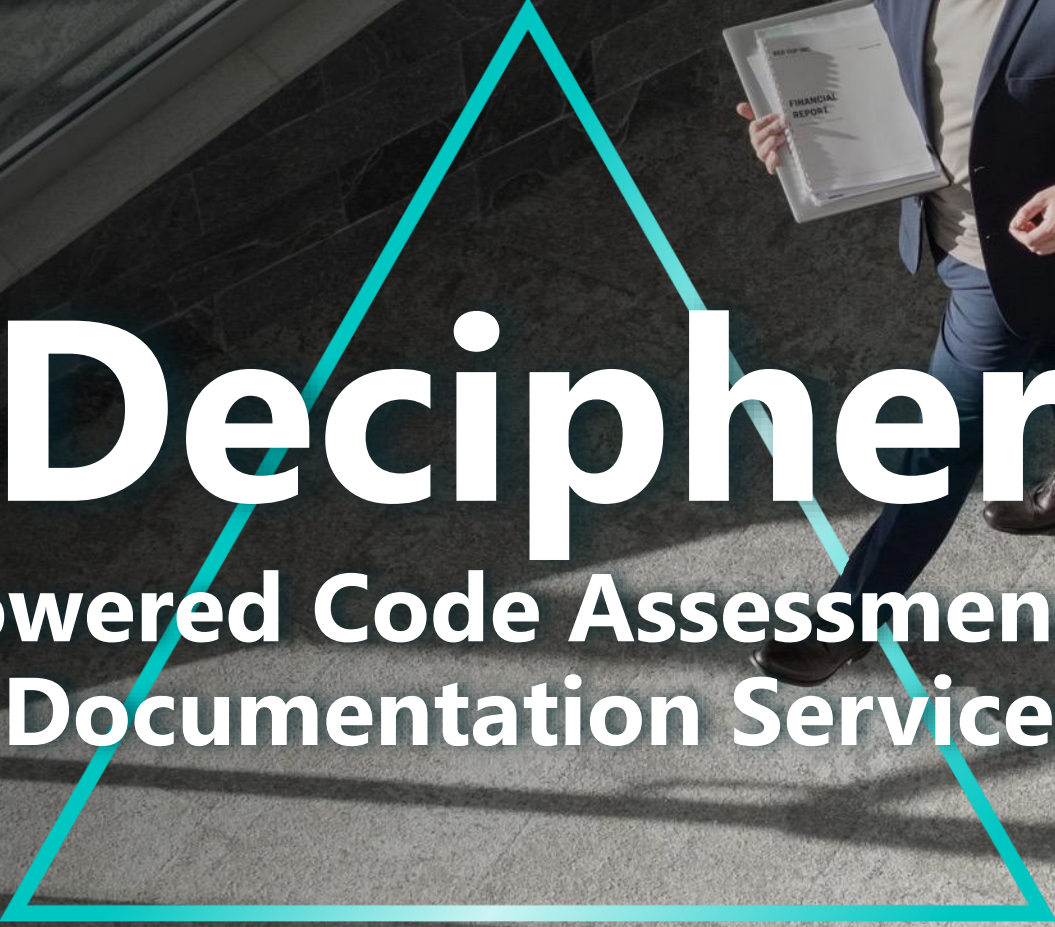




Decipher

AI Powered Code Assessment and Documentation Service

Summary

Decipher is a Generative AI powered solution that automates the generation of functional and technical documentation to decode legacy codebases and enable an accelerated and derisked application modernisation.

Features

- Documentation as a service accelerator priced based on number of lines of code to offer flexible pilot
- Supported by expert consultants

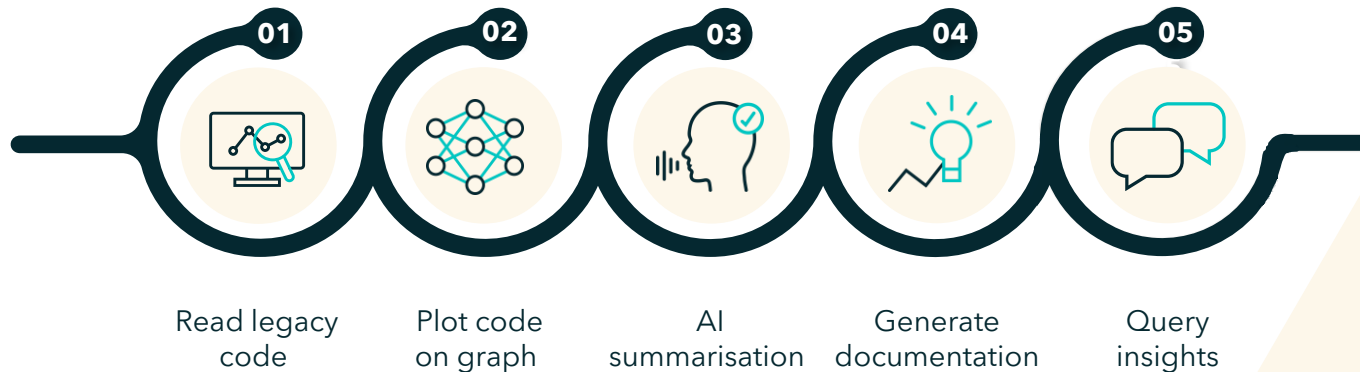
Benefits

- Comprehensive and up to date documentation for your systems.
- Documentation can be automatically generated directly from the source code
- Confidence to embark upon a modernisation programme with confidence and lower risk
- Engineers can be onboarded easily and at low cost to support and extend systems
- Quickly identify the most complex areas of systems that require most attention
- Documentation can be queried in natural language using a digital assistant.



Decipher a Version 1 developed solution

Decipher is a Version 1 developed solution which uses Generative AI and Knowledge Graph to auto document applications.



Powered by:



Azure
OpenAI



AWS
Bedrock



Neo4j
Graph DB

Languages currently supported:



Coming soon:



Decipher

AI powered code insights and documentation

A Cloud Agnostic AI solution that automates the generation of functional and technical documentation to decode legacy codebases and enable efficient, cost-effective application modernisation.

Power of Graph and AI

Enhanced Understanding of Interconnectivity

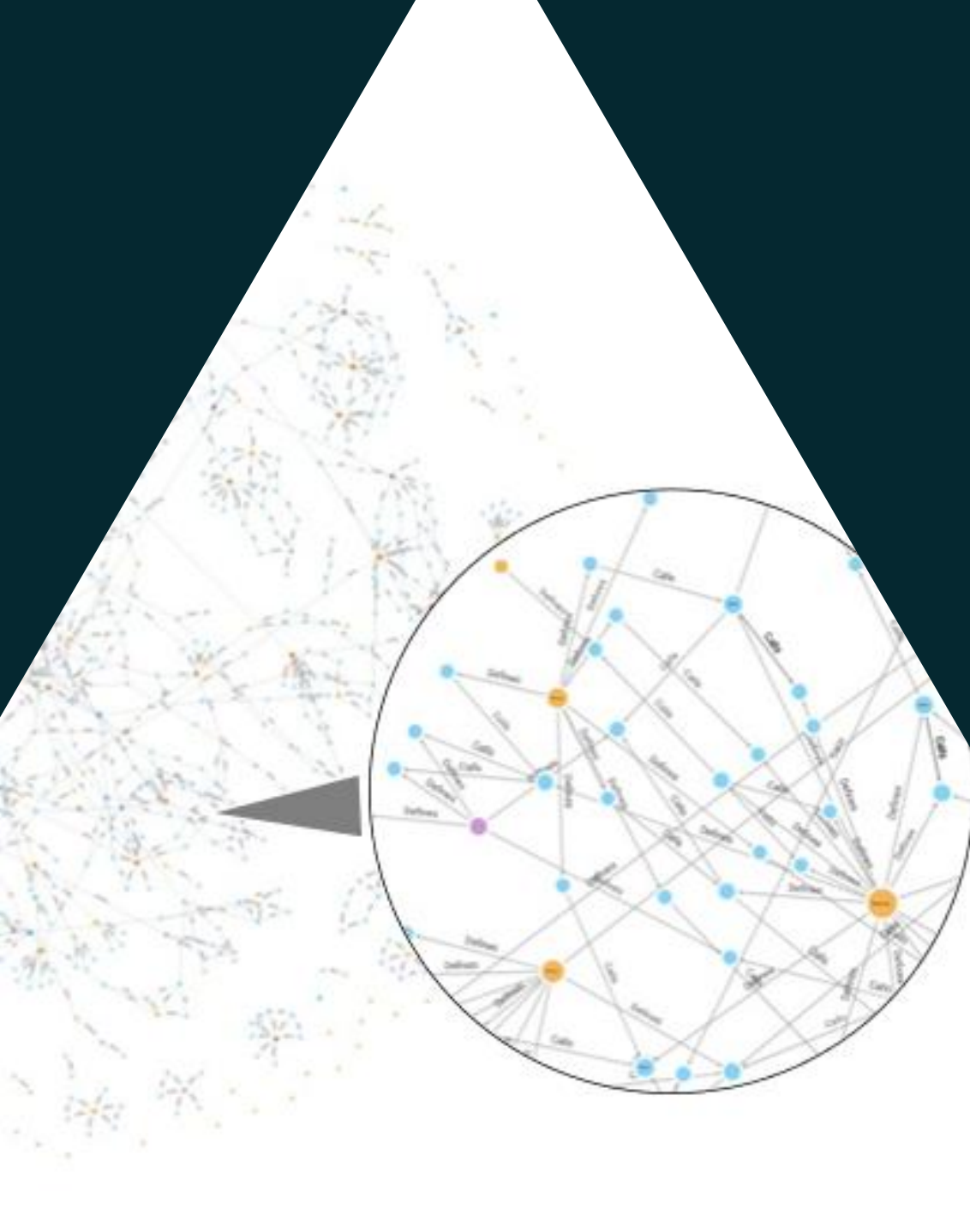
Mapping application code onto a knowledge graph, enables a comprehensive understanding of interconnectivity within the system. This helps in identifying the most complex areas that require attention.

Automated Discovery of Business Processes

Graph analytics facilitate the automated discovery of business processes embedded within the application. This enables the identification and presentation of complex workflows and code blocks, allowing for prioritisation of analysis on high-risk areas

Higher Accuracy in Documentation

By leveraging Graph, documentation is derived from relevant, interconnected code blocks rather than processing the entire codebase indiscriminately. This ensures higher accuracy and relevance in the generated documentation.



Effective documentation is a critical enabler of a successful modernisation program

Derisking Modernisation

Documentation of legacy systems is typically limited or outdated. Coupled with a dwindling number of engineers with expertise in the legacy technology, this results in a system which is poorly understood and hard to support, introducing risk to the modernisation process.

Accelerating Delivery

Accurate documentation enables faster discovery and analysis of the as-is solution, enabling you to accelerate your modernisation process.

Improving Cost Estimation

Quite often, modernisation projects are underestimated due to the complexity and logic of the as-is solution being misunderstood. Effective documentation which enables a deeper understanding of the as-is system is critical to support the estimation process.

Enhancing Maintainability

Maintaining accurate and up to date documentation is a challenge faced by every software development project due to competing demands. This impacts your ability to onboarding and upskill new staff quickly and cost effectively, whilst also providing a supportability issue.

Version 1 Decipher automatically generates code insights and documentation using Generative AI



20x faster than a manual documentation approach



90% accurate technical documentation produced



Editable documentation allowing you to extend or modify



Dependency charts, architectural diagrams and code quality metrics provide deep insights

Deciphering a legacy Java application for a major Irish Public Sector Department

Challenge

A major Irish public sector department faced a significant challenge in maintaining and modernising its extensive legacy IT systems. These systems, critical to the department's operations, lacked documentation and were becoming increasingly difficult to support.

Solution

We deployed Decipher to our customer's Azure tenancy and using Azure OpenAI, we deciphered a legacy Java application. The documentation produced was reviewed by the application SMEs to evaluate the performance, checking against agreed success factors including accuracy and completeness. This review completed with all success factors passing. This has enabled the Department to rapidly produce documentation for a key system, thus enabling and supporting their modernisation objectives.

Outcomes

x20+ reduced effort to produce documentation.

100% of success criteria passed.

90% accurate technical documentation.

Use Cases

Legacy Modernisation

Speed up Discovery and Assessment of Legacy Systems as part of an Application Modernisation effort

Auto Documentation

Enable development teams to auto document systems as they are developed

Reduce Risk of Support

Gain up to date documentation which enables existing unknown systems to be better supported

Acquisitions

Onboard new applications quicker and with lower risk

Change Impact Analysis

Use of graph capability to understand impacted business processes



Decipher features and roadmap

Current

Language Support	Java, C#, PL/SQL
Cloud Support	Azure
Model Support	OpenAI, AWS Bedrock
Repository Support	GitHub, GitLab, Azure DevOps
Deployment Options	Self-Hosted (cloud) or Version 1 Hosted
Documentation Format	Markdown - Documentation as code
Documentation Type	Functional & Technical
Granularity of Documentation	File, Process & Application Level
Documentation Exportable?	Yes
Intuitive User Interface	Yes
Side by side code compare	Yes
Virtual Assistant	Yes
Secure by Design	Yes
Graph Support	Yes
Code Complexity Insights	Yes

Coming soon

► Support for additional languages including PHP, & Visual Basic
► High Level Design Docs incl. System Architecture diagram
► Business Domain mapping & summarisation
► UML Architecture diagrams incl. Sequence diagrams
► Sonarqube integration for code quality insights
► AWS deployment support

Documentation as a service

The primary objective of this initiative is to automate the generation of accurate and comprehensive documentation for selected applications. This will reduce manual effort and mitigate organizational risks associated with undocumented systems. The engagement is planned as a time-boxed, exercise focusing on selected applications, dictated by the size of service selected. The scope of work includes:

- Analysis: Map applications into Decipher’s Graph DB for analysis.
- Documentation: Generate detailed documentation for the selected applications.
- Project Report: Deliver a presentation summarizing the project outcomes.

To assess and document the solutions using Decipher, a structured approach will be followed. Initially, CUSTOMER will provide one candidate source codebase, ideally rich in business logic and rules, to enable an effective assessment of Decipher’s analysis capabilities. CUSTOMER will also brief the team on a well-known call stack within the application, which will serve as a reference example. This example will help build support in Decipher by providing insights into the structure and functionality of the code, thereby facilitating the automation of the documentation process.



Source Code

The client supplies application code
Emphasis on business logic and regulations for thorough analysis



Reference Example

Comprehensive description of a specific call stack
Aids in streamlining the documentation process



Graph

Identify segments of application code and their relations
Plot the segments and relations on a graph for exploration and context for document generation



Document

Generate call stack and source code documentation



Review and Validation

Review and validate the identified call stacks and documentation
Review the overall accuracy and relevance of the source code documentation

Once CUSTOMER support is integrated into Decipher, documentation for the first application will be generated. Together with CUSTOMER, we will validate additional call stacks identified by Decipher to ensure comprehensive coverage and accuracy. CUSTOMER will evaluate the output of Decipher for the first application against the Success Criteria outlined overleaf. Following this validation, subsequent applications will be processed through Decipher, and the results will be similarly evaluated against the Success Criteria.

Deliverables

No.	Deliverable	Description	Acceptance Criteria
1	Documentation	Generate technical and functional documentation for the given application codebase.	The documentation must provide a concise summary. It should be clear, coherent, grammatically correct, and follow a consistent format and style. The process should be significantly faster than manual documentation.
2	Demonstration	Showcase the analysis and documentation of solutions using Decipher.	A demonstration must be provided to stakeholders, showcasing the analysis of the codebase, identified call stacks, and generated documentation.
3	Project Report	Deliver a presentation report summarising the project.	The report must include the steps taken, results achieved, lessons learned and recommended next steps.

Assumptions

To ensure the successful execution of the engagement, several assumptions will need to be made. These assumptions lay the groundwork for clear expectations and a shared understanding between Version 1 and the CUSTOMER, which are critical for the smooth execution and eventual success of the engagement.

Technical Environment

- Decipher, and the shared sample code can be run on Microsoft Azure Cloud environment hosted within Version 1 subscription or the customer's subscription.
- CUSTOMER users will not have direct access to the Decipher application without prior agreement.
- The choice of AI model will be Azure OpenAI (GPT4o or later) or AWS Bedrock (Claude).

Project Management

- The Agile SCRUM methodology will be accepted and adhered to by all parties involved in the engagement.
- All stakeholders agree to the bi-weekly sprint schedule and are committed to attending the necessary meetings and reviews.

Success Criteria:

- The CUSTOMER and Version 1 have a mutual understanding of what constitutes successful documentation generated by the engagement.
- The criteria for assessing the time-saving benefits and accuracy of automated documentation versus manual processes are agreed upon beforehand.
- CUSTOMER will be responsible for approving output; an SME will be provided to give feedback on the output in an iterative sprint approach.
- Version 1 will provide CUSTOMER with a copy of the generated documents in PDF and/or Markdown formats.

Post-Engagement Activities:

- There is a clear agreement on the decommissioning process for the solution and its services after the engagement is completed.
- The CUSTOMER is aware that all project elements will be removed post-engagement and has no objections.

Intellectual Property

- Decipher will remain the Intellectual Property of Version 1.
- All CUSTOMER source code input to the Code Documentation Web App Tool and documentation output by the tool will remain the property of CUSTOMER.

Security - Source Code & Generated Documentation

- Generated Documentation will be treated with the same level of security as the source code itself. Access to the generated documentation will be restricted to the project team members, CUSTOMER key stakeholders and CUSTOMER technical/business application owners.
- Documentation validation sanity checks will include a review of the generated images, tables/data, meta-data and hidden fields to ensure there is no unintentional data contained within.
- Generated documentation will not be distributed outside of the project team, CUSTOMER key stakeholders and CUSTOMER technical/business application owners.
- Generated documentation will become the intellectual property of the CUSTOMER
- Any data used during the engagement complies with privacy laws and regulations.

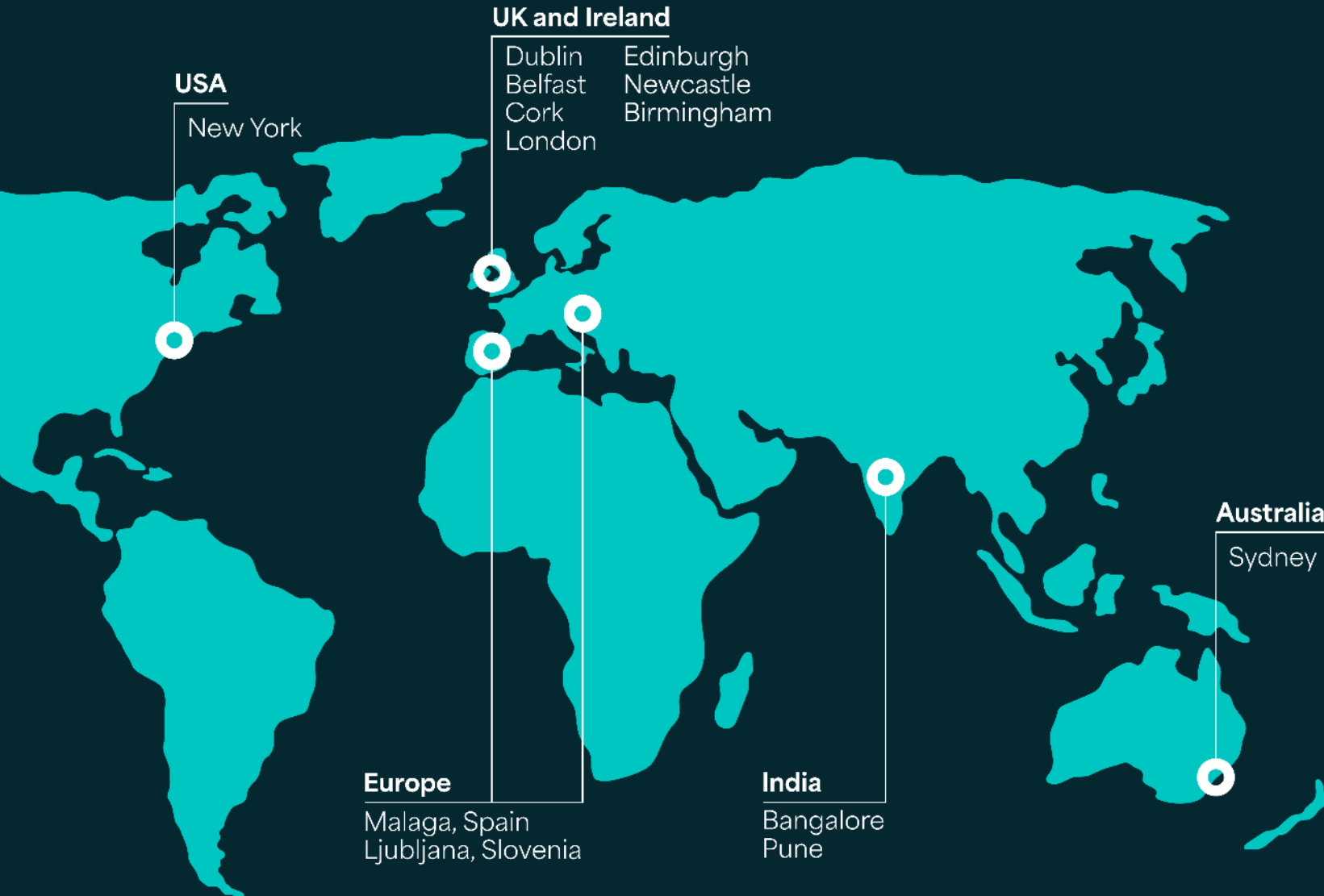
Dependencies

- CUSTOMER will provide access to the source code.
- If using CUSTOMER subscription, access to deploy Decipher onto this subscription must be granted by the CUSTOMER.
- CUSTOMER will review and validate the outputs - an SME will be provided to give feedback on the output in an iterative sprint approach. This step ensures the accuracy and reliability of the documentation generated by Decipher. Additionally, the CUSTOMER will review the overall source code documentation to ensure its relevance and accuracy.
- CUSTOMER is responsible for ensuring their data security policies allow for the engagement to be conducted.
- CUSTOMER will provide any guidelines or information related to ethical, legal and compliance considerations.
- Version 1 will ensure that CUSTOMER data confidentiality is maintained and CUSTOMER data is removed from Version 1 servers upon completion (if using Version 1 subscription).

About Version 1



Version 1 at a glance



29 years of experience

13 global locations

6 strategic technology partners



13 years as a great place to work



Industry best practice



€364M+ revenue 2024

82% employee engagement score (Q2 2025)

85% customer satisfaction score (Q2 2025)

The Version 1 difference

The core values at the heart of Version 1's success.



**Honesty and
integrity**



**Personal
commitment**



No ego



Customer first



Excellence



Drive

Looking forward: Our ESG targets, goals & achievements

A-

score for Carbon Disclosure Project reflecting our sustainability practices (Industry average is a C)

680+

Volunteering hours delivered by employees globally

80%

key suppliers with sustainability targets by 2025, we are committed to reducing environmental impacts across our supply chain through responsible sourcing and partnerships

217

Version 1 Impact Investors supporting our global Community First programme which aligns to the UN Sustainability Development Goals

Bronze

Ecovadis rating reflecting our ESG maturity across our strategic focus areas

930

Women in Tech members

Our four strategic ESG pillars:



**Environment
sustainability**



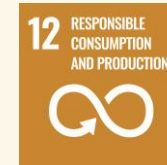
**Ethical
Practices**



**Responsible
Procurement**



**Social
Impact**



As a participant of the United Nations Global Compact, Version 1 is committed to aligning strategies and operations with universal principles on human rights, labour, environment and anti-corruption

Our services portfolio



Application Modernisation and Integration

Accelerating the modernisation of applications embracing sustainable engineering and AI-assisted development.

Legacy systems modernisation

Continuous modernisation

Next Gen Apps

Integrated Apps

Portfolio modernisation



Experience Design and Development

Designing, shaping and building products and solutions that deliver fantastic people and societal experiences.

Digital strategy and innovation

Product management and roadmaps

Behavioural research, analysis and journey mapping

Creative design and UX services

Product development and AI accelerated engineering

Envisioning and innovation workshops



Enterprise Applications

Optimising the core of your business with deep functional and technical expertise in Finance, People, Customer and Enterprise Performance Management (EPM).

Reshaping finance for the future

Elevating HR and people operations

Enhancing supply chain management

Amplifying customer touchpoints

Realising value with Data insights and AI



Data x AI

Becoming an intelligent, data driven organisation needs quality data x AI to make better decisions and processes.

Data strategy and architecture

Data engineering

Data analytics and visualisation

Data modernisation

Data governance

AI co-creation services



Cloud Transformation

Adopting, optimising and leveraging Cloud to unlock new or enhanced business value and innovation.

Industry specific cloud

Readiness and enablement

Migration and transformation

Operate and optimise

Specialist services



ASPIRE Managed Services

Reduce time, cost and risk by leveraging our VLA approach to run and optimise traditional and Cloud services to improve business agility and accelerate innovation.

Cloud and infrastructure management and optimisation

Oracle SaaS management and optimisation

Data and AI managed services

EBS, Peoplesoft and JDE managed service

Application management and optimisation

Digital workplace services

Our global technology partners

- Named **AWS Collaboration Partner of the Year 2024**
- Named **Global Microsoft Modernising Applications Partner of the Year Award 2023**
- Named **Microsoft Ireland Partner of the Year 2023 Winner - Social Impact**
- Named **Innovation Partner of the Year Winner - 2023 Oracle EMEA Partner Awards**
- Named **AWS Collaboration Partner of the Year - EMEA 2023**
- Named **AWS Migration Partner of the Year - EMEA 2022**
- Named **OutSystems Partner of the Year 2021**

Microsoft Partner

Azure Expert MSP



As an Azure Expert MSP and the Global Modernising Applications Partner of the Year 2023, Version 1 boasts extensive expertise across the Microsoft stack.



Premier
Consulting
Partner

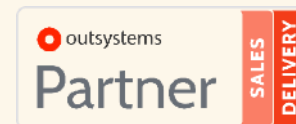
An AWS Premier Consulting Partner and EMEA Migration Partner of the Year, Version 1's unrivalled expertise boasts deep expertise with 400 certifications and accreditations.

ORACLE | Partner

With 28+ years of Oracle ecosystem expertise, we're a certified Oracle Modern OPN Partner and Cloud Solutions Provider - One of Europe's most distinguished Oracle Cloud partners.



As a Premier Red Hat partner, we are experts in hybrid-cloud models and OpenShift, recognised for driving innovative solutions using Red Hat technologies.



An OutSystems Partner for Sales, Delivery and Quality Apps Program Partner, Version 1 is committed to unlocking value for our customers through low code development.



As a Snowflake Partner Version 1 enables customers to leverage Snowflake's flexibility, performance, and ease of use to deliver more meaningful data insights.

Our Public Sector Customers



centrica

cie-uk



CCRC
Criminal Cases Review Commission



An Roinn Dlí agus Cirt
agus Comhionannais
Department of Justice
and Equality



An Roinn Iompair,
Turasóireachta agus Spóirt
Department of Transport,
Tourism and Sport





Thank you

For more information, please visit our website: www.version1.com

Or contact us at: tendernotices@version1.com