# Paradigm Shifts in Space Technologies and Business



Finding the Route to Market – Identifying Opportunities

Sean McCarthy – Explore Markets





#### Refresh and Enhance - Routes to Market Reports for the UK Space Industry

- Innovate UK funded
- 35 wide ranging topics
- Brief & Concise to identify opportunities
- 20 Consultants market specialists
- 63 opportunities now being prioritised
  - Value
  - Technical difficulty
  - Timeliness
  - Fit to UK industry
- Common opportunities across topics

- Air Traffic Management
- Disaster Response
- Future Cities
- Galileo PRS
- Gaming & Augmented Reality
- Indoor Navigation
- Internet of Things Using Satcom
- Location Based Services
- Seamless Personal Comms
- Agritech
- Carbon Monitoring & Modelling Services
- Climate Risk Services
- Energy Infrastructure Monitoring
- Environmental Monitoring Services
- Insurance Services
- Maritime Surveillance
- Rail Traffic Management
- Road Traffic Management
- Weather Services

- Broadband to Aircraft
- Broadband to Ships
- Broadband to Trains
- Broadband to Vehicles
- Fixed Satellite Broadband
- High Altitude Platforms Comms
- Polar Region Comms
- Secure Satcom
- Unmanned Aircraft Systems Comms

LEO & MEO Integrated Constellations

- Persistent Surveillance
- Space Launch
- Space Surveillance And Tracking
- Space Tourism
- Space Traffic Management
- Space Weather





#### **Rationale for 35 Reports**

- 1. To understand the potential market for Space services
- 2. Rapidly compare a range of markets targets for deeper dive
- 3. To stimulate the development of new space derived opportunities
- 4. To provide independent, evidence based market intelligence
- 5. Build on previous reports by enhancing stakeholder information, market dynamics and quantifying opportunities





#### Clients want 'end to end' solution

- Ease of access to data sources or service
- Value added insights
- Understanding of client's business by vendor
- Used by non-specialists lack in-house skills





## Data Granularity; Geographic Coverage Timeliness; Cost of Ownership

align with changing business needs (driven by customer's customer)





#### **Business Case Help**

Client's often have little space expertise





#### **Shared Services to Reduce Costs**

even with competitors, if not core business





#### **Link to Other Corporate Initiatives**

IoT, Big Data Analytics, Connectivity, Social Media





#### **Next Steps and Exploitation**

- 1. Editing & reviewing reports factual
- 2. Basic ranking in order of opportunity to UK Space companies
- 3. Identifying opportunities that can be combined
- 4. Final format and publishing to web sites
  - Satellite Applications Catapult
  - Innovate UK
  - Space Agency
  - KTN
  - Authors sites?
  - Others TBA ..
- 5. Investigating dynamic publishing channels wiki?
- 6. Feedback and updated information welcome from industry
- 7. Encourage all organisations to use reports and comment





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### Thank you



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Credits, ESA/NASA