Creating space downstream applications

Space assets can be a key part of new innovative solutions which solve business challenges in a different way. They could save money, improve reliability or open up new avenues of business.

Space, specifically satellites and satellite data, offers solutions to many business challenges. For example:

- Satellite navigation is crucial to many future deployments of road user charging

- Earth observation provides critical information from which long term asset investment decisions can be made

- Emissions monitoring can often be efficiently performed from space

- Satellite communications link remote locations to the rest of the world.

Space is often seen as expensive or inaccessible for business users, but many services can be delivered better, faster, or for less cost using satellites. Sometimes it can create unique services that cannot be delivered any other way. Growing at an average of 9% per annum over the last decade, space is one of the fastest growing sectors as more and more businesses realise the commercial benefits it has to offer.

Key benefits

- Find your business challenges which could be solved using space technology

- Develop the ideas to discover the real opportunity

- Investigate them with the right team to see the value

- Create the applications with the right team

- Build a sustainable service in the right business model for you

- Benefit from over 35 years experience of delivering complex, mission-critical space systems

- Our software has supported the missions of more than 200 satellites and we have developed space enabled applications for health, transport, public sector, farming, oil and gas, trading, finance, insurance etc.

CGI

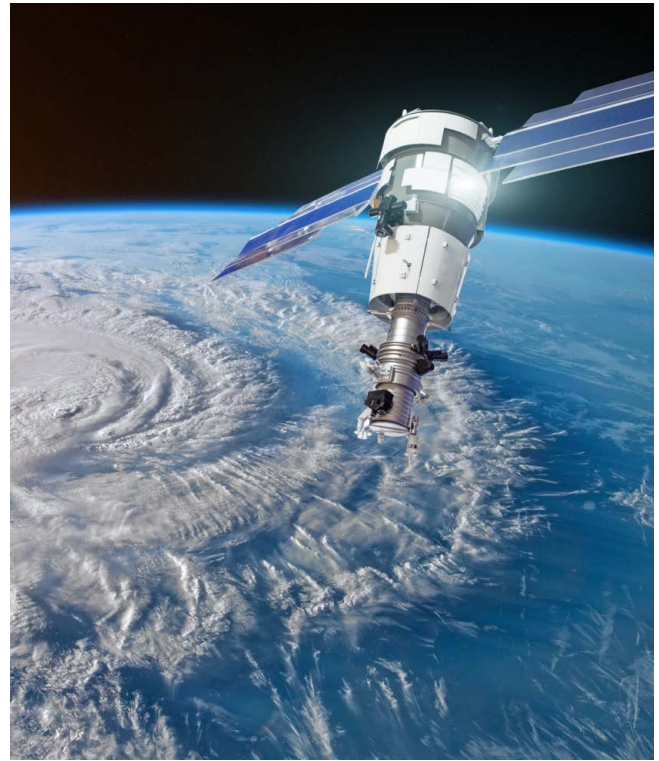# Our approach

Idea creation

We know how to identify which business challenges space can help solve or what opportunities the use of space technology can create for your business. Often this involves sharing examples of space applications and services to help 'blue sky' innovation which can find the best requirements where space could be part of the solution. As most of our company works in other market sectors we also have the experts needed to flesh out the ideas and build towards the requirements and solution.

We have Spark Centres across Europe providing dedicated environments to help create new ideas and ways of solving challenges. Our reputation in making this model work resulted in us being comissioned to build the Applications Innovation Centre (a Spark Centre for Space) now hosted at the Satellite Appplications Catapult, where many innovation workshops have been held. The European Space Agency has also commissioned us to run a high profile workshop involving space and insurance experts.

Deep domain knowledge

CGI has over 35 years of experience of delivering complex, mission-critical space systems and has highly qualified people across the key areas of a space solution; Earth Observation, Satellite Navigation, Satellite Communications and Space Security.

We have proven experience in leading consortia with a mix of SMEs, large primes and academic institutions to ensure that the potential of the most innovative technology and research is realized. A prime example of this is our leadership role in creating the UK national facility for Climate and Environmental Monitoring from Space (CEMS), where both public and private sector organisations are hosting innovative projects in areas such as renewable energy, carbon markets and climate change.

Systems integration

Developing an application or service often brings together many different technologies and legacy systems. CGI has delivered complex, mission-critical space systems for decades, and has a breadth of knowledge across a vast array of IT systems and technologies in all the major market sectors. The key is being able to bring all this together to offer an easy to use, resilient and secure service to our clients. For example, ESA chose us to lead the integration of multiple technologies to analyse the risk associated with landslides on Scotland's road and rail networks.

Sustainable service

Not only can we lead the development of innovative applications or services, but we can work with you to develop a business model to ensure the solution is sustainable. The key is integrating the space capability into your existing business systems and processes. We can provide a reliable, managed service to host our bespoke solutions and have a proven reputation in this with clients such as the UK Ministry of Defence, University College London Hospital and the UK's Crown Prosecution Service.

Why CGI

Space is less than 1% of CGI and the remaining 99% is delivering business critical systems and services to sectors such as banking, industry, transport, public sector, utilities, oil and gas, retail and telecoms. So we are especially well placed to identify where space technology and expertise can solve your business challenges. We also have the necessary ecosystem to help bring the right people around the table to implement the solution.

We are developing space enabled applications for many sectors, for example:

- Use of satellite navigation to demonstrate virtual tolling for road users

- Protection of commercial shipping from pirate activity

- Use of earth observation and satellite navigation to assess the risk of landslides and subsidence activity on Scotlands road and rail networks

- Hybrid satellite-terrestrial mobile broadband network for next generation European emergency service communications

- Use of high resolution imagery to support growth analysis of high value crops, in particular sugar beet and potatoes

- Deployment of eHealth services via satcom in Africa to deliver expert advice and training to remote regions

- Analysis of interconnecting journey legs for real-time route planning.

Why not contact us to find out what space could do for you?

About CGI

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. We are insights-driven and outcomes-based to help accelerate returns on your investments. Across 21 industry sectors in 400 locations worldwide, our 76,000 professionals provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

We are an IT Systems Integrator working to advise, build and operate bespoke, technically complex, mission-critical information systems. Bringing innovation to our clients using proven and emerging technologies, agile delivery processes and our expertise across space, defence, intelligence, aerospace and maritime, all underpinned by our end-to-end cyber capability.

For more information about CGI, visit cgi.com/uk/space, or email us at enquiry.UK@cgi.com