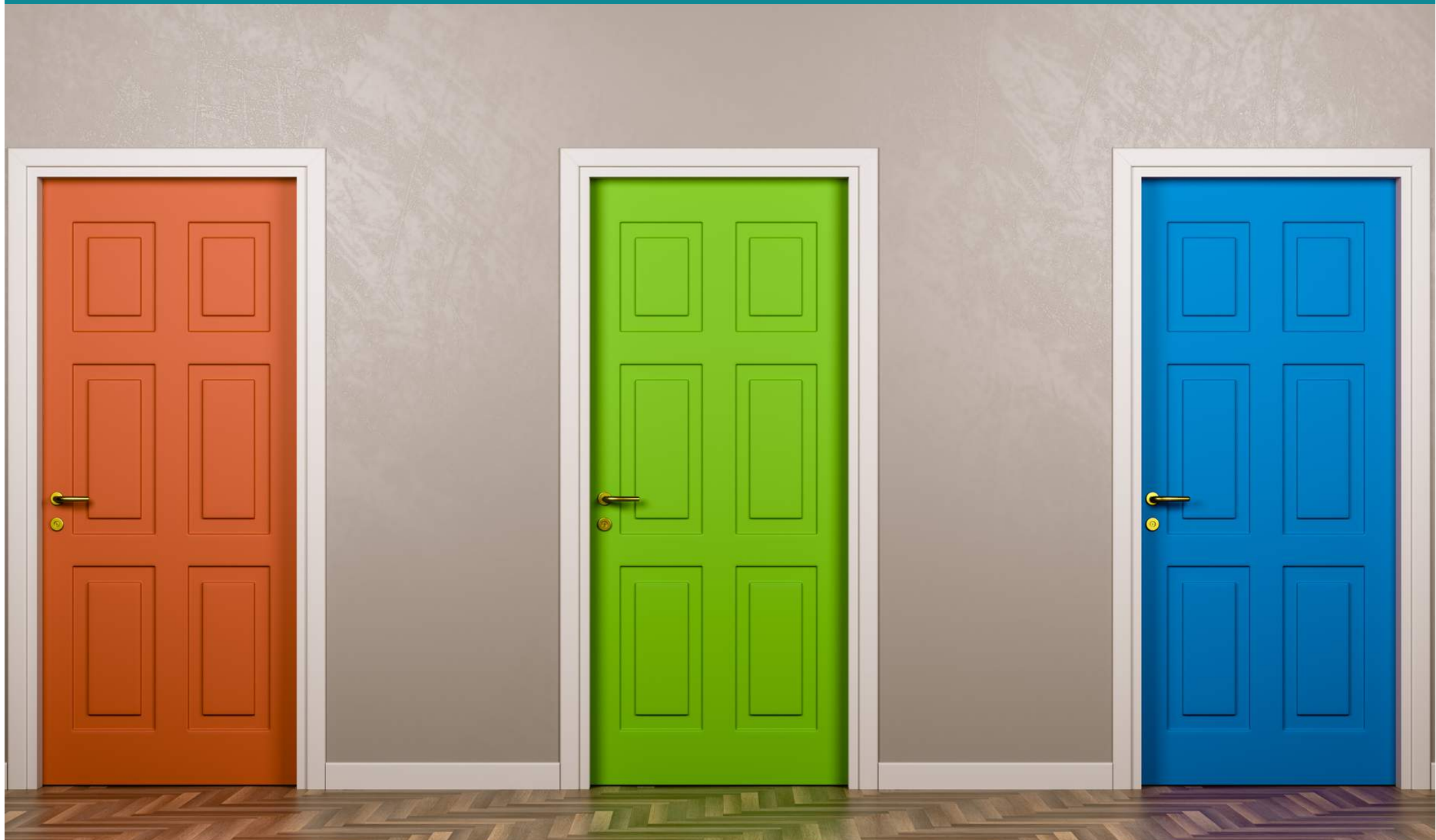




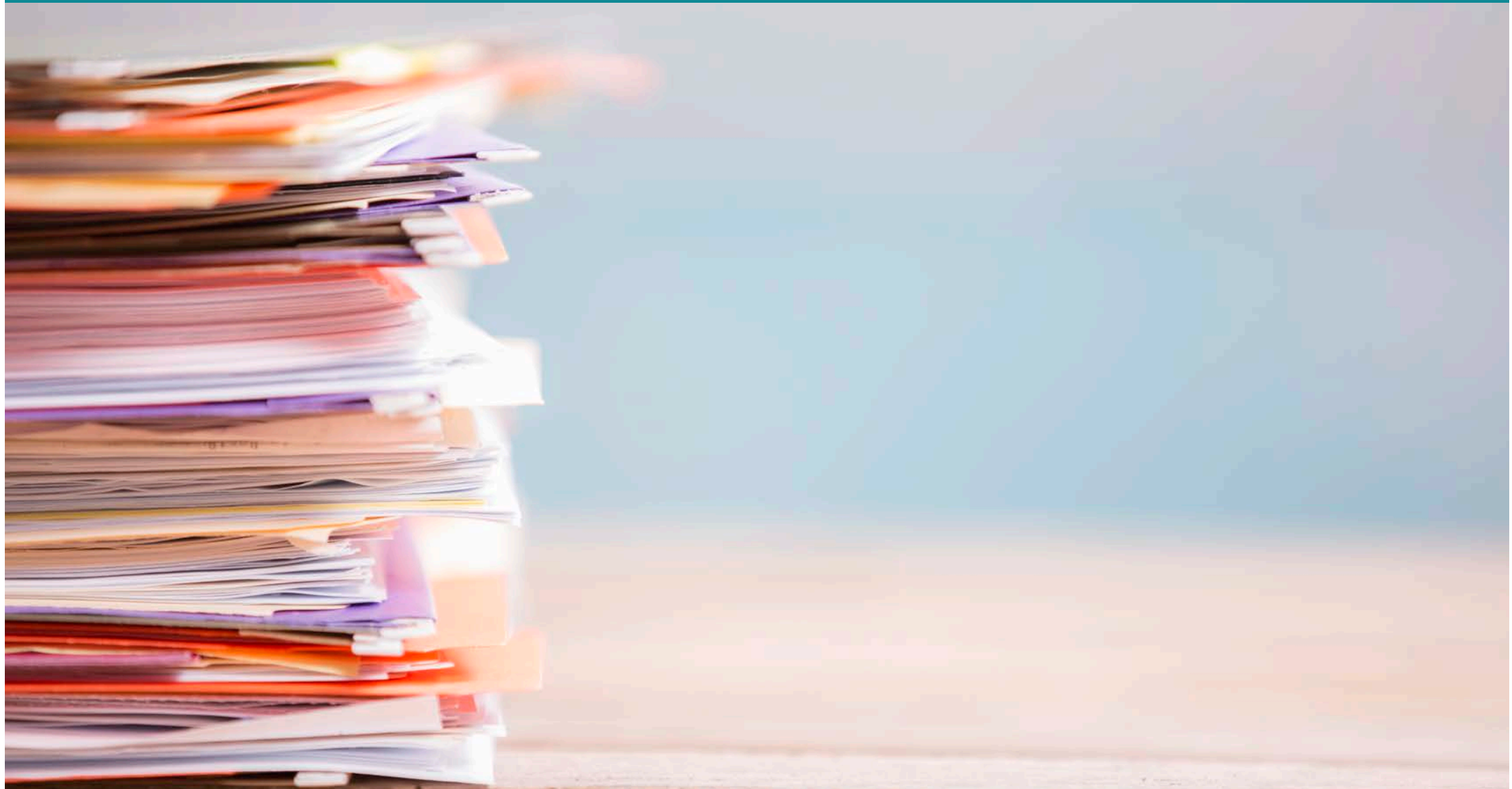
## **Accountability and Regulation**

Rising concern about the use of data influences public opinion. Policy makers seek a more joined-up approach to regulation, governance and accountability.





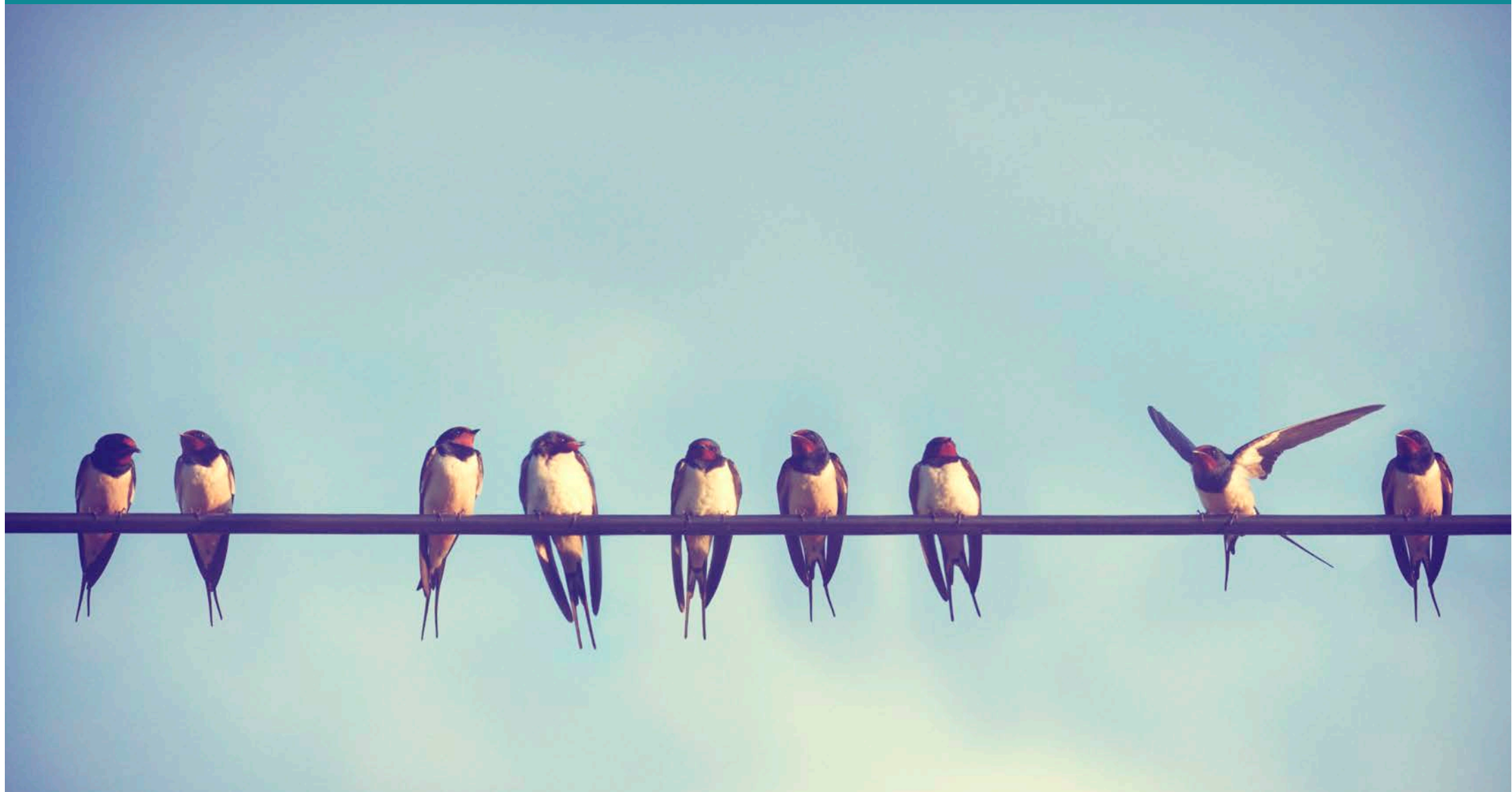
CONCLUSIONS



### **Summary Implications**

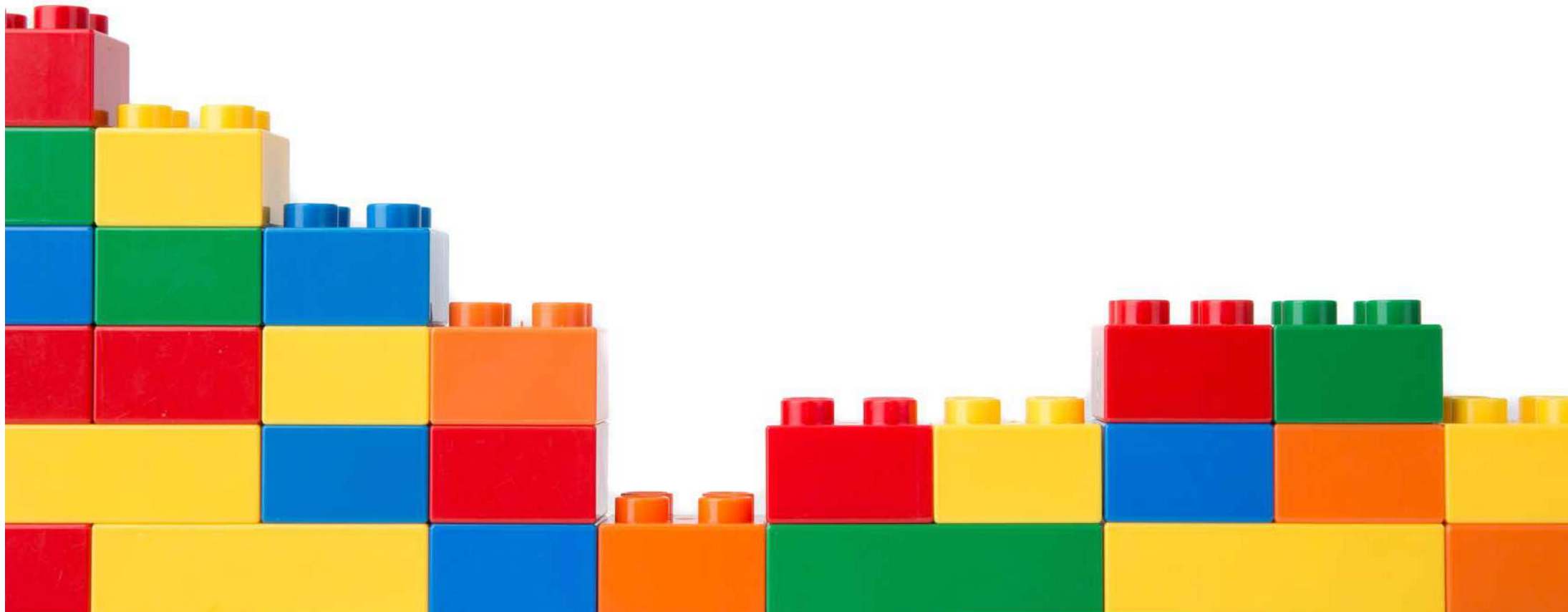
Today's technological changes are transforming society. Many believe that those profiting have a responsibility to help address the consequences.





## **Constructive Debate**

We need a process that brings all stakeholders together to allow constructive debate. This may be in multiple forums operating at many different levels.



## **Institutional Reform and Development**

The issues are multi-faceted and contextual. Each has distinct requirements which cannot be managed by regulation alone. Institutional reform is needed.





## **Global Frameworks**

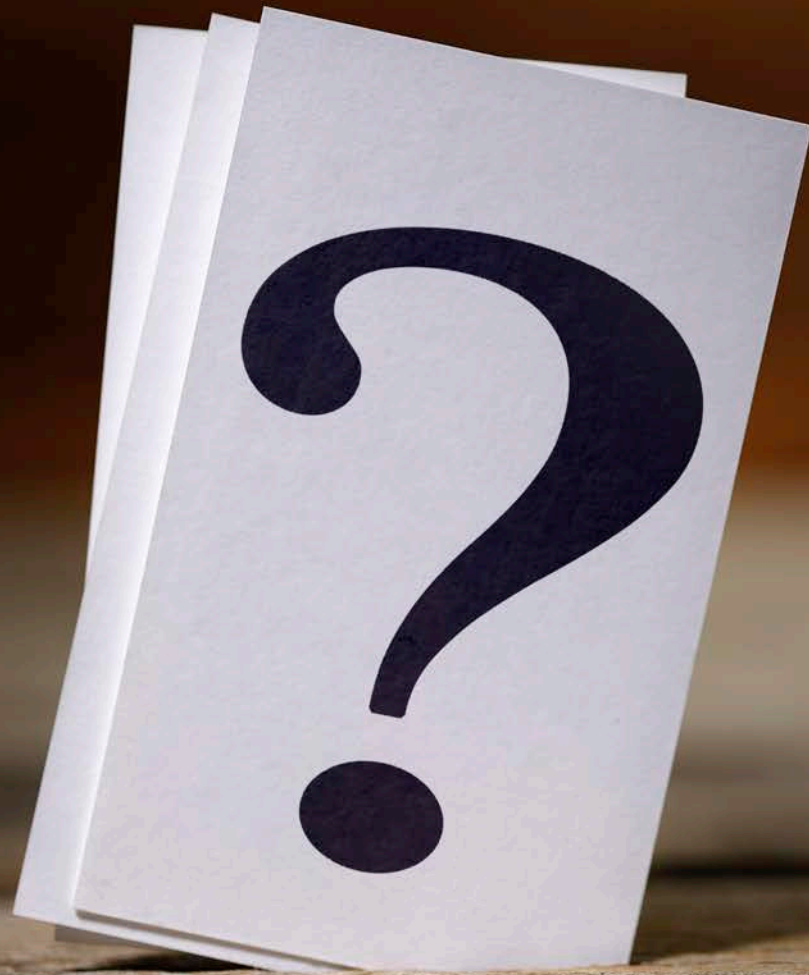
We need a global body able to align national (and often hostile) governments and multinational corporations to address global data governance challenges.




### **Regional or Industry Solutions**

Although a global framework is a long-term goal, the process is iterative. Regional or industry solutions may first emerge to set standards.







QUESTIONS



How can education help us to navigate the internet and digital platforms, and engage with social media? Who is best placed to teach us?




How can we ensure that we have the skills needed to work in a digital age?  
Do we need to train or retain so we can actively participate in the digital economy?



How would you assess if your data is being valued fairly, when it is used in exchange for something else?



Is 'ownership' a useful/practical concept when it comes to certain types of data, such as personal data? If not, what alternative concepts can we use to replace it?



How can we become more aware of our individual rights and responsibilities online? Should citizens be more proactive in making decisions around how to gain value from their data?






Who can we trust most to manage our data? Why?



What do you think the most significant digital rights should be and should they vary dependent on culture and region?




Given that we live in an era of increased surveillance, does privacy matter? Is it possible to achieve?




Would you be prepared to pay for services in exchange for greater privacy?



Would you be happy for data about you to be shared for social causes?



Organisations collecting and using large quantities of data can generate significant value for individuals, society, the economy and for themselves. They may also create excessive concentrations of power and/or use this unfairly or inappropriately. How should these dangers best be addressed?



Aside from ownership, what ways can we use to allocate rights, benefits, and responsibilities relating to data across stakeholders including governments, technology companies, multinational corporations, and individuals?



Is it possible to create a 'common language' where, across the world, key stakeholders all use the same terms and definitions to describe what is happening with data?



Is there enough understanding amongst policy makers to manage the transition to and the impact of digital technologies successfully? Can regulators better support digital literacy?



If it is impossible to deliver "informed consent" in any practical form, what should replace it?







How should these decisions be implemented and enforced?



If the momentum towards data sovereignty continues, will it be possible to ensure an international market for data?




What would encourage you to make your data sets available for public good?  
What constitutes 'good quality' open data?



Given the race to collect, store, and use data, and the commercial opportunities that this creates, how can businesses ensure that ethics are not side-lined? How can this incorporate the enormous variety in moral and ethical beliefs between different cultures?"



What does it take to be trustworthy?



If a corporate entity is deemed to have too much power or to be exercising its power irresponsibly, what are the appropriate mechanisms for effective action?




How can government enable citizens to have a value from their data, either for themselves or for others?



When is it necessary/desirable for data to flow across national borders? What different rules should be applied to different types of data (e.g. personal, non-personal), and different circumstances and use cases?




How can/should disputes between different entities and jurisdictions (local, regional, global) relating to the collection and use of data be handled?




Which bodies, at what level (local, regional, global), are best placed to take a lead on the on this, and how can we ensure a) their legitimacy in the eyes of key stakeholders and b) their effectiveness?






What is the best way to address key stakeholders' concerns (e.g. the dangers of a new 'data imperialism', the risks that constrained data flows could undermine innovation and economic prosperity)?



Will IoT data have greater value if it is proprietary or open to all? How do you ensure clarity about what data should be opened up, for what uses, and by who?



How can we create a regulatory environment which encourages competition, while making information-intensive organisations more accountable for the data in their care?



New commercial sources of value are being created from public, academic and government information, which are being used for private enterprise. Is it possible to limit the 'privatisation' of open data?



Do new innovations around AI and Machine Learning need a different form of governance and regulatory approach?

# FUTURE AGENDA

Open Foresight

Future Agenda, 84 Brook Street, London W1K 5EH +44 203 0088 141

[www.futureagenda.org](http://www.futureagenda.org) | [@futureagenda](https://twitter.com/futureagenda)