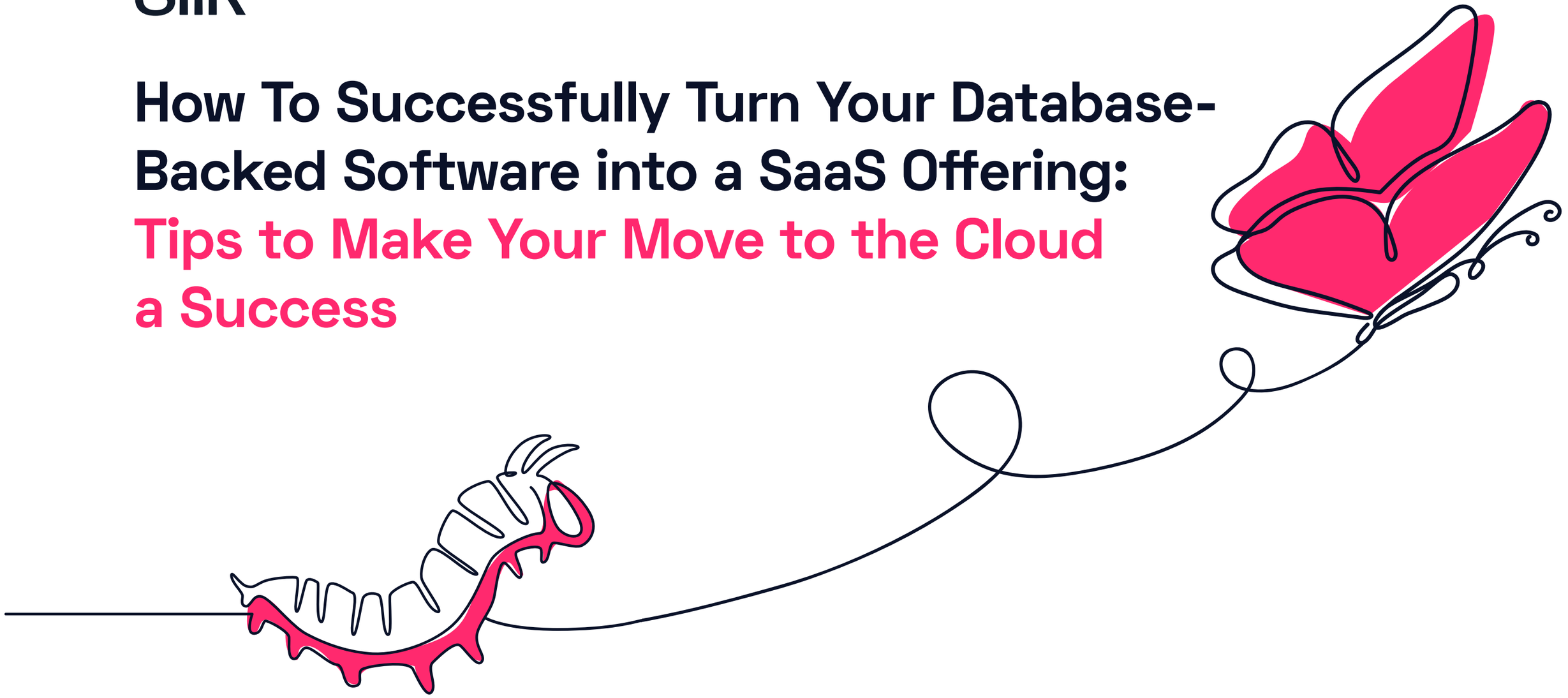
SILK

How To Successfully Turn Your Database-Backed Software into a SaaS Offering: Tips to Make Your Move to the Cloud a Success



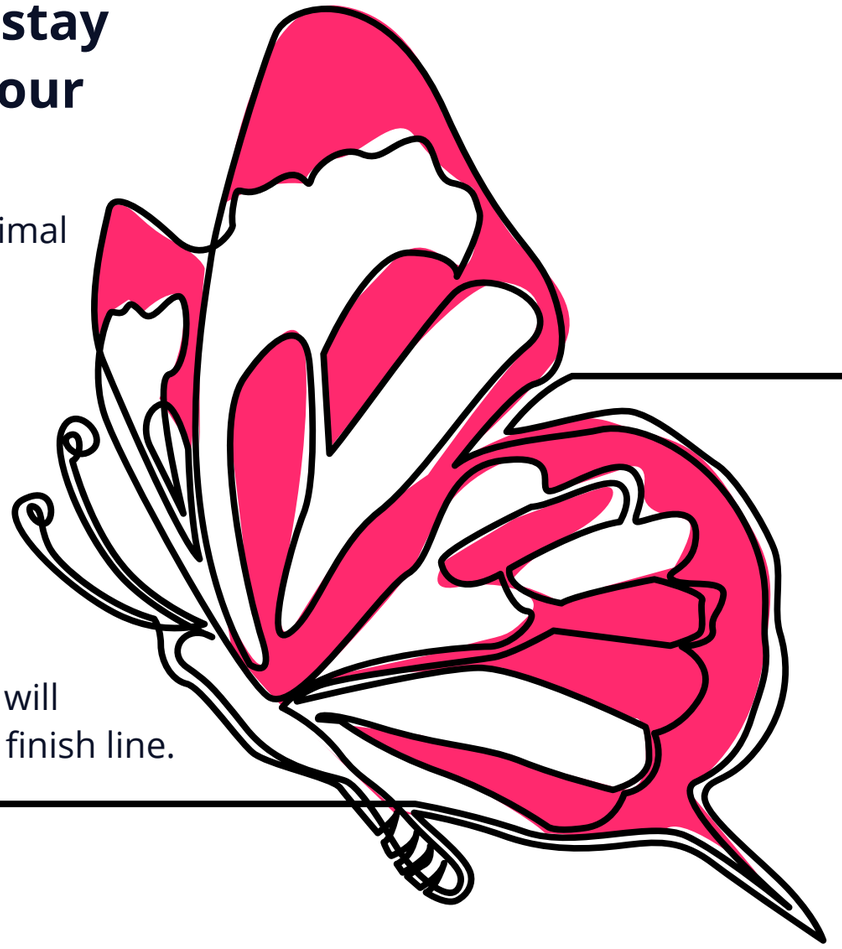
You've cornered the market with your company's product.

But in order to stay ahead of the competition, it's important to modernize, to take advantage of new technologies, to stay on the cutting edge. One way to do that is by morphing your cornerstone product into a SaaS offering.

A SaaS offering gives your customer base hands-off access to your product. There's minimal time and effort in onboarding and set up as there's no physical hardware required for installation. And the product can be remotely accessed, making it ideal for customers whose employees work remotely.

But is your product ready to be morphed into a SaaS offering? The first roadblock you need to overcome is the daunting task of data migration from on-prem to the cloud. And if your product's software runs on a heavy database like Oracle or Microsoft SQL Server, there might be a few hiccups you need to overcome first before you can push a SaaS offering out into the market.

In this ebook, we'll look at the benefits of providing a SaaS offering, roadblocks that you will need to overcome, and how the Silk Data Virtualization Platform can help you reach the finish line.

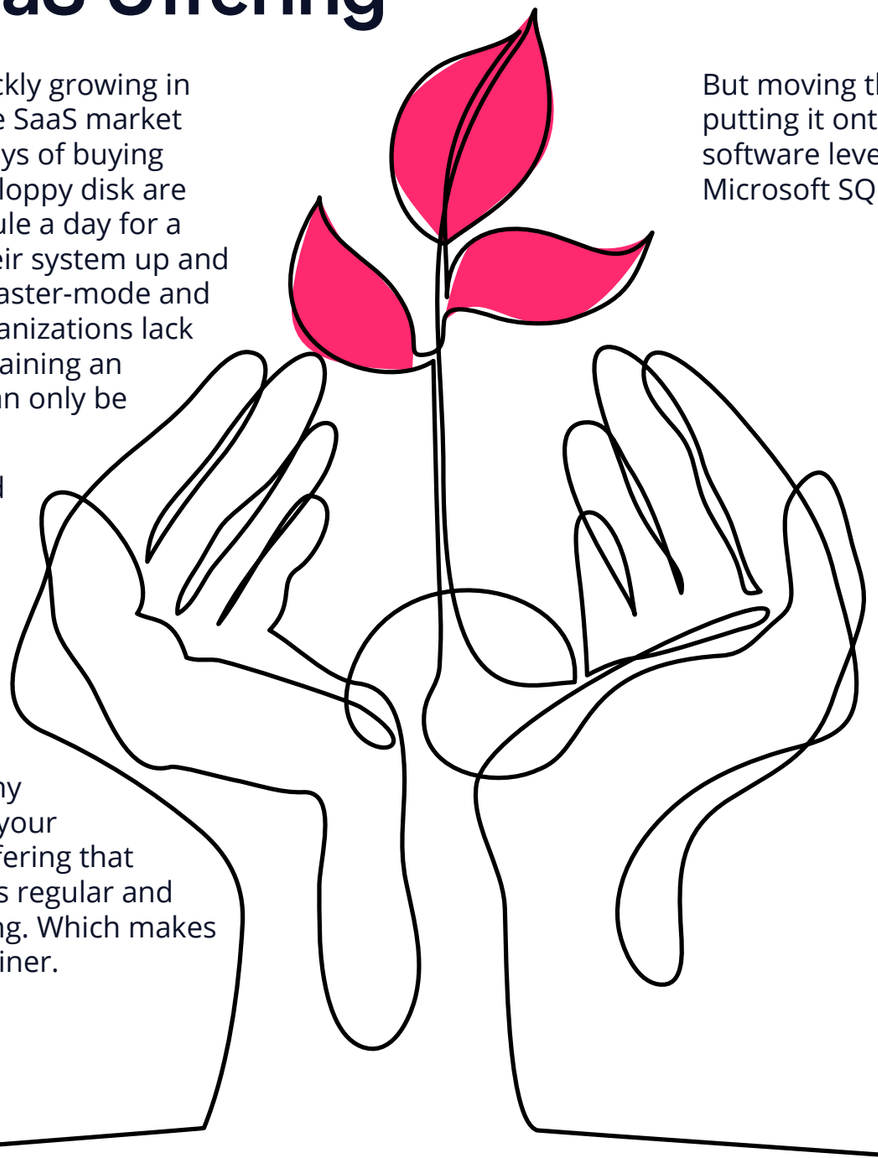


Chapter 1: The Benefits of Providing Customers with a SaaS Offering

Software as a Service (SaaS) offerings have been quickly growing in popularity in the market. Gartner puts the rate of the SaaS market growth at double-digits over the past decade. The days of buying software in-store and installing to a workstation via floppy disk are now long gone. Customers don't have time to schedule a day for a vendor to come on-site, install hardware, and get their system up and running. Furthermore, with the economy in roller-coaster-mode and workforces increasingly working remotely, many organizations lack the appetite to take on the added expenses of maintaining an on-prem infrastructure that is both expensive and can only be maintained by on-site employees.

SaaS platforms offer customers a subscription-based software that can be accessed via the Internet. They don't require hardware or an on-site IT team to maintain it. Instead of paying major upfront costs, customers can instead pay-as-they-go, making a SaaS offering especially appealing for companies looking to reduce capital expenditures.

Lower costs, decreased time and effort to use, and increased accessibility are only a few reasons why SaaS offerings are appealing to your customers. For your organization, adopting a SaaS model gives you an offering that appeals to a larger customer base as well as provides regular and long-lasting revenue from monthly subscription billing. Which makes morphing your product into a SaaS offering a no-brainer.



But moving the software onto the cloud may not be as easy as putting it onto Google Cloud and calling it a day. Especially if your software leverages databases on the backend, like Oracle or Microsoft SQL Server.

Why a SaaS Offering Is Right for Your Product:

- **Larger Customer Base** – According to BetterCloud, 85% of business applications will be SaaS-based by 2025. With SaaS offerings growing in popularity, you can appeal to a wider audience who isn't interested in maintaining an on-prem offering.
- **Regular, Long-Lasting Revenue** – SaaS subscription models give you a stable source of revenue. With subscription models, you can create long-term development plans that keep customers happy and subscribed.

Why Customers Choose SaaS:

Cost Efficiency

With a pay-as-you-go pricing model, no upfront installation, maintenance or upgrade costs, and the ability to offload infrastructure, SaaS offerings are a major cost savings for customers.

Freed Up Time

With no responsibility to maintain the system, customers can focus their efforts on more important tasks.

Scalability and Accessibility

Need more capabilities? SaaS offerings make it possible to quickly and easily expand your software as your needs grow. And for customers whose workforce is remote, anyone can access the software from anywhere that is Internet-connected.

Higher Adoption Rates

Because SaaS solutions require less intensive training, they have a higher rate of adoption by the customer's workforce.

Peace of Mind

By offloading the responsibility of maintaining backup copies of data and security to you, the provider, customers can rest easier knowing that you've got their back should any obstacles arise.

Chapter 2: Database Roadblocks to Creating a SaaS Offering

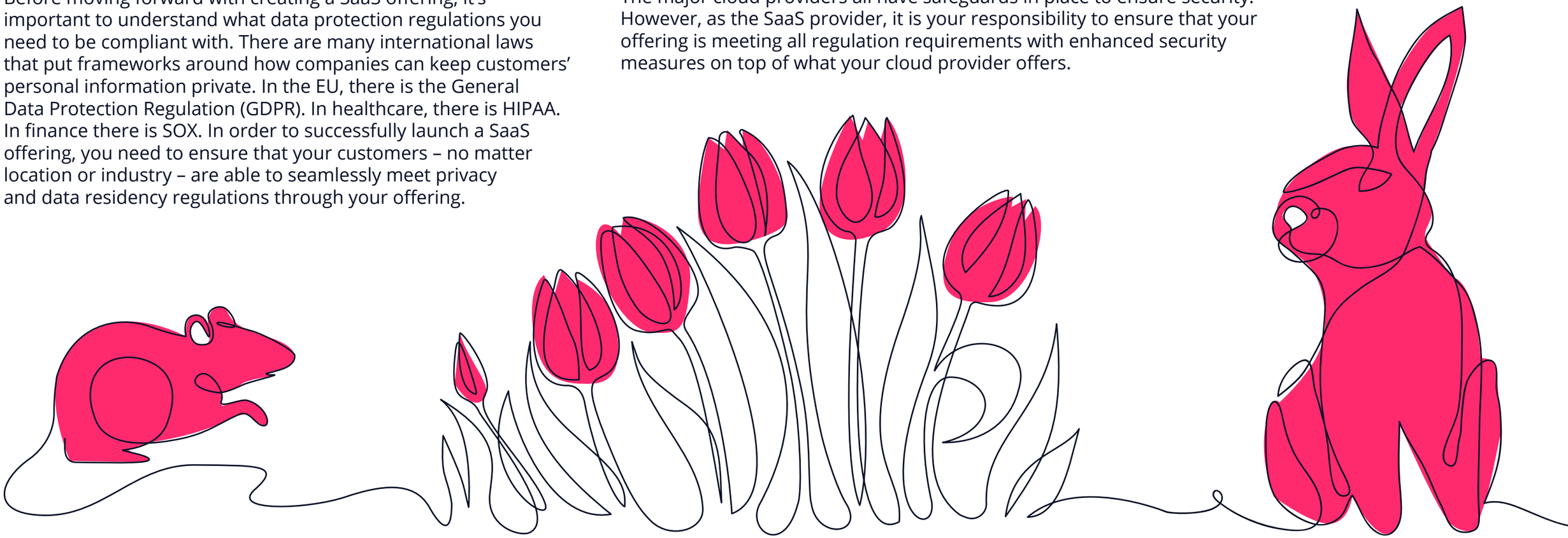
So your company has announced that it is releasing a SaaS offering for its product. Congratulations! Now what?

As you begin designing the application and building out the architecture, there are a few roadblocks you might encounter that can completely derail the success of your project.

Data Protection

Before moving forward with creating a SaaS offering, it's important to understand what data protection regulations you need to be compliant with. There are many international laws that put frameworks around how companies can keep customers' personal information private. In the EU, there is the General Data Protection Regulation (GDPR). In healthcare, there is HIPAA. In finance there is SOX. In order to successfully launch a SaaS offering, you need to ensure that your customers – no matter location or industry – are able to seamlessly meet privacy and data residency regulations through your offering.

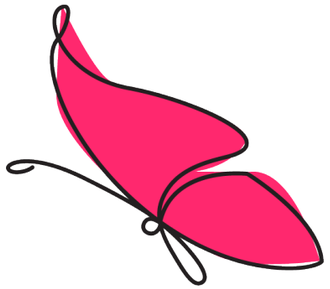
The major cloud providers all have safeguards in place to ensure security. However, as the SaaS provider, it is your responsibility to ensure that your offering is meeting all regulation requirements with enhanced security measures on top of what your cloud provider offers.



Zero Downtime Deployment

Since SaaS applications are accessed by people all over the world, it is important that the application be available at any time. Need to make updates to the application? Users today are not forgiving of any downtime whatsoever – even if they have been notified ahead of time that the downtime would occur.

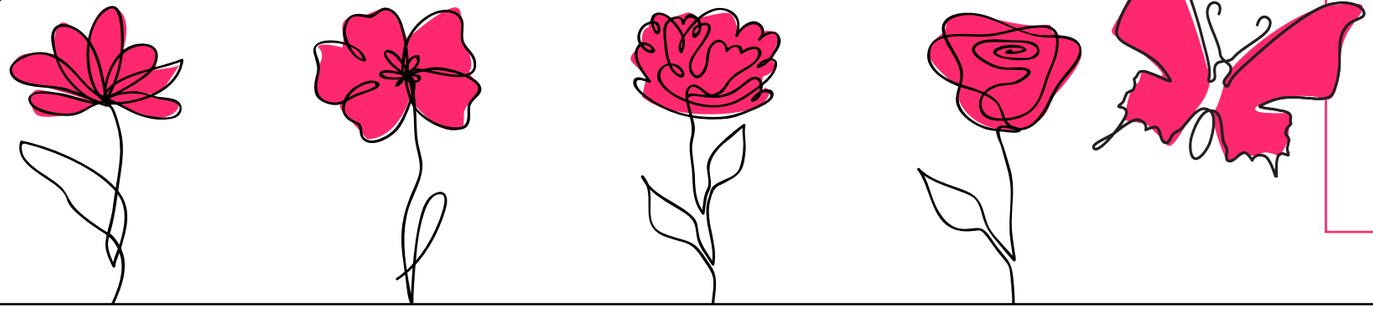
This means that when you are creating the offering, your developers need to use a zero-downtime deployment strategy. Every time you deliver an update to the application to users, you need to ensure that the server doesn't start serving the changed code before the deployment process is complete. But what about downtime that wasn't planned? With a SaaS offering, you are putting some of that control into the hands of your cloud vendor. Any outage on their part will ultimately affect your end customers. Having a Disaster Recovery plan in place to minimize cloud outages is key to your zero-downtime deployment strategy.



Fast Time to Market

Has the press release already gone out announcing your SaaS offering... but your team is still in the Discovery phase? Building a SaaS offering is a process that needs to be carefully and thoughtful done. It takes time that we don't often have in today's fast-paced business world. This means outright refactoring your application to be cloud-native is out of the question – unless you opt for a lift, shift, and evolve strategy, that is.

For some workloads, lift and shift is fine. But what about workloads that are more performance-intensive? These include databases like Oracle or Microsoft SQL Server that often run behind-the-scenes on your software application. These workloads will struggle to get onto the cloud, slowing down how long it takes to actually bring your SaaS offering to market. Why the struggle? This brings us to our next point...

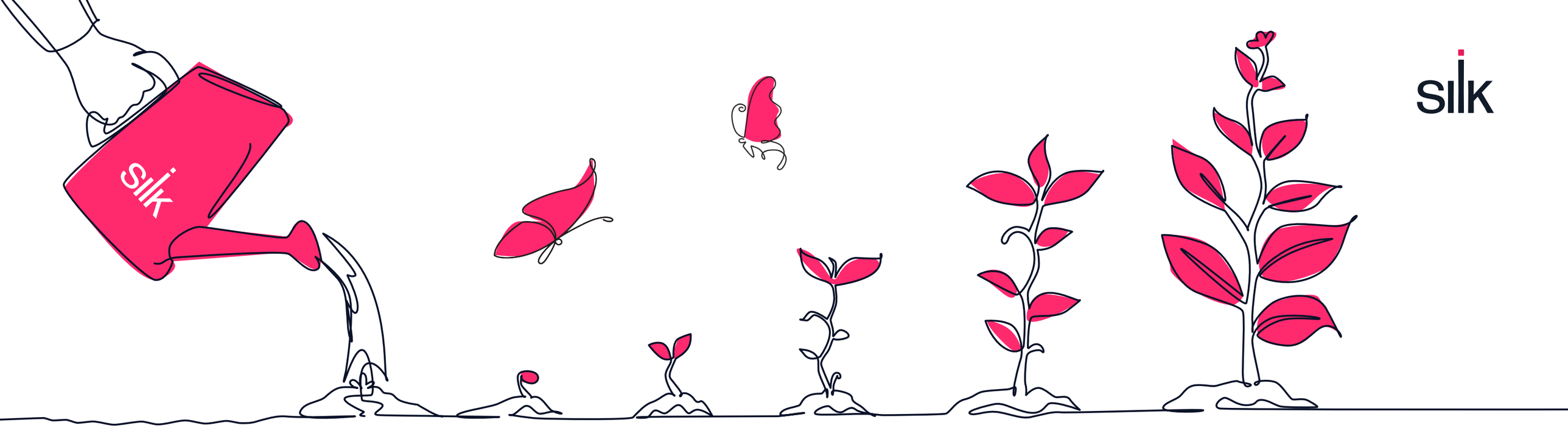


SimCorp

SimCorp's Story

SimCorp offers industry-leading, front-to-back investment management solutions to 40% of the world's top 100 financial companies. Its core product, SimCorp Dimensions, provides efficiency and flexibility in managing all assets from one platform. For the past 20 years, SimCorp only sold Dimensions as an on-premises software. But market demand led them to create a SaaS offering on Microsoft Azure. Because Dimensions runs on Oracle on the backend, it requires consistently high performance that wasn't achievable on native cloud. SimCorp already had its largest client set to migrate to SaaS and needed to figure out a way to migrate to the cloud – fast!

With Silk, SimCorp was able to migrate the client to SaaS while achieving the team's target response time in the cloud. In fact, by adding Silk to their cloud solution, SimCorp's SaaS offering was able to outperform its client's on-prem solution by 20%.



Performance

While morphing your product into a SaaS offering is a major endeavor as it is, if your software leverages databases on the backend, it might become nearly impossible. That's because databases, like Oracle and Microsoft SQL Server, are mission-critical and require extremely fast performance. And if you're using one of the major cloud providers, you might not be able to get the level of performance that you need.

That's because the providers typically put throttles on cloud speeds in order to keep things even across all of the customers in their multi-tenancy. If you want faster performance than what you've been allocated, it is possible to purchase more cloud resources to bump up your speeds. But that's a huge waste of budget for resources that you aren't even using.

But let's say you have the means to throw all the money in the world at this project. Unfortunately, that still won't help. The highest level of performance that the cloud providers offer doesn't even come close to the fastest performance that on-premises infrastructure can provide.

Cloud Scalability and TCO

Cost is another area that needs to be carefully considered when developing your SaaS offering. As more and more customers are onboarded, you need to ensure that your cloud has the scalability to migrate them all – along with all of their data – seamlessly and cost efficiently. As previously mentioned, the more cloud resources leveraged, the higher your cloud costs. Higher cloud costs can seriously affect your margins. On top of that, the flexibility of SaaS makes calculating a fitting Total Cost of Ownership (TCO) and a competitive offering price difficult. How many users and traffic can you support? How much capacity and storage volume can you achieve? By analyzing these factors early in your development, you can get a clearer picture of TCO and keep costs down.

Chapter 3:

How Silk Can Help Overcome SaaS Roadblocks

If cloud performance, runaway cloud costs, and recent news of cloud outages have you concerned if your SaaS offering can succeed, then you need Silk. The Silk Data Virtualization Platform sits between your applications and the underlying infrastructure.

The platform connects with compute VMs over a higher performance compute network instead of the limited-capacity data network of cloud infrastructure. This makes it able to support more performance-intensive workloads and eliminates the need to oversize compute VMs for faster performance. Silk separates the layers for performance and capacity, so you never have to spend unnecessary budget dollars to hit IOPS or throughput targets. And by offloading tasks that typically occur on the network layer to the compute layer, Silk provides dramatic and consistent reductions in latency for maximum application responsiveness.

Silk offers greater resiliency with its self-healing architecture that tracks cloud maintenance windows to proactively avoid disruptions and an active-active architecture that spreads management across cloud zones, eliminating single points of failure. With enterprise data services, like zero-footprint snapshots, you can create copies of data for Dev/Test or Disaster Recovery efforts without a performance penalty or additional storage costs. Silk boasts greater flexibility so you can easily scale to meet the needs of a growing customer base without overextending your cloud budget. And with machine learning-based monitoring, Silk analyzes cloud usage patterns to ensure that you are getting the best cloud experience at the most cost-efficient price point.

Curious as to how Silk can help set your SaaS offering up for success?

Learn more at silk.us/solutions/saas-providers.