What is Technical Debt, and How Can Organizations Manage it with TrueFort?

Technical debt: It's a term that circulates in software development circles, yet its significance extends far beyond the developer's desk. It carries ramifications for business operations, security, and long-term strategy. But what exactly is technical debt, how can it be managed, and how can the TrueFort Platform help organizations to bring it under control?

The Nature of Technical Debt

Technical debt is a metaphor coined to describe the "interest" organizations pay when they choose quick, easy, or cheap development solutions that aren't sustainable in the long run. Such "interest" could take the form of added costs, time, and effort needed later to rectify the shortcuts taken or to rewrite poorly designed code.

At times, incurring technical debt may be an intentional business decision. Perhaps a firm needs to release a product quickly to capitalize on a market opportunity, or resources are limited, and a less-than-perfect solution must be implemented in the interim. However, if left unchecked, the interest payments on this debt can mount up, leading to inefficiencies, poor performance, regulatory non-compliance, and security vulnerabilities.

The Cost of Technical Debt

Calculating the real cost of technical debt is no simple task, as it involves both tangible and intangible factors.

Direct costs include the extra time and resources spent on maintenance and bug fixing that could be invested in developing new features or innovations. However, the indirect costs are often even more significant. These include opportunity costs from delayed time to market, reduced competitive advantage, and the diminished morale of IT teams forced to constantly deal with legacy systems instead of working on new and exciting projects.

“This is a real eye-opener. Your product capabilities are massively understated.”

CISO, FinServe
There’s also the cost associated with increased security risks, as outdated software and systems are more vulnerable to cyberattacks, plus the impact on customer satisfaction and company reputation from persistent system errors or downtime should not be underestimated. In order to accurately calculate the real cost of technical debt, organizations need to consider all these elements, making it a complex but essential component of strategic planning.

The Role of TrueFort in Managing Technical Debt

As a comprehensive application and cloud security platform, TrueFort can play a pivotal role in managing an organization’s technical debt.

> Identifying and Assessing Technical Debt

The TrueFort Platform begins by providing complete visibility into an organization’s applications, their behaviors, and dependencies. With its application-centric approach, TrueFort can help identify outdated systems, underutilized resources, and potential areas of risk - all indicators of technical debt. Painting a clear picture of their current software architecture enables organizations to understand and quantify their technical debt more accurately.

> Mitigating Security Risks

One of the most critical consequences of technical debt is its increased security risk. Outdated software, weak code, and poorly configured systems often become the entry points for cyber-attacks. TrueFort offers real-time security monitoring and threat detection, identifying erratic behaviors that could indicate a security threat. This proactive approach helps secure the gaps in an environment caused by technical debt, reducing the risk of breaches and their associated costs.

> Streamlining Processes

A significant component of technical debt is inefficient processes that drain resources. TrueFort Platform helps streamline these processes. From automating least privilege access to validating account relationships, it supports a smoother, more efficient operational flow. By automating these processes, organizations can redirect their resources - both staffing and financial - from managing technical debt towards innovation and growth.

> Promoting a Zero Trust Model

TrueFort enables organizations to enforce a zero trust (least privilege access) model, which assumes no user or system is trustworthy by default, regardless of their location in relation to the organization's perimeter. TrueFort does this at a granular level, with microsegmentation for regulatory best practices. This approach is crucial in a landscape where technical debt can make systems vulnerable to attacks from both outside and inside an organization’s data environment.

> Tackling Technical Debt with TrueFort

Taking one of our clients as an example, consider a financial organization with a sprawling software architecture built over many years, plus recently acquired environments as a result of mergers and acquisitions. In their haste to meet market demands, they had utilized an eclectic array of patched and bespoke solutions, resulting in a mixture of legacy systems, underutilized resources, inherited unknowns, and mystery dependencies - a significant collection of technical debt.

By deploying the TrueFort Platform, the organization gained visibility into its application environment, uncovering forgotten accounts, inefficient processes, and potential security vulnerabilities. TrueFort Platform then helped them to streamline and automate security measures, redirecting the company’s resources from technical debt management to other critical areas.

The outcome? A more efficient, secure, robust, and legally compliant software environment. A more enabled, informed, and efficient security team.
Wrapping Up

Like financial debt, technical debt isn’t inherently bad. Sometimes, it’s the price of innovation or a strategic decision to address immediate business needs. However, as with monetary obligations, managing technical debt is crucial, ensuring that it doesn’t spiral out of control and hinder business progress.

TrueFort Platform, with its comprehensive security and application management platform, can be a powerful ally. By delivering visibility into an organization's software environment, mitigating security risks, streamlining processes, and promoting a zero-trust model, it helps keep technical debt in check and enhances an organization’s overall operational efficiency.

In the world of software, where change is the only constant, managing technical debt with solutions like TrueFort could mean the difference between being a market leader or being left behind.