



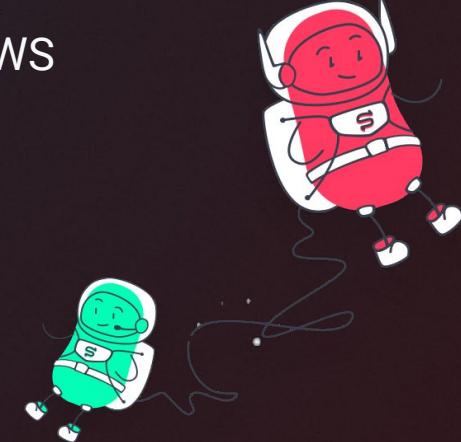
How to **kick-start** your **AWS Cloud Journey**

The why, what and how to get started in AWS



@wolkencode @superluminario

Nora Schöner



What's in it for you today?

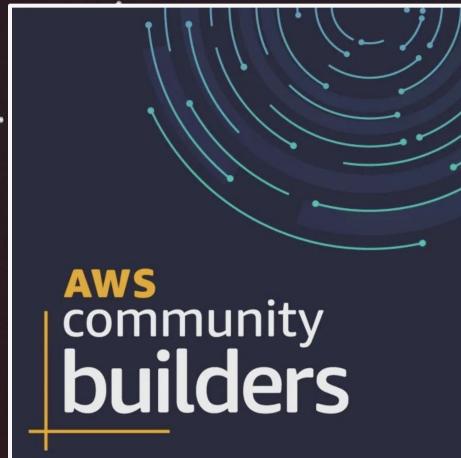
- What is the cloud and why it is useful?
- Getting to know AWS and its services
- Taking a look in mindset shifts
- How to begin and getting started 💪

we are

superluminar



Hi, I'm **Nora** 🙌



@wolkencode

How it started?

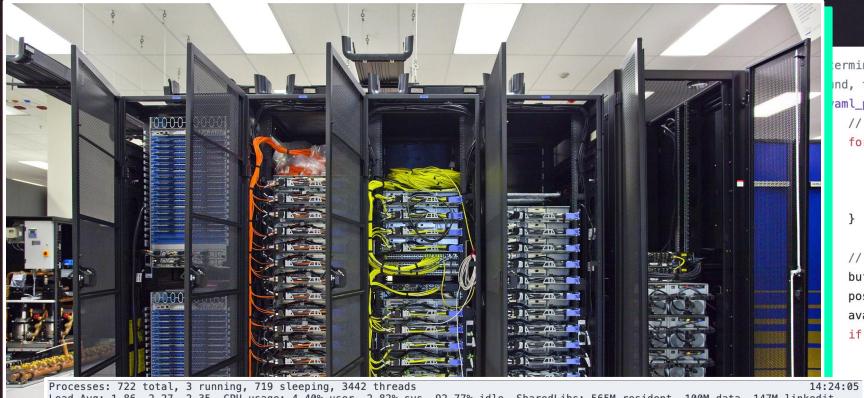




WHAT IF I TOLD YOU

**THE CLOUD IS JUST SOMEONE
ELSE'S COMPUTER**

What does classical hosting look(ed) like?

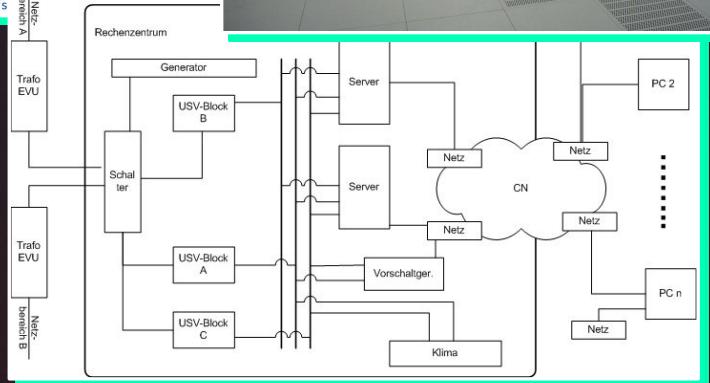


```
Processes: 722 total, 3 running, 719 sleeping, 3442 threads
Load Avg: 1.86, 2.27, 2.35 CPU usage: 4.40% user, 2.82% sys, 92.77% idle SharedLibs: 565M resident, 100M data, 147M linkedit.
MemRegions: 415483 total, 470404 resident, 127M private, 10G shared. PhysMem: 32G used (4176M wired), 87M unused.
VM: 5681G vszie, 2318M framework vszie, 11389084(0) swapins, 13294545(0) swapouts.
Networks: packets: 24475776/186 in, 5384478/216 out. Disks: 5578573/1446 read, 6861434/1338 written.
```

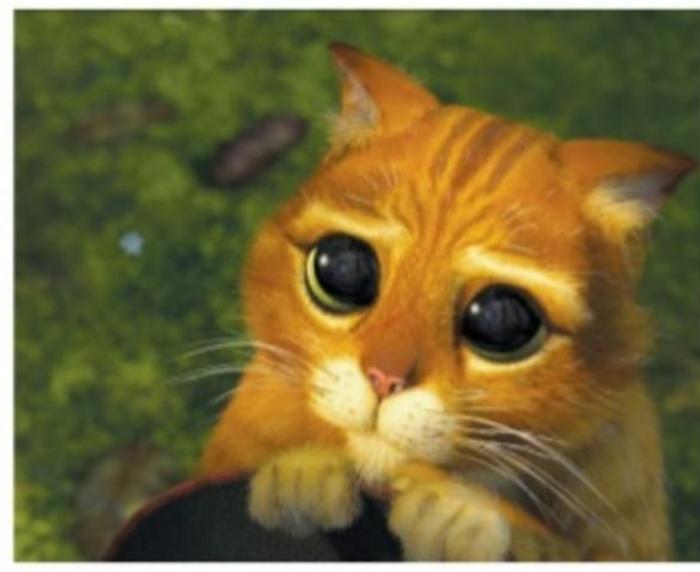
PID	COMMAND	RPDU	TIME	#T#	#W#	PROTS	PURG	CMPRS	PGRP	PPID	STATE	BOOSTS	%CPU_ME
68942	Google Chrom	40.2	13:21:39 31	1	283	366M-	OB	126M-	1648	1648	sleeping	*0[5]	0.00000
141	WindowServer	22.0	07:20:09 15	6	5339-	1663M-	2944K	144M-	141	1	sleeping	*0[1]	0.03710
26294	top	9.0	00:04:40 1/1	0	35	12M	OB	OB	26294	2415	running	*0[1]	0.00000
440	sysmon	5.8	25:10:09 3	2	22+	1664K-	OB	484K	448	1	sleeping	*0[302]	0.00000
8035	com.docker.h	5.7	04:18:15 17	0	41	14G	OB	857M	7983	8027	sleeping	*0[1]	0.00000
26366	scsienclosure	4.0	00:05:55 3	1	154	504K	628K	1652	1662	sleeping	*0[367+]	0.13400	
65848	sectorloopd	4.8	25:35:00 17	0	29	5192K	OB	2198K	65948	65945	sleeping	*0[1]	0.00000
16558	Activity Mon	4.6	35:15:27 75	5	1241	123M	OB	53M	1658	1658	sleeping	*0[987]	5.09803
0	kernel_task	4.6	03:05:21 297/16	0	0	214M	OB	OB	0	0	running	*0[8]	0.00000
4451	Signal Helpe	2.8	01:54:31 27	1	1440	211M	OB	111M-	1653	1653	sleeping	*0[32]	0.00000
17667	Microsoft Te	2.7	04:02:32 22	1	300	383M+	OB	74M	17658	17658	sleeping	*0[1]	0.00000
5736	Google Chrom	2.3	04:05:31 19	1	278	265M	OB	127M	1648	1648	sleeping	*0[8]	0.00000
2543	gamecontrolr	1.5	11:14:46 4/1	3	95	250K	OB	1892K	254	1	running	*0[2105514+]	0.00000
1653	TeamViewer	1.1	71:31:31 1	1	121	1493M	OB	1749M	1651	1651	sleeping	*0[34138]	0.00002
17658	Team	1.1	02:18:16 38	3	846	197M	OB	99M	17658	1	sleeping	*0[211263+]	0.00000
122	bluetoothd	1.0	39:12:28 6	4	314	14M	OB	3124K-	122	1	sleeping	*0[1]	0.14432
17663	Microsoft Te	0.6	00:56:73 9	2	106	17M	OB	8880K	17658	17658	sleeping	*0[1]	0.00000
26307	screencaptur	0.5	00:08:19 3	1	186	12M	OB	OB	26307	1	sleeping	*0[355+]	0.00000
20262	Microsoft Te	0.5	01:12:69 14	1	132	17M+	OB	14M	17658	17658	sleeping	*0[1]	0.00000
88874	Microsoft.Py	0.5	07:34:36 15	0	42	46M	OB	34M	80677	80677	sleeping	*0[1]	0.00000
77986	Microsoft.Py	0.5	08:47:77 15	0	43	353M	OB	340M	77834	77834	sleeping	*0[1]	0.00000

```
etermine the input stream encoding by checking the BO
nd, the UTF-8 encoding is assumed. Return 1 on succe
yaml_parser_determine_encoding(parser *yaml_parser_t)
// Ensure that we had enough bytes in the raw buff
for (parser.eof && len(parser.raw_buffer)-parser.i
    if (!yaml_parser_update_raw_buffer(parser))
        return false
    }

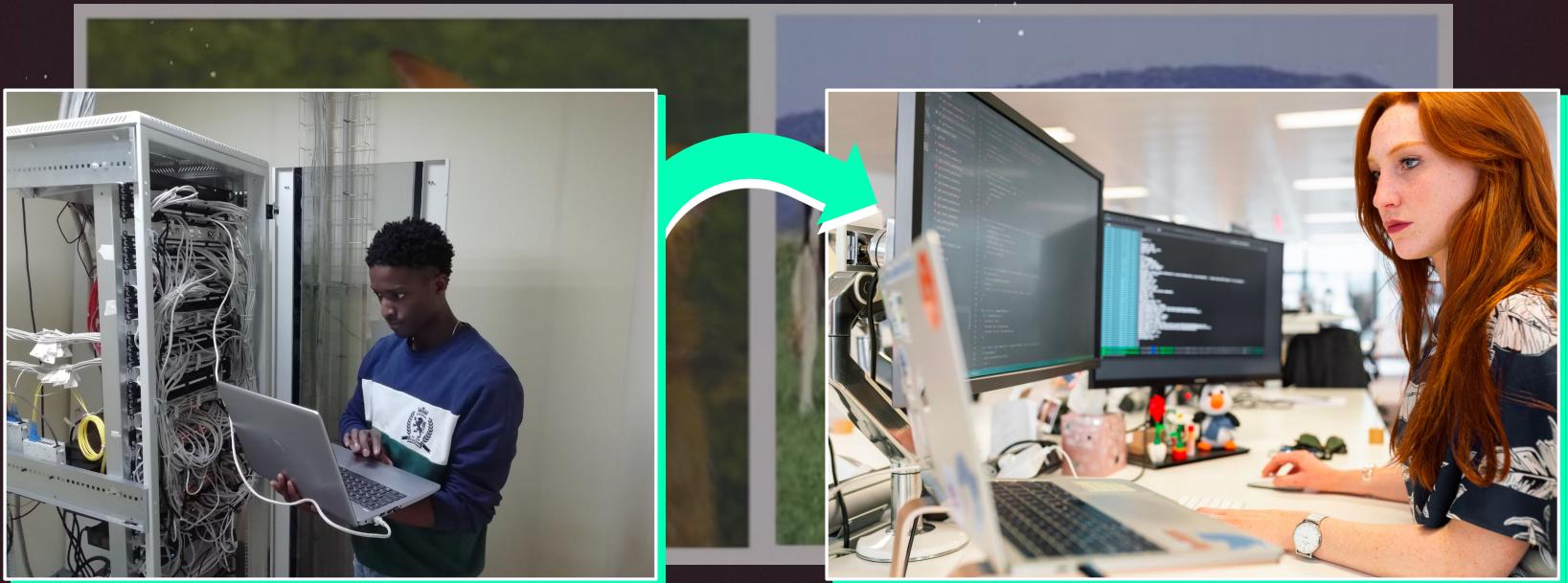
// Determine the encoding.
buf := parser.raw_buffer
pos := parser.raw_buffer_pos
avail := len(buf) - pos
if avail >= 2 && buf[pos] == bom_UTF16LE[0] && buf
parser.encoding = yaml_UTF16LE_ENCODING
parser.raw_
parser.off
```



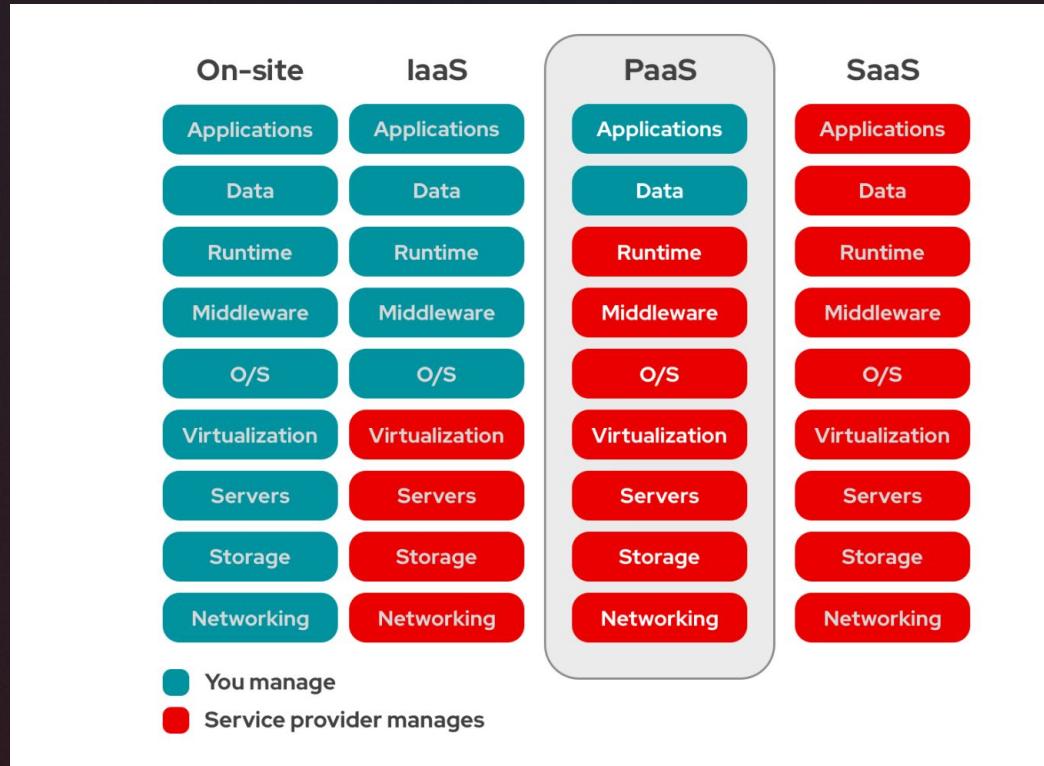
Shift of Attitude



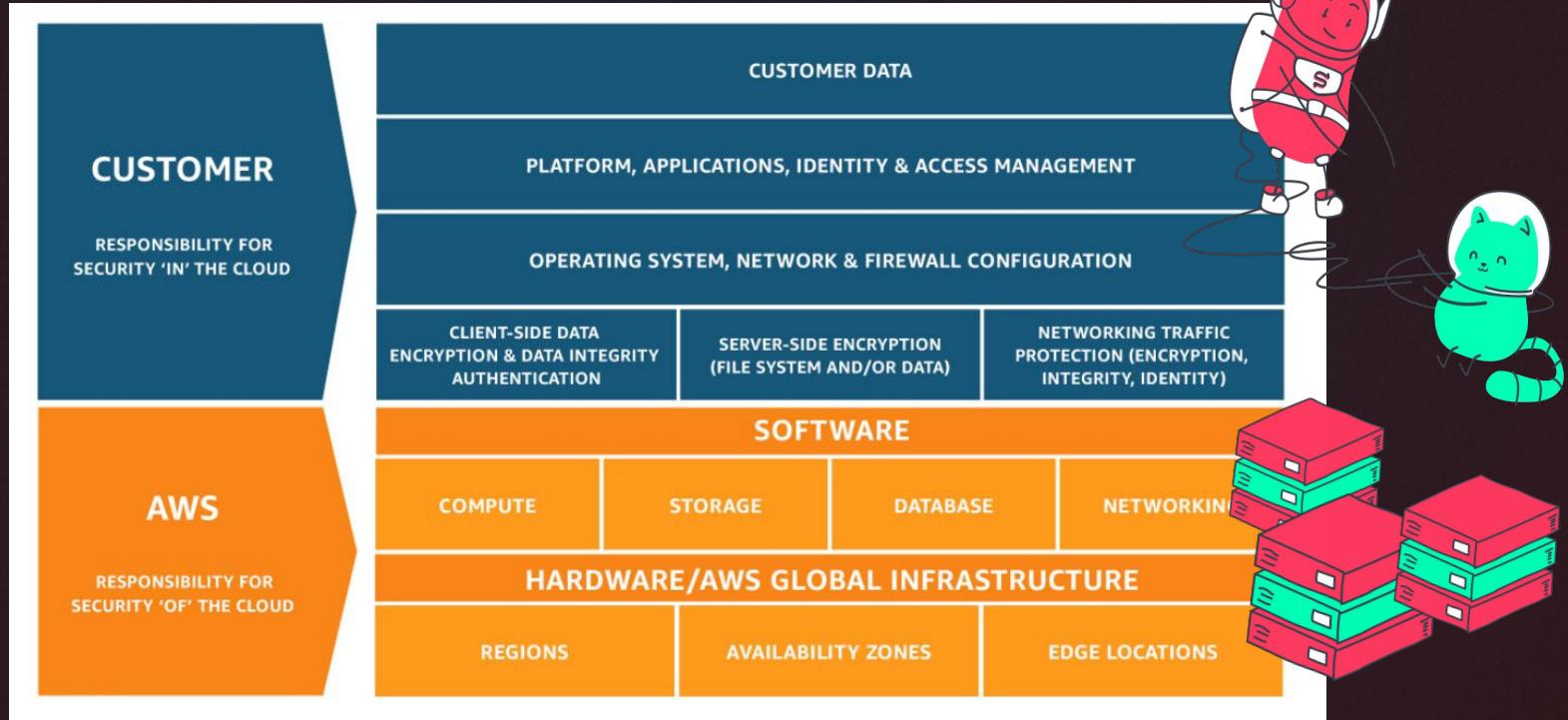
Shift of Attitude



Hello {*}aaS 🙌

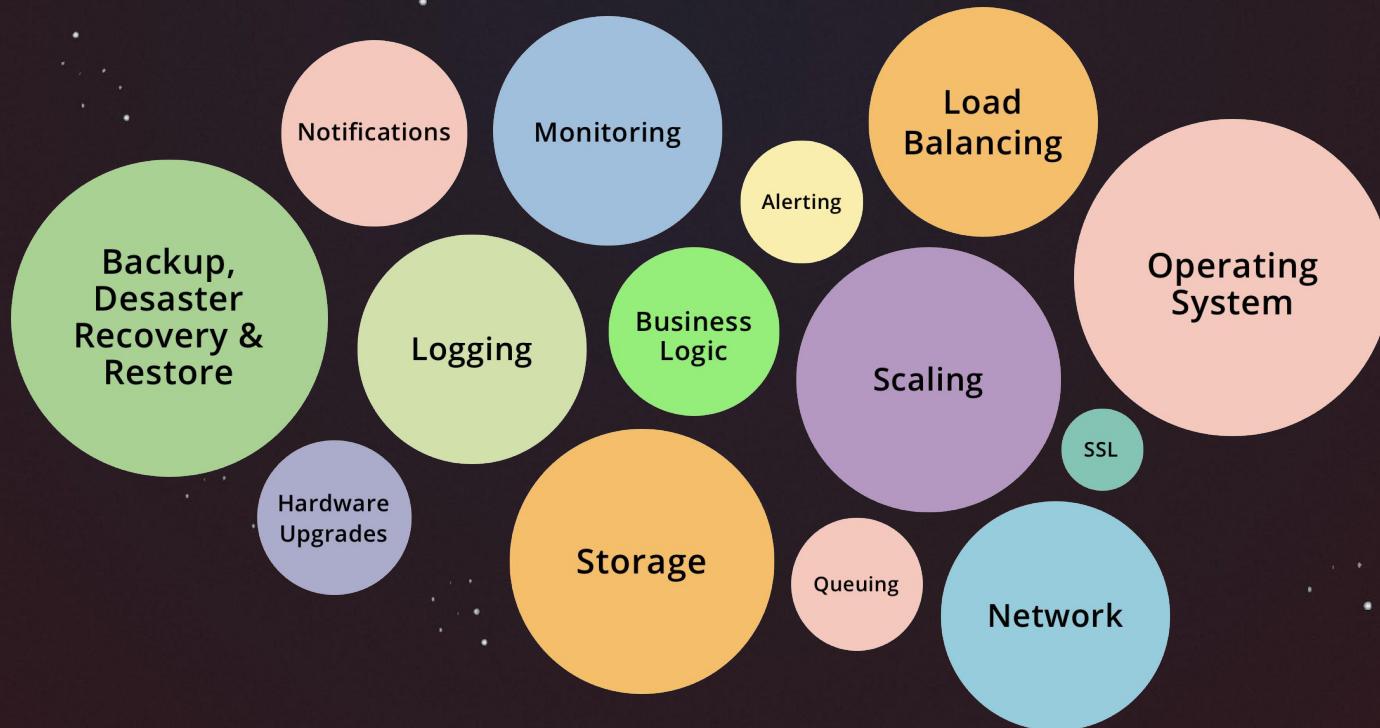


AWS Shared Responsibility Model

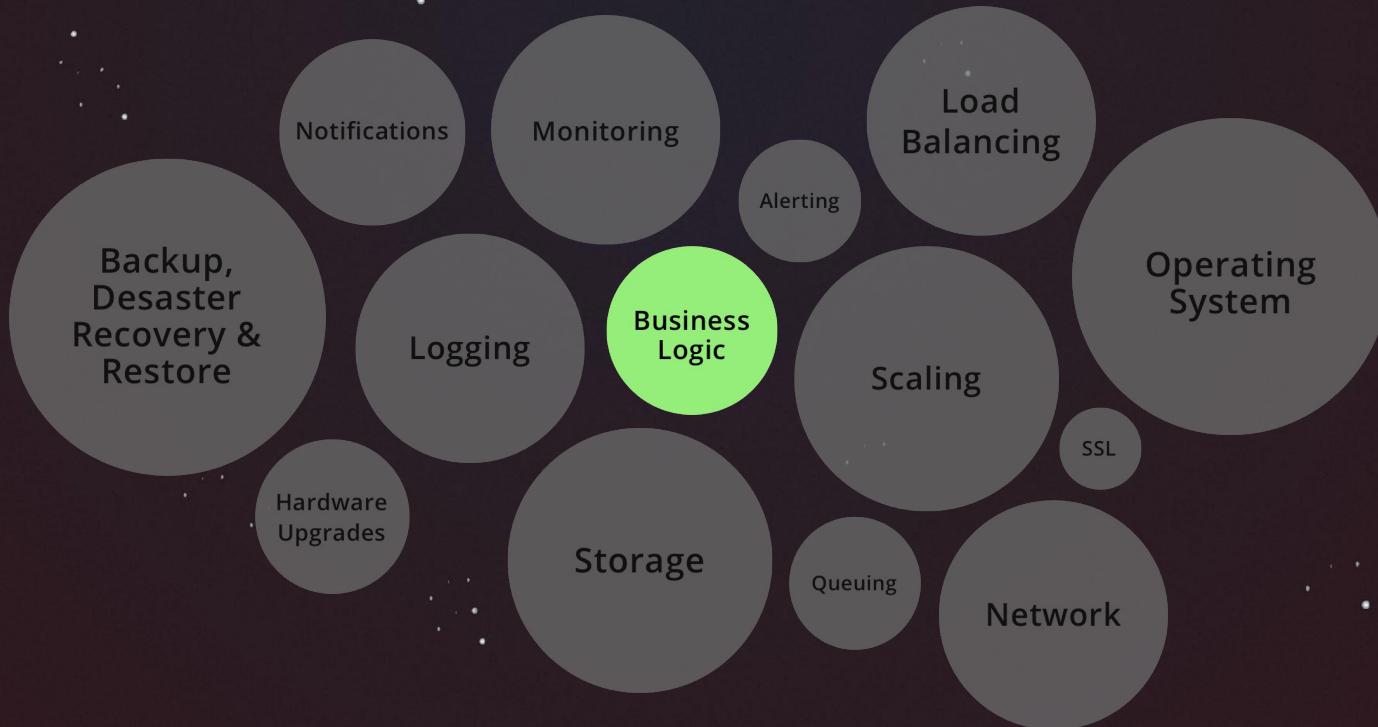


<https://aws.amazon.com/compliance/shared-responsibility-model/>

Things to take care of...



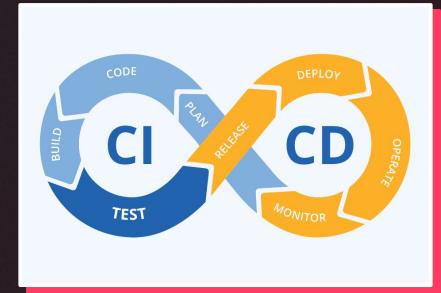
Where is the value?



Shift of development



```
31     def from_settings(cls, settings):
32         self.fingerprints = {}
33         self.log_fp = True
34         self.logging = False
35         self.logger = Logging()
36         if path:
37             self_file = open(path, 'r')
38             self_file.read()
39             self_file.close()
40             self.fingerprints = eval(self_file.read())
41
42     @classmethod
43     def from_settings(cls, settings):
44         debug(settings, 'from_settings')
45         return cls(_load(settings), debug)
46
47     def request_fingerprint(self, request):
48         fp = self.request_fingerprint(request)
49         if fp in self.fingerprints:
50             return True
51         self.fingerprints.add(fp)
52         self_file = open(fp + os.linesep)
53         self_file.write(fp + os.linesep)
54         self.request_fingerprint(self, request)
55
56     def request_fingerprint(self, request):
57         return request_fingerprint(request)
```



Shift of costs

fix costs



pay on-demand



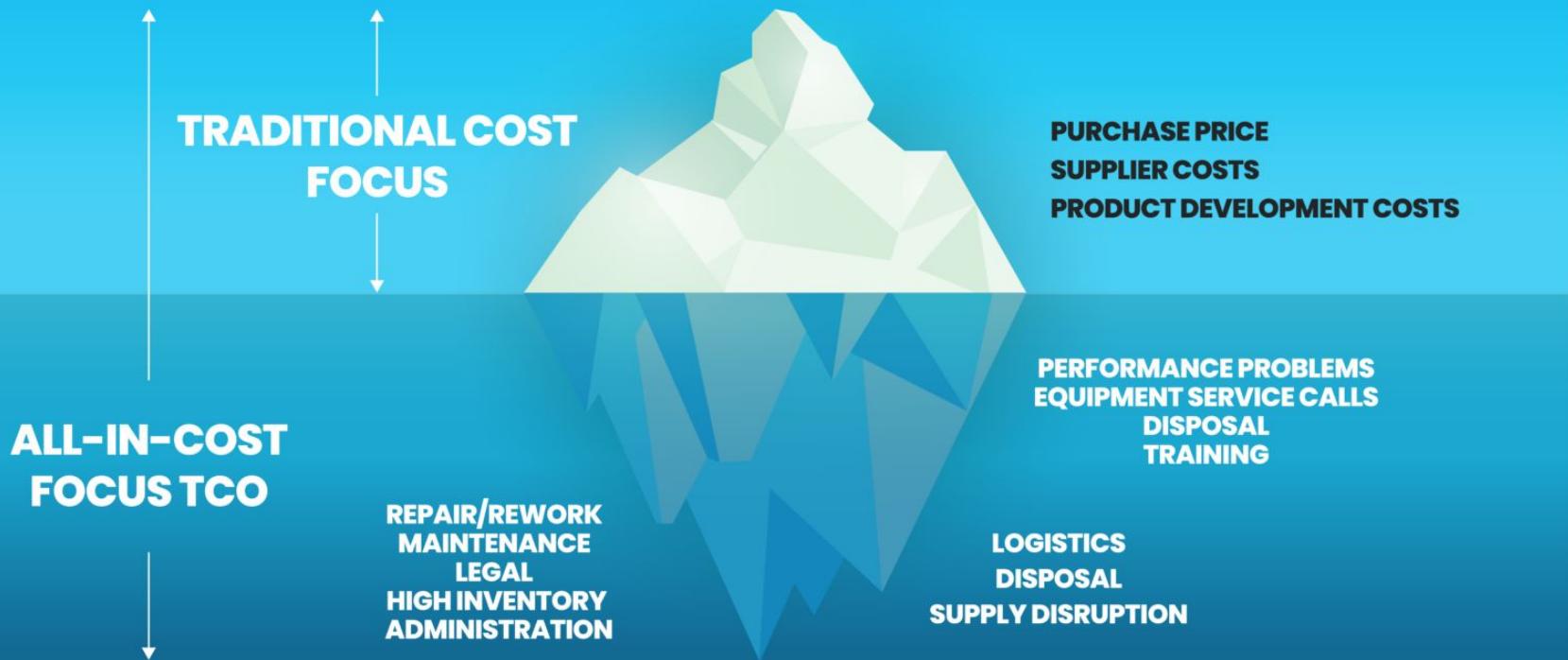
build



buy

TOTAL COST OF OWNERSHIP

TCO ICEBERG MODEL



Shift of Thinking

Vendor Lock-in

fear of
dependencies



Public Cloud
as driver

Shift of Thinking

Self Hosting/Building

fulfill my
specific needs



Is there a
service for it?

Shift of Thinking

Ownership of Assets

strategic
advantage



necessary evil

So, Cloud has something for everybody



AWS Services

Compute Amazon EC2 Amazon Elastic Container Service Amazon Elastic Container Service for Kubernetes Amazon Elastic Container Registry Amazon Lightsail AWS Batch AWS Elastic Beanstalk AWS Fargate AWS Lambda AWS Serverless Application Repository Auto Scaling Elastic Load Balancing VMware Cloud on AWS	Networking & Content Delivery Amazon VPC Amazon CloudFront Amazon Route 53 Amazon API Gateway AWS Direct Connect Elastic Load Balancing	Machine Learning Amazon SageMaker Amazon Comprehend Amazon Lex Amazon Polly Amazon Rekognition Amazon Machine Learning Amazon Translate	AR & VR Amazon Sumerian
Storage Amazon Simple Storage Service (S3) Amazon Elastic Block Storage (EBS) Amazon Elastic File System (EFS) Amazon Glacier AWS Storage Gateway AWS Snowball AWS Snowball Edge AWS Snowmobile	Developer Tools AWS CodeStar AWS CodeCommit AWS CodeBuild AWS CodeDeploy AWS CodePipeline AWS Cloud9 AWS X-Ray AWS Tools & SDKs	Analytics Amazon Athena Amazon EMR Amazon CloudSearch Amazon Elasticsearch Service Amazon Kinesis Amazon Redshift Amazon QuickSight AWS Data Pipeline AWS Glue	Application Integration Amazon MQ Amazon Simple Queue Service (SQS) Amazon Simple Notification Service (SNS) AWS AppSync AWS Step Functions
Database Amazon Aurora Amazon RDS Amazon DynamoDB Amazon ElastiCache Amazon Redshift Amazon Neptune AWS Database Migration Service	Management Tools Amazon CloudWatch AWS CloudFormation AWS CloudTrail AWS Config AWS OpsWorks AWS Service Catalog AWS Systems Manager AWS Trusted Advisor AWS Personal Health Dashboard AWS Command Line Interface AWS Management Console AWS Managed Services	Security, Identity & Compliance AWS Identity and Access Management (IAM) Amazon Cloud Directory Amazon Cognito Amazon GuardDuty Amazon Inspector Amazon Macie AWS Certificate Manager AWS CloudHSM AWS Directory Service AWS Key Management Service AWS Organizations AWS Single Sign-On	Customer Engagement Amazon Connect Amazon Pinpoint Amazon Simple Email Service (SES)
Migration AWS Migration Hub AWS Application Discovery Service AWS Database Migration Service AWS Server Migration Service	Media Services Amazon Elastic Transcoder Amazon Kinesis Video Streams AWS Elemental MediaConvert AWS Elemental MediaLive AWS Elemental MediaPackage AWS Elemental MediaStore	Business Productivity Alexa for Business Amazon Chime Amazon WorkDocs Amazon WorkMail	Desktop & App Streaming Amazon WorkSpaces Amazon AppStream 2.0
		Internet of Things AWS IoT Core Amazon FreeRTOS AWS Greengrass AWS IoT 1-Click AWS IoT Analytics AWS IoT Button AWS IoT Device Defender AWS IoT Device Management	Game Development Amazon GameLift Amazon Lumberyard
		Software AWS CloudHSM	

This is a lot...



Work with something you are motivated about



Get to know the bare basics



AWS IAM



Amazon
CloudWatch



AWS CloudTrail



AWS Cost Explorer

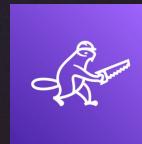


Amazon VPC

Some funny ones...



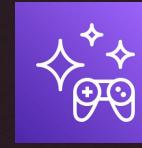
AWS Ground Station



Amazon Lumberyard



Amazon Sumerian

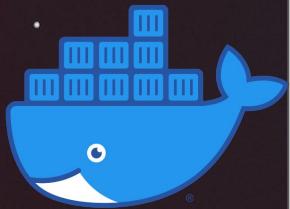


Amazon GameSparks

Let's take a closer look



Tooling is everything!



Search for a learning path

roadmap.sh



An example



Amazon
Cognito



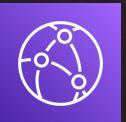
GraphQL
AppSync



Cert
Manager



Route53



Cloud
Front



S3



API
Gateway



Lambda



DynamoDB

Another example



Amazon VPC



Amazon EC2



Amazon RDS



Amazon EKS



AWS Fargate

Tools and little Helpers

- using a **Infrastructure as Code** tool
- using **ramp up** tools (e.g. Amplify, Copilot,...)
- learn about **Well Architected Framework**
- attending **meetups** and **conferences** 😊



CloudFormation



Thank you.



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Advanced
Consulting
Partner

Well Architected
Program

Immersion Day
Program

AWS Public Sector
Partner