



## Own the Cloud: Strategy and Action Plan

Whether you move to the cloud or stay on premises, do it with confidence!

# ANALYST PERSPECTIVE



You'll find yourself in the cloud one way or another. Do it right.

“ *The vast majority of organizations are experimenting with the cloud – and there’s certainly a case to be made for cloud adoption. But any effort to migrate to the cloud will be for nought without a well-defined, reasonable cloud strategy. A consistent framework for evaluating and implementing cloud services will demonstrate IT’s commitment to the shift to a service brokerage model.*

*The cloud has a defined set of characteristics, some of which it shares with non-cloud architectures. If your main justification for moving to the cloud is getting your infrastructure offsite, or reducing the amount of work you have to do on the back end, you might be better served by collocating your services or hiring a managed service provider.*

*Before moving to the cloud, clearly articulate the benefits of such a migration. You’ll be thankful you did.*

”

**Jeremy Roberts,**

Senior Consulting Analyst, Infrastructure Practice  
Info-Tech Research Group

# Our understanding of the problem

## This Research Is Designed For:

- ✓ CIOs
- ✓ Infrastructure managers
- ✓ Enterprise architects
- ✓ Cloud architects

## This Research Will Also Assist:

- ✓ Non-IT executives
- ✓ IT administrators

## This Research Will Help You:

- ✓ Identify workloads that are good candidates for the cloud.
- ✓ Outline and mitigate risks.
- ✓ Develop a comprehensive cloud strategy.
- ✓ Map initiatives on a roadmap.

## This Research Will Help Them:

- ✓ Understand the reasons behind a cloud decision.
- ✓ Differentiate between different cloud service and deployment models.

# Executive summary

## Situation



- The cloud is more appealing than ever. According to RightScale, 95% of organizations are experimenting or running applications in Infrastructure-as-a-Service.
- As pervasive as the cloud is today, its reach is only growing. By 2020, cloud is projected to be the default business deployment model (Gartner).

## Complication



- Cloud strategies (where they do exist) are incomplete. They lack focus on changes in responsibility for staff, governance, and financial controls.
- According to Softchoice, 52% of organizations lacked a cloud strategy for 2017. Not all cloud options are created equal, and picking the wrong one can erode any benefit.

## Resolution



- Creating and employing a comprehensive framework for evaluating workloads' suitability for the cloud using Info-Tech's methodology will allow you to select optimal cloud service models (or colocation, on-premises, or managed solutions) and provide high-quality service that end users expect from IT.
- Codify risks tied to workloads' cloud suitability, and tie them to mitigations that can be employed to improve the likelihood of a successful cloud project.
- Design a cloud strategy to ensure that any cloud migration initiatives are successful in terms of governance, monitoring and reporting, financial controls, success factors, focus, people, and processes.
- Develop a roadmap populated with detailed initiatives related to the outcome of the workload evaluation activity, the risk and mitigation exercise, and the components of the cloud strategy document.

## Info-Tech Insight



- 1. You shouldn't move a workload to the cloud unless you expect to benefit from cloud-specific features.**  
If your justification for the migration is "it won't be here anymore," think again.
- 2. Clouds have different benefits – align your workload to the right one.**  
Host with IaaS; build with PaaS; consume with SaaS.
- 3. The cloud changes roles it doesn't eliminate them.**  
Even if you stick everything in SaaS, you'll need someone to manage vendor relationships.

# What is the cloud, how is it deployed, and how is service provided? (Definitions from NIST)

## Cloud characteristics

1. **On-demand self-service:** the ability to access resources instantly without vendor interaction.
2. **Broad network access:** all services delivered over the network.
3. **Resource pooling:** multi-tenant environment (shared).
4. **Rapid elasticity:** expand and retract capabilities as needed.
5. **Measured service:** transparent metering.

## Service model

1. **Software-as-a-Service:** all but the most minor configuration is done by the vendor.
2. **Platform-as-a-Service:** customer builds the application using tools provided by the provider.
3. **Infrastructure-as-a-Service:** the customer manages OS, storage, and the application.

## Delivery model

1. **Public cloud:** accessible to anyone over the internet; multi-tenant environment.
2. **Private cloud:** provisioned for a single organization with multiple units.
3. **Hybrid cloud:** two or more connected clouds; data is portable across them.
4. **Community cloud:** provisioned for a specific group of organizations.



# Develop a strategy to align your needs with the appropriate cloud (or non-cloud) solution

Service Model	Example	Function
Software-as-a-Service	Salesforce.com Office 365 Workday	Consume
Platform-as-a-Service	Azure Stack Amazon Platforms WordPress	Build
Infrastructure-as-a-Service	Microsoft Azure Amazon EC2 Google Cloud Platform	Host

# Align your needs to a service delivery solution

**A workload-first approach will allow you to take full advantage of the cloud's strengths.**

- Under all but the most exceptional circumstances good cloud strategies will incorporate different service models. Very few organizations are “IaaS shops” or “SaaS shops,” even if they lean heavily in a one direction.
- These different service models (including non-cloud options like colocation and on-premises infrastructure) each have different strengths. Part of your cloud strategy should involve determining which of the services makes the most sense for you.
- Own the cloud by understanding which cloud (or non-cloud!) offering makes the most sense for you, given your unique context.

## SaaS

Useful when the organization is **consuming** an off-the-shelf service that does not differentiate it.

## PaaS

Ideal for developers who want to focus on **building** out an organization's key product.

## IaaS

Have to **host** some virtual machines in the cloud tomorrow? IaaS is your friend. It offers control.

## Colocation

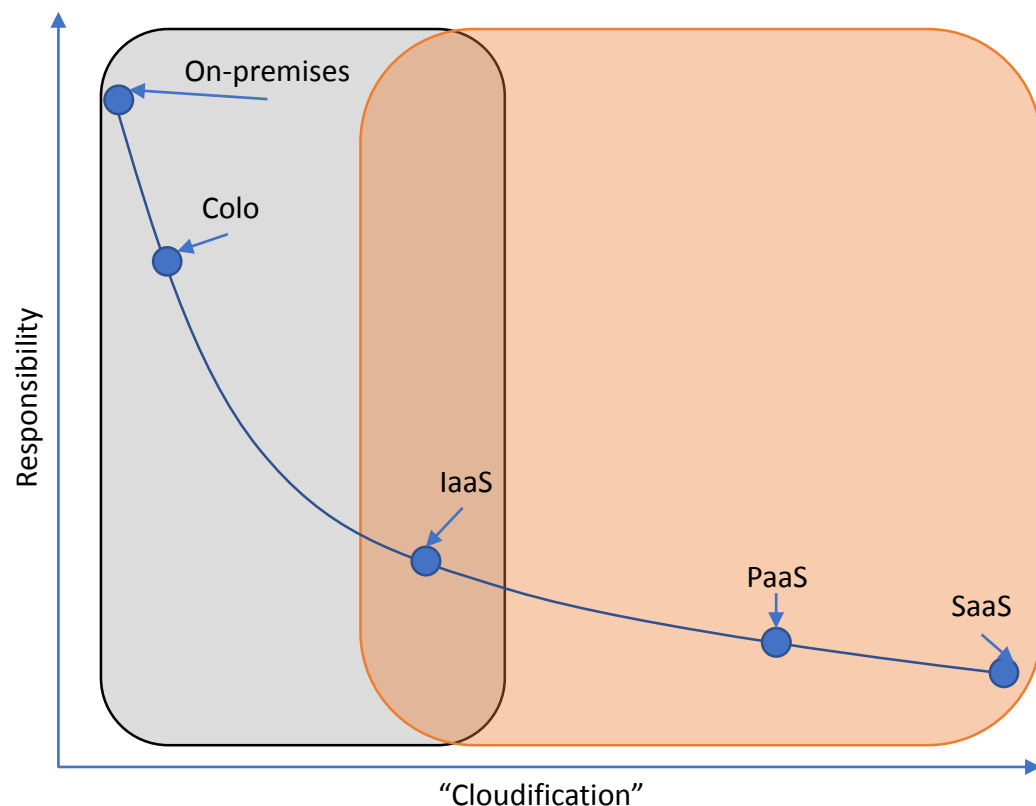
If your mandate is to transition IT from “here” to “not here,” a colocation site might be just the ticket.



## On-premises

Ol' reliable: if you've got everything you need, really sensitive data, or operate at a massive scale, that is.

# What are your responsibilities based on different cloud/non-cloud service models?

## Responsibility vs. “Cloudification”



-  Meets the NIST cloud definition
-  Traditional architecture

The service models are not necessarily discrete; managed infrastructure services can include managed IaaS or even PaaS.



# Delivery models, too, have different strengths – pick the one that’s right for you

## Public cloud



- Potentially infinite scalability
- Vendor management of facilities
- Scale begets good value



## Private cloud



- Control over existing infrastructure while still being scalable
- Resource pooling for efficiency
- Ability to take advantage of on-premises infrastructure

## Hybrid cloud



- Dynamic bursting across clouds
- Most fully capitalize on the cloud’s elasticity
- Allows leveraging of existing infrastructure

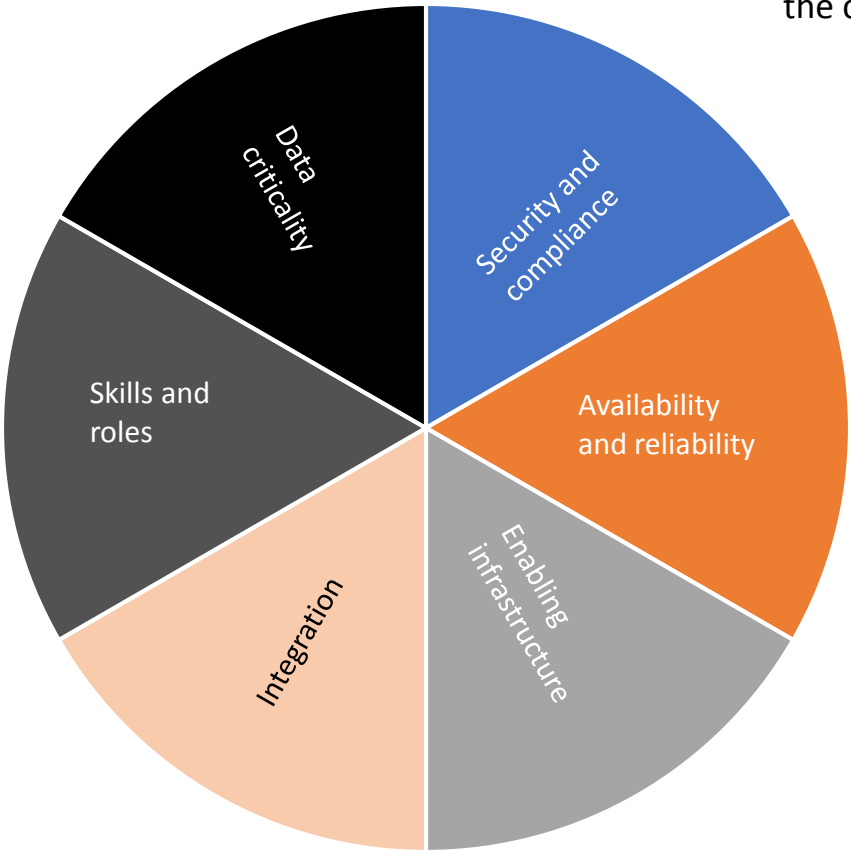
## Community cloud



- Similar organizations can capitalize on their similar needs
- Secure, certified environments
- Still able to capture economies of scale



# Moving to the cloud is a risky proposition (occasionally)



Is it legal to store my data in Redmond?

Can I meet my agreed-upon SLAs if I move to the cloud?

Can my cloud provider put important documents under legal hold?

How much availability can my vendor offer?

Do I have anyone on staff who knows how to handle vendors?

Do I have a big enough pipe to handle cloud traffic?

Can my staff handle the change in the required skills?

Will moving to SaaS break my calendar integration?

# Developing a plan to optimize your cloud experience is an essential part of the cloud strategy document

**An effective cloud strategy comprises the following seven categories, some of which are higher priority and different in maturity (Ruparelia, 2016).**

1. **Focus:** the extent of cloud alignment with business needs.
2. **Success factors:** extent to which standards of interoperability are established.
3. **People:** skills and roles necessary to ensure cloud success.
4. **Processes:** extent to which cloud is integrated into business processes.
5. **Monitoring/reporting:** effectiveness of metric creation/tracking.
6. **Governance:** the degree of codification of ownership of cloud across business units.
7. **Financial control:** effectiveness of the rules surrounding budgeting for the cloud.



Use Info-Tech's tools and templates to evaluate your current state, define a future state, and create a list of initiatives to help you get there.

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