Testing

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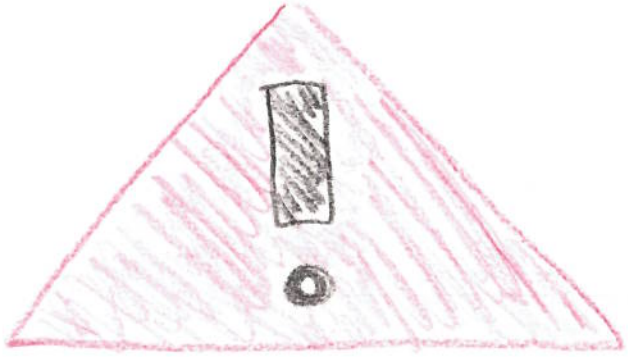
Jens Rantil

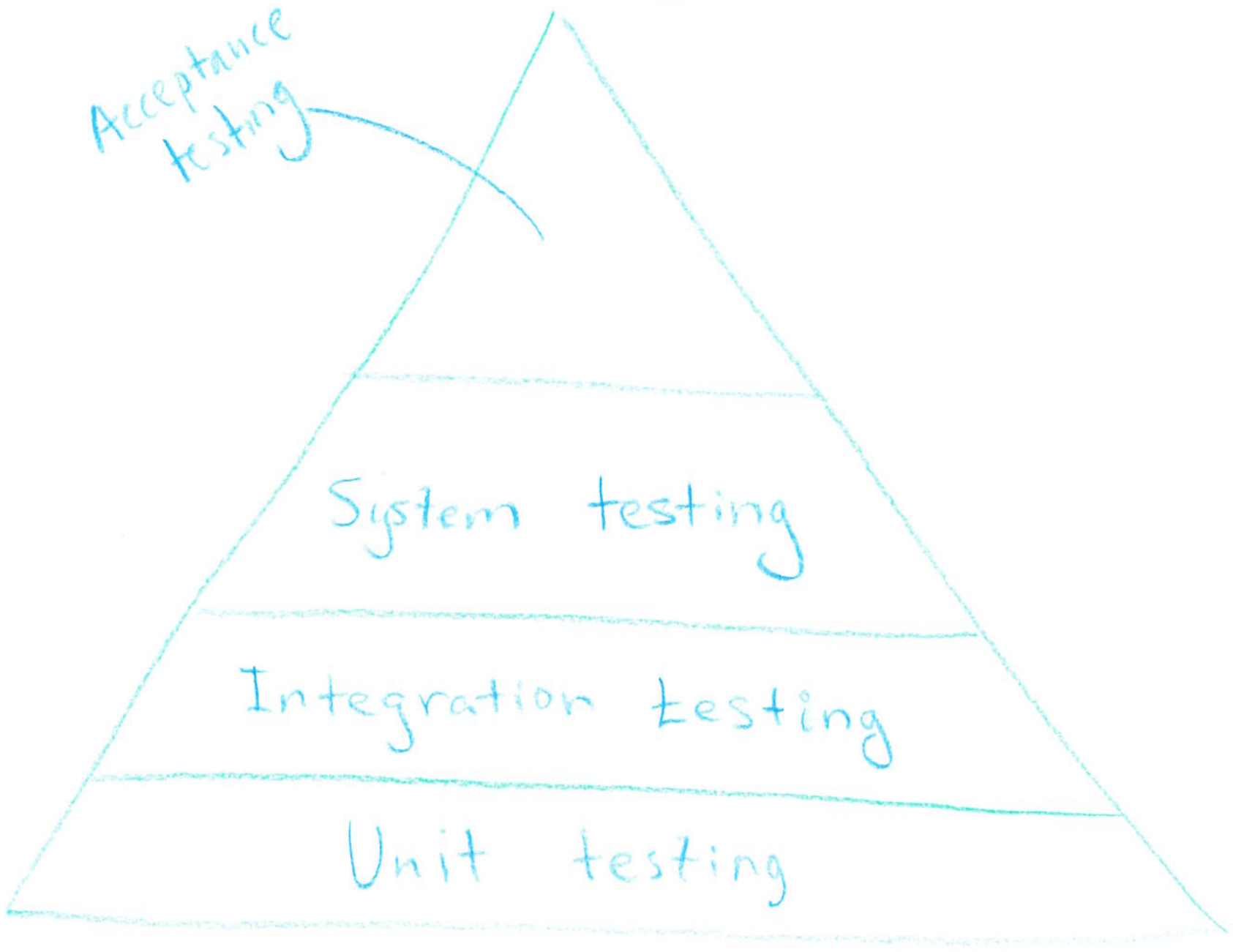
Agenda

- Test Pyramid
- Testing Observations
- Testing @ Tink

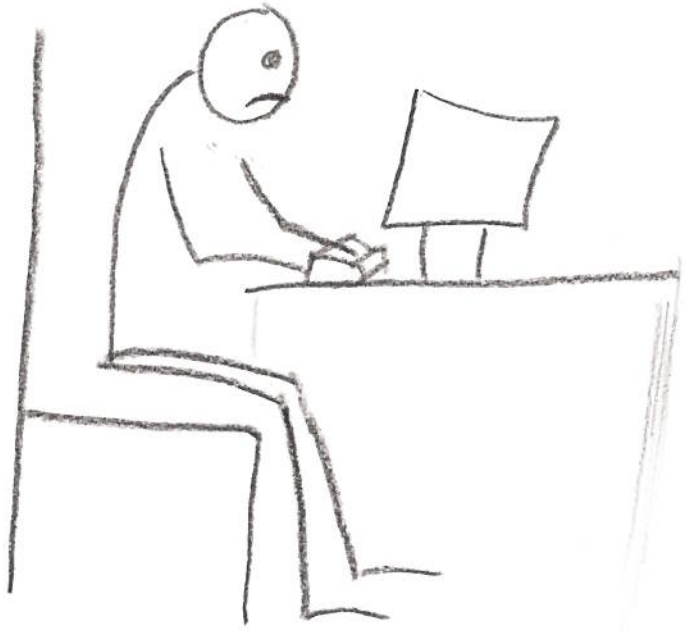


Controversial!

The Test Pyramid



"Manual Testing"



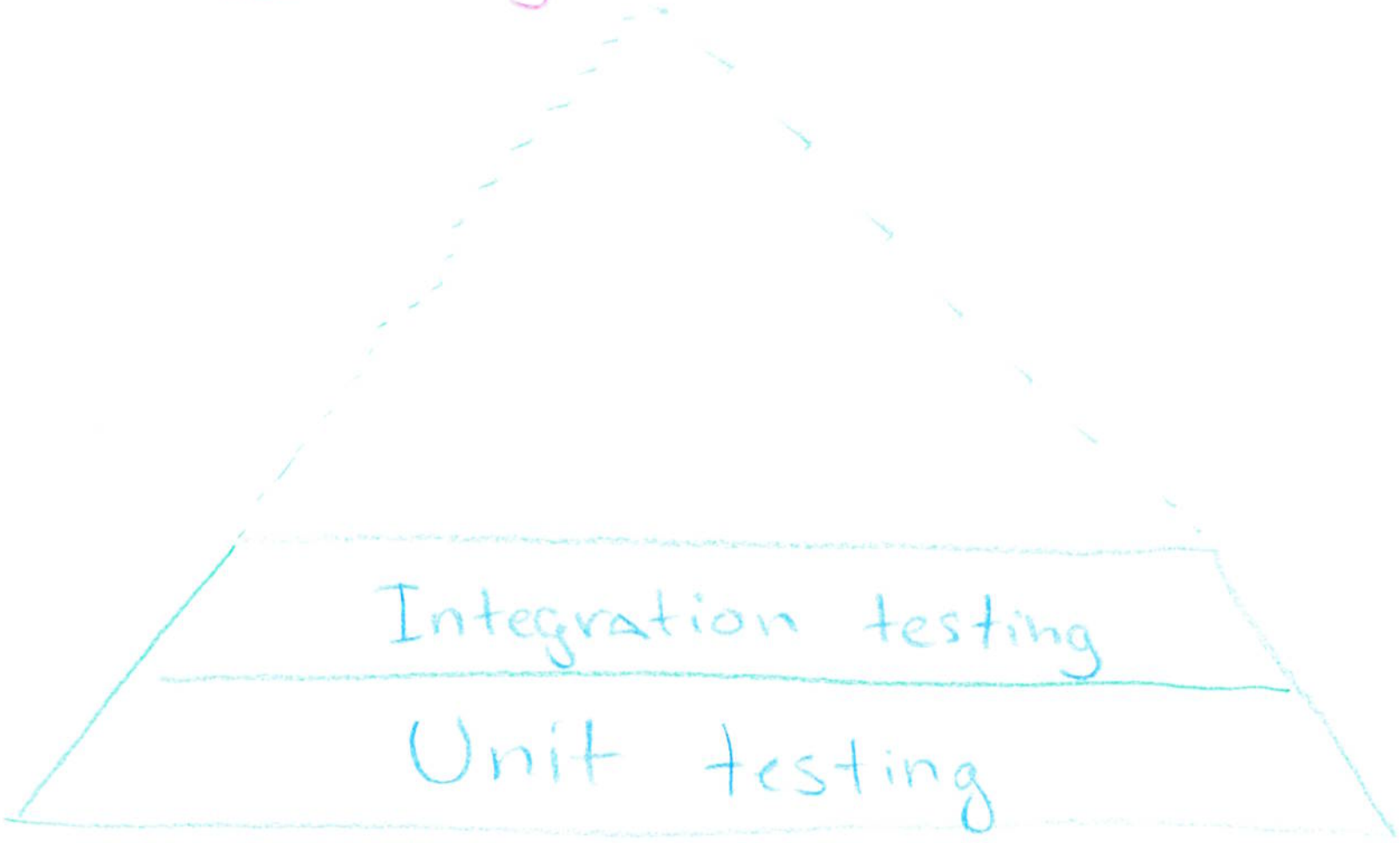
Manual Testing –

- Captures point-in-time.
- Hard to recreate.
- No longterm confidence improvement.

"Acceptance"?

ISTQB: "Formal testing with respect to user needs, requirements, and business processes conducted to determine whether or not a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system."

Integration test?



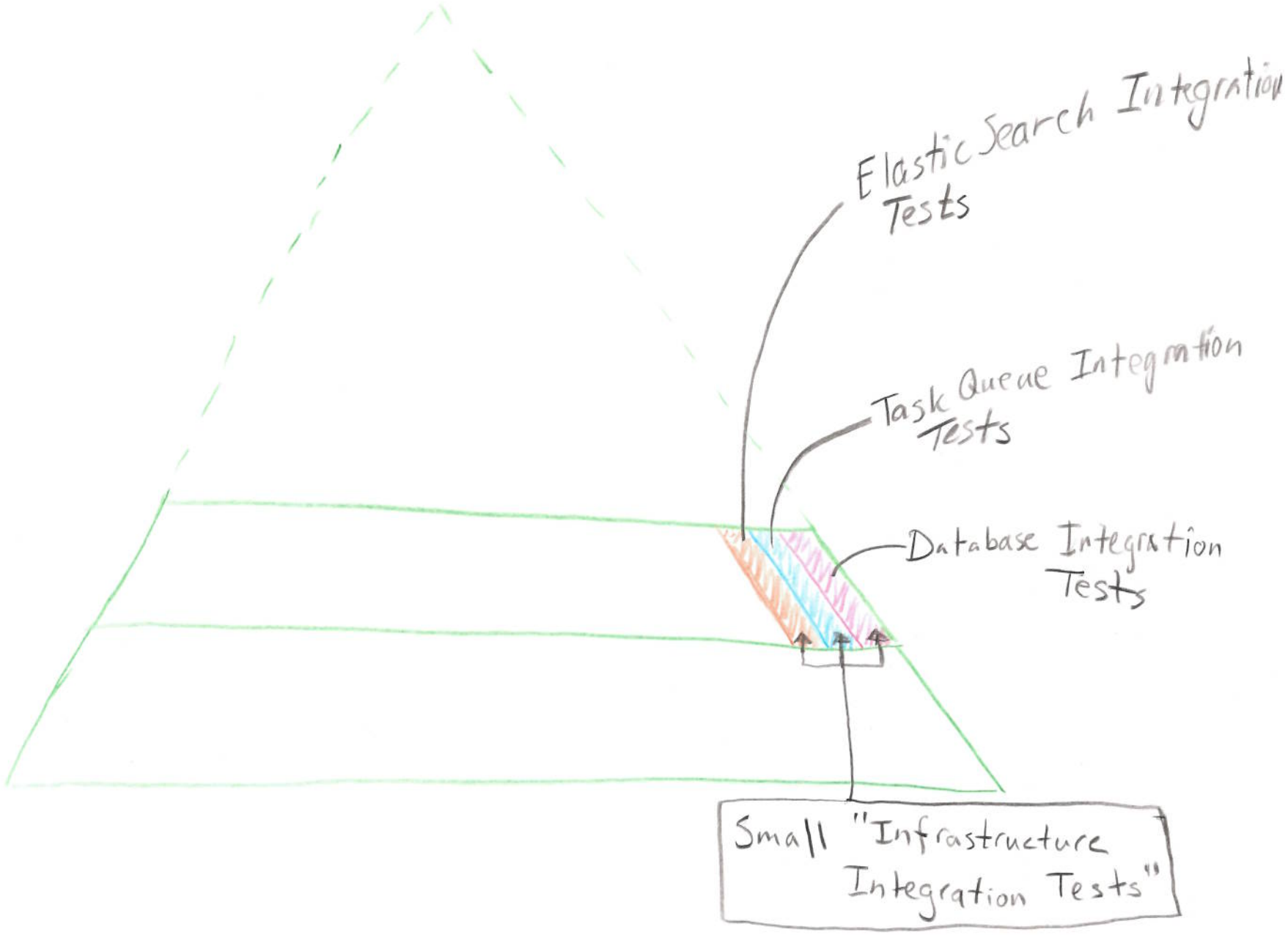
Integration tests

"Components"?

"Systems"?

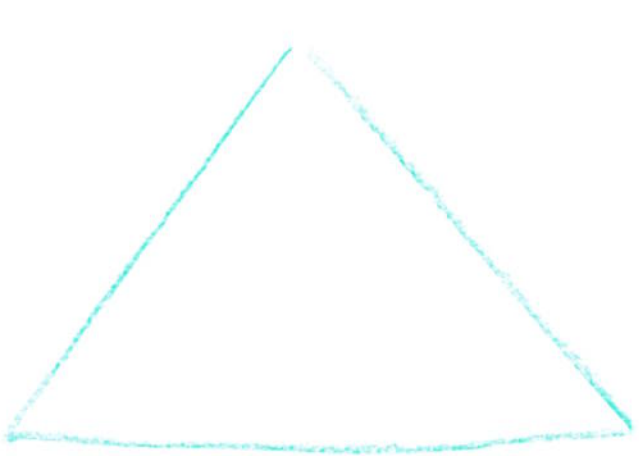
"Testing interfaces between multiple components"

Integration test?



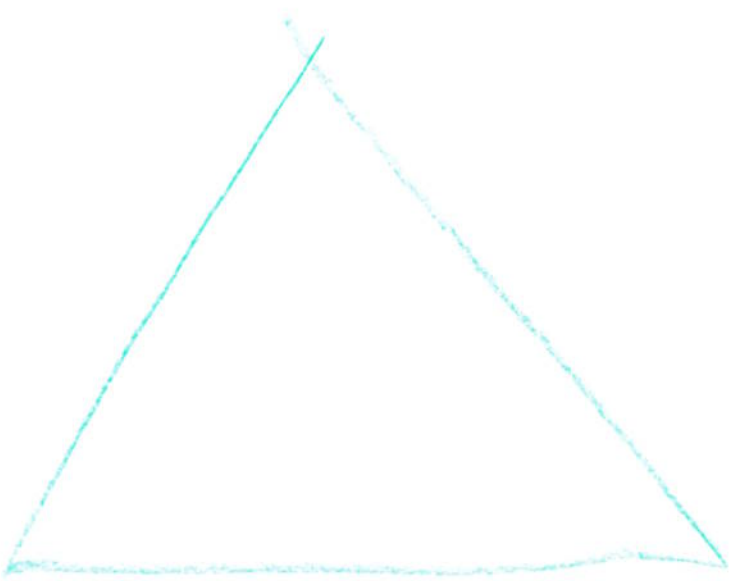
Observations


Slower feedback



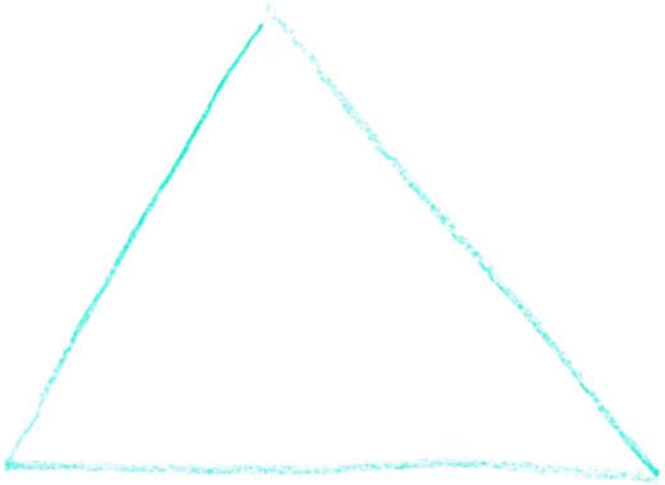
More brittle tests

Harder to make stable!

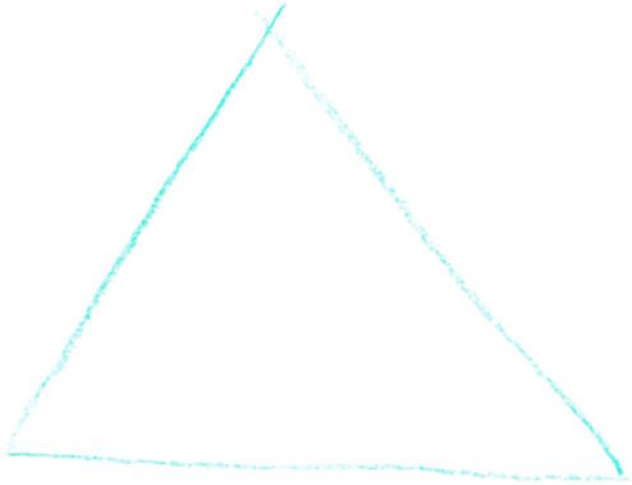


More work to maintain

Requires more love



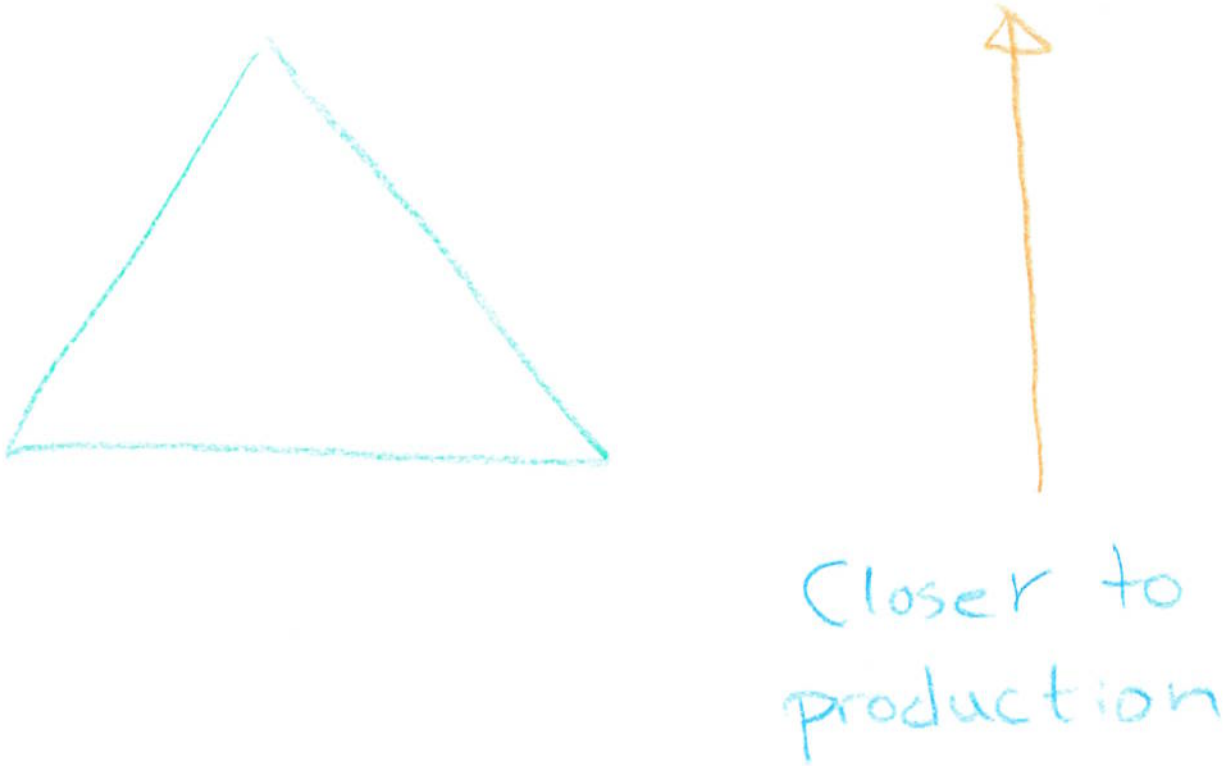
Harder to debug!

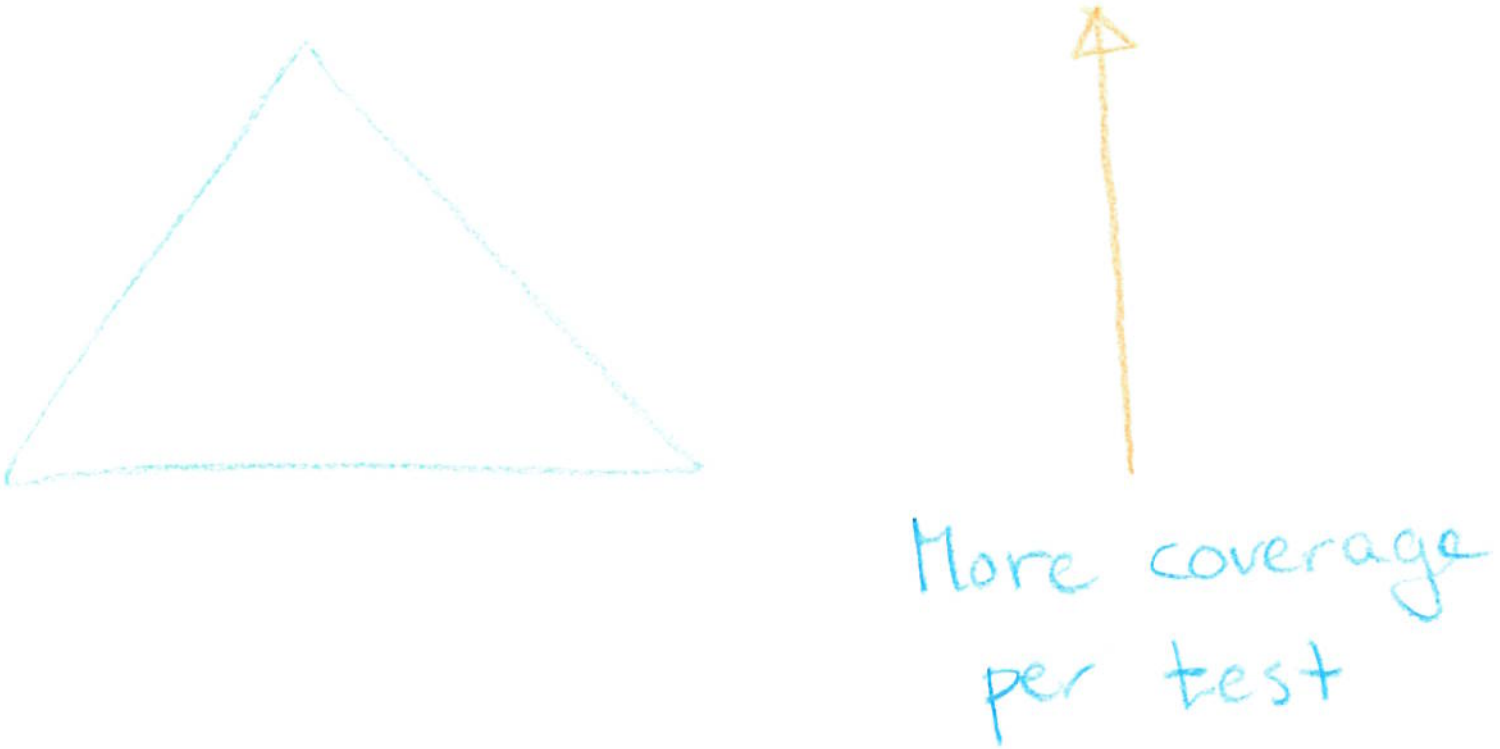


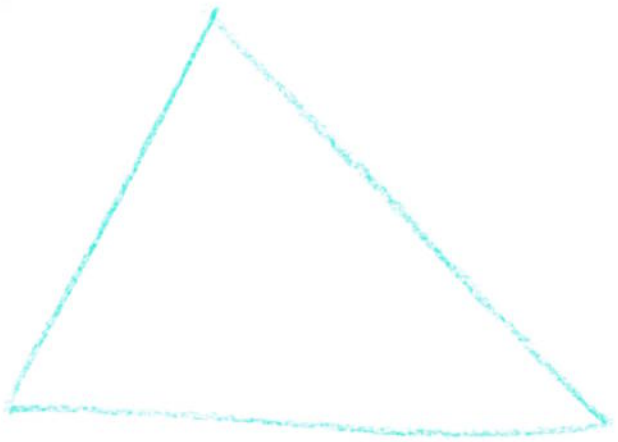
Slower and more complex to run

Encourages low coupling
high cohesion

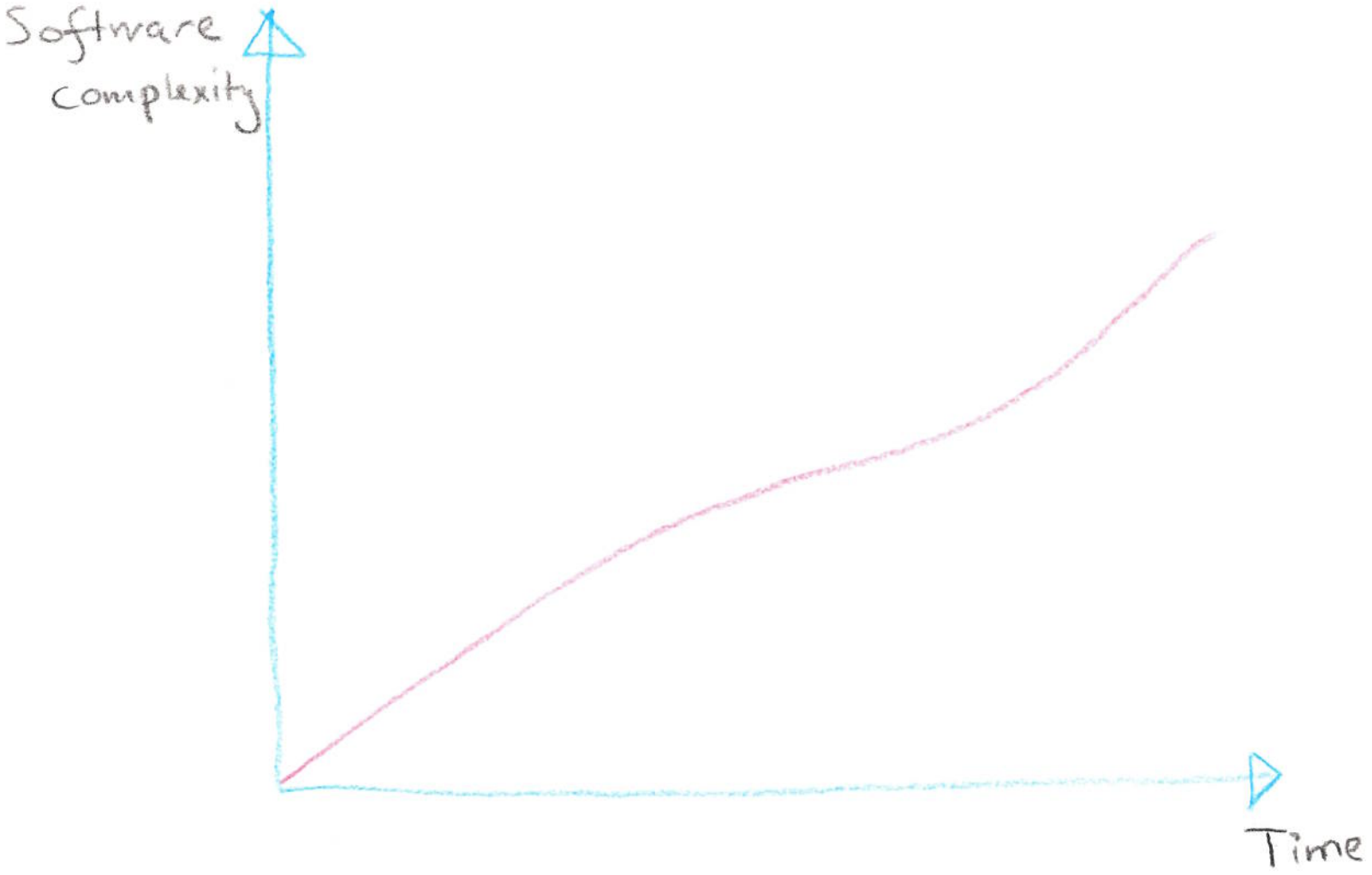
(AKA "good software design")

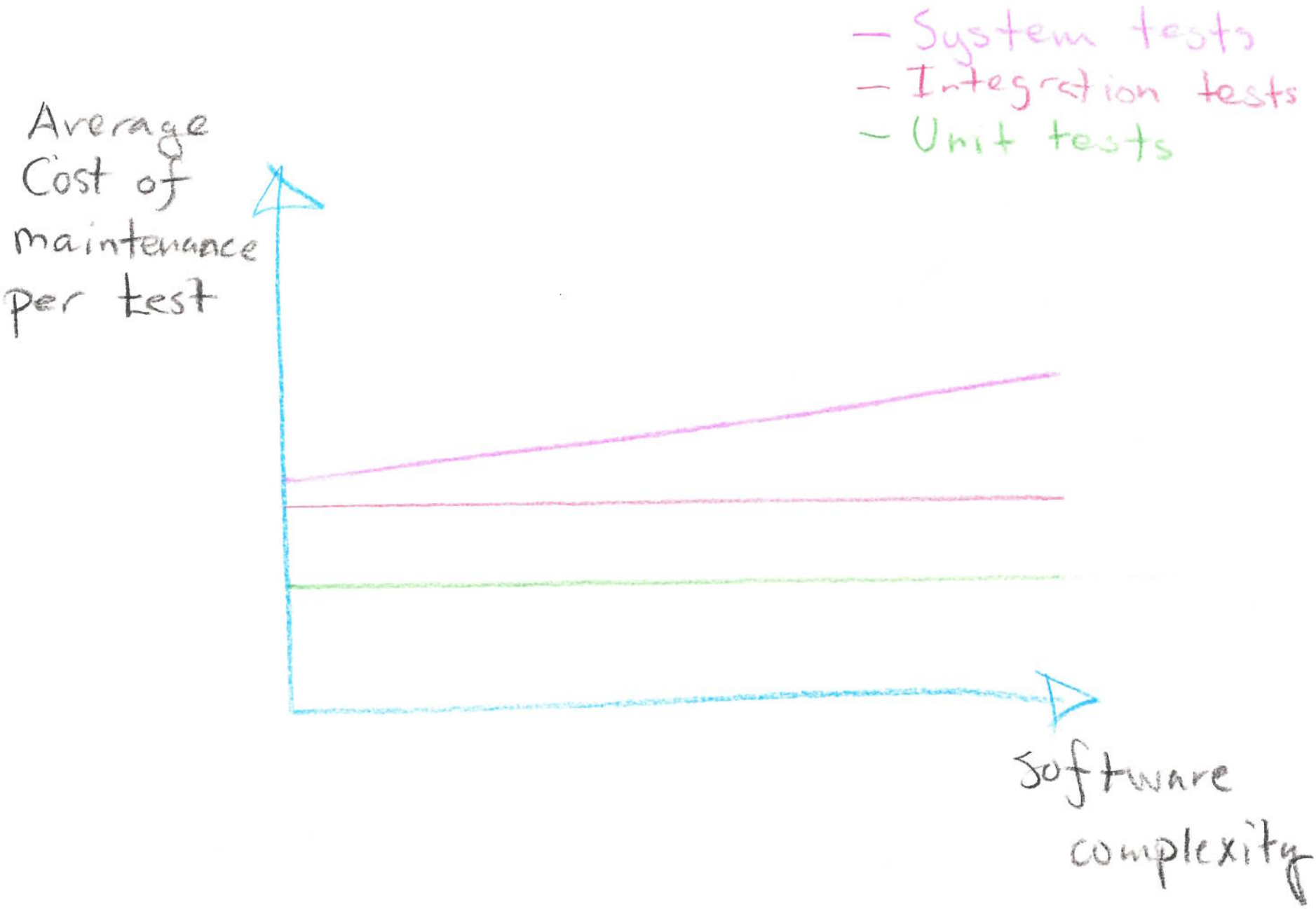

Closer to
production

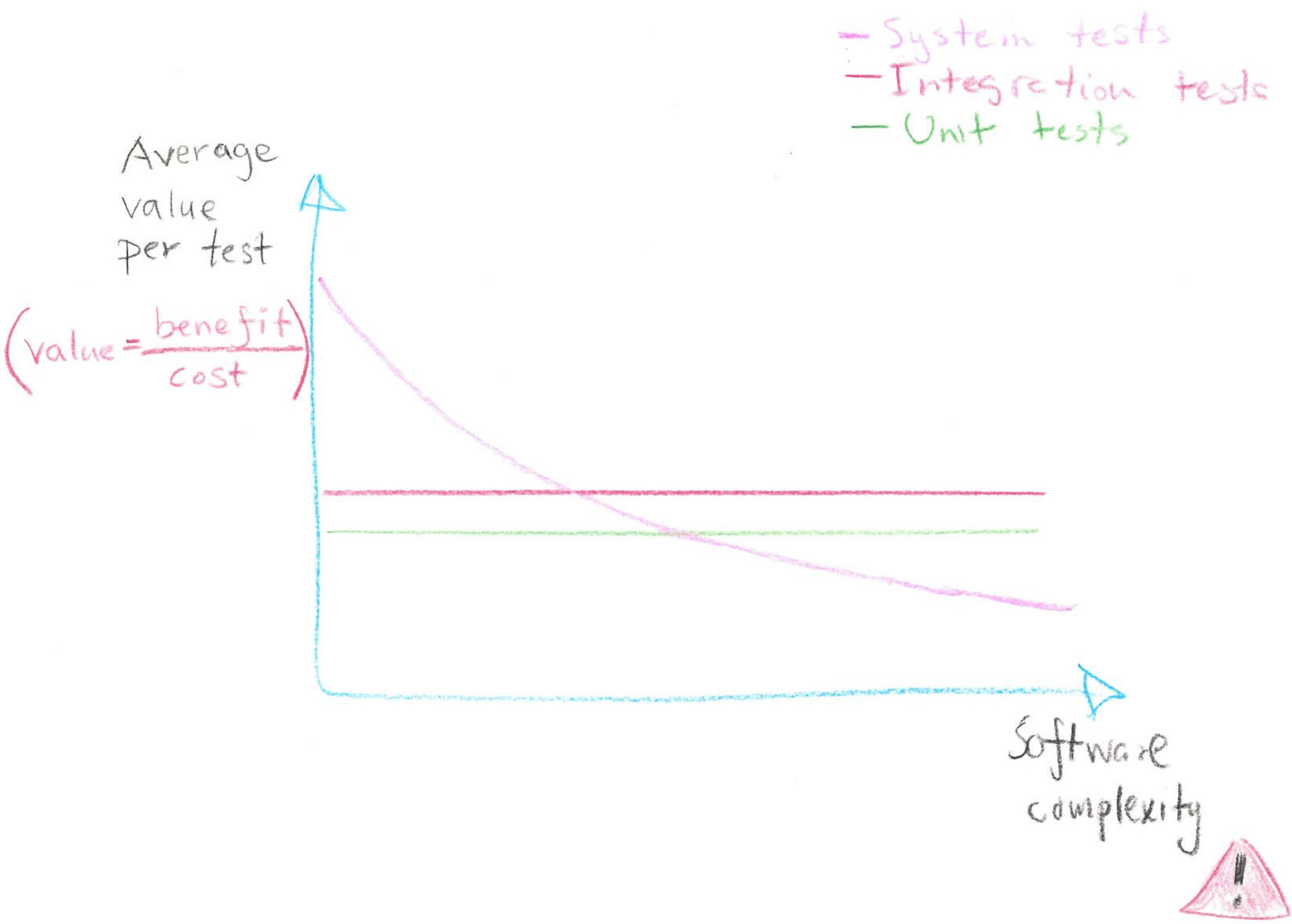

More coverage
per test

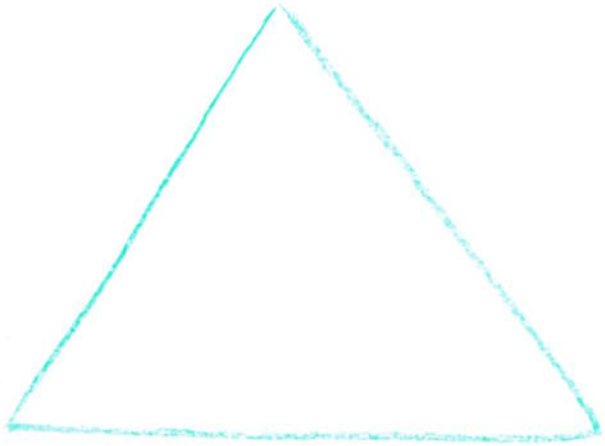


Much more work
to cover all cases
(and reach ⟹ 100%
test coverage)


Software
complexity
Time


– System tests
– Integration tests
– Unit tests
Average Cost of maintenance per test
Software complexity


— System tests
— Integration tests
— Unit tests
Average value per test
(value = benefit / cost)
Software complexity



Scales better with Lime.

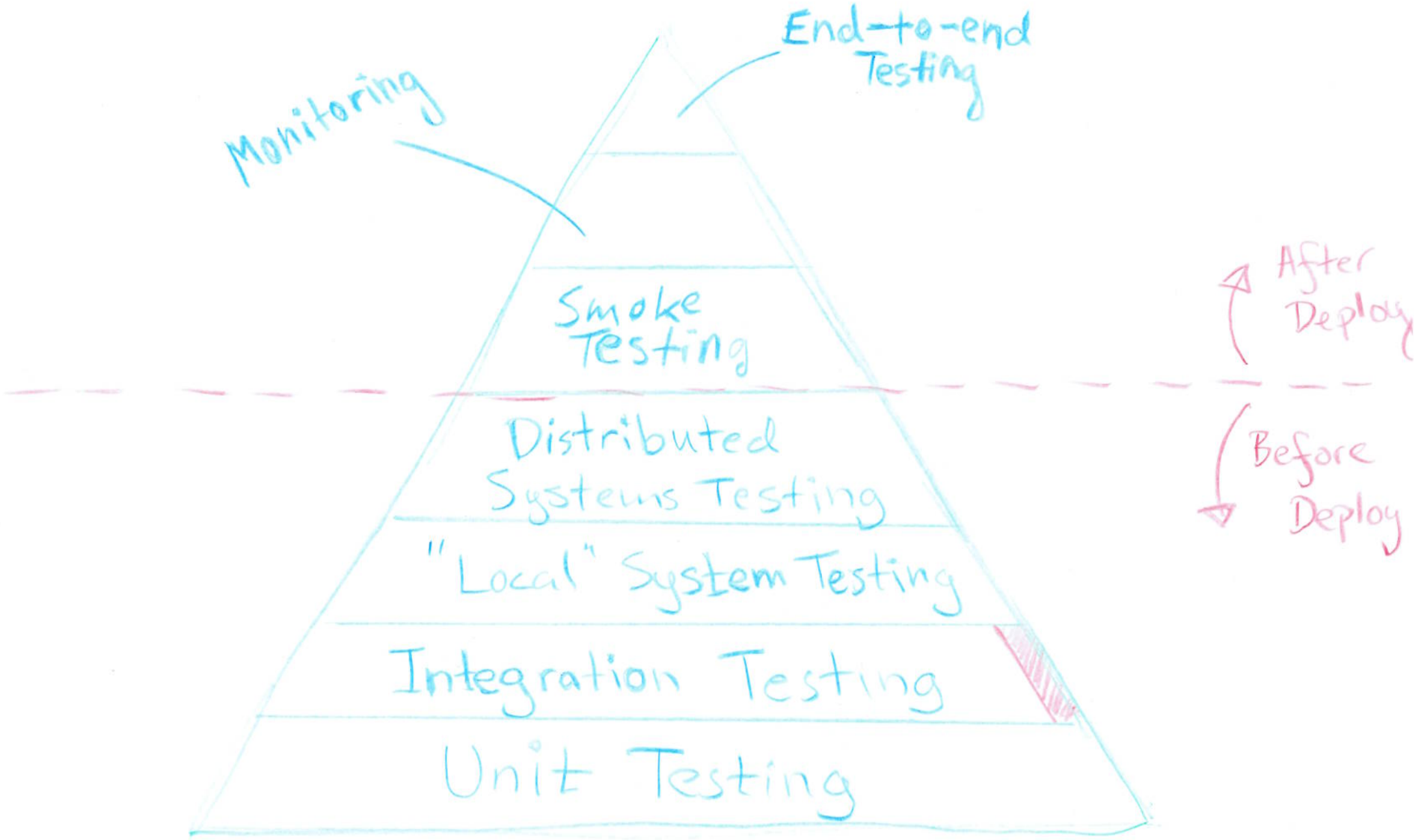
Tradeoffs!

— Requirements changes over time, including how to test.

This means engineering culture also needs to change.


Testing@Tink

Tinle's Test Pyramid (today/direction



WE'RE

HIRING!