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What do you need to ask yourself when you move to the Cloud?

By Bob Flynn

The March Toward the Clouds: MF Perspectives

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CI Compass Cyberinfrastructure for NSF Major Facilities Workshop

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What Do You Need to Ask Yourself when You Move to the Cloud?

Bob Flynn, PM Cloud Infrastructure & Platform Services, Internet2

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Explain

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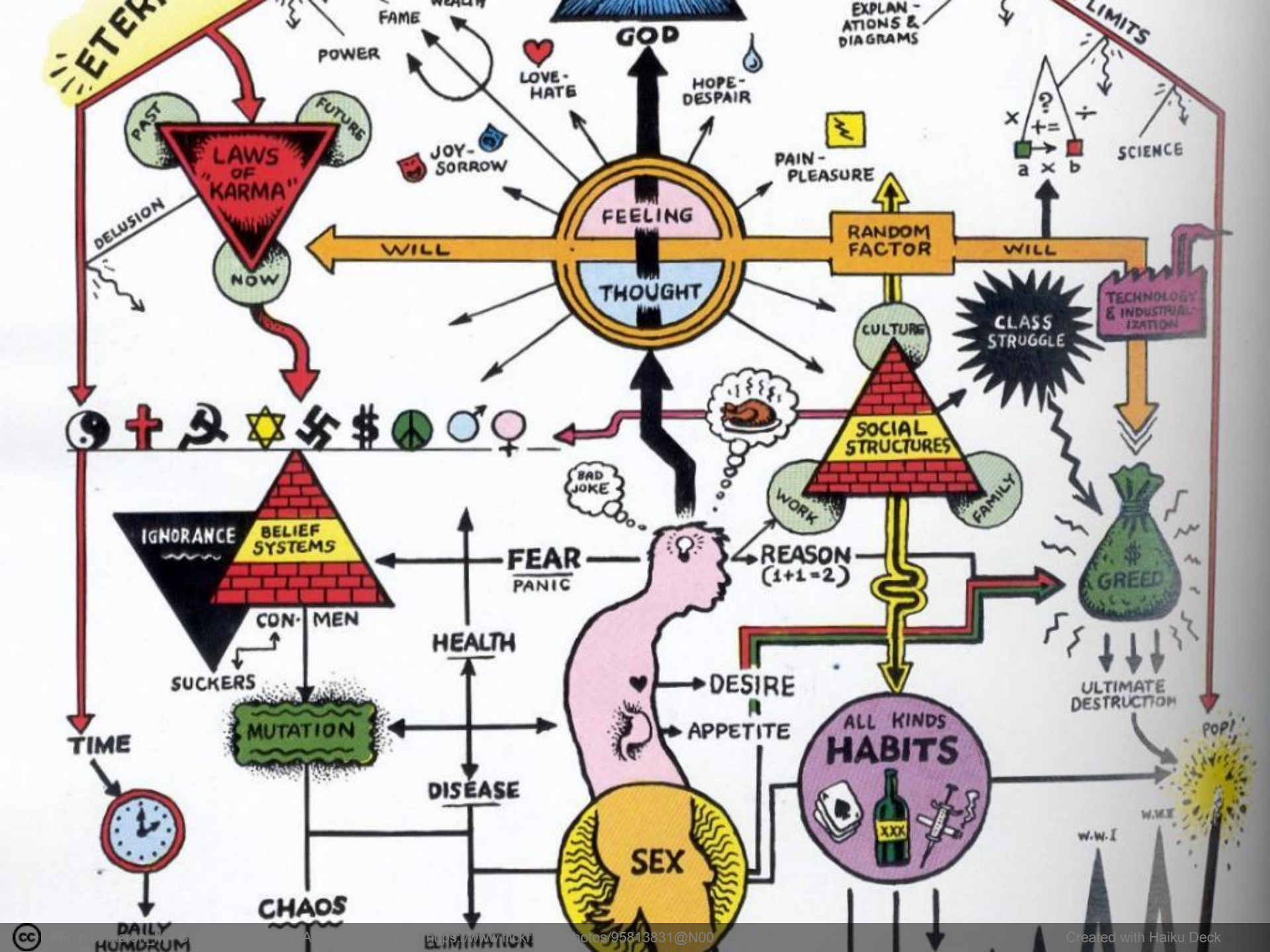

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Questions

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Motivation?

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Long-term survival?

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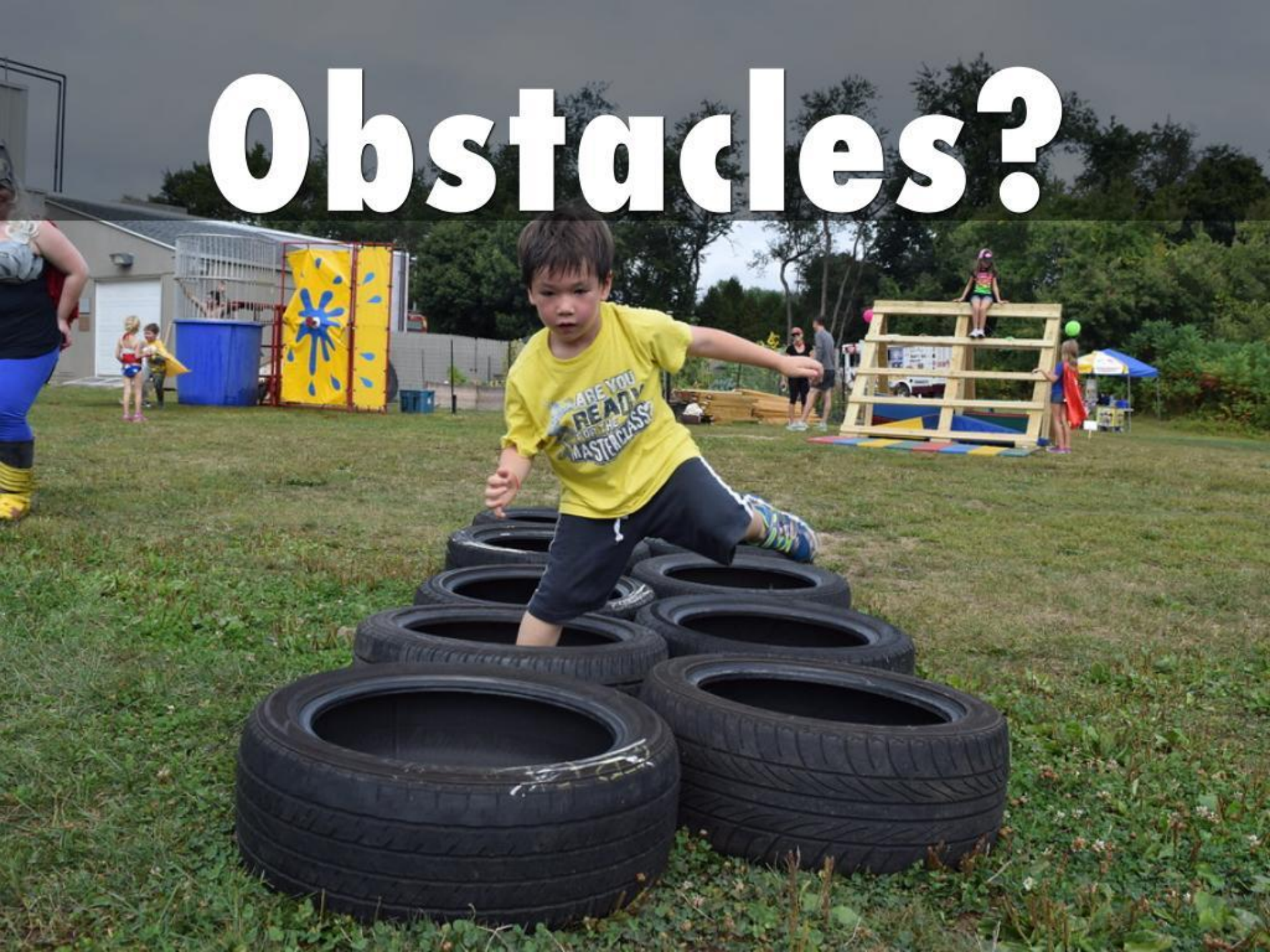
Obstacles?



Cost?

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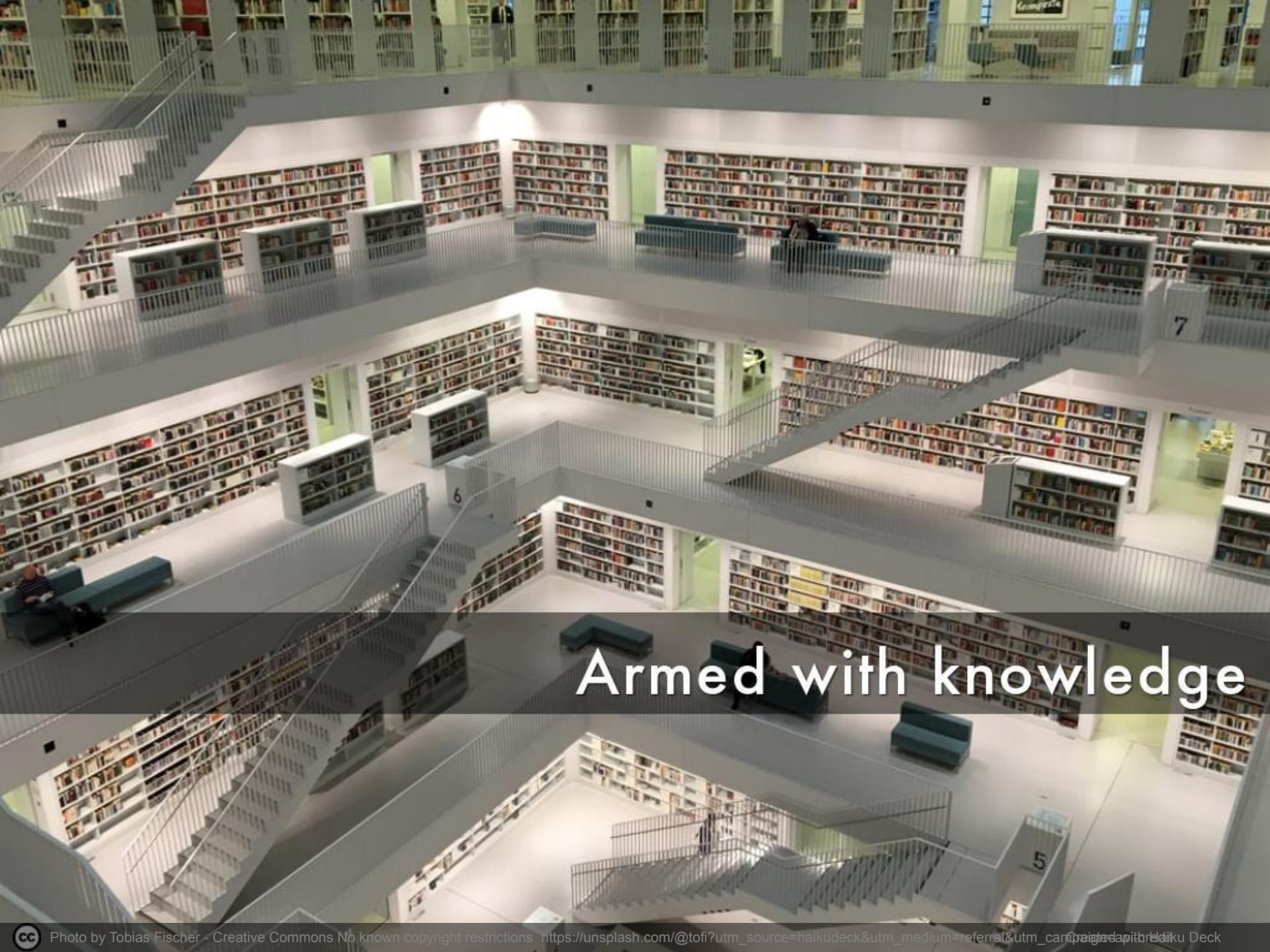
The Cloud Boogeyman is coming!

Fiscal Security



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Reset All

Services | Estimate of your Monthly Bill ($ 0.00)

Choose region: US East (N. Virginia)

- Amazon EC2
- Amazon S3
- Amazon Route 53
- Amazon CloudFront
- Amazon RDS
- Amazon Elastic Load Balancing
- Amazon DynamoDB
- Amazon ElastiCache
- Amazon CloudWatch
- Amazon SES
- Amazon SNS
- Amazon Elastic Transcoder
- Amazon WorkSpaces
- Amazon WorkDocs
- AWS Directory Service
- Amazon Redshift
- Amazon Glacier
- Amazon SQS
- Amazon SWF
- Amazon Elastic MapReduce
- Amazon Kinesis Streams
- Amazon CloudSearch

Amazon Elastic Compute Cloud (Amazon EC2) is a web service that provides resizable compute capacity in the cloud. It is designed to make web-scale computing easier for d

Newer versions of the EC2 calculators are available: Amazon EC2 , EC2 Dedicated Host, Elastic Graphics, Elastic IP

Compute: Amazon EC2 Instances:

	Description	Instances	Usage	Type	Billing Option	Monthly Cost
⊕	Add New Row					

Compute: Amazon EC2 Dedicated Hosts:

	Description	Number of Hosts	Usage	Type	Billing Option
⊕	Add New Row				

Storage: Amazon EBS Volumes:

	Description	Volumes	Volume Type	Storage	IOPS	Baseline Throughput	Snapshot Storage
⊕	Add New Row						

Amazon EBS Fast Snapshot Restore:

Number of Snapshots to Restore: 0

Amazon EBS direct APIs for Snapshots:

Number of GetSnapshotBlock API Requests: 0 Requests

Number of L[illegible] API Requests: [illegible] Requests

Number of Pu[illegible]sh[illegible]ot API Requests: 0 Requests

Oh, that's straightforward enough

Compute: Amazon Elastic Graphics:

	Description	Number of Elastic Graphics	Usage	Elastic Graphics Size and Memory
⊕	Add New Row			

Additional T2/T3/T4g Unlimited vCPU Hours per month:

T4g For Linux, RHEL and SLES: 0

For Linux, RHEL and SLES: 0

For Windows and Windows with SQL Web: 0

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Have you talked to the vendors?

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Don't hide your growth plans from the vendors

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Is Change Possible?

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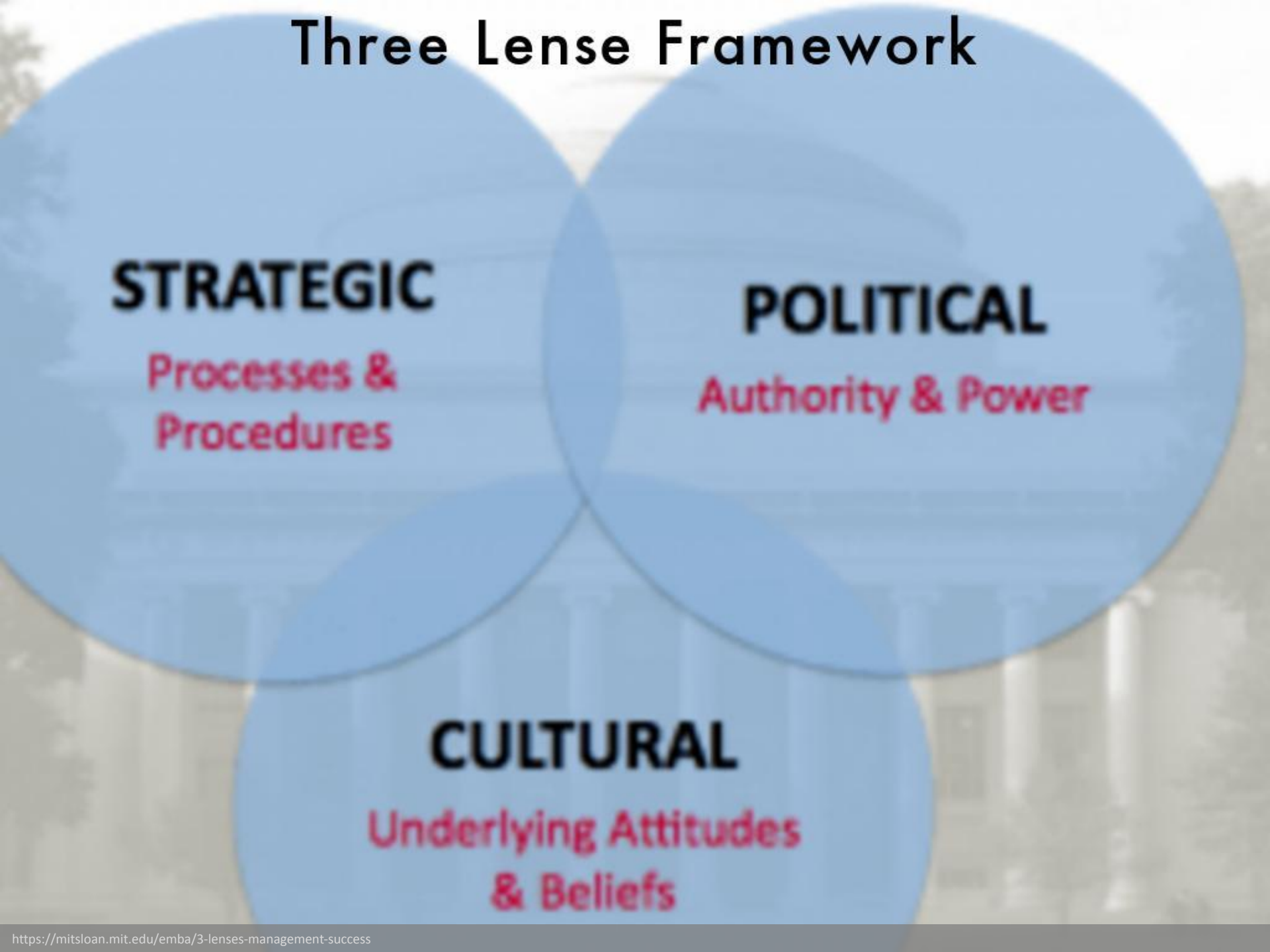
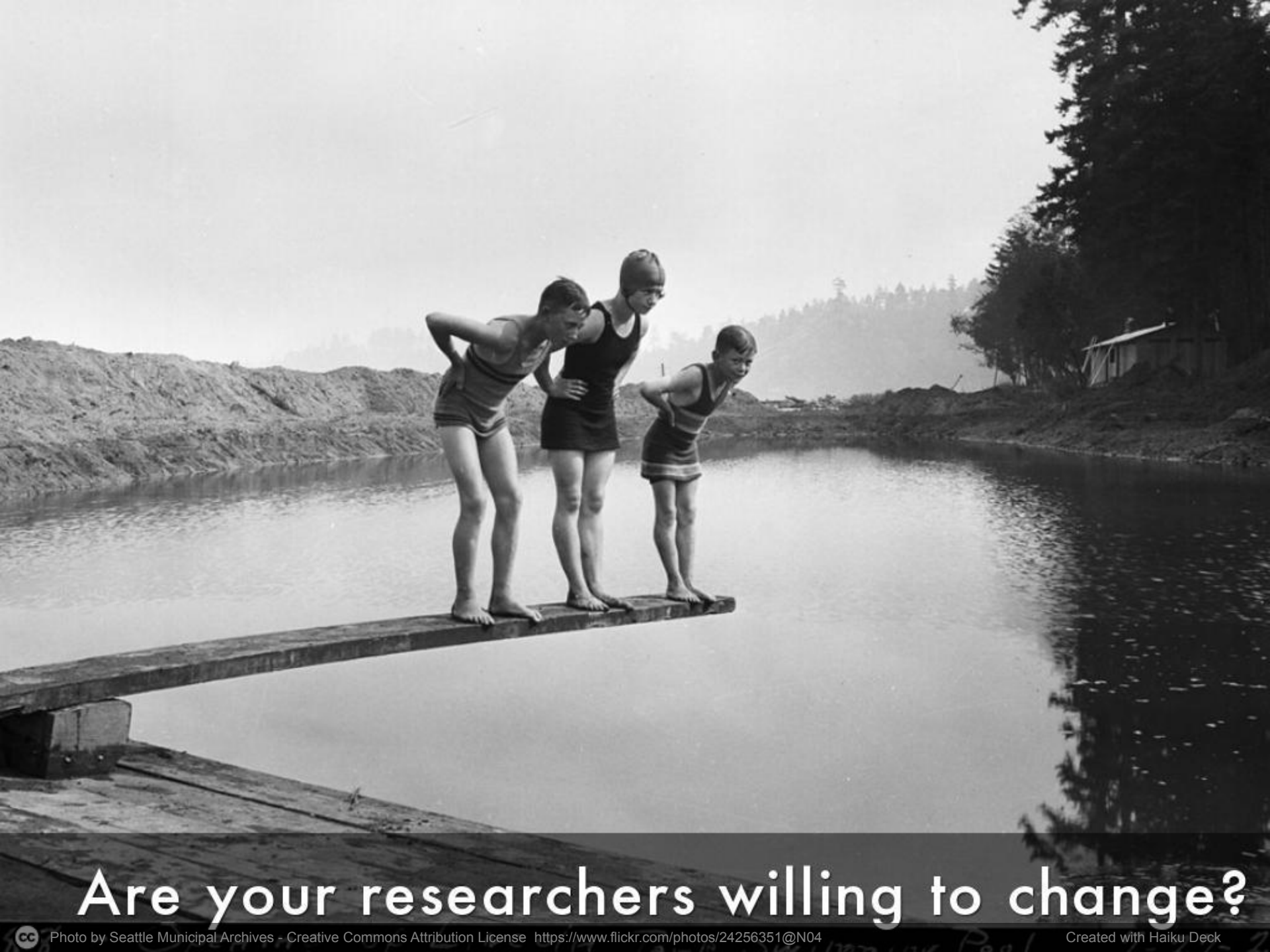
Three Lense Framework



https://mitsloan.mit.edu/emba/3-lenses-management-success



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Happiness is a warm...server?

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What is your team's CloudIQ?

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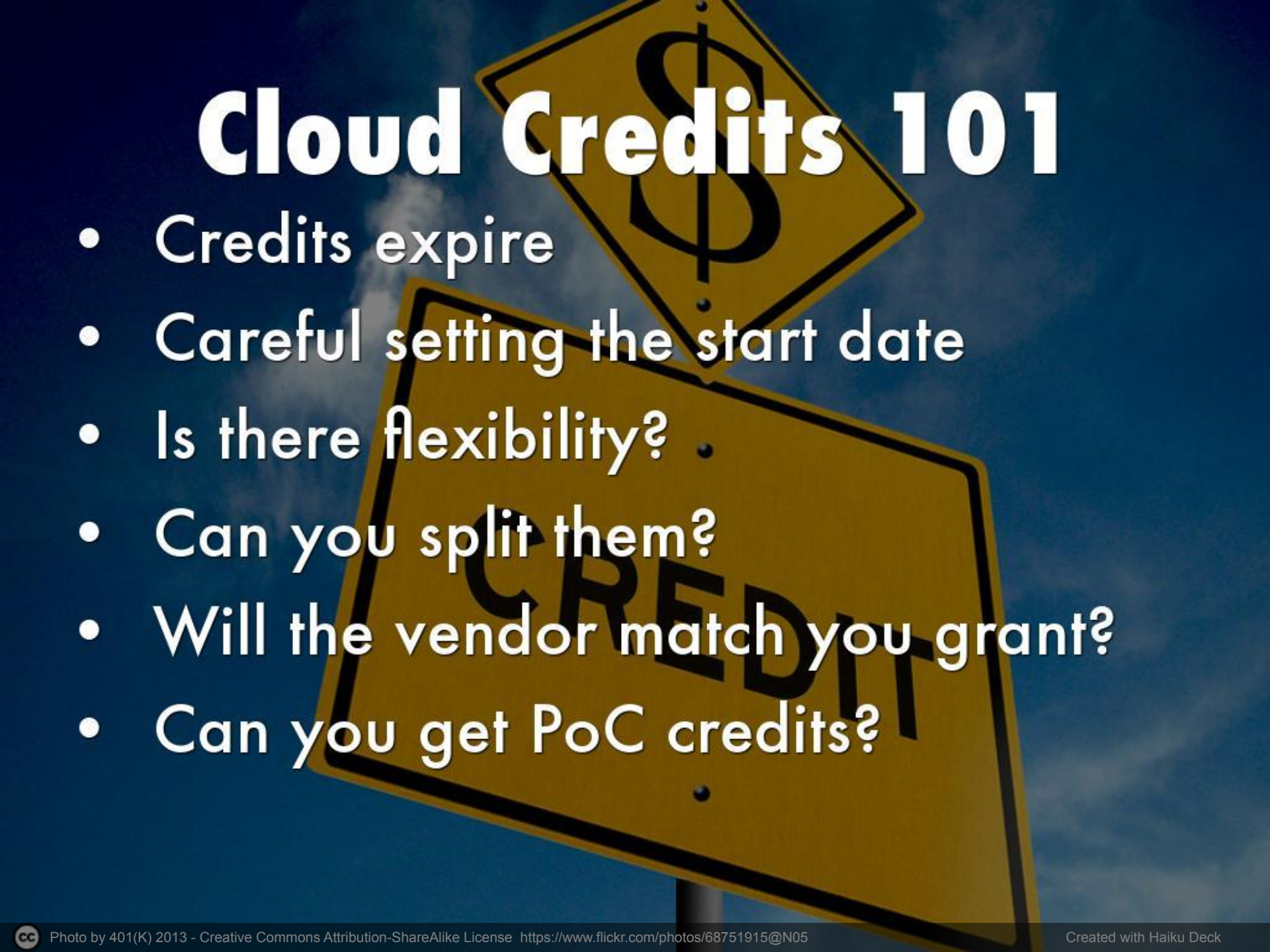
Cloud Credits 101

- Credits expire
- Careful setting the start date
- Is there flexibility?
- Can you split them?
- Will the vendor match you grant?
- Can you get PoC credits?



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Do you have the relationships in place?

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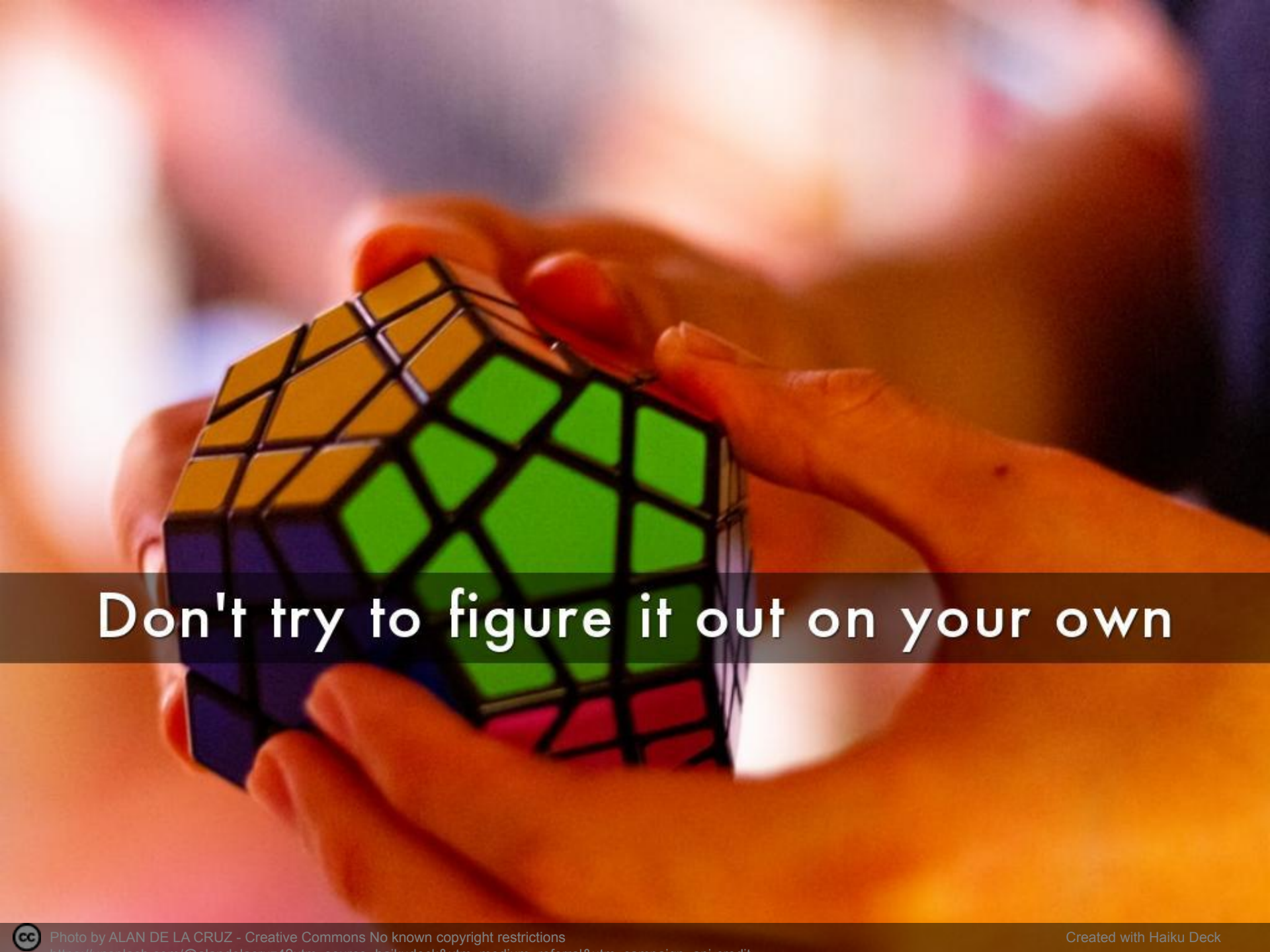
A lot of pieces have to come together



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Amazon Web Services

Microsoft Azure

Google Cloud Platform

Work with the vendors

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Are the MFs centers of research...

...or centers of hardware?

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