

# Transform complex data challenges into meaningful solutions

### Contents

1

Why data matters

2

Our philosophy 3

Our core capabilities

4

Who we help 5

Case study: UK defence

6

Our approach

7

Our people 8

Our social values

9

Case study:
Adra

10

What our clients say



# Why data matters now more than ever

As cloud technologies and AI become central to modern operations, organisations face increasing pressure to turn data into actionable insight.

But many are still held back by fragmented systems, outdated infrastructure, and poor data quality.

Butterfly Data helps public and private sector organisations overcome these challenges by unlocking the full value of their data to drive smarter decisions, operational efficiency, and sustainable growth.

Our goal is to make data work seamlessly for you, turning complexity into clarity and insight into action, by putting data behind every decision.

# Our data talks

- 6+
  years trusted delivery
- **68+** critical projects brought to life
- Q-35+ clients empowered by data
- >1/3
  clients returned for more

## Our philosophy

We empower organisations to make ethical, inclusive, and accountable decisions by unlocking the full potential of their data - putting meaningful insight and sustainability at the heart of every choice.



#### Integrity, honesty and fairness

We never wing it. We serve our clients with honesty and fairness, setting realistic expectations without over-promising.



#### **Technological mastery**

We combine thoughtful expertise with the right technology to tackle data challenges with care and clarity.



#### Collaborative culture

We don't just stick to the script, we communicate openly, work flexibly and embrace your culture - going the extra mile to drive progress.



# Security, privacy and transparency

You can trust us to keep your data safe. We respect the privacy of you and your customers, practice technical rigour, and are committed to transparency.



#### Working together

As an employee-owned business, we believe in shared success. We support one another, grow together, and deliver work we're proud to put our name behind.



#### Making a difference

We're more than just data people. From socially responsible projects, to supporting fairness and inclusion in tech, we aim to make the industry (and world) a better place.

# Our core services & capabilities













## Data quality, governance and privacy

- Automated cleansing frameworks
- Master data management
- Metadata cataloguing
- Governance and privacy aligned to industry standards and regulation



## Data analytics and visualisation

- Interactive reporting & KPI tracking
- Dashboard development
- Self-service analytics enablement
- Custom visual frameworks



# Data engineering, integration and cloud adoption

- Cloud migrations
- Data lake & warehouse solutions
- Streamlining legacy systems
- Cross-platform interoperability
- ETL/ELT development



## Data science and Al

- Predictive analytics
- Machine learning model development
- Business simulation
- AI advisory & proof-of-concepts

# Who we help

Government



Healthcare



**Defence** 



**Emergency services** 



Energy and utilities



Financial services



# Don't see your industry?

Our consultants have a longstanding track record across various industries and will rise to the challenge alongside your subject matter experts.

We embrace a collaborative approach that builds on each other's expertise, taking our work to new heights.

Contact us



CASE STUDY

# Enhancing the future defence workforce through data insights

#### Client:

UK defence organisation

#### Services delivered:

- Open-source data analysis
- Strategic advice
- Client reporting



#### The challenge

A leading UK defence organisation needed to quickly boost its in-house data analysis capability for sensitive, high-impact operations. At the same time, it faced growing recruitment and retention challenges driven by demographic shifts, evolving societal norms, and increasing demand for digital skills. To stay ahead, the client required targeted workforce analysis to explore:

- How UK population trends will affect recruitment by 2030
- Emerging skills gaps in engineering and digital education

#### Our approach

We conducted a focused analysis using open-source data to assess demographic shifts, educational trends, and future skills needs. Our work identified key risks, such as STEM skills gaps and recruitment challenges linked to population changes. Findings were compiled into a clear, actionable report covering:

- Trends in STEM education
- Skills for future defence roles
- Demographic impacts on hiring

#### The outcome



Clarified reasons for decline in eligible recruits



Identified new opportunities from educated candidates



Exposed data gaps for better engagement with candidates



Advised targeting youth, diversifying fields, and updating systems

# Our approach works

We are a trusted partner for data-led initiatives, helping clients turn complex data into clear, actionable insights. All while balancing business and user needs to ensure every decision is rooted in understanding, not guesswork.



#### **Flexible**

We integrate with your teams and partners, scaling support as needed. Our adaptive model means we can pivot fast and deliver exactly what's needed, when it's needed.



#### Bespoke

Every solution is tailored. We take time to understand your unique needs and build systems that fit seamlessly into your existing setup.



#### Agile

We align with your goals and timelines, working iteratively to stay responsive to change. This keeps delivery on track, costs in check, and solutions relevant.



#### Comprehensive

We combine deep expertise across disciplines to solve immediate problems and uncover future opportunities - delivering smart, scalable results.



#### Secure

Security is built into everything we do. Our experience teams follow strict data, privacy, and compliance standards - ensuring integrity onsite or remote.



#### Creative

We experiment, prototype, and iterate with purpose. By blending insight and innovation, we help you turn big ideas into real solutions.

# Our people behind the data

Since becoming employee-owned in 2021, every team member is personally invested in our clients success.

#### What you can expect:

- Cross-functional teams of engineers, data scientists, and strategists
- Dedicated account partners for every engagement
- A people-first culture with a passion for real-world impact

Meet the team





# Our social values













#### **Economic equality**

We're a proud Living Wage Employer,
offer career growth through our
Graduate Scheme, provide internal and
external mentoring, and our commit to
Pledge 1%.



#### Wellbeing

From private health cover to our Spring Summit retreat, we support the mental, physical, and social wellbeing of our team.



#### Climate change

Through our Carbon Reduction Plan, EV scheme, and hybrid work model, we're taking meaningful steps toward Net Zero.



#### **Equal opportunities**

As an Armed Forces Covenant signatory and employee-owned business, we ensure every voice is heard and every background valued.

CASE STUDY

#### Near-Time IoT Data Integration

#### Client:

Adra Housing

#### Services delivered:

- Engineering of Azure infrastructure
- Pipeline connection to TTN
- Training sessions



#### The challenge

Adra previously used a legacy AWS and InfluxDB system but needed support to migrate and improve it on Azure. The goal was to build an interface connecting The Things Network (TTN) with Adra's Azure infrastructure, enabling smooth, near real-time data transfer to an SQL database. The solution also had to be scalable for future sensor integration.

#### Our approach

Butterfly Data built a fully integrated data pipeline in Adra's Azure environment, enabling smooth transition and independent management.

We set up a secure Azure infrastructure with an SQL database, connecting TTN to pull and decode sensor data. Data is transmitted securely to Azure IoT Hub in near real-time, enriched with extra sensor details via API calls. Custom data views provided deeper insights—like average readings and device status—making analysis easier and reducing dashboard workload.

The system was designed for future scalability to support additional sensors.

#### The outcome



Delivered on-time with no disruption to Adra Housing's operations



Enabled near real-time data access with improved usability



Streamlined data processing for faster, smarter decisions



Equipped Adra's team for independent system management



## What our clients say



Butterfly conducted interviews with 15 strategic leaders in national policing to work out how they currently use data in their roles, and how they feel data use needs to change to improve policing. This was the foundation of the next stages of the data journey, which resulted in building a digital data product. We still refer to Butterfly's user story outputs on our data journey.

HMICFRS, DELIVERY LEAD



Butterfly successfully delivered our project to integrate The Things Network (TTN) with our Azure infrastructure, ensuring seamless real-time data transfer and secure storage to a SQL back end. They met all our technical and security requirements, followed best development practices, and provided comprehensive documentation. Their professionalism and expertise made the process smooth, and we are very pleased with the outcome.

ADRA HOUSING, DELIVERY LEAD



Working with Butterfly is easy. The team were eager to learn our business in order to understand our requirements. This enabled them to deliver a piece of work that achieved more than we could have hoped at the outset, including providing a comprehensive report which included actionable recommendations. I would have no concerns over working with the Butterfly team again.

CTPHQ, PRODUCT OWNER



Butterfly have delivered a high quality analysis of our data that shows the level of insight that can be drawn out of it, which will have an impact on future strategy and work planning for our organisation.



Butterfly have been a pleasure to work with, offering exceptional service and outcomes which will have immediate positive impact on Project delivery and Project users. The added value offered through this project will resonate for many years.



## Get in touch

Learn more about us



Let's talk about data - we would love to hear from you.



Email us at <a href="mailto:hello@butterflydata.co.uk">hello@butterflydata.co.uk</a>



Call us on <u>029 212 00140</u>











