NINTH SESSION OF THE COMMITTEE OF EXPERTS ON GLOBAL GEOSPATIAL INFORMATION MANAGEMENT

Forum on Future Trends in Geospatial Information Management

David Henderson, Ordnance Survey

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Forum structure

INTRODUCTION	
15:00 – 15:15	**Welcome and Opening** David Henderson (Executive Director, Ordnance Survey) • Overview of the Future Trends report • Workshop outcomes and structure • 15 key trends identified during the first and second review phase
WORKSHOP SESSION	
15:15 – 16:20	**Workshop activities**
WAY FORWARD	
16:20 – 16:30	**Closing remarks** David Henderson (Executive Director, Ordnance Survey) • Future Trends roadmap

Overview of Future Trends

The Future Trends report is **a strategic insight document** for all countries and the global geospatial information community, taking a look at the key trends and drivers within our industry over the short- to mid-term.

Not only do the reports look at emerging themes such as ‘Smart Cities and the Internet of Things’ and ‘Artificial Intelligence and Big Data’, but also ‘Legal and Policy development’ and ‘the role of governments in geospatial data provision and management’.

Over 114 member states, organisations and individuals, from all over the world contributed to the two previous reports.

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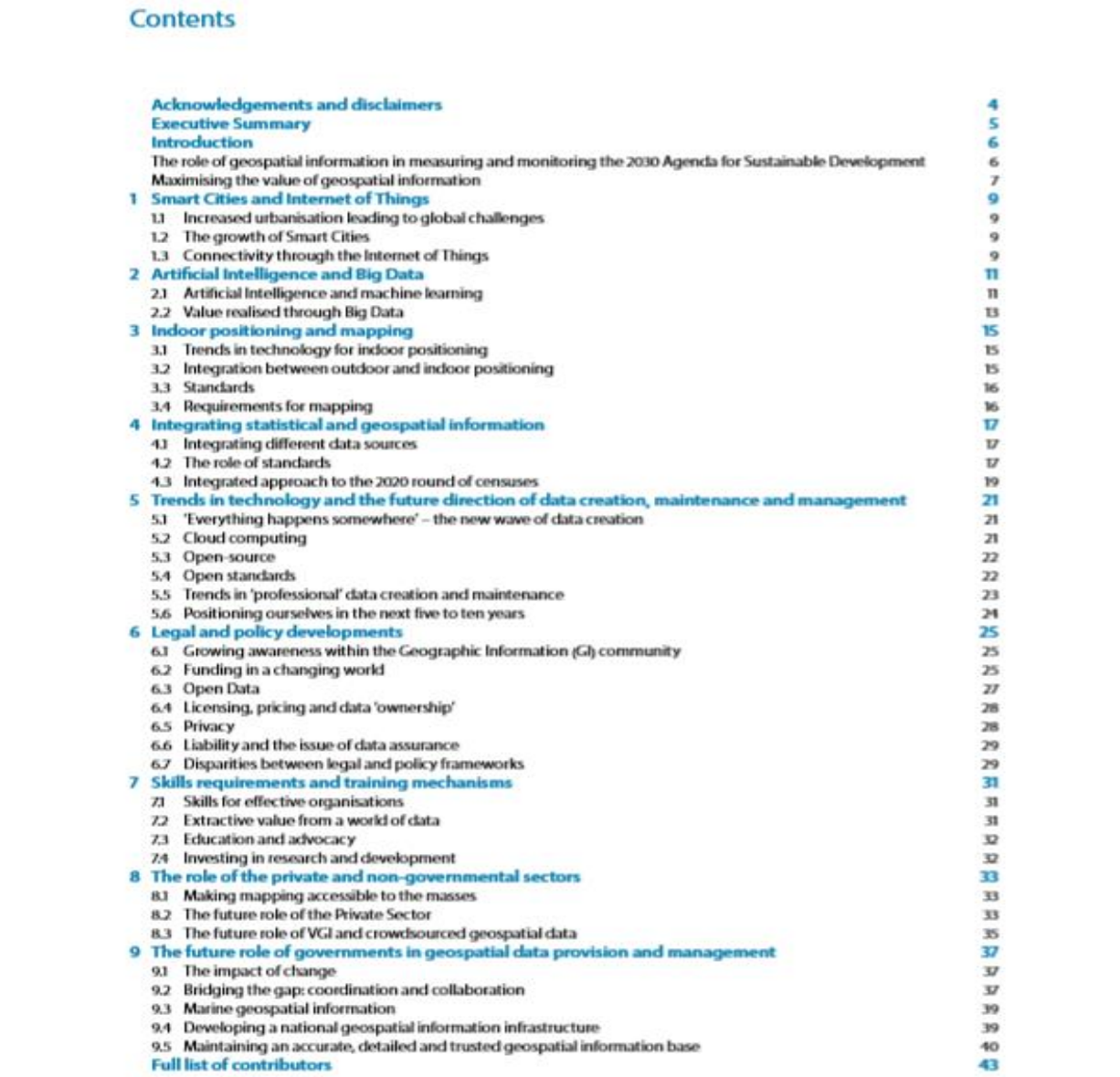

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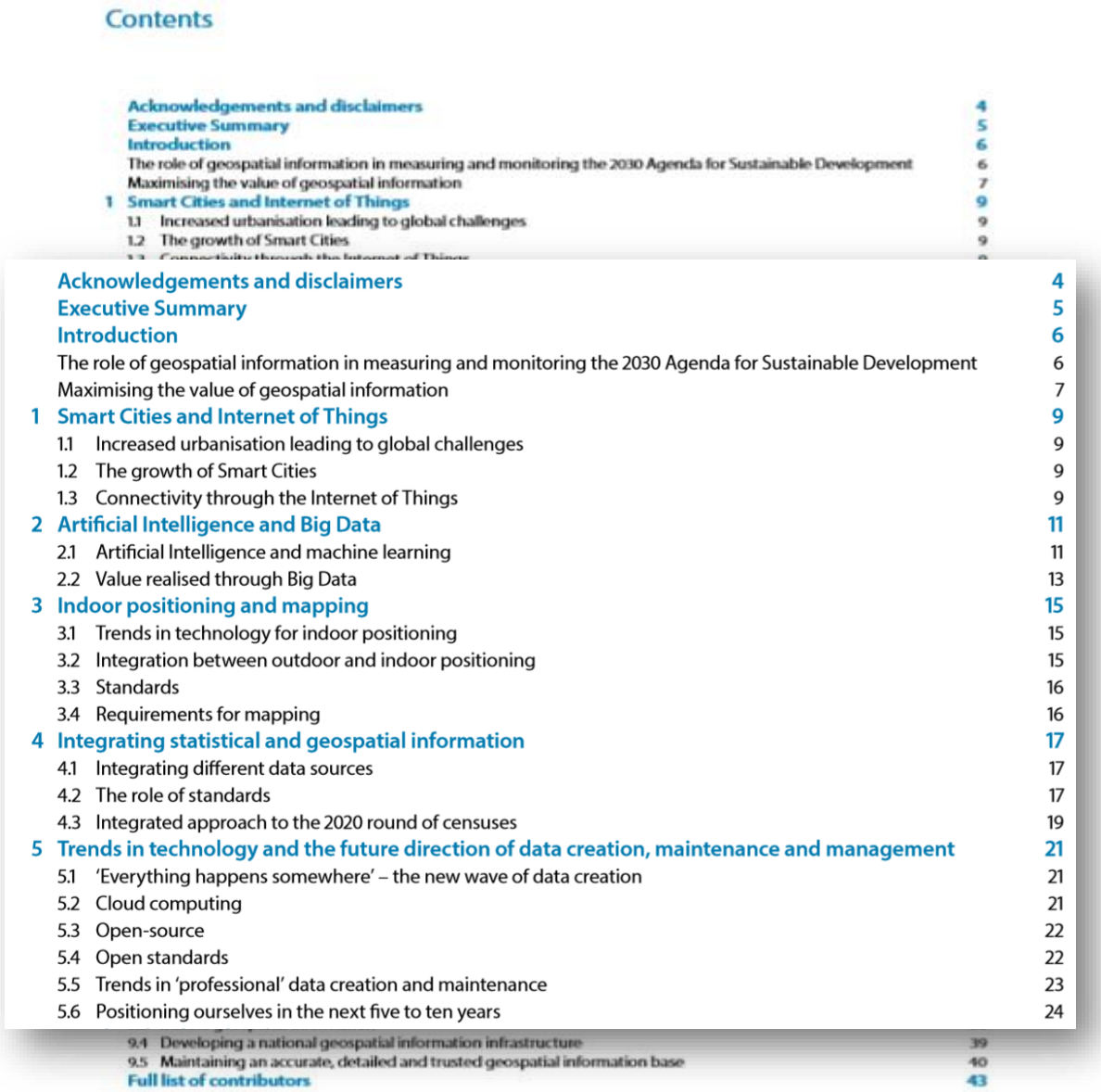

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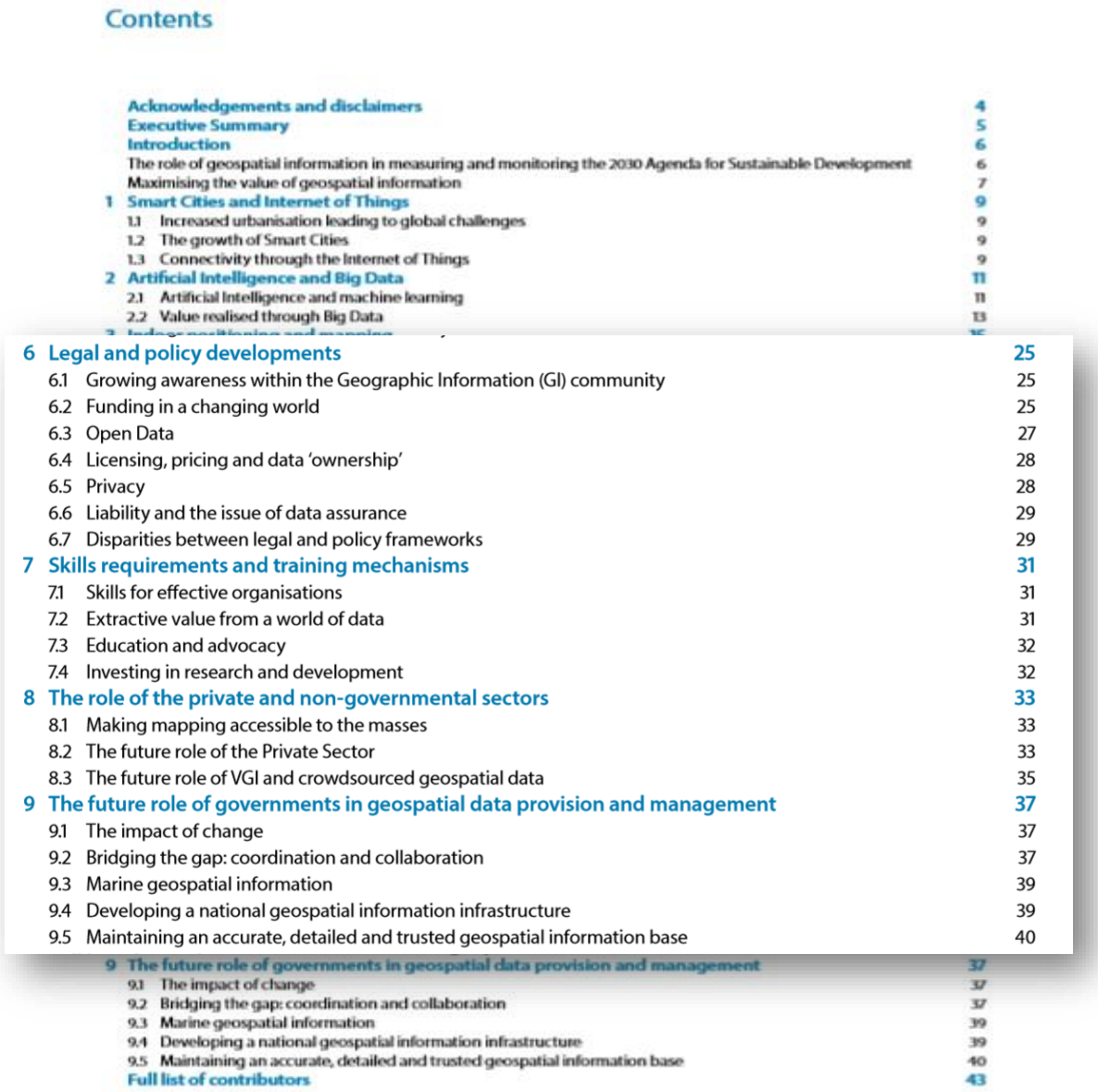
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Way forward - Future Trends Roadmap

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April 2019: Phase 1 - Call for input

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September/October 2019: Writing the first draft

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April 2020: **Launched at the Sixth High Level Forum on UN-GGIM in the UK**

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Workshop structure

Forum Objectives:

- Exploration of the key trends identified during the first and second review phase of the Future Trends report;
- Identification of key trends that have not yet been covered;
- Prioritisation of the key themes by forum attendees;
- Impact and trajectory assessment of the key trends on countries and the global geospatial information community; and,
- Analysis of how the trends impact on the Integrated Geospatial Information Framework.

Breakout sessions:

Stage 1

- Discussion about which key trends that have not been covered.

Stage 2

- Chart the impact and trajectory of the key trends on countries and the global geospatial information community.

Stage 3

- Analysis of how the trends impact on the pathways of the Integrated Geospatial Information Framework.
- Further information to be taken into account.

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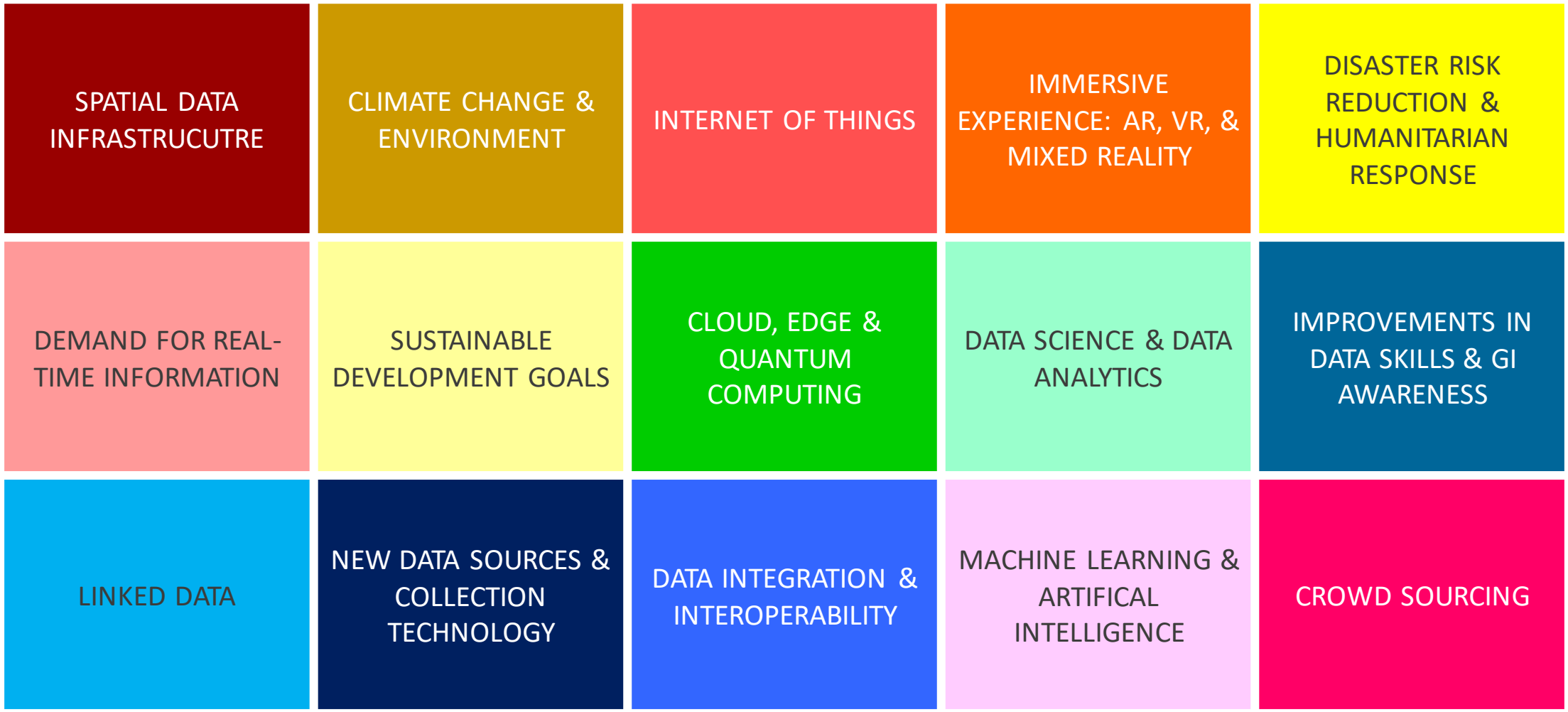
15 Key Trends



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SPATIAL DATA INFRASTRUCUTRE

A framework of technologies, policies, and institutional arrangements that together facilitate the creation, exchange, and use of geospatial data and related information resources across an information-sharing community.

CLIMATE CHANGE & ENVIRONMENT

A change in global or regional climate patterns resulting in the long-term alteration of temperature and normal weather patterns in a place.

INTERNET OF THINGS

The interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data.

IMMERSIVE EXPERIENCE: AR, VR, & MIXED REALITY

Immersive technology is an integration of virtual content with the physical environment in a way that allows the user to engage naturally with the blended reality.

DISASTER RISK REDUCTION & HUMANITARIAN RESPONSE

The systematic approach to identifying, assessing and reducing the risks of disaster; while dealing with educe socio-economic and environmental vulnerabilities.

DEMAND FOR REAL-TIME INFORMATION

Real-time data represented 15 percent of the datasphere* in 2017, and is expected to grow to 30 percent by 2025. This trend is closely linked to the growth in global connectivity.

SUSTAINABLE DEVELOPMENT GOALS

The 2030 Agenda for Sustainable Development, including the 17 SDGs set out to shape national development plans to achieve a better and more sustainable future for all.

CLOUD, EDGE & QUANTUM COMPUTING

Makes emerging technologies more efficient by bringing intelligence closer to the place where intelligence is needed, without having to route it back to a cloud or data center for processing, and then return it the device.

DATA SCIENCE & DATA ANALYTICS

Data science analyses large amounts of data to deliver value.

IMPROVEMENTS IN DATA SKILLS & GI AWARENESS

Society is becoming increasingly aware of the importance of data skills and its role in GI.

LINKED DATA

Linked data is a structured data which is interlinked with other data so that become more useful through semantic queries.

NEW DATA SOURCES & COLLECTION TECHNOLOGY

A wider variety of data sources and collection technology has emerged in recent years including satellite imagery, Smallsats, laser scanning, sensor networks, IoT, UAVs and drones, point cloud, EO and high performance spaceborne sensors.

DATA INTEGRATION & INTEROPERABILITY

Processes related to the movement and consolidation of data within and between data stores, applications and organizations. Integration consolidates data into consistent forms, either physical or virtual. Data Interoperability is the ability for multiple systems to communicate.

MACHINE LEARNING & ARTIFICAL INTELLIGENCE

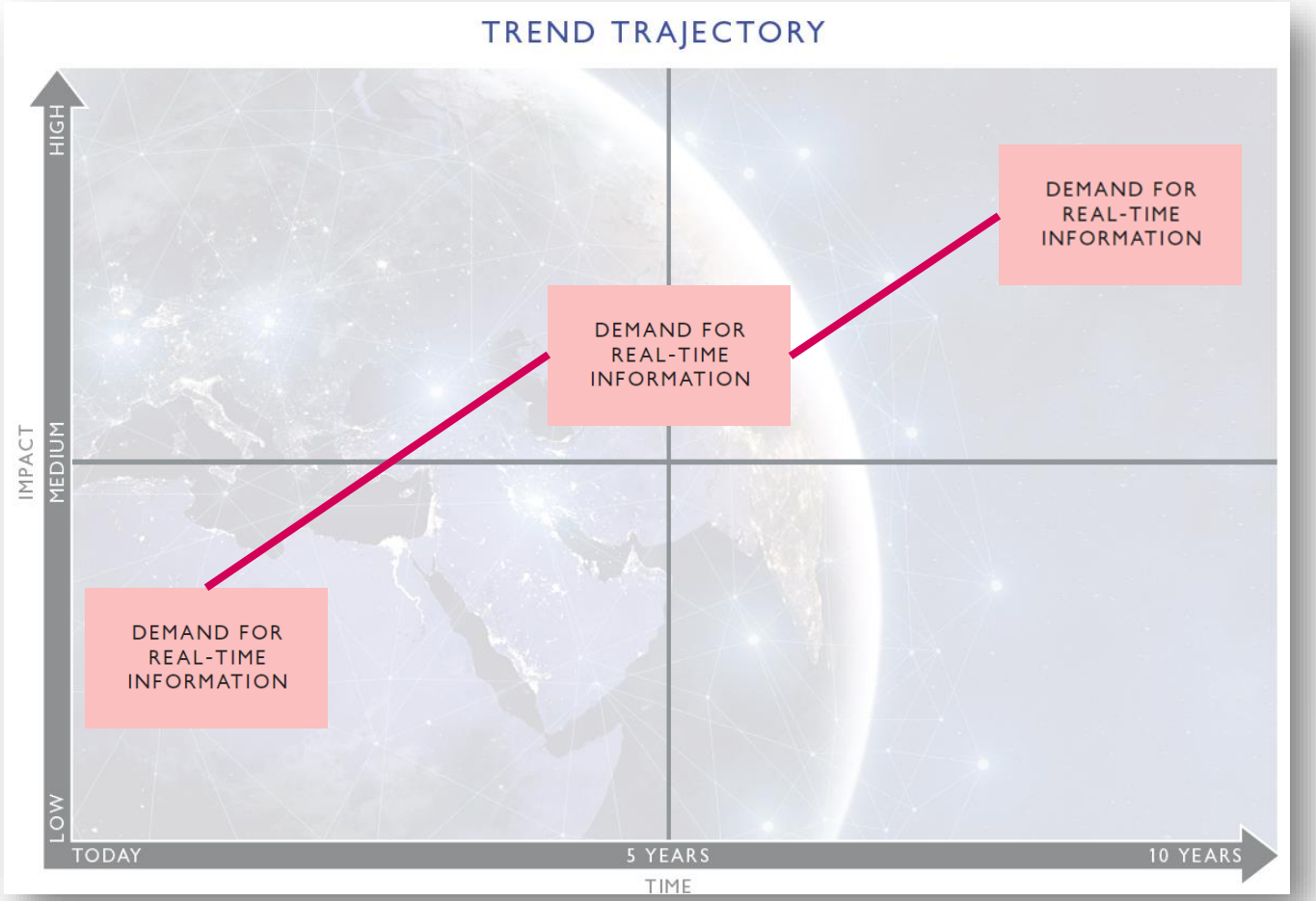
Machine learning describes machines that are taught to learn and make decisions by examining large amounts of input data.
Artificial intelligence describes a machine that is capable of imitating and performing intelligent human behaviour including problem-solving and decision-making.

CROWD SOURCING

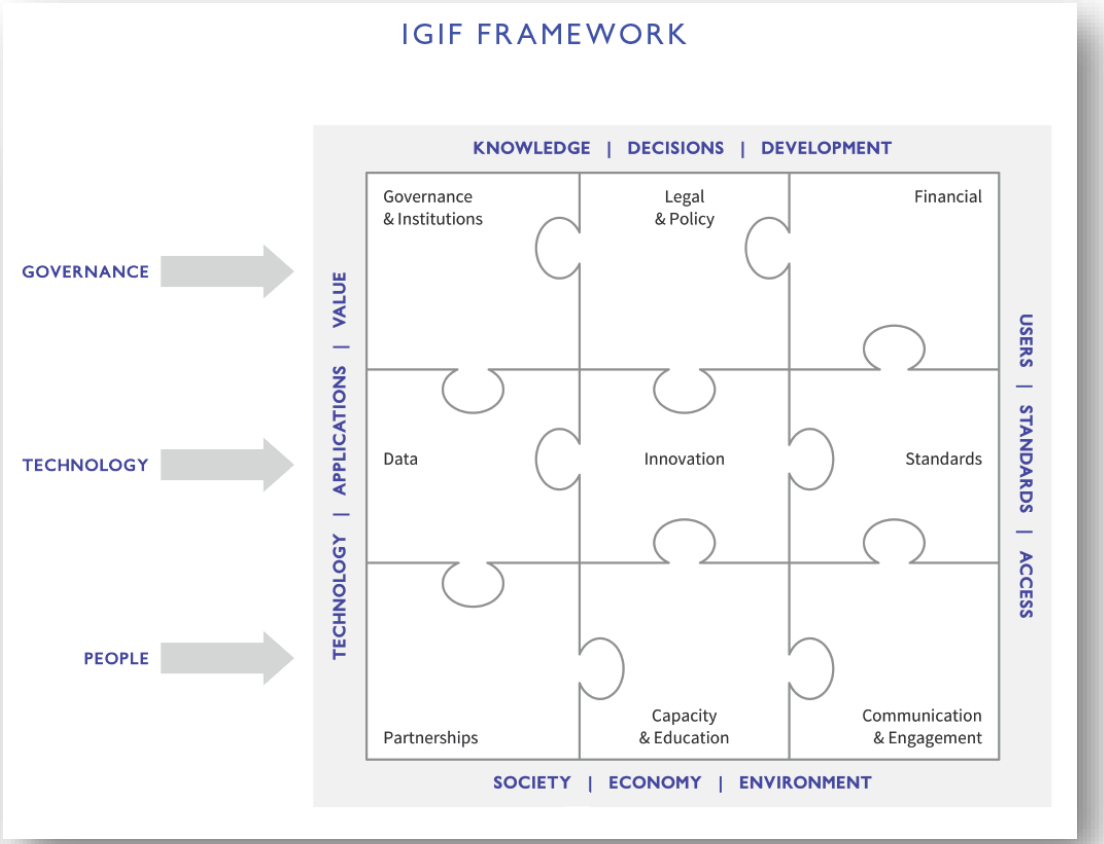
Crowdsourcing involves obtaining work, information, or opinions from a large group of people who submit their data via the Internet, social media, and smartphone apps.

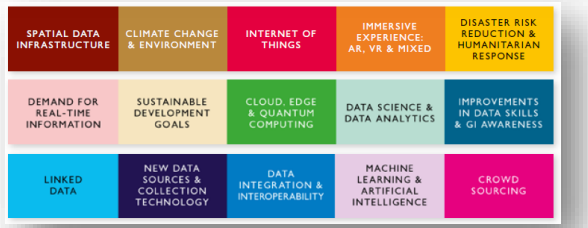
Workshop activities

Stage 2



Stage 3





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Thank you

For any enquiries, please contact FutureTrends@os.uk

Further information: http://ggim.un.org/future-trends/