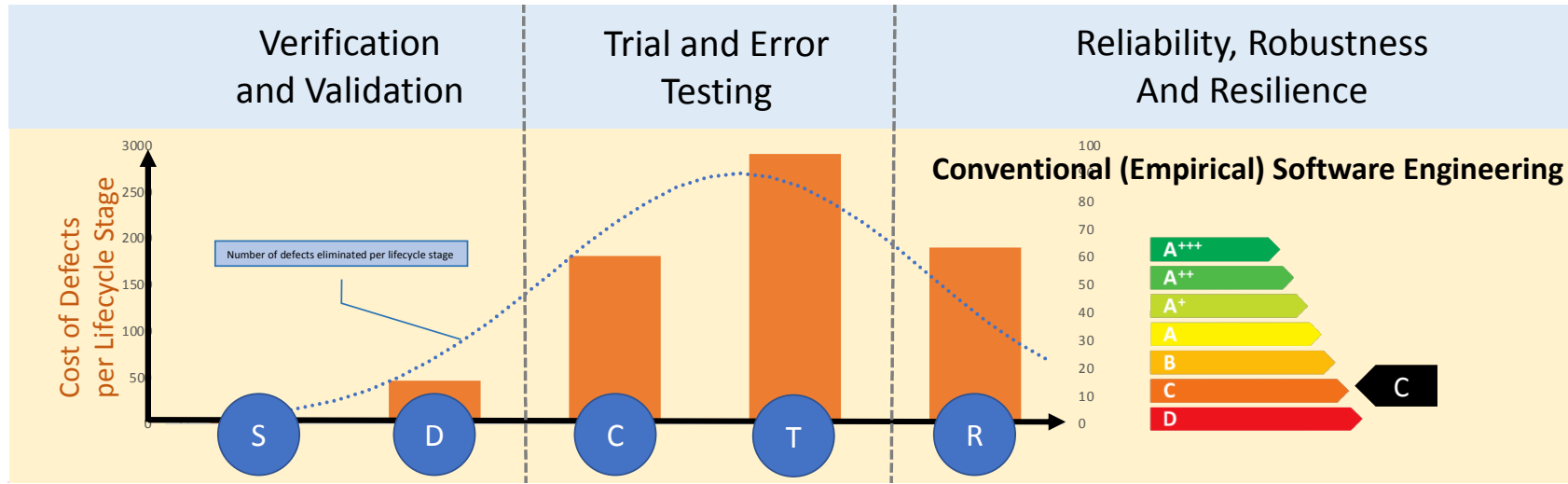# How to develop software that can be trusted

DESIGN AUTOMATION & EMBEDDED SYSTEMS
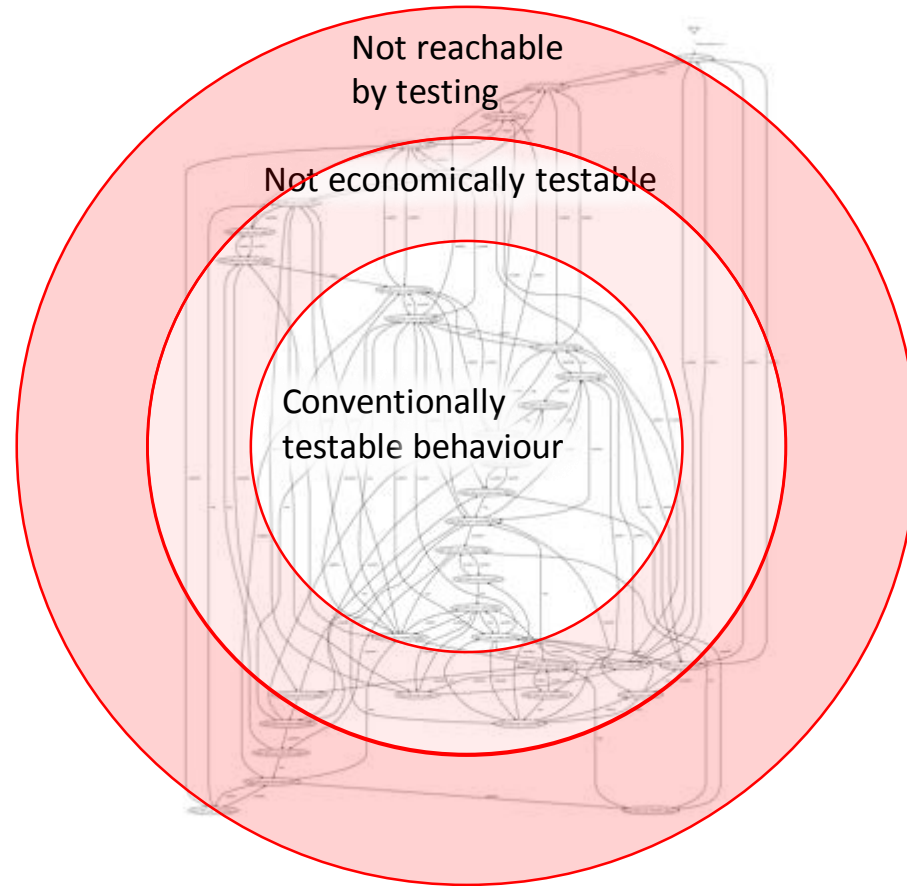
8 OKT
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EINDHOVEN

D&E
event
2019

The Business Case for Dezyne

Unsafe, Insecure Software

Not reachable by testing

Not economically testable

Conventionally testable behaviour

- Untested behavior
  => UNRELIABLE
- Missing Behaviour
  => NOT ROBUST
- Unconstrained Behaviour
  => NOT RESILIENT

Leads to high risk of Unsafe, Insecure Software

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Foundation for Safe, Secure Software

100% Behaviour Verified
Complete, Correct and Consistent

- No Untestable Behaviour

  => RELIABLE

- No Missing Behaviour

  => ROBUST

- No Unconstrained Behaviour

  => RESILIENT

**Reliable, Robust, Resilient
behaviour is the foundation
of Safe and Secure Software**
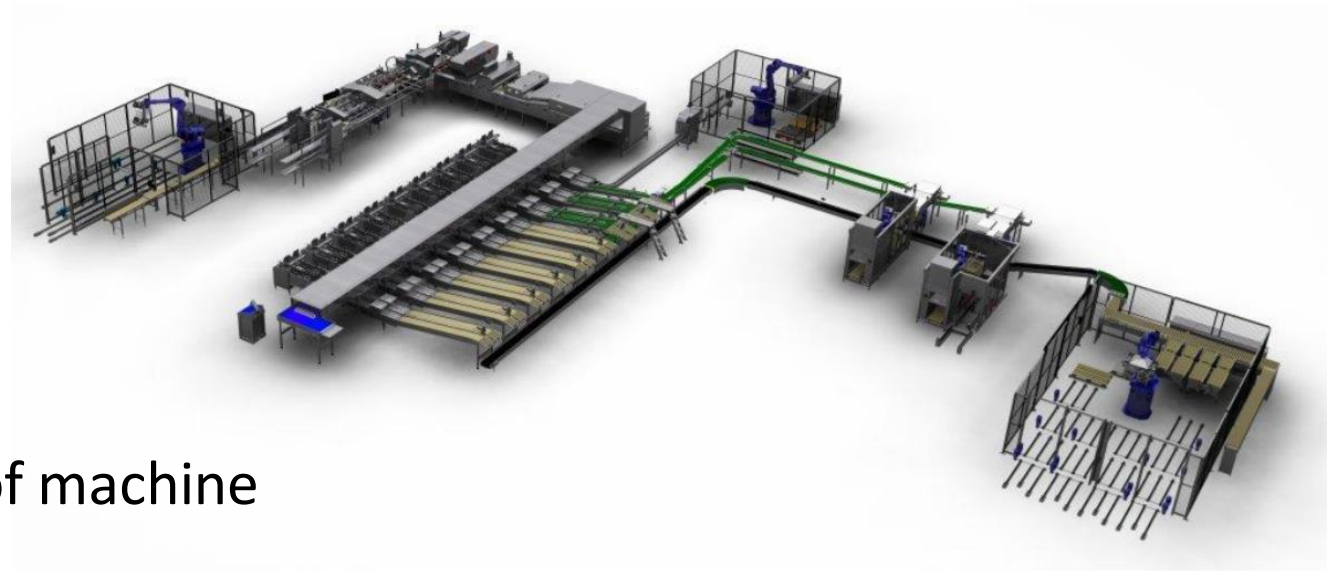
8 OKT ← D&E event 2019
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Business case MOBA

World market leader in grading & packing of eggs

How to improve efficiency during development and time to market

Case:
- Start production new version of machine
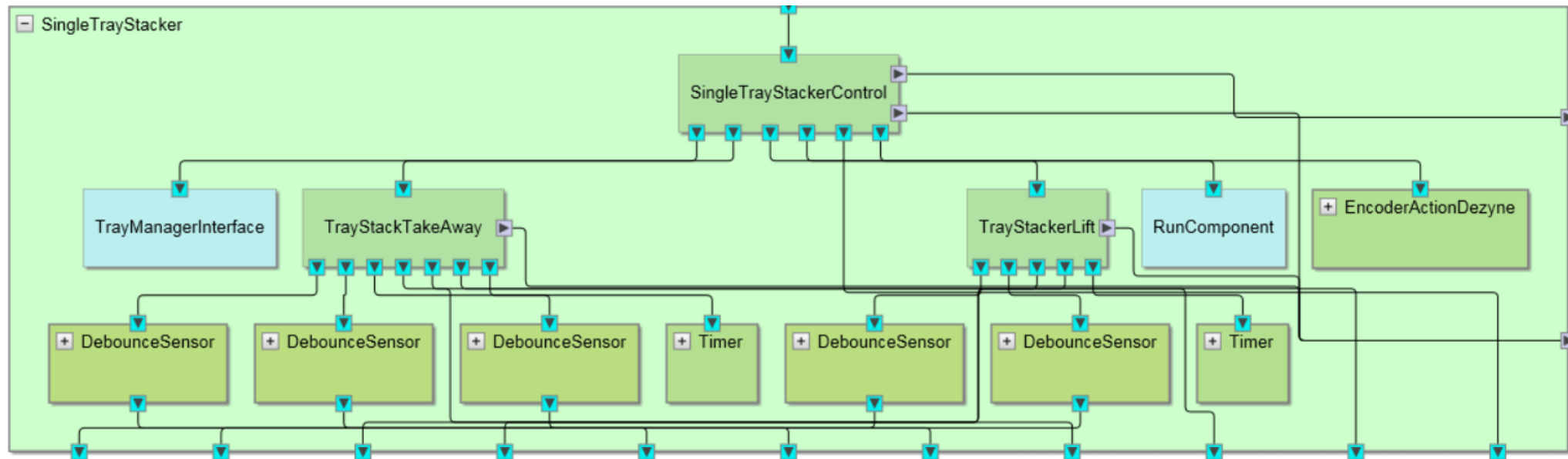- Software generation:
  Based on model driven approach (Dezyne)

End result

- ✓ So far (since 4 months now) zero software issues
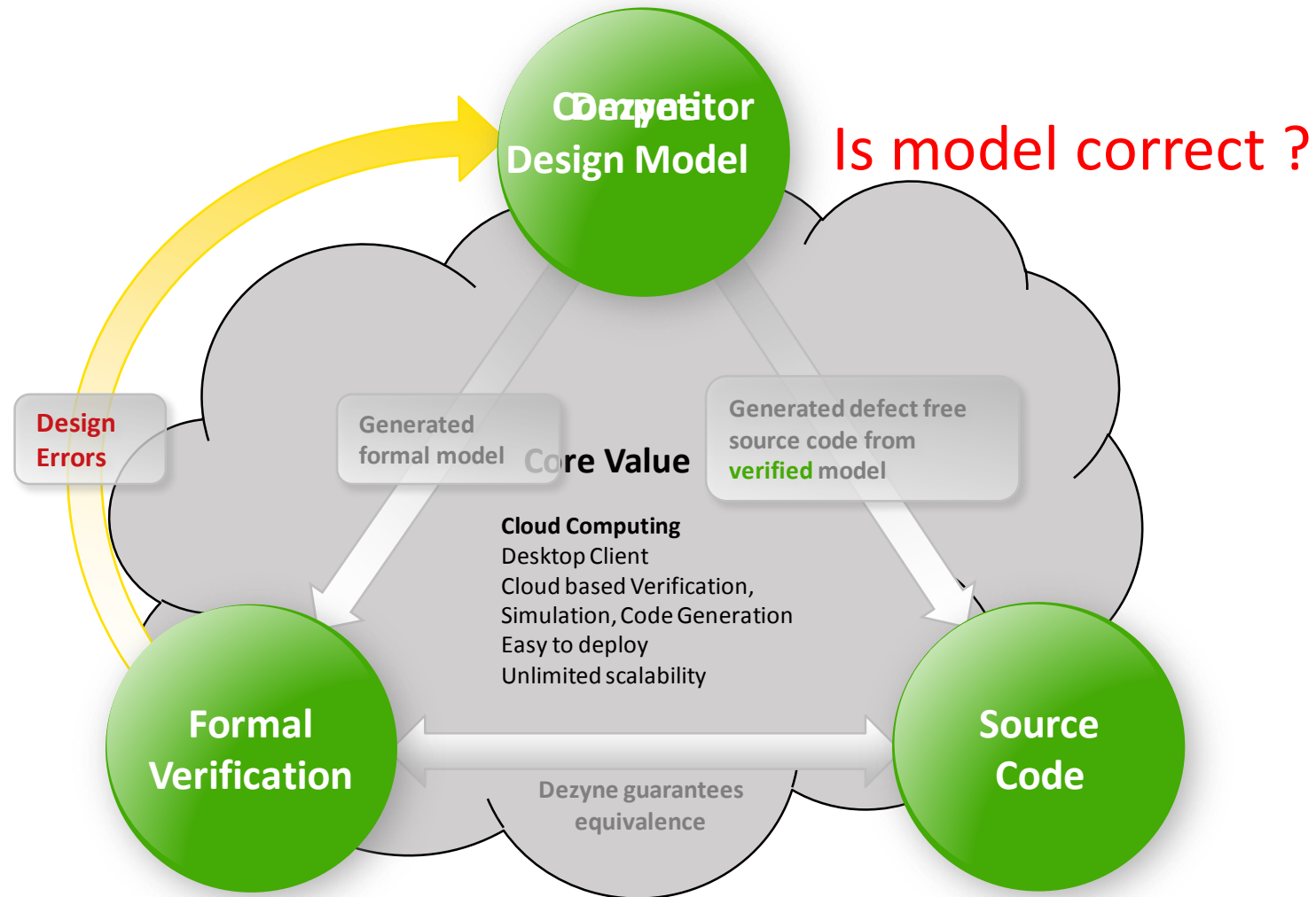- ✓ No bug reports
- ✓ Flawless performance

Experiences with Dezyne

✓ Find behavioural errors early (Simulator)
✓ Find wrong paths or events
✓ Easier to correct behaviour
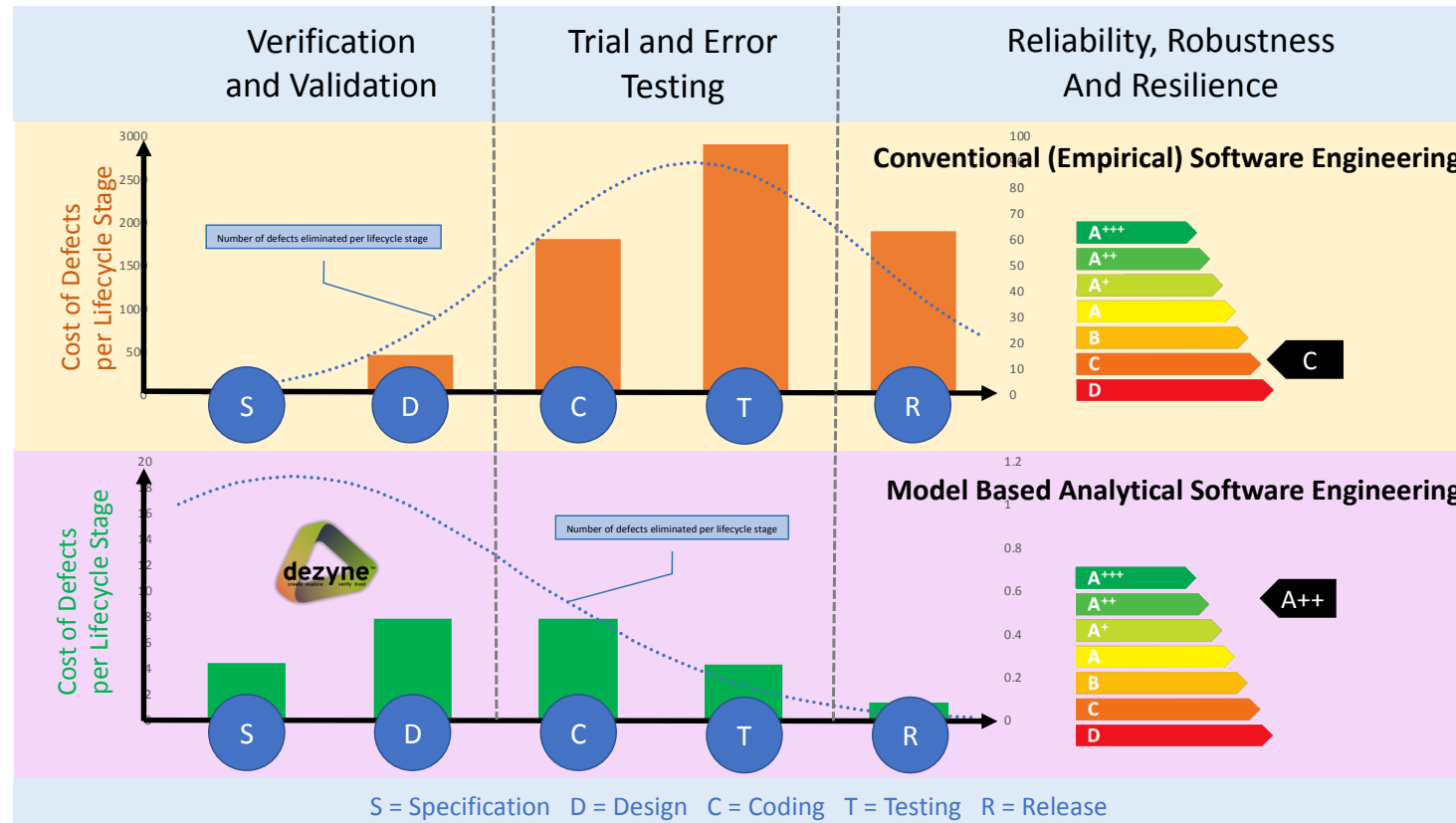✓ More confidence in code
✓ System View is convenient

How Dezyne is different

Is model correct ?

Dezyne models are:
✓ Consistent
✓ Complete
✓ Correct

The Business Case for Dezyne

Safe and secure software can only be realized based on strong foundations

Thanks for your attention

✓ Start your free trial of Dezyne: **www.verum.com**