Emerging technology and the digital led university

Harnessing innovative technologies that bring higher education to life

- An Advisory Services PoV

CGI

From augmented reality that transforms learning, to geospatial technologies that assist research, the higher education sector is increasingly looking to innovative technologies as a means to dramatically address efficiencies and improve the university experience.

We generate ideas and build strategies, and manage scaled technology implementations and agile operations, helping universities to rethink everything they do.

The innovation edge is inundated with new technologies, tools and methods (including analytics, AI, machine learning, RPA, blockchain, internet of things and geospatial technologies) that can improve operations and unlock your university's full potential. But innovation investment isn't easy, and the first challenge is to develop a comprehensive plan aligned to achieve your desired outcomes.
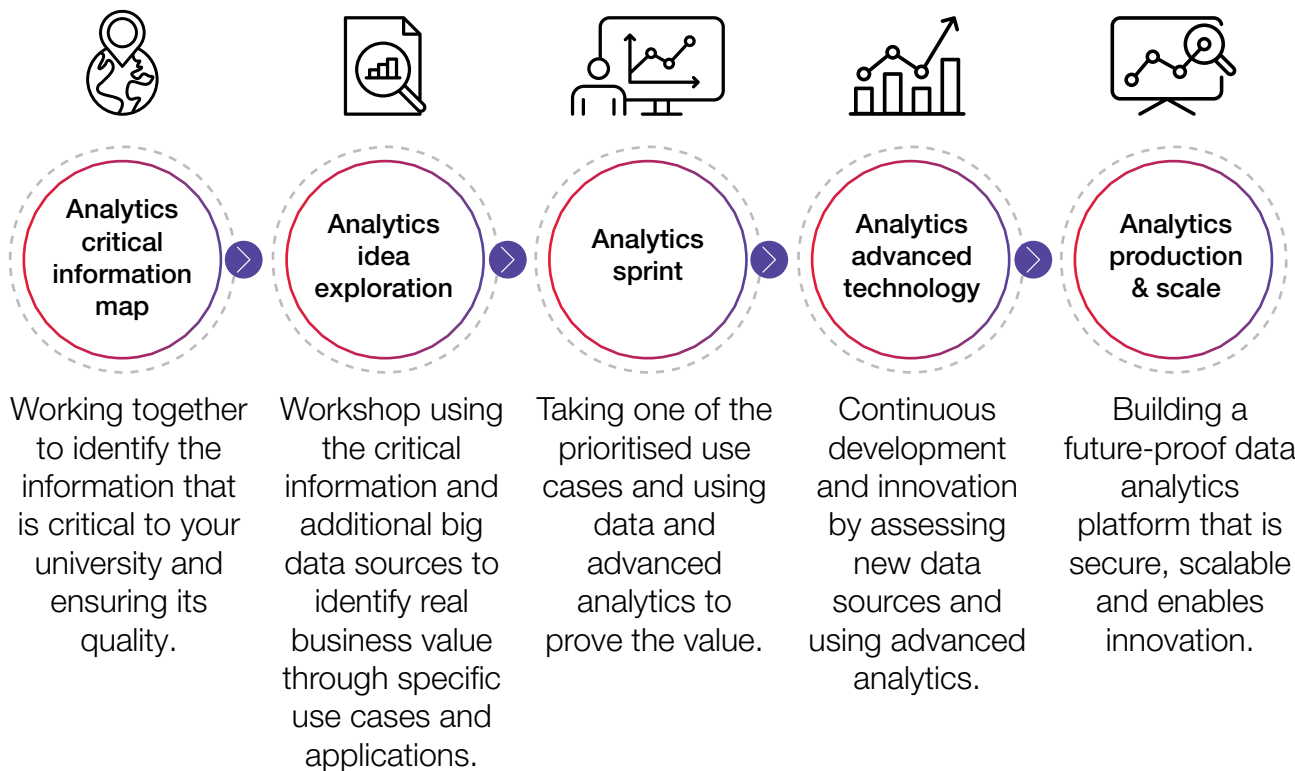
By partnering with CGI, we work together to add pragmatic thinking and design based upon global best practices to your digital innovation roadmap. Using our deep understanding of people, our change management support ensures that your innovation delivery succeeds and becomes embedded, whilst avoiding any missteps and wasted investment along the way.

Advanced analytics

We use our expertise and end-to-end advanced analytics capabilities to help universities navigate and manage their data repositories so that they can better operate to serve all stakeholders.

The result is real-time analytics that supports business decisions, providing a "single pane of glass" view across all aspects of university life. With these real-time insights, your university can act on live data and be on the front foot in terms of planning and decision-making.

Analytics critical information map	Analytics idea exploration	Analytics sprint	Analytics advanced technology	Analytics production & scale
Working together to identify the information that is critical to your university and ensuring its quality.	Workshop using the critical information and additional big data sources to identify real business value through specific use cases and applications.	Taking one of the prioritised use cases and using data and advanced analytics to prove the value.	Continuous development and innovation by assessing new data sources and using advanced analytics.	Building a future-proof data analytics platform that is secure, scalable and enables innovation.

Intelligent automation

Intelligent automation is our framework for implementing emerging technologies such as robotics, internet of things (IoT), advanced analytics and AI. These key technologies help universities respond to new challenges with robust, modern, efficient operations that benefit both the student and staff experience, as well as the financial stability of the organisation.

We can advise and support your university's journey with intelligent automation in many ways:

1

Augmented reality

From understanding AR's potential, to building full-scale, production-ready AR applications that bring together the physical and digital worlds, we help higher education institutions to envision new ways of operating and driving business value.

We support every step of the AR journey, to discover, evaluate, augment, connect, secure and integrate key data and create a new AR that helps the university to imagine, rethink and build. In turn, your organisation will harness the benefits of real-world AR applications, including: improved safety, quality and operational efficiency, better collaboration and exciting learning environments.

2

Blockchain

We help organisations use innovative blockchain technology to build next generation, secure, efficient services that meet student expectations. We enable close collaboration and enhanced trust across extended ecosystems, and increase the velocity of technology implementation and business change. In turn, the university is future-proofed and gains the trust of all university citizens.

3

Robotic process automation

Our Digital Led University vision transforms operations by automating repetitive, monotonous and resource-intensive tasks that are a burden on your internal administration. To create exceptional user experiences, many are rethinking service design using RPA to break down silos, allowing legacy processes to be examined to save time and empower human resources. Universities can also gain insights from historical data to help transform operations, improving the service and experience delivered.

4

Geospatial services

Having delivered geospatial services since 1992, CGI is now a recognised leader in this field with hundreds of experts working in our geospatial centres of excellence across 13 countries. We have an extensive record of delivering major geospatial projects and collaborate with some of the world's leading geospatial solution providers.

Digital twins, which is fast becoming the next step in digitalisation, often has a geospatial aspect. By integrating geospatial technology with mobile devices and augmented reality, and combining with IoT, advanced analytics, video analytics, AI and cloud platforms, we can create valuable capabilities for customer service, work automation and operations such as asset management. This technology can be used to enhance applications across the Digital Led Campus, for example, by linking location-based services to university portals, enabling wayfinding that supports safe navigation to buildings as well as a transformed self-service experience.

CGI as an emerging technology partner

We work at the edge of new technologies, and support our clients across the globe to implement the latest techniques and toolsets that will deliver the critical transformational change they desire.

Thanks to our experience of delivering meaningful use cases across the edges of innovation in every industry and globally, we are a partner that is perfectly matched to deliver outcomes across your campus and learning environment, adding value to all research projects.

Furthermore, as your university establishes itself as a leader for implementing these technologies, it will continue to add value to its locality and partners, inspiring services that will benefit a much wider populace beyond the university.
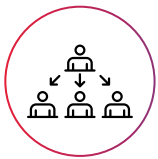
Why CGI?

+82,000 members

85% of members shareholders

+190 IP-based solutions

95% projects on time, on budget

9 SOCs worldwide, 2 UK-dedicated

5,500 end-to-end services clients globally

400 locations

40 countries
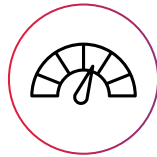
9.3/10 client satisfaction score

5 star SDI accredited service desk for 10 years

CGI Advisory Services

For 45 years, organisations have trusted CGI to transform their operations with innovative and reliable services and solutions. Committed to supporting our clients for every step of their digital journeys, two years ago we established our Advisory Services, where our experts utilise their vast knowledge and experience of delivering world-class IT to collaborate closely with clients and help them unlock their full potential.

It is here that our vision for the Digital Led University was developed. In our ever-evolving world, technology provides higher education institutions with unlimited opportunities to continuously adapt, and we understand that this digital transformation isn't simple! Our Digital Led University approach supports our clients with the right solutions that are aligned to their institution; the university experience is simplified, seamless and secure for the convenience of students, staff and investors, and your university benefits from an increased reputation, cost savings, sustainable operations and much more.

About CGI

Insights you can act on

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 hundreds of locations worldwide, we provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

Learn more at cgi.com/uk

For more information enquiry.uk@cgi.com