Manufacturing in the Cloud: The Keys to a Smarter Future

Leveraging Technology to Be More Agile, Efficient, and Profitable

SC&H
GROUP

Introduction

From the speed of modern business to the rapid response to COVID-19 requiring millions of people to work remotely, it's hard to imagine a world without cloud technology. The pandemic has proven to be somewhat of a stress test for businesses no matter where they find themselves – in the cloud, a hybrid of cloud and On-Prem/legacy systems, or operating solely on legacy systems, nothing in the cloud.

At no other point in history has there ever been a need for the instant accessibility to solutions enabled by the cloud than during this pandemic. What many organizations may not recognize is the needs or challenges you are experiencing now have always been there; however, they are in the spotlight now more than ever.

Whether an organization is operating in a business as usual environment or when navigating the chaotic and uncertain environment of an entire workforce being forced to work remotely, there are a few different challenges businesses experience. In order to alleviate those challenges, throughout 2020, we will see many organizations racing to the cloud.

With a race in mind, think of this as a runner would. What level of preparation is needed to get your business ready for the race?

Jump to the section that best applies to your organization:

IN THE CLOUD →

Is your business already a runner, but in need of some added accessories to properly train for the race? Essentially, are you in a state of needing to take advantage of the continual improvements cloud platforms deliver to place better in the race to the cloud?

HYBRID →

Has your business signed up for the race, but hasn't fully bought in on the concept, therefore, is procrastinating training for the race? Does operating with one foot in the race (the cloud), and one comfortably maintaining bad habits (legacy systems) to avoid the stress of the race itself?

ON-PREM →

Is your business sitting on the couch, doesn't know where to begin, and in need of a coach to get them in racing shape? Would a mapped out plan to see how to get from point A (legacy systems) to point B (the cloud) position your business to rank higher in the race to the cloud?

You're in the Cloud

**Great. But the work doesn't stop there.**

Many businesses see the move to the cloud as a set it and forget it process. We've moved everything to the cloud, so the work is done; however, that is very far from the truth.

Common challenges include not knowing where the data lives, not securely accessing the information due to lack of education on best practices, or, most recently, the need to test different scenarios like moving your entire workforce to a remote work environment. Many organizations find although they are fully in the cloud, they need to revisit their infrastructure presented itself due to the sheer numbers of employees operating remotely.

Besides revisiting your infrastructure, it is important to ask your IT team: When was the last time we did a "check-up" on the way our systems are setup? This points back to the set it and forget it model most organizations operate on. Maybe you moved to the cloud five years ago, but have you revisited to make sure everything is up-to-date? Or have you considered what enhancements could be made (some at no cost!) to be unlocking the full potential?

Lastly, if you are finding some of the set it and forget it, scenarios apply to your organization, the need to add a cybersecurity check to the list is likely there too. Just because you're in the cloud does not mean your information is on lockdown. If your IT team has not been making regular updates or considered the add on's that may provide additional security, there could risks. Now is a great time to check in on your current setup, and remind your employees of the need to brush up on cybersecurity best practices.

To summarize, many IT teams will stand by "they've moved everything to the cloud," and leave it at that. Often, this just means the IT teams put existing servers/applications on the selected cloud vendor's hardware. This is a common scenario, and what organizations eventually find is they haven't come close to taking advantage of what the cloud can offer. Simply moving servers is just the first step. To truly take advantage of the cloud there is a full transformation process that needs to occur.
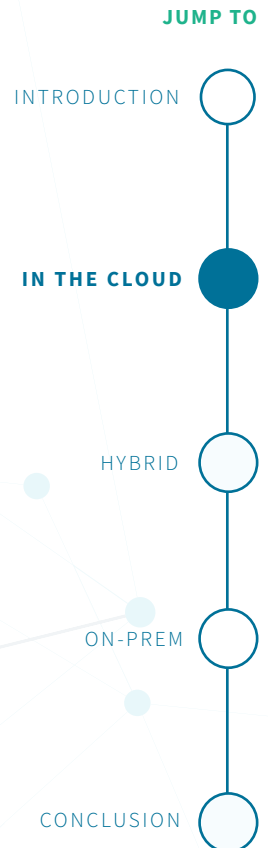
You're in the Cloud

CONSIDERATIONS

1   Are your current cloud applications and services scalable?

2   What are your cloud data backup, retention, and restoration plans? Have they been tested?

3   How does your disaster recovery/business continuity plan address cloud services? Has the plan been tested? Are you using it now?

4   What is your overarching security strategy? And has your security strategy adapted to the new threats that are present in a cloud only world?
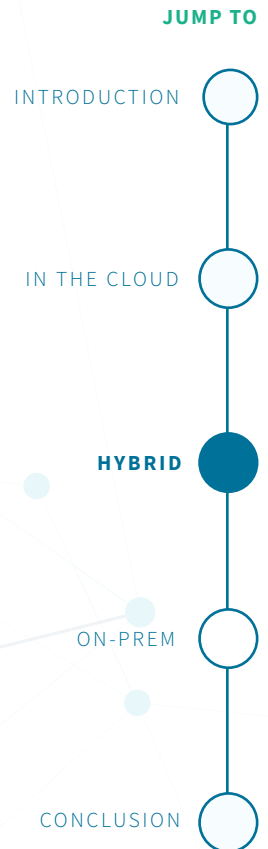
You're Operating with Hybrid Solutions

Your business has one foot out of the door of operating in the cloud and the other staying put utilizing legacy systems.

Some may think this section is a middle ground between in the cloud or not in the cloud; however, the reality is this is the worst-case scenario to be in more often than not. Interestingly enough, this is where many organizations are right now lingering in limbo between On-Prem or legacy systems versus being fully in the cloud, and organizations lingering here are experiencing a few different challenges right now.

As budgets are getting tighter, it is important to note operating in a hybrid fashion position you to be double-spending, whether that is between the solutions themselves or the way you are securing the cloud and your legacy systems. This leads to another challenge – many cybersecurity practices that are crucial to cloud operating environments do not apply to legacy systems and visa versa. The risk for errors is much greater when operating with hybrid solutions because you're asking employees to apply two different types of

security practices, or you've trained everyone to apply the same security practices across all solutions. If you have not already figured this out, it is a matter of time until you will learn this will not work as applying legacy security practices to cloud solutions leaves room for the creation of a gaping security hole.

Simply stated, the investment you've made in moving some of your business operations to the cloud will be hampered by applying legacy best practices to it. Again, the risks associated with a hybrid operating environment include cyber and overspending, therefore streamlining practices by operating in one type of environment, i.e., fully in the cloud, will be of benefit to your organization in the longer-term.

You're Operating with Hybrid Solutions

CONSIDERATIONS

1 What systems are still On-Prem, and why are they still there?

2 Do you have a strategic plan and roadmap for moving the remaining applications?

3 What is your satisfaction level with the current cloud services?

4 If On-Prem applications cannot be moved to the cloud, have you developed and tested your disaster recovery and business continuity plans?

5 What is your security model for handling both cloud and On-Prem applications?
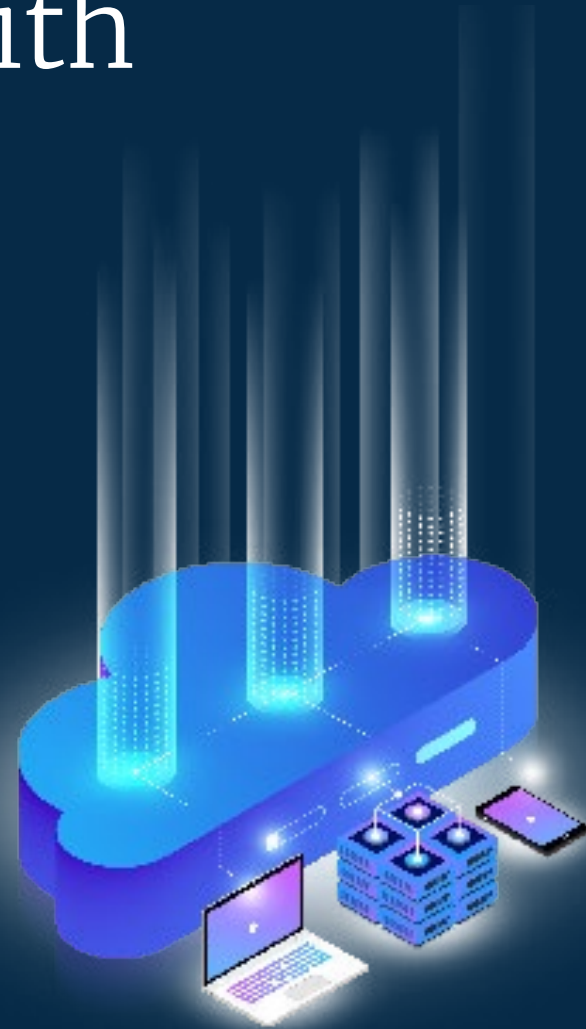
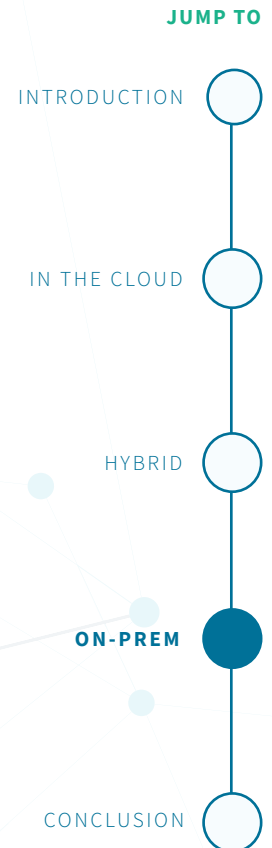# You've Put Off Investing in Moving to the Cloud

Reliance on legacy systems and working remote proved to be a nightmare. Time to make a change.

Potentially during, but most likely post-pandemic, many organizations will find themselves rushing to move off of outdated legacy systems to cloud-based solutions. After months of navigating remotely, during a time executives needed real-time financial information, or employees needed the ease of co-working, whether in shared documents, on video or conference calls, or the ability to access and transfer files securely, the list is endless. As many organizations realized their inability to leverage remote work with ease, no matter the company size or industry, we will see a surge in cloud migrations in the coming months.

Also of note are that legacy systems often mean legacy processes in general. For example, an approval process that requires an employee to print something out to sign a document, scan it back in, and send to someone else to approve to sign and scan, and so forth, now requires employees who operate on an outdated process to have access to a printer in their home. Positioning an organization to now need to budget to purchase printers for members of teams operating as such given the legacy systems.

As much as the saying of "if it isn't broke, don't fix it," rings true to many, overall, this approach could be inhibiting your businesses' ability to be productive and could prove to be more costly than necessary. Now is a great time to take a look at what is working, and what's not, because there is no better time to make the move to the cloud if you are relying on legacy systems.

Why now? Often many organizations do not make the jump to fully operating in the cloud because they feel as if a hybrid approach is "safer," or a baby steps version of making changes. However, this only elongates the process of cloud migrations because once in a hybrid state, you will find the desire to move everything based on the explanation above. Organizations that make the shift from legacy systems to fully operating on cloud systems will find themselves benefiting the most. One final note here too, this type of jump from legacy to cloud can be risky if an organization is not versed in migrating to new solutions. Relying on a partner or advisor who is well versed in this type of leap is crucial to avoid overspending and eliminate room for error.

You've Put Off Investing in Moving to the Cloud

CONSIDERATIONS

1 Are you resisting cloud services? If so, why? Lack of experience and knowledge? Can't build a business case for it? Are you taking "it's not broken, don't fix it" approach?

2 Do you know the true costs of your IT Operations?

3 What is your security model? Do you have physical and logical protections in place for all On-Prem systems and data? Have they been tested by a 3rd party?

4 Are you performing and testing data backups and restoration?

5 What is your disaster recovery/business continuity plans if your IT location becomes unavailable or is destroyed?

Conclusion

Transforming how you operate can seem like a big undertaking; however, if viewed as a transition, with thoughtful steps, this effort can propel your business forward. The race to the cloud presents an opportunity for businesses to think bigger—to step back, examine your processes, tactics, and objectives, and determine how technology can be used to address inefficiencies and operational challenges.

If you find yourself in a place of considering your options, it is important to work with advisors who take the time to understand your business objectives to marry them with a cohesive technology plan with a vendor-agnostic approach from the start. Not only will this type of approach be of benefit to avoiding any gaps in your organization's day to day processes, but in the long-term, making technology decisions that run parallel to your business goals only benefits the product or service you provide.

Often those who take the DIY approach find themselves not capitalizing on the full potential of what they have invested time and dollars into but also can find themselves navigating cloud configuration errors that can create costly cybersecurity risks leading to possible interruptions in their ability to do business, meet client demands, or worse lose the trust of their network if a breach reaches beyond one company.

The quality of your cloud strategy can make the difference between unrealized potential and steady, long-term improvements in productivity, performance, and growth. So, before moving forward with strategy development and implementation, it is important to determine whether your internal resources alone are sufficient for these tasks.

How can SC&H help?

SC&H Group's Technology Advisory team is here to help. Often the most difficult or daunting step to take is transitioning from idea to implementation,and rightfully so as it is a process that requires time, thoughtfulness, and experience to successfully overhaul or make changes to your technology strategy. It requires someone with an agnostic approach to make recommendations after assessing your software strategy, but more importantly, your business strategy.

How can we help get you to a state of operating efficiently in addition to raising the bar to meet the demands of a competitive market?

Whether helping you migrate from a hybrid state, or fully off On-Prem systems, or assessing the security of your setup, we have the expertise and experience to help you get your organization to a place of meeting the needs of your customers now, and in the future.

As external technology advisors, we provide an independent, insightful perspective on your goals, people, processes, and technology. With this perspective—combined with deep business acumen and technology expertise—SC&H Group's Technology Advisory Team recognizes that superior service, open communication, unparalleled work ethic, and continuity are paramount to our mutual success.

Learn more at **schgroup.com**

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