Balancing Budget and Data Security: Cost-Effective Strategies for IT Managers

As an IT manager in the electronics product development industry, your role involves protecting sensitive design data while managing tight budgets. Cyber threats are increasingly sophisticated, presenting considerable risks to your company's market position and financial stability. A breach can have far-reaching consequences, from financial losses to long-term reputational damage.

However, the truth is **resources are finite, and every decision you make must strike a balance between cost-efficiency and uncompromised security**. In this blog, explore how you can maintain this critical balance, ensuring your data security measures are both strong and economically viable.

Unique Data Security Needs of the Electronics Product Development

In the electronics industry, the data you handle is more than operational—it's the heart of your company's innovation and competitive advantage. This positions sensitive design data, encompassing everything from initial concepts to final schematics, as a prime target for cyber attackers. These adversaries seek to misappropriate intellectual property, undermine your market standing, and capitalize on technological innovations.

What makes design data such an attractive target? The theft of intellectual property directly diminishes your bottom line and market share, effectively granting your competitors an undue advantage. Beyond significant financial losses, data breaches erode trust with partners and customers. Moreover, these incidents can trigger non-compliance with industry standards, leading to fines and legal challenges that obstruct your operational capacity and growth potential in crucial markets.

Your responsibility for implementing strong data security measures directly influences your company's ability to innovate securely, maintain its competitive edge, and comply with industry regulations. But how can you efficiently protect design data with the limited resources you often face?

Spoiler alert: Turning it off and on again won't help in this case.

Cost-Efficient Strategies for Data Security

But a promising strategy is the adoption of **cloud-based platforms**, which offer secure, scalable, and economically efficient solutions for data storage and management. Let's explore why transitioning to the cloud might benefit your operations strategically.

Cost of IT Resources in Traditional Solutions

Maintaining on-premise server space for design file storage incurs substantial costs, not only due to the physical servers themselves but also the space and energy they consume. The operational drawbacks include regular maintenance, dedicated personnel for upkeep, and the complex processes involved in data recovery, which carry a high risk of data loss.

Contrast these challenges with cloud storage, where many of these financial and operational burdens are significantly reduced or eliminated. Opting for a subscription model provides predictable costs that cover infrastructure security, maintenance, and more efficient data recovery options, meaning considerable financial relief compared to traditional methods. This approach not only eliminates the costs of server hardware but also reduces the demand for specialized IT staff to manage these systems. You can free up that part of your resources previously tied to maintaining and securing on-premise infrastructure.

Revert That Change!

Now consider a scenario where a designer must revert to a previous file version due to an error. Not a rare phenomenon, is it? In an on-premise environment, tracking changes and restoring data becomes a complex, resource-intensive task. The cloud, however, simplifies this with automated backups, easy version control, and quick recovery, presenting a cost-effective way to maintain data integrity and ensure business continuity. This capability is particularly crucial in electronics product development, where every modification matters.

Can You Replicate It In-House?

The ongoing maintenance costs of on-premise setups extend beyond the initial installation. Both the deployment and continued management demand substantial resources. With its advanced encryption and regularly updated protocols to address emerging threats, cloud security eliminates the need for extensive hardware and constant oversight from your team. Cloud service providers employ specialized teams to maintain and update security processes and systems for you, ensuring they remain current. **Achieving this level of expertise and managing associated costs is often unfeasible in-house**.

Moreover, technological advancement adds another layer of complexity to data security. Traditional systems typically need frequent upgrades to keep up with technological progress. This necessity for continuous updates stretches your budget and diverts your team's focus away from other crucial IT responsibilities. This challenge is especially acute when dealing with legacy systems that may not integrate smoothly with new software versions. Cloud solutions directly address these issues by providing secure integrations and automatic updates, which helps your systems always be equipped with the latest security protections without the extra investments of time and money.

Vendor Risk Management? Get It Off Your Shoulders!

Now, think of vendor risk management. **How much of your time, budget, and energy currently goes into managing the security of your hardware and software vendors?** It's a resource-intensive process, requiring continuous vetting and lifecycle management.

That's another reason to consider the cloud. Here, service providers are responsible for managing vendor verification, security updates, and compliance with industry standards on your behalf. This delegation to a third party brings a level of expertise and resources that would strain even the most robust in-house IT departments.

Automate Security Processes

One more way to balance budget and data protection is through the automation and integration of security processes. By automating routine security tasks, you decrease the chance of human error—a major factor in security breaches, with an IBM study showing that **95% of cybersecurity** incidents stem from such mistakes—while allowing your team to concentrate on other essential areas. Your systems can benefit from the latest security protections without manual effort. Such automation also minimizes system downtime, a key factor in preventing delays in product launches and related financial implications.

Simplify Complex Ecosystems for Financial Efficiency

Integrating tools used across electronics product development within your team amplifies this cost-effectiveness. By adopting an integrated design environment, you optimize real-time threat detection and response, enabling quicker mitigation of these risks. This unified cloud environment reduces the need for multiple, overlapping tools—a common source of unnecessary expenditure. Such integration fosters a cohesive defense mechanism, strengthening your security posture while minimizing the expenses involved in overseeing numerous disparate security systems.

Hand Over Some Control

Wait. **What?** The idea of transferring some administrative rights to your engineering team might raise eyebrows. "What if...?" you might wonder, envisioning many potential security risks. Yet, consider the substantial amount of time and resources currently spent on providing engineers with access and managing administration. Is there a more efficient way?

In electronics development, the race to innovate and launch new products faster is ever-present. Yet, stringent security measures, while necessary, can unintentionally slow down these processes. Cloud platforms emerge as a powerful mediator, enabling rapid development cycles without compromising security. They offer a secure framework within which design teams can operate more autonomously, reducing bottlenecks that may arise from IT security protocols.

Minimizing administrative overhead by granting engineers control over certain operations not only accelerates the design process by reducing wait times for IT approvals but also decreases the IT department's allocation of resources to mundane, routine tasks. Engineers driving the Product Data Management (PDM) storage savings, rather than IT staff, exemplify a shift towards these more cost-efficient operations.

Delegating administrative rights doesn't equate to relinquishing all control. Platforms like Altium 365 enable IT managers to retain overarching control over the system by issuing specific access and rights tailored to the needs and roles within the engineering team. This controlled empowerment maintains stringent data security while allowing the flexibility necessary for efficient product development workflows.

ALTIUM 365

Let Compliance Be Someone Else's Job

Meeting regulatory compliance standards demands significant time and financial investment–from implementing stringent security measures to handling the ongoing costs of audits and updates.

Cloud platforms provide advanced documentation and process standards that greatly simplify compliance with industry regulations. These solutions are built to meet regulatory standards right from the outset, freeing you from the burden of constant monitoring and maintaining compliance protocols. The responsibility for keeping security updates and certifications current is shifted to a third-party service provider. This transition helps your systems align with the latest compliance requirements without continuously draining your resources. Cloud solutions transform compliance from a complex and demanding task into a cost-efficient and manageable aspect of your operations.

Consider the experience of companies that have moved to Altium 365. For organizations analyzed in a Forrester Study*, the shift to this electronics product development platform significantly improved their security and compliance. Before Altium 365, the absence of a standardized PCB design and collaboration environment forced IT teams to juggle multiple tools and processes that varied across functional groups and geographic locations. Altium 365 enabled a more effective approach, including most necessary security certifications and controls.
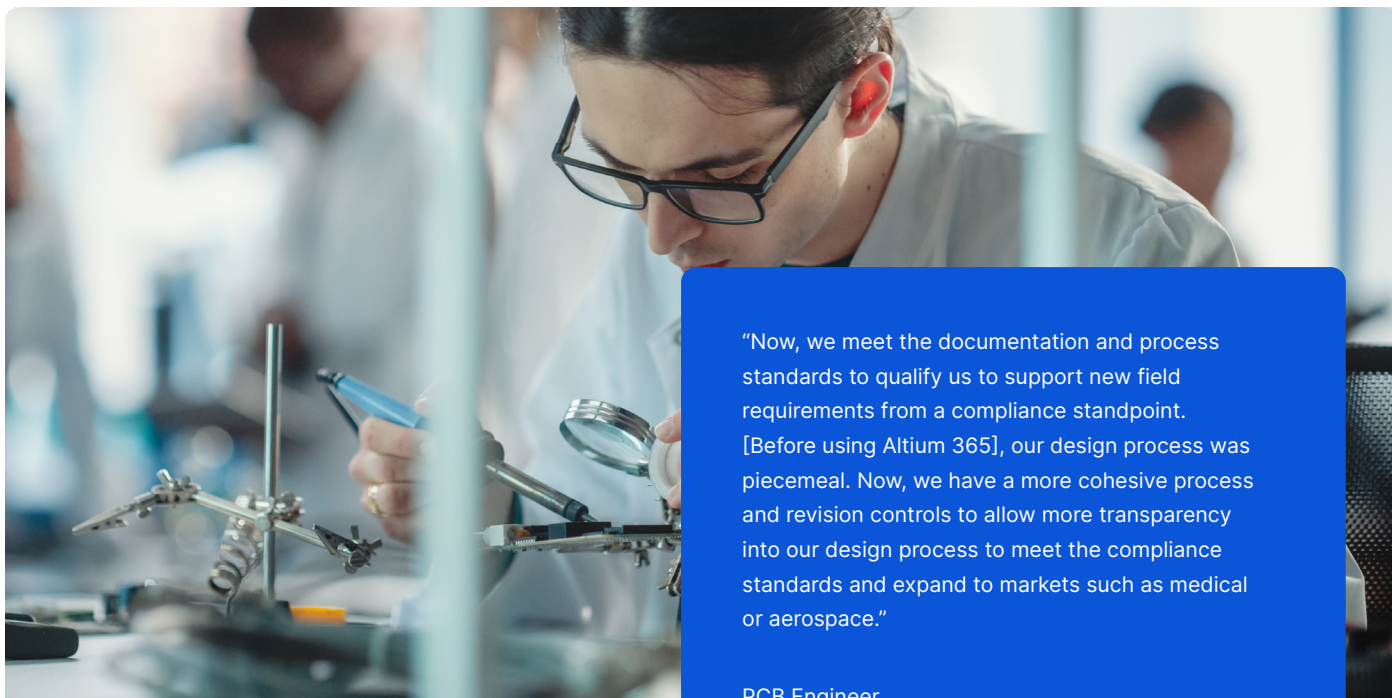
"Now, we meet the documentation and process standards to qualify us to support new field requirements from a compliance standpoint. [Before using Altium 365], our design process was piecemeal. Now, we have a more cohesive process and revision controls to allow more transparency into our design process to meet the compliance standards and expand to markets such as medical or aerospace."

PCB Engineer,
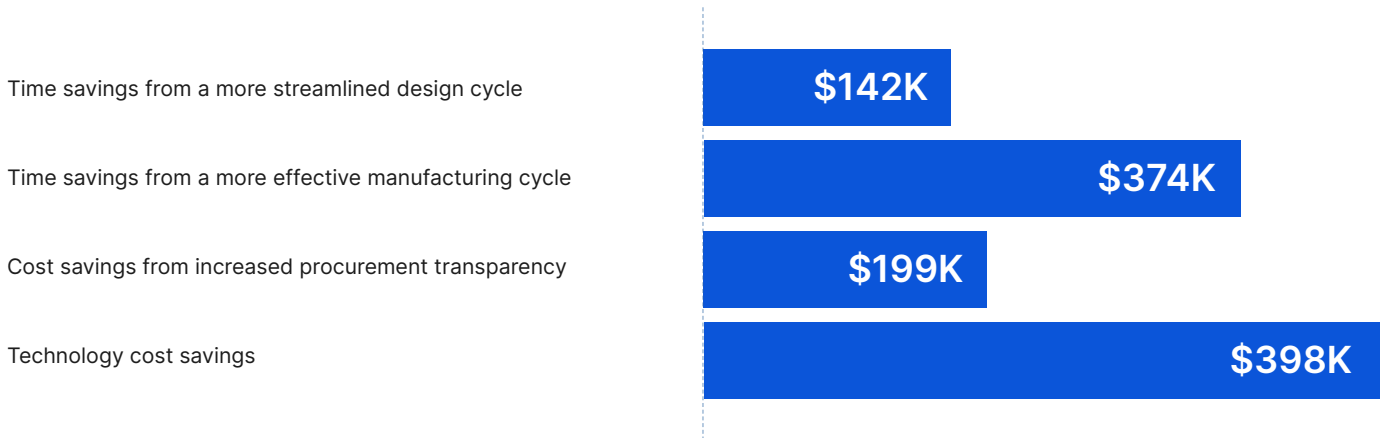Manufacturing (Electrical Equipment)

A Closer Look at Cost Savings

Feedback from businesses that have switched to the cloud highlights numerous benefits, including accelerated project timelines, lighter IT workloads, and substantial cost savings due to more efficient operations. But what solid evidence supports these claims?

According to the same Forrester Study, the adoption of Altium 365 by the evaluated organizations led to cost savings from reduced IT support and hardware costs amounting to **$398,000** (three-year present value).*

ALTIUM
365

# Customer Insights: The Voice from the TEI™ Study by Forrester

Summary of Benefits

Three-year risk-adjusted

Time savings from a more streamlined design cycle	**$142K**
Time savings from a more effective manufacturing cycle	**$374K**
Cost savings from increased procurement transparency	**$199K**
Technology cost savings	**$398K**

*A commissioned study conducted by Forrester Consulting on behalf of Altium 365 in 2023.
Results are based on a composite organization.

No matter the initial setup—be it reliance on on-premises tools or basic methods like local file storage and manual sharing—Altium 365 has eliminated the need for extra IT support and related expenses. Some interviewees noted that their prior systems frequently required IT intervention due to regular crashes and the absence of auto-backup capabilities, issues Altium 365 effectively resolves.

Furthermore, some organizations highlighted savings on hardware and electricity costs. The provision of dedicated support from Altium was repeatedly mentioned as a key factor in reducing technological expenses. With expert support addressing platform issues, the internal IT team's workload lightened, allowing them to concentrate on other strategic areas.
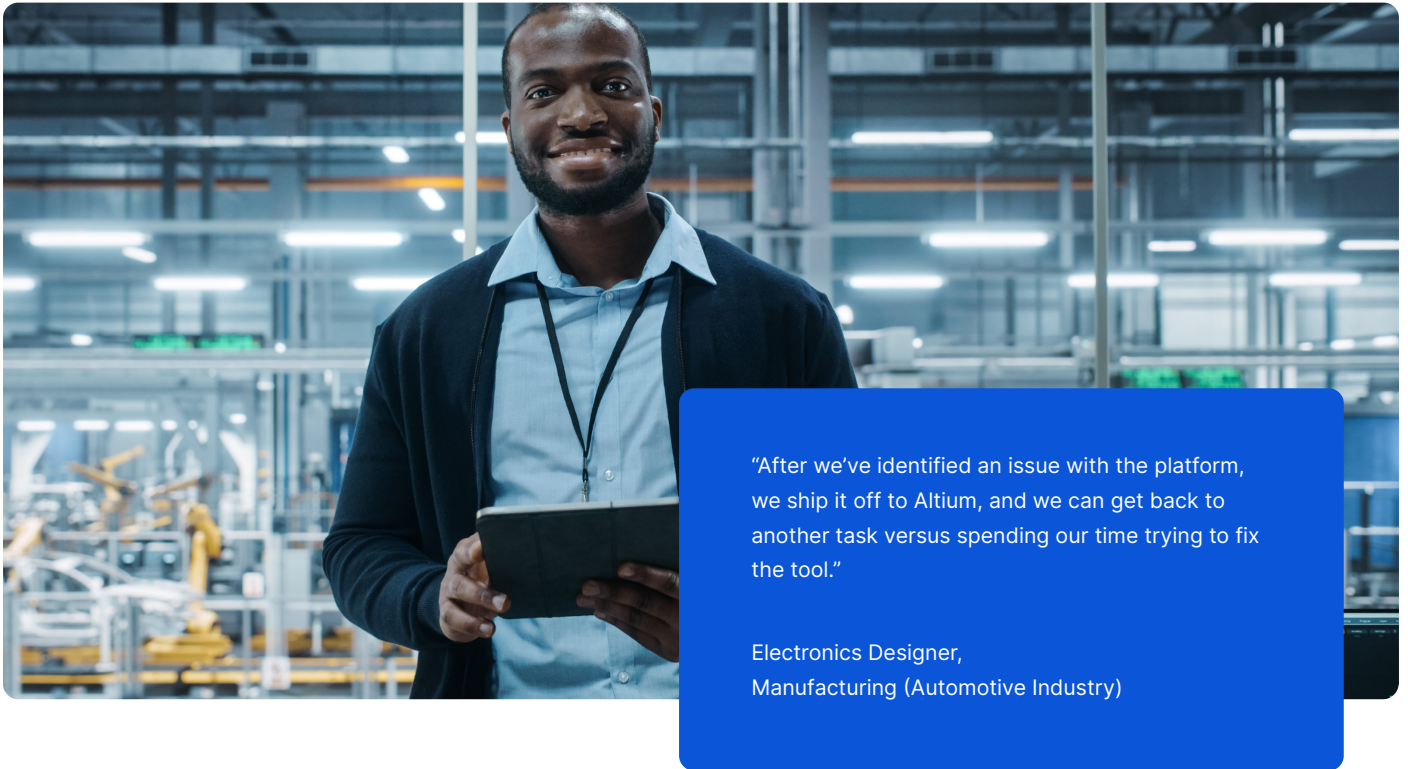
"After we've identified an issue with the platform, we ship it off to Altium, and we can get back to another task versus spending our time trying to fix the tool."

Electronics Designer,
Manufacturing (Automotive Industry)

Grab a Free Copy of Your Security Whitepaper

For IT managers in the electronics product development industry, cloud solutions present a compelling case for balancing budget constraints with the need for solid data security. By leveraging the financial and operational efficiencies of the cloud, you can ensure the protection of sensitive design data while optimizing your resources. Want to learn what specific security measures protect your design data in Altium 365?

[Download whitepaper]
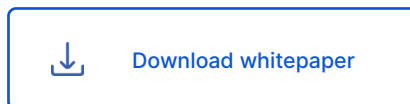
*A commissioned study conducted by Forrester Consulting on behalf of Altium 365.
Results are based on a composite organization.

ALTIUM
365