WPS presenting

@hschwentner
#DomainStorytelling

Domain Storytelling

A Henning Schwentner Talk

Starring
ACTORS AND ACTIONS

With
WORK ITEMS as AGGREGATES

Directed by **DOMAIN EXPERTS**

Written by **REAL LIFE**

NC-17 NO ONE 17 AND UNDER ADMITTED

FSK ab 18

Metro Goldwyn Lolcat

@hschwentner

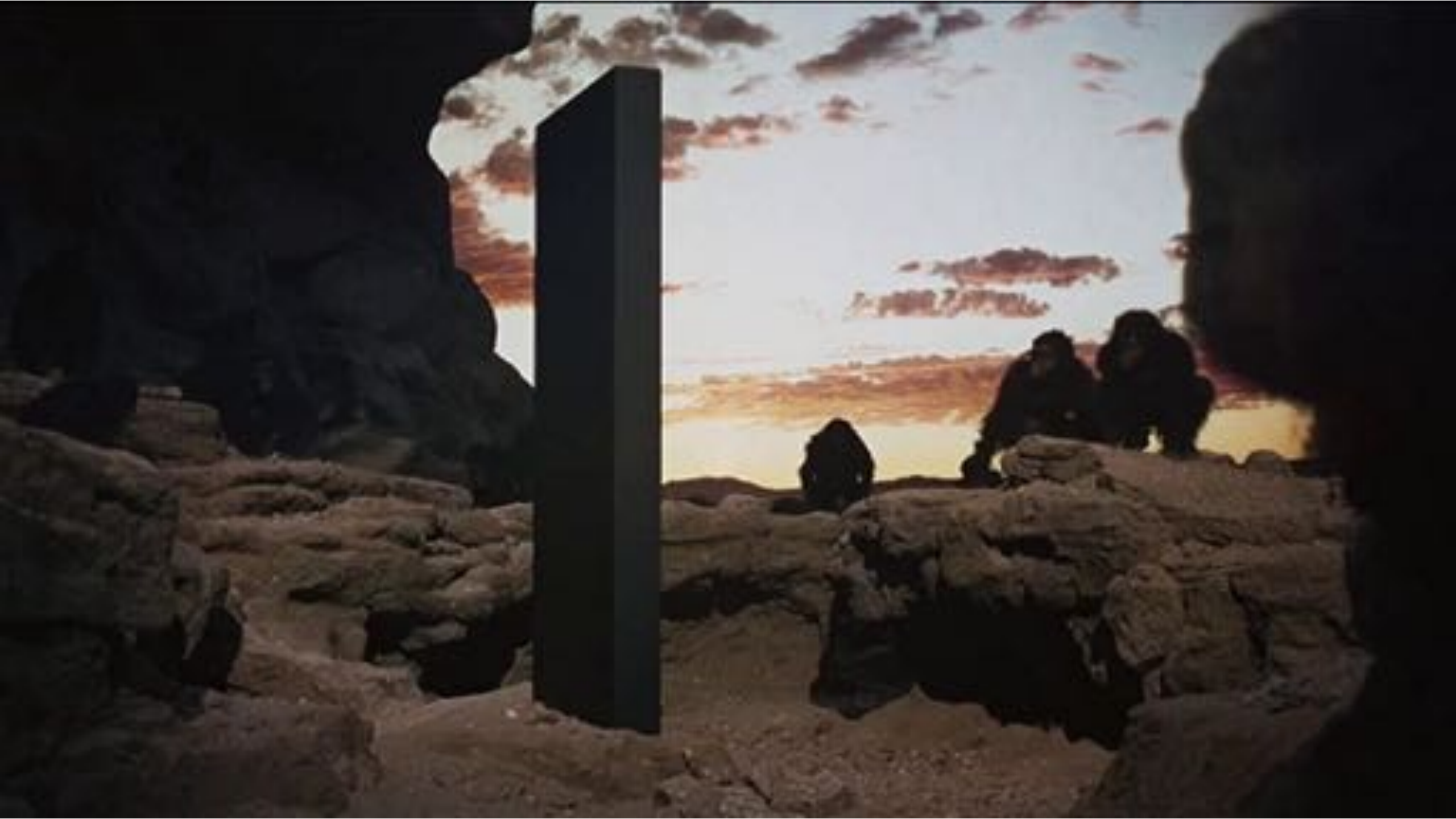
Foto: Rameessos/Wikipedia

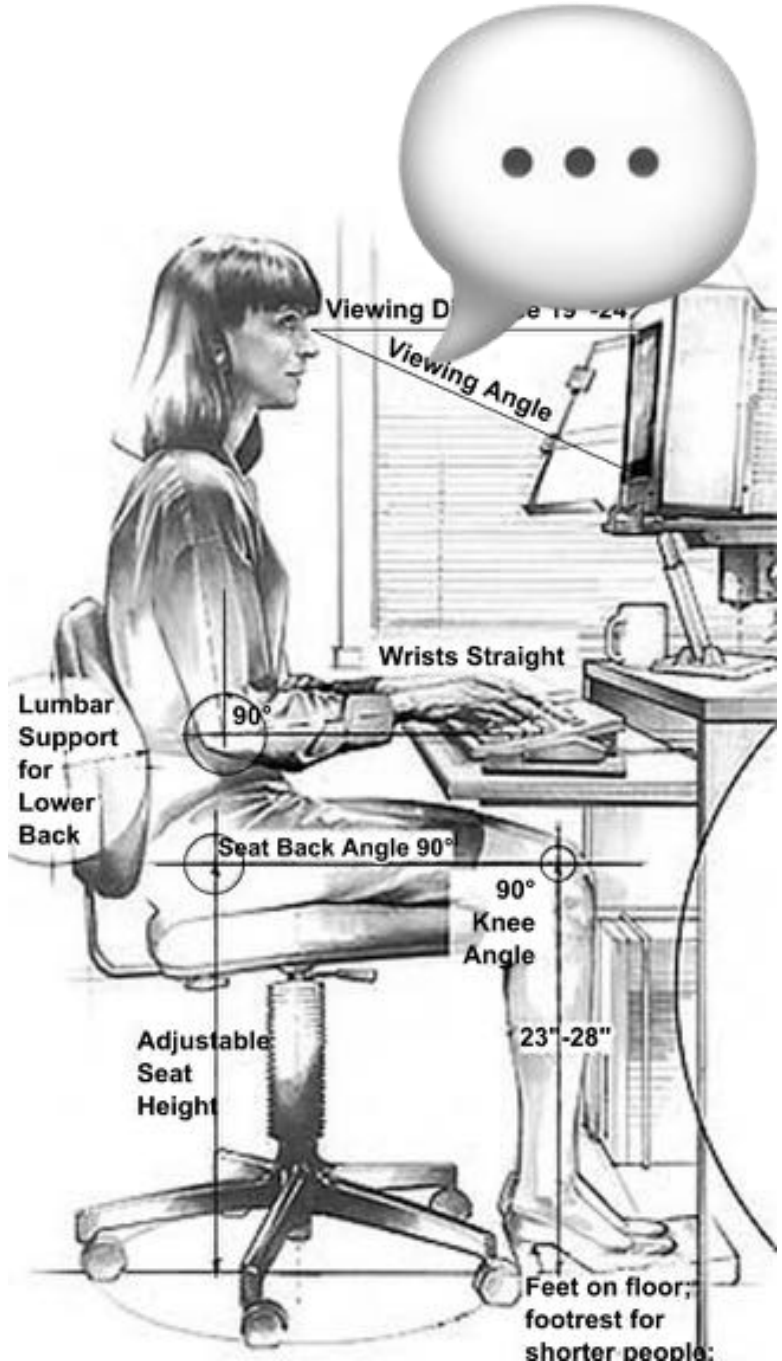
Spark a fire 

Tell a story 

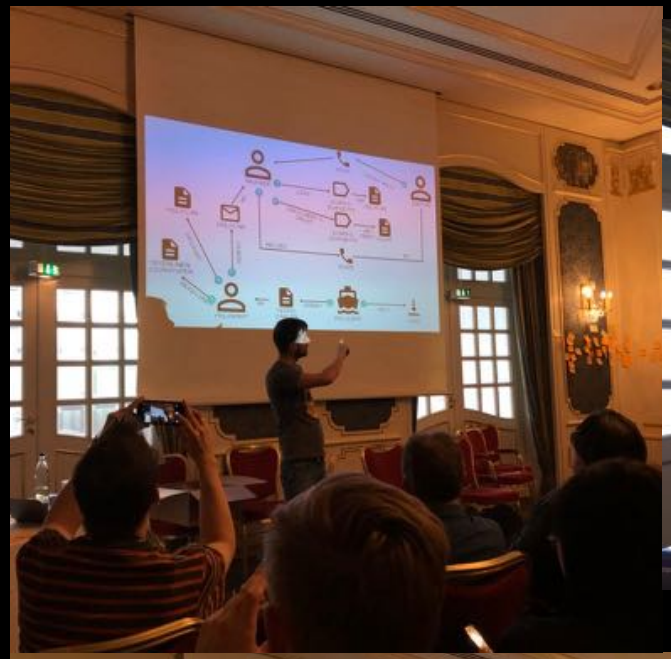
Paint a picture 

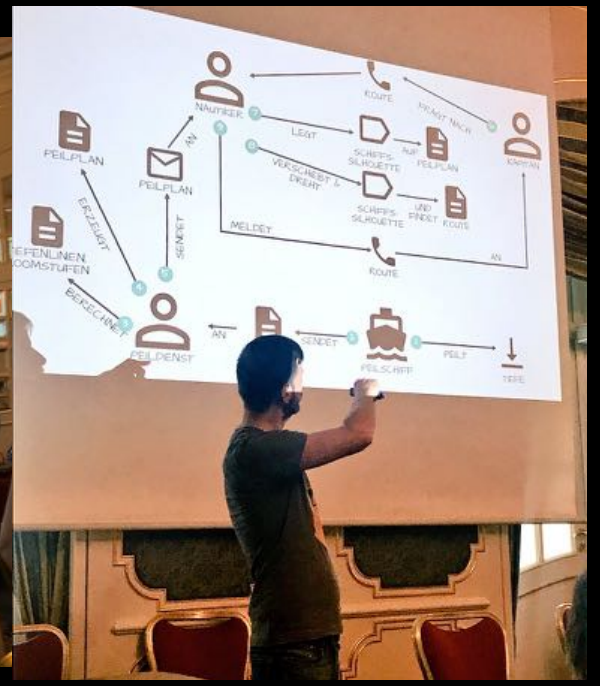
@hschwentner




Viewing Angle
Wrists Straight
Lumbar Support for Lower Back
90°
Seat Back Angle 90°
90° Knee Angle
Adjustable Seat Height
23"-28"
Feet on floor; footrest for shorter people;

THE NAME OF THIS SPEAKER IS HENNING SCHWENTNER





LIVE 45 MIN TALK

WPS WORKPLACE SOLUTIONS


COBOL
C++
Java
TS
THE
C
PROGRAMMING
LANGUAGE
C#
php
python
Swift
ABAP

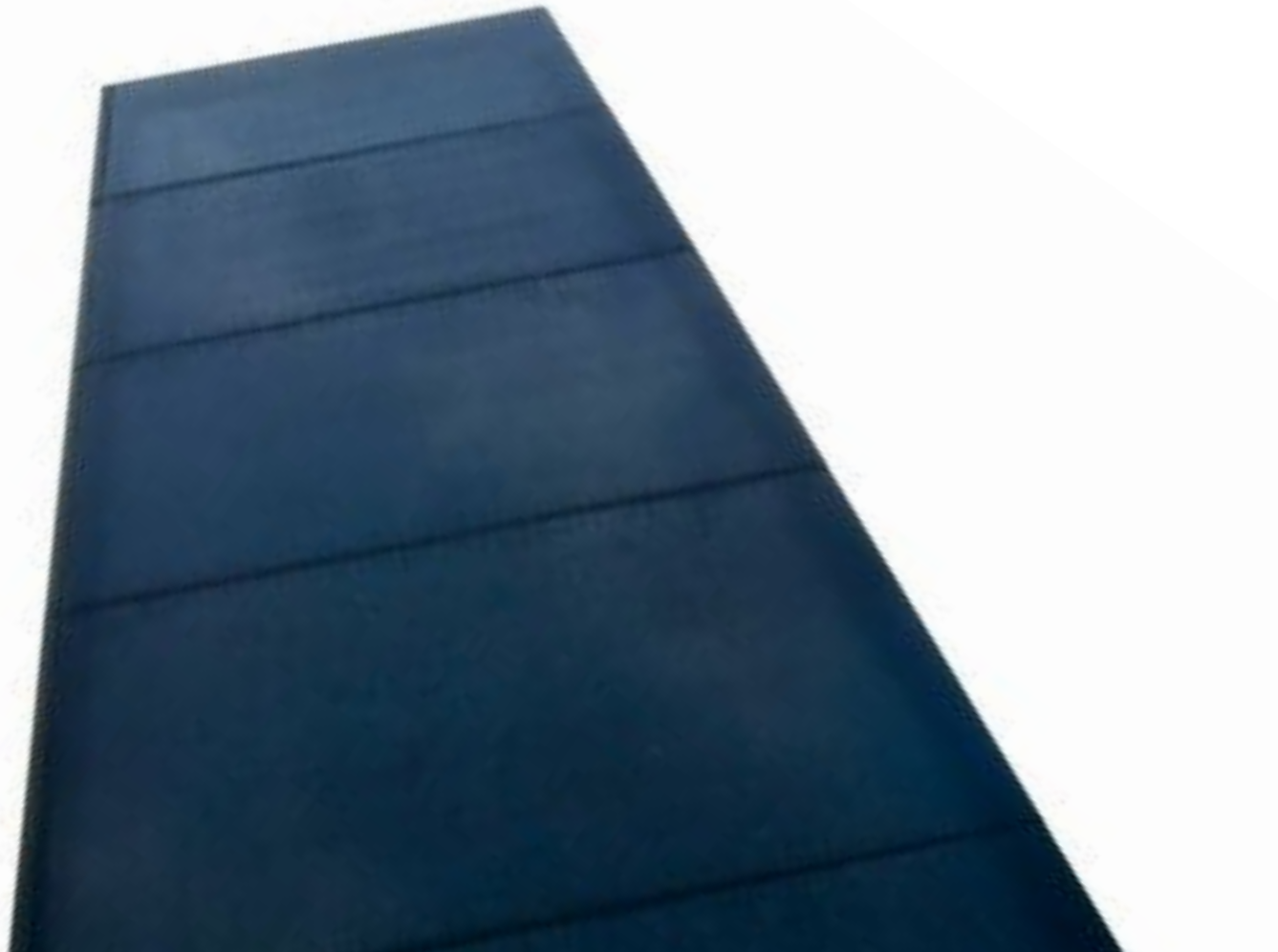
Story Time

Do I get a car for this?

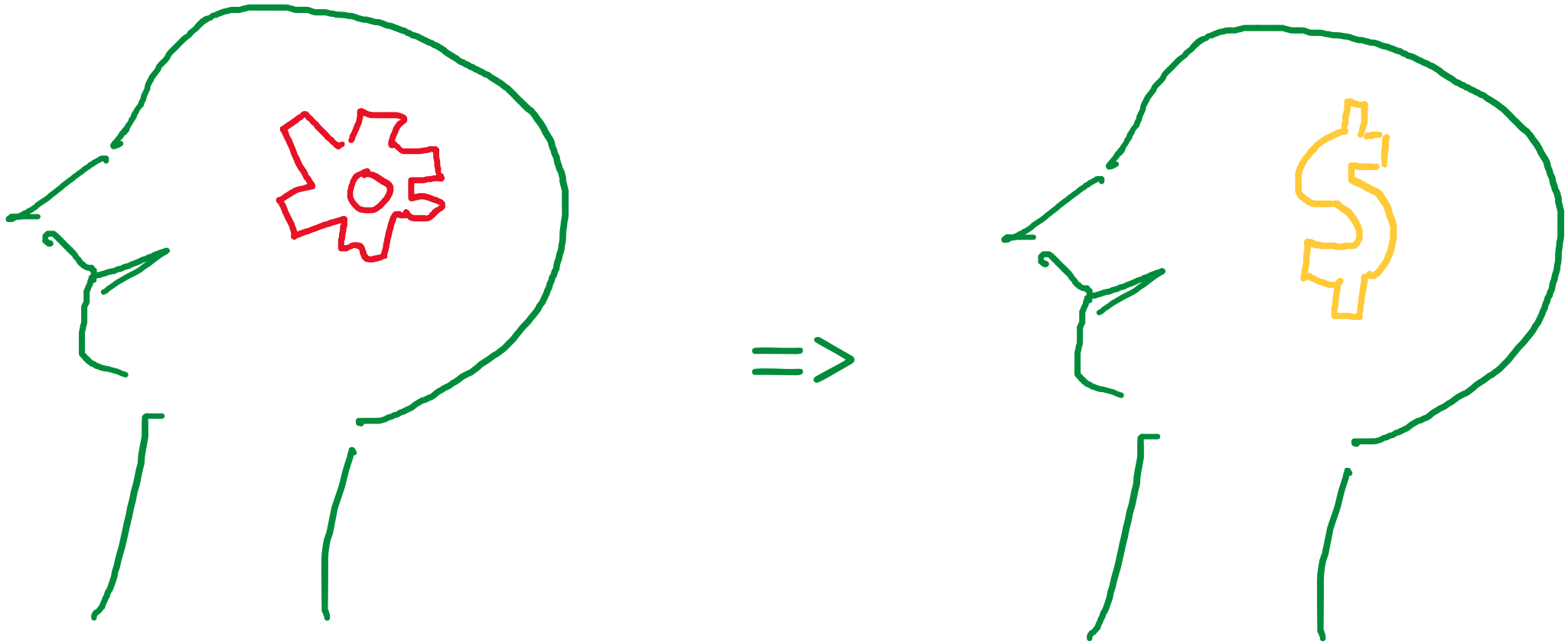

NO WAY!


LEASING

Monolease



To split the Monolith we first have to put it aside

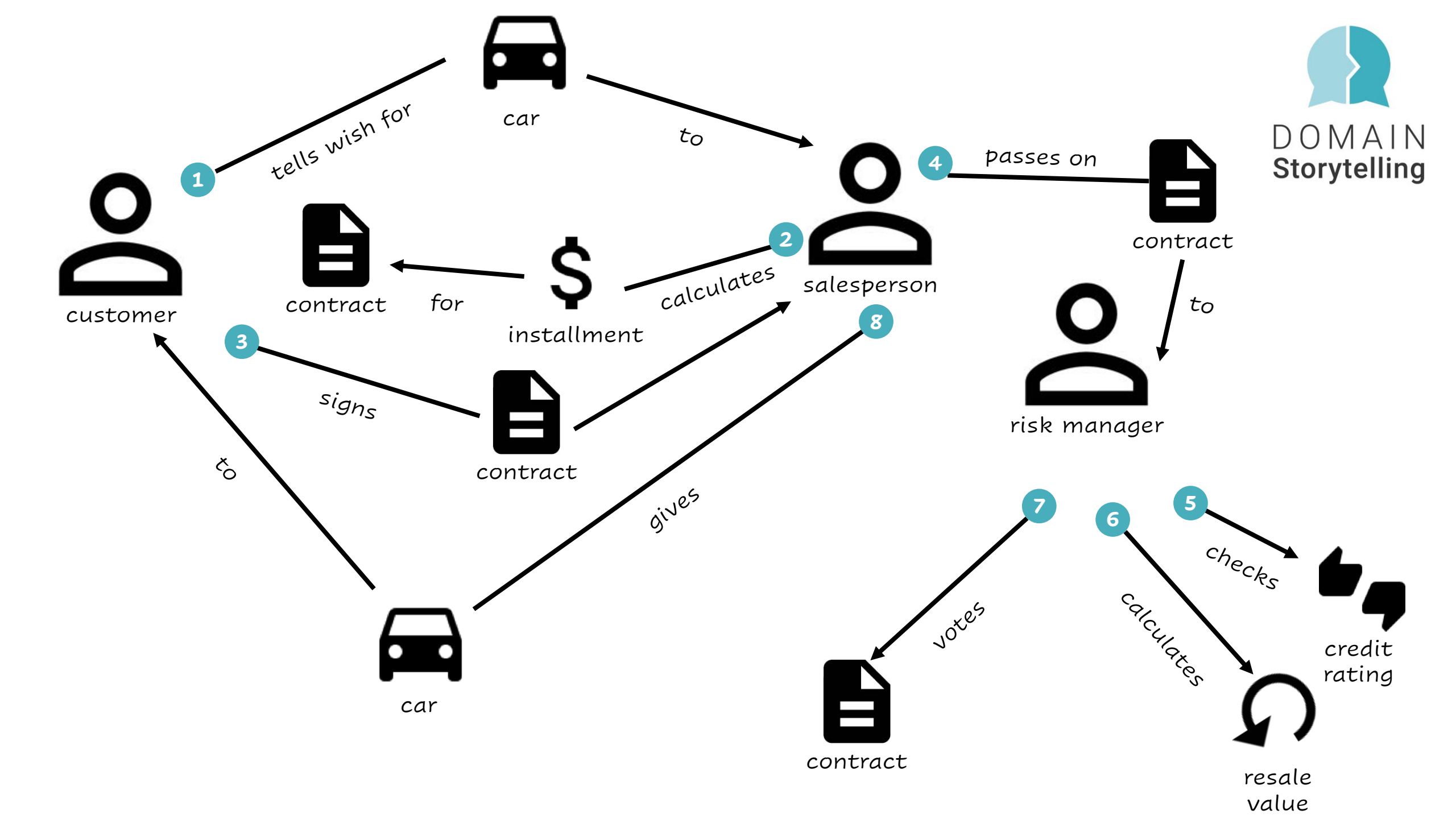


thinking about technology

=>

thinking about business

to


DOMAIN
Storytelling
car
1
tells wish for
to
customer
contract
for
installment
2
calculates
salesperson
4
passes on
contract
to
risk manager
3
signs
contract
8
gives
to
car
7
votes
contract
6
calculates
5
checks
credit
rating
resale
value

Explained

COLLABORATIVE MODELING

Domain Expert

Developer

Knowledge crunching

Methods

User Story Mapping


EVENT STORMING
3x
gratis
Post-it

DOMAIN Storytelling

http://www.domainstorytelling.org

Domain Storytelling = Pictographic Language + Workshop Format

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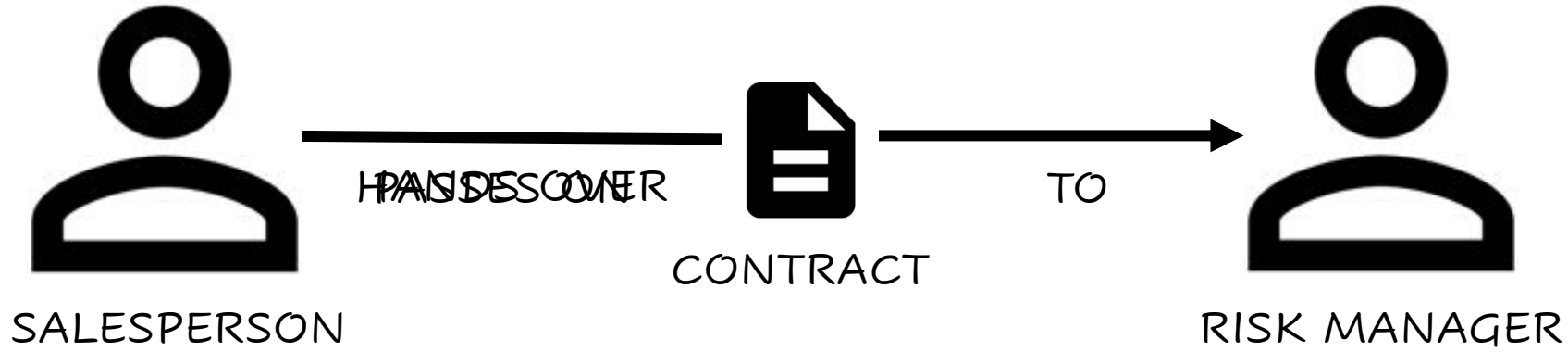
The Workshop Format

The right people


storyteller
Listeners

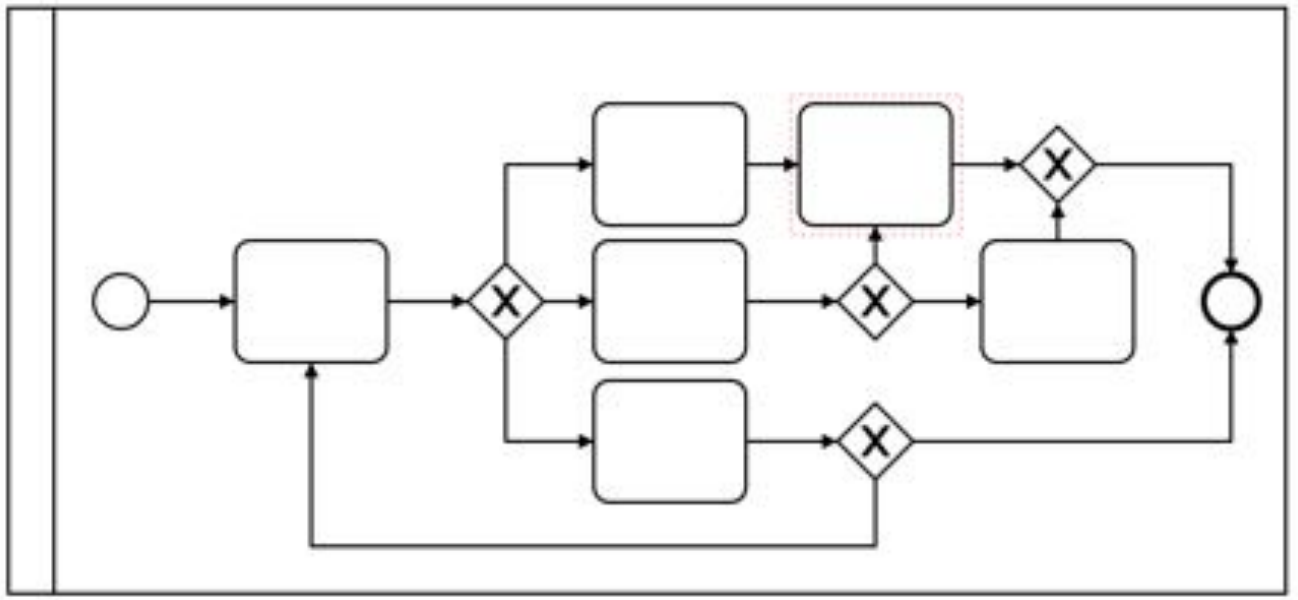

MILDRED LYON

"The salesperson passes on the contract to the risk manager"



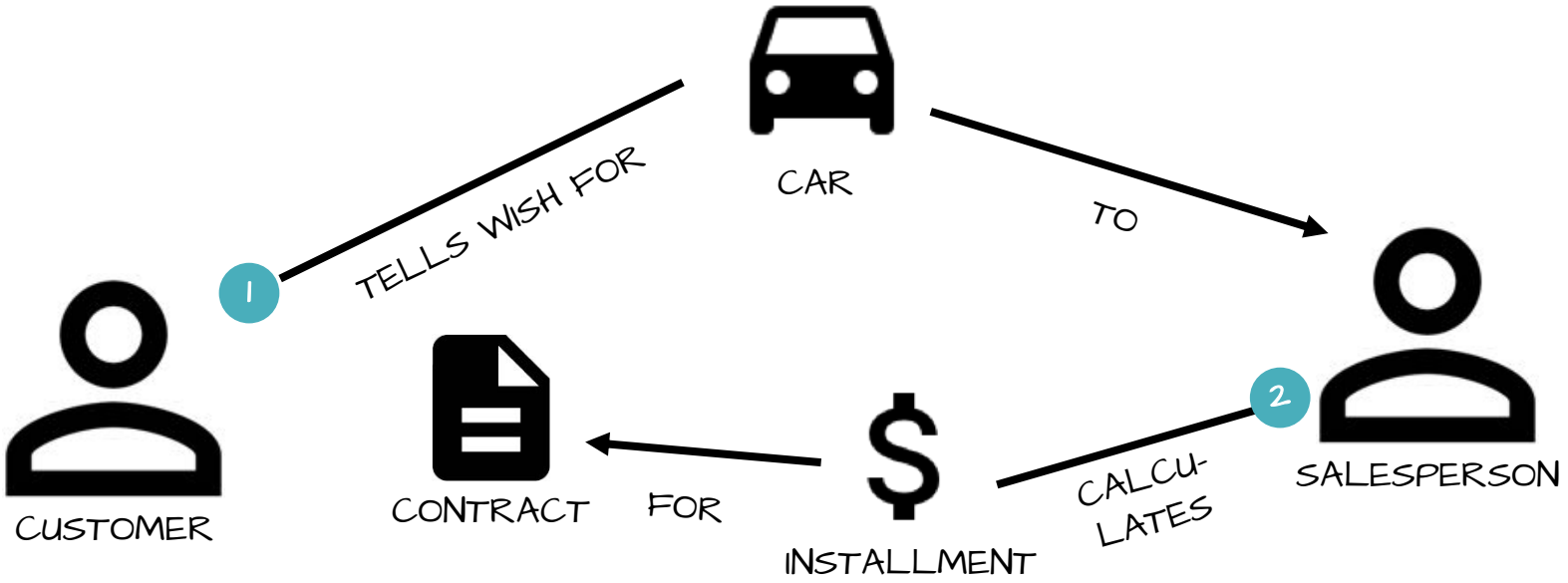
Active Listening

CONCRETE STORIES VS. ABSTRACT PROCESSES



The Pictographic language

@hschwentner


1
TELLS WISH FOR
CAR
TO
CUSTOMER
CONTRACT
FOR
INSTALLMENT
2
CALCU-
LATES
SALESPERSON

actor

work object

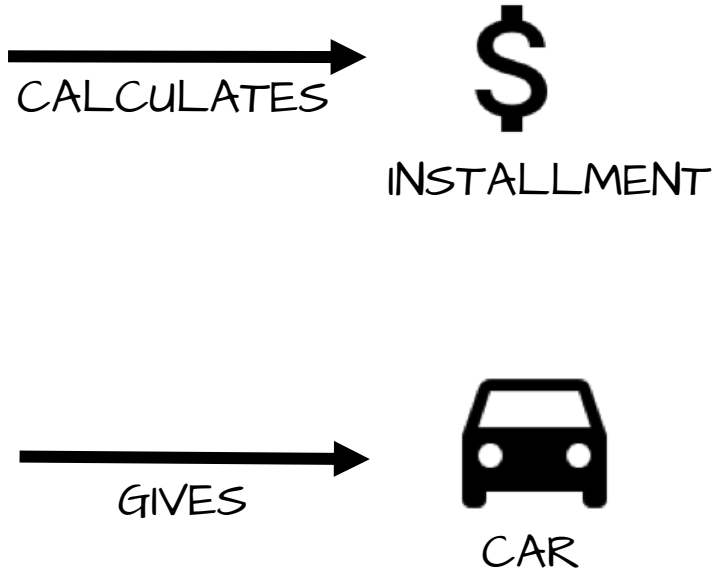
activity

sequence number

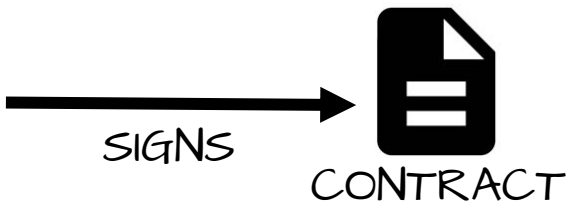
risk manager

contract

votes

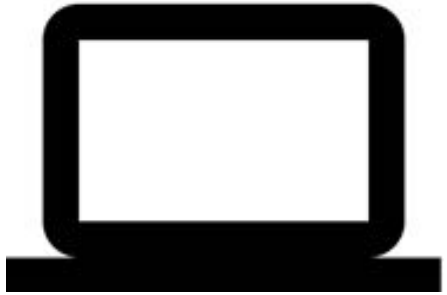

CALCULATES
$
INSTALLMENT
GIVES
CAR


PASSES ON
CONTRACT


SIGNS
CONTRACT

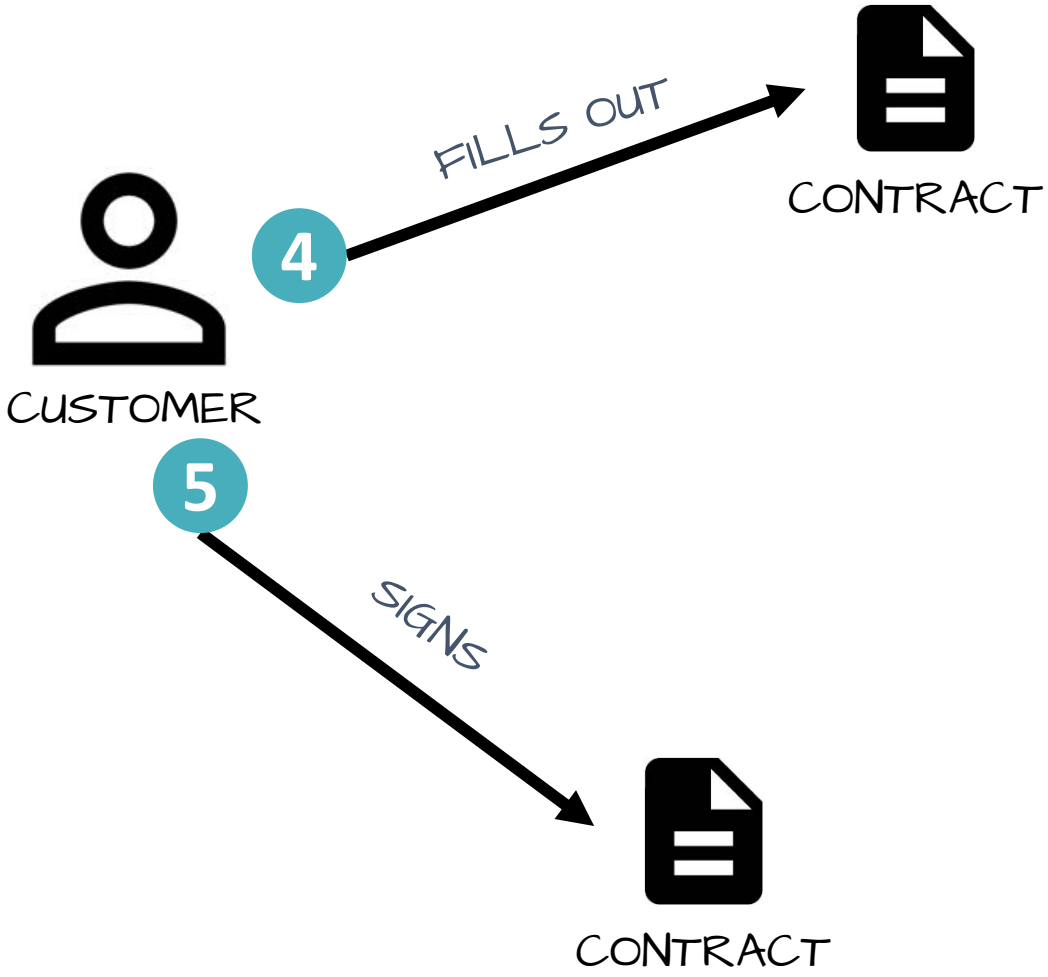
person

group



IT system

ACTORS ONCE/
WORK OBJECTS SEVERAL TIMES



Name of the Domain Story

←Draw here

Leave some empty space there →

Preconditions, assumptions, and triggers

Annotations, variations, and purpose

PICTOGRAPHIC LANGUAGE – NO IF/SWITCH/OR

actor

work object

activity

sequence number

Scenario-based modeling

Scenarios

Car Leasing – The Happy Path

Car Leasing – Customer can't afford installment

Car Leasing – Contract is too risky

Scope

Scope Factors

Granularity
Point in time
Domain Purity

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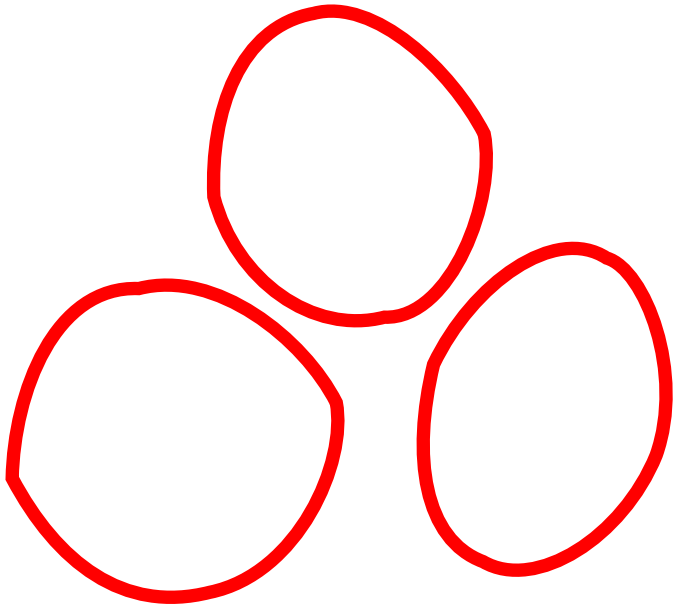
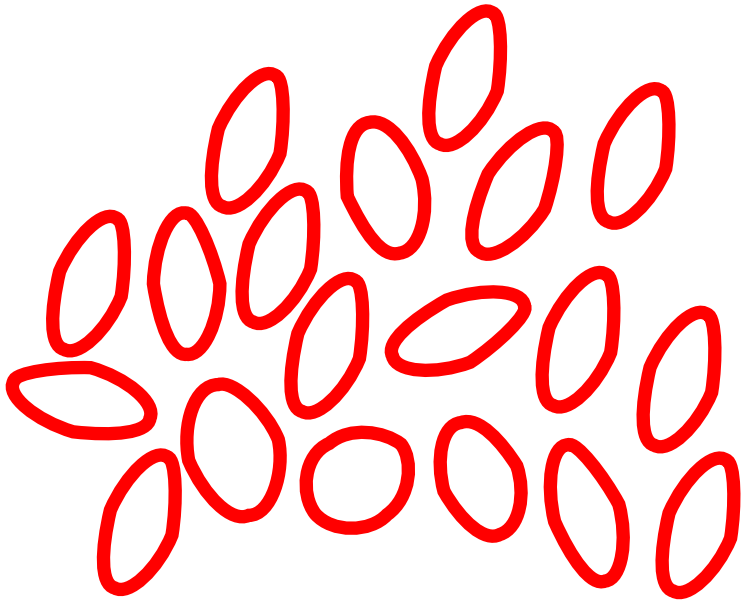
Granularity



coarse-grained

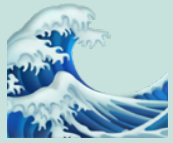


fine-grained

A Day at the Beach

Cloud Level

Kite Level



Sea Level

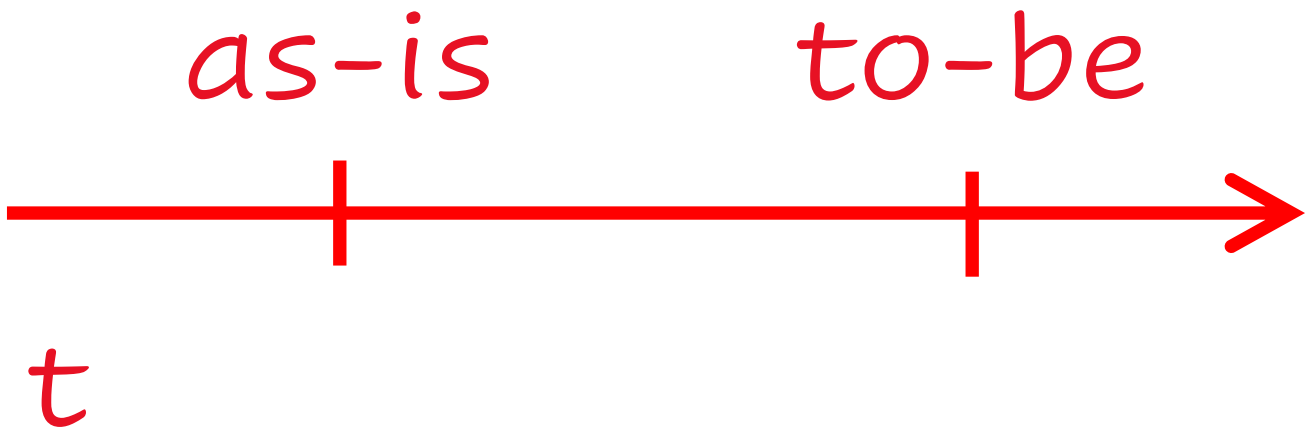
Fish Level

Clam Level

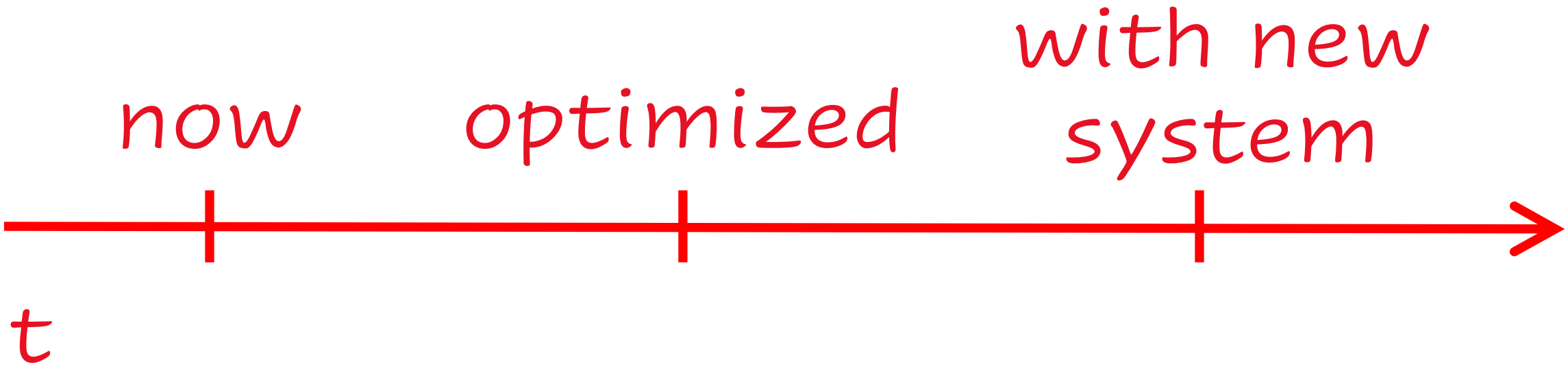
Alistair Cockburn

Foto: Dennis Hamilton/flickr/CC BY 2.0

Point in Time



Point in Time



Domain Purity

pure

digitalized

Exercise

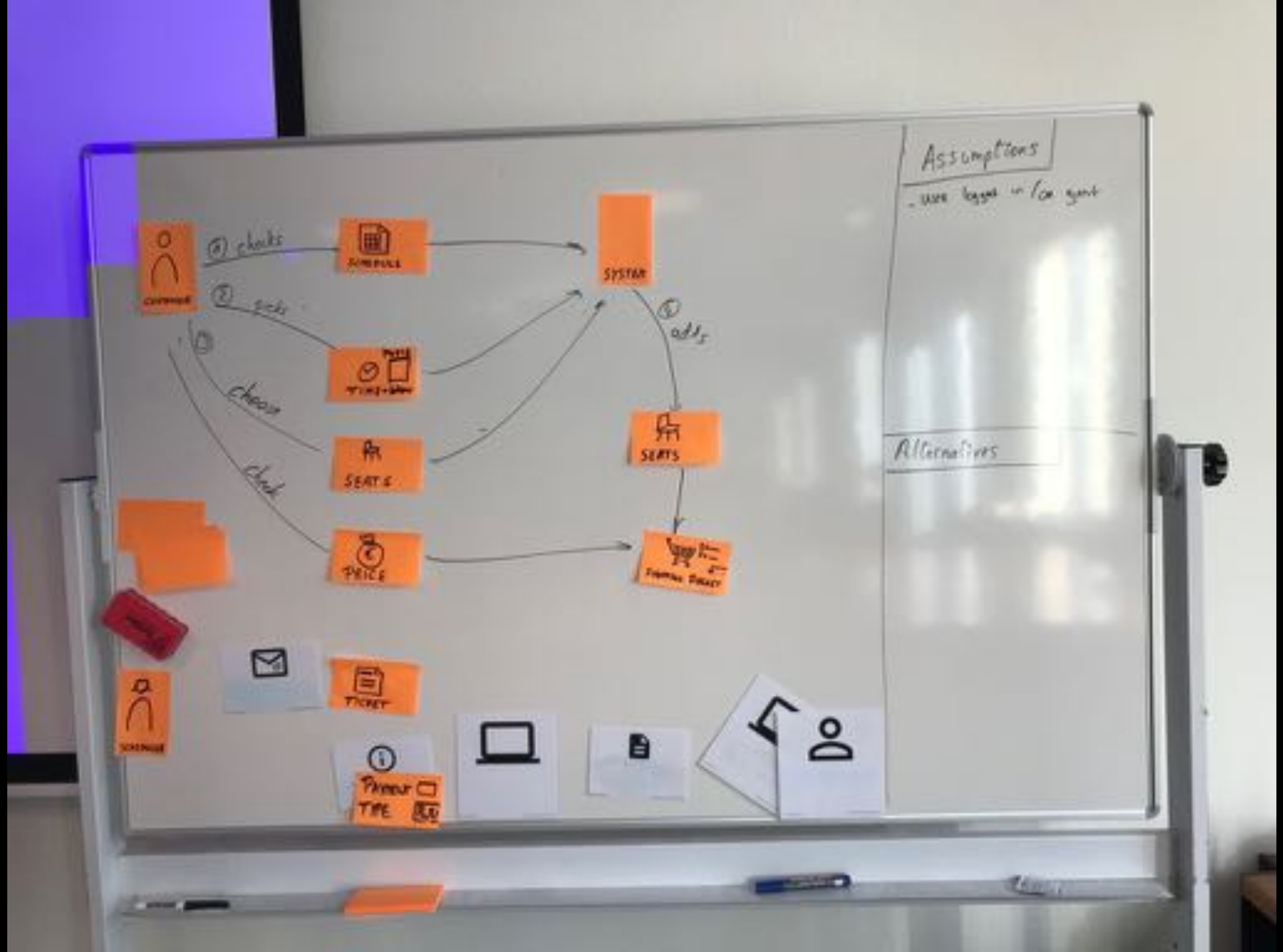
Exercise

Tell domain story:

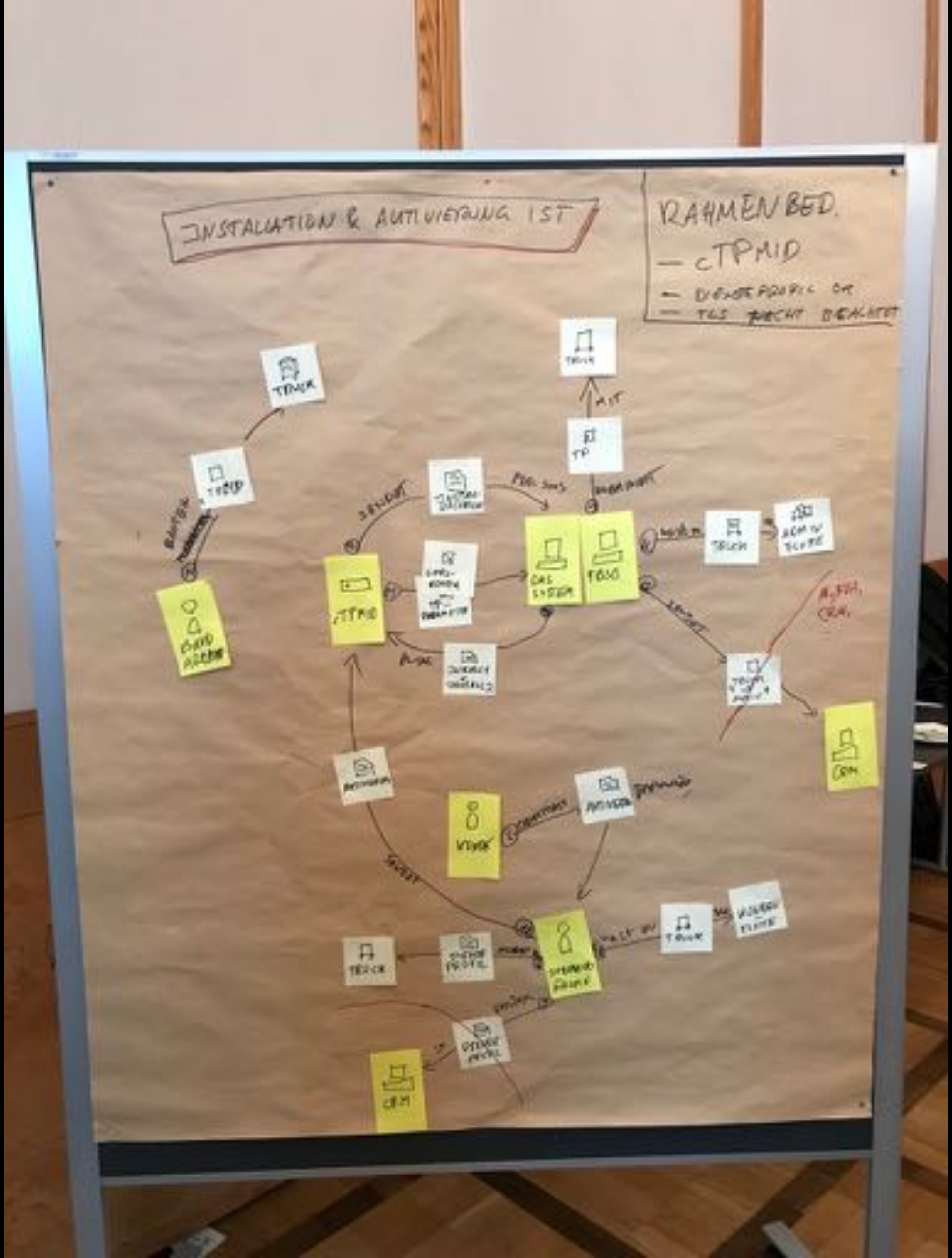
- “Travel by train”
- Coarse-grained
- All together

Tools

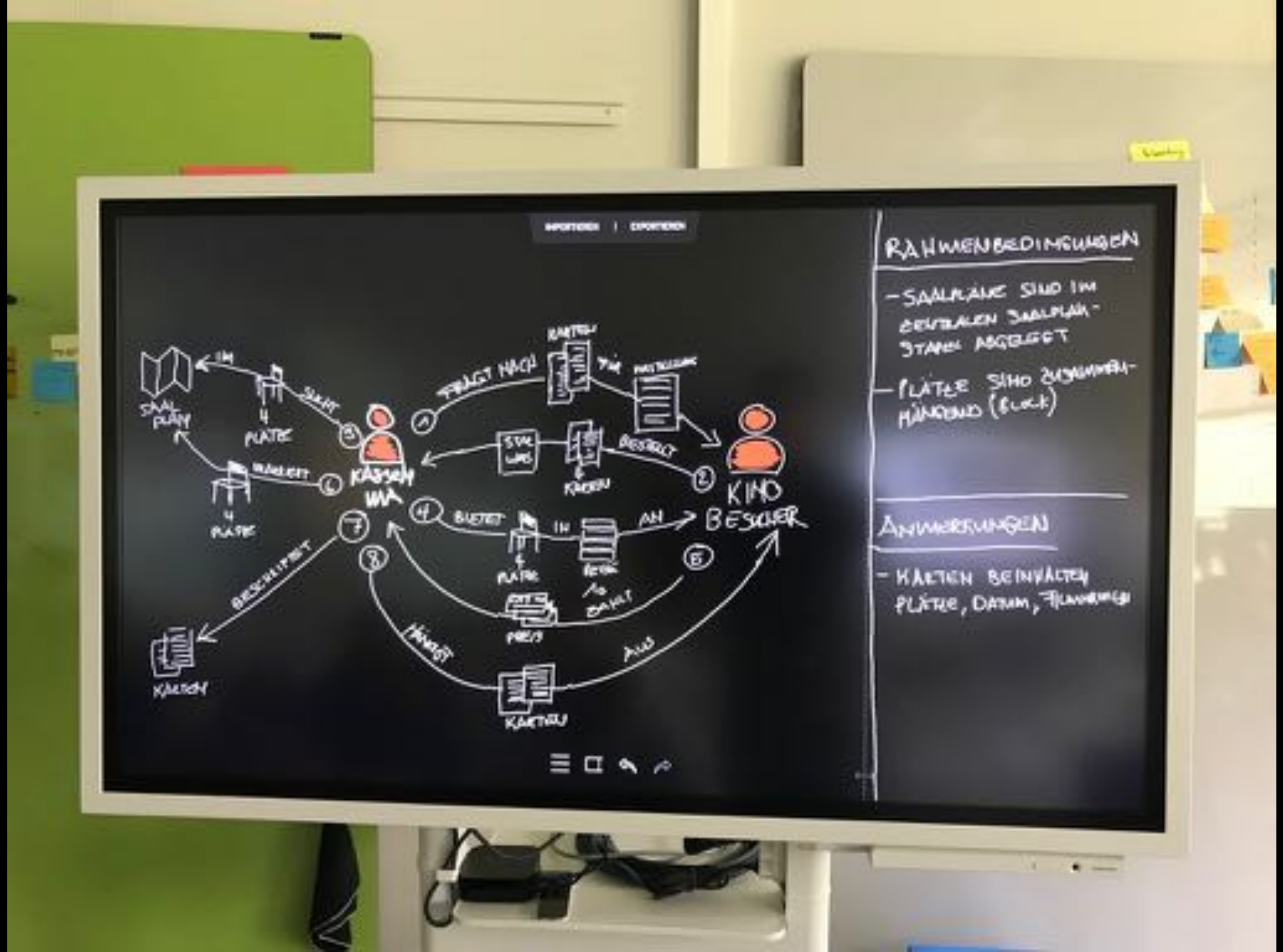
https://egon.io

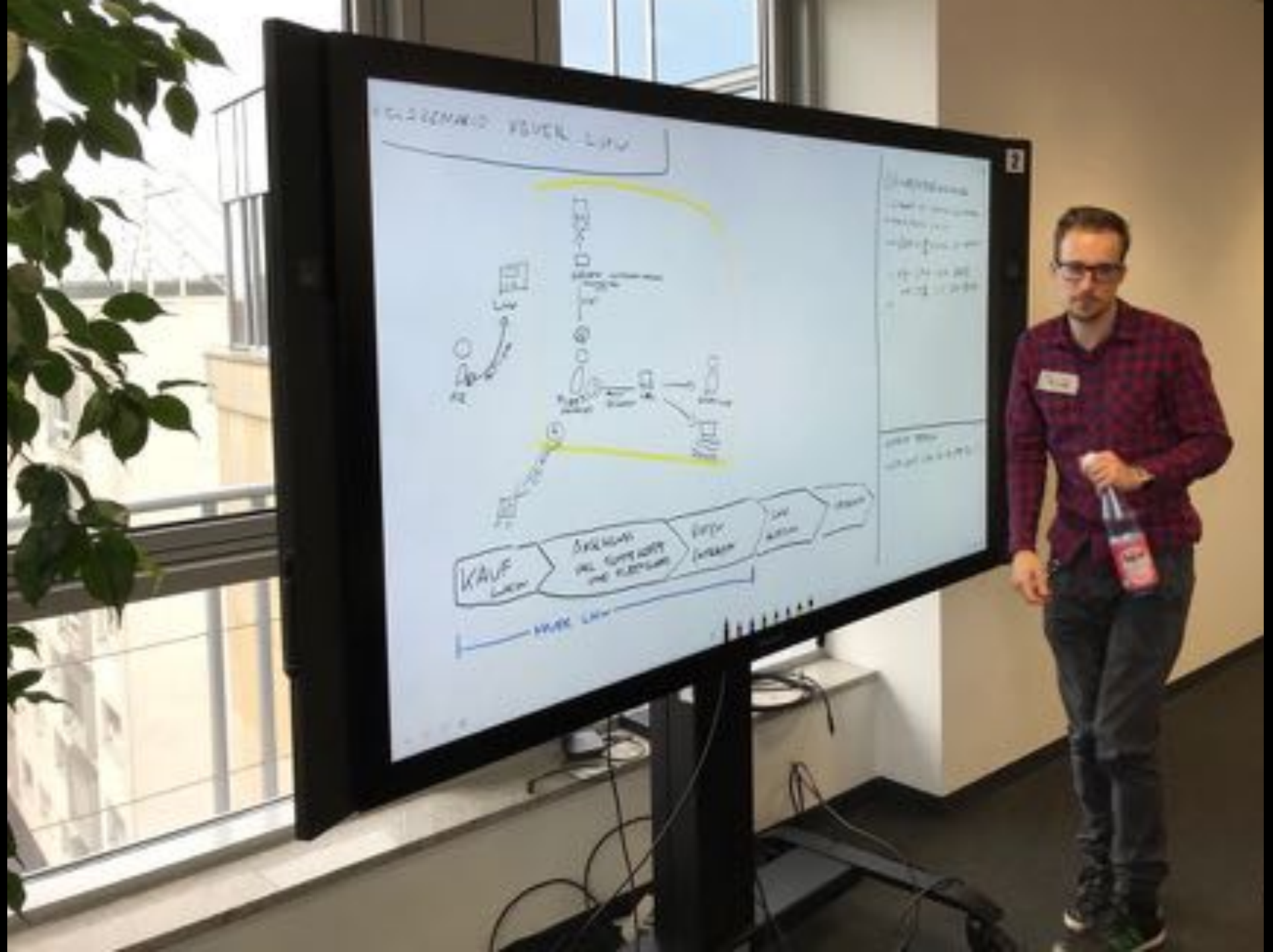

Assumptions
- user logged in for cart
Alternatives
checks
gets
chooses
check
adds
SYSTEM
SEATS
PRICE
TICKET

Whiteboard Kit (www.domainstorytelling.org)



INSTALLATION & AKTIVIERUNG IST
RAHMENBED.
— cTPMID
TRUCK
cTPMID
CRM


RAHMENBEDINGUNGEN
- SAALPLÄNE SIND IM ZENTRALEN SAALPLAN-STAND ABGELEGT
- PLÄTZE SIND ZUSAMMENHÄNGEND (BLOCK)
ANMERKUNGEN
- KARTEN BEINHALTEN PLÄTZE, DATUM, UHRZEIT
KINO BESUCHER
KASSEN MA
SAAL PLAN
4 PLÄTZE
KARTEN
PREIS


KAUF


CUSTOMER
CAR
SALES-
CALCULATES

Modes

Moderated


Smart

Co-op

Exercise

Tell domain story:

- "Going to the movies"
- Coarse-grained
- In groups

Purposes

learn language

draw boundaries

work on requirements

implement domain model

find shadow IT

...

learning Domain language

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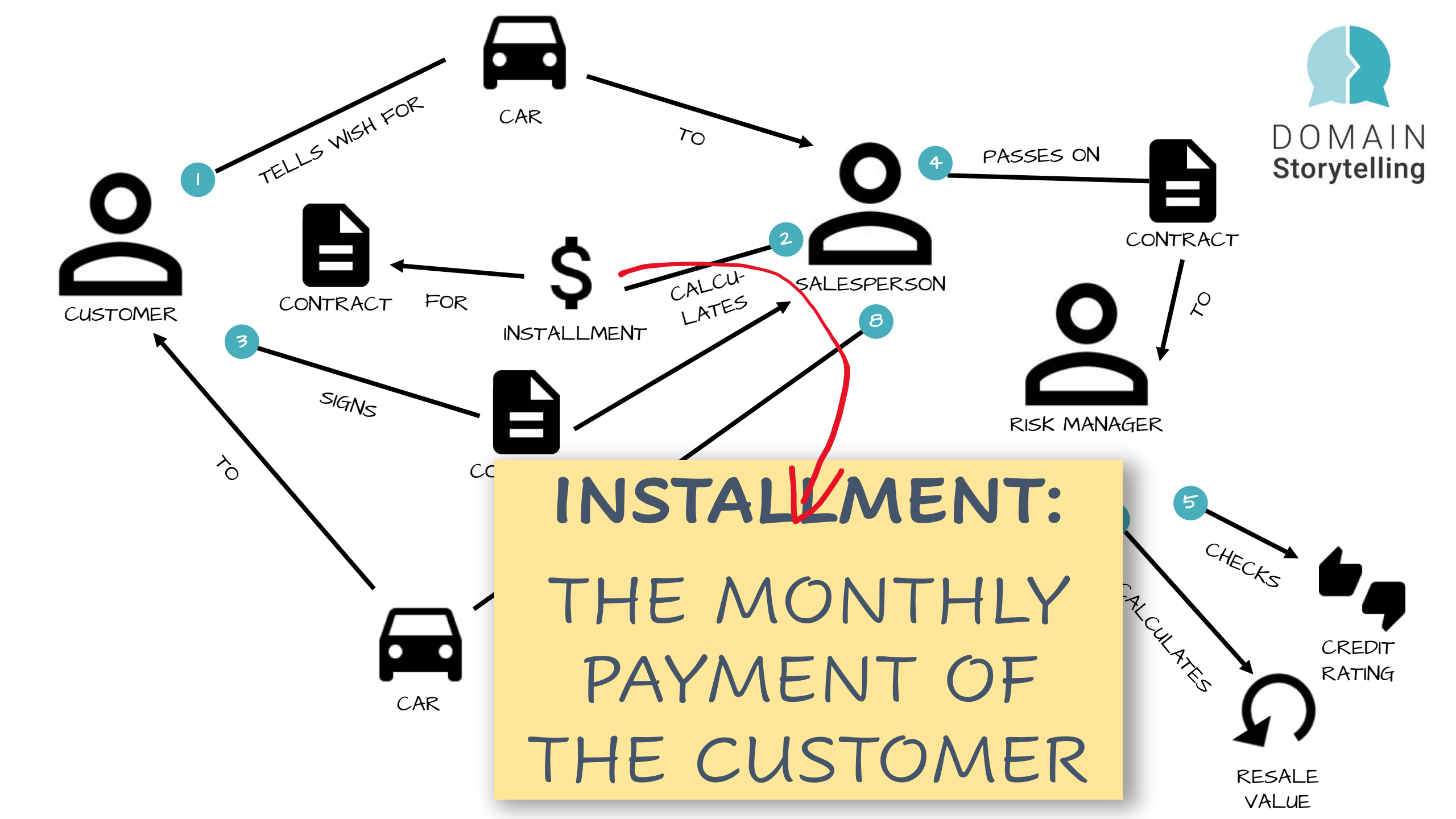
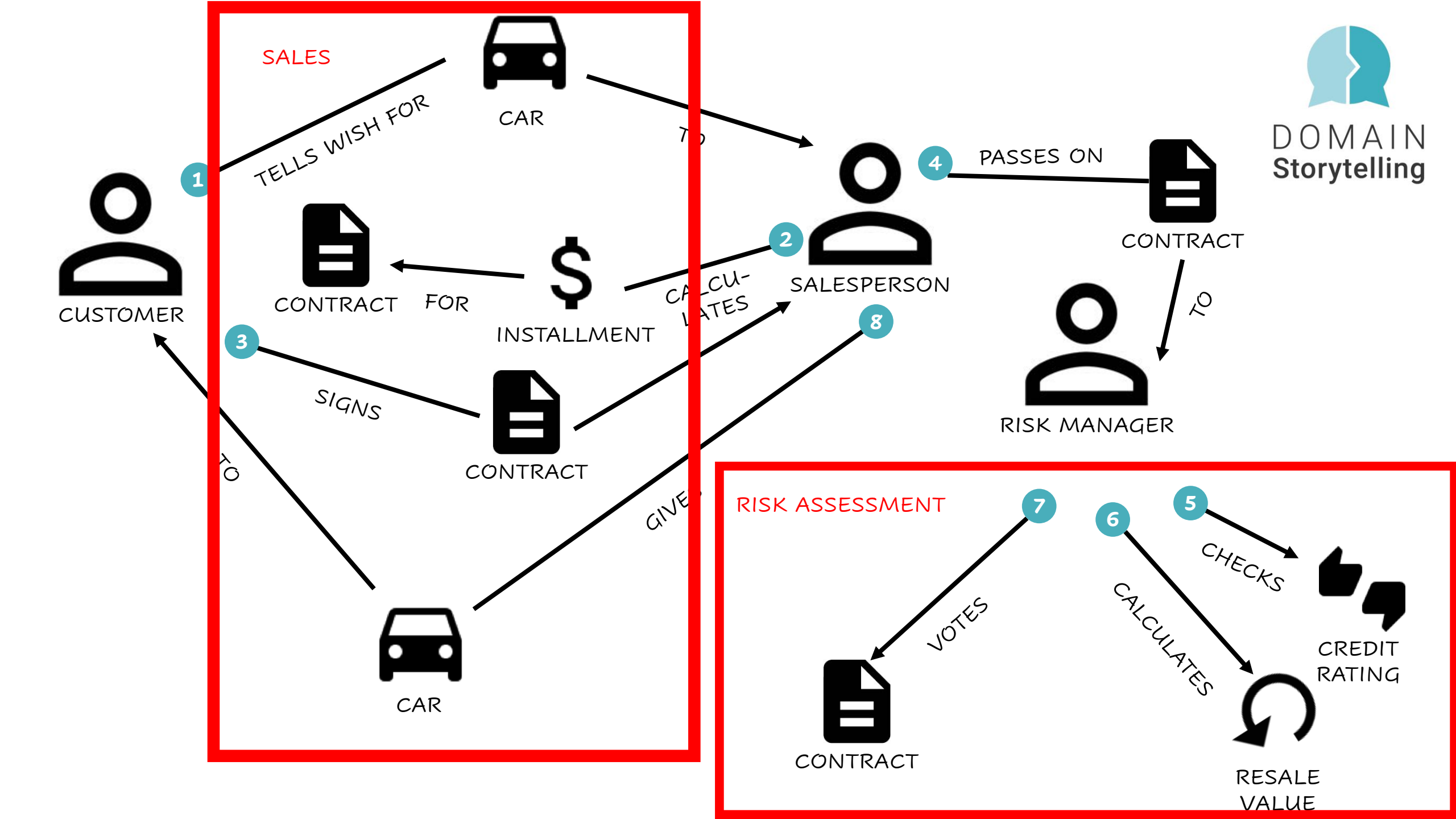
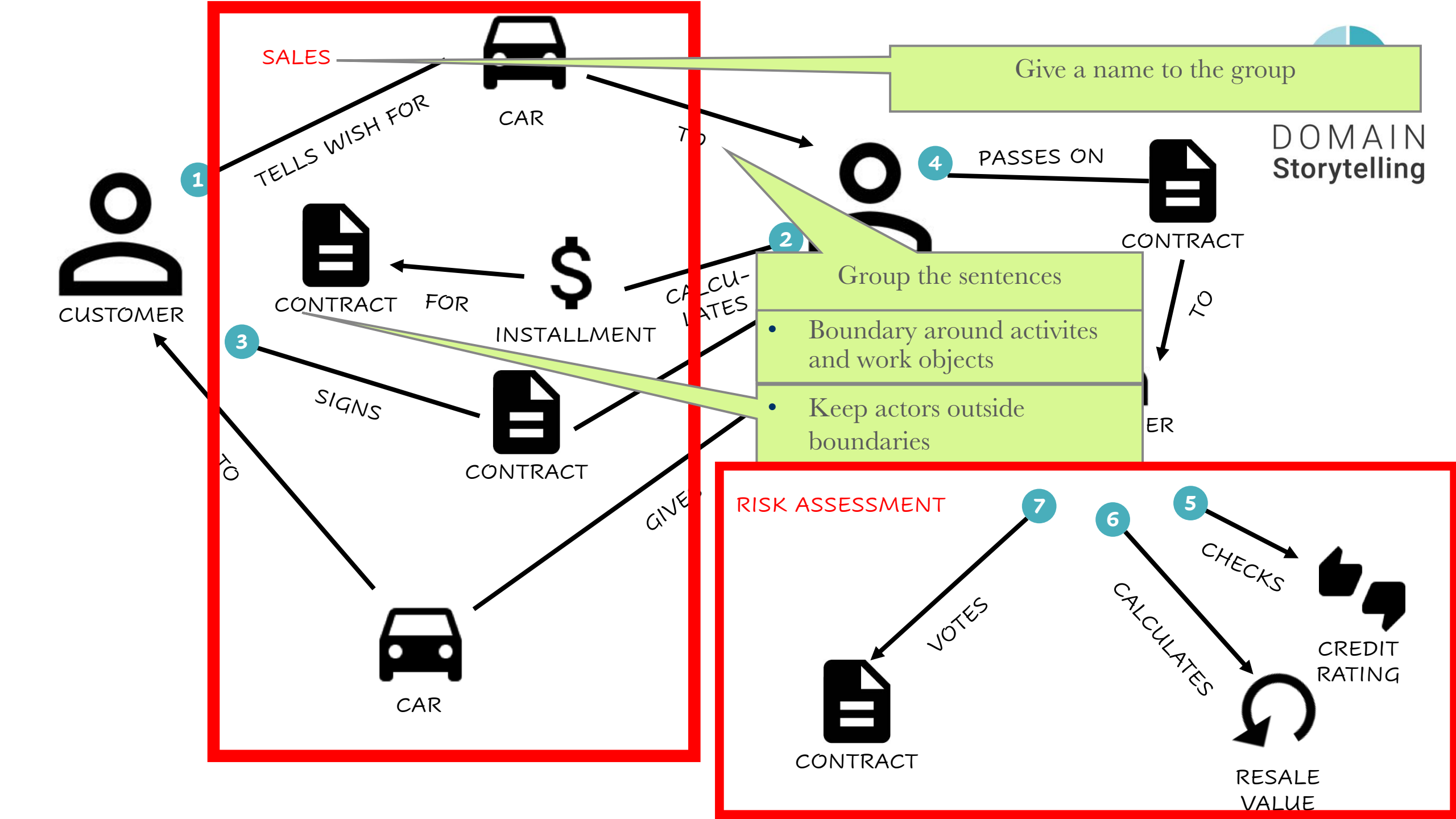

DOMAIN
Storytelling
CAR
1
TELLS WISH FOR
TO
CUSTOMER
CONTRACT
FOR
$
INSTALLMENT
2
CALCU-
LATES
SALESPERSON
4
PASSES ON
CONTRACT
TO
RISK MANAGER
3
SIGNS
8
TO
CAR
INSTALLMENT:
THE MONTHLY
PAYMENT OF
THE CUSTOMER
5
CHECKS
CREDIT
RATING
CALCULATES
RESALE
VALUE

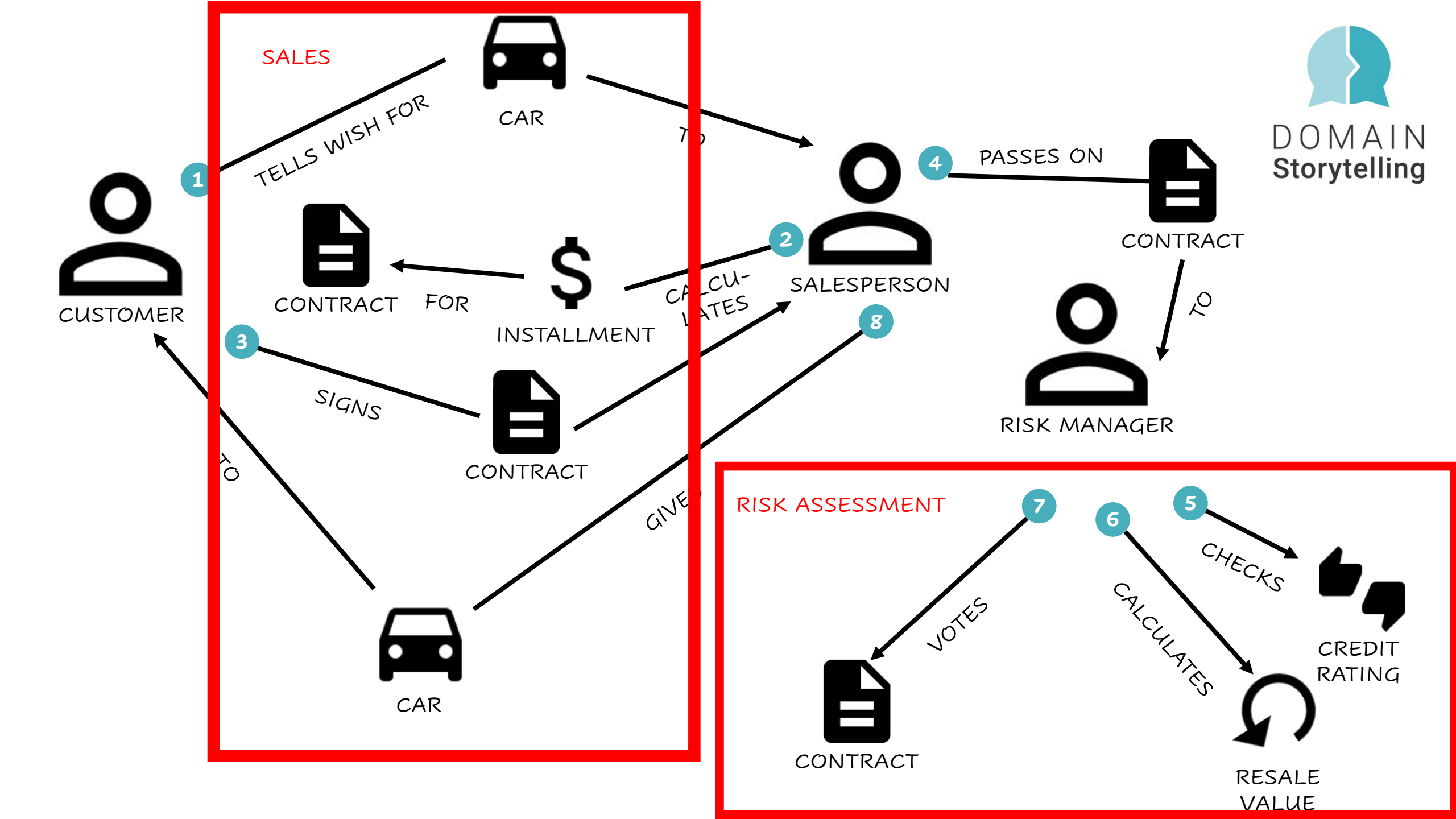
Drawing Boundaries

Scope: coarse-grained as-is/to-be pure


Which activities
belong together
(from an actor's
perspective)?


SALES
CAR
TELLS WISH FOR
1
TO
CUSTOMER
CONTRACT
FOR
INSTALLMENT
2
CALCU-
LATES
SALESPERSON
4
PASSES ON
CONTRACT
TO
RISK MANAGER
3
SIGNS
CONTRACT
8
TO
GIVE
CAR
DOMAIN
Storytelling
RISK ASSESSMENT
7
VOTES
CONTRACT
6
CALCULATES
5
CHECKS
CREDIT
RATING
RESALE
VALUE


SALES
Give a name to the group
DOMAIN
Storytelling
CAR
TELLS WISH FOR
1
TO
4
PASSES ON
CONTRACT
CUSTOMER
CONTRACT
FOR
$
INSTALLMENT
2
CALCU-
LATES
Group the sentences
• Boundary around activites and work objects
• Keep actors outside boundaries
3
SIGNS
CONTRACT
TO
GIVE
CAR
RISK ASSESSMENT
7
VOTES
6
5
CHECKS
CALCULATES
CREDIT
RATING
CONTRACT
RESALE
VALUE


SALES
CAR
TELLS WISH FOR
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TO
CUSTOMER
CONTRACT
FOR
INSTALLMENT
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CALCU-
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SALESPERSON
4
PASSES ON
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SIGNS
CONTRACT
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TO
GIVE
CAR
DOMAIN
Storytelling
RISK ASSESSMENT
7
VOTES
CONTRACT
6
CALCULATES
5
CHECKS
CREDIT
RATING
RESALE
VALUE


SALES
RISK
ASSESSMENT

Indicators:

1) Actor produces result on their own
2) One-way information flow
3) Different triggers
   (time vs. on demand)
4) Activities supporting something that is not
   in the picture
5) Difference in language
6) Different use of the same thing

Ask your domain experts!

Exercise

Draw Boundaries:

- “Traveling by train”
- In groups

Exercise

Draw Boundaries:

- "Going to the movies"
- In groups

From Coarse-Grained to Fine-Grained

Exercise

Tell domain story:

- “Validate train ticket”
- Fine-grained
- All together

Exercise

Tell domain story:

- “Selling movie tickets”
- Fine-grained,
  pure, as-is
- In groups

From Domain Story to User Story

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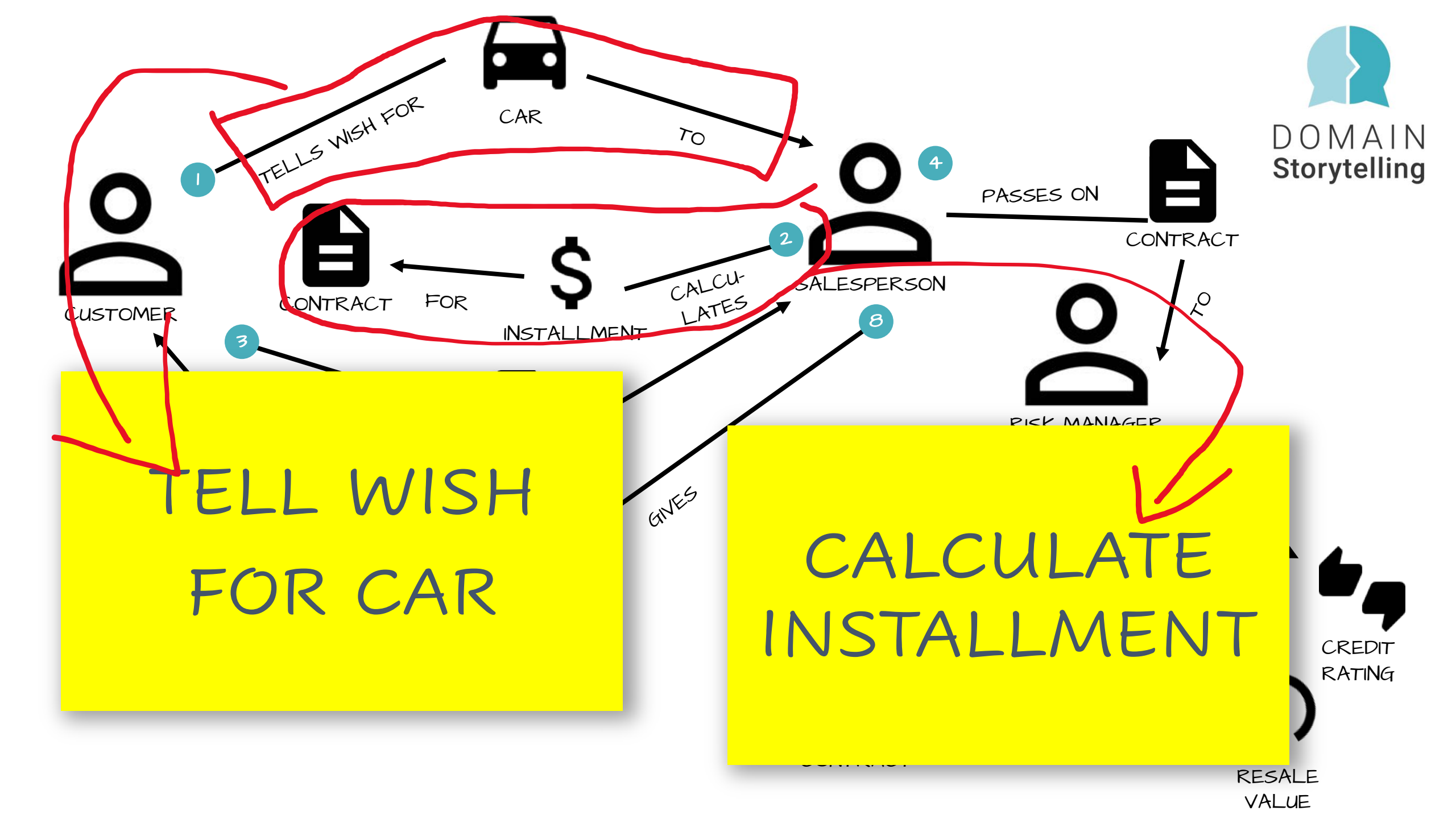
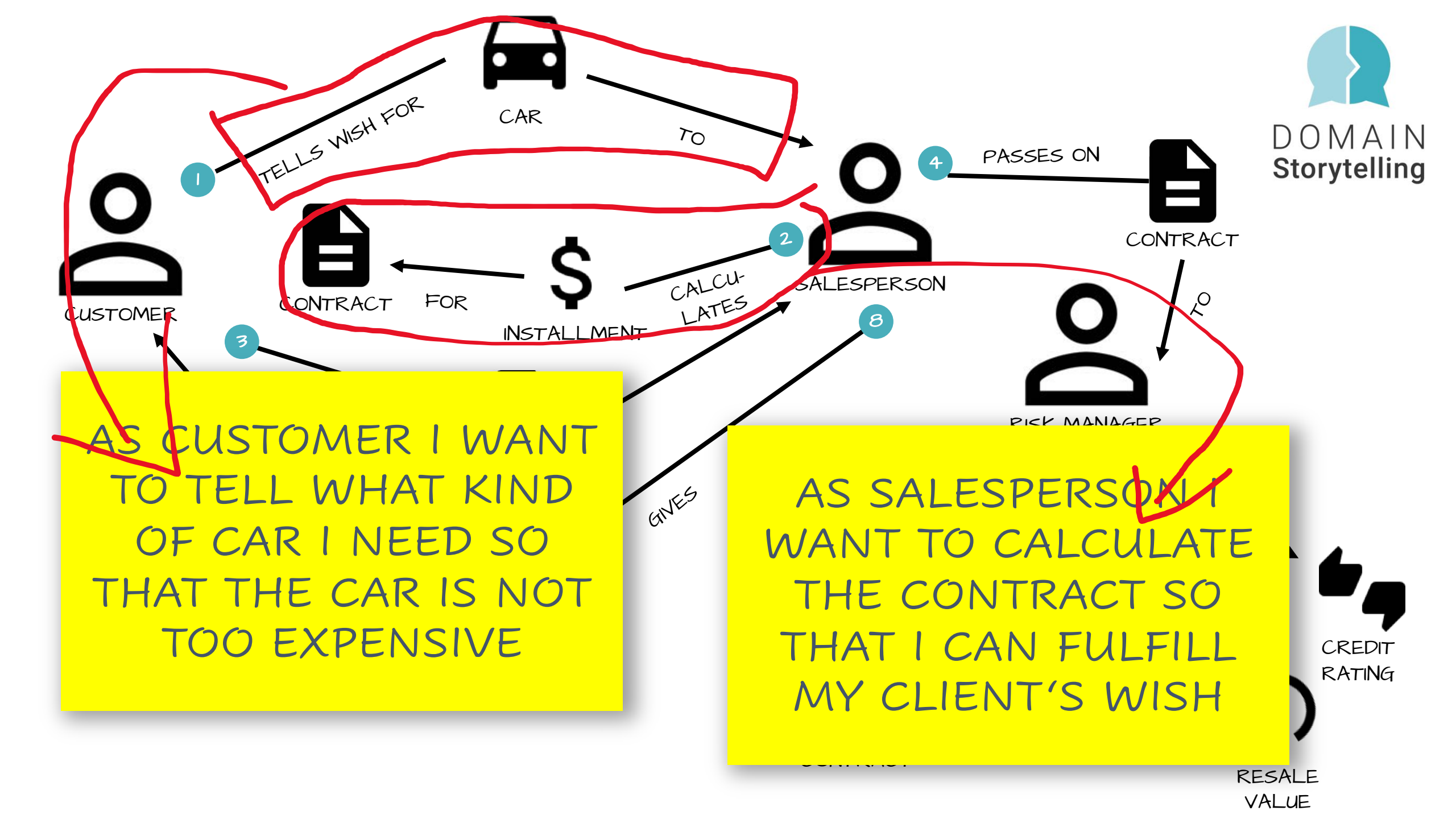

DOMAIN
Storytelling
TELLS WISH FOR
CAR
TO
1
CUSTOMER
CONTRACT
FOR
$
INSTALLMENT
2
CALCU-
LATES
SALESPERSON
4
PASSES ON
CONTRACT
TO
RISK MANAGER
3
8
GIVES
TELL WISH
FOR CAR
CALCULATE
INSTALLMENT
CREDIT
RATING
RESALE
VALUE


DOMAIN
Storytelling
1
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CAR
TO
CUSTOMER
CONTRACT
FOR
$
INSTALLMENT
2
CALCU-
LATES
SALESPERSON
4
PASSES ON
CONTRACT
TO
RISK MANAGER
3
8
GIVES
AS CUSTOMER I WANT TO TELL WHAT KIND OF CAR I NEED SO THAT THE CAR IS NOT TOO EXPENSIVE
AS SALESPERSON I WANT TO CALCULATE THE CONTRACT SO THAT I CAN FULFILL MY CLIENT'S WISH
CREDIT
RATING
RESALE
VALUE

From Domain Story to User Story Map

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Coarse-Grained Domain Story as Backbone for User Story Map

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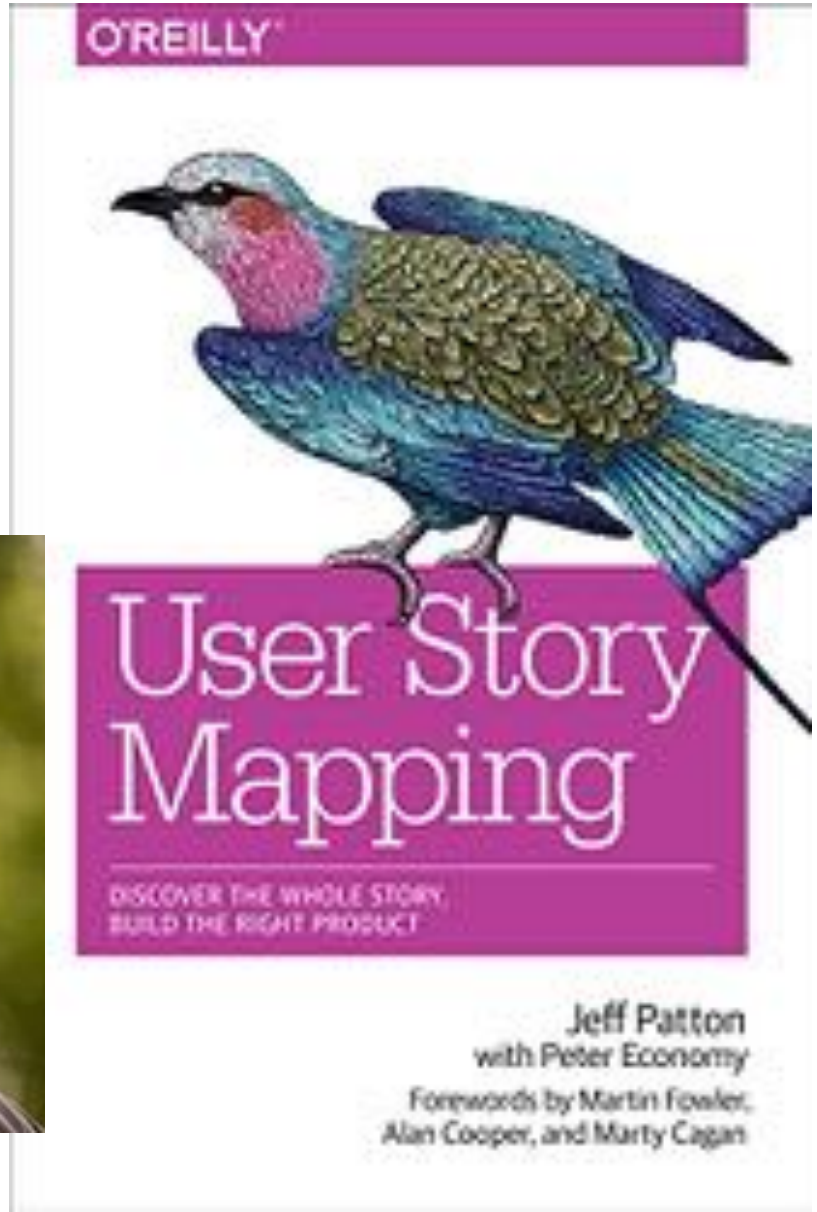
O'REILLY
User Story Mapping
DISCOVER THE WHOLE STORY.
BUILD THE RIGHT PRODUCT
Jeff Patton
with Peter Economy
Forewords by Martin Fowler,
Alan Cooper, and Marty Cagan

TELL WISH FOR CAR

CALCULATE INSTALLMENT

SIGN CONTRACT

PASS ON CONTRACT

WISH CAR

CALCULATE INSTALLMENT

SIGN CONTRACT

PASS C CONTRA

CALCULATE INSTALLMENT FOR NEW CUSTOMER

CALCULATE INSTALLMENT FOR EXISTING CUSTOMER

Exercise

Tell domain story:

- “Selling movie tickets”
- Fine-grained, digitalized, to-be
- In groups

Modeling in Code

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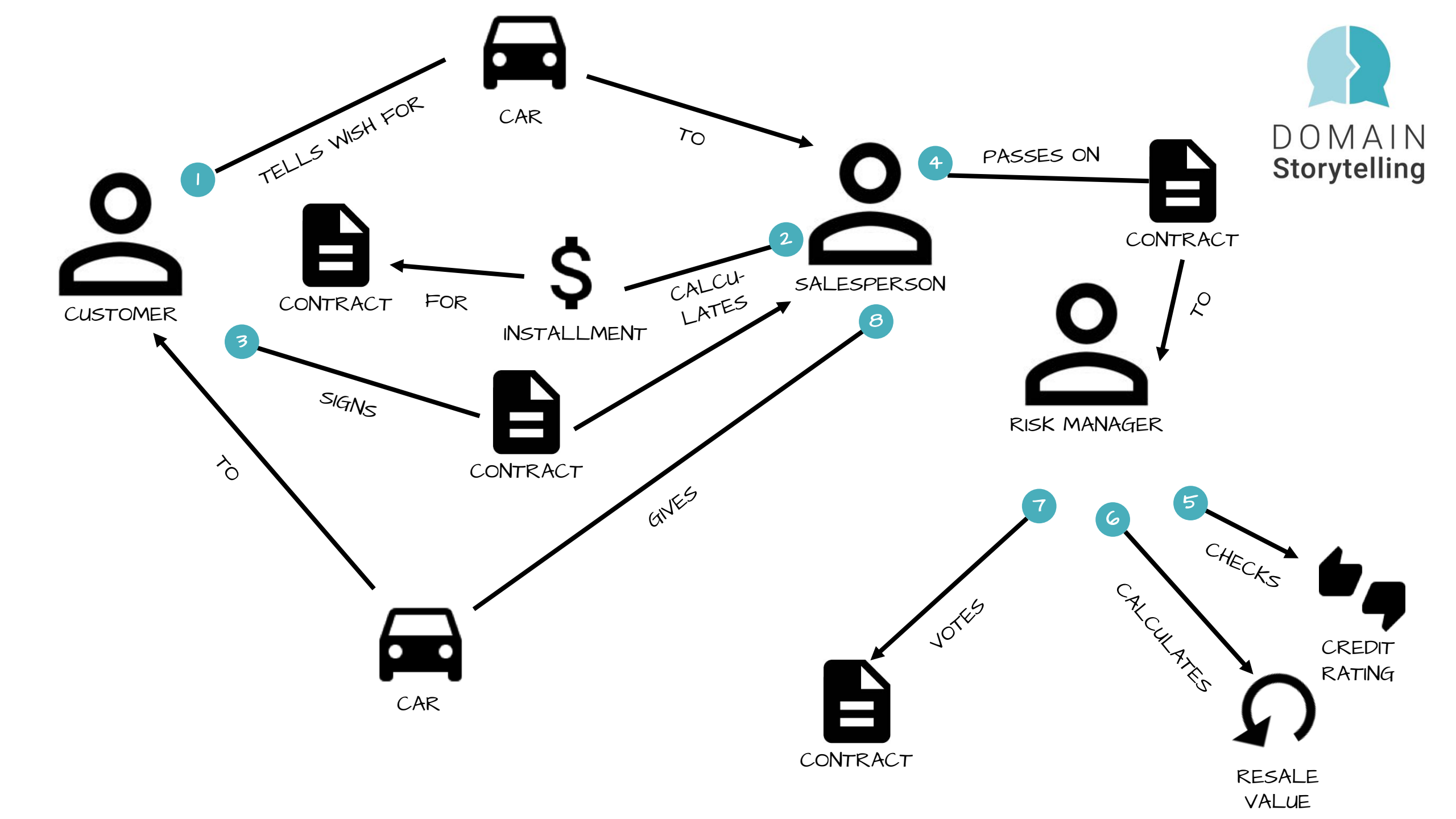
DOMAIN
Storytelling
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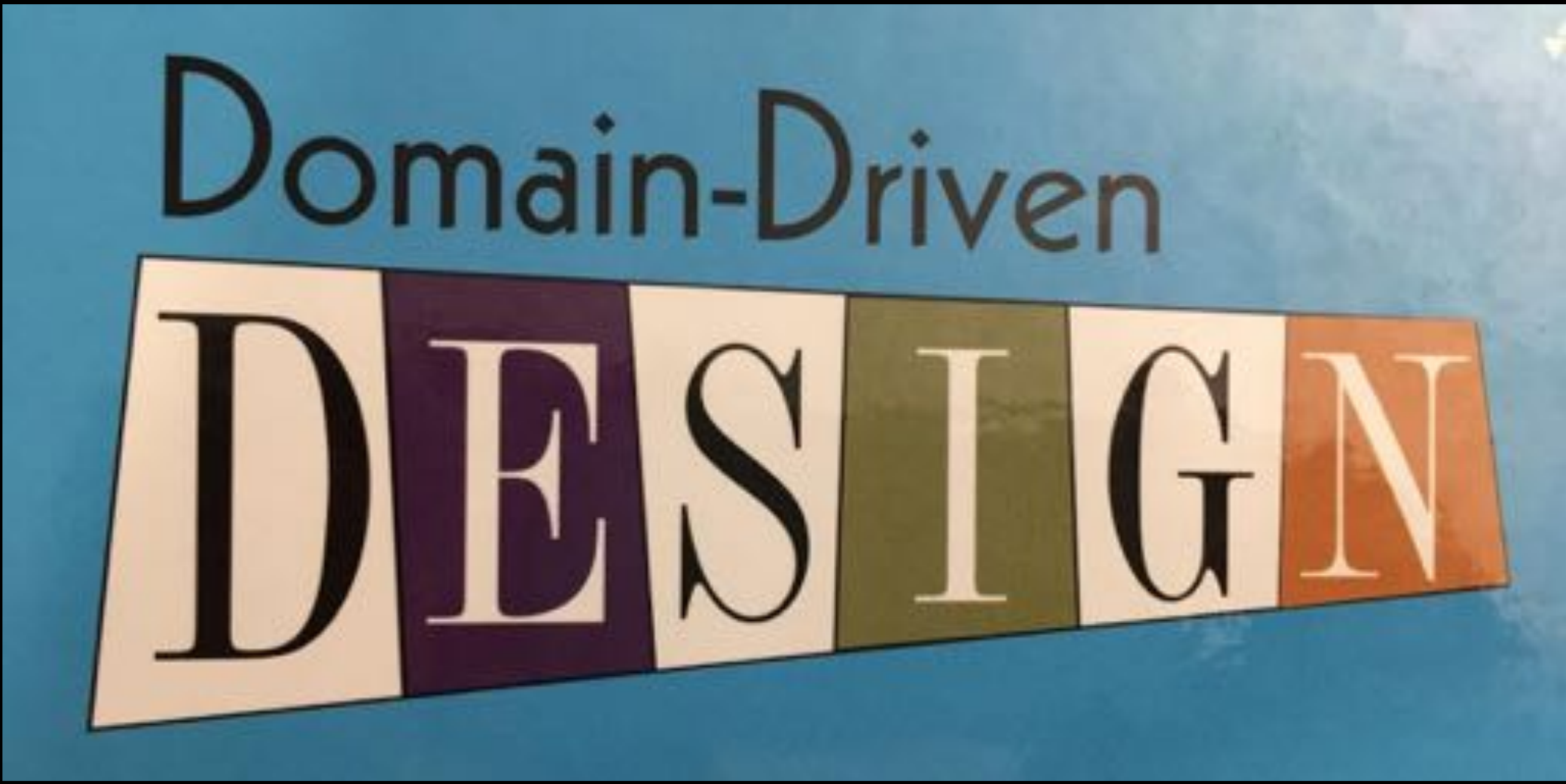
TELLS WISH FOR
TO
CUSTOMER
CONTRACT
FOR
INSTALLMENT
2
CALCU-
LATES
SALESPERSON
4
PASSES ON
CONTRACT
TO
RISK MANAGER
3
SIGNS
CONTRACT
8
GIVES
TO
CAR
7
VOTES
CONTRACT
6
CALCULATES
5
CHECKS
CREDIT
RATING
RESALE
VALUE

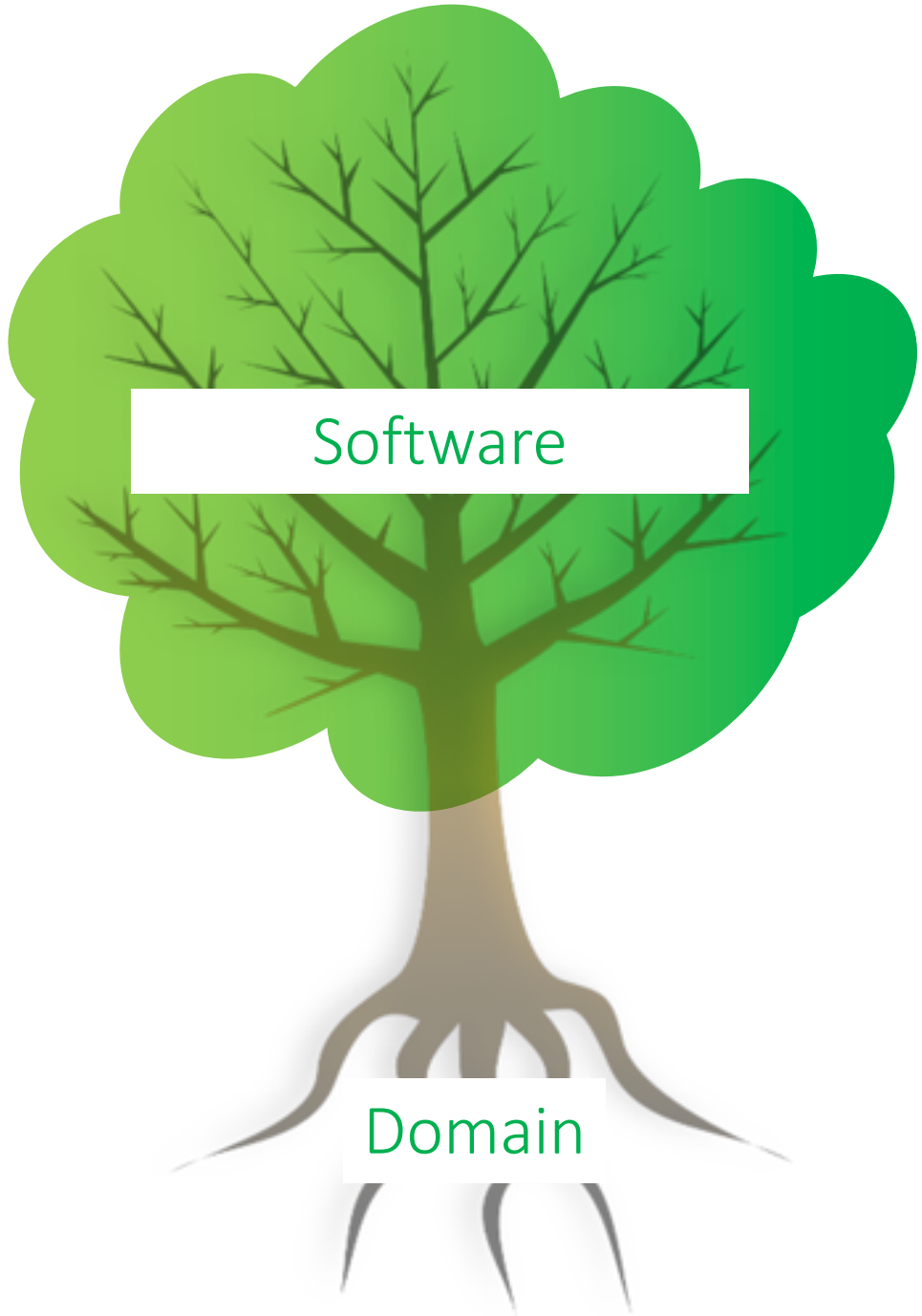
How do we design a program for that?

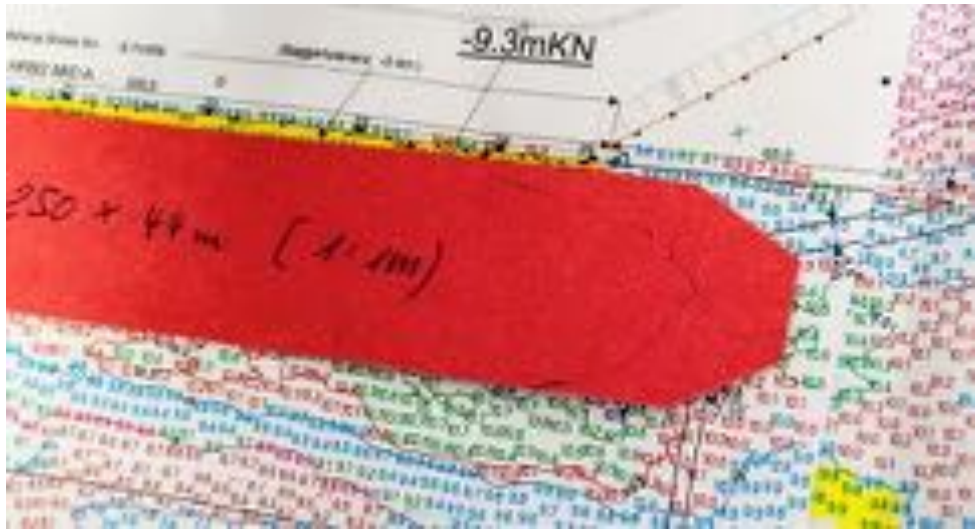

Domain-Driven
DESIGN

#dddesign

@hschwentner

-Driven design


Software
Domain


-9.3mKN

From Domain Story to Code

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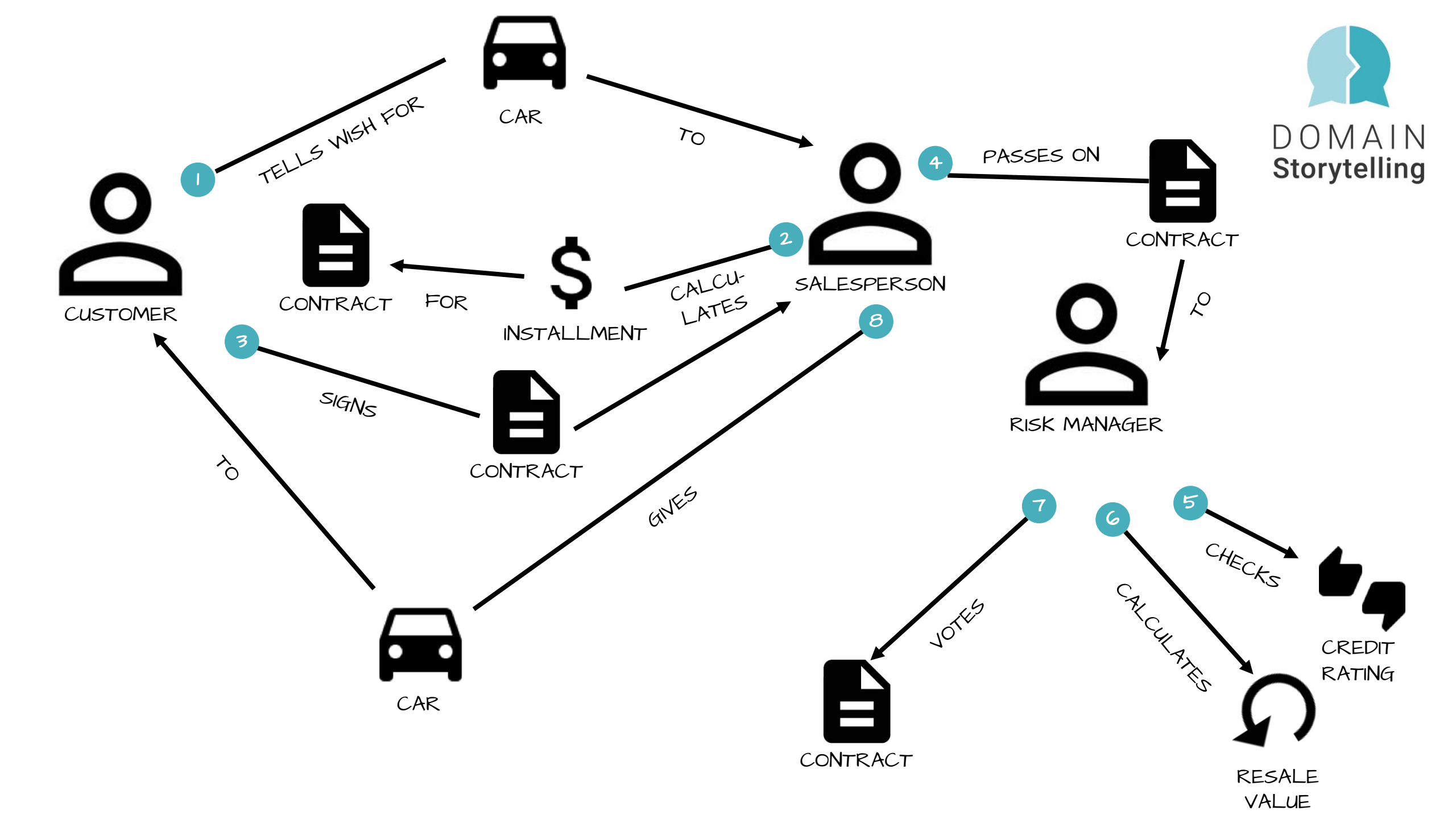
DOMAIN
Storytelling
CAR
1
TELLS WISH FOR
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CUSTOMER
CONTRACT
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VOTES
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CALCULATES
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CREDIT
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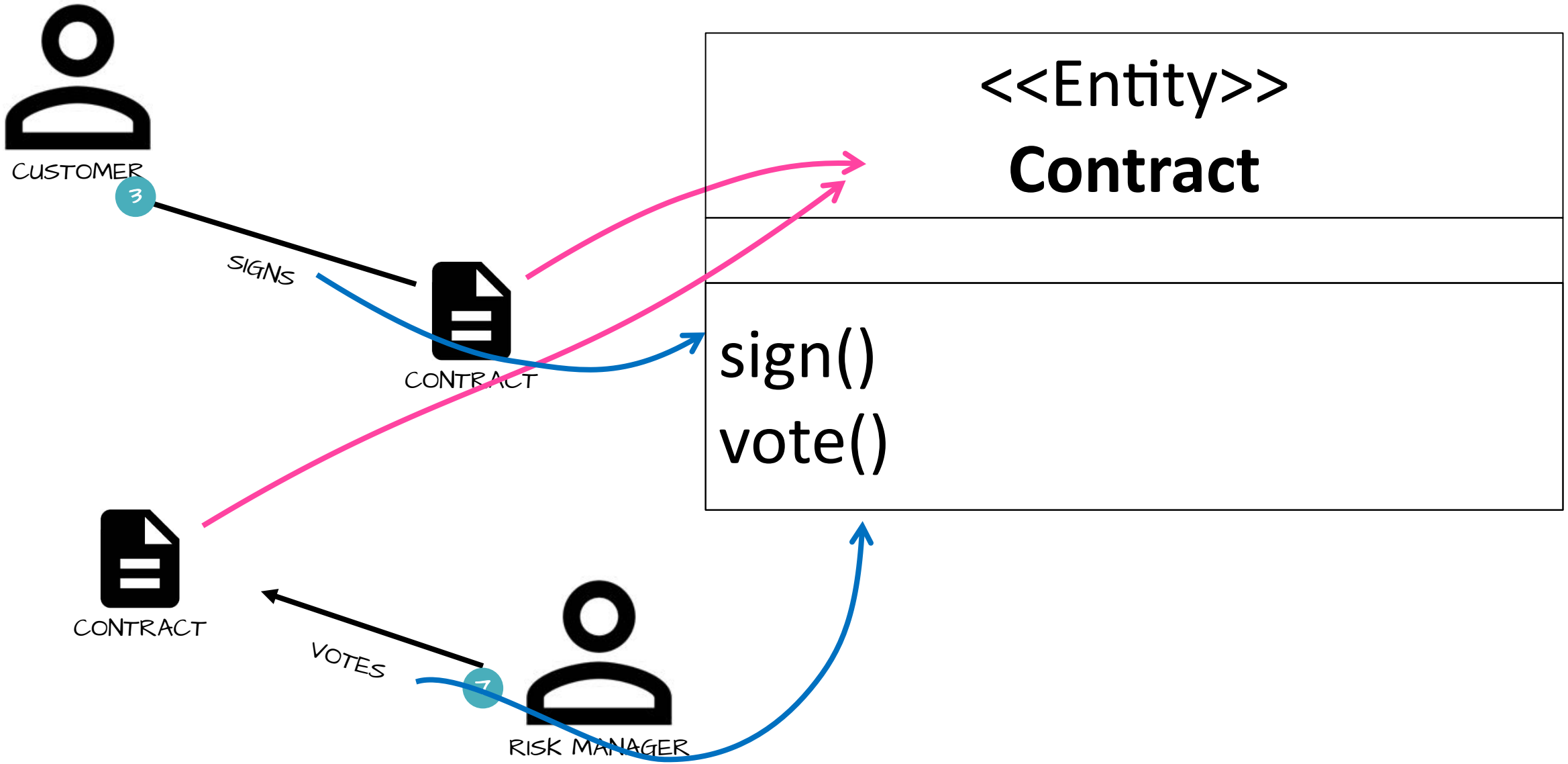
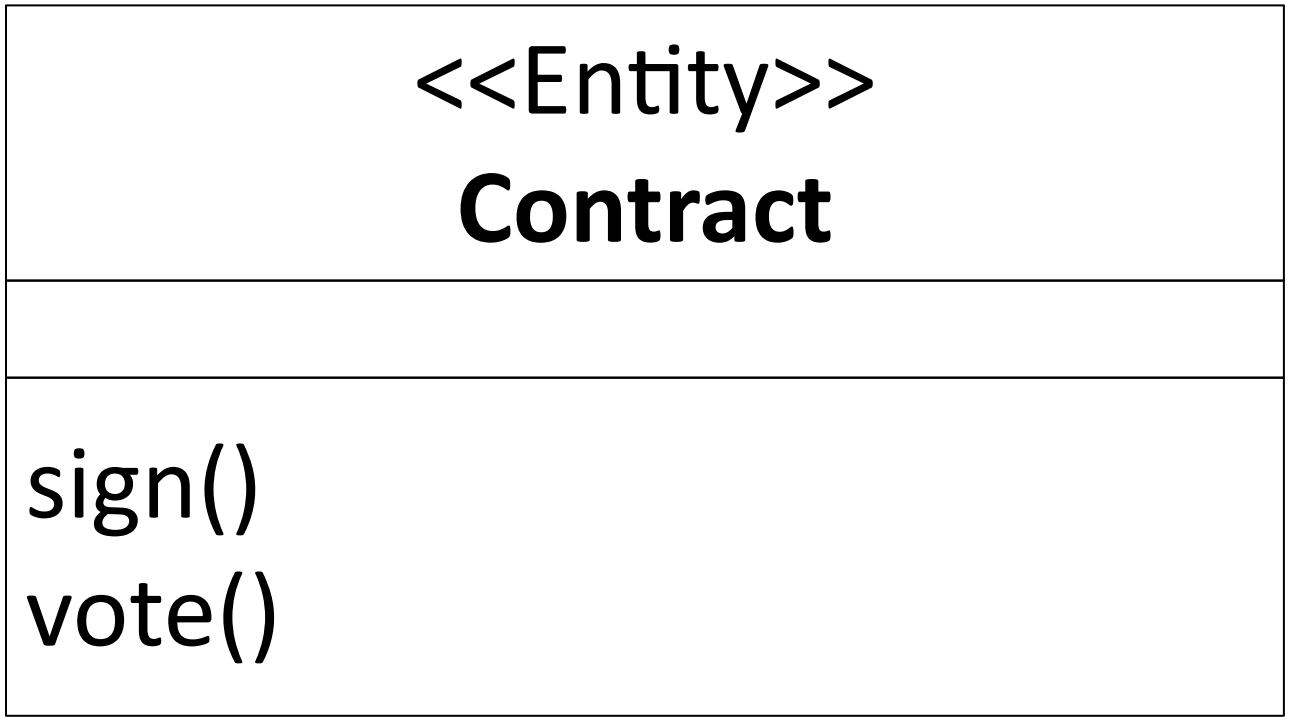
RESALE
VALUE


CUSTOMER
3
SIGNS
CONTRACT
<<Entity>>
Contract
sign()
vote()
CONTRACT
VOTES
RISK MANAGER


<<Entity>>
Contract
sign()
vote()

```
public class Contract {
     public void sign(SignDate date)
     //...
      public void vote(VoteResult result)
     //...
}
```

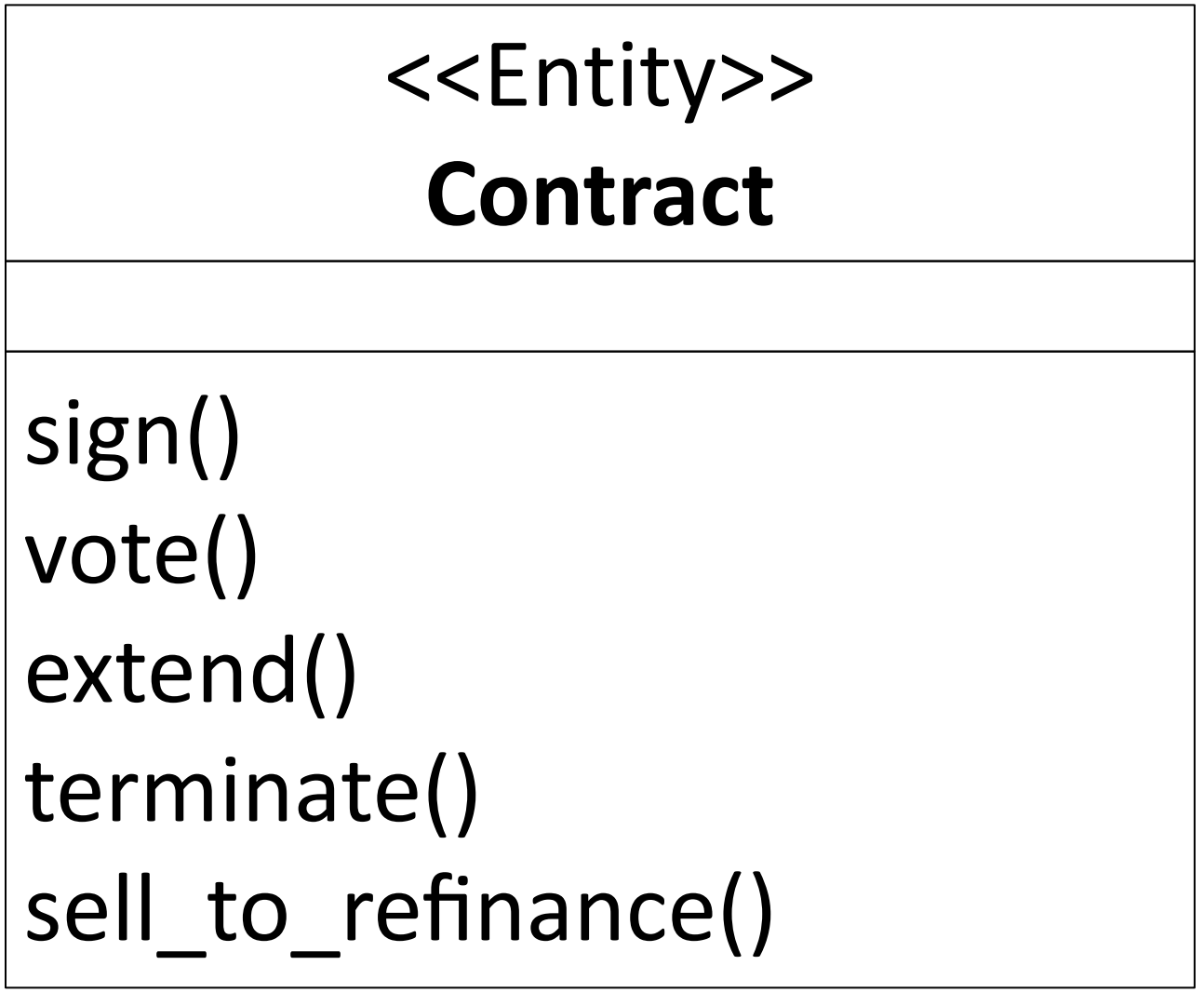
Object orientation

LeasingNinja.io

@hschwentner

Domain Stories for Strategic Design

@hschwentner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Contract
sign()
vote()
extend()
terminate()
sell_to_refinance()

The One Big Model

Reality:
Not one big model
But several mixed models

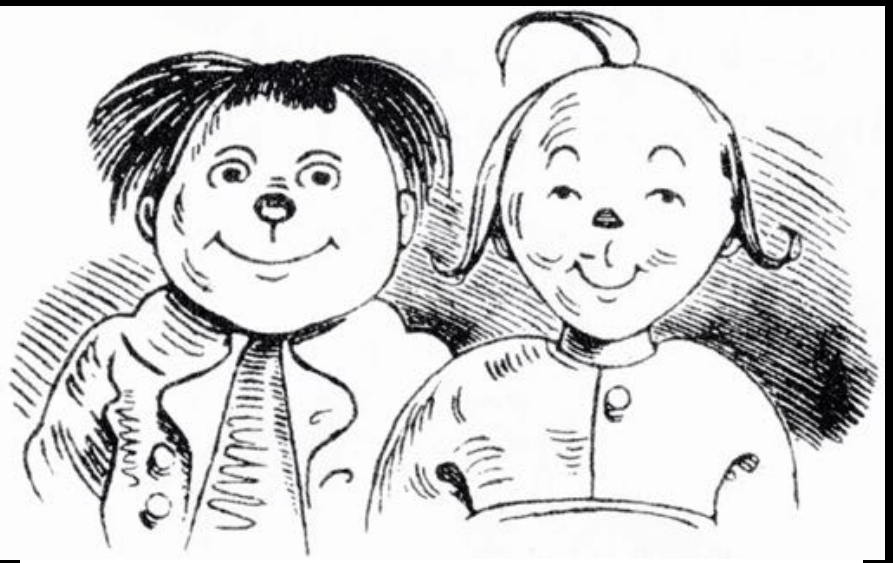

the horror

"Whoever uses a canonical model has lost control over his life."
– Karl Lagerfeld

»Wer ein unternehmensweites Modell einsetzt, hat die Kontrolle über sein Leben verloren«
– Karl Lagerfeld

Why is that?

Too big
to be understood
as a whole



Max und Moritz

eine

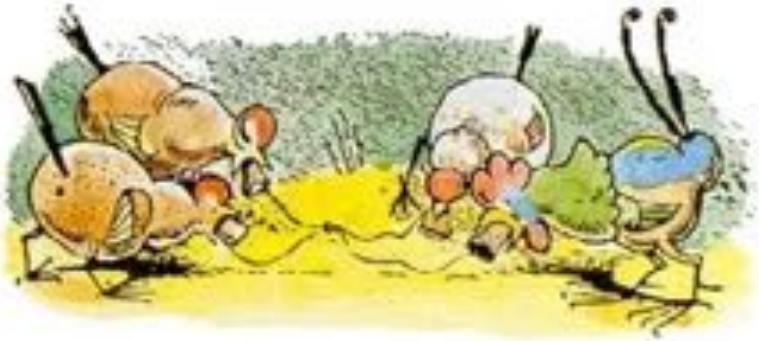
Bubengeschichte

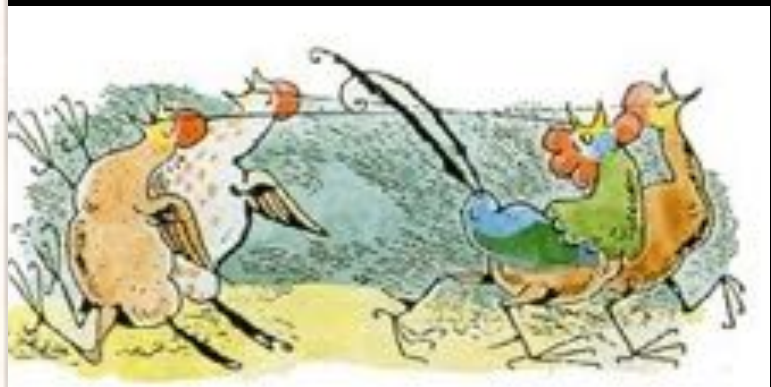
in

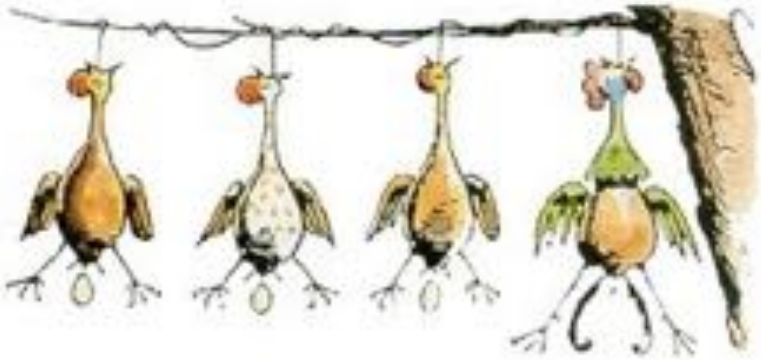
sieben Streichen

von

Wilhelm Busch.

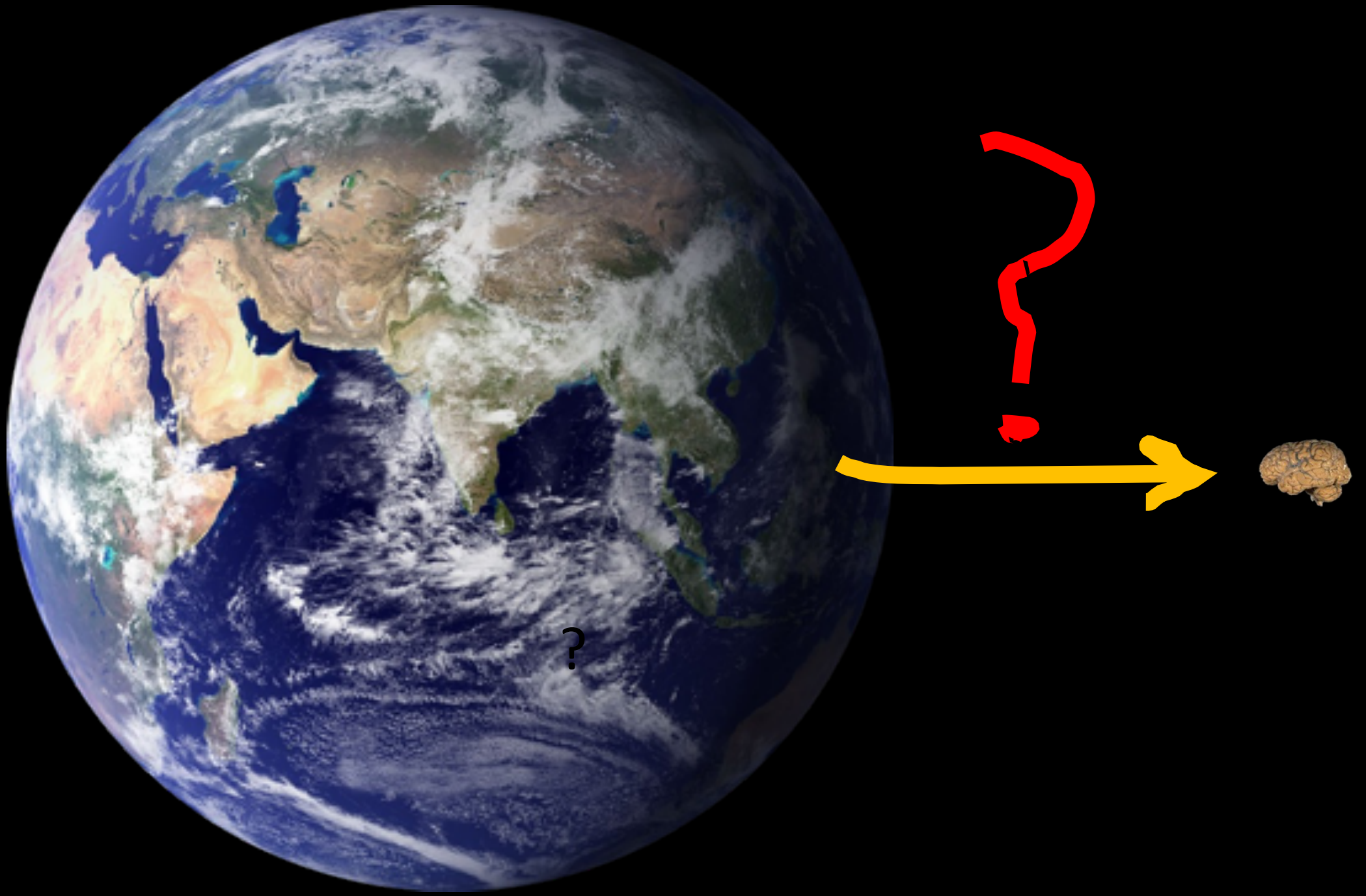


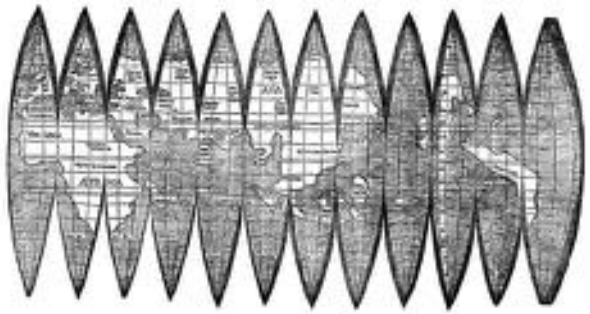


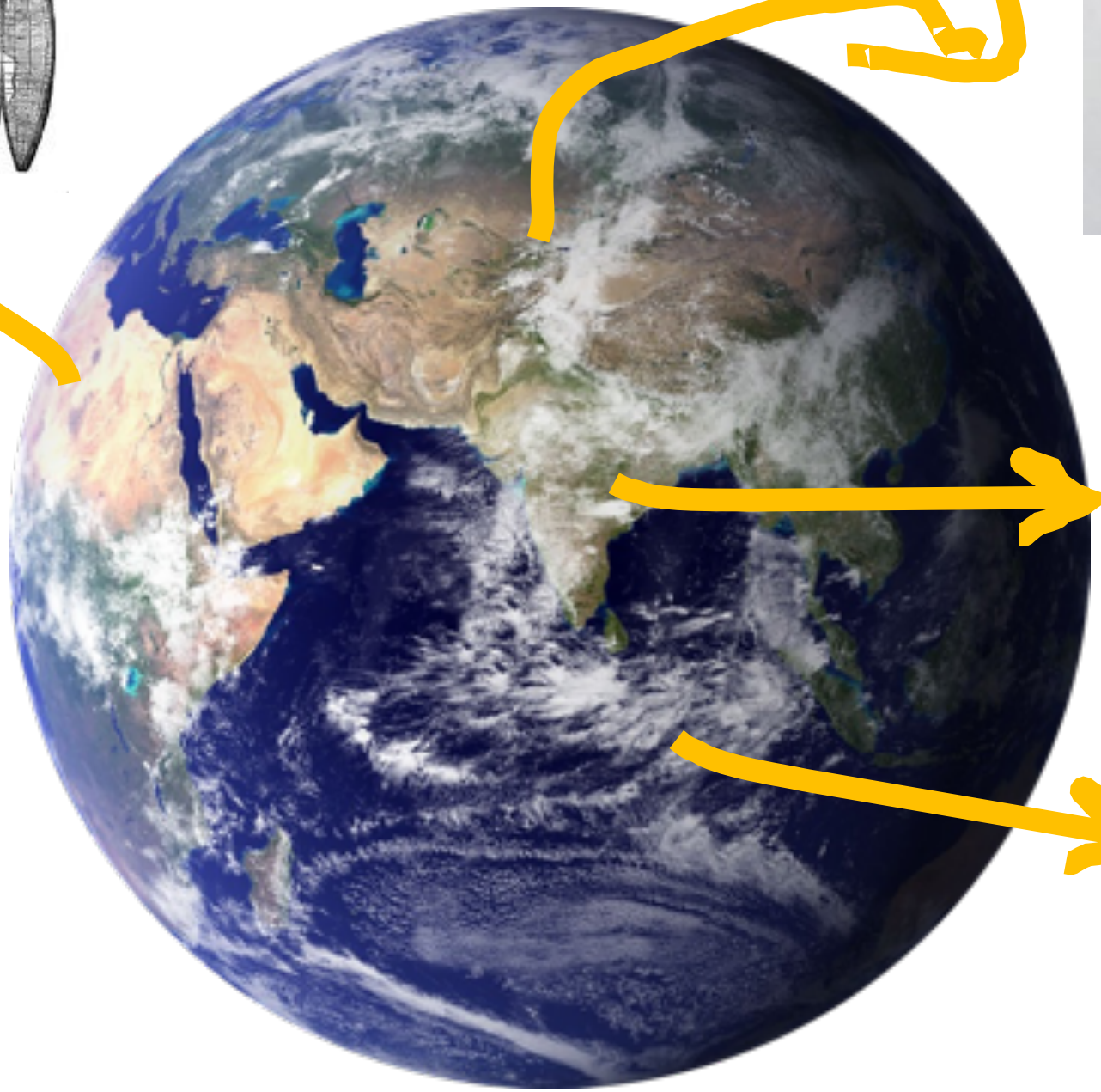


Model?

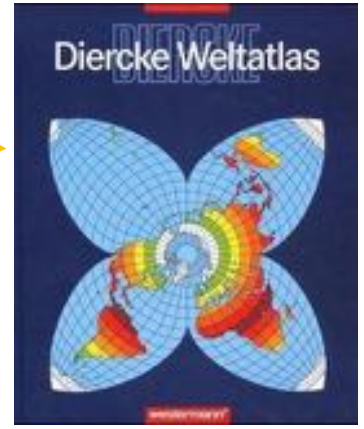
A tool to understand the world

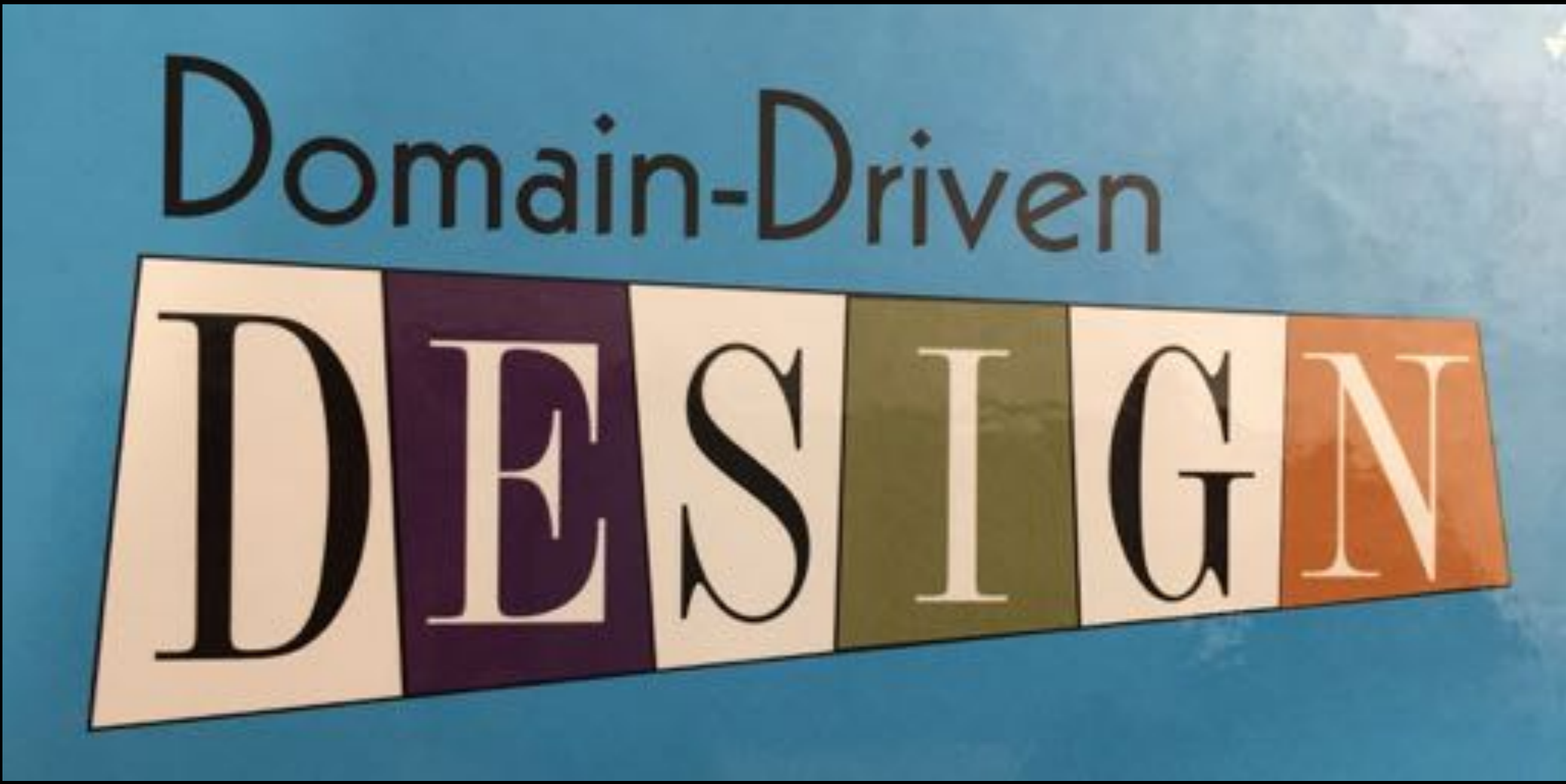




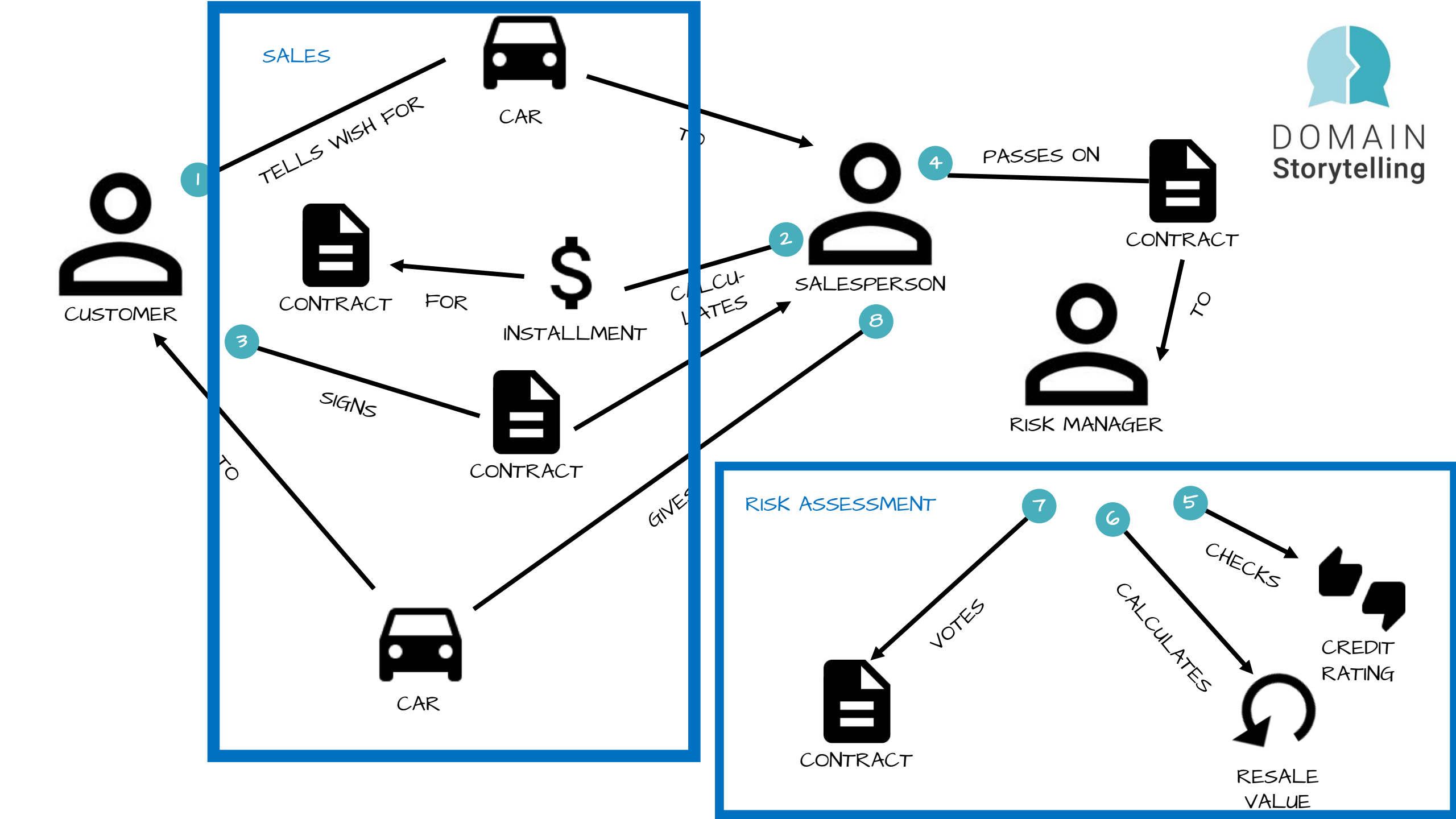



NORTH AMERICA
EUROPE
ASIA
AFRICA
SOUTH AMERICA
AUSTRALIA
ANTARCTICA


Diercke Weltatlas


Domain-Driven
DESIGN


edu
net
com
info


DOMAIN
Storytelling
SALES
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1
TELLS WISH FOR
TO
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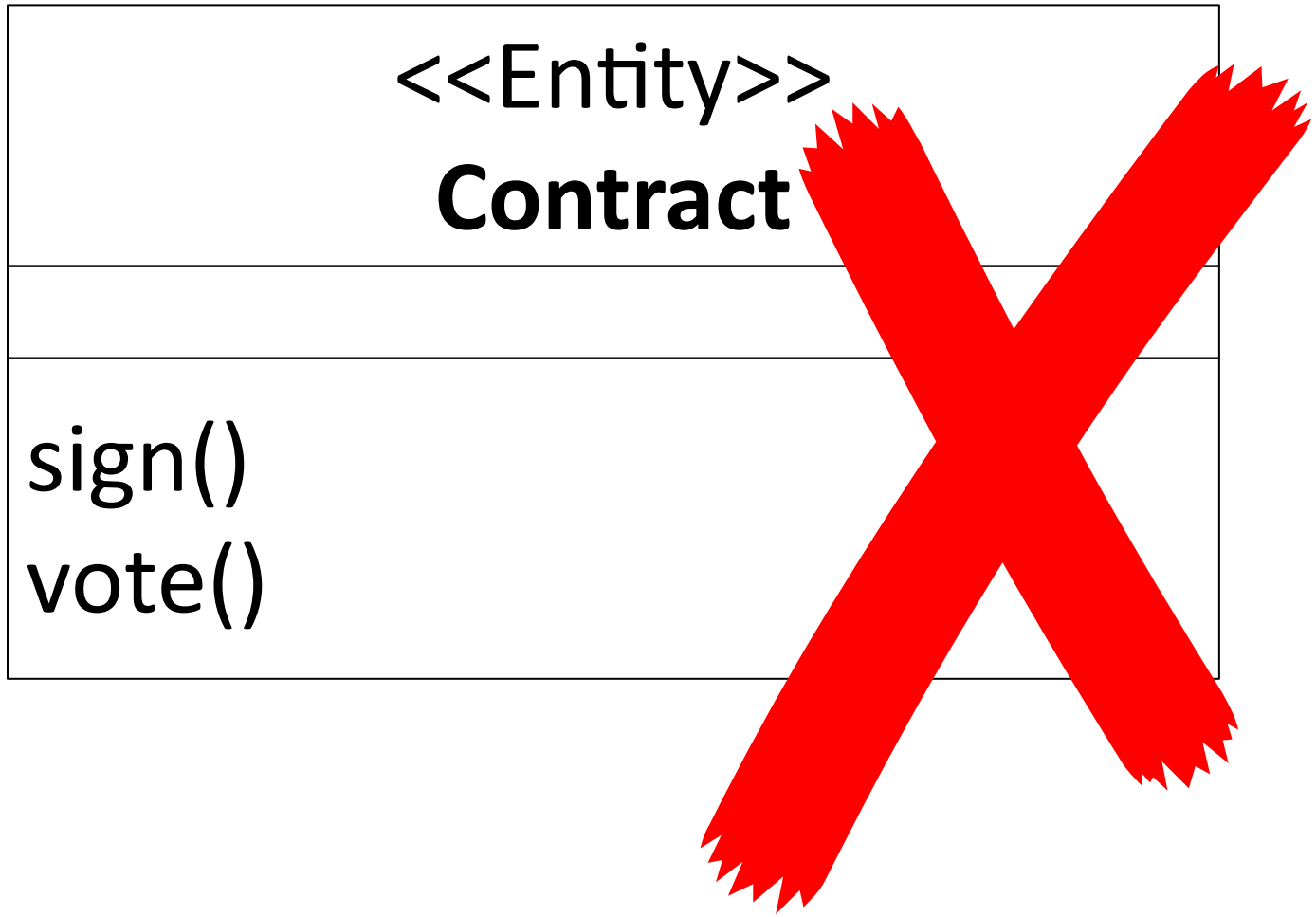
CONTRACT
FOR
$
INSTALLMENT
2
CALCU-
LATES
SALESPERSON
4
PASSES ON
CONTRACT
TO
RISK MANAGER
3
SIGNS
CONTRACT
8
GIVES
TO
CAR
RISK ASSESSMENT
7
VOTES
CONTRACT
6
CALCULATES
5
CHECKS
CREDIT
RATING
RESALE
VALUE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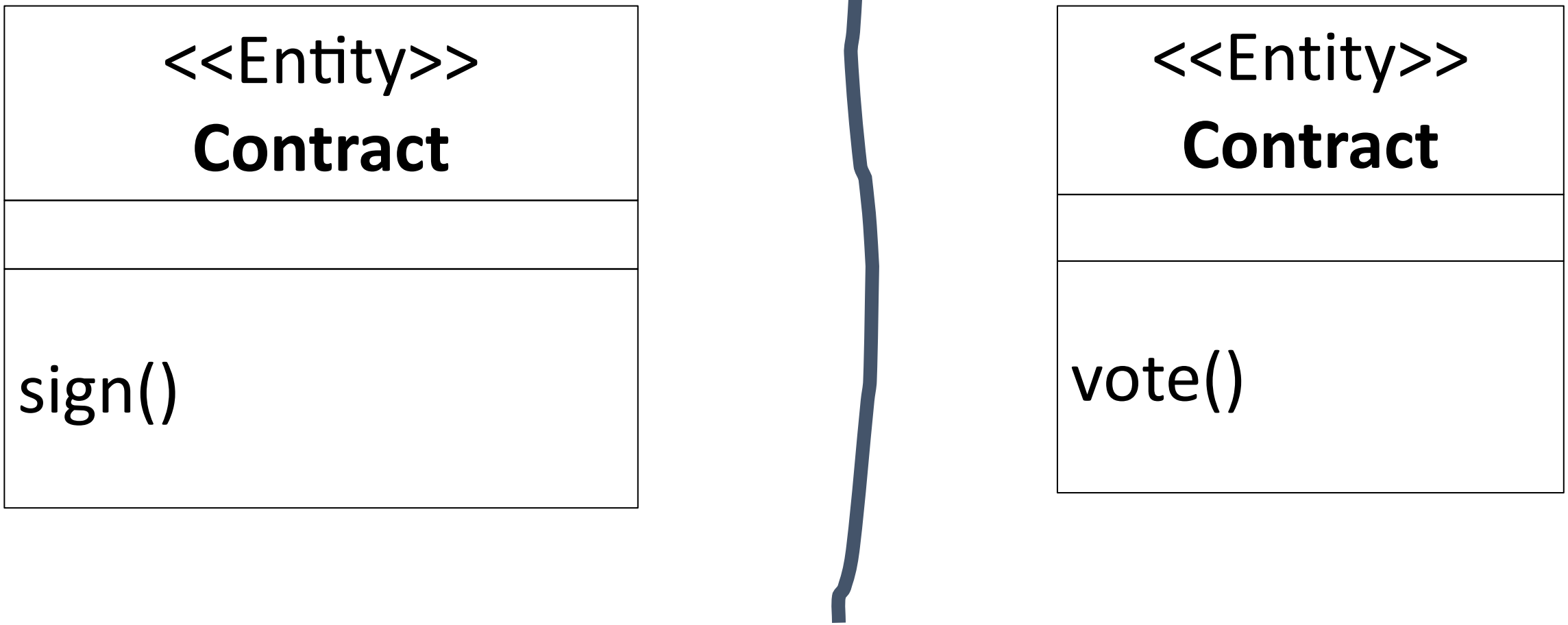
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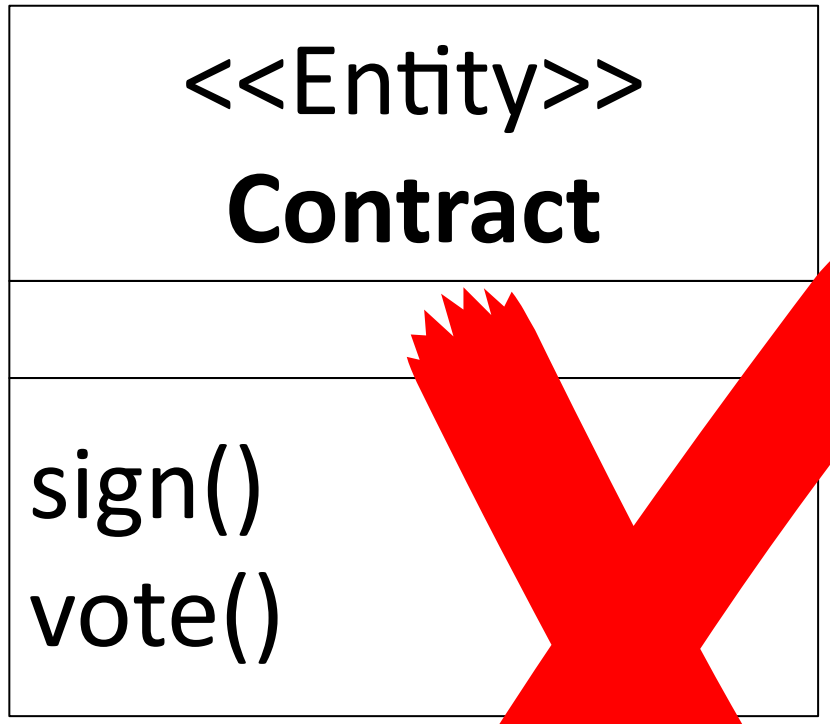
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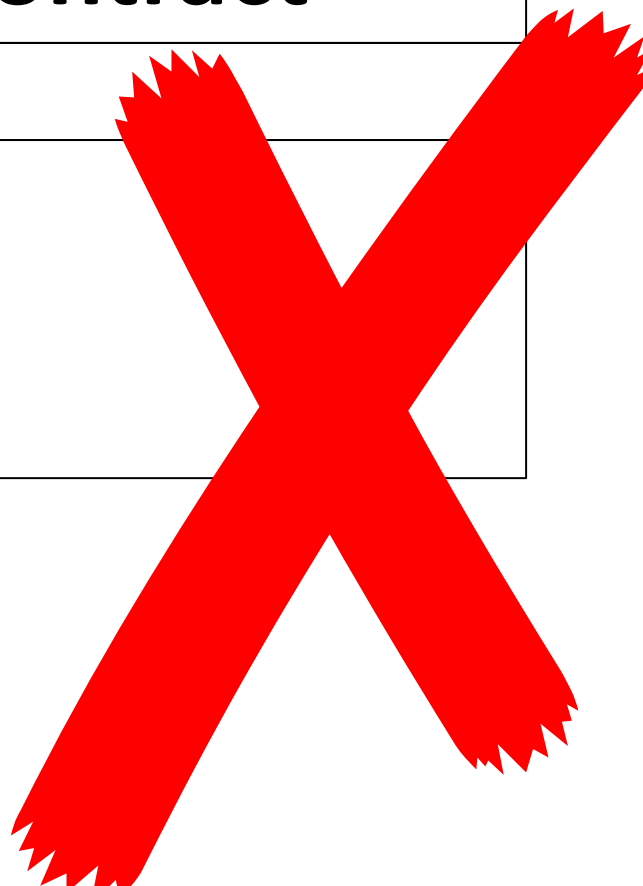

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Contract

vote()

SALES

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Contract

sign()

RISK ASSESSMENT

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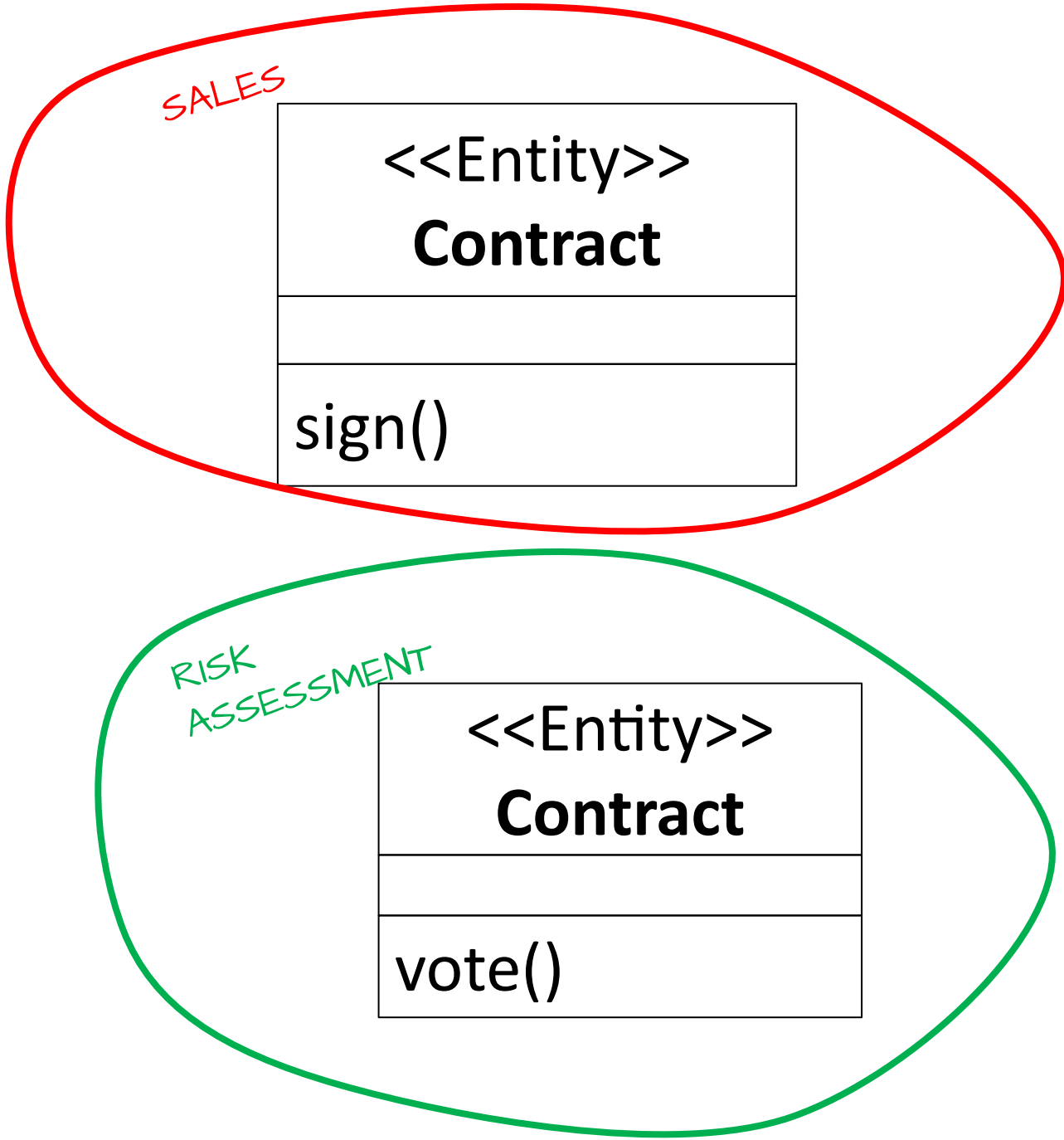
Contract

vote()

Bounded Context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RISK
ASSESSMENT
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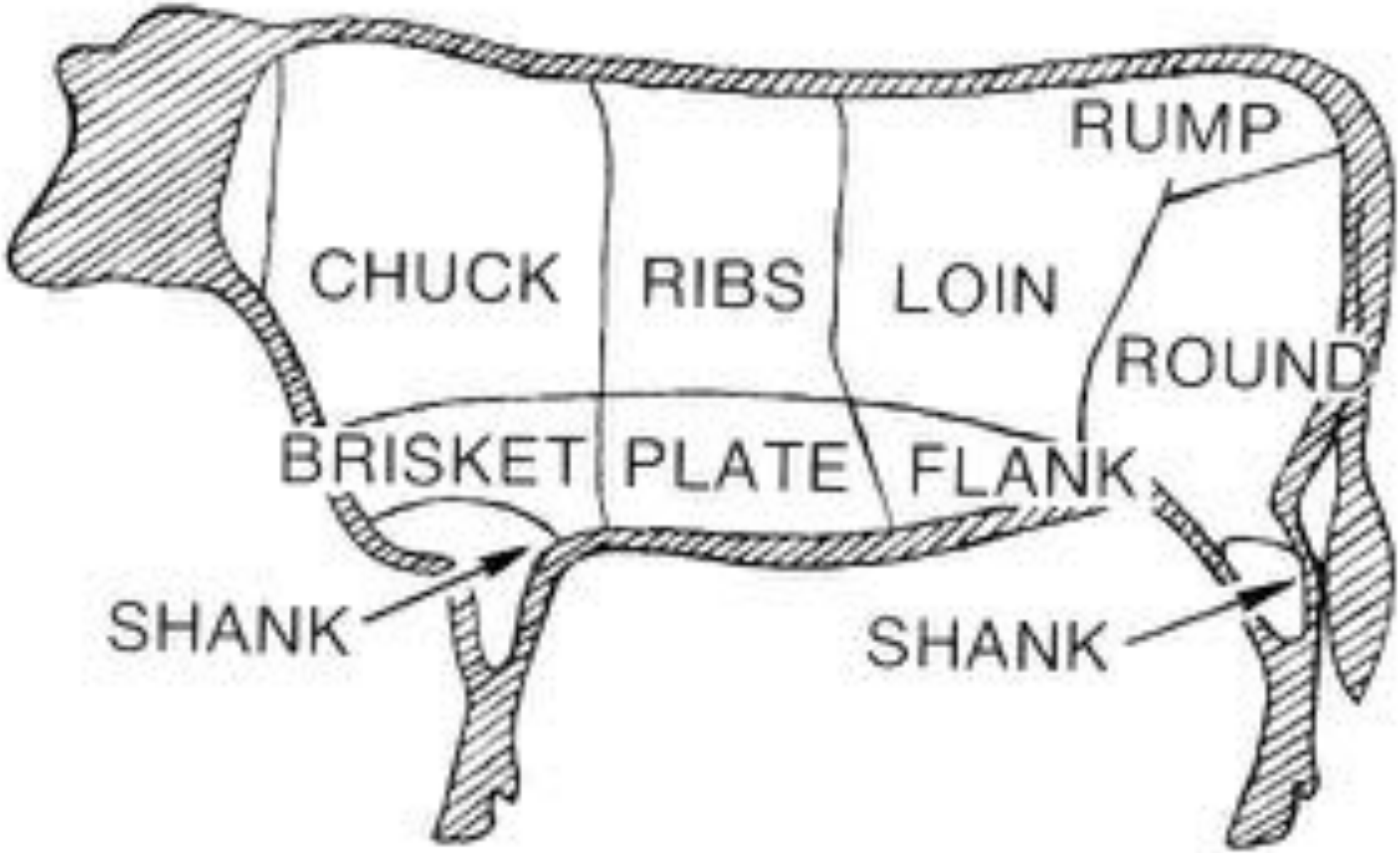
Contract
vote()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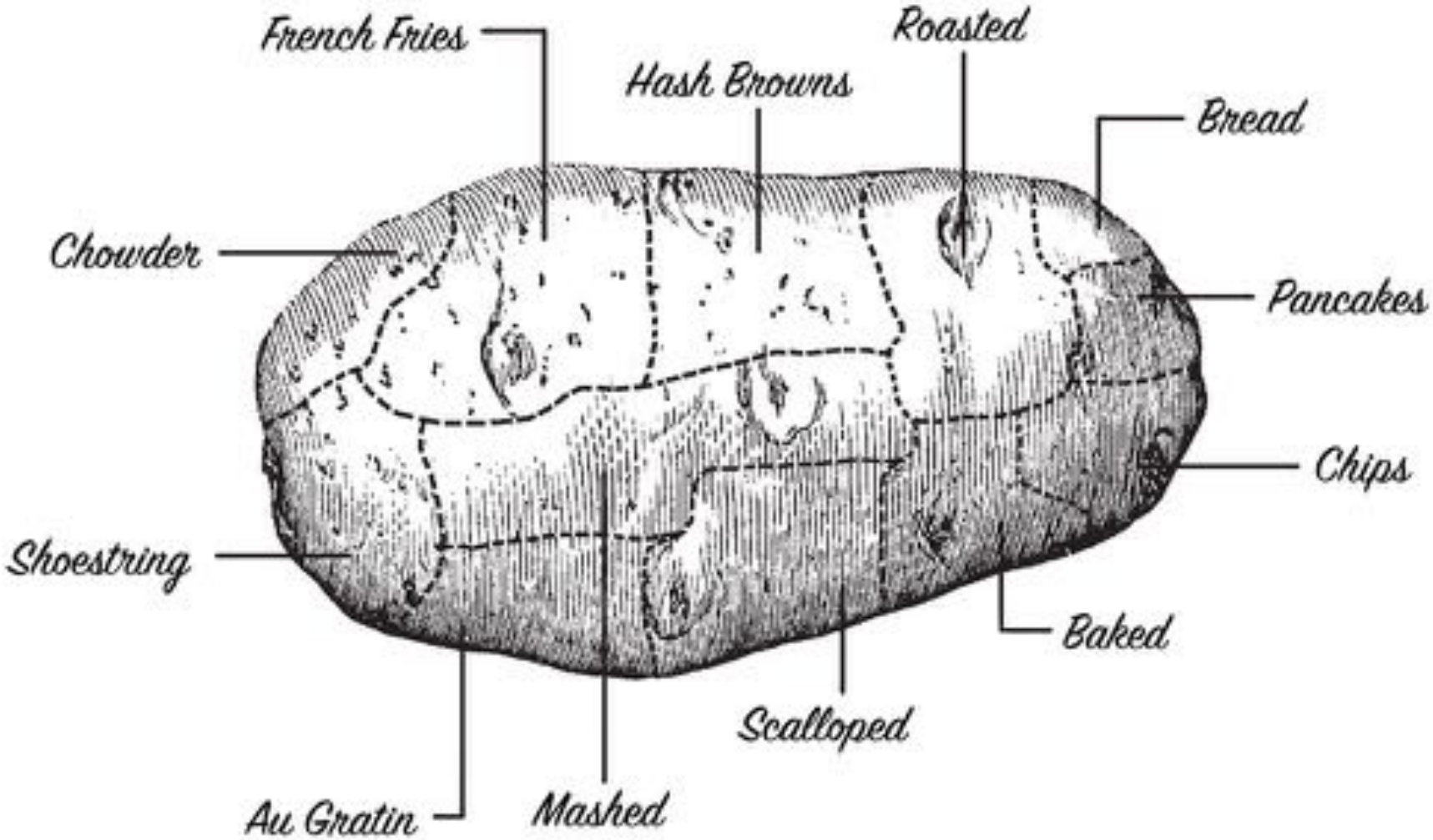

CHOICE CUTS OF IDAHO® POTATOES

Implementing Multiple Models

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JVM: Packages Jigsaw-Modules

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.NET: DLLs

@hschwentner

Other: Microservices Self-Contained Systems Verticals

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Exercise

Derive Domain Model:

- “Traveling by train”
- From fine-grained stories
- All together

Exercise

Derive Domain Model:

- "Going to the movies"
- From fine-grained stories
- In groups

Cutting the Monolith

Brownfield

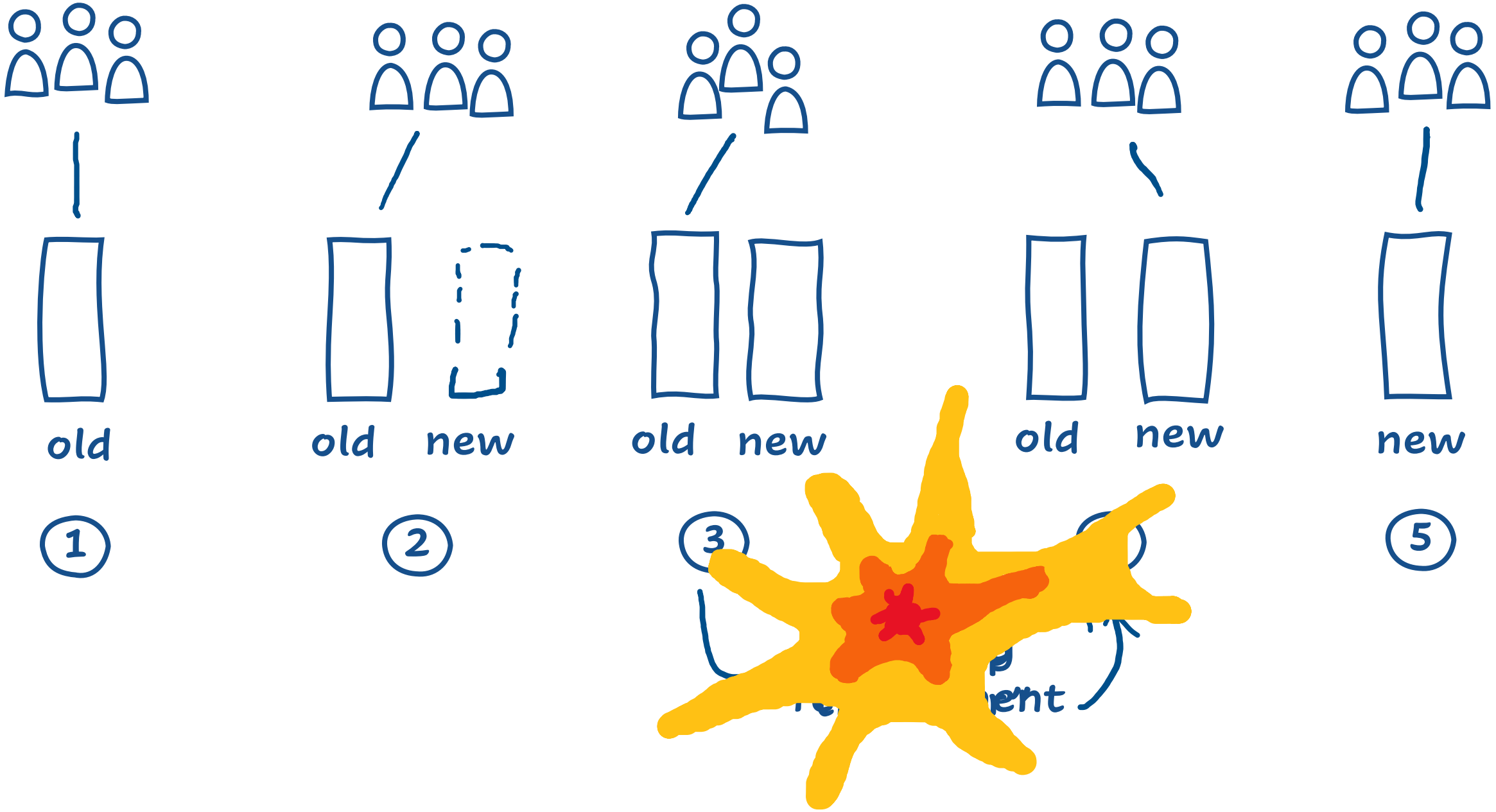
How to split the monolith®

Secret Recipe

@hschwentner

1) How should it be?
2) How is it?
3) How to move the “is” to the “ideal”?

1) How should it be?
    1) Domain Re-Discovery
    2) “ideal” context map
2) How is it?
    1) Architecture Analysis
    2) As-is context map
3) How to move the “is” to the “ideal”?
    1) Compare
    2) Create List of Refactorings
4) Do the move
    1) Extract a supporting domain to learn
    2) Then extract core(s)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old
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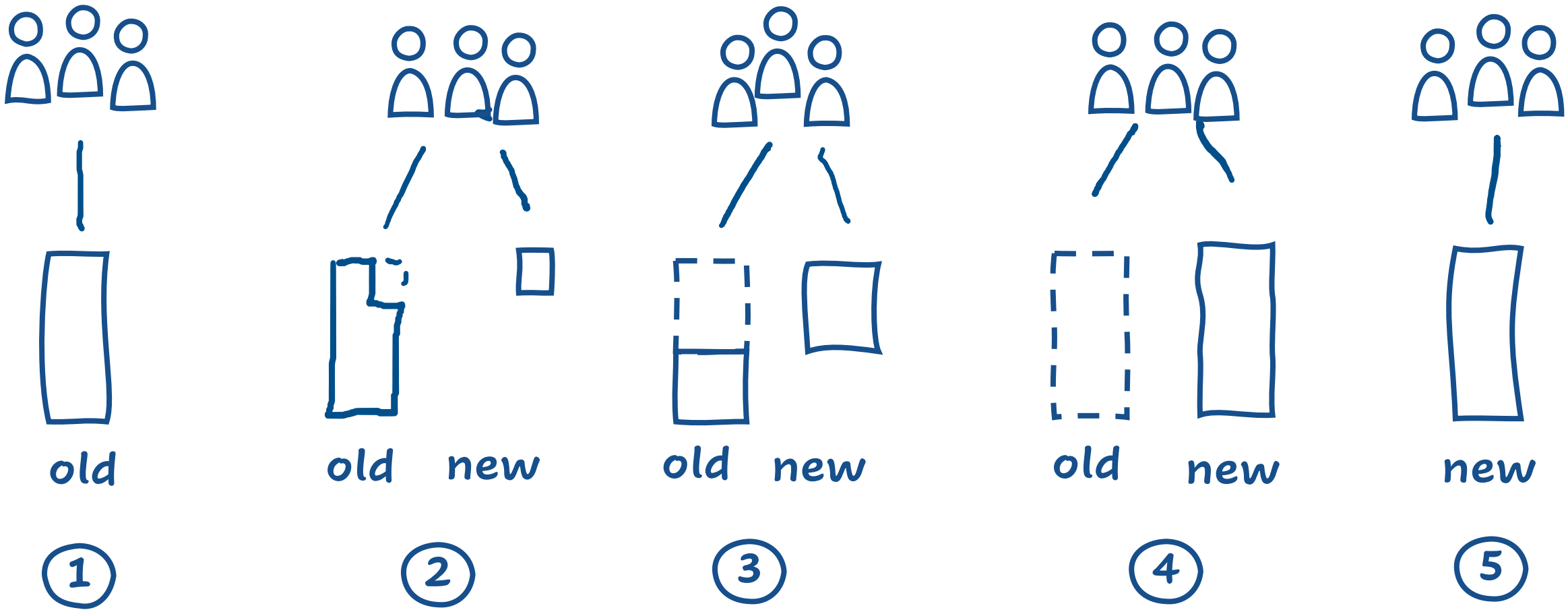
new
1
2
3
5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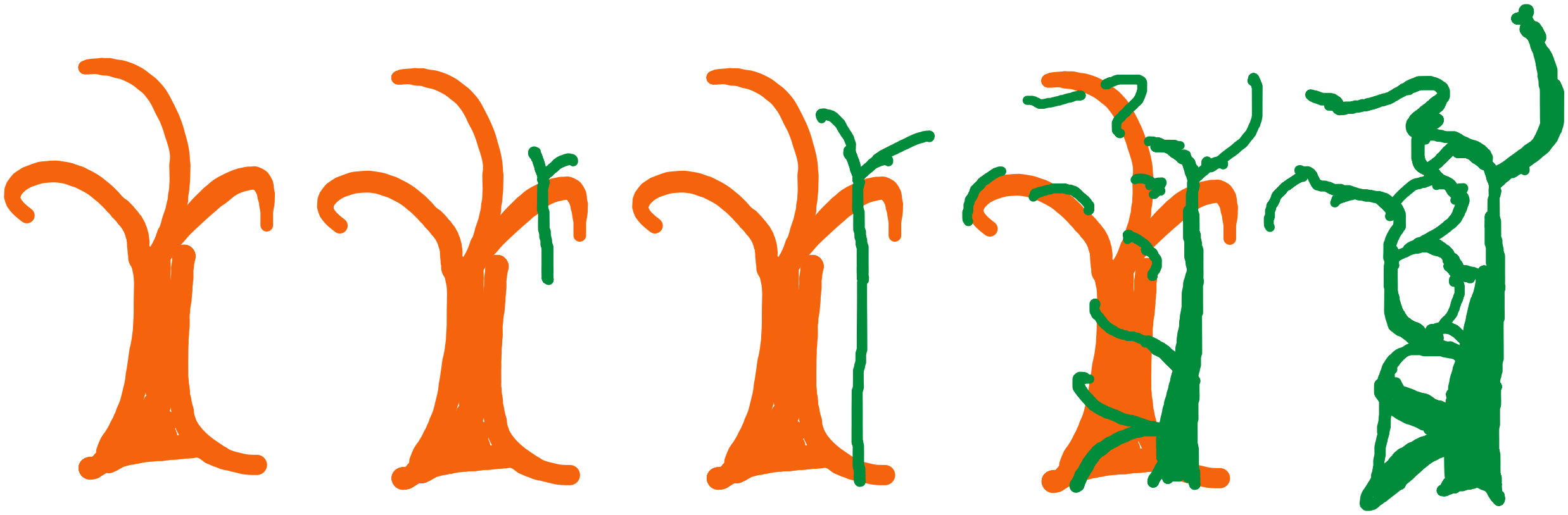
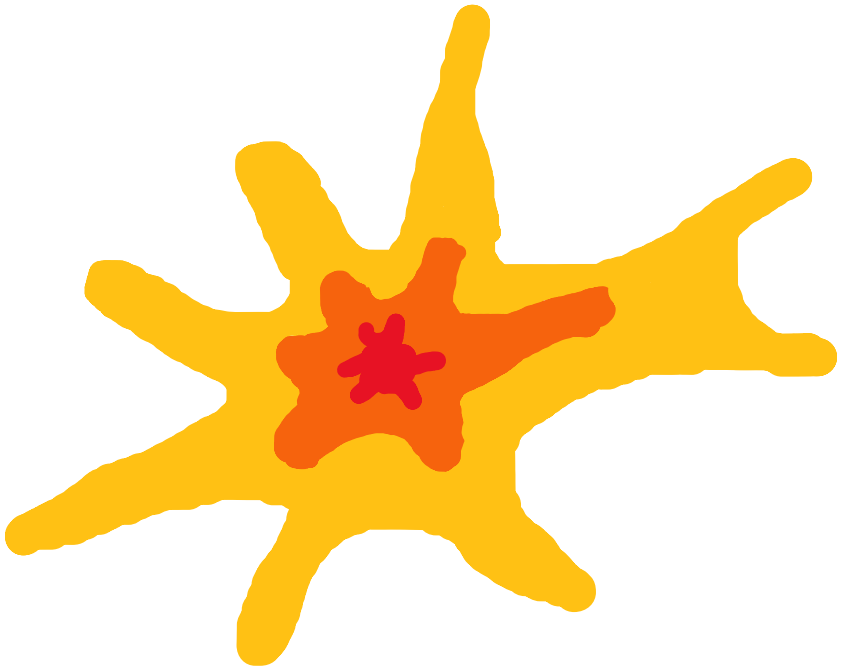
Strangler Fig Application



Strangler Fig Application

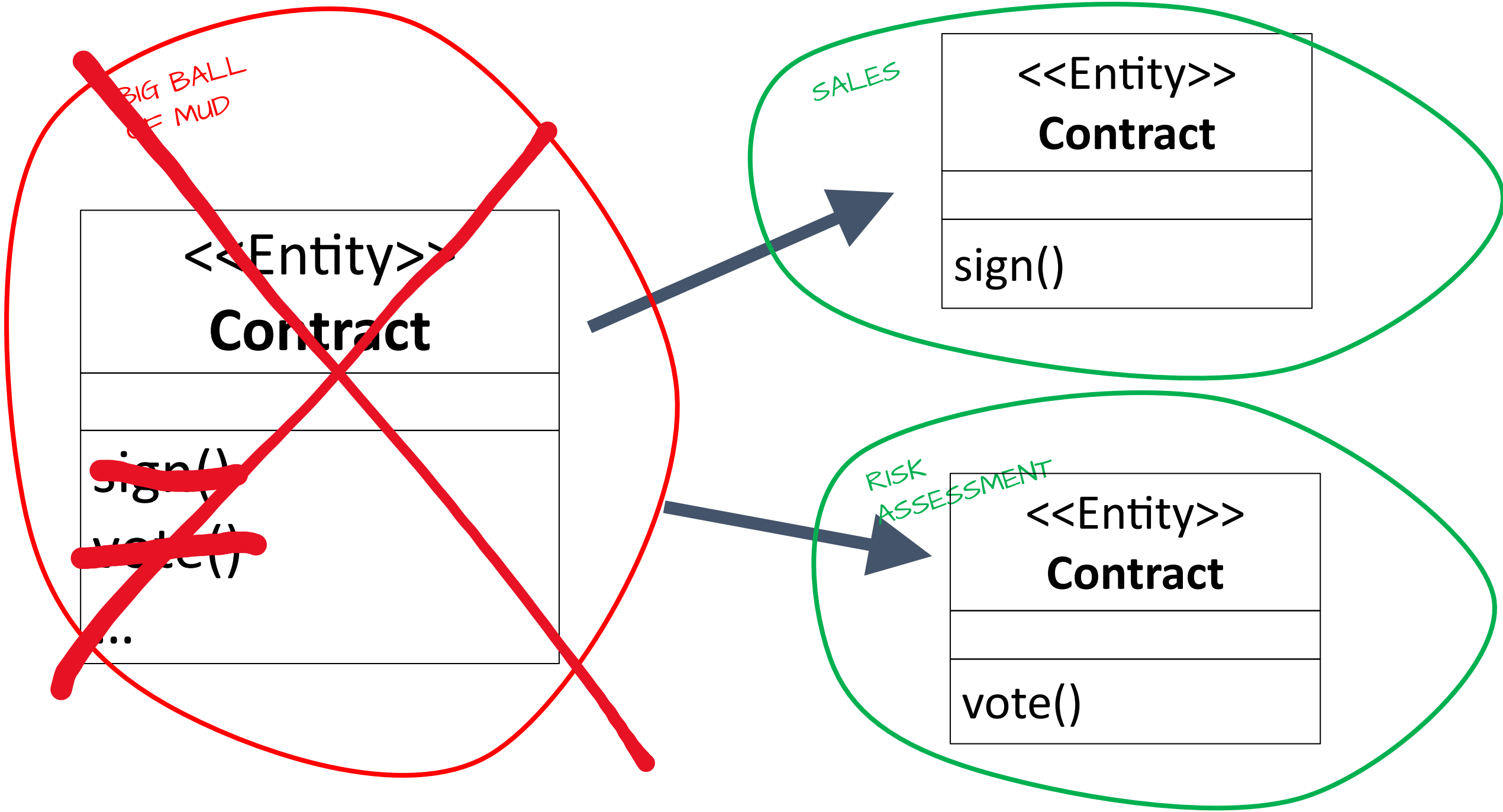
Lesson:

is better than



Strangler Fig Application

Big Bang Replacement


BIG BALL
OF MUD
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vote()
...
SALES
<<Entity>>
Contract
sign()
RISK
ASSESSMENT
<<Entity>>
Contract
vote()

Read on at:

https://hschwentner.io/domain-driven-refactorings

How to draw an Owl.

"A fun and creative guide for beginners"

Fig 1. Draw two circles

Fig 2. Draw the rest of the damn Owl

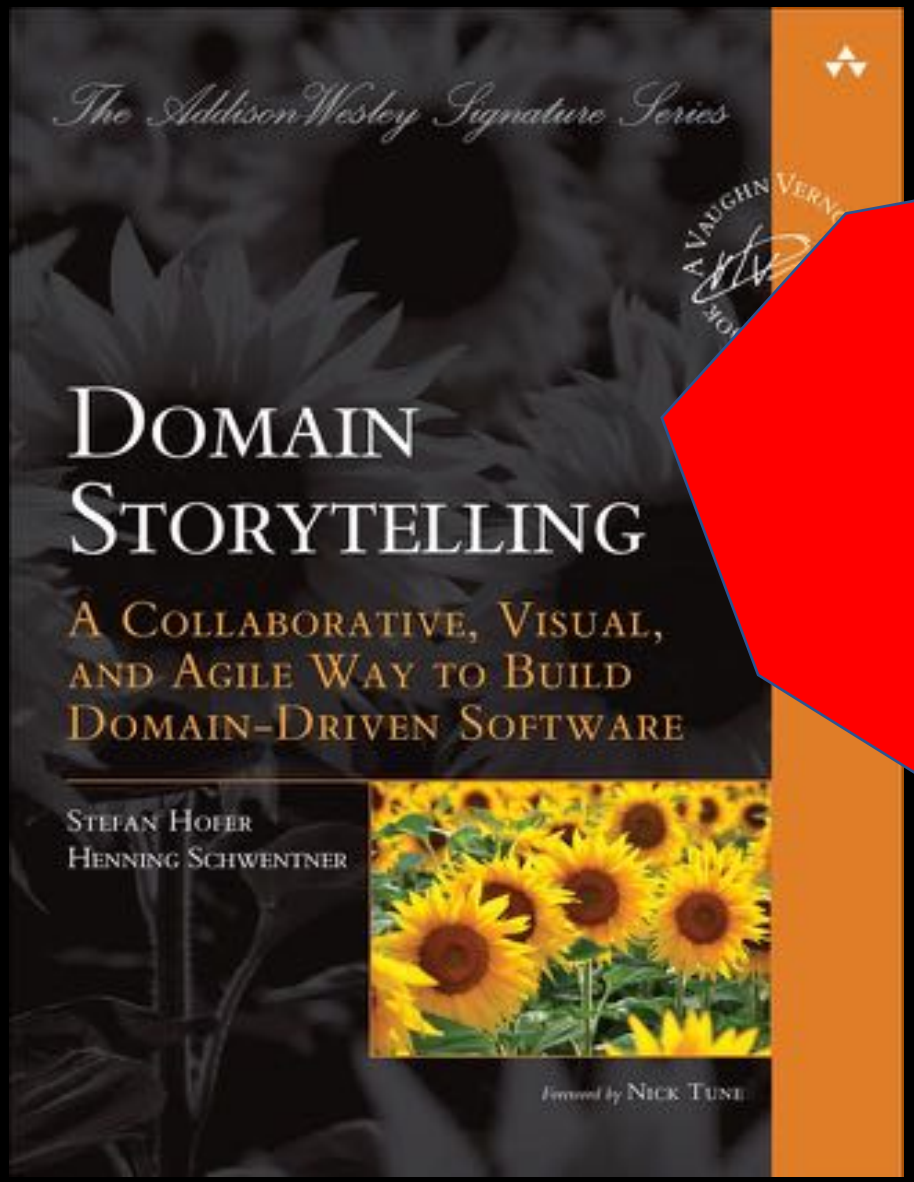
Consulting


007
YOU'LL

Conclusion

Further Reading

https://domainstorytelling.org



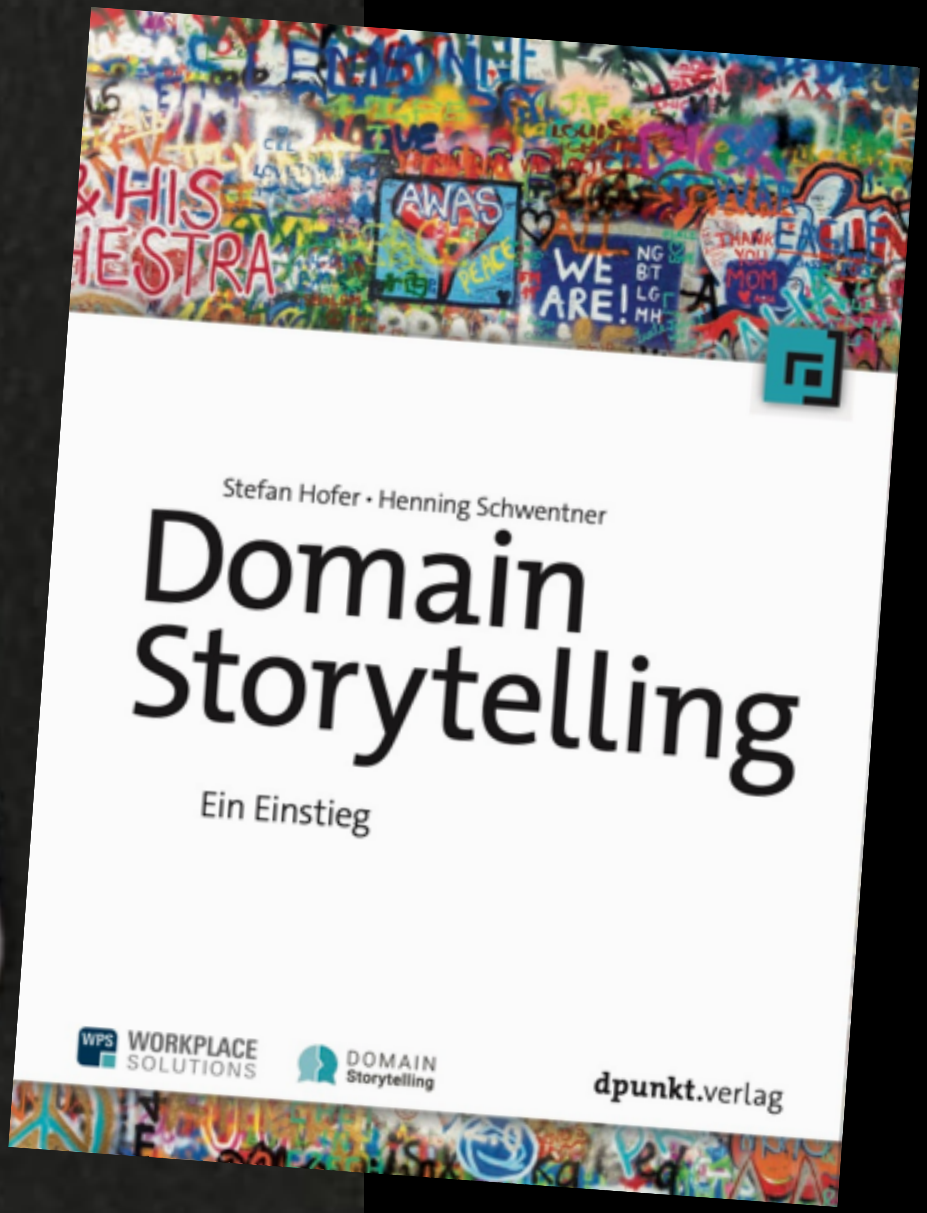
Get it at:
https://hschwentner.io

LeasingNinja.io

@hschwentner


THE
END
IS
NEAR

DOMAIN
Storytelling




Please evaluate
the session
Great!
Ok
meh _
NDC (Oslo)


Happy End
Recycling
öffnen
3
Recycling-
papier
8x

This has been a presentation of

Metro Goldwyn Lolcat

Henning Schwentner

https://hschwentner.io

@hschwentner

hs@wps.de

Appendix

What about Event Storming?


DOMAIN STORYTELLING
DDD
EVENT STORMING

EVENT STORMING AND DOMAIN STORYTELLING ARE GREAT

CAN'T DECIDE WHICH ONE I SHOULD USE IN MY NEXT PROJECT

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