London Economics – Supplier prospectus

Futures Framework

Image: Myriams-Fotos/Pixabay

Contents

Introduction – London Economics

London Economics is one of Europe's leading specialist **economics and policy consultancies** and has its head office in London.

Our economic consultants are highly-qualified economists with experience in applying a **wide variety of analytical techniques** to assist our work, including **futures techniques** (e.g., horizon scanning, Delphi method, SWOT analysis etc.), cost-benefit analysis, multi-criteria analysis, policy simulation, scenario building, statistical analysis and mathematical modelling.

We are also experienced in using a wide range of data collection techniques including literature reviews, survey questionnaires, interviews and focus groups. In addition, we have extensive experience of using official statistical sources and private sector databases, often in **innovative** ways.

London Economics is committed to providing world class standards of advice and service to all of our clients, based on our core values of **independence**, **rigour** and **quality**.

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London Economics at a glance

London Economics (LE) is a full-service economic consultancy based in Central London.

35+ consultants specialised in economic and policy analysis, most of whom have delivered research to the public sector

1 in 4 consultants with **public sector** or **academic research** experience

Skills

Examples

Futures techniques
(e.g., Horizon Scanning, Delphi, SWOT)

Data science, machine learning & artificial intelligence

Behavioural economics

Qualitative research

Training and workshops

Value for money (VfM) analysis

Sectors

2 teams focused on **Science and Technology** issues

Data & Technology

Space

Other sectors

Consumer markets & protection

Education and labour markets

Energy, infrastructure and regulation

International trade and investment

Finance

Competition

Innovation and reliability

Sophisticated **Data science, machine learning** (ML) & **artificial intelligence** (AI) capabilities

An **innovative culture** (e.g., internal research on AI applications)

Rigorous **quality assurance** processes (ISO 9001:2015 standard)

A robust **data security** policy (e.g., Cyber Essentials Plus accreditation)

Public sector client examples

HM Treasury

Department for Business & Trade

Department for Science, Innovation & Technology

Department for Digital, Culture, Media & Sport

Scottish Government
Riaghaltas na h-Alba

Department for Energy Security & Net Zero

Llywodraeth Cymru
Welsh Government

Department for Work & Pensions

British Business Bank

Met Office

Department for Education

HM Revenue & Customs

Department for Environment Food & Rural Affairs

Ministry of Justice

FCA FINANCIAL CONDUCT AUTHORITY

Cabinet Office

CMA Competition & Markets Authority

Our experience delivering futures work

Overview

- We have delivered numerous projects involving futures work – predominantly in our **Data & Technology**, and **Space** practice areas.

- We also **combine futures techniques with our expertise in a range of sectors** and have done so in areas such as education, consumer policy and the financial sector.

Examples of futures techniques

- ✓ Horizon Scanning
- ✓ Delphi
- ✓ Uncertainty characterisation
- ✓ Scenario modelling
- ✓ SWOT Analysis
- ✓ Stress-testing

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Our experience delivering futures work

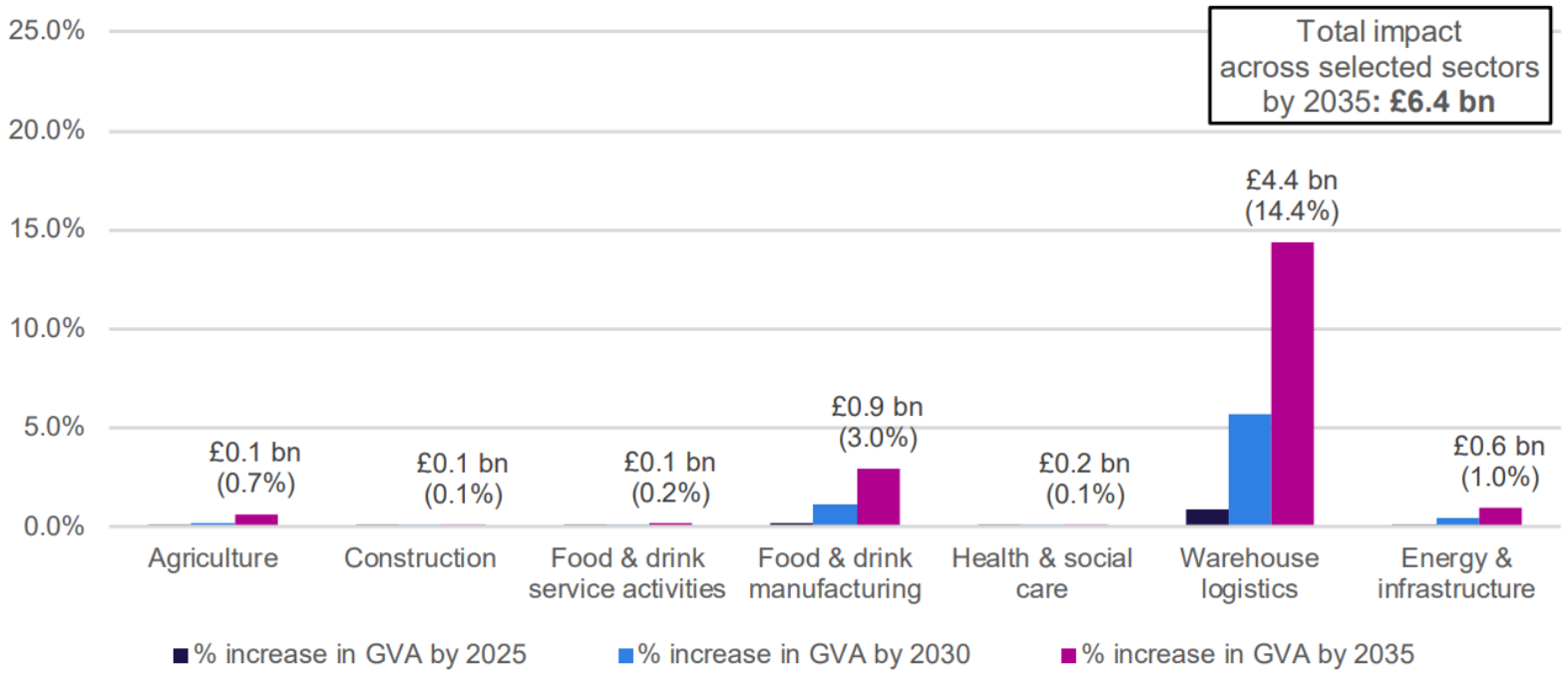
Case study – economic impact of Robotics and Autonomous Systems across UK sectors

- London Economics were commissioned by BEIS (now DSIT) identify key economic opportunities for Robotics and Autonomous Systems (RAS) uptake based on:
  - **Analysis of trends and forecasts** of the likely adoption of RAS across UK sectors **up to 2035**.
  - **Quantification of the impact** of RAS, based on analysis of the current RAS landscape and **key drivers**.

- This study enabled BEIS/DSIT to understand where the key future economic opportunities lie for RAS uptake across the wider economy.

- The study has been **used by Government as a tool of engagement** to show the importance of robotics to Ministers and cross-government stakeholders.

Estimated economic impact from RAS uptake



Note: The figure shows the % increase in gross value added relative to baseline, given estimates of future adoption trends and displacement assumptions made.

Source: London Economics' analysis

Data & Technology team

Overview

- Advances in technology are a key source of economic growth and dynamism.

- Our expertise in this area is underpinned by our **practical know-how in advanced analytics and AI** and our understanding of the economics of innovation and competition in dynamic technology markets.

- Our services are powered by our sophisticated cross-cutting **Data science, machine learning (ML) & artificial intelligence (AI) capabilities**.

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Data & Technology team

Overview

We advise on:
(examples)

- Artificial Intelligence (AI)
- Robotics and Autonomous Systems
- Industry 4.0
- The Internet of Things (IoT)
- Advanced Materials
- High-Performance Computing
- Nuclear Fusion
- The economics of data protection
- International trade in data
- Data sharing between organisations
- Data institutions

Data & Technology team

Case study – AI for services

- Two studies on the latest **trends in technology adoption and use** in the UK accountancy, insurance and legal services sectors and their impact on business transformation.

- These reports focus on the use of advanced and disruptive technologies including AI and advanced machine learning (ML), Internet-of-Things (IoT) and Big Data, advanced cloud computing technology, robots, robotic process automation (RPA) and blockchain. The studies included:

  - A **SWOT analysis** together with actionable steps that actors in the sector could take to ensure the services sector reaps the maximum benefit in the future from AI and data.

  - **Stakeholder interviews** and **original surveys** to reveal **key drivers** shaping innovation.

  - A **benchmarking** exercise to compare the UK against other countries' use of technology in service sectors.

- The SWOT analysis fed into a **set of recommendations and lessons** for the UK services sector and wider government to overcome challenges and exploit opportunities for further technology adoption.

Space team

Overview

- Across more than **140 projects** over the last **15 years**, the London Economics Space Team has established itself as a **leading provider** of economic analysis, demand modelling, and market analysis services for the space industry.

- Our interests and expertise in space encompasses the **full vale-chain** and **all space technologies** – areas where we have developed sizeable **proprietary databases**, **knowledge of key players**, and an **extensive global network**.

- This expertise has been used to advise investors on the **commercial potential** and credibility of **prospective investments**; space operators and start-up companies on investment opportunities and **future markets**; government on their national space strategies and **future market opportunities**, and space agencies on the value of their investments.

- To deliver these complex assignments, the team is well versed in working with and integrating the outputs of **interdisciplinary teams**, including engineers, regulatory experts, lawyers, subject matter experts, and bankers.

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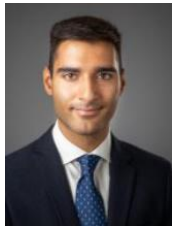

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Space team

Overview

We deliver:

- Market sizing and forecasting
- Technology analysis
- Return on Investment
- Business cases
- Commercial due diligence
- Competitive assessment
- Strategic insight

Space team

Case study – Research for the European Union Agency for the Space Programme

- LE was tasked with delivering a Cost-Benefit Analysis of potential investment options in Europe's next generation of Galileo satellites – Europe's Global Navigation Satellite System (GNSS) for positioning, navigation, and timing services. Each investment option corresponded to different technical scenarios for the global satellite constellation – each implying different levels of service performance and at different cost (in the order of € billions).

- The European Union Agency for the Space Programme Agency (EUSPA) intended to use this information to prioritise options in close collaboration with EU Member States and states allied to EU GNSS programmes, who would provide the funding.

- To do this, LE needed to estimate the overall benefits of the new infrastructure for service users (citizens, businesses, government), the supply-chain, and wider economy over the **time period 2035-2045**. To assess the benefits to users, LE undertook detailed analysis and **horizon scanning** of competing technologies and sources of position, navigation, and timing data in the future and the potential future requirements of users across different end-user applications (e.g. maritime, road, aviation, consumer, infrastructure) to understand the incremental benefits of the new infrastructure.

- Benefits were assessed in quantitative and qualitative (strategic and security) dimensions. A **Delphi process** was undertaken with stakeholders to arrive at a consensus for the weighting of both types of benefits in the **multi-criteria analysis**. As quantitative benefits were due only in the future, results were subject to **uncertainty characterisation** to ensure stakeholders understood the ranges of results.

- Our research served as inputs into the EU policy cycle and decision on the future development of the European navigation satellite system.

Behavioural economics team

Overview

- We apply innovative, leading-edge techniques in the fields of behavioural and experimental economics. We combine behavioural science such as 'Nudge Theory' together with academically rigorous testing to deliver insights into consumer and firm behaviour where conventional techniques reach their limits.

- We work across multiple policy areas, such as regulated industries (finance, water, gas, electricity and telecommunications), education, environmental policy, and competition assessment.

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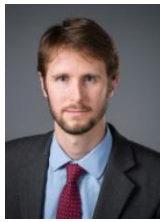

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Behavioural economics team

Overview

We deliver:
(examples)

- Behavioural experiments
- Consumer and firm willingness-to-pay
- Wind tunnelling/road testing future policy/interventions
- Training and workshops
- Competition analysis incorporating behavioural analysis
- Understanding the effects of behavioural biases
- Impacts of framing and pricing strategies on consumer behaviour

Behavioural economics team

Case study – Digitalisation and the money market

- With cash usage declining, central banks internationally are exploring how digitalisation may affect the money market over the **long-term horizon**. LE designed and analysed a quasi-behavioural experiment to explore consumers preferences around money and the future.

- Qualitative research **mapped the drivers and barriers** to digitalisation. The quasi-behavioural experiment tested **built scenarios** that consumers may face (e.g. a windfall gain, a new tech firm entering the market with a digital currency) to understand how consumers may respond to these scenarios and **stress-test** the performance of a central bank digital currency compared to alternatives.

- This study informed the client's understanding of consumers' appetite (drivers and barriers) for digitalisation. Findings will feed into a feasibility assessment and potential design of a Central Bank Digital Currency which would operate alongside cash.

Finance team

Overview

- We have a long and proven track record of public sector clients on financial sector issues.
- We help clients in addressing their issues by providing focused and academically robust analysis, studies and **policy recommendations** using a **multi-disciplinary approach**.
- We work with both micro and macro data, use various **state-of-the-art econometric and non-parametric techniques**, undertake **surveys**, run **financial services user experiments**, run **stakeholder consultations** and **workshops**.
- Our work is frequently peer-reviewed by academics.

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Finance team

Overview

We advise on:
(examples)

- The functioning of capital markets
- Banking
- Credit markets
- Payment services
- Regulation of institutions
- Financial sector infrastructure
- Personal debt and bankruptcy
- Consumers in financial markets

Finance team

Case study – Study on the creation of a Capital Markets Union (CMU) indicators dashboard

- The Capital Markets Union (CMU) aims to improve access to market finance and mitigate the risks inherent in a financial system too dependent on the banking sector.

- LE developed a **dashboard** to monitor progress towards achieving the CMU. The research was conducted through a mix of **literature review**, **stakeholder consultations** and **empirical analysis**.

- Based on an extensive review of the existing literature and insights from key stakeholder groups, **driver mapping** was conducted to illustrate the relationship between the CMU objectives and the enablers/barriers influencing them.

- Indicators were then identified to populate the driver map for **data visualisation** and **dashboard development**.

- The CMU indicators dashboard helps to highlight progress achieved (to date) towards the CMU, flag potential shortcomings, and inform future policy actions.

Education and Labour Markets team

Overview

We have extensive experience in education and labour market policy analysis. For example, our experience includes analyses of:

- Higher education fees and funding systems, and the impact of higher education on individuals, the Exchequer and society.
- The incidence and outcomes associated with apprenticeships and other vocational qualifications at all levels.
- The secondary education system (e.g. in relation to educational attainment and child outcomes, qualification regulation, and special educational needs).
- Labour market outcomes, e.g. in terms of the impact of qualification attainment and other government policies on earnings and employment outcomes.

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Education and Labour Markets team

Overview

We deliver:

(examples)

- Sophisticated econometric analysis
- Cost effectiveness and cost-benefit analysis
- Policy evaluation and impact analysis
- Survey design and primary data collection
- Secondary data cleaning, processing, and imputation

Education and Labour Markets team

Case study – Modelling the Welsh higher education funding system

- As part of the Diamond Review of higher education in Wales, we modelled the Welsh higher education funding system in existence at the time, and the associated resource flows between students/graduates, the Exchequer, and higher education institutions. We also undertook a detailed analysis of the **long-term trends** in higher education in Wales.

- Based on an extensive literature review and stakeholder consultations, and a complex economic model of the impact of the funding system on the different stakeholders, we modelled a number of **alternative scenarios** to assess a range of potential alternative funding systems to deliver a sustainable funding system for Wales.

- The analysis **resulted in a transformational change** in the approach to funding higher education in Wales. Following the implementation of the recommendations – in full - there has been a fundamental **reversal of the decline in part-time study** that had been occurring since 2010. In addition, the **significant cost savings delivered** as part of the Review have allowed the Welsh Government to invest more heavily in other parts of the education system (particularly in apprenticeship funding).

Competition, Regulation, trade and investment teams

Overview

- Our **International Trade and Investment team** analyses international trade and FDI flows and their interaction with different areas of trade policy.

- Our **competition team** has worked for competition authorities and regulators in Europe and Asia, on merger analysis, antitrust cases, cartel damages litigation, and providing competition policy support in areas such as market definition, vertical and horizontal agreements, and State aid. We have provided competition advice, reports and expert opinions across a range of sectors including telecoms, media and retail, to clients in both private and public sector.

- Our **regulatory economics** expertise extends across all the major regulated utilities, sectors and industries, with particular expertise in energy, water, air transport, telecommunication and postal services markets.

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Competition, Regulation, trade and investment teams

Overview

We can advise on:
(examples)

- Monitoring
- Economic impact assessment
- Evaluation
- Understanding drivers
- Market definition and analysis of competition and dominance
- Competition enforcement in mergers, antitrust and cartel damages
- Investment appraisal, impact assessments, and policy evaluation

Competition, Regulation, trade and investment teams

Case study – Estimating the economic impact of FDI to support DIT's promotion strategy

- We were commissioned by the DIT (now DBT) to estimate the economic impacts of Foreign Direct Investment (FDI) on the UK economy.

- Based on firm-level data for Great Britain between 1998 and 2014, the analysis estimated the net impact of a 1% increase in FDI stock in Great Britain in terms of gross value added, employment, average wages, apparent labour productivity, and research and development.

- The results have been used by the DIT to support their value-based investment promotion strategy.