Mastek™

Trust. Value. Velocity

G-Cloud 15

Outcome-Based Capability Modelling Enterprise Architecture Services with Stakeholder Ideation

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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 a context of high uncertainty and complexity while collaborating in 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:

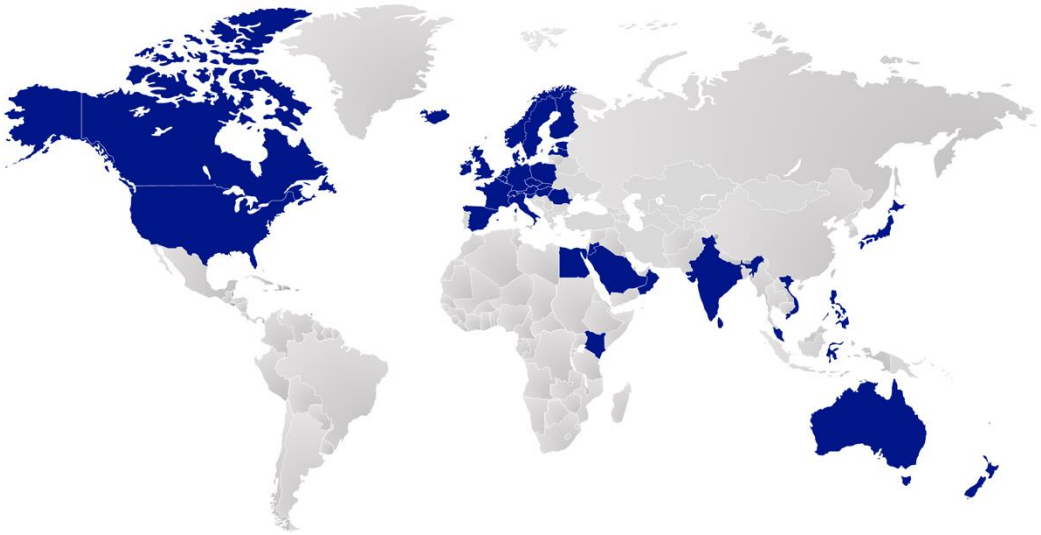
Working through a complex stakeholder landscape: We understand the importance of establishing effective communication channels, building trust and fostering a collaborative working environment that empowers stakeholders to contribute meaningfully to the project's success. Our approach is based on a deep 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, Ministry of Defence and NHS, we have a proven track record of working seamlessly with large stakeholder groups, including civil servants.

Standards, compliances: We comply with >20 policies and standards, including Government Digital Standards and Government CDDO Service Toolkit covering service standards, service manuals, TCoP, API technical and data standards. Our stringent governance, methods, playbooks and processes (both 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, being transparent, leading to enablement, acting with transparency, practising a no-blame culture and being flexible.

Mastek's global presence



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Poland
Romania
Singapore
Slovakia
Spain
Sri Lanka
Sweden
Switzerland
United Arab Emirates (UAE)
United Kingdom
USA

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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 though 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 and 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 and 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 and migration • Legacy modernisation • Low code / no code App Dev • DevSecOps • Enterprise integration	• MACH • Digital commerce • UX and 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 and 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

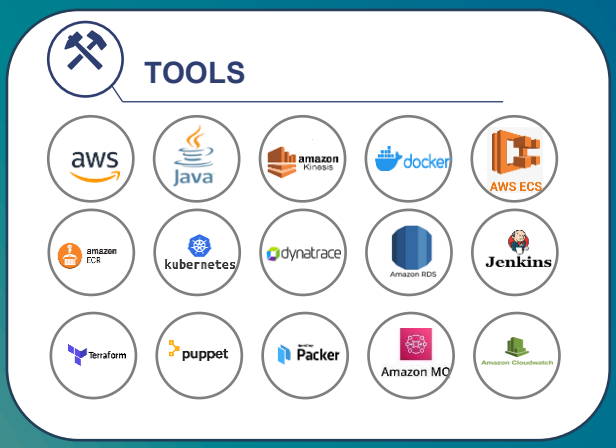
- Transition business-critical Platform services from incumbent supplier with minimal risk
- Migration from private cloud to AWS Cloud.

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

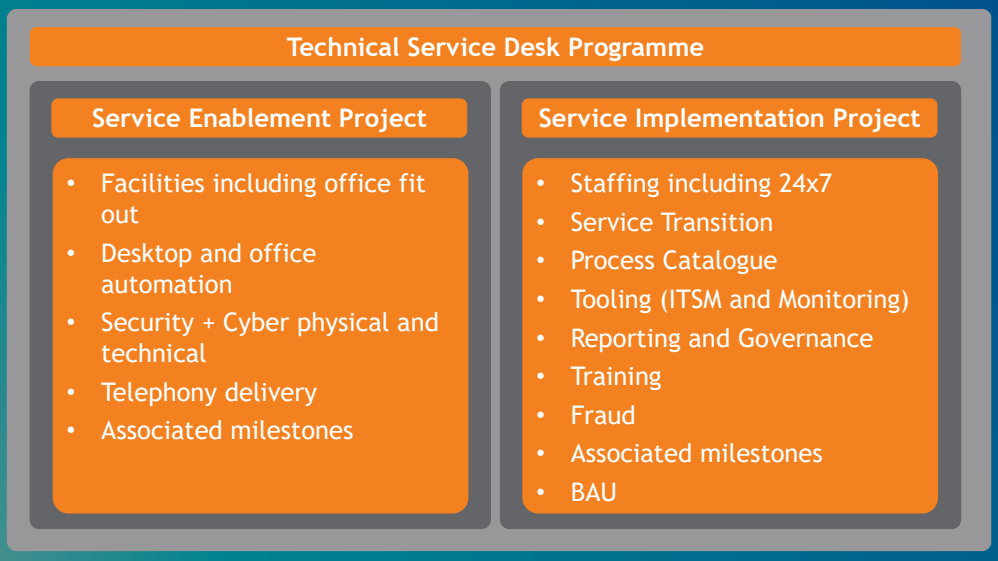
- Programme Management office lead.

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 and applications for Army Digital Services

Developed mobile app and 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

Outcome-Based Capability Modelling Enterprise Architecture Services with Stakeholder Ideation provide a holistic, business-aligned approach to enterprise transformation by ensuring that strategy, investment decisions and delivery execution are consistently anchored to clearly defined business outcomes. This service moves enterprise architecture beyond static documentation into a dynamic, decision-enabling discipline that directly supports value creation, prioritisation and measurable impact.

The service establishes a structured, capability-led operating model, where business capabilities are identified, decomposed and assessed across maturity, performance, risk and strategic relevance. These capabilities form the backbone for investment planning, portfolio prioritisation and transformation roadmaps, ensuring that every initiative is explicitly linked to the outcomes it enables, such as cost efficiency, growth, resilience, regulatory compliance, customer experience, or sustainability.

Stakeholder-driven ideation is embedded throughout the lifecycle via facilitated workshops, design sprints and co-creation sessions involving business leaders, product owners, technology teams, finance, operations and external partners. These forums enable a shared understanding of pain points, opportunities, constraints and dependencies, while translating strategic ambitions into outcome-oriented initiatives, capability uplift themes and actionable architectural options. Continuous feedback loops ensure alignment as priorities evolve.

From an architecture perspective, the service integrates business, data, application, integration and technology architecture viewpoints into a unified capability model. Current-state and target-state architectures are mapped directly to capabilities and outcomes, enabling transparent traceability from enterprise strategy through to programmes, epics and delivery backlogs. This supports evidence-based decision-making, avoids duplication, reduces technical debt and accelerates time to value.

Agile and adaptive architecture practices are applied to support incremental delivery and change. Lightweight governance, architecture guardrails and decision frameworks are designed to empower product and delivery teams while maintaining coherence, compliance and strategic intent. Architecture artefacts are continuously updated based on delivery learnings, metrics and operational feedback, rather than being treated as static, one-off outputs.

The service also incorporates maturity assessments and performance metrics across capabilities, architecture practices and delivery outcomes. These insights enable organisations to track progress, benchmark against peers, identify bottlenecks and dynamically adjust investment and transformation plans. Financial and value-based measures, such as ROI, cost-to-serve, unit economics and benefits realisation, are integrated to support transparent prioritisation and funding decisions.

Ultimately, Outcome-Based Capability Modelling Enterprise Architecture Services with Stakeholder Ideation enable organisations to create a clear line of sight from strategic intent to delivered outcomes. The result is improved alignment between business and IT, higher return on technology investments, reduced delivery risk and a culture of collaboration and innovation across internal teams and partner ecosystems, supporting sustainable, long-term enterprise transformation.

3. Masteks Service

This service provides comprehensive support for designing, implementing and optimising enterprise architecture programs using outcome-based capability modelling and stakeholder ideation. The offering is structured into distinct phases and deliverables:

3.1 Stakeholder Ideation and Engagement

- **Discovery Workshops:** Facilitate multi-disciplinary sessions with business, IT, operations and external partners to capture goals, pain points, regulatory drivers and innovation opportunities.
- **Persona and Empathy Mapping:** Develop detailed stakeholder personas, empathy maps and influence matrices to understand needs, motivations and constraints.
- **Innovation Labs:** Run co-creation sprints, hackathons and design thinking workshops to surface new ideas, prioritise initiatives and build consensus.

3.2 Capability Modelling

- **Business Capability Mapping:** Create hierarchical capability maps, decomposing business functions into granular capabilities, sub-capabilities and supporting processes.
- **Maturity Assessment:** Evaluate current and target maturity levels for each capability using industry benchmarks, best practices and custom scoring models.
- **Value Stream Alignment:** Map capabilities to value streams, identifying bottlenecks, redundancies and opportunities for automation or optimisation.

3.3 Outcome Definition and Traceability

- **Outcome Mapping:** Link business outcomes (e.g., revenue growth, compliance, customer experience) to specific capabilities, technology enablers and investment priorities.
- **KPI/OKR Frameworks:** Define quantitative and qualitative metrics for each outcome, establish baseline measurements and set improvement targets.
- **Benefit Realisation Planning: Develop benefit realisation** plans, dashboards and reporting mechanisms to track progress, validate impact and inform decision-making.

3.4 Architecture Blueprinting and Solution Patterns

- **Reference Architectures:** Develop logical and physical architectures for business, data, application and technology domains, tailored to prioritised capabilities and outcomes.
- **Solution Patterns:** Document reusable solution patterns (e.g., microservices, event-driven, API-led, data mesh, automation) with implementation guides and technology stacks.
- **Emerging Technology Integration:** Assess and integrate AI, cloud, automation, IoT and other emerging technologies to enable new capabilities and outcomes.

3.5 Agile Architecture Practices

- **Architecture Sprints:** Organise iterative sprints for rapid prototyping, solution validation and stakeholder feedback.
- **Continuous Feedback Loops:** Implement mechanisms for ongoing feedback from business, IT and partners, enabling adaptation to changing requirements.

- **Rapid Prototyping:** Build proofs-of-concept, pilots and MVPs to test new capabilities and validate outcomes before full-scale rollout.

3.6 Governance and Decision-Making

- **Architecture Boards:** Establish cross-functional boards for architecture review, decision-making and escalation.
- **Review Gates and Decision Logs:** Implement structured review gates, maintain transparent decision logs and ensure traceability from strategy to execution.
- **Policy-as-Code:** Codify architecture principles, guardrails and compliance requirements into automated policies for CI/CD pipelines and cloud platforms.

3.7 Change Management and Communication

- **Stakeholder Engagement Plans:** Develop tailored engagement plans, communication strategies and training programs for each stakeholder group.
- **Adoption Roadmaps:** Create readiness assessments, adoption roadmaps and support channels to drive change and sustainment.
- **Continuous Improvement:** Embed lessons learned, best practices and knowledge sharing into architecture processes for ongoing optimisation.

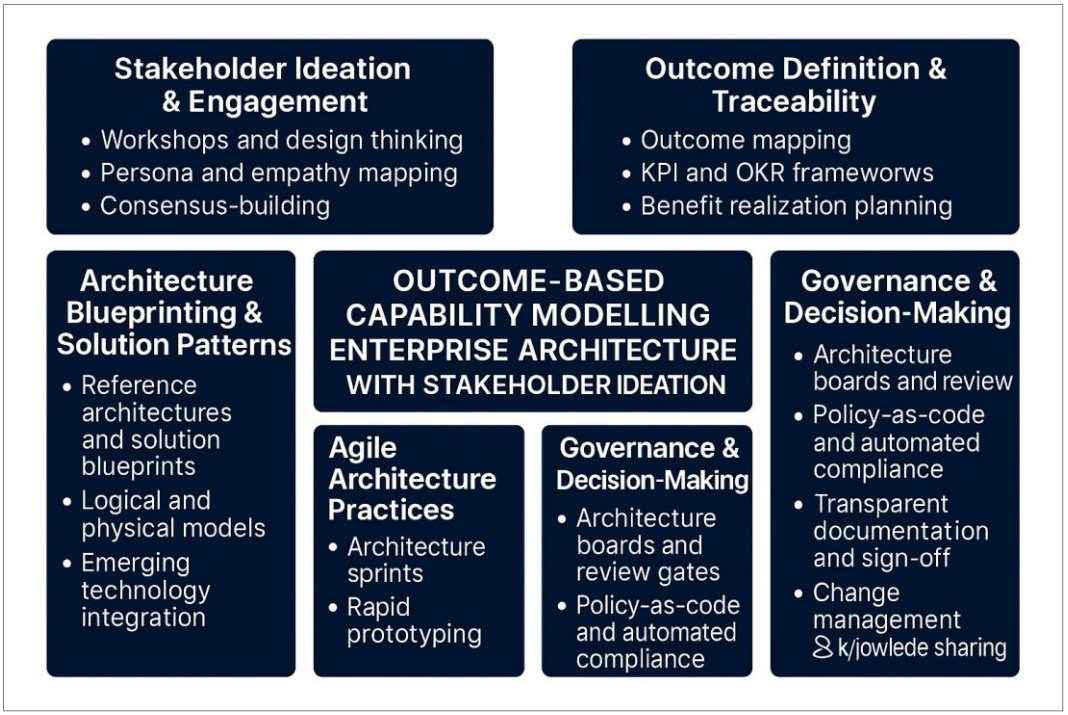


Figure 1: Outcome-Based Capability Modelling Enterprise Architecture Services with Stakeholder Ideation

4. Key Features

4.1 Stakeholder Ideation and Engagement

- Multi-disciplinary workshops, design thinking, innovation labs and co-creation sprints.
- Persona development, empathy mapping, influence matrices and consensus-building frameworks.
- Stakeholder journey mapping and pain point analysis.

4.2 Outcome-Based Capability Modelling

- Hierarchical capability maps, maturity assessments and benchmarking.
- Value stream mapping, process optimisation and automation opportunities.
- Capability prioritisation based on business impact, risk and regulatory requirements.

4.3 Outcome Definition and Traceability

- Outcome mapping, KPI/OKR frameworks and benefit realisation planning.
- Dashboards, reporting and continuous measurement.
- Traceability from strategic goals to technology investments and architecture decisions.

4.4 Architecture Blueprinting and Solution Patterns

- Logical and physical reference architectures, solution blueprints and reusable patterns.
- Integration of emerging technologies (AI, cloud, automation, IoT).
- Implementation guides, technology stacks and best practices.

4.5 Agile Architecture Practices

- Architecture sprints, rapid prototyping and solution validation cycles.
- Continuous feedback loops, adaptation to evolving requirements.
- Proofs-of-concept, pilots and MVPs.

4.6 Governance and Decision-Making

- Architecture boards, review gates, decision logs and escalation paths.
- Policy-as-code, automated compliance and traceability.
- Transparent documentation and stakeholder sign-off.

4.7 Change Management and Communication

- Stakeholder engagement plans, communication strategies and training programs.
- Adoption roadmaps, readiness assessments and support channels.
- Continuous improvement, lessons learned and knowledge sharing.

5. Business Benefits

- **Strategic Alignment:** Directly links architecture decisions and technology investments to business goals, regulatory mandates and stakeholder priorities.
- **Accelerated Value Delivery:** Enables rapid realisation of business outcomes through agile, collaborative architecture practices and continuous feedback.
- **Enhanced Stakeholder Buy-In:** Builds consensus and ownership among business, IT and partners, reducing resistance and improving adoption.
- **Transparency and Traceability:** Provides clear documentation, decision logs and traceability from strategy to execution, supporting auditability and compliance.
- **Adaptability and Resilience:** Supports continuous feedback and iteration, enabling organisations to respond quickly to change and market dynamics.
- **Optimised Investments:** Aligns technology spend with prioritised outcomes and capabilities, reducing waste and maximising ROI.
- **Sustained Benefits:** Embeds benefit realisation and measurement into architecture processes, ensuring long-term value and continuous improvement.
- **Innovation Enablement:** Fosters a culture of innovation through stakeholder ideation, co-creation and rapid prototyping.

6. Technologies, Languages, Methodologies and Vendor Support

#	Technologies	Languages	Methodologies	Vendor Support
1	LeanIX, Orbus iServer, MEGA HOPEX, Sparx EA, ArchiMate	Java, .NET, Python, SQL	Capability modelling, value stream mapping, TOGAF, ArchiMate	LeanIX, Orbus, MEGA, Sparx
2	Jira, Confluence, Miro, Azure DevOps	JavaScript, TypeScript, YAML	Agile, Scrum, Kanban, design thinking, architecture sprints	Atlassian, Microsoft, Miro
3	Power BI, Tableau, Qlik, Excel	DAX, SQL, Python	KPI/OKR tracking, benefits realisation, dashboarding	Microsoft, Tableau, Qlik
4	AWS, Azure, GCP, IBM Cloud	Python, Go, Java, Node.js	Cloud-native architecture, solution blueprinting, automation	Amazon, Microsoft, Google, IBM
5	Slack, Teams, Zoom, Webex	HTML, CSS, JavaScript	Stakeholder engagement, communication and change management	Slack, Microsoft, Cisco

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