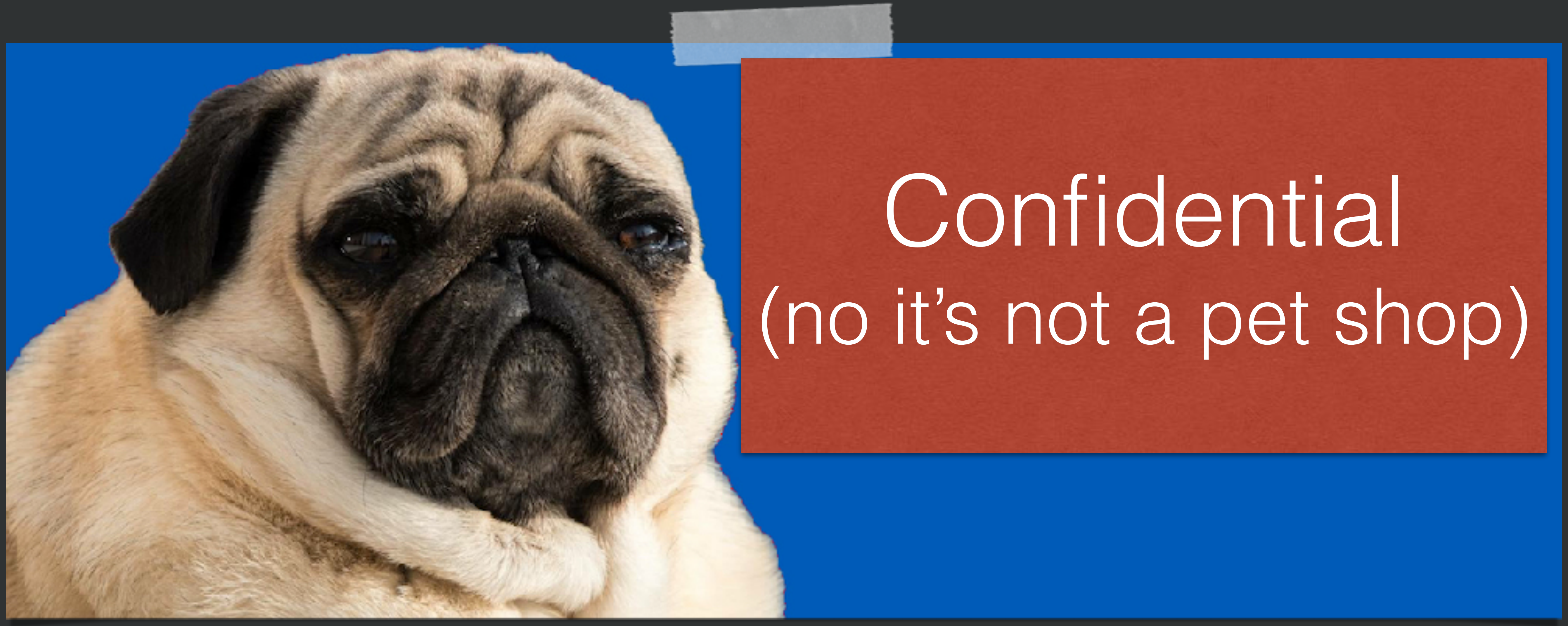
DDD

Strategic Design With Spring Boot



Michael Plöd - innoQ
@bitboss

The Spring Boot / code part of this presentation can be found at:

https://github.com/mploed/ddd-strategic-design-spring-boot

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Disclaimer

Most of these ideas do not come from me personally. I have to thank Eric Evans for all the inspiration / ideas. If you haven’t: go out and get his amazing book: Domain Driven Design.

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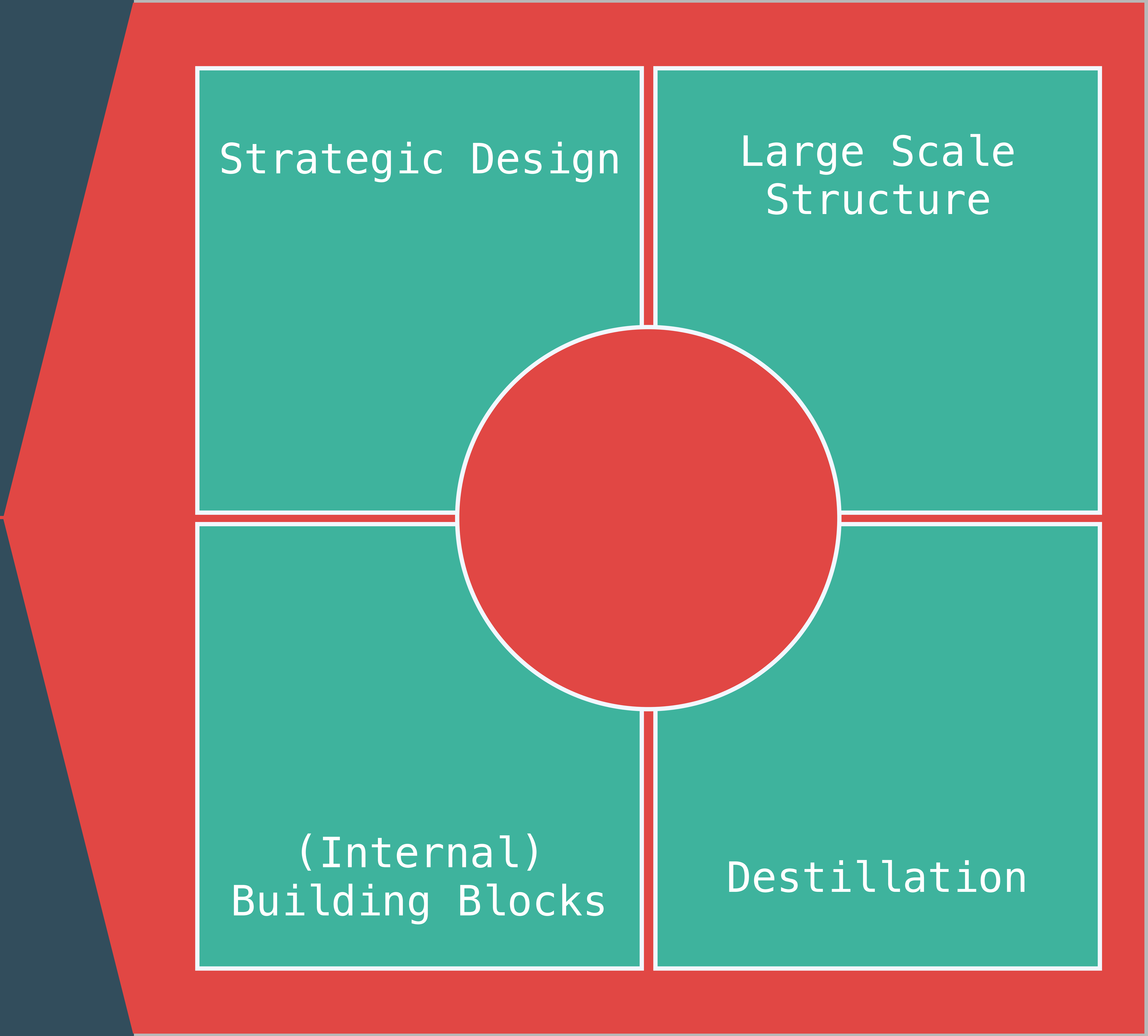
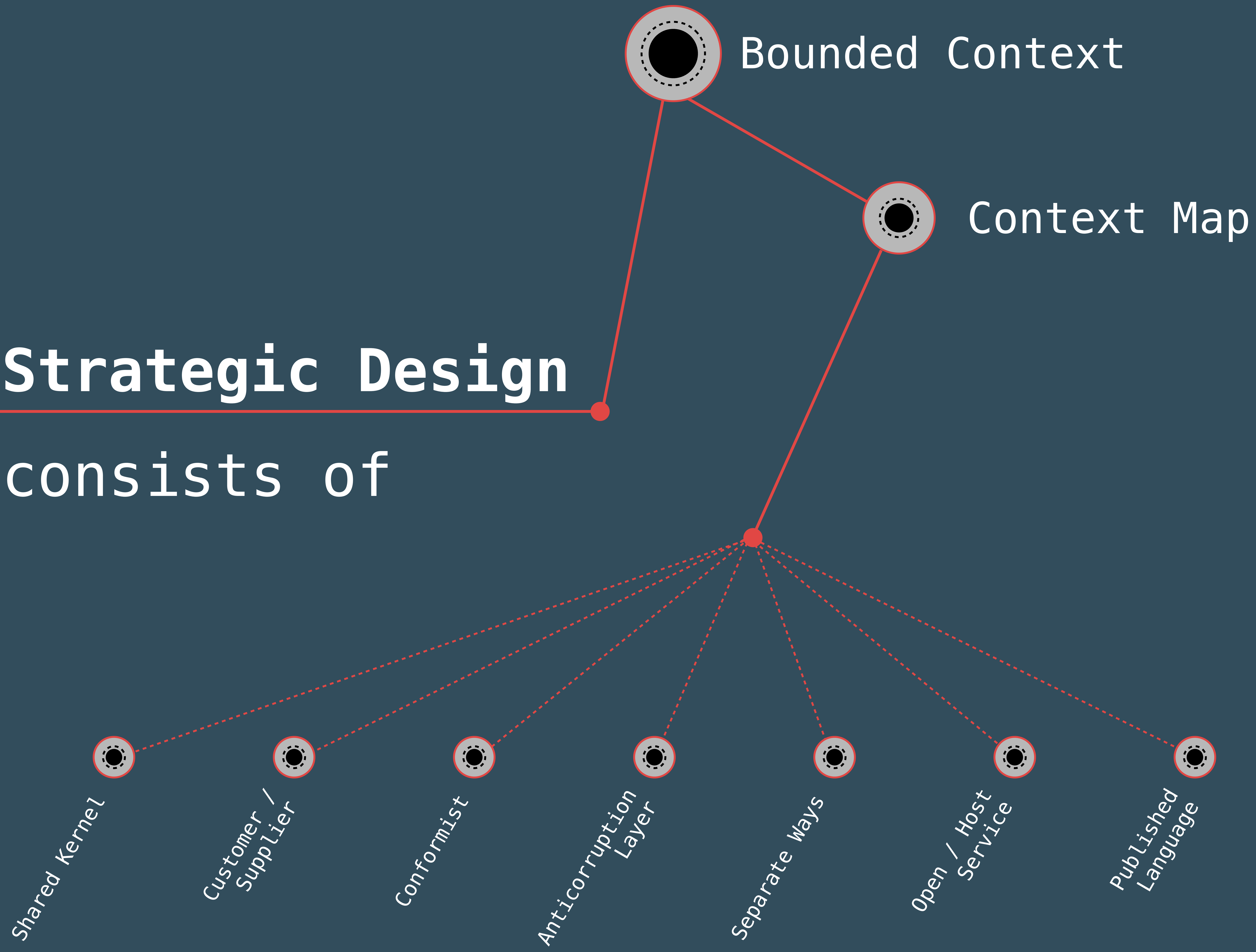
Domain Driven Design



Strategic Design

Strategic Design

consists of



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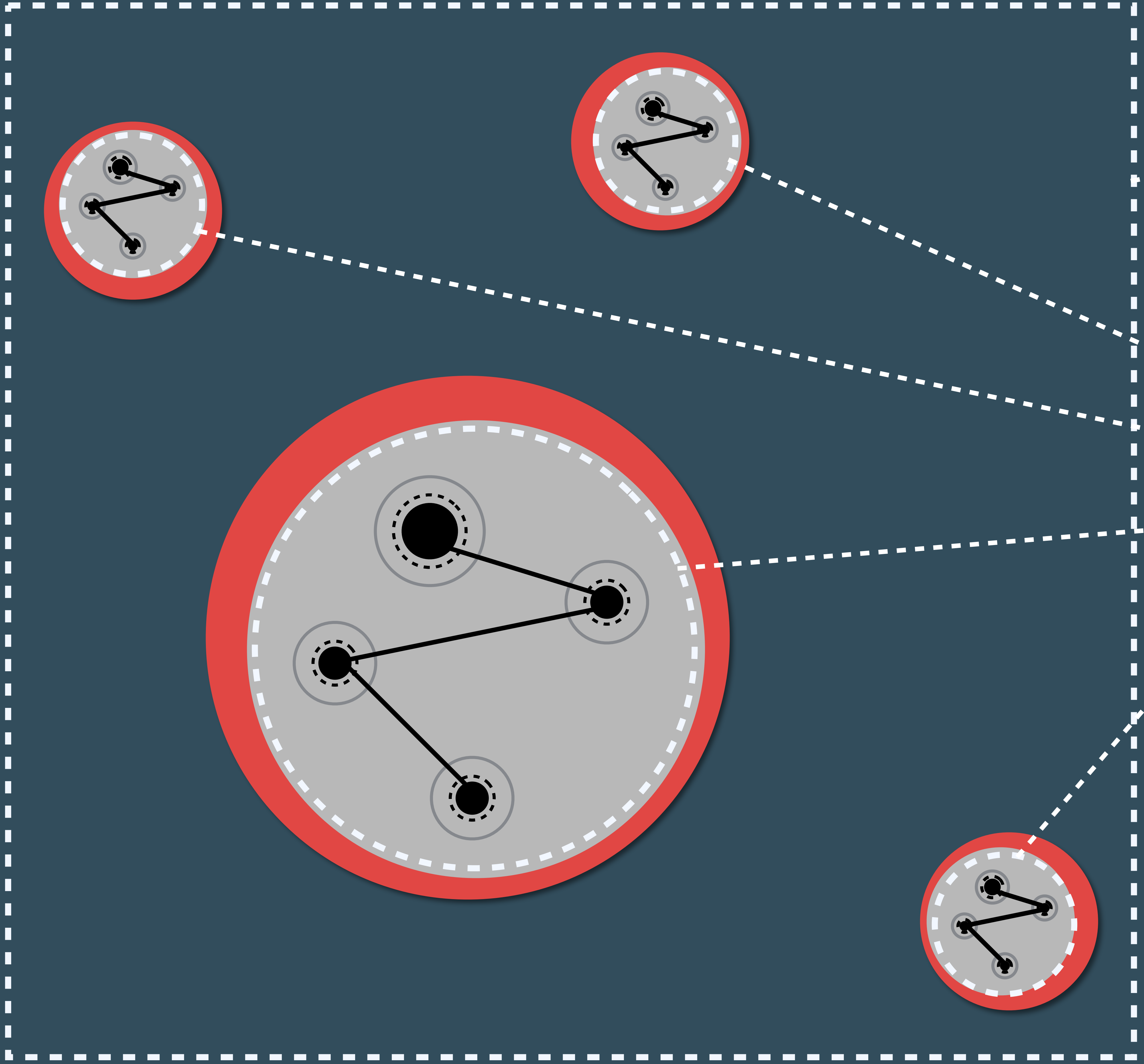
Bounded Context



Every sophisticated business domain consists of a bunch of **Bounded Contexts**

Each **Bounded Context** contains models and maybe other contexts

The **Bounded Context** is also a boundary for the meaning of a given model

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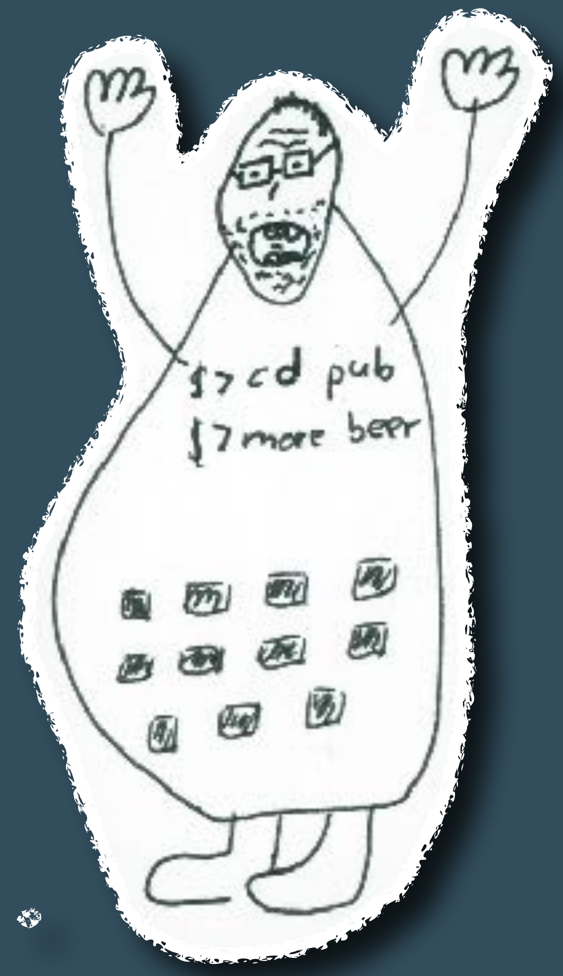
Bounded Context Example

Reservations

Event Management

Badges

Customer



Name

Payment Details

Adress

Company

Session Registrations

Lunch Preferences

Name

Job Description

Twitter Handle

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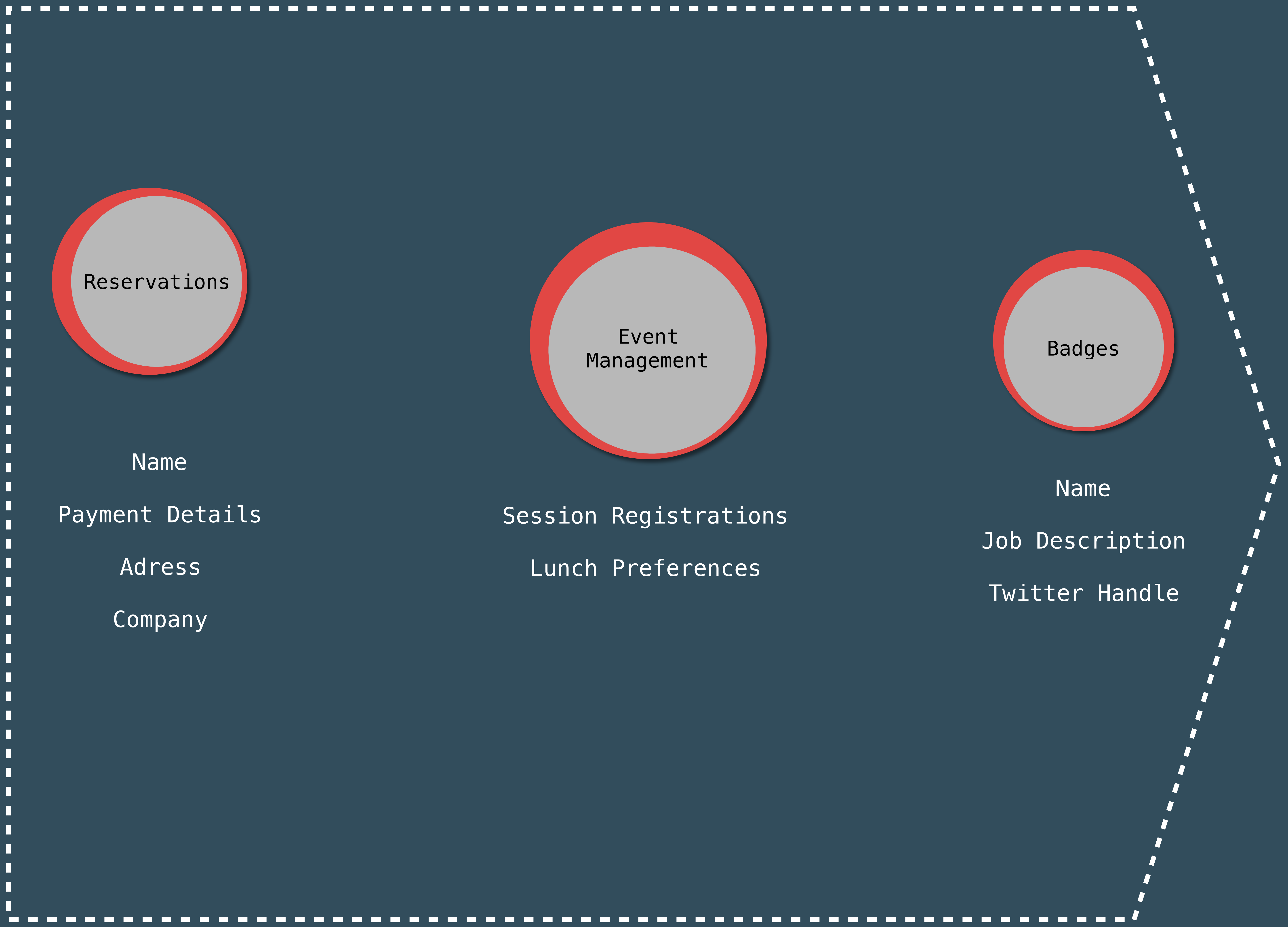
Bounded Context Example



Each Bounded Context has its own model of a customer

This is a major enabler for independent Microservices

Take a look at the name of the customer? Maybe we want some shared data?

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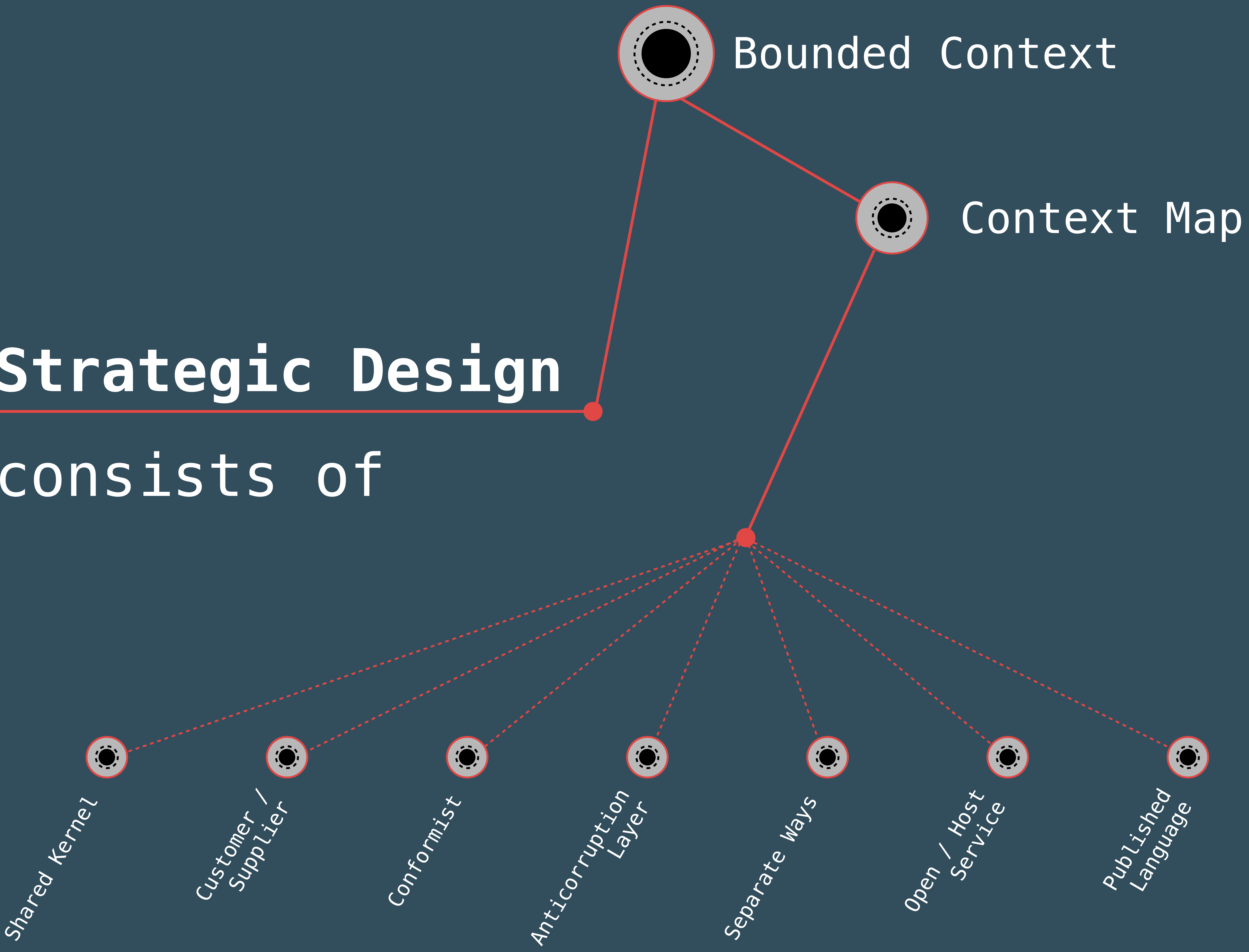

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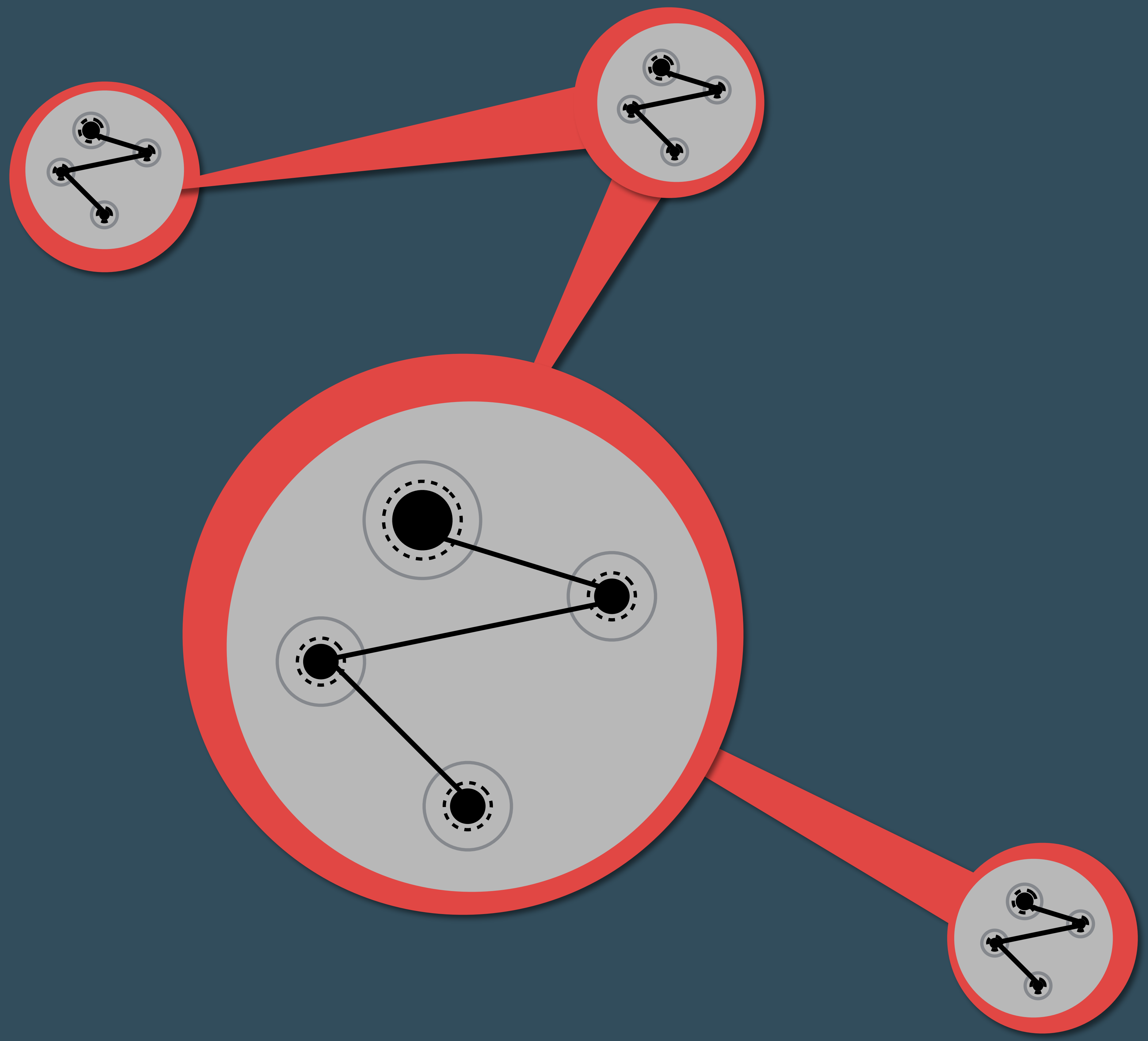
Context Map



The Bounded Context by itself does not deliver an overview of the system

By introducing a **Context Map** we describe the contact between models / contexts

The **Context Map** is also a great starting point for future transformations

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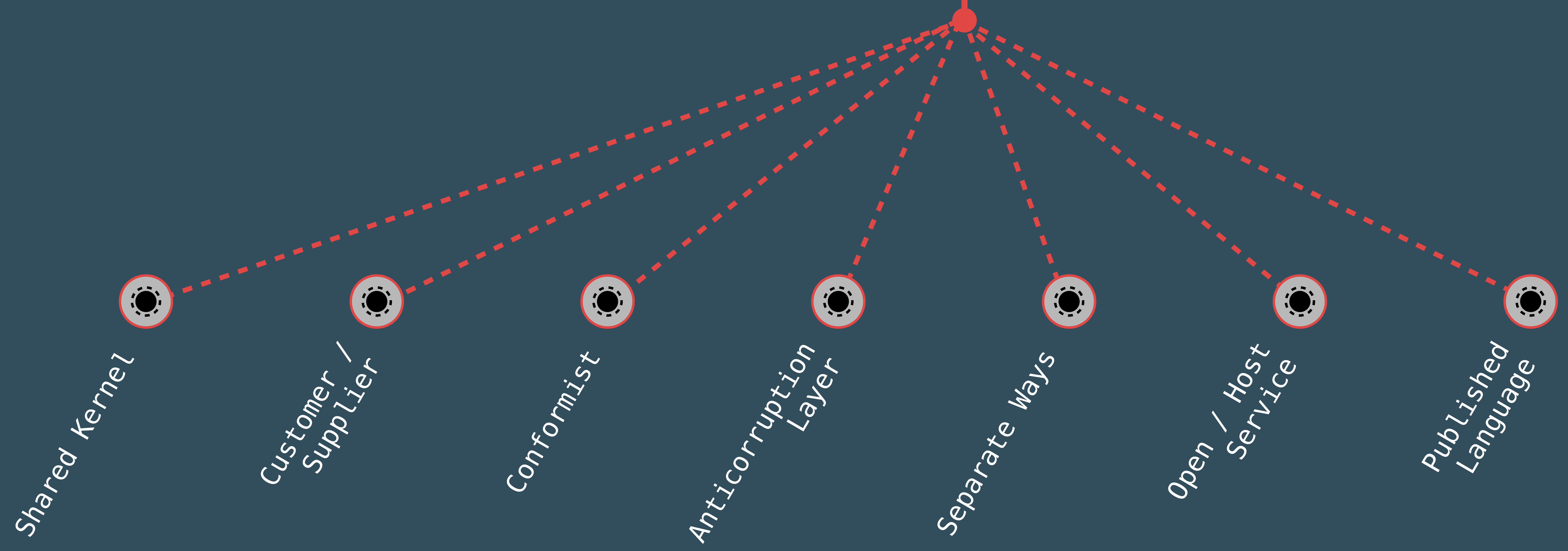
Context Map – Patterns



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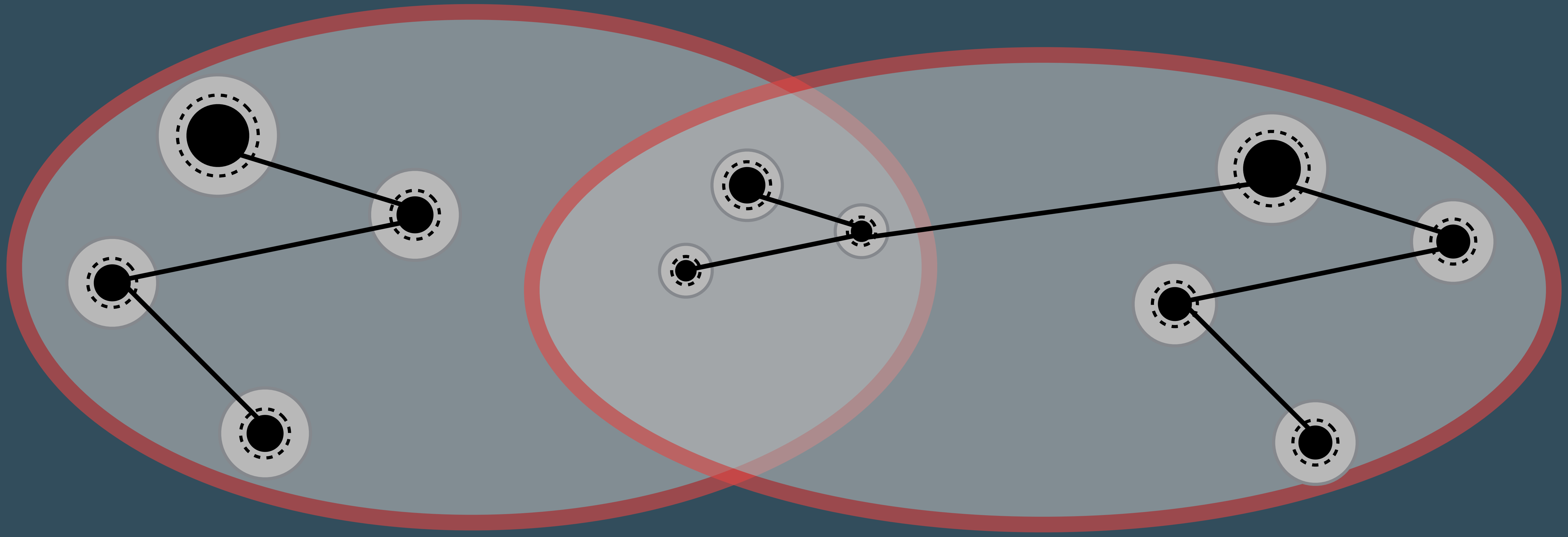
Context Map – Patterns

- **Shared Kernel**
- Customer / Supplier
- Conformist
- Anticorruption Layer
- Separate Ways
- Open / Host Service
- Published Language

Two teams share a subset of the domain model including code and maybe the database. The shared kernel is often refered to as the core domain.



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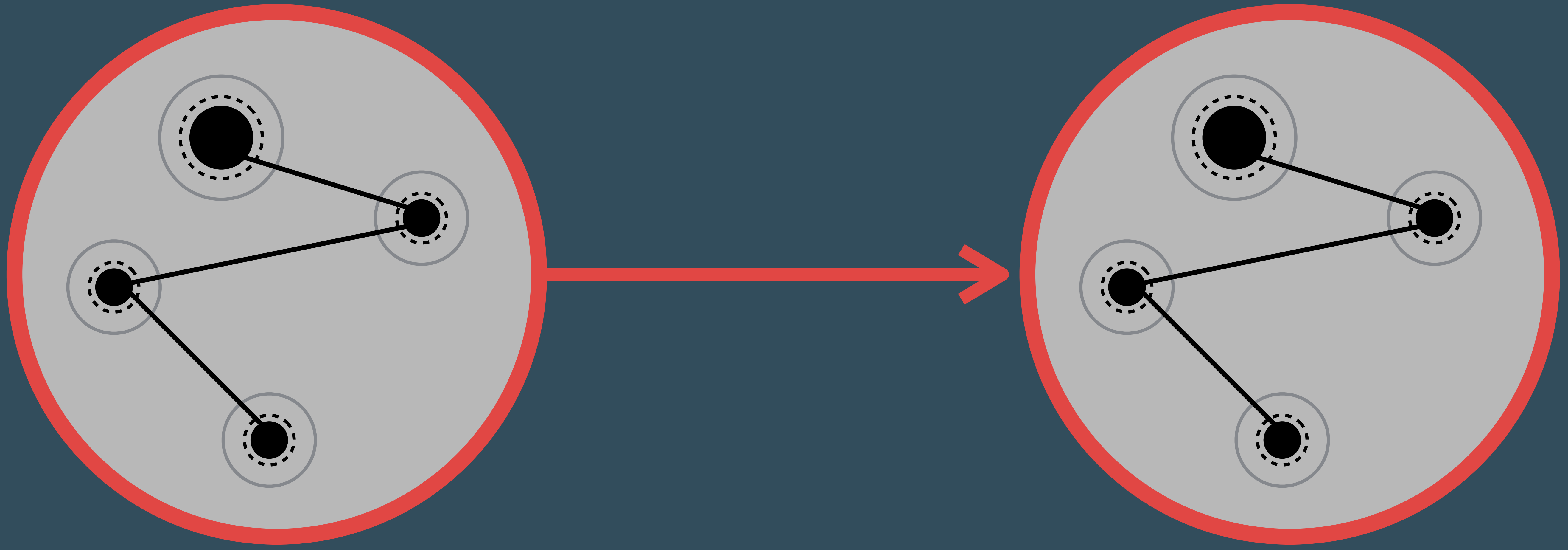
There is a customer / supplier relation ship between two teams. The downstream team is considered to be the customer, sometimes with veto rights.



Context Map – Patterns

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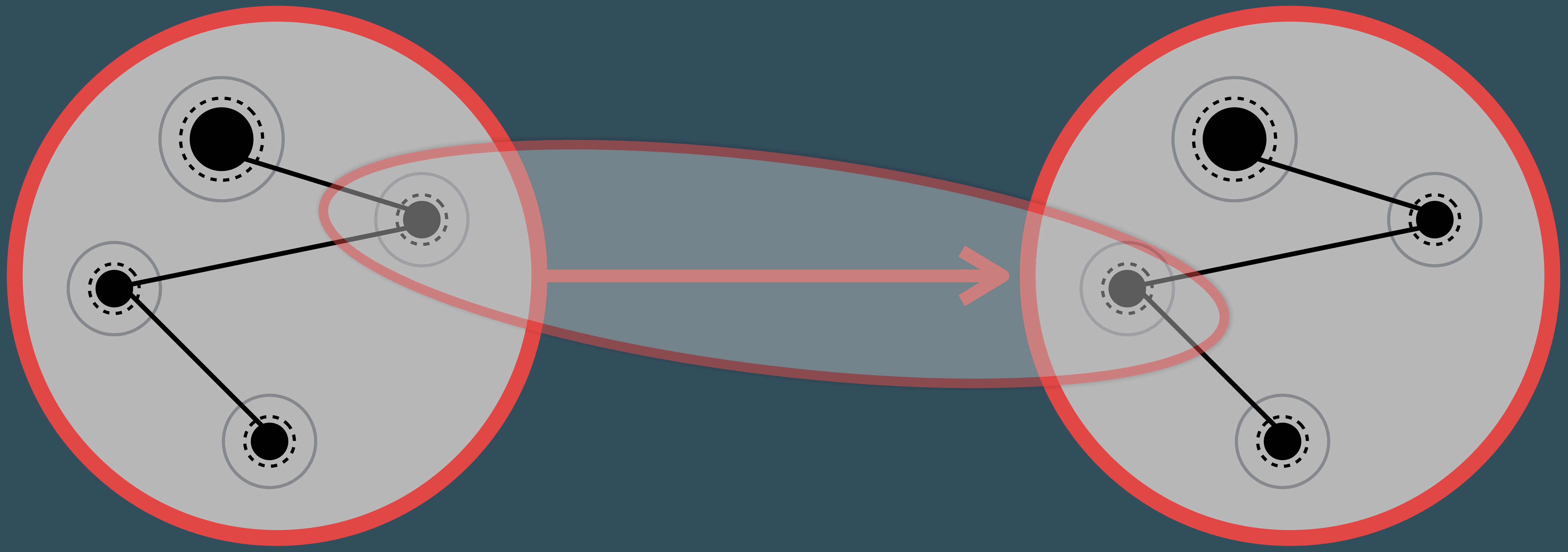
The downstream team conforms to the model of the upstream team. There is no translation of models and no vetoing. If the upstream model is a mess, it propagates to the downstream model.



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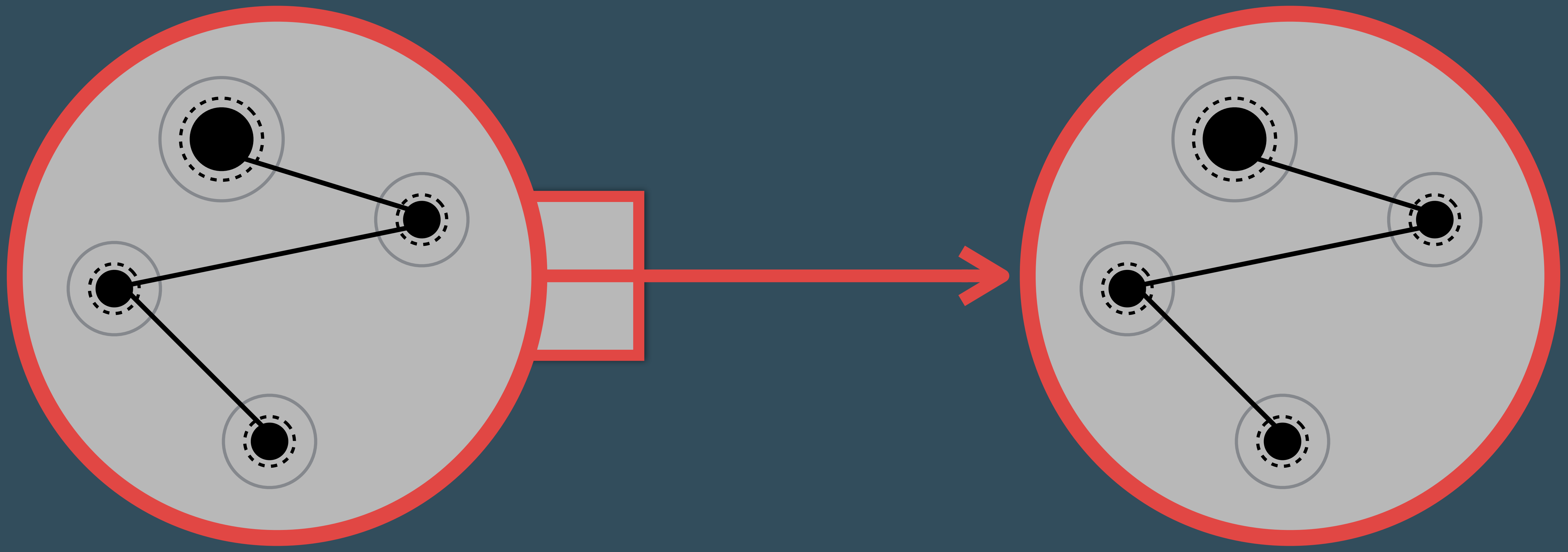
The anticorruption layer is a layer that isolates a client's model from another system's model by translation.



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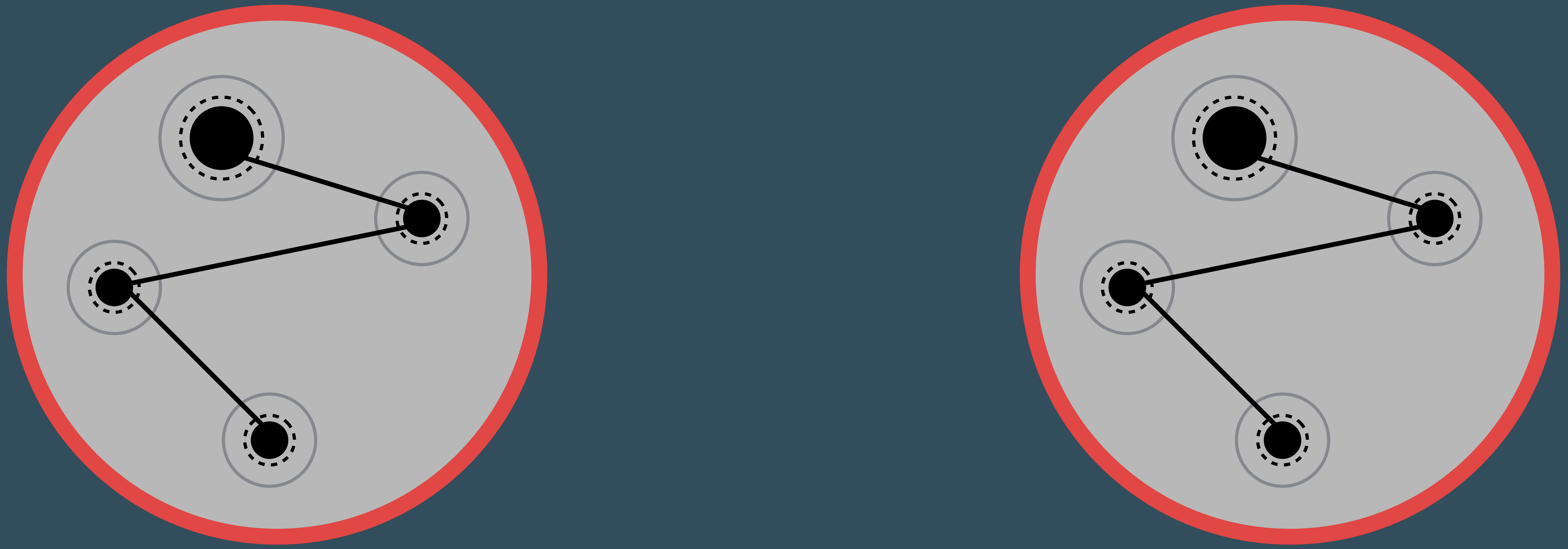
There is no connection between the bounded contexts of a system. This allows teams to find their own solutions in their domain.



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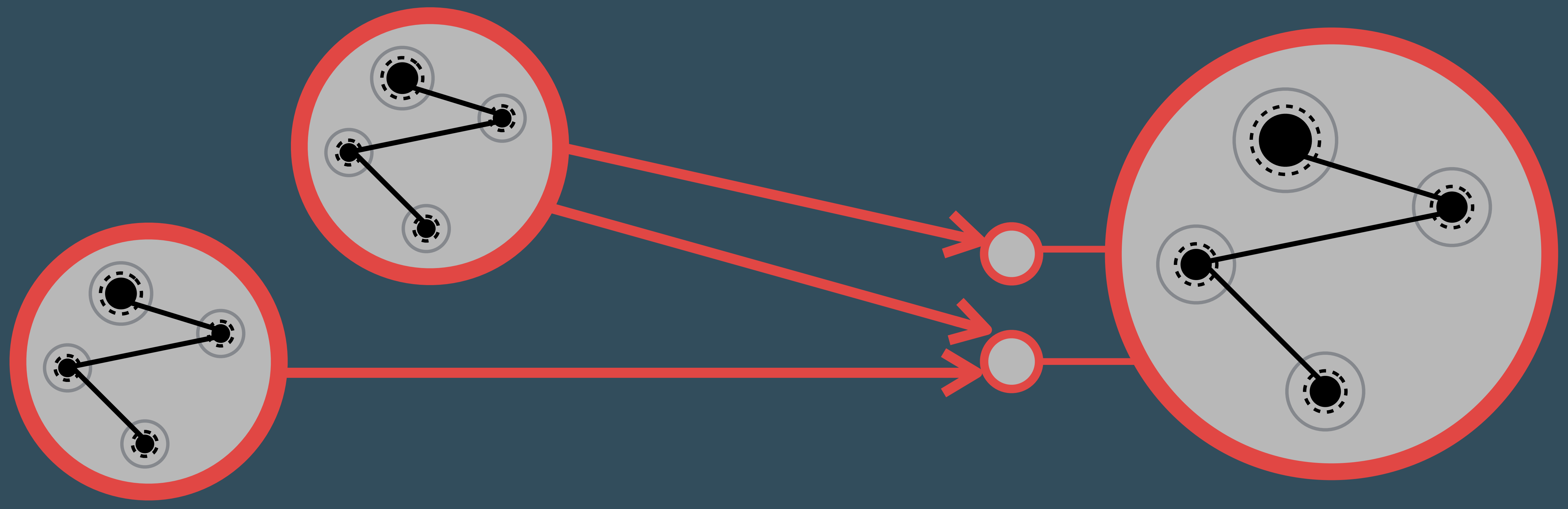
Each Bounded Context offers a defined set of services that expose functionality for other systems. Any downstream system can then implement their own integration. This is especially useful for integration requirements with many other systems.



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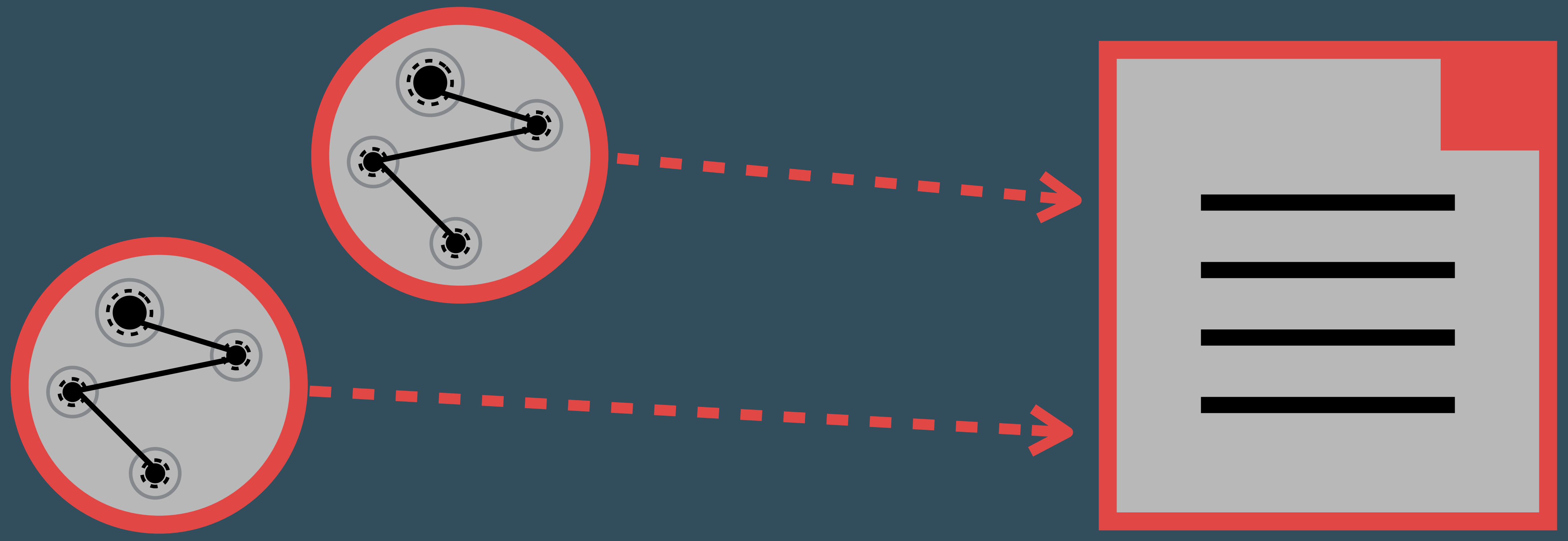
Published Language is quite similar to Open / Host Service. However it goes as far as to model a Domain as a common language between bounded contexts.



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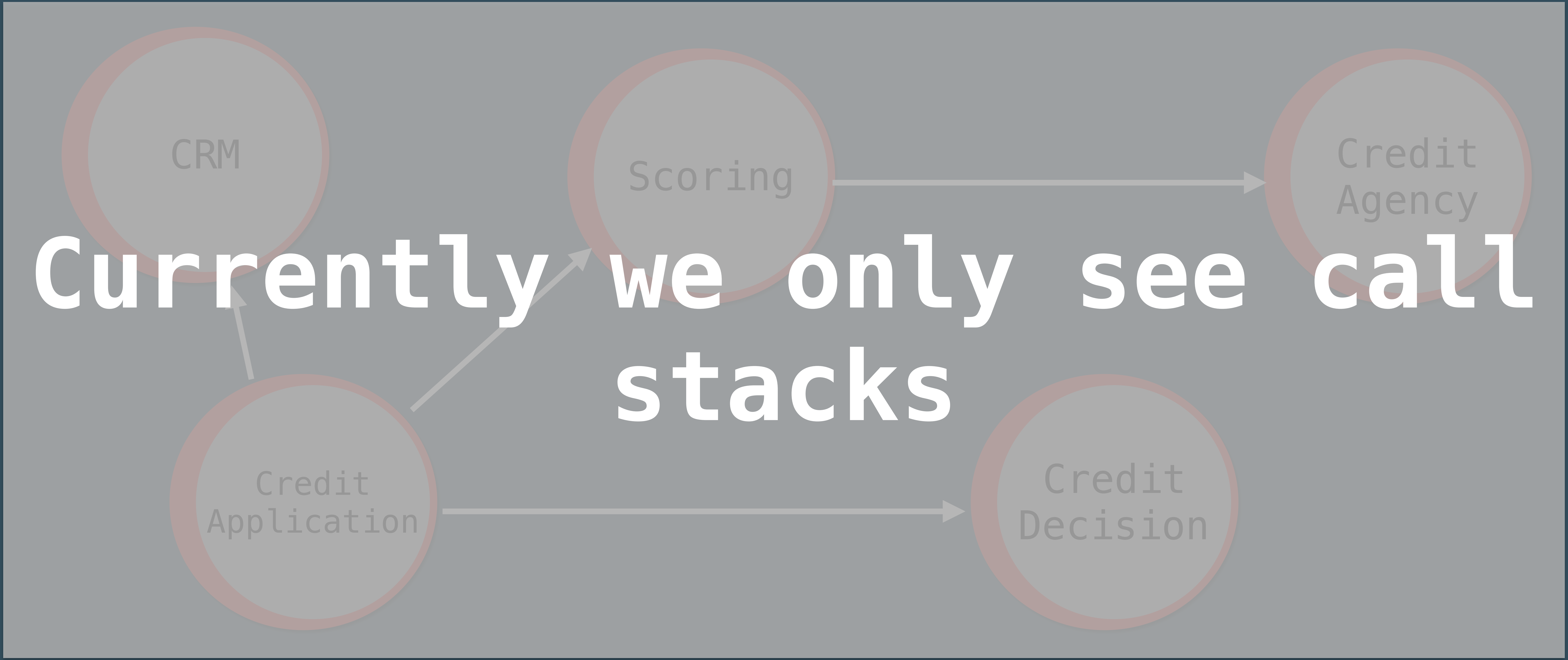
Context Map – Why?



Currently we only see call stacks

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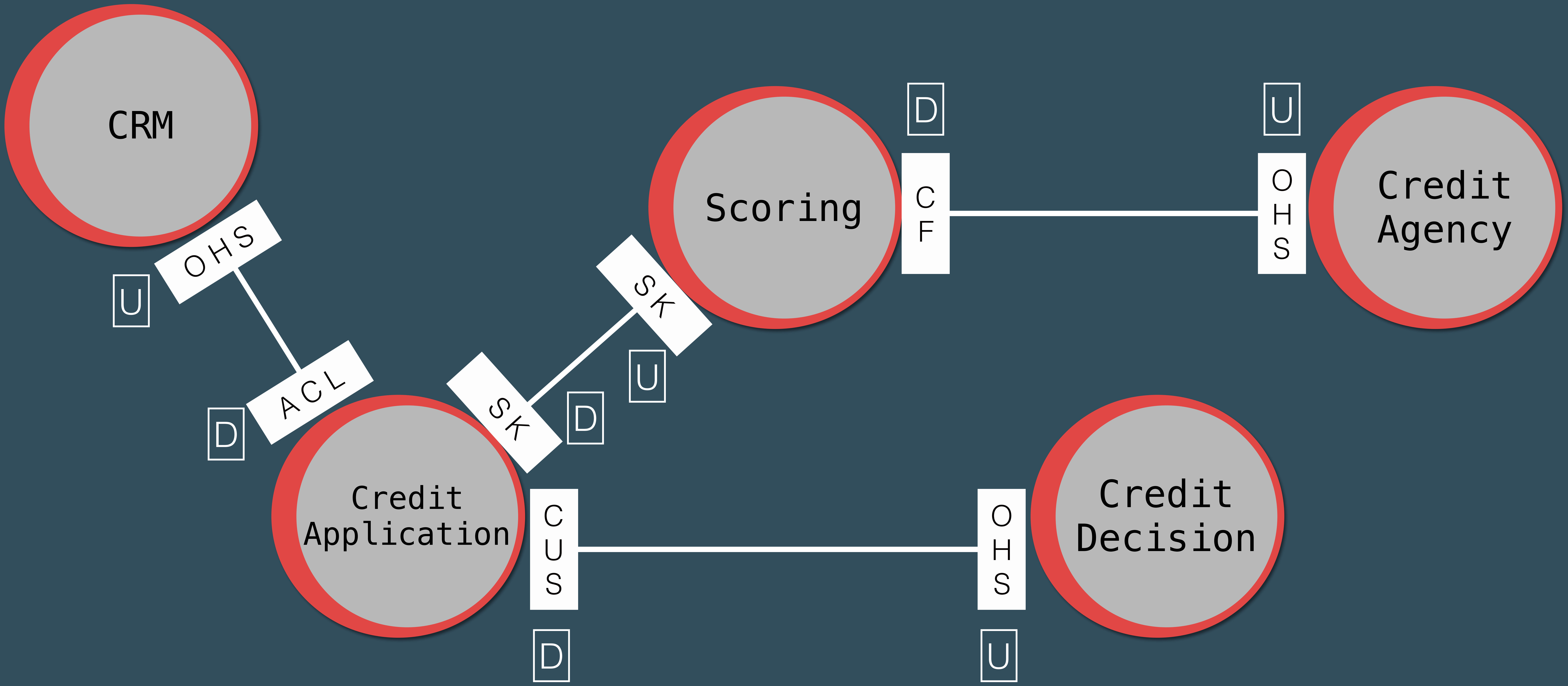
Context Map



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Example Spring Boot App

https://github.com/mploed/ddd-strategic-design-spring-boot

THANK YOU!

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Contact me for DDD Trainings / Consulting