a tale about scale

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Norbert Hartl - ApptiveGrid

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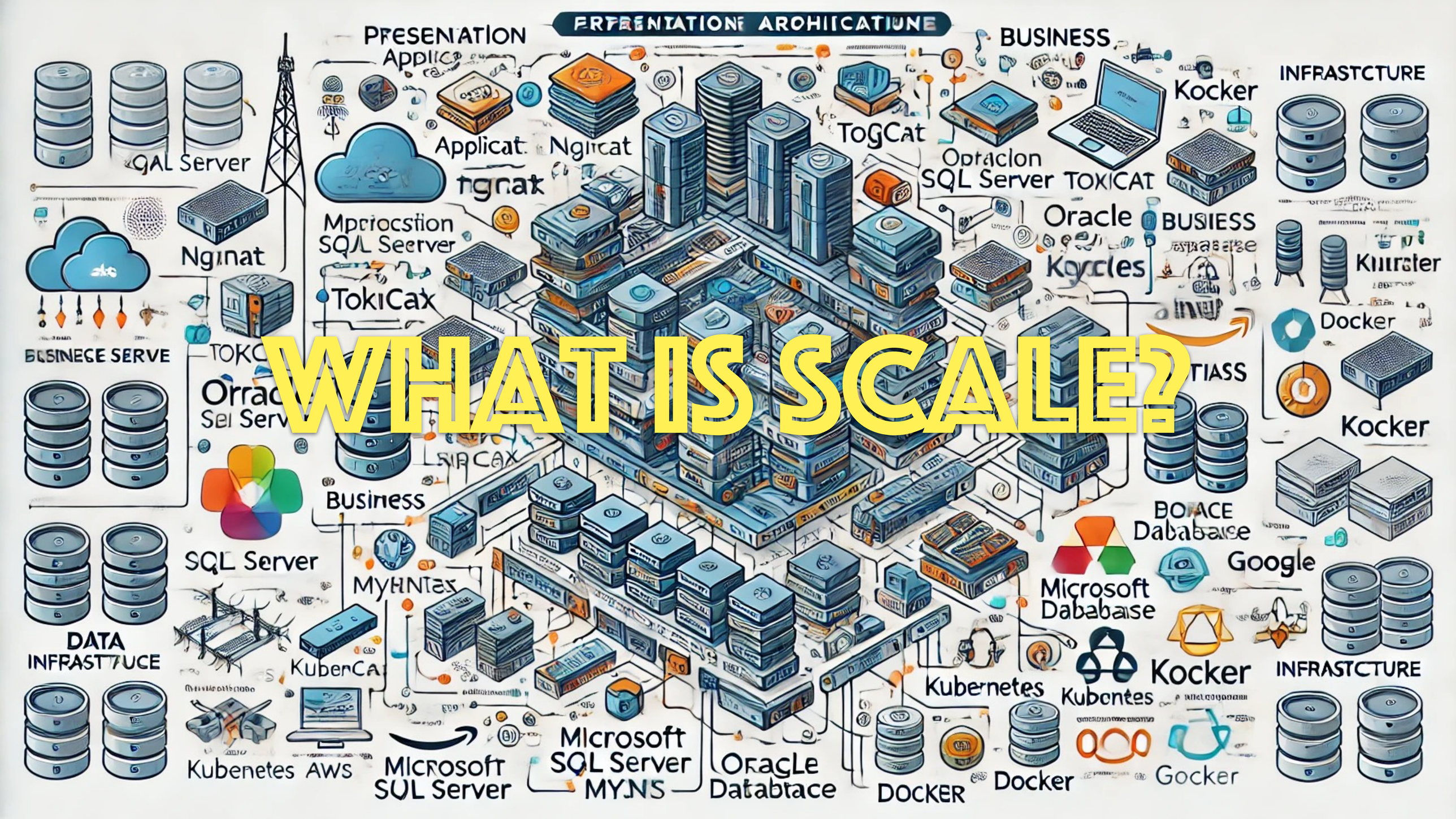
caution: only remotely technical

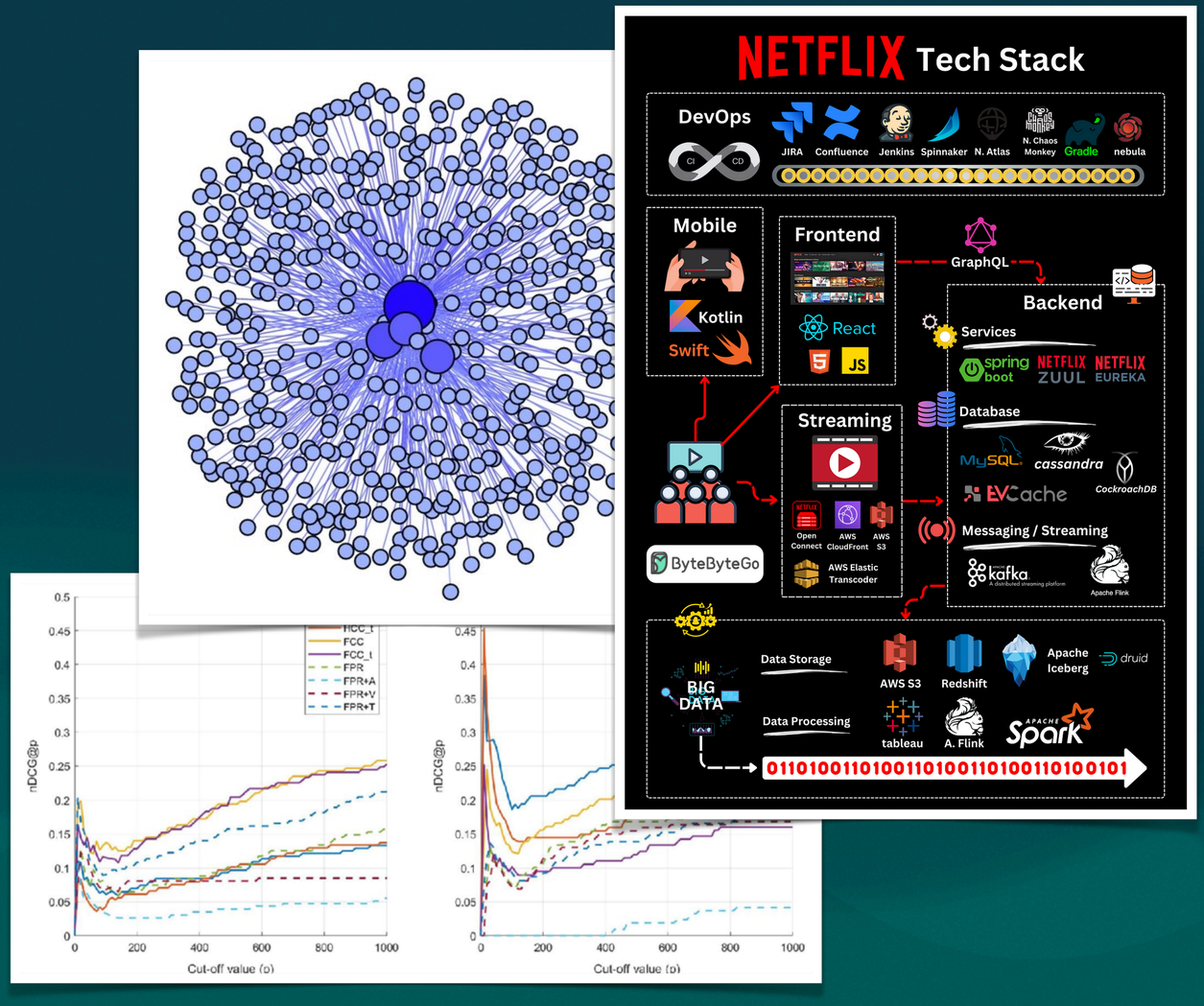
Norbert Hartl - ApptiveGrid

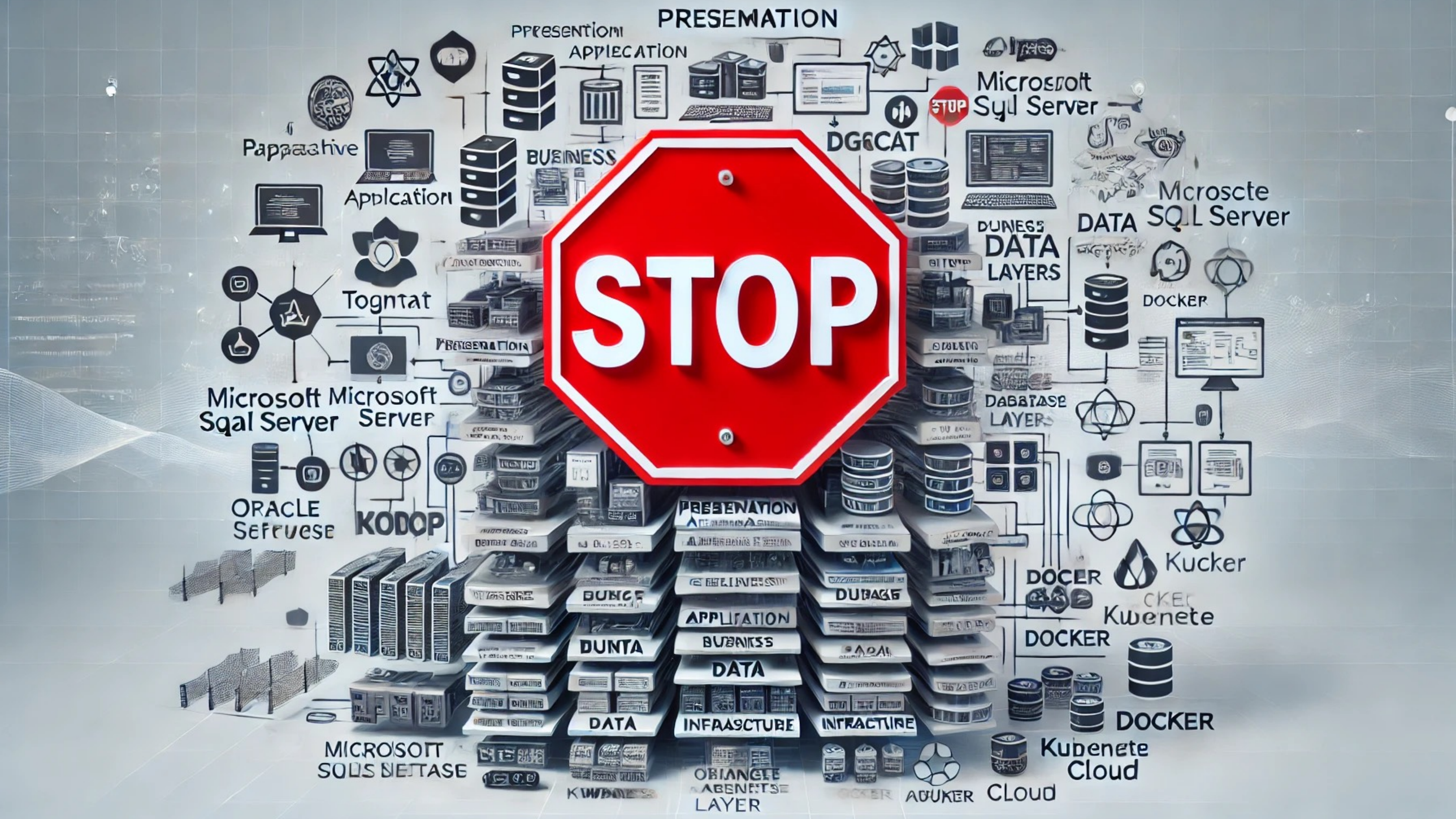
# I'm talking about pharo in practice

# Pharo days 2015


WHAT IS SCALE?
PRESENTATION
BUSINESS
INFRASTCTURE
Nginat
TokiCax
Oracle
Docker
Kocker
SQL Server
Business
Google
Microsoft
Kubernetes
Kubentes
Docker
DATA
INFRASTTUCE
Kubenetes
AWS
Microsoft
SQL Server
Oracle
Databtace
DOCKER
Gocker

# technical scale




STOP
PRESEMATION
Microsoft
DATA
DOCKER
Kucker
DOCKER
Kubenete
Cloud
DOCKER
Kubenete
Cloud
DATA
LAYERS
Microsoft
Server
ORACLE
KODOP
DATA
INFRASTRUCTURE
LAYER

# keeping focus - CPM model

# CPM model

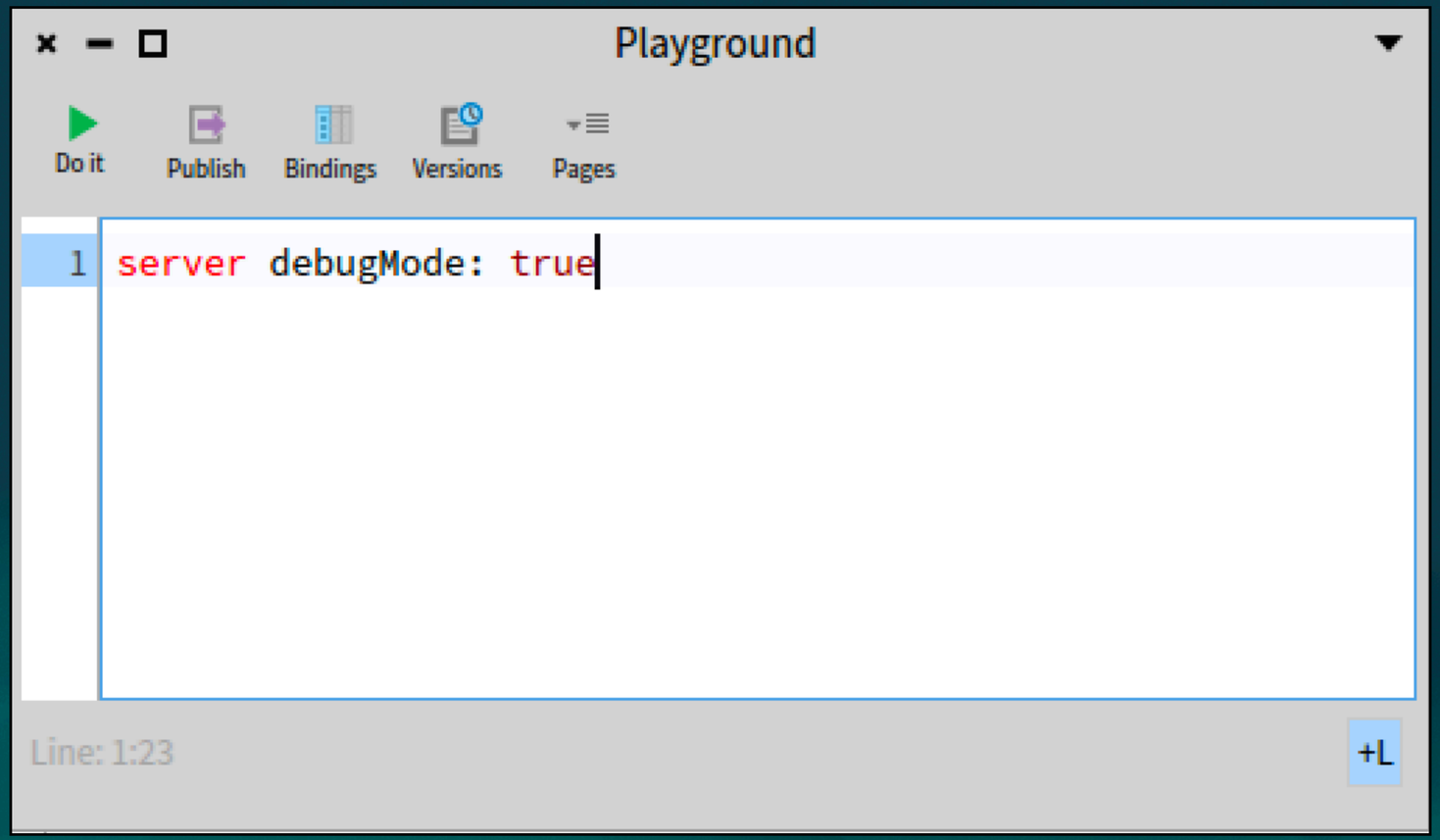
- **C**omputer
- **P**haro
- **M**e

IT'S TIME TO
SCALE
SUPER HAPPY!
IT!

team scale

# two laptops on a network

# debugging

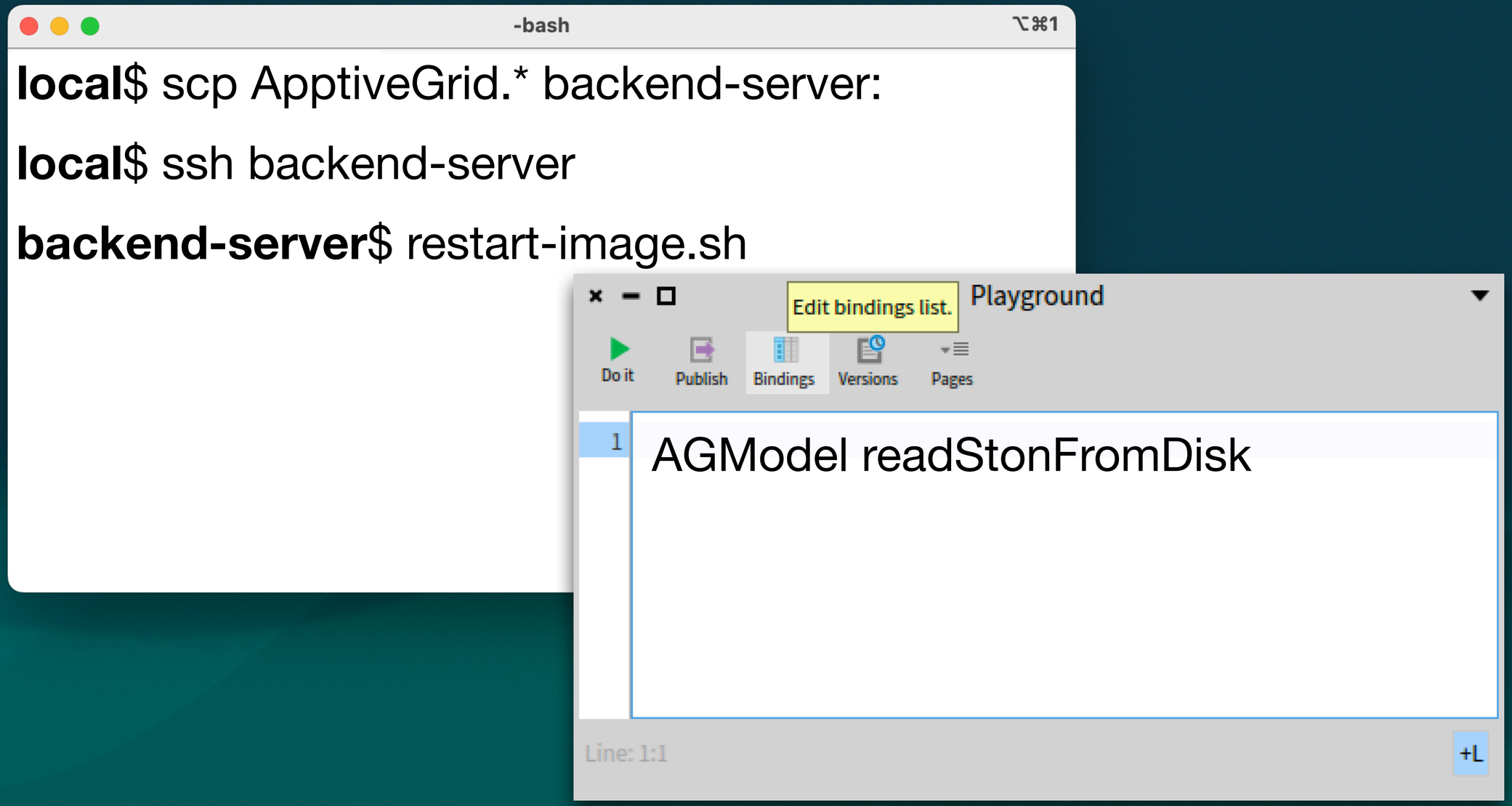

Playground
Do it
Publish
Bindings
Versions
Pages
1
server debugMode: true
Line: 1:23
+L

# Repeat

# DOS attacks

IT'S TIME TO
SCALE

# deployment scale



IT'S TIME TO
SCALE
IT'S TIME TO SCALE!
IT'S TO SCALE!
$

# deployment scale

- use database
- add migration
- do backups

IT'S TIME TO
SCALE
SEACH!
THUMS UP!

# team scale

- issue tracker
- code repository
- development process (pull requests, review,...)
- CI pipeline building artefacts
- artefact management
- deployment scripts

IT'S TIME TO SCALE!
IT'S TIME TO SCALE!
IT'S TIME TO SCALE

approx. 5000 users

# resilience

# resilience

- images can crash

# resilience

- images can crash
- You need more images

# resilience

- images can crash
- You need more images
- You need a load balancer

# resilience

- images can crash
- You need more images
- You need a load balancer
- Machines can also fail

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# resilience

- images can crash
- You need more images
- You need a load balancer
- Machines can also fail
- You need more machines
- You need a machine for the load balancer

# resilience

- images can crash
- You need more images
- You need a load balancer
- Machines can also fail
- You need more machines
- You need a machine for the load balancer
- The load balancer machine can fail

# resilience

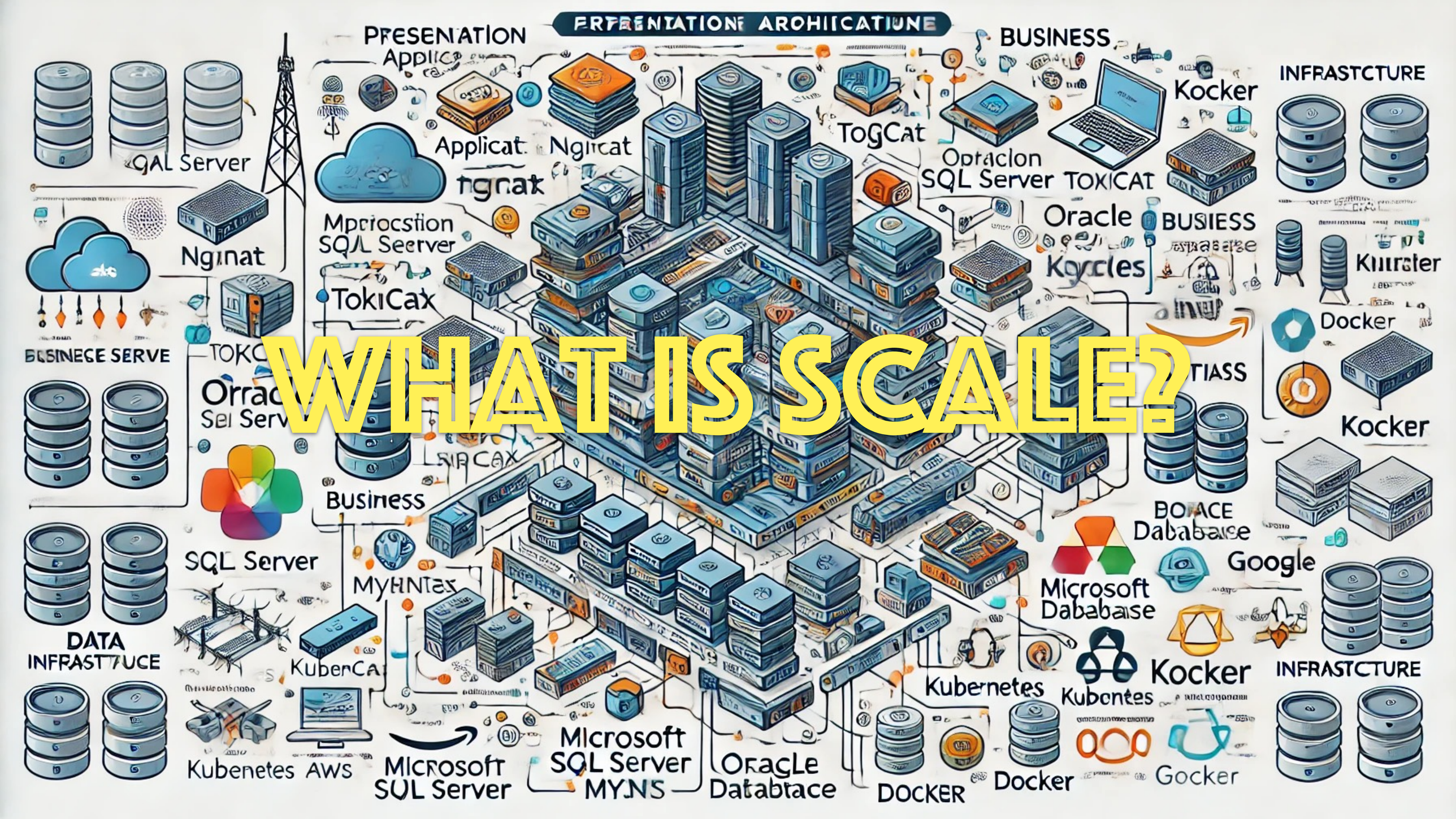
- images can crash
- You need more images
- You need a load balancer
- Machines can also fail
- You need more machines
- You need a machine for the load balancer
- The load balancer machine can fail
- You need a backup of the load balancer

# resilience

- images can crash
- You need more images
- You need a load balancer
- Machines can also fail
- You need more machines
- You need a machine for the load balancer
- The load balancer machine can fail
- You need a backup of the load balancer
- ...

# resilience

... and so far I didn't even care about logging, monitoring, metrics, ...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Gocker

# When to scale? (Internet version)

technical scale -> success

# When to scale? (real version)

success -> technical scale

# Conclusion

- scaling is distraction

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- scaling is distraction
- no gain without losing something

# Conclusion

- scaling is distraction
- no gain without losing something
- when benefits outweigh the drawbacks significantly... scale

# Conclusion

- scaling is distraction
- no gain without losing something
- when benefits outweigh the drawbacks significantly... scale
- If not then not!

# thank you!

ApptiveGrid

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