

OVERCOMING THE TECHNOLOGY CHALLENGES OF STARTUP BUSINESSES

Entrepreneurs need simple, scalable technology solutions that help them innovate and grow.

EXECUTIVE SUMMARY

The early stages of a startup company can be incredibly exhilarating — and incredibly hectic. One moment, a product breakthrough or a successful round of funding makes it seem as though a company is well on its way to disrupting its industry and taking a leading position in the marketplace. The next, one crisis or another threatens to derail the entire enterprise before the company has even found its footing.

Amid all the excitement and chaos, technology can be either a valuable business enabler or one more obstacle to overcome. Key technology challenges include setting up an office and IT environment, onboarding users, supporting the core business via technology and managing cash flow. Additionally, startups must deliver devices and basic productivity tools to end users in a constantly changing environment. As new companies begin to scale their operations, it becomes even more pressing — and even more difficult — to maintain an effective security posture, deliver a consistent experience for users and customers, and maintain a competitive edge.

By working with a trusted, experienced ally, startups can avoid costly mistakes and build a technology environment that will support sustained growth.

The Key Technology Challenges of Emerging Startups

The factors that make startup culture so exciting are the same ones that make launching a new business incredibly challenging. Thrilling brainstorming sessions turn into bleary-eyed all-nighters. There are the ambitious new employees that need space and tools to help them do their work. And periods of explosive growth require companies to rapidly scale out processes and resources.

Additionally, most startup companies across industries face a core set of technology challenges. Because startups are not burdened with decades of legacy technology infrastructure — and because they're able to build their IT teams from scratch — technology presents an opportunity for startups to stay lean, adopt modern tools and processes, and set themselves apart from their more established competitors. But if they get tripped up by common hurdles, startups risk turning technology into a problem rather than a solution.

Startup leaders should seek out effective, efficient tools and processes to help them meet their technology challenges.

CHALLENGE 1: Building an Effective Website

A website is no longer just a website. It's also a company's virtual front door, an online billboard waiting to catch the eyes of passersby, a business card showing off a startup's professionalism and even a portfolio that displays products and services. For some startups, the website practically is the business, serving as a portal for customers to view available offerings, place orders and initiate service requests. It's crucial, then, that a startup's website be well designed, easily navigable, optimized for mobile users and always available.

Among the potential pain points for startups:

- Cyberattacks or other sources of technology outages can bring down websites that are hosted on company-owned equipment.
- Startups may not have any dedicated IT staff, and therefore may need to bring in external consultants to set up, maintain and manage on-premises solutions.
- Many startups lack physical space to dedicate to IT systems or may move between several different office spaces in quick succession to accommodate rapid growth.

Technology solutions that can help:

- Hosting a website in the public cloud simplifies IT management and is often a cost-effective option.
- By turning to public cloud providers for website hosting, startups gain the reliability and security of those cloud vendors' environments.

1 in 323

The rate of malicious emails received by businesses with fewer than 250 employees, the highest for companies of any size¹

CHALLENGE 2: Delivering a First Product

Until it develops a functioning product that customers are willing to buy, a company is really nothing more than an idea. Today more than ever, many startups' products have a significant digital component, such as a mobile app. And developing these digital assets often consumes more time and resources than originally planned — delaying product launches and potentially threatening the viability of a startup.

Among the potential pain points for startups:

- Deploying physical technology infrastructure is a time-consuming process that requires specialized expertise.
- After a new product has been developed and tested, a startup may have less need for technology resources, resulting in expensive equipment sitting idle.

Technology solutions that can help:

- Cloud resources from Infrastructure as a Service and Platform as a Service providers can help startups meet their technology development and testing needs quickly, simply and effectively.
- Businesses pay only for the IaaS and PaaS resources they actually use. When development and testing are complete, cloud resources can be quickly scaled back, preventing overspending.

CHALLENGE 3: Maintaining a Secure Technology Environment

While startup leaders are focused on the movements of their competition, they may hardly give a thought to one of the largest threats to their business: cyberattackers. A successful hack can cripple a startup's business operations, lock down its proprietary data or expose the personal and payment information of employees and customers. In fact, a single catastrophic cyberattack can shutter a business for good. According to the Ponemon Institute, the global average cost of a data breach is approaching \$4 million.

Among the potential pain points for startups:

- A comprehensive cybersecurity strategy requires the right mix of technology, processes and user training. Many startup leaders lack the background to determine what mix of security measures is necessary to protect their own organizations.
- Depending on the industry, some startups may be subject to additional data safety regulations.

Technology solutions that can help:

- A trusted security partner can offer services around web and email security, cloud security, and data and device security, as well as managed security services — helping startups to make overall network security central to their operations.

CHALLENGE 4: Enabling Employee Productivity

One thing is certain at most startups: Work doesn't happen only during normal business hours. Employees need tools to connect, communicate and collaborate no matter where they are or what time it is.

Among the potential pain points for startups:

- When they lack the appropriate productivity and collaboration tools, employees often engage in makeshift, inefficient workflows. For instance, team members might email a document or slideshow back and forth, forcing them to constantly search for the latest file version.
- Employees who rely on consumer technology tools to help them do their jobs can inadvertently expose their companies to security vulnerabilities.

Technology solutions that can help:

- Cloud collaboration suites such as Microsoft Office 365, Google G Suite and Cisco Systems' WebEx Teams tie together applications such as email, chat, and document creation and management.

CHALLENGE 5: Deploying End-User Devices

To do their jobs and stay in touch with colleagues and customers, employees need access to modern, powerful computing tools. Many users require multiple devices, including a desktop, laptop, smartphone and tablet.

Office in a Box

Startup leaders are in a rush to get new products to market, hire staff, fulfill orders, resolve customer problems, instill quality control measures and create a company culture from the ground up. Even if they have the skills and experience to also build out a technology environment from scratch, most simply don't have the time.

With CDW's Office-in-a-Box service, startups can roll out much of their needed technology infrastructure in one fell swoop, freeing up time for other business-critical tasks.

Hosted phone system: By opting for hosted telephony, startups can eliminate the upfront capital expense of an on-premises system and pay as they go. Also, hosted telephony eliminates the need for ongoing maintenance and upgrades, helping to simplify operations.

Network connectivity: The network can be a pipeline or a bottleneck. CDW's experts help ensure that startups have the bandwidth they need to support their business.

Cloud productivity suites: Software as a Service productivity suites incorporate email, file sharing, calendar and other applications, ensuring that users are able to stay on the same page and drive the business forward.

Secure endpoints: The task of procuring, provisioning, deploying and managing smartphones and laptops for employees can be deceptively complex. Offloading these tasks to a partner helps ensure a secure, hassle-free environment.

**Among the potential pain points for startups:**

- Employee satisfaction and productivity will suffer if users aren't equipped with the right tools and allowed some degree of choice over the devices they're able to use. However, supporting multiple device types from different vendors can strain even seasoned IT departments, let alone startups that may lack dedicated IT staff.

Technology solutions that can help:

- Unified endpoint management tools can help startups to keep tabs on their device environments and prevent security problems.
- Through a Device as a Service engagement, a partner can help startups to procure, configure, provision and manage end-user devices. In DaaS engagements, companies pay for devices via a subscription model — transforming a significant capital expenditure into a predictable, recurring operating expense. A DaaS partner will also safely dispose of devices when they reach end of life and then deploy new models, ensuring that workers always have the modern tools they need to support their work.

Meet Your Growing Startup's Challenges

The period when a startup begins to take off is a heady time, but also a potentially chaotic one. Explosive growth is clear evidence that there is demand for a company's products, and that a startup's leaders have adopted an effective early business model. But as affirming and exciting as this time can be, it's also fraught with peril. Plenty of companies, after all, burn bright for a short period before fizzling out. The decisions that startup leaders make during the growth stage will have a profound impact on the future of the company, and this reality can turn feelings of exhilaration into a sense of mounting pressure.

At the same time, when companies grow, there's simply more to do. Managing a company of 50 or 100 employees is obviously a more complex task than managing a close-knit team of five to 10 people. And while startups may have been able to scrape by with shoestring budgets or makeshift workflows in their earliest days, growth requires them to standardize processes and adopt best-in-class solutions.

During this stage, IT can turn into a source of additional stress and cost for startup leaders, or it can become a business enabler that helps companies stabilize and continue to grow. It's important for growing businesses to adopt solutions that will help them to streamline their operations, rather than high-touch systems that will frustrate leaders and employees and distract them from their larger goals.

By making strategic decisions in the following areas, growing startups can set themselves up for long-term success:

Office Setup

As an organization grows, operations become more complex. Startups in the growth stage may still lack much in the way of dedicated, experienced IT staff, making it a challenge to fully support new processes and systems. However, startups also have an advantage over their more entrenched competitors: a clean slate. Precisely because they are starting essentially from scratch, startups have an opportunity to set up their offices for

optimal efficiency, without having to work around and integrate outdated legacy systems. It can be tempting at this point to opt for technologies that merely solve existing problems as quickly and cheaply as possible. But savvy startup leaders will choose networking, telephony and other systems that will streamline maintenance and other operations over time, with the potential to quickly and easily scale out.

Most startups will not only need to support employee productivity at the physical office but will also have to put solutions in place to enable remote work.

Onboarding Employees

It's common to hear the early hires at Silicon Valley tech giants referred to by their hiring order (as in "Employee #13"). Early employees help to establish the culture of a company and make a startup into what it will eventually become.

In other words, employees who are brought on during a startup's growth stage will have an outsized impact on the business and may eventually rise to be leaders within the company. Because of this, it's important to enable these workers to be as productive and efficient as possible, which will help to set baseline expectations for future employees. To onboard employees efficiently, startups must procure, configure and provision productivity tools such as devices and applications

No. 1

The rank of the United States on the 2018 Global Entrepreneurship Index, an annual measure of the health of the entrepreneurship ecosystems in 137 countries²

as quickly as possible. Many startups will need to rely on an external partner to assist with asset management and overall technology support.

Core Business Focus

In the technology world, managers often bemoan the amount of time and money that must be spent on simply "keeping the lights on" – a euphemism for keeping existing data center infrastructure and other systems running without breaking down. Often, these maintenance and management tasks make significant

demands on resources, keeping employees from addressing more strategic and valuable projects.

Growing startups don't have time to worry about merely keeping the lights on. They want to focus on their business and find ways to disrupt their industries. To maintain a focus on the core business and avoid getting bogged down with technology maintenance and support, many startups turn to partners that offer managed services, professional services and IT as a Service.

Workforce Productivity

Enabling workforce productivity isn't simply a matter of hiring the right people and giving them appropriate technology tools during the onboarding process. Nor is it enough to merely support data center infrastructure and other systems. Startups must continue to make targeted, strategic technology investments that will help give their employees an edge over workers at competing companies. An external IT partner can handle many of the difficult tasks needed to set users up with new systems, allowing startups and their employees to focus on productivity right away. Among other tasks, a trusted IT partner can assist with hardware integration, software integration, data center rack configuration, asset engraving and tracking, and diagnostic services.

Navigating Growth: Scaling Up Without Getting Bugged Down

It's often impossible to pinpoint the precise moment it occurs, but it eventually happens to every successful company: The startup stops being a startup.

Company leaders come into work one day and realize that they're no longer the new kids on the block. Instead, they're running a mature (or maturing) company. Rather than disrupting their industries, they're setting the standard, and their focus subtly shifts away from scrambling to create new relationships with employees and customers and toward nurturing and maintaining existing ones. As companies mature, they must continue to keep up with customer demands while also exploring new markets and products. Many former startups look to make acquisitions to maintain a competitive edge as they grow; as they do so, they may face new challenges around technology integrations.

Financing Options for Startups

Growth requires cash. But for many startups, existing capital is tied up in product development, initial hires and one-time expenses such as furniture and equipment. And many traditional lenders require a year of business history before issuing financing, forcing startup leaders to find alternative sources of capital.



SBA microloans: These loans, offered by the U.S. Small Business Administration in partnership with nonprofit intermediary lenders, range from \$500 to \$50,000, with interest rates between 8 percent and 13 percent.

Business lines of credit: With a line of credit, businesses receive a maximum credit limit but pay interest only on the amount they're using at any given time.

Personal loans for business: For startup leaders with good credit, it may be easier to obtain a personal loan than a business loan. However, the borrower is personally responsible for repaying the loan, even if the business fails.

Business credit cards: Credit cards give startups quick access to a revolving line of credit. But carrying a high balance can drag down a business's credit score, making it harder to secure other forms of financing.

Supporting the technology infrastructure of a maturing company requires a delicate balance. On one hand, company leaders will want to leverage their new size and strength, along with existing investments and relationships, to overpower smaller competitors. But on the other, they will also want to maintain something of the startup mindset that got them to where they are. And they'll want to avoid falling into the traps that ensnare so many large, established companies: complacency, bureaucracy and a bias in favor of "the way things are done around here" rather than an openness to new possibilities.

In particular, maturing companies should pay careful attention to several key technology areas.

Growing Security Challenges

As companies establish a significant customer base and begin to bring in more revenue, they face more attention from cybercriminals. Additionally, the consequences of a cyberattack that either leaks or locks down proprietary or sensitive data grow more serious as a company grows larger. Security must continue to be a top concern, with companies continually implementing the best tools and process and responding to changing conditions.

Maintaining an effective security posture is a function of both investing in appropriate solutions and assessing a technology environment to look for potential weak points.

Companies should consider making investments in the following areas to help shore up security:

- Automated cloud and endpoint backup
- Disaster Recovery as a Service
- Software and asset management visibility
- End-user behavior analytics
- Software-defined WAN
- Identity and access management

To determine the effectiveness of cybersecurity solutions, firms should also consider bringing in trusted external partners that offer the following assessment services:

- Application and code security testing
- Compliance auditing services
- Security policy/process assessments
- Proactive threat monitoring and incident response

Maintaining a Consistent Customer and User Experience

As companies mature, more layers of management tend to sprout up between frontline employees and executives, making it more challenging for leaders to keep their fingers on the pulse of what their workforces need to thrive. And as companies begin to deliver a wider array of services to customers, it becomes more challenging to ensure a consistently high-quality experience. To maintain a consistent experience for customers and end users, maturing companies must be able to react in real time to spikes in demand and deliver services via multiple channels.

A number of tools and services can be implemented to maintain a quality end-user experience. These will vary according to a company's needs and existing investments, but may include application integrations, data migrations, machine learning, serverless computing, hybrid cloud and data analytics. Depending on the industry, companies may also experiment with new ways of engaging and interacting with customers, including Contact Center as a Service, mobile applications, beacons, and Internet of Things sensors and applications.

Strategic Transformation

One of the most ubiquitous terms in the IT world in recent years has been "digital transformation," which refers to the integration of digital technology into virtually all areas of a company in an effort to fundamentally change business operations. Largely, the phrase is used in reference to older companies' need to change longstanding practices, modernize technology systems and embrace new processes and workflows. But as startups mature, they also will need to regularly update their technology infrastructure and leave behind inefficient ways of doing things.

As part of strategic transformation efforts, maturing companies will want to find ways to optimize cloud and other tech spending, create agile infrastructure and systems that accelerate results, increase automation, and reduce inefficiencies that slow down business. The fresh eyes of an external partner can help businesses to see areas for improvement.

Creating Company Culture

One of the most important tasks that a startup leader will tackle is creating a strong company culture — one that will last well past the startup phase. [Entrepreneur magazine](#) offers these six tips:



Build on your strengths: Founders who are designers should make their companies known for design; those who come from sales should emphasize that part of the business. "No one else can beat you on your own turf," *Entrepreneur* writes.

Be transparent: Staff should be kept in the loop about key developments and the company's progress — even when the news is bad.

Establish core values: These should be more than a poster on a wall. "The amount of time you spend on an activity," *Entrepreneur* writes, "is one of the best ways you can show to your employees what really matters."

Hire the right people: Look beyond the resume and make sure new hires embody the values of the company, *Entrepreneur* advises.

Provide a pleasant work environment: "Remember," advises *Entrepreneur*, "everybody wants to work in a cool work environment nowadays."

Get teams together outside the office: Retreats and outdoor activities deepen relationships and bring together people who don't usually work together.

We Get Startups

With decades of experience in supporting both established enterprises and emerging companies, CDW's solution architects have the expertise to provide startups with objective, in-depth advice that will help them thrive in the moment and scale out in the future. CDW maintains partnerships with leading startup incubators and accelerators and offers services and engagements to help startup leaders determine which technology investments are needed to help meet their business objectives.

Cloud consulting: CDW's experts can help with every step of cloud initiatives, including preplanning discussions, proposal recommendations, engagement preparation and execution of service.

Device as a Service: DaaS allows startups to outsource the procurement, provisioning, configuration and ongoing management of employee endpoints such as smartphones and laptops.

Security engagements: Through vulnerability assessments and threat checks, CDW's experts can help startups spot areas of risk and develop comprehensive plans for addressing them.

Managed services: CDW and its partners can manage startups' most complex infrastructure and applications with holistic, secure solutions — tailoring services to a company's goals and identifying the service level that meets its specific needs and budget.

The CDW Approach



ASSESS

Evaluate business objectives, technology environments and processes; identify opportunities for performance improvements and cost savings.



DESIGN

Recommend relevant technologies and services, document technical architecture, deployment plans, "measures of success," budgets and timelines.



DEPLOY

Assist with product fulfillment, configuration, broad-scale implementation, integration and training.



MANAGE

Proactively monitor systems to ensure technology is running as intended and provide support when and how you need it.

To learn more about how CDW can serve as an innovation partner for your startup, visit our [startups page](#).

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