Technical Due Diligence

By Georgia & Molly

When systems are complex and timing matters, technical due diligence is how you slow things down just long enough to see clearly — before committing to scale, restructure, or invest. For companies built on both hardware and software, it offers a sharp view of what holds — and what doesn't.

Purpose and Scope

Technical Due Diligence is a systematic, in-depth analysis of an organization's hardware, software, and supporting processes. It identifies hidden vulnerabilities, validates existing strengths, and evaluates overall sustainability.

These evidence-based findings inform critical decisions—investments, acquisitions, capital raises, scaling, or expansion—by clarifying the technology's capacity to meet both present and future operational demands.

By providing a clear, factual foundation, Technical Due Diligence reduces uncertainty and helps stakeholders make critical decisions and align improvements with business priorities.

Common use cases:

- Investments and Acquisitions – Validating commercial and legal integrity of a technical platform.
- Capital Raises – Demonstrating robust technology strategy through well-documented evidence.
- Scaling and Expansion – Detecting constraints and confirming that the technology accommodates future growth.
- Strategic Actions – Establishing whether to pivot, discontinue, or develop technical solutions further.
- Restructuring – provide the technical input in a company restructuring process.

Analysis parameters

The review focuses on hardware, software, and all supporting elements that may influence a company's operational and long term objectives. It targets a comprehensive understanding of existing functionality, capacity, potential gaps, and improvement areas—rather than peripheral IT infrastructure.

Key evaluation points include:

1. Inventory of Technical Assets

a. Software and Hardware – Source code, infrastructure, physical components, device integration.
b. Tools and Tests– Test environments, development frameworks, and related utilities for product verification.

2. Life Cycle Assessment

a. Product Portfolio – Stateof each product's design, development, and release cycles.
b. Functional Carriers – Core components that enable product functionality, plus any critical dependencies

3. Agreements, Licenses, and Intellectual Property

a. Ownership & IP – Licensing terms, third-party dependencies, and technical patent portfolios.
b. Contractual Commitments – Supplier agreements, joint development contracts, or technology transfers.

4. Maturity of Processes

a. R&D Practices – Structured workflows, team functions, and effective documentation throughout development and handling of stakeholders
b. Quality – Processes for field quality follow-up as well as quality assurance before product release.
c. Technical Support – Support philosophy and setup. Effects on R&D work.

5. Know-how and Key Personnel

a. Critical Expertise – Identification of critical know-how andor knowledge repositories within the organization.
b. Dependency Risks – Potential issues if key individuals leave or are unavailable.

6. Risks and Actions

a. Risk Identification - Security vulnerabilities, performance bottlenecks, compliance gaps. Future changes to technical infrastructure or legislation.
b. Roadmap – Proposed actions and timelines to address identified weaknesses.

7. Opportunities/Strengths

a. Unique product aspects - Identifying unique aspects of the product which provides a unique selling point.
b. Possibilities - Understanding aspects with high potential from a technical and business perspective.

Consequences of Insufficient Evaluation

Omitting a thorough review of the above parameters can lead to the following risks:

- Unplanned Costs – Modernizing or rectifying developed systems may require significant resources.
- Weak IP Framework – Gaps in licensing or ownership can produce legal complications and usage restrictions.
- Security Vulnerabilities – Improperly vetted systems can be vulnerable to face cyberthreats external threats or regulatory penalties.
- Inhibited Growth – Underlying technology that is not designed for scalability cannot support increasing demand or new market opportunities.

Comprehensive Technical Due Diligence reduces these uncertainties.

Georgia & Molly's Methodology

Georgia & Molly integrates both hardware and software assessments, delivering a comprehensive and accurate analysis that aligns technical findings with relevant business objectives.

Methodological Steps:

1. Data Collection – Gathering architecture diagrams, specifications, source code, personnel overview, process descriptions, license details, and other product related documentation and information.
2. Initial Review – Pinpointing risks, identifying core components, and areas for further investigation.
3. Detailed Investigation – Conducting interviews with key technical staff, verifying critical systems, and assessing functional carriers and processes.
4. Final Assessment & Recommendations – Writing a report detailing technical assets, core products and components, risks, potential business impacts, and recommended technical actions.

This approach merges efficiency with deep technical knowledge.

Data Access and Requirements:

The examination requires structured access to relevant internal and external materials—such as documents, specifications, source code, design schematics, areas of responsibility, organizational charts, architecture overviews, process descriptions, and software licenses. To ensure a complete analysis, access to, and engagement from, key personnel across R&D, production, support, and sourcing is required.

AI-supported Process:

All due diligence activities leverage AI in a controlled European environment, without external data sharing or model training. Our approach follows a two-phase "Double Diamond" framework:

1. Data Gathering – Collecting and organizing all relevant information for preliminary review.
2. Assessment – Combining AI-based analytics with human expertise to produce an in-depth, factual report on risks, opportunities, and recommended actions.

Target Beneficiaries

Technical Due Diligence is intended for organizations in which technology represents a core asset, ensuring that management decisions rest on objective data:

- Tech Companies Undergoing Transition – Companies preparing for fundraising, sales, course corrections or expansions.
- Investors – Requiring a precise, data-driven technical assessment.
- M&A Legal Advisors – Law firms and consultancies conducting thorough technical reviews to inform merger or acquisition processes.

Data Security and integrity

Technical Due Diligence involves sensitive data with high proprietary value. Georgia & Molly adheres to stringent data protection guidelines:

- No Public AI Training – All reviews occur in controlled environments where data is never used for training or any other purposes.
- Standardized NDAs – Enforcing explicit contractual boundaries to safeguard confidential information.
- Secure Data Management – Refraining from unverified platforms, maintaining full compliance.

Distinguishing Factors

1. Comprehensive Technical Insight - By reviewing both hardware and software assets, the analysis covers the complexities of software and hardware overlaps.
2. System-Level Evaluation - Examining the processes on a system and component level provides reliable indicators of performance and scalability.
3. Critical Gap Identification - Dependencies and documentation gaps often harbor unseen vulnerabilities. Georgia & Molly's thorough approach can identify potential future difficulties.
4. Full-Spectrum Coverage - Hardware-oriented audits frequently neglect software constraints; software-focused evaluations can overlook hardware limitations. We assess both.
5. Alignment with Real-World Usage - We confirm current capabilities and evaluate readiness for future improvements, ensuring that products and processes meets actual operational demands.

Additionally, Georgia & Molly stands out for:

- Storytelling Skills – Communicating complex technical findings via clear narratives that foster better stakeholder understanding.
- Deep Knowledge of Production & Service – Beyond hardware and software, we consider production processes, service and decomissioning to ensure that the entire product lifecycle is assessed.
- Experience from the Other Side – Having participated in due diligence as both evaluators and stakeholders, we recognize the concerns and requirements from multiple perspectives.
- Relationship-Building Focus – We prioritize getting to know each client's context and objectives, establishing a foundation of trust and collaboration from the outset.

Georgia & Molly provides Technical Due Diligence backed by factual rigor. Our goal is to supply the concrete, data-centric insights needed to reduce uncertainties, protect technological assets, and inform product portfolio decisions.

Offerings

1. Technical snapshot - A rapid, high-level overview for smaller companies or quick decisions.
2. Comprehensive Assessment - A more thorough investigation suited to medium-scale needs. A focused look at how your tech operates in practice—ready to support decisions, not just describe systems.
3. Tailored Full-Cycle Review - A custom approach, acknowledging the expanded requirements and deeper detail often necessary for production-intensive or accelerated scenarios.

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