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# WHY YOU SHOULD THINK TWICE BEFORE CHOOSING COSMOS DB

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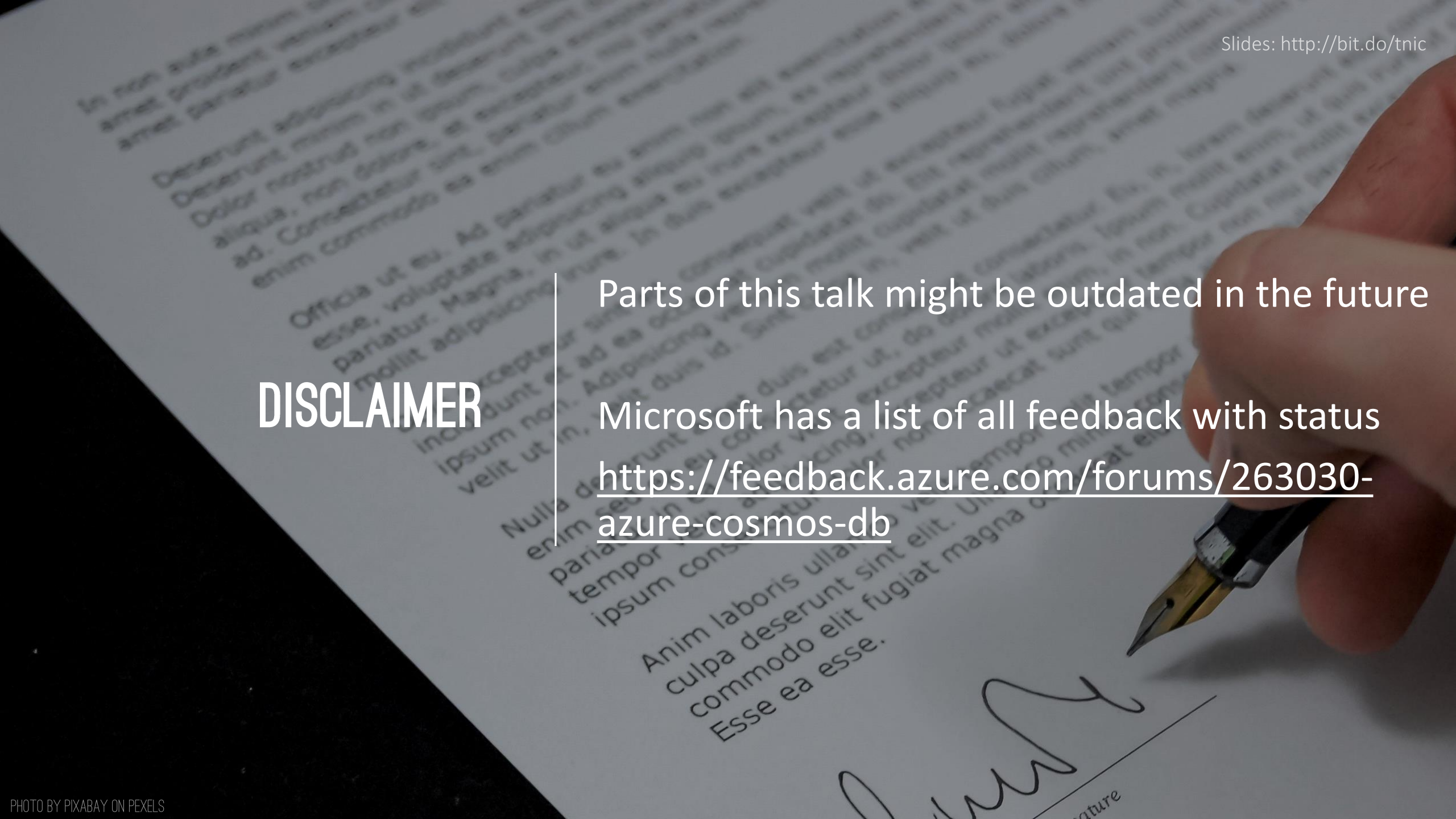
# DISCLAIMER

Parts of this talk might be outdated in the future

Microsoft has a list of all feedback with status https://feedback.azure.com/forums/263030-azure-cosmos-db

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First advice

# MAKE SURE IT FITS YOUR USE CASE

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# What to consider

Relational or hierarchical data?

Advanced query functionality?

Support transactions?

Read data right after writing it?

Redundancy?

Competence?

https://docs.microsoft.com/en-us/azure/cosmos-db/use-cases

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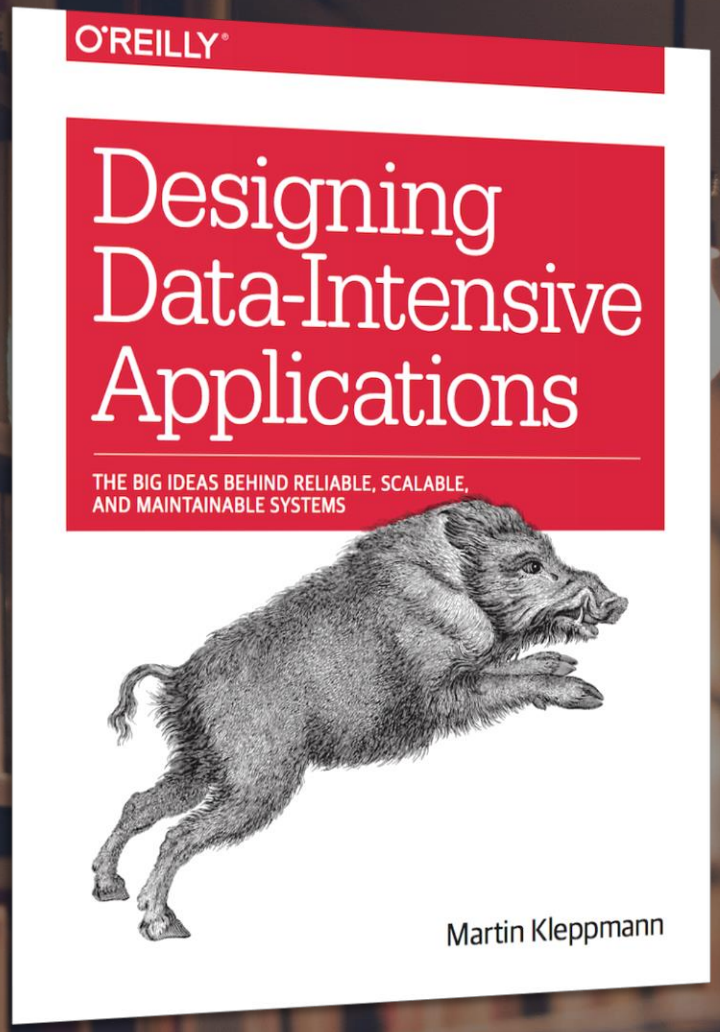


https://dataintensive.net/

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Second advice
LEARN THE PRODUCT
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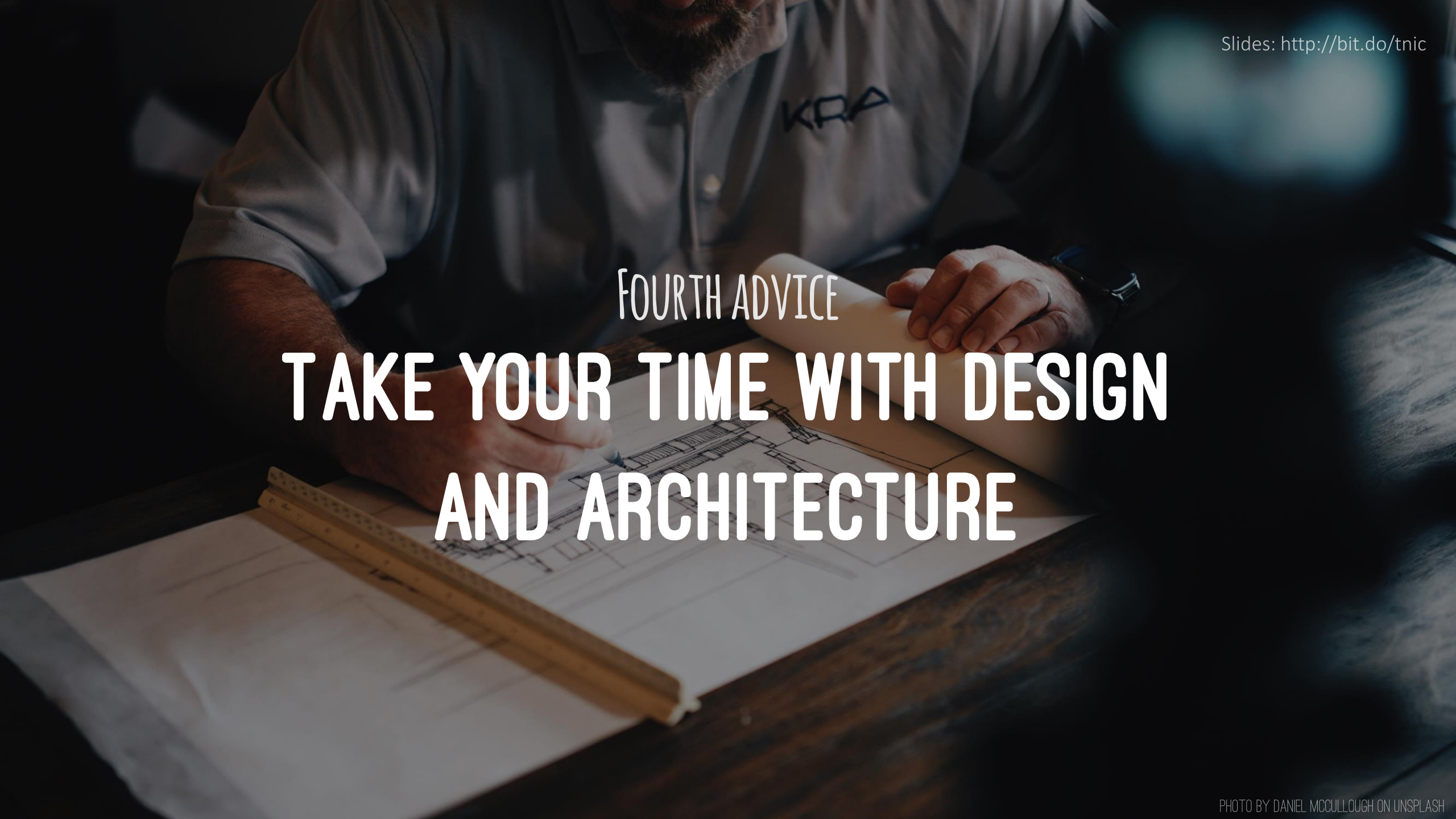

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Fourth advice

# TAKE YOUR TIME WITH DESIGN AND ARCHITECTURE

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# Design considerations

Do you need consistency?

Is response time important?

Can conflicts happen?

Who resolves conflicts?

How do you handle fault scenarios?

How many reads and writes?

Queries or lookups?

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# Implementation tips

Choosing a partition key is hard – choose wisely

Set aside time for experimentation

Use ETags to get optimistic concurrency

Plan for HTTP 429 – Too many requests

Look into techniques like CQRS and Event Sourcing


Fifth advice

# TEST EARLY AND MONITOR CONTINUOUSLY

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Constructive rant

# THINGS TO BE AWARE OF

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# Request unit usage is hard to predict

Everything costs RUs

- Azure Function reading the event feed
- Indexer after changes
- Triggers and stored procedures

Little documentation on how the cost changes with more data

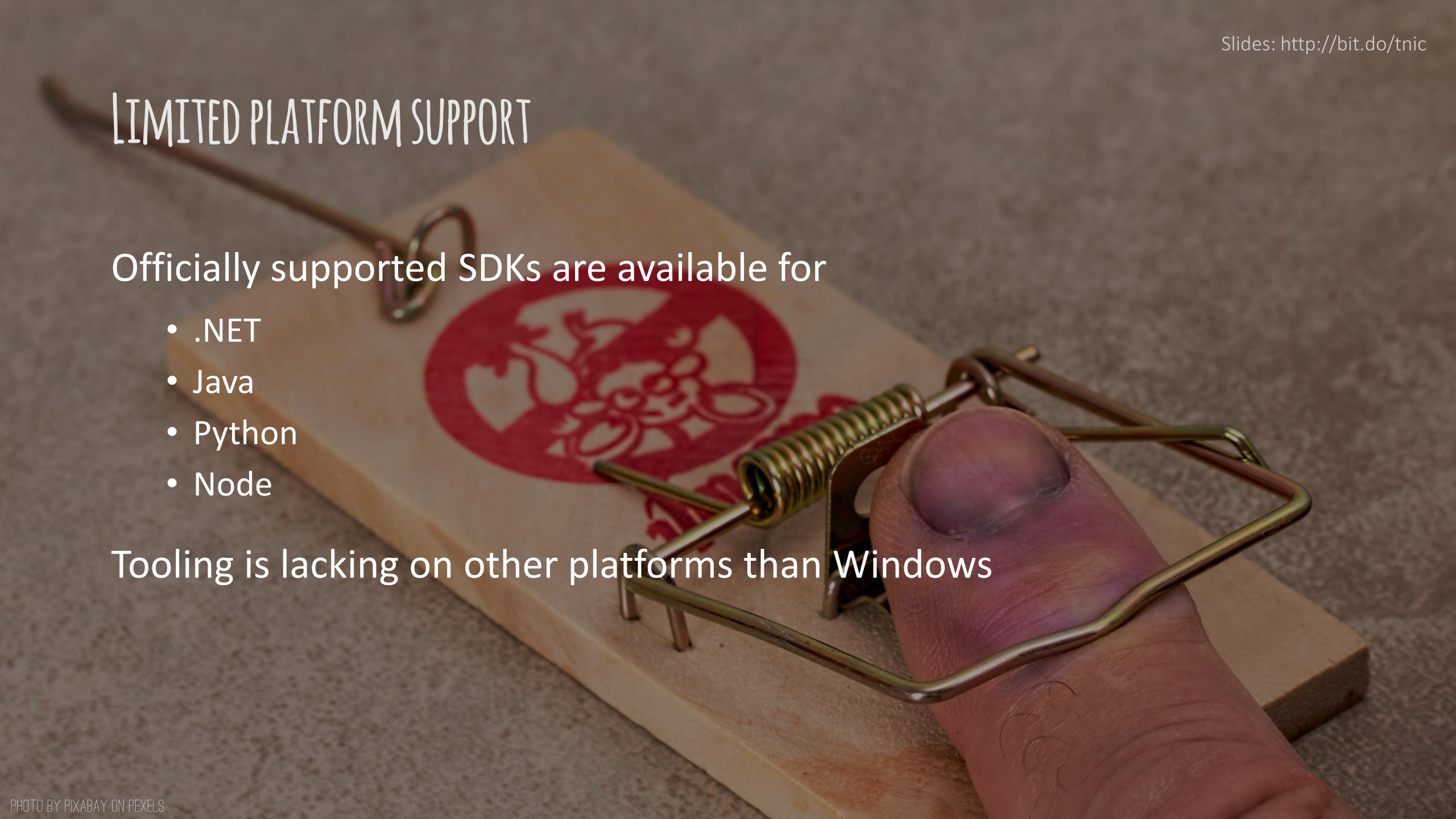
Wrong design can end up with a very costly system

# Limited platform support

Officially supported SDKs are available for

- .NET
- Java
- Python
- Node

Tooling is lacking on other platforms than Windows



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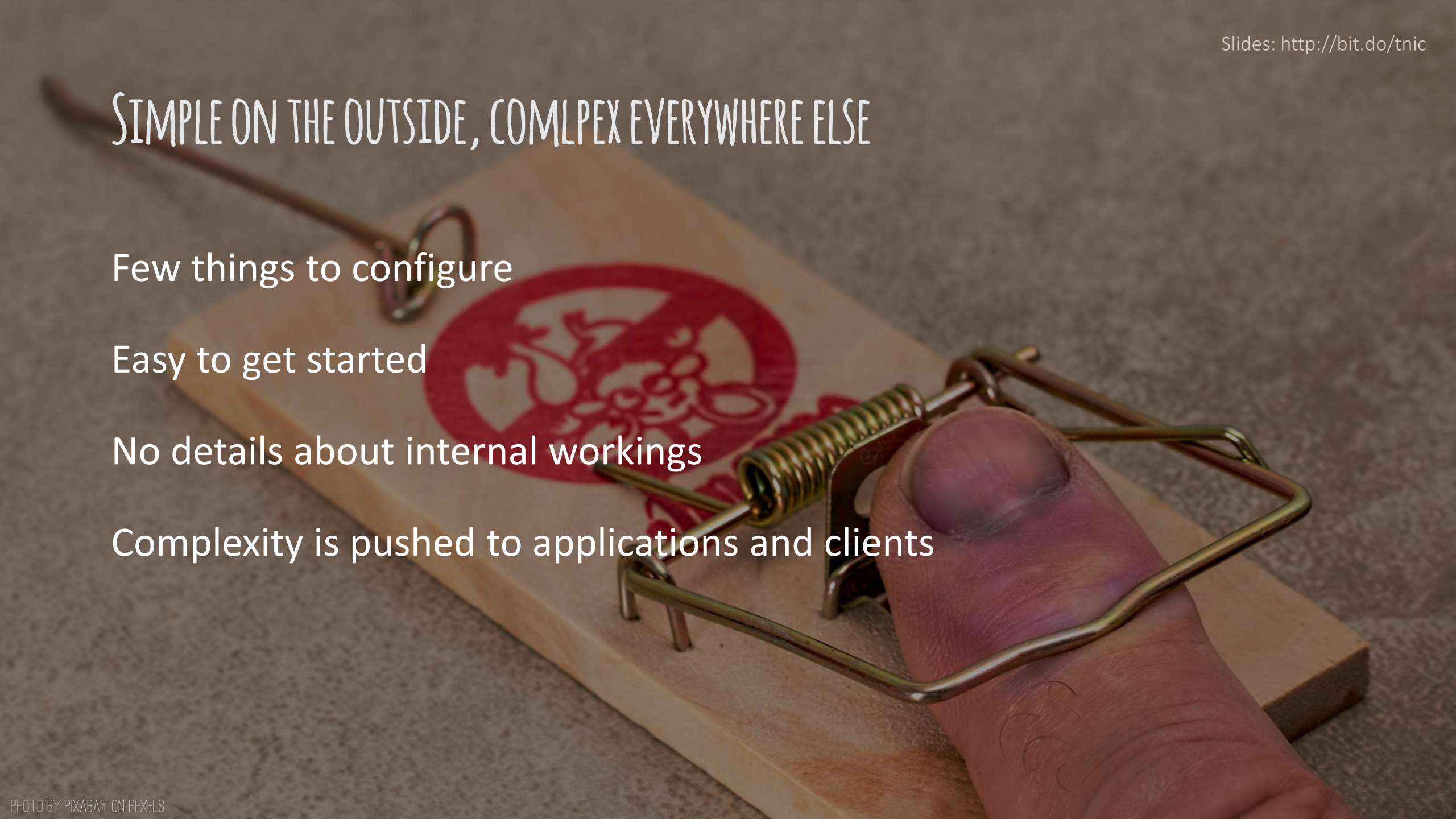
# Simple on the outside, comlpex everywhere else

Few things to configure

Easy to get started

No details about internal workings

Complexity is pushed to applications and clients



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Will I use Cosmos DB in another project?
Closing thuoghts...
Photo by Cristofer Jeschke on Unsplash

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QUESTIONS?

# THANKS!

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