Workshop "Experiencing Domain Driven Design"

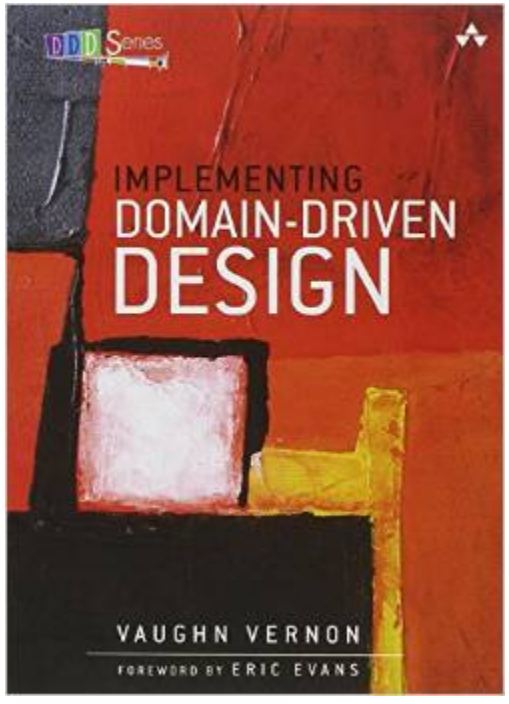
Summary

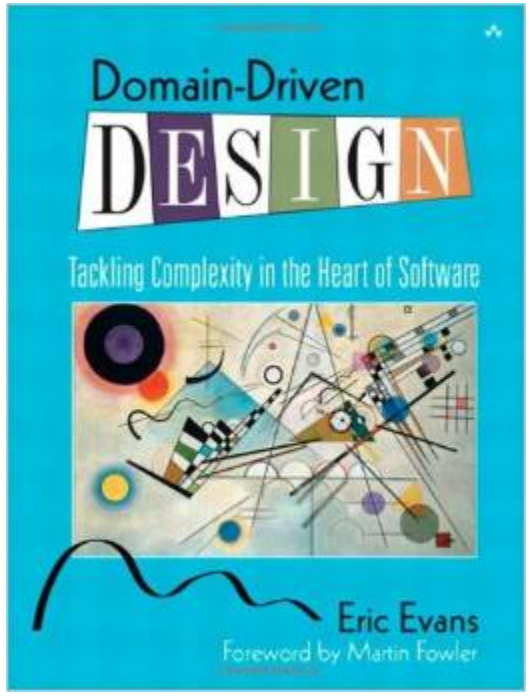
29-sept-2014

Workshop Experiencing Domain Driven Design

- Cursusgever: Mattias Verraes http://verraes.net/#talks
- "Workshop" van drie dagen.
- Programma dag 1: Intro / Systems thinking, Event storming..
- Programma dag 2 (n.a.v. voting): "Heuristics", Boeken, Context mapping.
- Programma dag 3: Event sourcing, CQRS, Event store, Model storming.

Domain Driven Design





Domain Driven Design Summary

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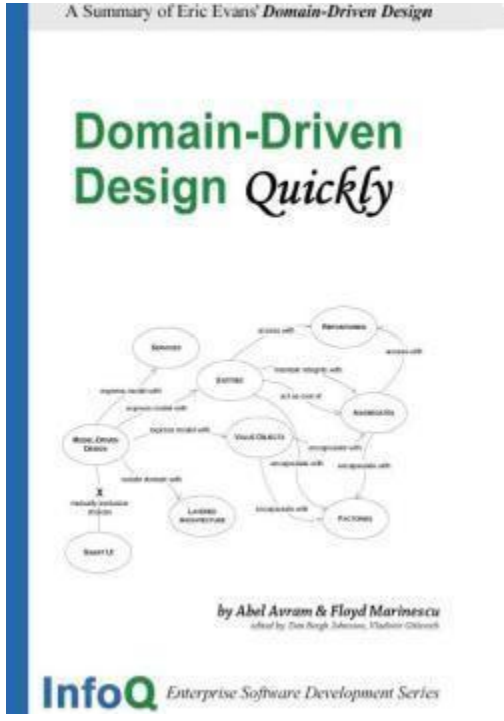
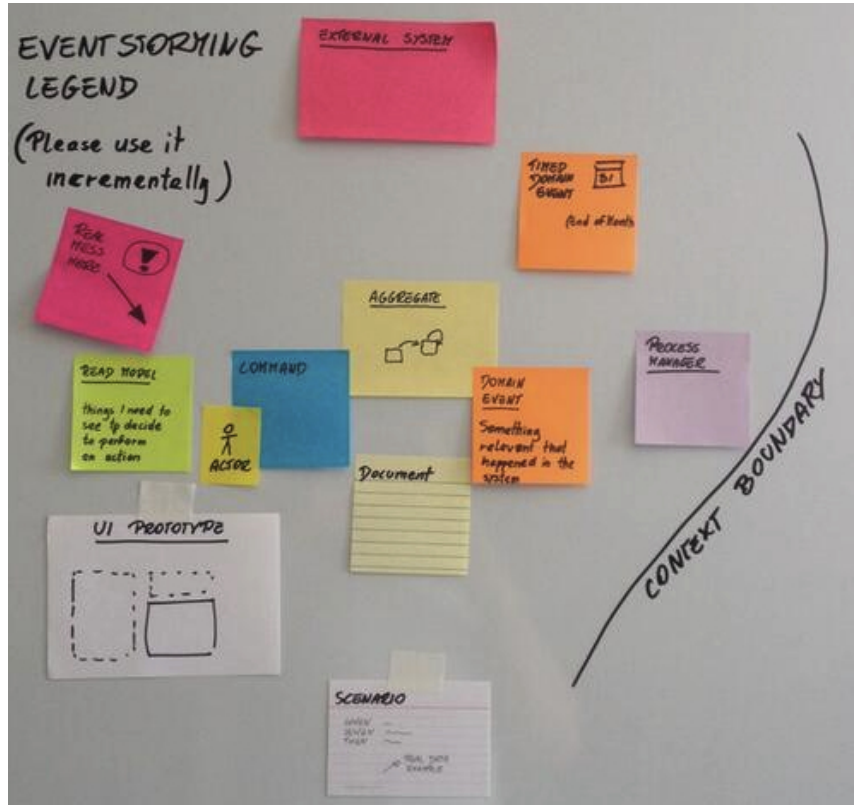


DDD

- Supple design
- Declarative design
- Refactoring
- Bounded contexts
- Distillation
- Large-scale structure
- Modelling whirlpool
- Model storming

Event storming

- Alberto Brandolini (link: here)
- Important events for the business.
- Events ==> Past tense and in the Ubiquitious language.
- No consensus first, better to have alternatives.



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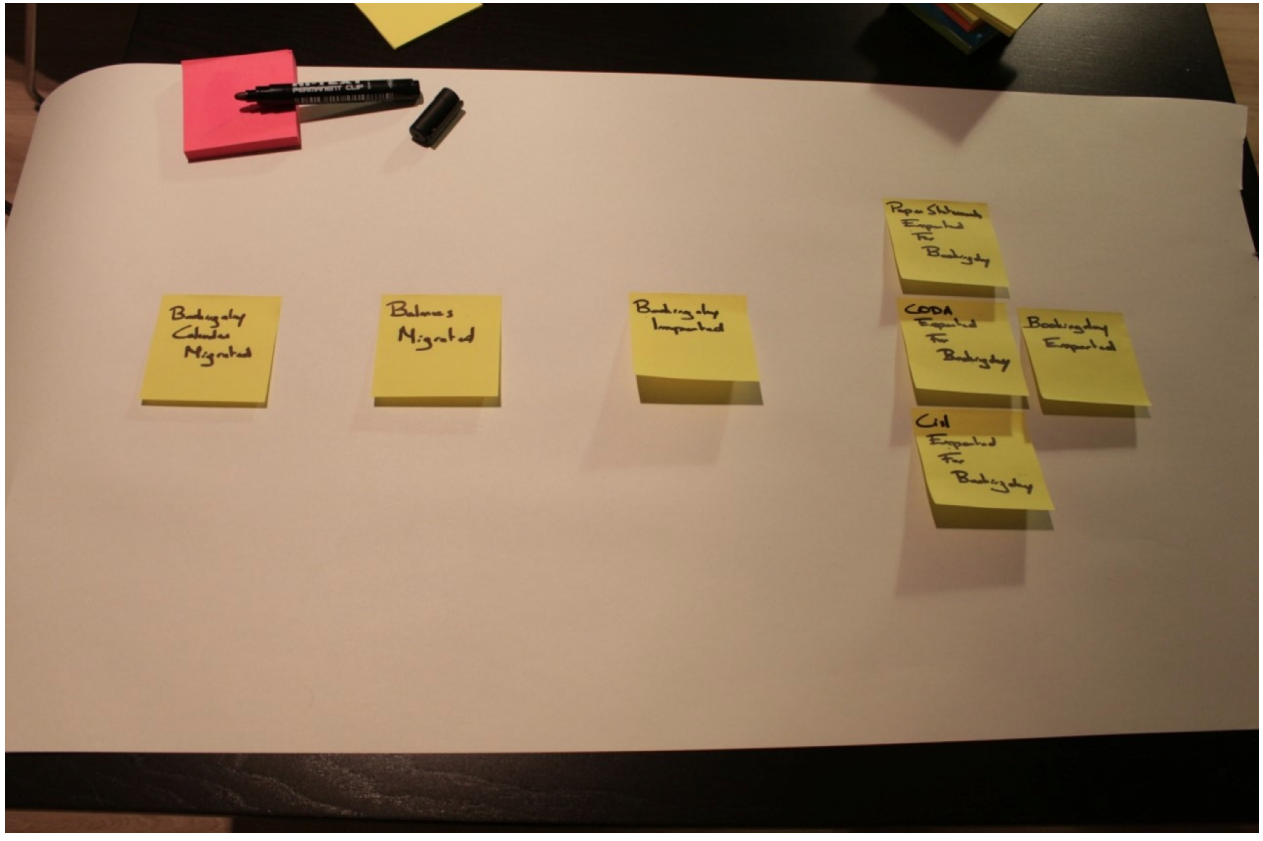
NO technical events like Network is down, Transaction has failed...


Balances
Migrated
Budgetary
Imported
COOA
Budgetary
Budgetary
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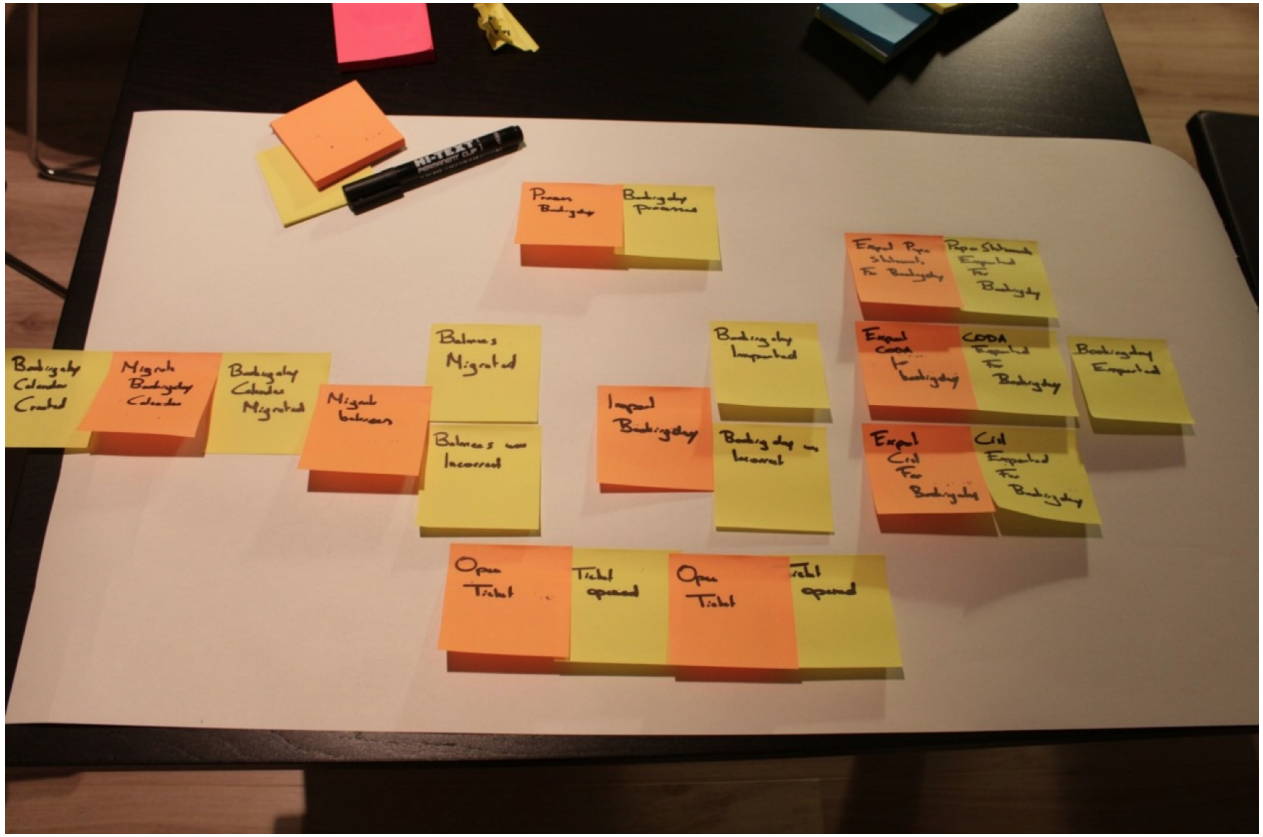
- Possible sources: human, time, process.


Budgeting Calendar Created
Migrate Budgeting Calendar
Budgeting Calendar Migrated
Migrate balances
Balances Migrated
Balances are Incorrect
Import Budgeting
Budgeting Imported
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Open Ticket
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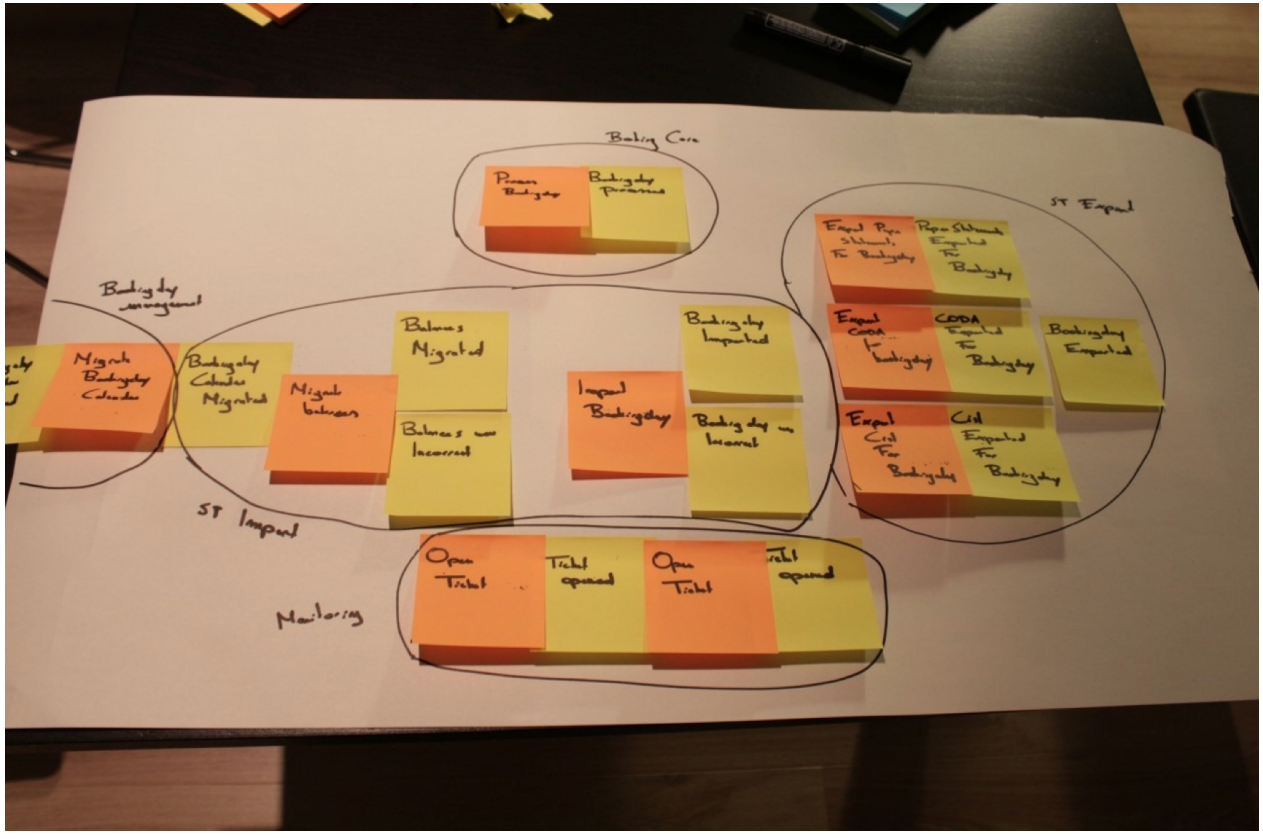
- Example: Fleet Management, Scheduling, ..


Booking Core
Person Booking
Booking Processed
ST Export
Export Pax Submit. Fr Booking
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Export CODA Fr booking
CODA Exported Fr Booking
Booking Exported
Export Ctrl Fr Booking
Ctrl Exported Fr Booking
Booking management
Migrate Booking Calendar
Booking Calendar Migrated
Migrate balances
Balances Migrated
Balances are incorrect
ST Import
Import Booking Day
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4) Find Business rules / decisions

- Put them on the map to make the different scenarios explicit

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- Example: An already cancelled reservation cannot be cancelled anymore

5) Group events that influence decision

6) Discover & experiment with aggregate boundaries

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- Retroactive Business rules;

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- Let the human do it;

Brownfield DDD

Start by drawing the Current Model and the Desired Model. Make a small step toward the Desired Model. Throw away both drawing models regularly while in the process of leading the current model to the desired model, so that desired model also evolved with the maturity of our understanding.

Brownfield DDD

Have a wall were people write identified Technical Debt. Each time someone stumble upon the same debt, put a dot in front of it. This helps us identify the most critical debt.

Context Mapping

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Relationships fall into repeatable patterns..

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- Separate ways (rebuild the stuff you need)

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- Put yourself on the map

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The presentation : https://speakerdeck.com/mathiasverraes/fighting-bottlenecks-with-cqrs

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Event Sourcing

Do not put invariant in the apply method because you couldn’t restore the aggregate anymore if invariant change. It is then possible to have aggregate that do not comply with new invariants and it is a business decision to know what to do with these.

Event Sourcing

Projectors should be easy to write. Don’t use an ORM here since they will slow the process down.

Testing the write model is like:

- Given { previous events }
- When { command }
- Then { expected new events or expected exception }

Testing projector / read model is like:

- Given { previous events }
- Then { expected states }


THE
END