



Technology Due Diligence

Dare with care

1 Dare with Care

2 Technology Due Diligence at Vaultinum

3 Our methodology

4 Our experts & tools

Vaultinum, Technology As A Service

- ›› A unique approach, combining automated tools, data and experts
- ›› Meet the needs of investors and tech companies for assessment, compliance, monitoring
- ›› A team of senior experts, with experiences rooted in business & technology
- ›› Protecting & auditing source code for over 40 years
- ›› Offices in Geneva, Paris, London, Madrid, Dubai
- ›› eIDAS-qualified and ISO 27001 organization

>100

Audits per year

>20

Countries around
the world

30

Senior Tech
experts

250 000

Source codes on
our servers

Vaultinum differentiators



Unique scanning technology to collect data and insights



Experts giving actionable recommendations

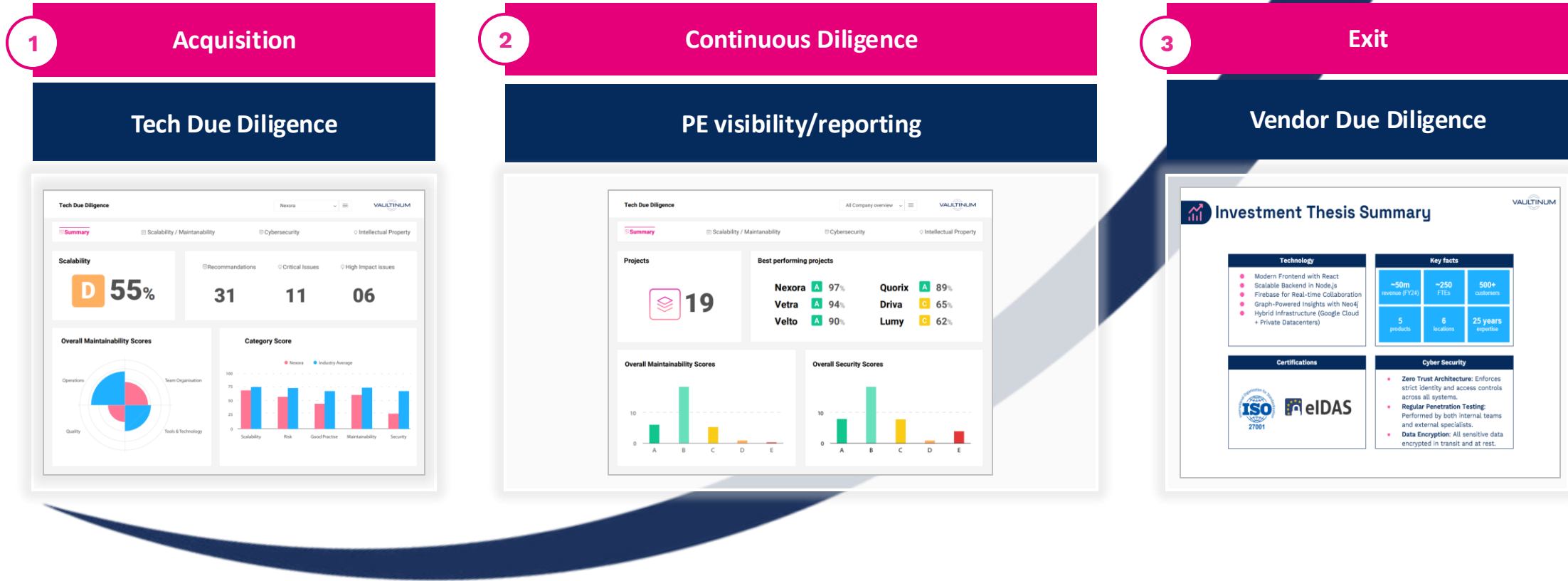


Identifying risks and downsides, enhancing scalability and upsides



Adding tech value creation to support portfolio companies

Supporting Private Equity firms from acquisition to exit



They trust Vaultinum

Clients



Partenaires



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We assess Technology in several areas



Software Scalability

- › SDLC
- › Roadmap
- › Tech Debt
- › Process & Tooling
- › Automation



Ops & Client Support

- › Efficiency
- › Process
- › Tooling
- › Implementation and support



Cybersecurity software

- › Code Scan
- › CVEs and CWEs
- › General consideration



Infrastructure scalability

- › Enterprise/SaaS
- › Architecture
- › Cost optimisation
- › Internal IT



AI Maturity & Disruption

- › AI code readiness
- › Initiatives & Roadmap
- › AI product Integration
- › AI Moat



Cybersecurity hardware

- › Network Footprint
- › @host exposure
- › Pen test
- › Equipment and tools



Organisation

- › Talents
- › Governance
- › Key people



IP & 3rd party dependency

- › Open Source
- › Third Party
- › OWASP



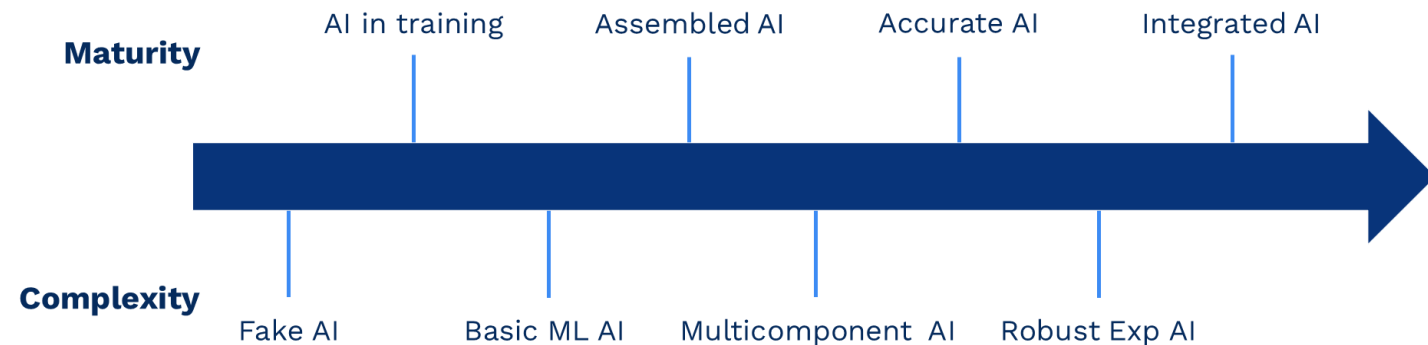
Data

- › Data value chain
- › Cost Optimisation
- › Data Privacy (GDPR)

Focus on AI Readiness Assessment



- ›› Assess AI usage in SDLC (Code generation, tooling maturity)
- ›› Evaluate AI product integration (framework, ML models)
- ›› Analyse AI governance and enterprise adoption
- ›› Measure defensibility and competitive positioning (tech angle)
- ›› Review AI Initiatives and Roadmap and produce a SWOT Analysis



Focus on Cybersecurity



General consideration

- » Understanding the level of cybersecurity-readiness
- » Looking at phishing email response, employee training, level of equipment and tooling
- » Offering recommendations and best practices to avoid hacking, spoofing, data leaks

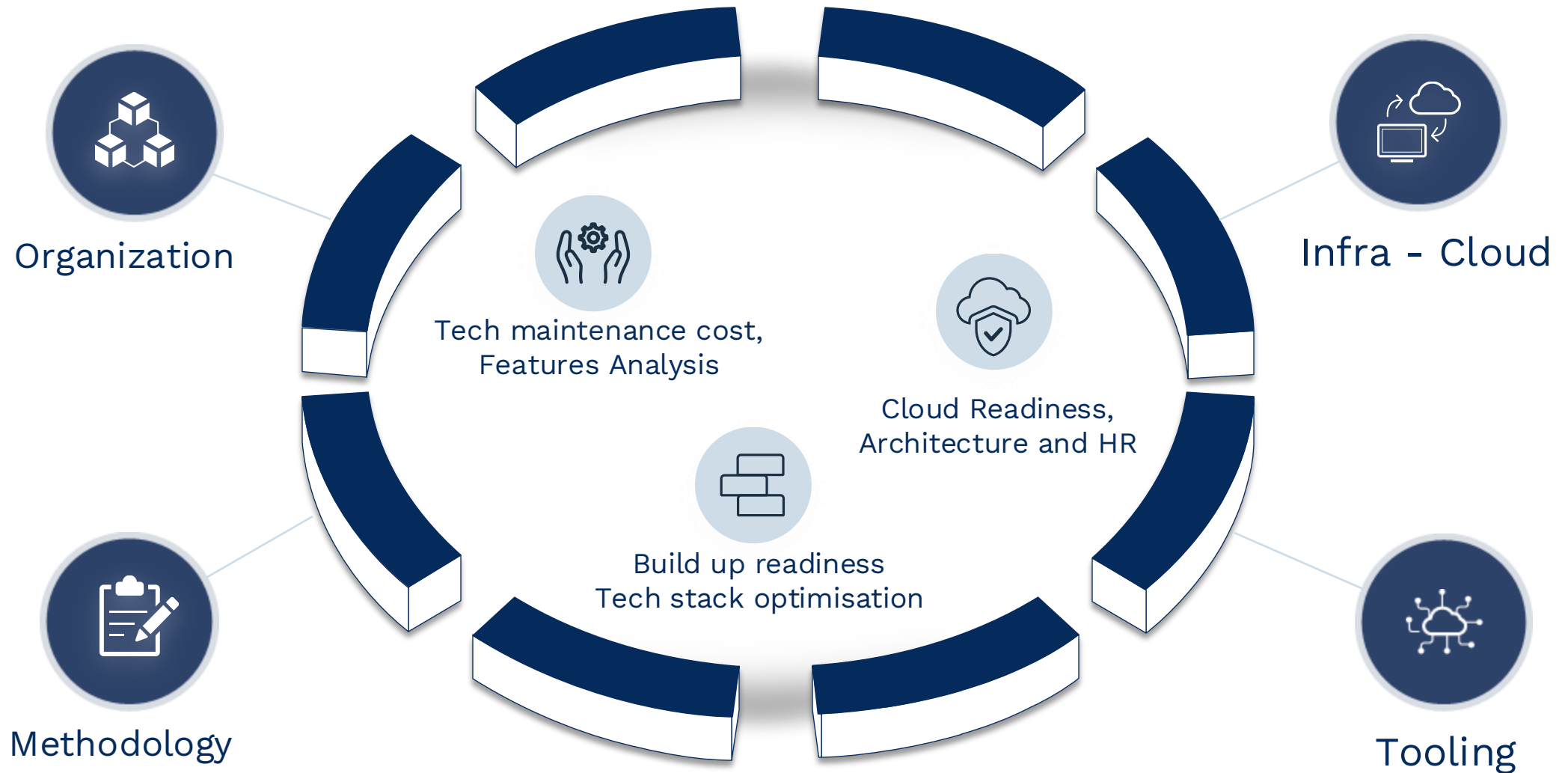
Software Scan

- » Source code scan and OWASP compliance
- » Detecting CVEs (Common Vulnerabilities & Exposures)
- » Detecting CWEs (Common Weaknesses Enumeration)

Network Footprint and Pen test

- » Scanning the host exposures
- » Testing the resiliency of Hardware equipment
- » Verifying data leak to Dark Web
- » Black Box, Grey Box, & Pen testing optional

Vaultinum's thorough 360° Audit



1 Dare with Care

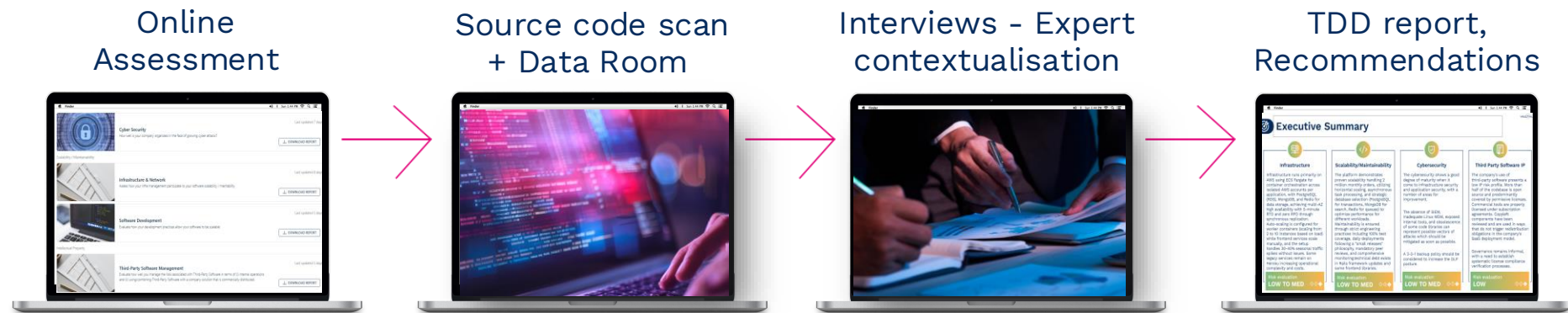
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Combining data and expert guidance

>> Using data to go deeper and faster



>> Operational insights for impactful decisions and better exit value

Thorough analysis of the tech's strengths and vulnerabilities

Report focusing on the main areas of risk and how to address them

Action plan with estimated time of fix and costs

360 Assessment of the technology in hand

Vaultinum's available reports



3 reports available

- >> Red Flag report with first assessment
- >> Code Scan report with all technical details of vulnerabilities, open-source licenses, and maturity insights -> very useful for the audited company
- >> Investor report with executive summary, observations, industry contextualisation, and tactical & strategic recommendations

Delivering a TDD report with recommendations

A risk report and action plan that shows

- » Scalability of the tech asset, cloud readiness, build up readiness
- » Cyber estimated risk
- » AI SWOT analysis, bridging technology and future strategy
- » Deep tech background to factualise risks and recommendations

Priority	Scope	Name	Description	Costs
Important & Urgent	Security	MDM/DLP Replacement	Replace Mirador with unified MDM/EDR/DLP solution. Current MDR has poor Linux support, limiting security visibility on dev machines.	Moderate
Important & Urgent	Technical Debt	Rails Version Updates	Update Rails on 3+ projects currently behind. Known CVEs exist, even if not directly exploited. Critical for security compliance.	Moderate
Important & Urgent	Technical Debt	Frontend libx updates	Update Ember library as it has become obsolete.	Moderate
Important & Urgent	Security	Library Vulnerability Remediation	Code scan revealed multiple vulnerabilities in dependencies. Implement <code>audit</code> or <code>trivy</code> and update dependencies.	Moderate
Important	Backups	3-2-1 backup strategy	Three copies of data (including primary). Two different storage types. One off-site copy.	Moderate
Important	Backups	Testing	Commercial tools like Commvault support MongoDB Atlas backup testing, allowing you to perform test backups and restores. AWS Backup's restore testing for PostgreSQL.	Moderate
Important	Compliance	ISO 27001 Certification	Planned for next year. Will streamline client audits and improve credibility. Most documentation already exists. Consider Data to prepare.	C20-20k (audit & certification) + 3-4 months preparation
Important	Security	SIEM Implementation	Replace BetterStack with proper SIEM for security event management. Currently using workarounds.	C15-25k/year + 1-2 months implementation
Important	Documents	System Architecture Doc	Make sure to keep updated and detailed system architecture diagrams (application and infrastructure level).	Low

Strengths	Weaknesses
<ul style="list-style-type: none"> Strong proprietary data assets (historical order book, cross-product trade data) that can support future AI model training. Vaultcorp's proprietary system provides a highly structured, machine-readable medium for AI agents. While standard LLMs inherently struggle to perform complex mathematical operations on massive datasets at scale, they are capable of writing XXX scripts. This enables AI agents to translate natural language requests into deterministic, regulator-friendly execution code. 	<ul style="list-style-type: none"> AI integration into investigation workflows appears still in early stages of maturity.
Opportunities	Threats
<ul style="list-style-type: none"> AI agents could significantly automate analyst workflows (alert explanation, investigation support, reporting). Integration of AI with the runtime may allow natural-language generation of complex surveillance queries. By exposing its analytics engine via MCR, Vaultcorp will create a secure integration point for external AI. As Tier 1 banks increasingly develop their own proprietary AI agents, they can "plug" their internal AI directly into their calculation framework. 	<ul style="list-style-type: none"> Regulatory constraints and explainability requirements may limit adoption of opaque AI models. AI-driven market manipulation techniques may increase the complexity of abuse patterns, but seems very unlikely.

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Example of AI SWOT

AI - SWOT analysis

Strengths

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Opportunities

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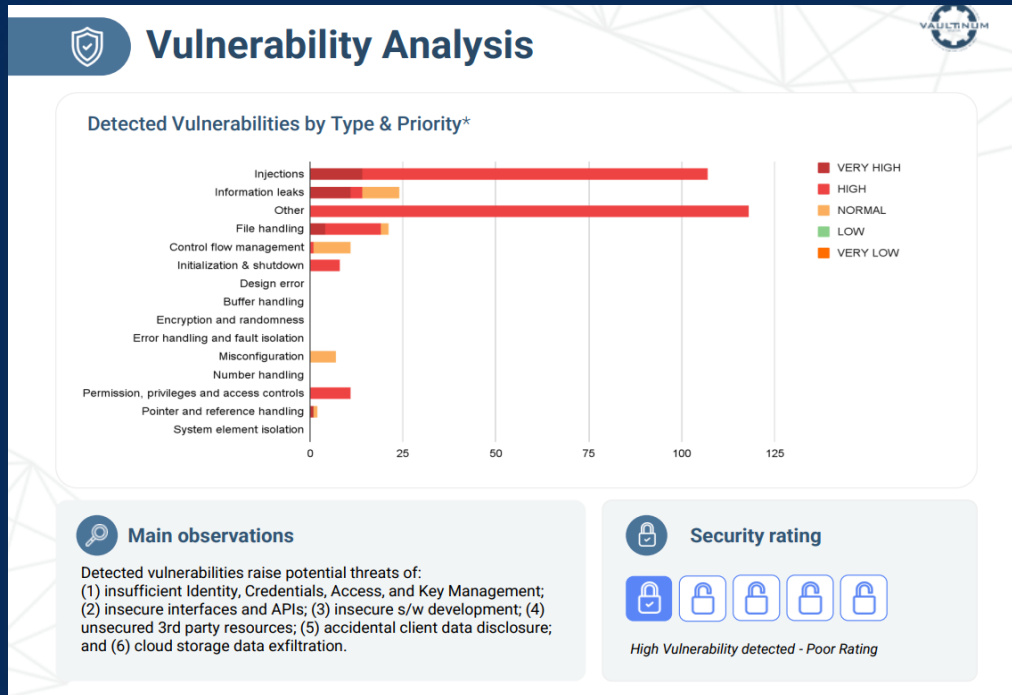
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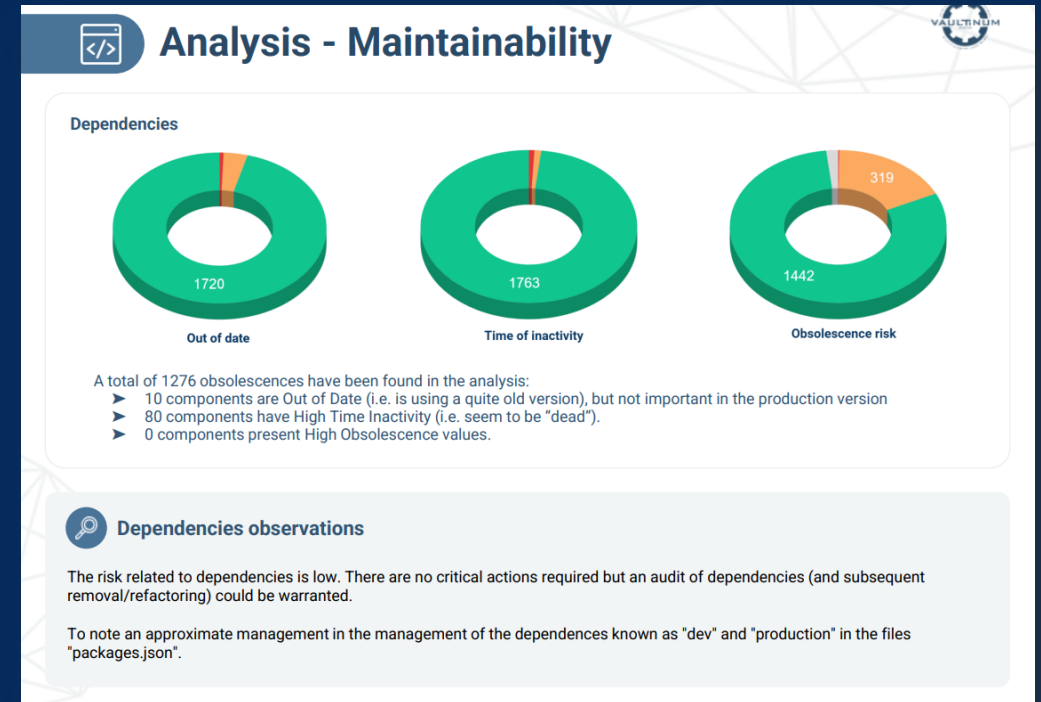
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Illustrated view of code scan insights

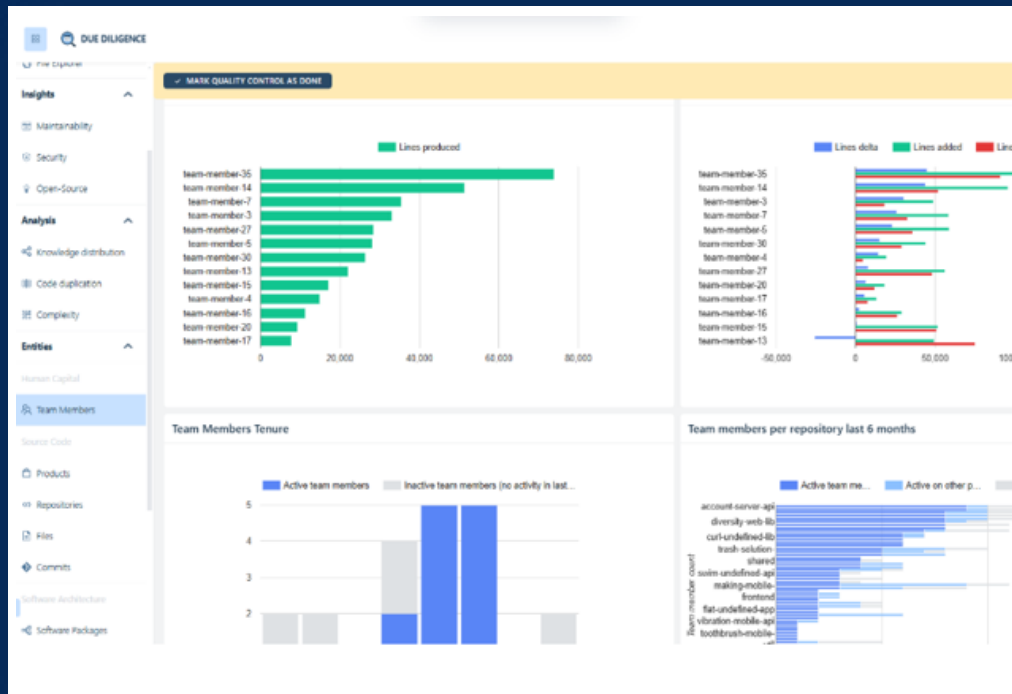


Important vulnerabilities identified. Critical (red) to be remediated.



Scan identified obsolete files that need to be reviewed to ensure maintainability.

An illustrated view of performance and costs



R&D efficiency per individual is reported here through several criteria.



View on delivery per project and lines of code per technology to check the active project.

An illustrated view of performance and costs

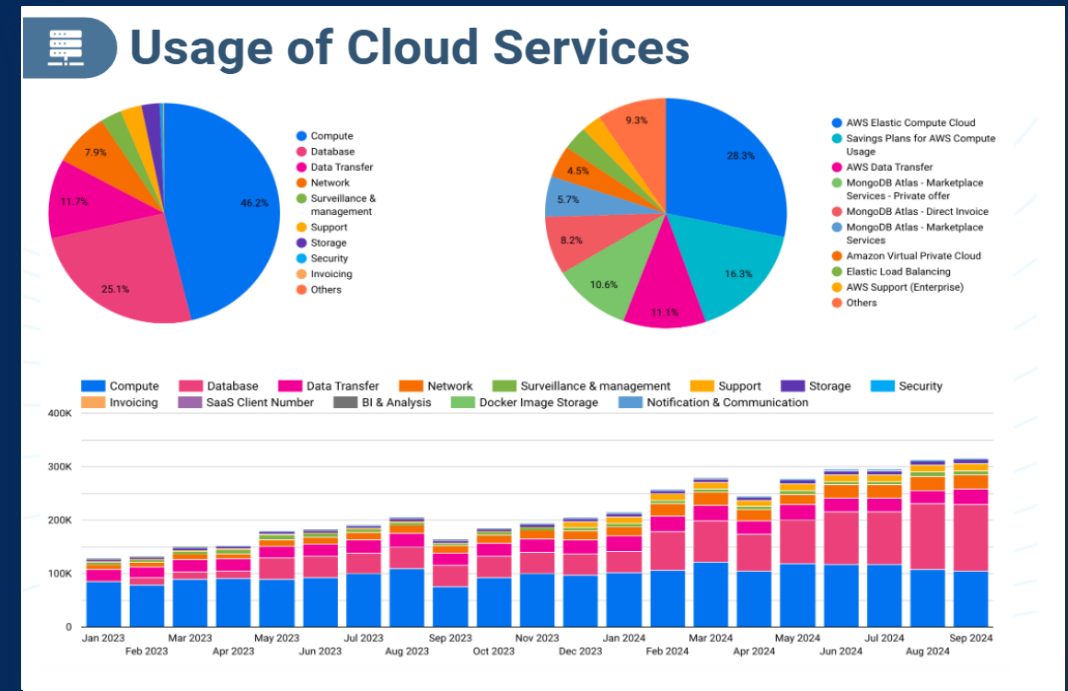
Defense & Monitoring tools

Log Aggregation and Monitoring
Grafana to visualize the aggregation of logs from Prometheus. This includes system metrics and logs pushed by Loki into a bucket.

IPS/IDS on Fortigate
Intrusion Prevention Systems (IPS) and Intrusion Detection Systems (IDS) activated on Fortigate. While Zero Trust Network Access (ZTNA) is currently not activated, there is potential to migrate to Cloudflare's ZTNA.

Continuous Integration and Continuous Deployment (CI/CD)
Bitbucket Pipelines: Utilized for managing their CI/CD processes, including tasks such as dispatching jobs, vulnerability scanning with Trivy, and we internally check the exploitability of identified vulnerabilities.

Tooling issues identified. Acquisition of suggested applications will improve cost of deployment.



The company could save 300K by making EC2 commitments on AWS.

VAULTINUM



Vaultinum is a provider of technology due diligence services for private equity investors. We support tech-driven value creation and risk mitigation across the full investment lifecycle.

From pre-acquisition to post-deal optimisation, through a combination of proprietary scanners and expert insights, our assessments deliver a clear, data-driven view of a target's technology assets, covering scalability, cybersecurity, team performance, data compliance, intellectual property, FinOps, AI maturity and AI disruption risks.

[Contact us](#)

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