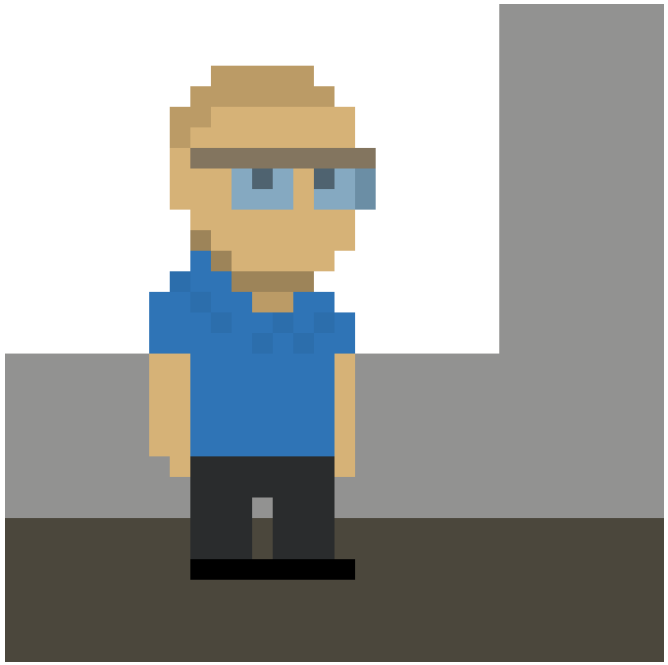
Tangible Software Quality

Sigge and Gojko

@siggeb @gojkoadzic

Sigge Birgisson

Put the paragraph text here...



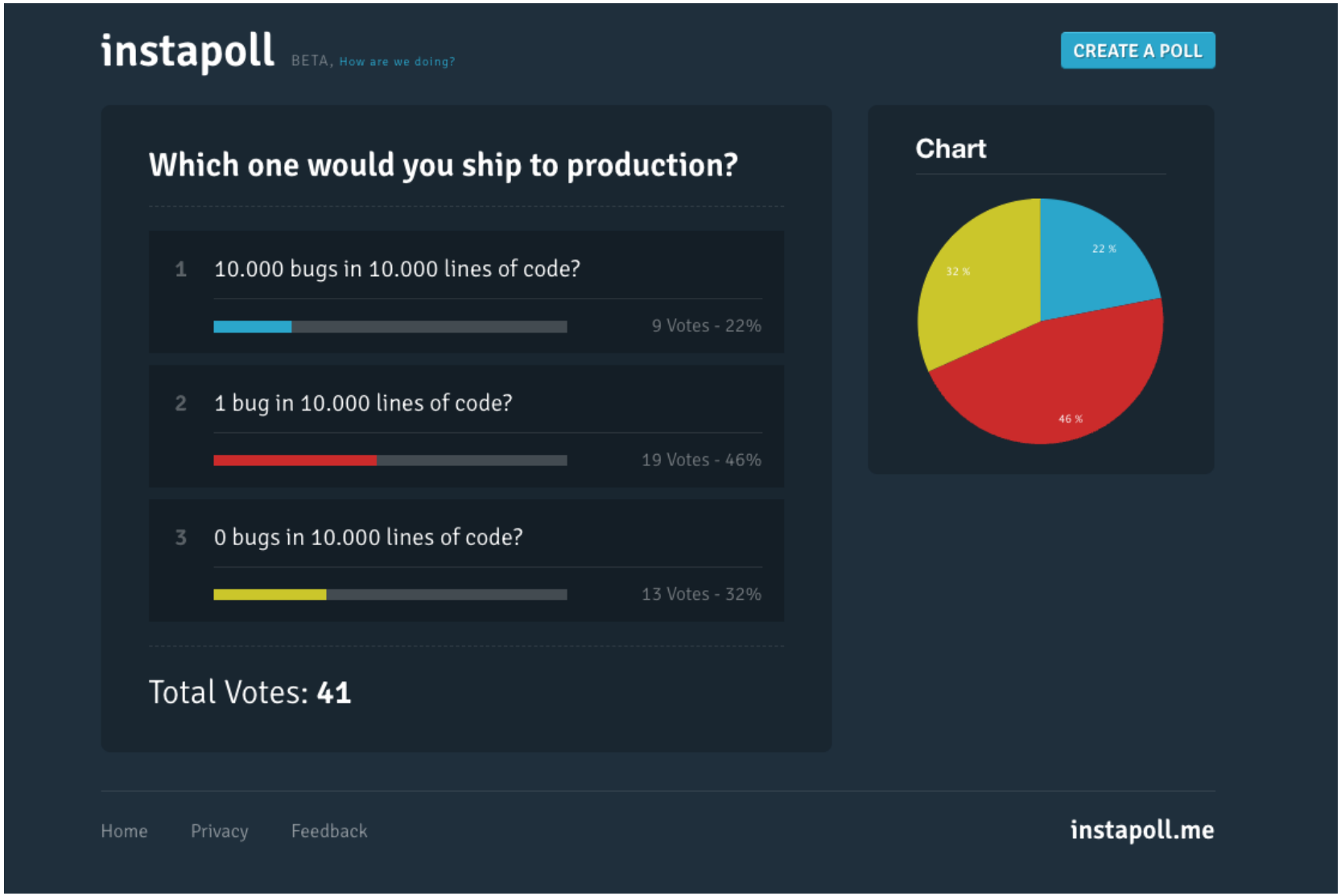
Which one would you ship to production?

10.000 bugs in 10.000 lines of code?

1 bug in 10.000 lines of code?

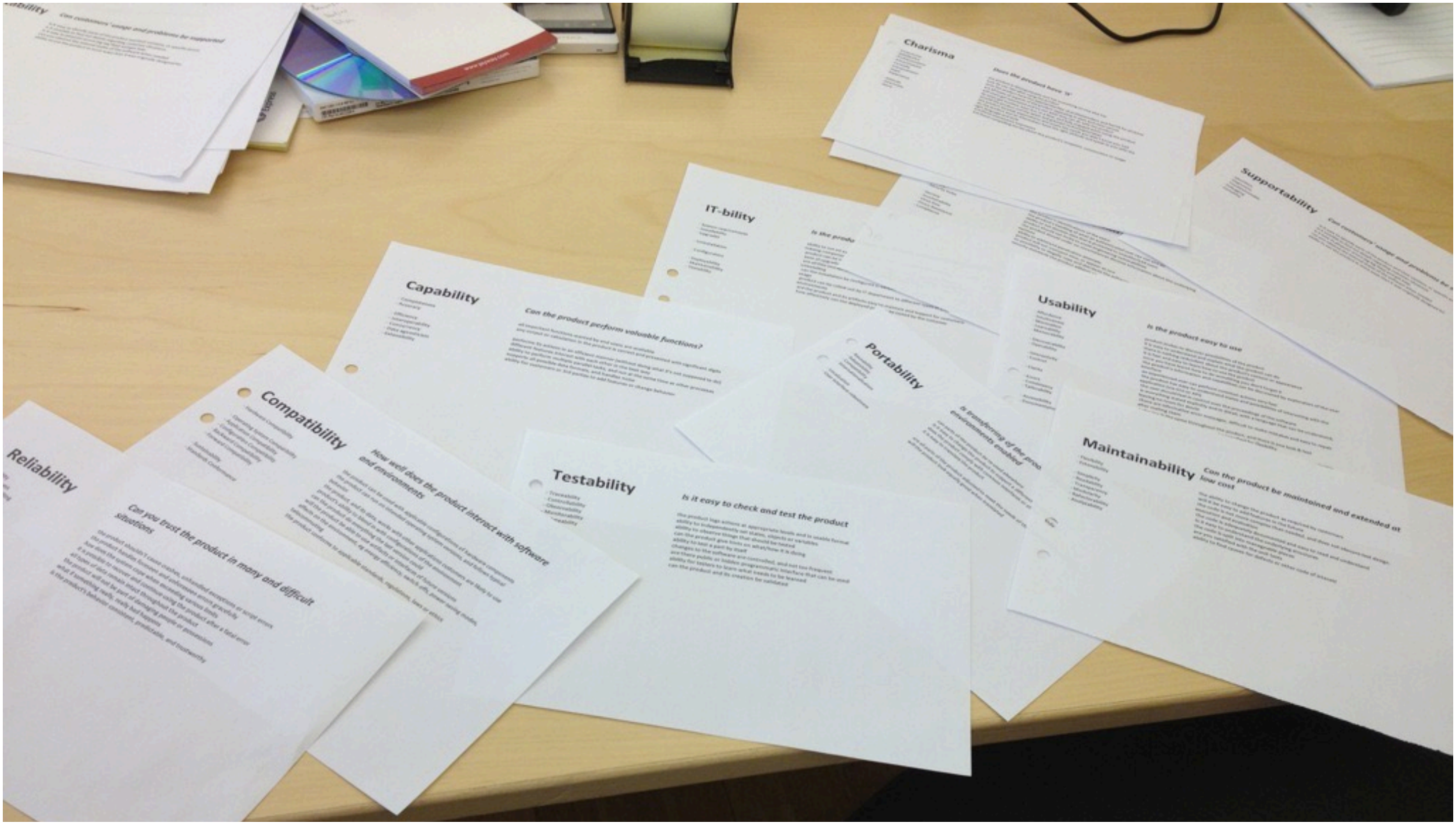
0 bugs in 10.000 lines of code?

https://instapoll.me/11633


instapoll
BETA, How are we doing?
CREATE A POLL
Which one would you ship to production?
1 10.000 bugs in 10.000 lines of code?
9 Votes - 22%
2 1 bug in 10.000 lines of code?
19 Votes - 46%
3 0 bugs in 10.000 lines of code?
13 Votes - 32%
Total Votes: 41
Chart
22 %
32 %
46 %
Home
Privacy
Feedback
instapoll.me

Tangible quality rule #0:

PRESENCE of Quality
can't be measured by
Absence of something (bugs?)


Charisma
IT-bility
Supportability
Capability
Usability
Portability
Compatibility
Maintainability
Testability
Reliability
Can the product perform valuable functions?
Is the product easy to use
Can the product be maintained and extended at low cost
Is it easy to check and test the product
How well does the product interact with software and environments
Can you trust the product in many and difficult situations

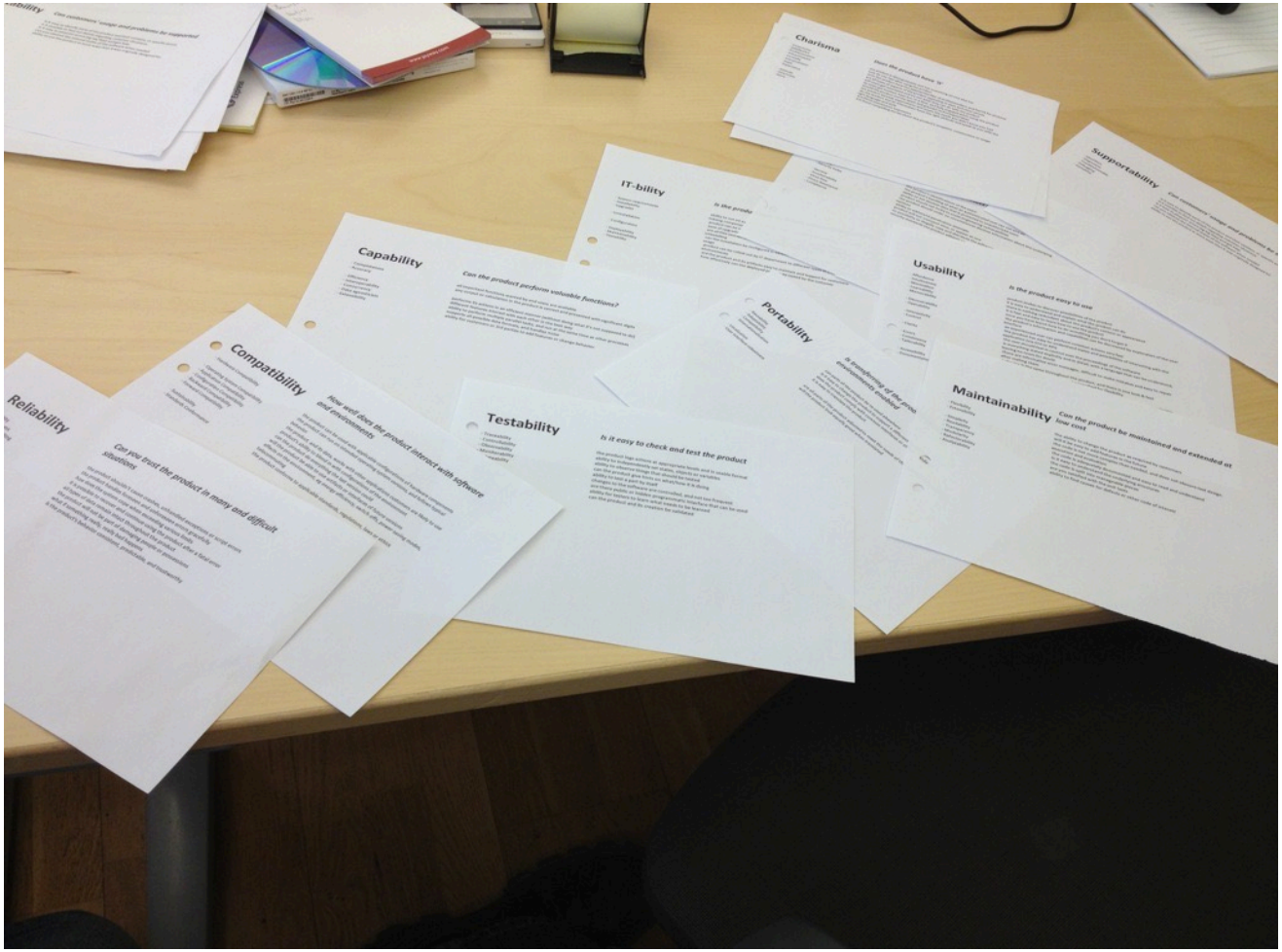
We need to build a system that is FAST and RELIABLE...

We need to build a system that is FAST and RELIABLE, so it's OK to be EVENTUALLY CONSISTENT

Tangible quality rule #1:

Don't think about QUALITY think about QUALITIES

Accurate
Performant
Trustworthy
Fun
Beautiful



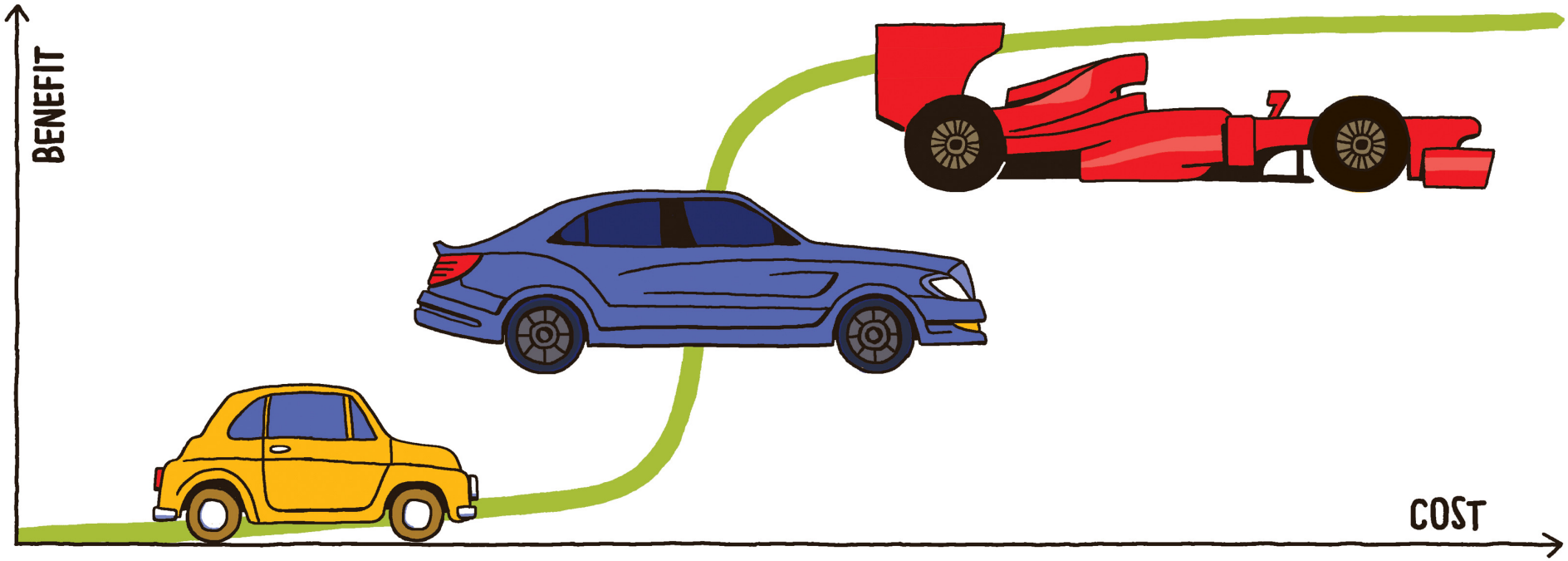
"We need to build a system that is FAST and RELIABLE, so it's OK to be EVENTUALLY CONSISTENT"

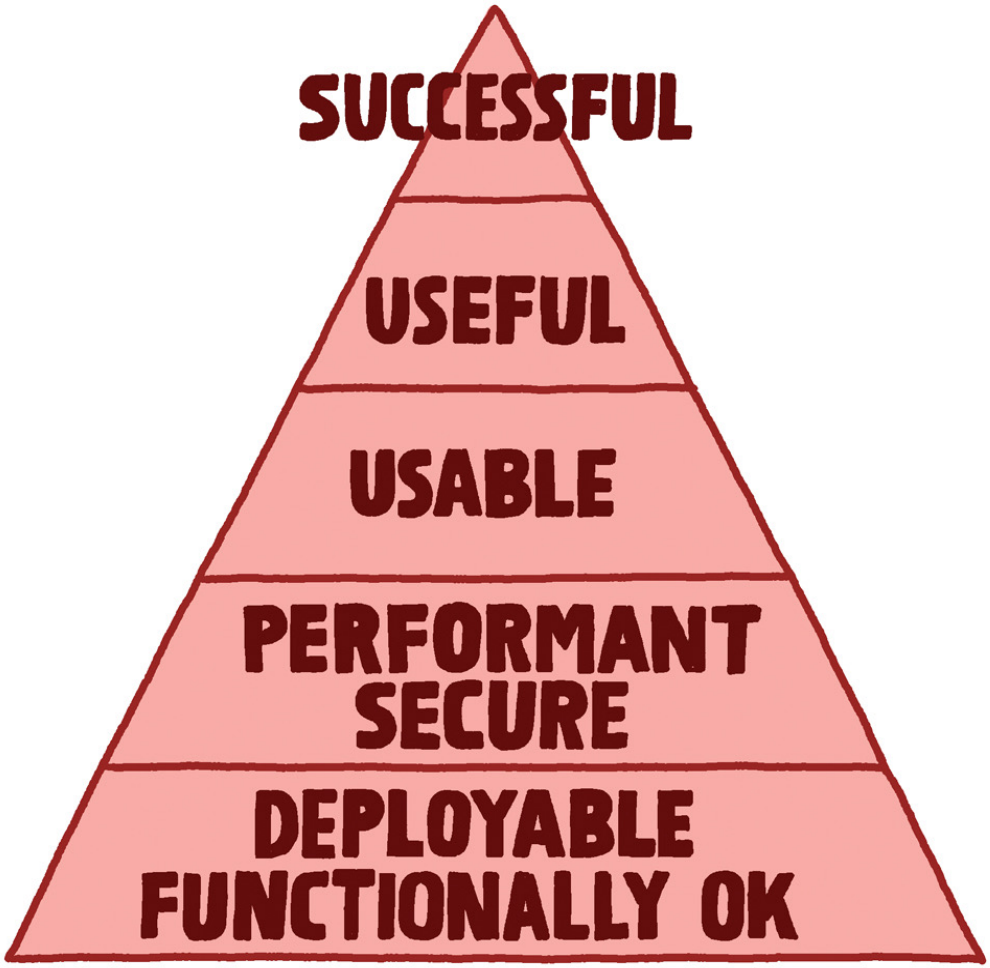
"So what is EVENTUALLY ENOUGH???"

Tangible quality rule #2:

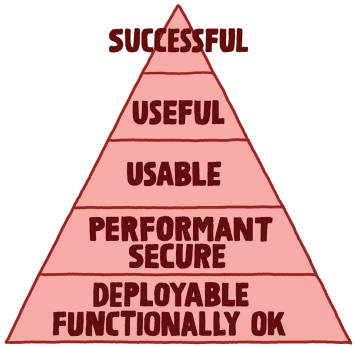
With multiple "qualities", we need tradeoffs between them - and that's a PRODUCT DECISION.

QUPER = Quality Performance



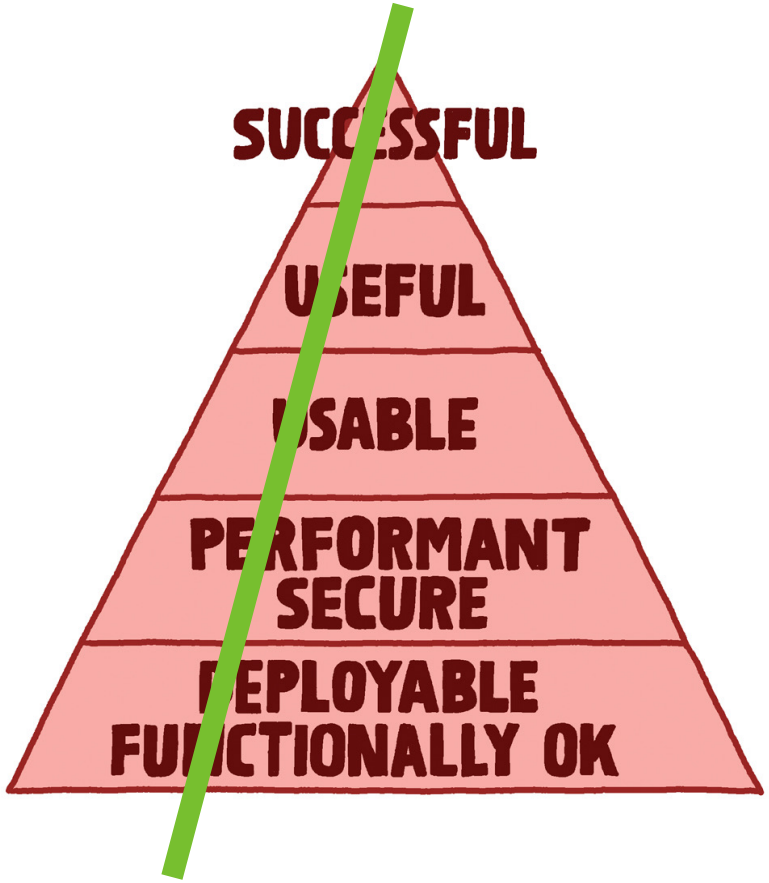

SUCCESSFUL
USEFUL
USABLE
PERFORMANT
SECURE
DEPLOYABLE
FUNCTIONALLY OK

IKEA Value of planner	**Revenue** **Seamless range updates – Support the running business** Brand value Sustainability Customer trust Legal compliance Conversion rate Development time saving – Cost concious
End users Customer **goals achievement** Co-workers **goals achievement**	**Conversion moments - Give me (Save, Favourite, Add to bag)** **NPS surveys** Saved design open percentage (value of design) Planner efficiency (how quickly is a design finished?) Seamless user journey Accessibility
Can be used by customers / co-workers	**Engaged vs bounced** **Customer interaction moments - What is me, Make it me, Help me, Show me** Session times Page level insights Undo/redo User errors / Unwanted behaviour
Fast enough? **Secure** enough?	**Google web vitals measurements** **Perceived performance** Specific loading times, Page weight, Drag n drop Etc. Zero open security issues
Failures and bugs? Reliability and Availability	**DORA: Deployment frequency, MTTR (Incidents), Change failure rate, Change lead time** **Monitored error rates** **Defects reported vs deployed features** Regressions 10 most basic requirements



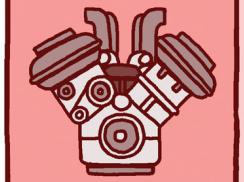
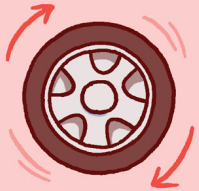
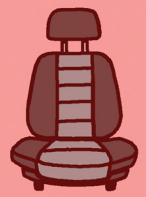
What is important for us?

What is quality?



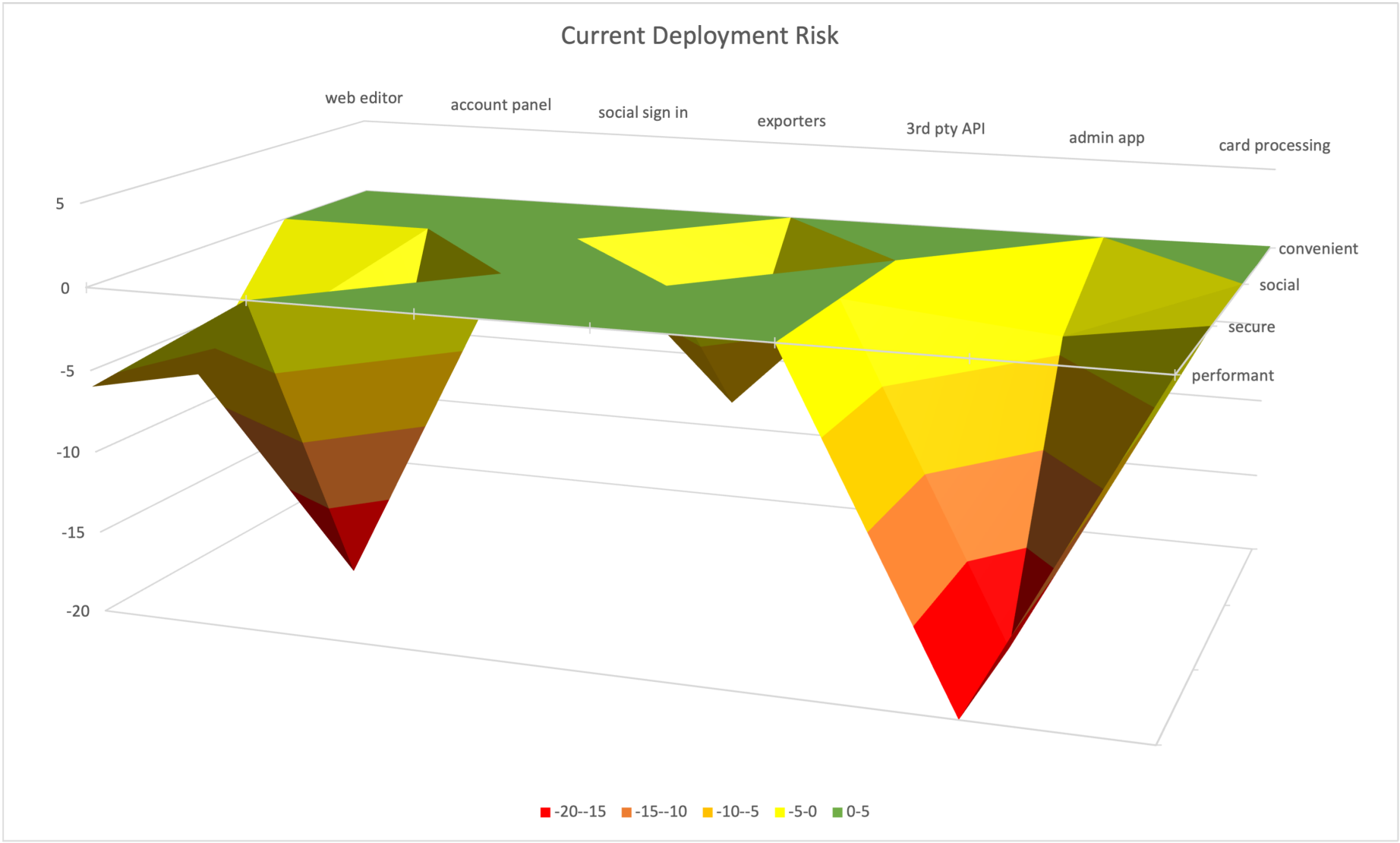
Tangible quality rule #3:

Shape the quality priorities NARRATIVE with a MODEL!

	FAST	SAFE	ECO
			
			
			
			

If you're not KEEPING SCORE,
You're not COMPETING,
You're just PRACTICING.

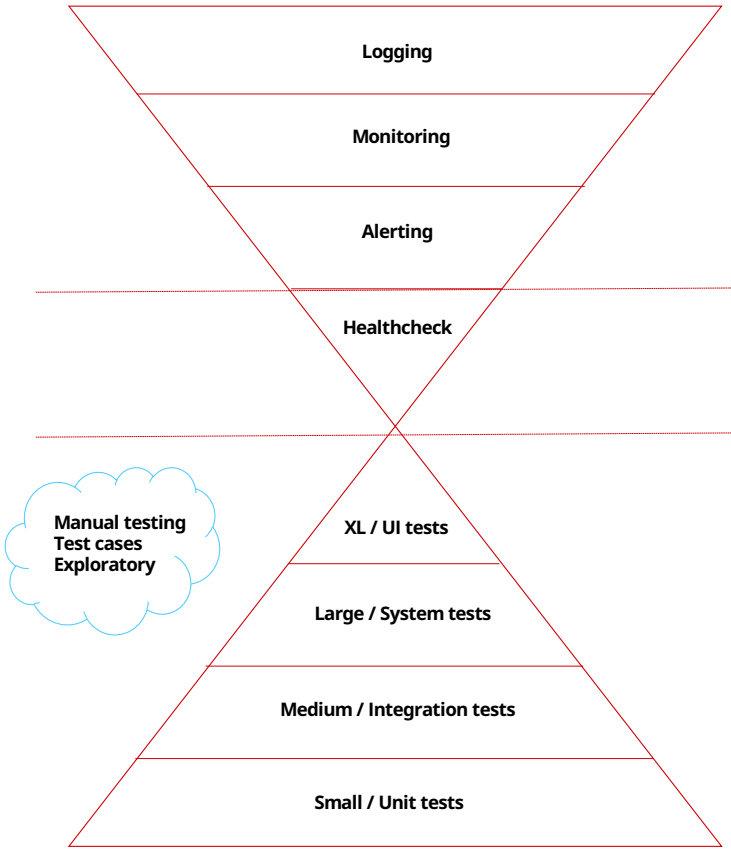
Four Disciplines of Execution


Current Deployment Risk
web editor
account panel
social sign in
exporters
3rd pty API
admin app
card processing
5
0
-5
-10
-15
-20
convenient
social
secure
performant
-20--15
-15--10
-10--5
-5-0
0-5

Tangible quality rule #4:

Make it tangible by VISUALISING.
Then ACT on the signals.

Automation or observability – which risks do we handle where?



	When	Where	What
Logging Monitoring Alerting	Continuous	Test and prod environments	Unknown unknowns Features User flows
Healthcheck	Mid deployment Continuous	Test and prod environments	Environment configs
Manual testing Test cases Exploratory XL / UI tests Large / System tests Medium / Integration tests Small / Unit tests	As continous as needed and possible	Dev, test and prod environments	All code, functions, features and risks

* (Size of area = How many /should/ there be preferably)

MAKING QUALITY TANGIBLE

0. MEASURE PRESENCE, not absence

1. Describe multiple QUALITIES

2. Tradeoffs are a PRODUCT DECISION

3. Shape priorities with a MODEL

4. VISUALISE and ACT