

Expert Guide to Technical Due Diligence for Startups



Introduction to Technical Due Diligence

What is Technical Due Diligence?

Technical due diligence is a comprehensive evaluation of a startup's technological capabilities. It evaluates a company's IT network, software and applications, infrastructure, cyber security and data privacy controls.

It is most commonly used by investors (such as venture capitalists, family offices and investment managers) who are seeking assurance that a startup is technically sound. It's essential to assessing the viability and risks of the technology underlying a business. For startups seeking private equity investment, technical due diligence is a critical step in demonstrating their readiness and value.

Why is Technical Due Diligence Crucial for Startups?

Risk Mitigation

Investing in a startup is risky. Through technical due diligence, potential investors are able to identify and mitigate risks associated with the target company's technology. The process will uncover vulnerabilities, technical debt and improvement areas, ensuring a more data-driven and informed decision around whether or not an investment is wise.

Investment Readiness

It costs between £20,000 – £100,000 for a venture capitalist to perform technical due diligence (depending on the size of the transaction). Consequently, you know if a startup has reached technical due diligence, they are being formally considered as a potential investment.

Cultural Fit

It's not all about the outputs from the due diligence... both companies (venture capitalist and startup) will learn a lot about how each other work and operate by virtue of going through the process together.

Key Takeaway

The due diligence process itself acts as a mechanism for transparency and an informal way for each to assess whether there might be a 'cultural fit' too.

Driving Business Value

Technical due diligence provides an opportunity for the startup as well as the potential investor. By identifying and addressing technical weaknesses early, startups can; improve code quality, underlying IT infrastructure and privacy/security controls. This can lead to greater scalability, boosting investor confidence, higher valuations but also, winning more clients.

Key Elements of Technical Due Diligence

Infrastructure and Architecture Review

Assessment of Current IT Infrastructure

A thorough review of the startup's IT infrastructure is performed. This will evaluate any physical network (if it exists) and cloud environments such as AWS (Amazon Web Services), GCP (Google Cloud Platform) or Microsoft Azure. The goal is to assess both whether the infrastructure is robust, secure and compliant, but also whether it is capable of supporting commercial growth.

Scalability

Scalability is a critical factor for startups looking to grow rapidly. The infrastructure must be able to handle increased loads and adapt to changing business needs, especially if investors are about to pump a load of cash into the business. Assessing the flexibility of the system ensures that it can integrate new technologies and scale seamlessly and efficiently.

Code Quality and Maintainability

Code Reviews and Technical Debt

Code quality is a significant indicator of a startup's technical health, especially where the company is a SaaS (Software-as-a-Service) product. Depending on the calibre of software engineers the startup has used to date, code quality could potentially be a big challenge that takes some time to rectify. Often in the early days of growing businesses, code quality suffers as founders focus on getting afloat and winning contracts.

Conducting code reviews will identify technical debt, which can hinder future development and increase maintenance costs. Investors will be keen to identify any areas which might increase operating costs as this will affect profitability.

Coding Standards & Best Practices

Adhering to best practices in coding standards is fundamental for ensuring a high product quality. Code that aligns to industry standards and is well-documented facilitates quicker development sprints, faster product releases and easier onboarding of new software engineers as the team grows.

Cyber Security

The Role of Cyber Security in Due Diligence

Protecting Sensitive Data

Cyber security is a cornerstone of technical due diligence. There isn't an investor out there that is keen to deal with a significant data breach of a company they have just acquired. Protecting customer data (names, addresses, emails, etc.) and personally sensitive data (sexual orientation, political views, health data, etc.) from being lost to cyber attackers is key.

This includes accidental data loss by a careless employee and is crucial to maintaining client trust and regulatory compliance. An effective cyber security strategy that is well implemented, safeguards company and customer data, ensuring the security of the business.

Compliance and Regulatory Requirements

Startups must comply with various regulatory requirements depending on their sector, types of data they process and country of origin. Ensuring compliance with these regulations during due diligence is crucial to avoiding legal complications and potential fines from regulators.

Cyber Security Assessment Checklist

The venture capitalist will likely bring in an expert due diligence partner to perform the required checks. The cyber security assessment will follow a standard industry best practice framework, such as ISO 27001, CIS 18 Critical Controls, NIST, OWASP, etc.

Conclusion

Startups need to do thorough preparation and self-assessments before technical due diligence commences to reduce risks and ensuring that any negotiations around valuation aren't impacted.

This involves identifying and fixing vulnerabilities, technical debt, and areas that need improvement. It demonstrates investment readiness, showcasing a startup's commitment to transparency and willingness to tackle potential issues, making it more attractive to venture capitalists.

Improving code quality, infrastructure, and security controls can help startups drive their own commercial success by winning more clients, making them more scalable and potentially, more valuable.