What's going on with Cloud?

@northvein

What's going on with Cloud?

- Disconnect between the **whys**
- Resulting in a disconnect between the **hows**
- Security some place in the middle or in a corner
- Mixed messages across the industry
- No idea what's going on with academia

This talk

- Why orgs **should** move to cloud
- Why orgs **end up** using cloud
- What can go wrong and why
- Why it's important to you
- What you should be doing

Why orgs *should* move to cloud

Reduce Capital Expenditure

*You only pay for **what** you use, when you need it!*

Reduce Personnel Costs

*You only pay for **who** you use, when you need them!*

Reduce Operational Costs

Ops sucks, make it part of the service costs!
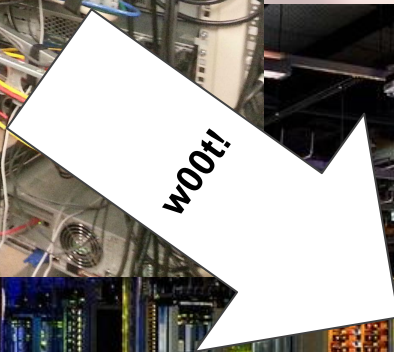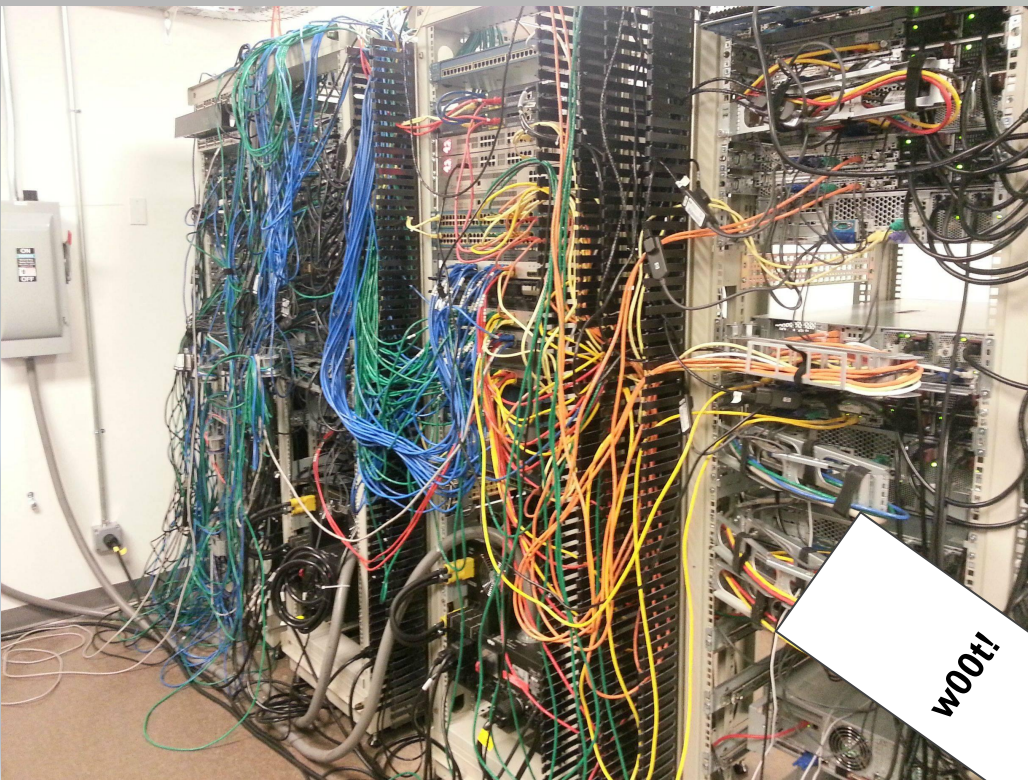
Transfer Compliance Costs

Compliance sucks, make it part of the service costs!

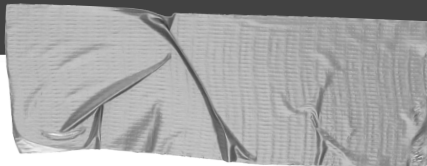## Cheaper backup, retention & archiving

Economies of scale yolo!

HA HA!

w00t!

Why orgs *end up* using cloud

"It's the future, right?"

Everything in the cloud is the future. It's all totally different and way better.

"It's cheaper, right?"

The cloud is always cheaper. It's like all-you-can-eat-party-fun-land.

"It's more secure, right?"

It's gotta be. Amazon/Microsoft/Google will protect the data. They always have.

"REDEMPTION! SALVATION!"

If you couldn't fix it on prem you can obviously fix it in cloud. It's a magical place.

What can go wrong

and why

1983

WarGames Released

Y2K Bug

Avocados arrive on earth

2009'ish

Cloud takes off

Crazy Times	Not So Crazy Times	Crazy Times 2.0

1995

Hackers Released

00's

IT grows up. InfoSec grows up with it. Lots of stuff happens.

Now

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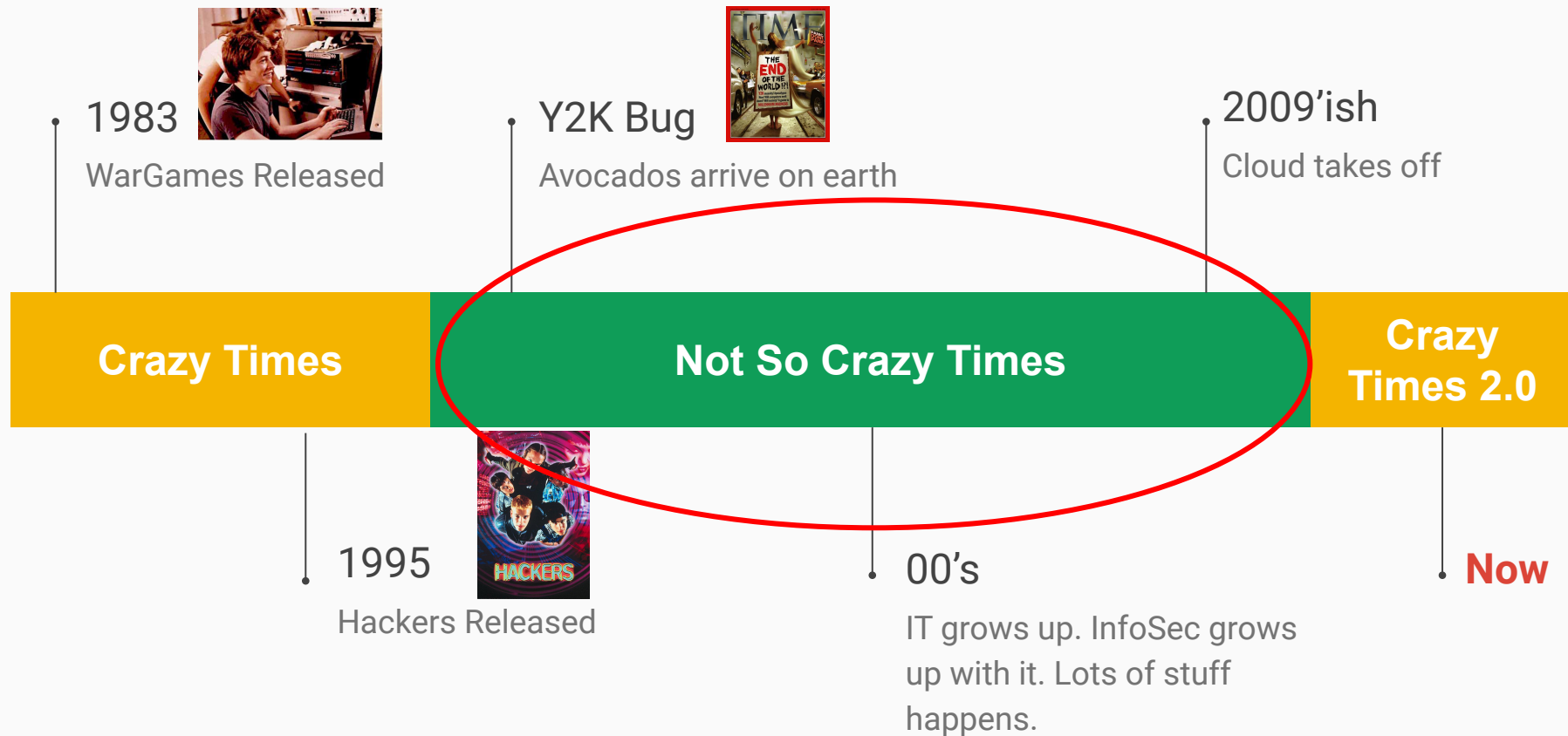**00's**

IT grows up. InfoSec grows up with it. Lots of stuff happens.

Now

IT / Infra Engineering

Builder of things, protector of the server room.

Turn-ons: doing stuff by the book. The book they wrote in blood from many a racking accidents.

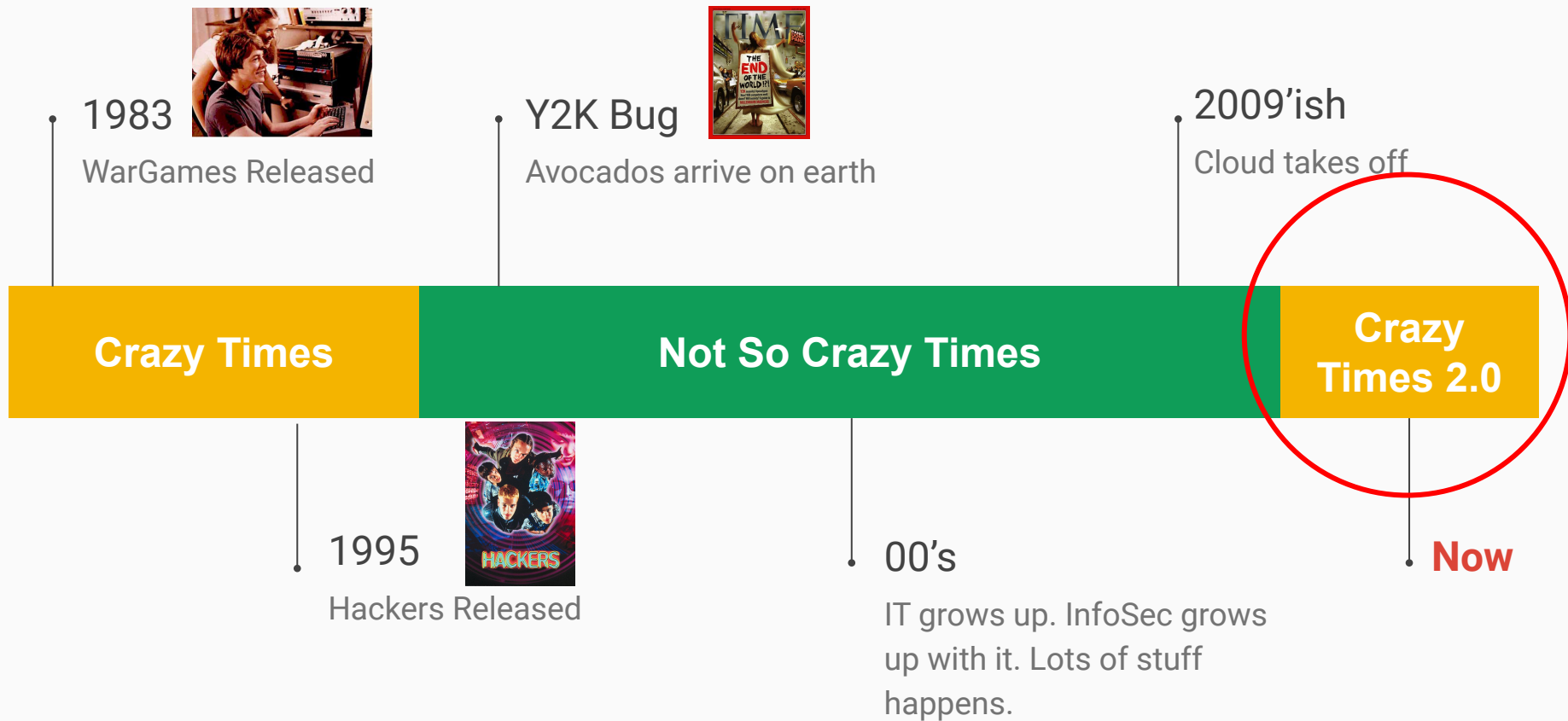**Turn-offs:** all this cloud stuff. It all changes every other day.

Good Stuff

- **Super smart cloud tourist**
- **Keeping the lights on / plates spinning**
- **Loads of experience (good times and bad)**

Not-so-good Stuff

- **Don't really get cloud**
- **Build stuff in cloud like they do on-prem**
- **Probably don't engage security etc (blockers)**
- **Probably (a bit) obsessed with rules**

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Good Stuff

- **Super smart cloud native**
- **Creating stuff, bringing in the £money**
- **Leading the way into new tech, i.e. cloud**

Not-so-good Stuff

- **Probably don't have years of experience**
- **Tech centric, not really risk aware (see experience)**
- **Probably don't engage security etc (blockers)**
- **Probably not too fussed about ops**

Devs

Coder of things, flat white wizards. Beard optional.

Turn-ons: moving quickly, getting new stuff out there ASAGDP.

Turn-offs: waiting for stuff, bureaucracy, service management, old stuff.

What can go wrong and why (top 2)

- Devs don't have engineering experience
  - Network security, capacity planning, monitoring…
  - Experience = Years of Mistakes
- Costs
  - Leaving the lights on
  - Rebuilding on-prem in cloud cos that's all they know

Why it's important

for you

Why it's important for you

- Time to get involved - call to arms
- Security should be an enabler - so enable
- Can't stop it now

What you *should* be doing

What you should be doing

- Align Security with Engineering - Enable by Example
- Security as Code - Rules, Standards, all of it (No More Paper)
- Work out how to do monitoring, IR, all that good stuff
- Migrate YOUR workloads to cloud - go along for the ride
- Form a crew of security-minded cloud natives (CCoE 1.0)
- Agree guardrails, don't make rules