



# 7 Dirty Little Secrets About the Cloud

**TOP SECRET**



The cloud isn't just the future of business—it's the present. As of today, if at least a portion of your business does not operate in the cloud, you are already behind your competitors.

Consider:

- Worldwide spending on public cloud services are poised to grow at a 19.4% compound annual growth rate – from \$70B in 2015 to \$141B in 2019.
- By 2019, IDC predicts cloud IT infrastructure spending will be 46% of total expenditures on enterprise IT infrastructure.
- 17% of enterprises now have more than 1,000 VMs in the public cloud.
- 31% of enterprises now have more than 1,000 VMs in a private cloud.

On the other hand ...

While cloud adoption is occurring at a faster pace than anyone could have predicted, fewer than one-third of IT Managers report having the visibility and control they need to keep things in check. Does the cloud pose a danger to your organization? Some IT Leaders say yes – the cloud introduces potential unnecessary and duplicated costs, and exposure to cybersecurity risk.

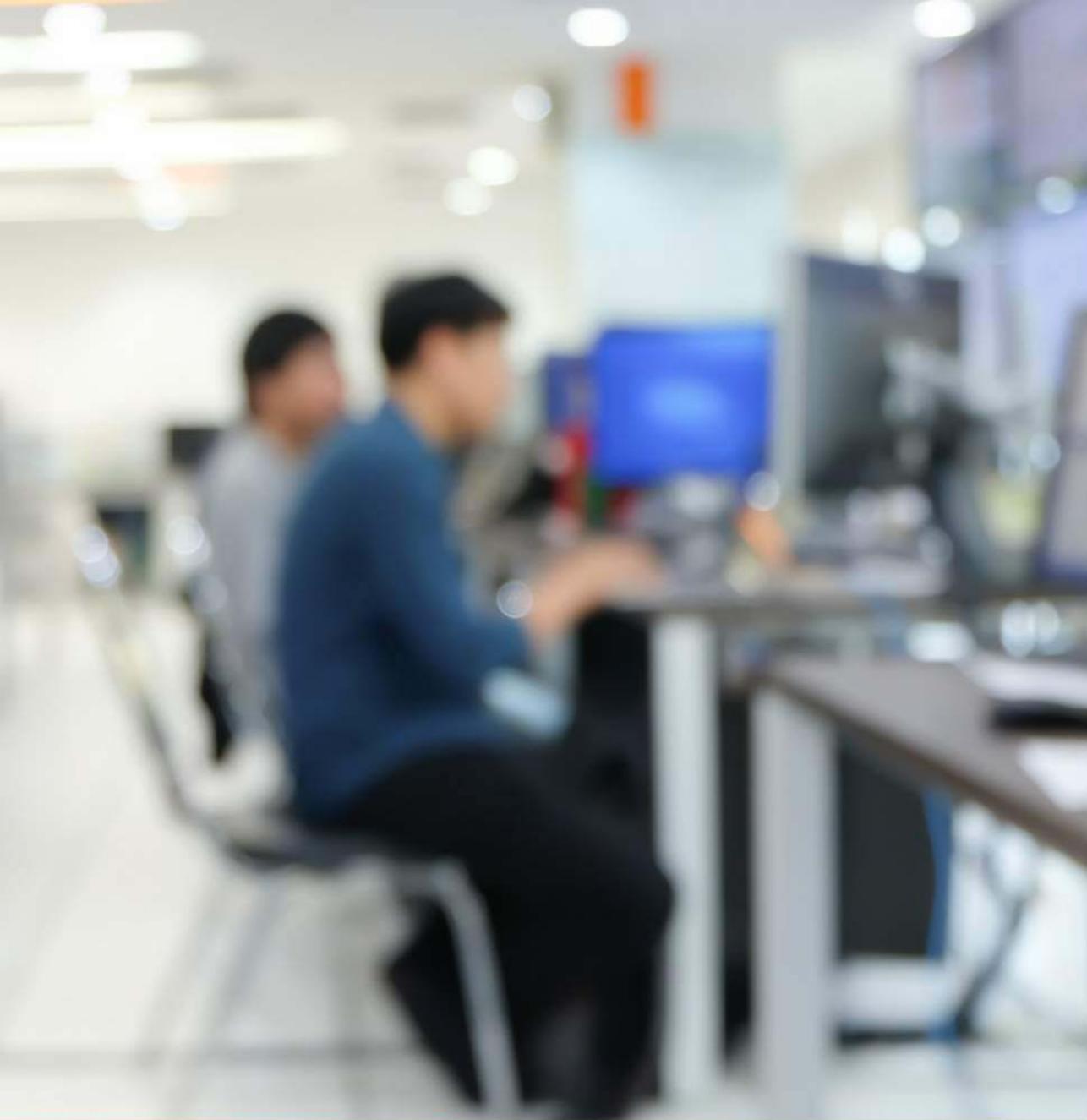
Today's most innovative companies are often praised for encouraging and achieving ingenuity at a low cost by exploiting the flexibility of cloud computing. A welcome concept. But in practice, there's a lot more to understand for a successful migration of your business to the cloud.

Here are seven dirty little secrets about the cloud that may help you mitigate risk as you navigate this emerging technology.



## Dirty Little Secret #1

At least a portion of your engineering staff will lack the technical expertise to architect software for the cloud.



This isn't to say your staff isn't intelligent, educated, and talented in their work; you wouldn't have hired them if they weren't.

But, there is a learning curve to designing and building cloud application architecture. In order to deliver the highest value possible on the cloud platform, it's often best to turn to experts in the field that can help guide you through this complicated process, and assist your team to develop the exact platform your business needs.

Partnering with the right firm can get you up and running—meeting and exceeding what you may have even thought possible.

## Dirty Little Secret #2

Not all of your legacy applications can be moved to the cloud.





It is true that the cloud provides greater accessibility than on-premises infrastructure – an enormous business benefit. Unfortunately, not every legacy application is suitable for migration to the cloud. Legacy applications have historically been developed for high bandwidth, low latency local area network (LAN) environments and are not always web-based.

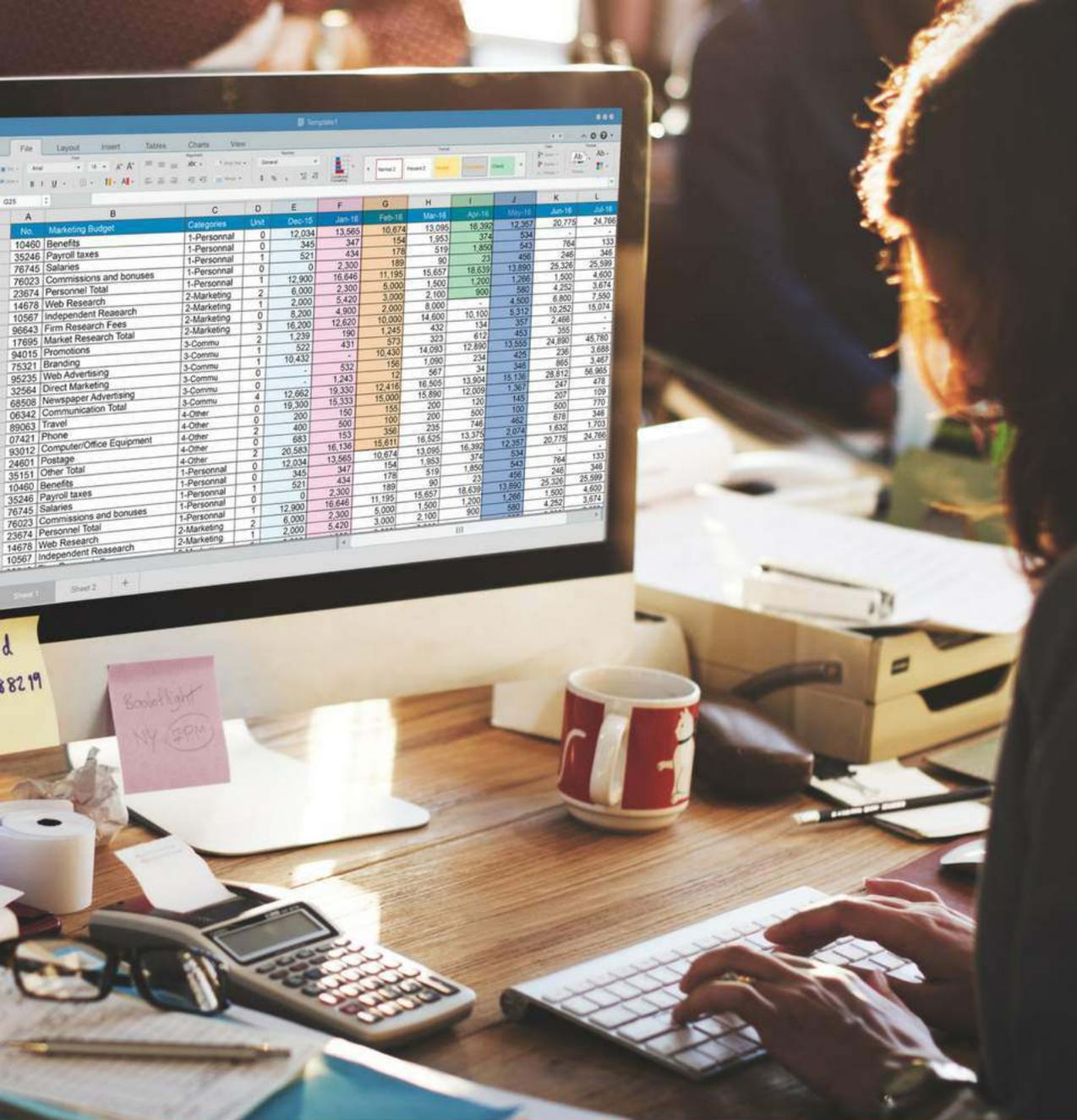
With multiple tiers making them far more complex than their non-legacy counterparts, they may need to be re-architected and in some cases, rebuilt altogether. Oftentimes, a hybrid cloud scenario is the best solution. A hybrid cloud spans at least one public and one private cloud.

You might even have a private, virtual environment on-premises that is connected to a public cloud. Ultimately, the complexity of your legacy application along with the technical implications, and the performance impact, must be fully considered before making your final decision on how (or whether) to utilize the cloud.



## Dirty Little Secret #3

The cloud does not always guarantee cost savings.



Very often, IT leaders report being lured into a false sense of hope that the cloud will reduce their operational costs. Much ink has been shed on all of the ways the cloud saves money, yet one important detail is often left out – the cost of migration. It is not as easy as a simple swapping of your on-prem data center with a virtual data center.

Applications may need to be re-architected, databases reconfigured, or rebuilt altogether. IT and business leaders are grappling with the fact that the cost of migration sometimes outweighs the immediate cost benefit ... not to mention the cost of staffing changes.

Evaluating the cost of the cloud vs on-prem means looking not just at the cost of the physical or virtual infrastructure on premises but also the labor cost to manage it, the electricity and cooling costs in the datacenter, the cost for the backup solution, the cost for the patch management software, and so on. All of those need to go in to the business decision of whether the "cost of cloud" is justified. Also, consider the value of the additional flexibility you will gain. How do you put a price tag on being able to bring a product to market more quickly than your competitors? Or being able to retool and readjust more quickly?

While moving to the cloud may not implicitly save money, it can still raise your bottom line. Depending on the type of architecture needed and how you approach your legacy applications, the cost may not be any less expensive than your current setup, but the benefits gained almost always more than compensate for the move. Also consider the business benefit of greater output and better business agility. It may be one of the best long-term investments you make, even if you aren't saving a bundle in the short-term.

## Dirty Little Secret #4

Cloud vendor SLAs are not always met.





In modern business, there's simply no time for downtime. With so much running through the cloud, it is imperative you stay connected. Services like AWS guarantee 99.95% availability, but does that really mean that your app is actually going to be up and running 99.5% of the time? Not necessarily.

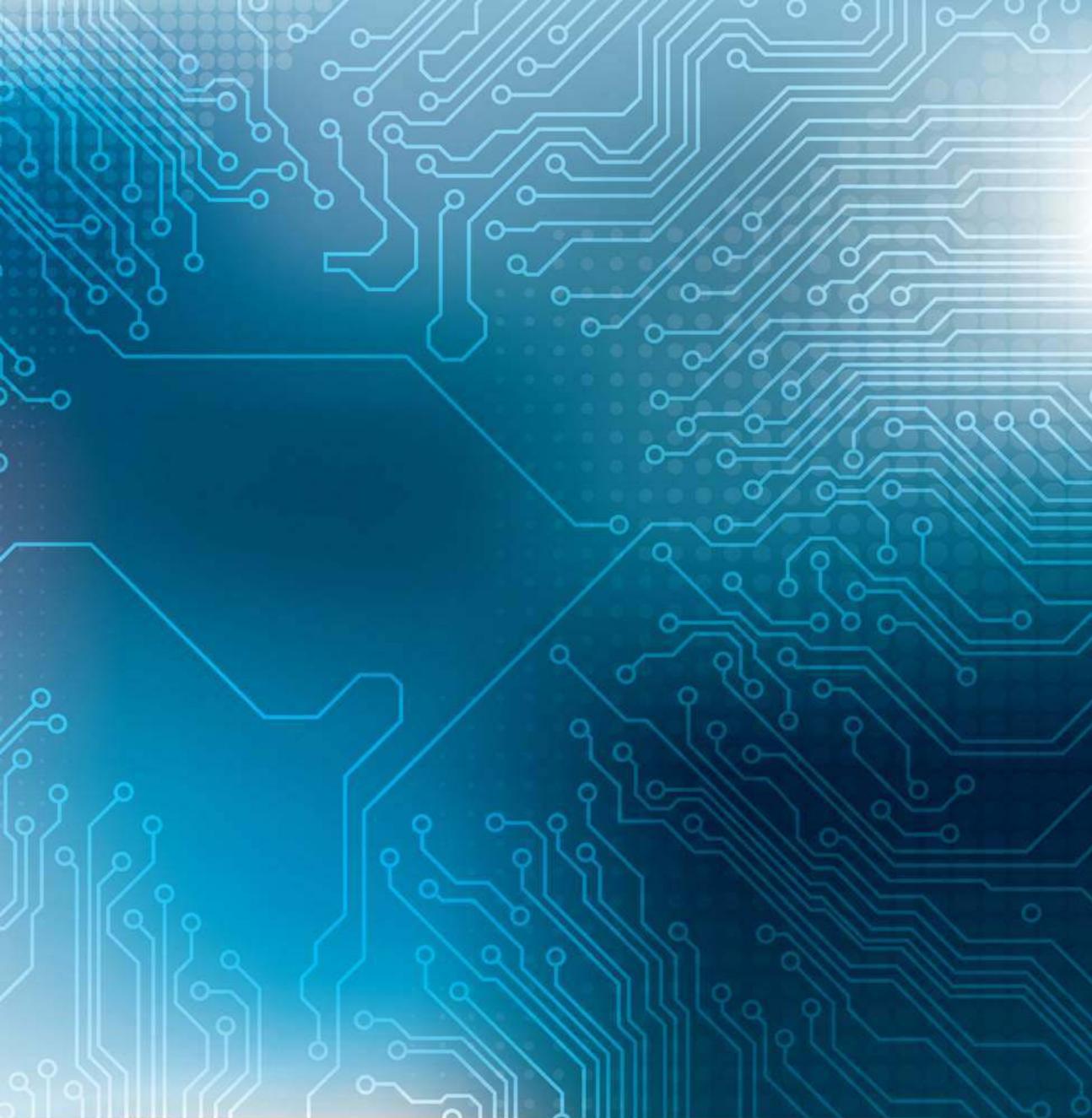
Unexpected outages from services like AWS have rendered large, industry leaders, such as Netflix, Tinder, Airbnb, Reddit, and IMDb offline for hours upon hours, with little to no recovery plans available.

These examples illustrate the crucial need for a strong disaster recovery and redundancy plan. Look to trusted services like Microsoft Azure that have resiliency designed specifically to support disaster recovery to keep downtime to a minimum, so you never miss a beat.



## Dirty Little Secret #5

Cybercrime is on the rise.



As technology advances and everyone becomes more interconnected, everyone becomes more vulnerable to cyberattacks. Cyberattacks can be devastating to businesses as well as to individuals. Such tactics can include identity theft, data breaches, financial fraud, ransomware, or other similar cybercrimes.

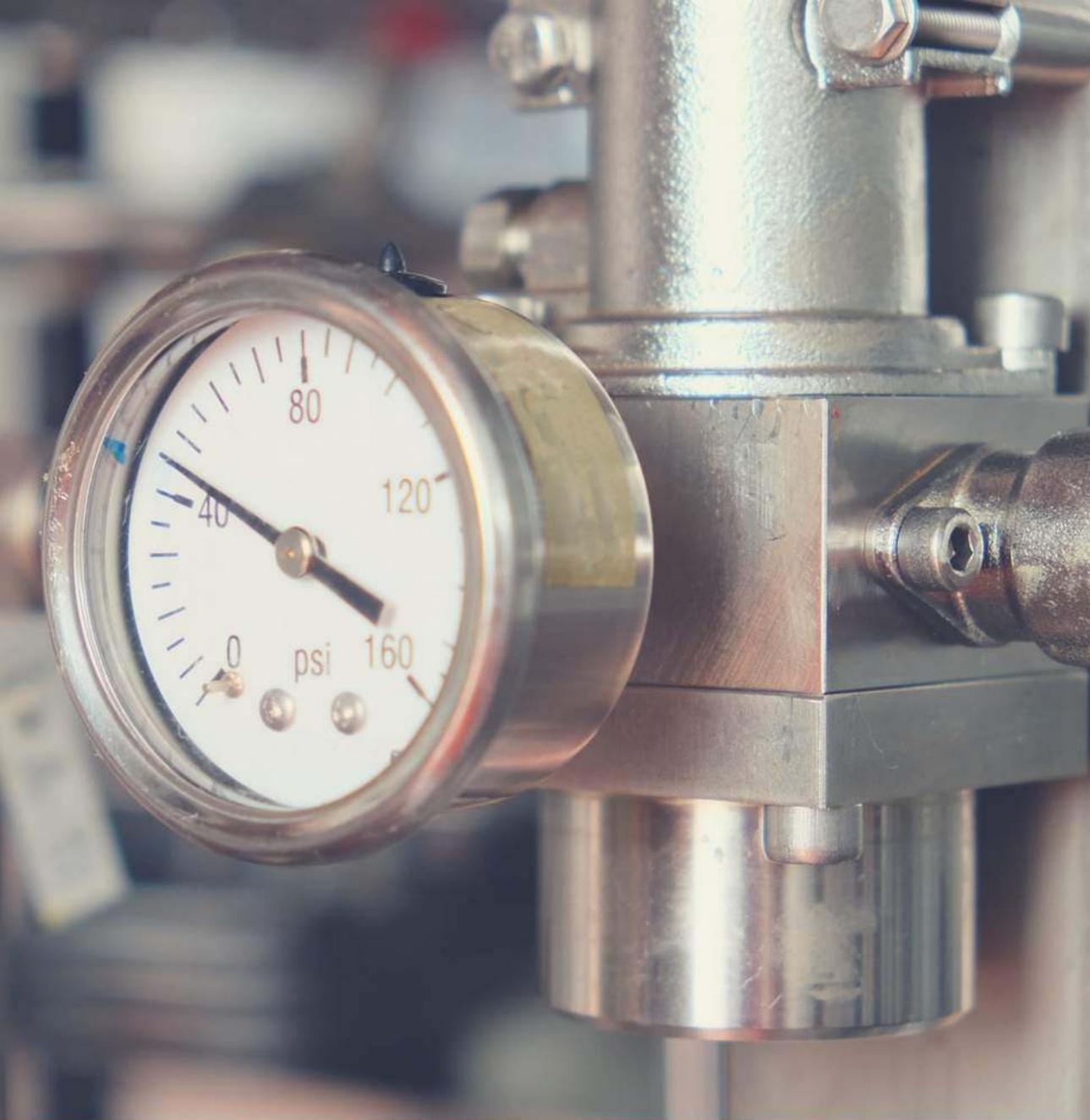
Ycloud could already be compromised without your knowledge. Cyber attackers spend a median of 8 months on your network before they are ever detected. Oftentimes, it is law enforcement who notifies the business of the malicious behavior. As of this writing, the longest undetected presence on a hacked system was a shocking 2,982 days.

It is important to have a security plan in place as you transition your business to cloud-based services. Keeping everything up to date, implementing protocols and developing a proactive strategy can keep you safe from attack. You can't wait until a cyberattack has already occurred to develop and execute a strong cybersecurity plan. Partnering with the right cloud security firm can provide defense before you've even begun the migration process, ensuring your data, user identities, and your critical applications are protected from day one.

## Dirty Little Secret #6

It's possible to let the meter run unnecessarily in the cloud.





A commonly cited benefit of the cloud is the fact that you only pay for what you use. Unlike on-premises infrastructure, the cloud is available when you need it, and you are free from the burden of maintaining your cloud infrastructure when it is not in use.

Comprehensive cloud-based infrastructure includes integrated development environments, application lifecycle management components, test and quality management, source code, configuration management, continuous delivery tools, and application security testing components. That's a lot to keep up with.

Developers can easily forget or neglect to turn off virtual machines they aren't using. These will effectively drain resources from machines that are not being effectively utilized and could result in unexpected costs and skewed capacity planning.

Utilizing Azure's comprehensive automation capabilities you can ensure that you're only using the required amount of cloud at any particular time, scaling up or down as necessary and even turning off workloads with periodic or no activity for long periods of time. Alternatively, it is necessary to have a strong development and test process in place, and a dedicated admin who can monitor your cloud infrastructure and keep things running smoothly.

## Dirty Little Secret #7

Cloud vendor lock-in is difficult to undo.





By and large, most cloud service providers use their own proprietary APIs. If and when you choose to change providers, it could prove to be a complicated—and more importantly—a costly undertaking to dislodge from the arrangement. To avoid vendor lock-in, many companies leverage low-risk strategies such as utilizing cloud storage for less critical business needs like backup, DR and archiving, while they explore gateways which enable local applications to access remote cloud-based storage.

But, is there a way to balance the fear of vendor lock-in while still embracing an organizational cloud transformation? The real challenge in migrating to any IaaS platform is not the technology or the providers, but the governance models, cost control measures, and the processes your systems and development teams use to work together.

One major benefit of Microsoft Azure is the ease at which one can move workloads into and out of the cloud. Setting up converged cloud solutions that utilize on-premises and one or more public clouds maximizes your flexibility.

The tough part for most organizations is evolving the role of central IT as not just purchaser and governance body, but an engine of continuous development and change.



New technologies can seem overwhelming at first. There's a lot to learn, and many moving parts to navigate. It is necessary to understand the benefits as well as the drawbacks to cloud services prior to setting out on your own cloud journey. A successful cloud migration can help you achieve greater agility and scalability and far better accessibility.

Find out how the cloud can work for your company and help your company work. Request a free consultation with a cloud expert today and take your business from the past to the present, and right into the future.