



Trust. Value. Velocity

G-Cloud 15

Microsoft Business Intelligence, Analytics and
AI Service

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1. About Mastek

Mastek has been delivering Critical National Infrastructure programmes in the UK Public Sector for over a decade now. We are trusted with multiple contracts for the UK Government across Central Government, Health, Local Government, Policing, Public Protection and Defence. The majority of our national services are delivered in contexts of high uncertainty and complexity, while collaborating across multi-supplier environments.

While working for these large and complex public sector organisations, we have continuously refined our management, delivery and underlying processes to reflect key learnings from the sector:

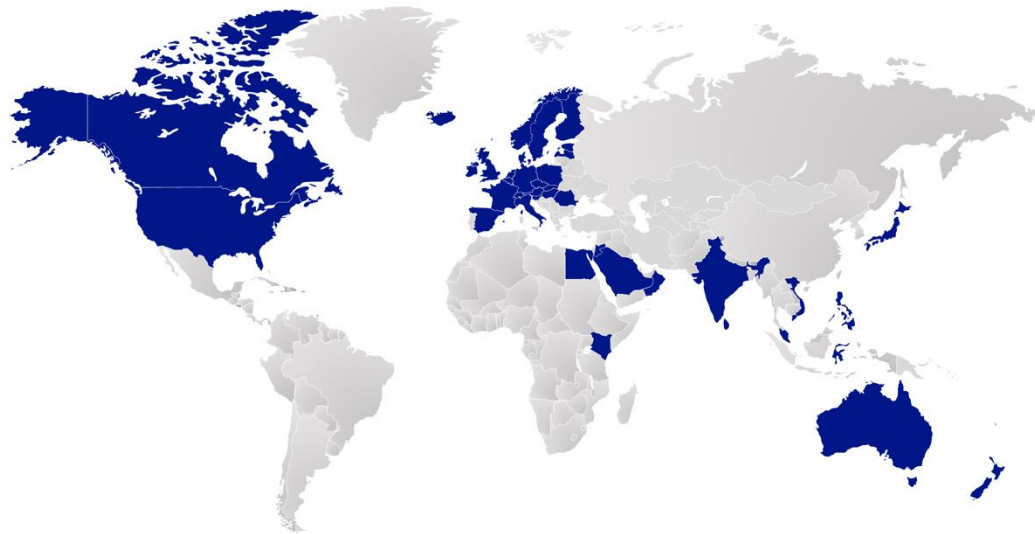
Working through a complex stakeholder landscape: We understand the importance of establishing effective communication channels, building trust and fostering a collaborative working environment that empowers stakeholders to contribute meaningfully to the project's success. Our approach is based on a deep understanding of stakeholder needs and requirements. We leverage our experience and expertise to design governance structures that promote transparency and accountability and use data-driven reporting mechanisms to ensure stakeholders have real-time visibility into project status and progress. At the Home Office, GDS, the Ministry of Defence and the NHS, we have a proven track record of working seamlessly with large stakeholder groups, including civil servants.

Standards, compliance: We comply with >20 policies and standards, including Government Digital Standards and the Government CDDO Service Toolkit, covering service standards, service manuals, TCoP and API technical and data standards. Our stringent governance, methods, playbooks and processes (manual and automated) span across service delivery phases, ensuring continuous compliance.

Policy-driven: Policies and procedures largely drive Public Sector organisations. We need to be Agile and flexible to meet demands for policy/regulatory changes, geopolitical events and ministerial commitments.

Culture: We adhere to the Civil Service core values of integrity, honesty, objectivity and impartiality. Key behaviours we promote stem from a combination of Civil Service and Mastek values. These include being passionate, accountable, sustaining predictable and repeatable outcomes, not transferring risk, transparent, leading to enable, acting with transparency, practising a no-blame culture and being flexible.

Mastek's global presence



Australia

Austria

Bahrain

Belgium

Brunei

Canada

Denmark

Egypt

Estonia

Finland

France

Germany

Hungary

Iceland

India

Indonesia

Ireland

Italy

Japan

Jordan

Kenya

Kingdom of Saudi Arabia
(KSA)

Kuwait

Latvia

Luxembourg

Malaysia

Netherlands

New Zealand

Norway

Oman

Philippines

Poland

Romania

Singapore

Slovakia

Spain

Sri Lanka

Sweden

Switzerland

United Arab Emirates (UAE)

United Kingdom

USA

Did you know?

75%

Around three quarters of Local Authorities in the UK who run Oracle have worked with Mastek on their digital transformation journey.

300,000 Users

Supported managing up to 750,000 logins per month to MOD through Identity and Access Management

Crime reduction

We designed, built and manage the UK's Strategic National DNA Database that helps Forensics and Law Enforcement Authorities investigate & stop crime

90% faster

We enabled the National Health Service (NHS) to drive 90% faster response times with a billion pharmacy prescriptions a year.

Technical Service Desk

We provide level 2 and ITSM support for the One Login service at Government Digital Service

22k

Our systems enable 22,000 schools to function efficiently every day of the year.

Healthcare and manufacturing

We delivered Finance, HCM & Supply Chain transformations for clients across health and manufacturing globally powered by Oracle Cloud

Transformation of trade

Transforming UK's trade with the EU and rest of the World by supporting Customs Declarations Services and its trade users.

99.99% Availability

We support the Home Office Biometrics (HOB) Platform, Having migrated it to an AWS platform.

Our digital and cloud services portfolio

Powered by Glide 4.0 and value-based delivery

Industry-aligned approach with business outcomes

Digital engineering and experience	• Cloud engineering & migration • Legacy modernisation • Low code / no code App Dev • DevSecOps • Enterprise integration	• MACH • Digital commerce • UX & CX • Platform engineering • Gen AI software development.
Oracle Cloud and enterprise apps	• Oracle Cloud applications • Oracle consulting • Oracle Cloud infrastructure	• Value-based delivery • Glide 4.0.
Data, automation and AI	• Cloud data modernisation • Business Intelligence & Analytics	• Data management • Intelligent automation • Data Governance.
Salesforce	• Sales Cloud • Service Cloud • Marketing Cloud • Industry Cloud	• Experience Cloud • Mulesoft.
Innovation labs and platforms	• Enterprise workforce scheduler • Connected enterprise • icx-Pro – intelligent part assistant	• iLeaseFinPro.
Cloud enhancement managed services	• Oracle managed services • Digital managed services • Commerce managed services	• Salesforce managed services.

Home Office Biometrics (HOB)

Public sector platform modelled 24x7 with 99.99% availability

Problem

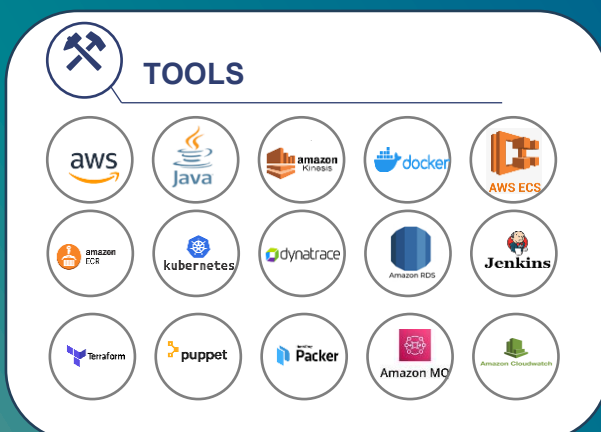
- Transition business-critical Platform services from incumbent supplier with minimal risk
- Migration from private cloud to AWS Cloud.

Solution

- Migrated the infrastructure from private cloud to AWS
- Embedding Kubernetes Containerisation
- Introduced Docker and fully-baked AMIs
- Supporting the platform's self-service functionality using Jenkins Jobs
- Applying security updates to the OS base images through pipelines
- Instituting automated patching and testing for infrastructure images
- Support of configuration, test and releasable artefacts through the pipeline.

Outcome

- **Zero impact** on live service
- **80% automation** of SIT
- Environment Provision **2 days to 1 hour**
- **5x scalability** in handling student BRPs
- Cost saving the authority circa **£9.5m/year.**
- Won the '**Best Use of Cloud Services**' award
- **35%** Incident Volume Reduction.



Government Digital Service

Problem

GDS initiated the One Login programme to create a single front door for identity verification and authentication, which could be adopted and scaled across all government departments. This would improve the user experience by providing the public with a single identification and verification service for the government, reduce costs as each department no longer required its own identity service and reduce identity fraud and identity-enabled crime.

GDS released a tender in June 2023 to provide a Technical Service Desk (TSD) managed service for the One Login service. This service would provide a single point of contact for level 1 and 2 service support as part of the wider support ecosystem. It would be provided in the UK and replace the incumbent's scaled-down non-ITIL-aligned break-fix service.

Solution

In September 2023, Mastek were successfully awarded the TSD contract to deliver TSD on behalf of GDS. GDS had an extremely aggressive programme driven by the onboarding of HMRC as a user, which was a major milestone planned for February 2024, migrating new and existing HMRC users to the One Login platform. The TSD service was expected to go live in November 2023. This was an extremely complex programme which, within this timescale, would deliver:

- The contact centre provider for level 0 directly facing the public
- The TSD supplier in place directly facing all government departments
- The TSD supplier in place providing L1 and L2 engineering support and monitoring
- Continued delivery on the One Login backlog of features
- Continued migration of smaller government departments to the platform.
- Delivery of a new ITSM toolset to be configured for use by GDS and the One Login programme, integrating level 0 to level 3 support
- Working as one team, Mastek quickly integrated into the programme, appointing the leadership team early in the engagement. We collaborated with GDS from the outset, ensuring we tailored the service to their expectations rather than delivering what was written in the contract.

Our leadership team consisted of:

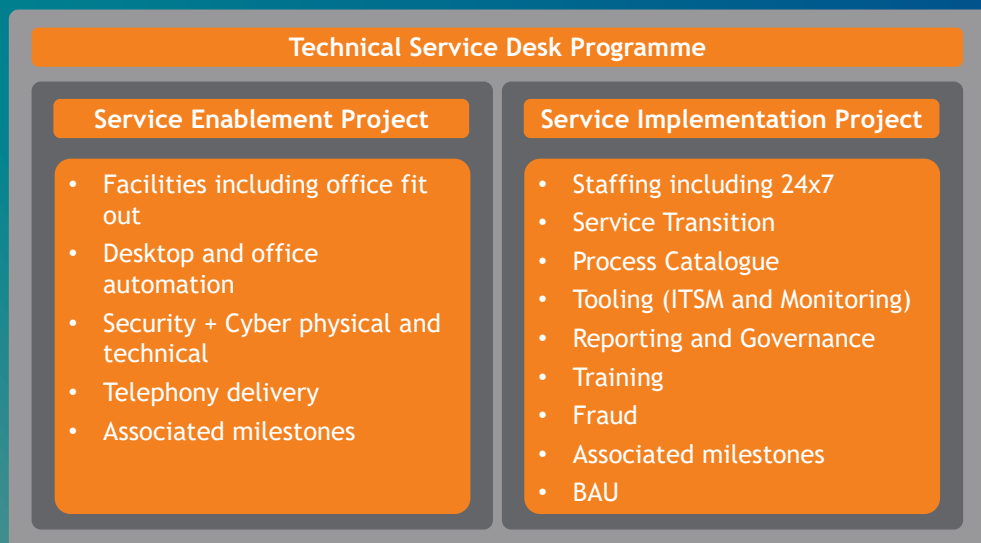
- Service Management Vice President
- Programme Director
- Chief Technology Officer
- Programme Management office lead.

Outcome

At its height, the programme team was circa 15 strong, covering programme/project delivery, PMO, architecture, fraud, security, support, omni-channel and quality assurance. The service team is currently in place providing circa 21 resources now covering end-to-end service management, service delivery and L1 and 2 engineering roles.

As the One Login migrations continue, Mastek is supporting Government departments onboarding to the platform as they transition into the new service and provide One Login a secure Technical Service Desk managed service with:

- Omni channel access for other government departments via telephony, email and web form
- Provision of L1 and L2 engineering support
- 24x7, 365 days a week cover
- 24x7x365 eyes on monitoring service
- Fraud detection and security, GDPR compliant
- End-to-end (L0-3) incident and problem management
- End-to-end 24x7 Major incident management (MIM)
- On-call/call-out engineering support, incident and MI management
- Adherence to stringent SLAs on incident response, call handling and fix times
- End-to-end monthly service reporting alongside TSD KPI and SLA reporting.
- A shift left culture and mindset, reducing the impact of service on product teams (L3)
- Support with service maturity in the programme, preparing GDS to run critical national infrastructure.



Internet-facing platform & applications for Army Digital Services

Developed mobile app & web app
with 24*7 high availability

Problem

- New Defence Gateway Portal
- Combine all internet-facing applications into one
- Easy to use
- Enable easier access to the MySeries portfolio of products.

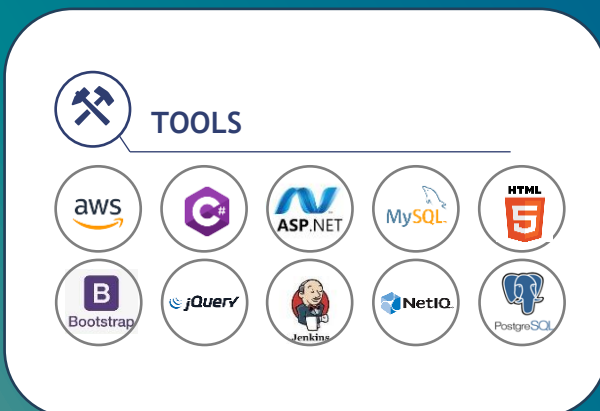
Solution

Designed and developed the following easy-use Progressive Web Apps:

- Defence Gateway Landing Page
- My Leave App
- My Expenses App
- My Health App
- My Details App
- My Appraisal App
- My Admin App
- COVID-19 Reporting Tool
- Commanders' COVID-19 Tool.

Outcome

- Delivered 20+ successful projects
- Deployment Automation
- £7.5m in savings annually
- Zero Downtime
- Environment creation in hours.



Delivered a platform for the Department for Health and Social Care

Delivered capability supporting 200k+ tests in a day,
traced millions of COVID-19 infections

Problem

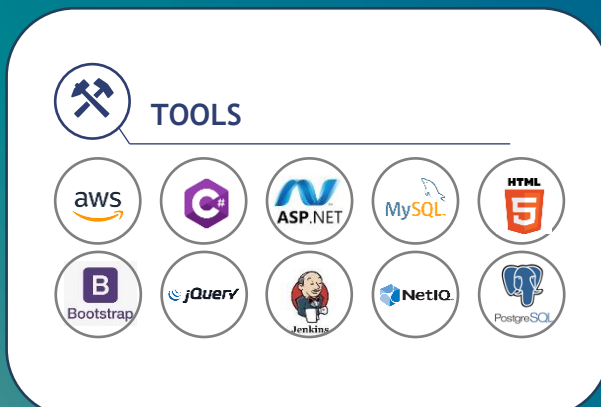
- Leveraging DevOps platform based on reusable GitHub, AWS and Azure DevOps Pipelines
- Introduce more flexible, scalable and reusable IaC capabilities
- Implement CI/CD pipelines.

Solution

- Uplifted from Cloud Formation into Terraform (IaC)
- Pre-built the AMIs using Packer, with automated security checks
- Immutable infrastructure, thus eliminating the risks of partial upgrades and patches
- Continual Cost Optimisation processes and other service functions, such as Change and Risk management
- Migrated into an organisation-wide collaboration toolset. This included Jira, Confluence, Trello, Miro, Teams, SharePoint, O365, Slack, etc.

Outcome

- 75% reduction in lead time due to pre-built AMIs
- Zero Downtime Deployments
- Delivered a Platform - Secured, multi-tenanted hosted on Azure and AWS in 5 weeks
- Cost reduction achieved through close monitoring of resource utilisation.



Mastek and Technology in the Public Sector

Technical Capabilities	Relevant Technology Capability	Mastek Scale
Software Development Continuous Integration, Platform - Other Products, Cloud Collaboration Tools		Software Engineering 2354 FTE
QA and Test; API, Automated Functional and Compatibility, Accessibility & Performance		QA and Testing 774 FTE
Cloud Platforms Amazon Web Services AWS Microsoft Azure		Cloud Platforms 1046 FTE
Data BI/MI Components, Integration		BI and Visualisation 725 FTE
User-Centered Design		UCD 25 FTE
Office Automation Tools		Collaboration 4565 FTE

2. Summary

Mastek delivers **Business Intelligence and Analytics Services** that enable public sector and regulated organisations to make confident, evidence-based decisions using **Microsoft's modern data, analytics and AI platform**.

Our service supports organisations across the **full analytics lifecycle** from assessing current capability and defining a clear roadmap, through to building, operating and continuously improving **secure, governed analytics platforms enhanced with Microsoft AI capabilities**. We help organisations modernise legacy reporting and data warehouse solutions into **integrated analytics environments** that combine trusted data, advanced analytics and AI-assisted insight generation.

Rather than treating analytics or AI as standalone initiatives, Mastek delivers **analytics as a live, managed service**, with AI embedded where it provides measurable value. We design platforms that are **Copilot-ready**, governed by role-based access, auditability and data protection controls, ensuring safe adoption of AI-assisted analytics in line with public-sector assurance expectations.

Mastek is a Microsoft Solutions Partner in Digital & App Innovation, Data & AI. Our services are delivered by Microsoft-certified professionals using **DDaT-aligned delivery practices**, working within multi-supplier environments and alongside in-house teams.

3. Mastek's Service

Mastek provides a comprehensive range of end-to-end Business Intelligence, Analytics and AI-enabled insight services based on Microsoft technologies. Our services support organisations across the full analytics lifecycle from strategy and platform design through to live service operation and continuous improvement.

3.1 Strategy, Roadmap and Consultancy

Mastek works with business, data and technology stakeholders to establish a clear, achievable analytics direction. Our services include:

- Evaluating current Business Intelligence and Analytics (BI&A) capability across people, process, technology and data
- Assessing readiness for modern analytics platforms and AI-enabled analytics
- Recommending a strategy for modernising data warehouse and BI solutions, including cloud-native and Microsoft Fabric-based approaches
- Considering data management, information governance, project scope, technology selection and target architecture
- Providing pragmatic, tactical and strategic recommendations that align analytics investment to organisational outcomes and assurance requirements

This ensures analytics initiatives are prioritised, value-driven and sustainable.

3.2 Machine Learning and AI-Enabled Analytics

Mastek embeds machine learning and AI capabilities into analytics platforms, delivering clear business value rather than treating them as standalone initiatives. Our services include:

- Applying structured analytical approaches (such as CRISP-DM) to support controlled use of advanced analytics.
- Developing predictive and pattern-based analytics to support use cases such as risk identification, operational insight and process optimisation.
- Aligning machine learning and AI capabilities to business objectives and data maturity.
- Leveraging Azure Machine Learning, Azure AI Services and approved Azure OpenAI capabilities where appropriate.
- Using open-source technologies such as Python, R, Java and Scala, with human-in-the-loop controls and explainability to support responsible AI adoption.

AI capabilities are introduced in line with organisational risk appetite and governance requirements.

3.3 Business Intelligence and Analytics Support Service (Live Service)

Mastek operates BI and analytics platforms as production live services, ensuring reliability and continuity. Our support services include:

- Ensuring Service Level Objective (SLO) delivery for analytics platforms in production.
- Providing an ITIL-aligned service management model.
- Monitoring data pipelines, analytics workloads and reporting services.

- Managing incidents, problems and change in line with agreed processes.
- Supporting both planned and unplanned change through a well-defined, agile delivery and support model.
- This approach ensures analytics platforms remain stable, secure and responsive to evolving needs.
- Data Integration Services.
- Build data integration pipelines to combine data from disparate sources.
- Utilise technologies like Extract, Transform, Load (ETL) and data virtualisation.
- Use Azure Data Factory and Azure Data Lake for orchestration and storage.

3.4 Data Analytics Services

Mastek designs, builds and operates secure data integration solutions that underpin analytics and AI workloads. Our services include:

- Building data ingestion and transformation pipelines to combine data from disparate internal and external sources
- Using Extract, Transform, Load (ETL) and modern data integration patterns, including data virtualisation where appropriate
- Leveraging Azure Data Factory, Azure Data Lake and Fabric-native pipelines for orchestration and storage
- Implementing data validation, quality checks and lineage to improve trust in analytics outputs

This ensures analytics platforms are supplied with timely, reliable and auditable data.

Data Analytics and Reporting Services

Mastek delivers user-centred analytics solutions that support insight, action and decision-making. Our services include:

- Designing and delivering analytics across descriptive, diagnostic, predictive and prescriptive use cases.
- Developing dashboards and reports using Microsoft Power BI as the primary analytics and visualisation tool.
- Implementing shared semantic models to support consistent, governed reporting.
- Enabling Copilot-assisted analytics where approved, supporting natural-language exploration and insight summarisation.
- Utilising complementary services such as Azure Synapse Analytics, Azure Analysis Services, Azure Databricks and Azure Cognitive Services, where they add value.
- All analytics outputs are designed with appropriate access controls, information protection and usability in mind.

4. Key Features

4.1 Assessment and Gap Analysis

Evaluate the current Business Intelligence and Analytics capability across people, processes, technology and data, identifying gaps against the desired target state and readiness for modern analytics and AI-enabled insights.

4.2 Roadmap and Blueprint

Develop a clear, prioritised roadmap and target architecture blueprint to support incremental capability building, platform modernisation and controlled adoption of Microsoft analytics and AI services.

4.3 Technology and Deployment Options

Recommend appropriate Microsoft technologies, deployment models and delivery approaches, including cloud-native analytics platforms, to meet functional, security and assurance requirements.

4.4 Analytics Operating Model and Organisation Design

Define an appropriate BI and analytics operating model, including roles, responsibilities and governance structures, to manage and sustain analytics capability over time.

4.5 Cost-Benefit and Value Analysis

Conduct cost-benefit analyses for analytics initiatives to support informed investment decisions and transparency into platform and operational costs.

4.6 Expert-led Consultation and Delivery

Provide experienced analytics and data consultants who work with stakeholders to position Business Intelligence and Analytics as a core organisational capability rather than a standalone technology solution.

4.7 Advanced and AI-enabled Analytics

Implement advanced analytics and AI techniques that deliver clear value, including predictive analysis and pattern recognition, using Microsoft AI services with appropriate governance, explainability and human oversight.

4.8 Standard Operating Procedures and Service Documentation

Develop and maintain standard operating procedures, support runbooks and deployment documentation to enable an effective transition to live service and ongoing support in line with agreed service levels.

4.9 Monitoring, Assurance and Incident Management

Monitor data processing, analytics workloads, access activity, audit logs and platform health. Analyse and recover failed processes in line with defined procedures, prioritising incidents based on business impact.

4.10 Automation and Continuous Enhancement

Automate routine maintenance and support activities and apply DevSecOps practices to improve reliability, reduce manual effort and support continuous improvement of analytics and AI-enabled services.

5. Business Benefits

- **Improved decision-making confidence:** Provide decision-makers with timely, trusted and governed insights, enabling clearer visibility into performance, trends and areas requiring action, supported by AI-assisted analytics where appropriate.
- **Better resource planning and cost transparency:** Support informed resource planning and cost estimation by providing clear insight into operational performance, demand patterns and analytics platform usage.
- **Enhanced risk and opportunity identification:** Enable earlier detection of risks, anomalies and missed opportunities through advanced, predictive analytics, supported by Microsoft AI services under appropriate governance.
- **Stronger alignment with organisational objectives:** Align analytics outputs directly to business and policy objectives, ensuring insight generation supports strategic priorities rather than isolated reporting needs.
- **Improved alignment with IT and data strategy:** Ensure BI and analytics capabilities align with broader IT, data and cloud strategies, reducing fragmentation and technical debt across analytics platforms.
- **Targeted skills and capability development:** Identify skill and capability gaps within analytics teams, supporting structured capability uplift and more effective use of self-service and AI-assisted analytics tools.
- **Reliable, continuous analytics service delivery:** Maintain high availability and reliability of BI and analytics platforms through proactive monitoring, support and live service management.
- **Faster access to insight for decision-makers:** Enable quicker access to relevant reports, dashboards and AI-assisted summaries, reducing time spent locating or preparing information.
- **Improved incident resolution and change control:** Reduce the impact and duration of analytics service incidents through structured incident management, controlled change and clear escalation processes.
- **Proactive platform management and optimisation:** Actively manage analytics platforms to prevent performance degradation and service disruption, improving user experience and trust in analytics outputs.
- **Optimised system performance and usability:** Continuously optimise analytics platform performance and usability, ensuring reporting and dashboards remain responsive, accessible and scalable.
- **Deeper user and service insight:** Support improved understanding of user behaviour and service performance through analytics-driven insight, enabling more targeted improvements and evidence-based decision-making.

6. Technologies, Languages, Tools, Methods and Vendor Support

#	Technologies	Languages	Methods	Vendor support
1	Microsoft Fabric (OneLake, Lakehouse, Warehouse), Power BI & Power BI Copilot, Azure Data Factory, Azure Synapse Analytics, Azure Machine Learning, Azure AI Services, Azure OpenAI, Microsoft Purview, Azure SQL Database	SQL, Python, R, Scala, Java (Open Source)	Agile, DevSecOps, DDaT-aligned delivery, Rapid Application Development, Test-Driven Development	Microsoft

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