



SmartQA

IST Masterclass

Session #1

"Set the context for IST"



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TOPICS

SmartQA - The context

Testing vs Checking

Validation approaches

Validation POVs

The role of QA

Introduction to IST

SmartQA - The context

SmartQA



SmartQA

Do less. Accomplish more.



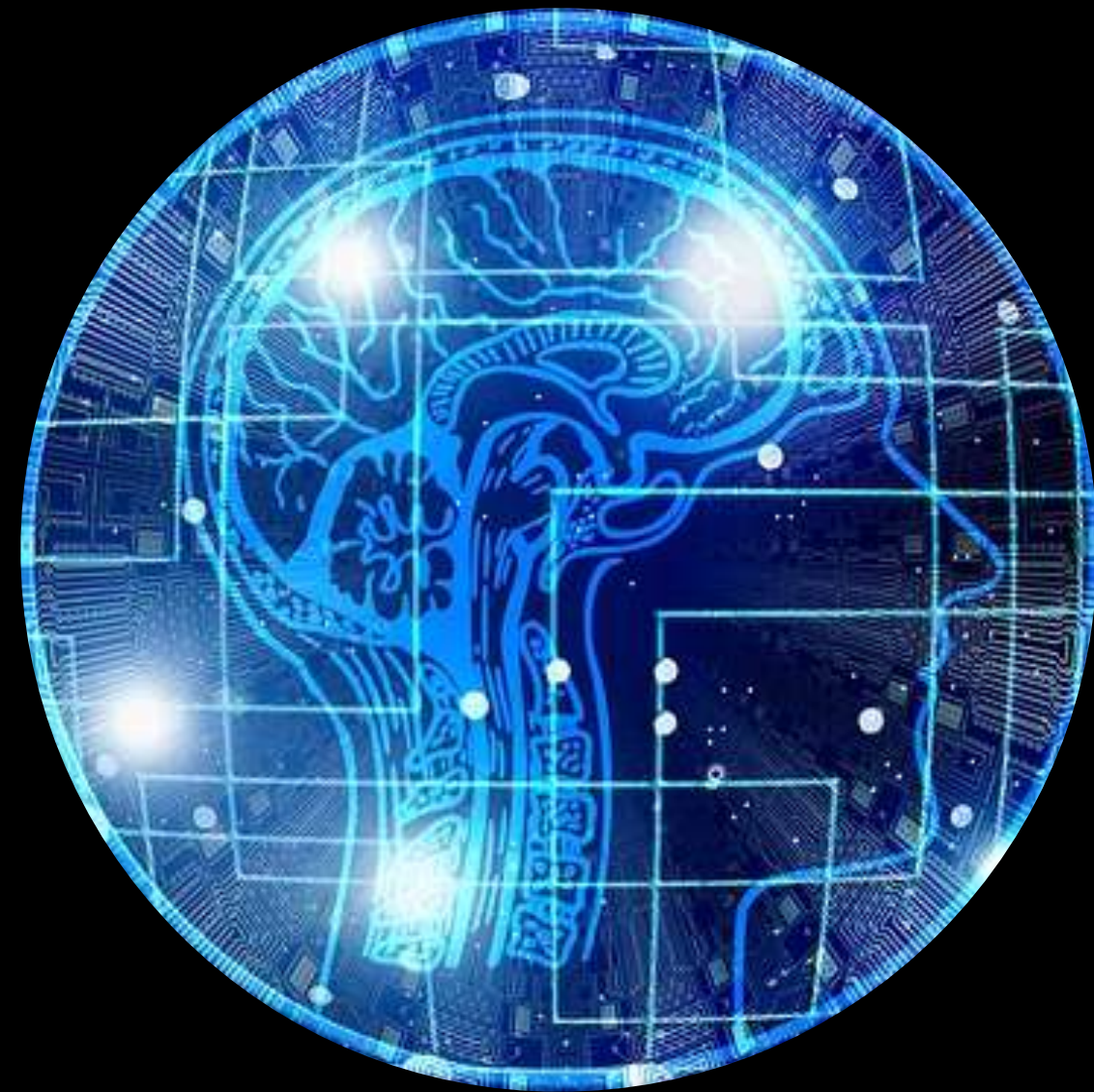
SmartQA

Do less. Accomplish more.

Human powered. Machine aided.



SmartQA

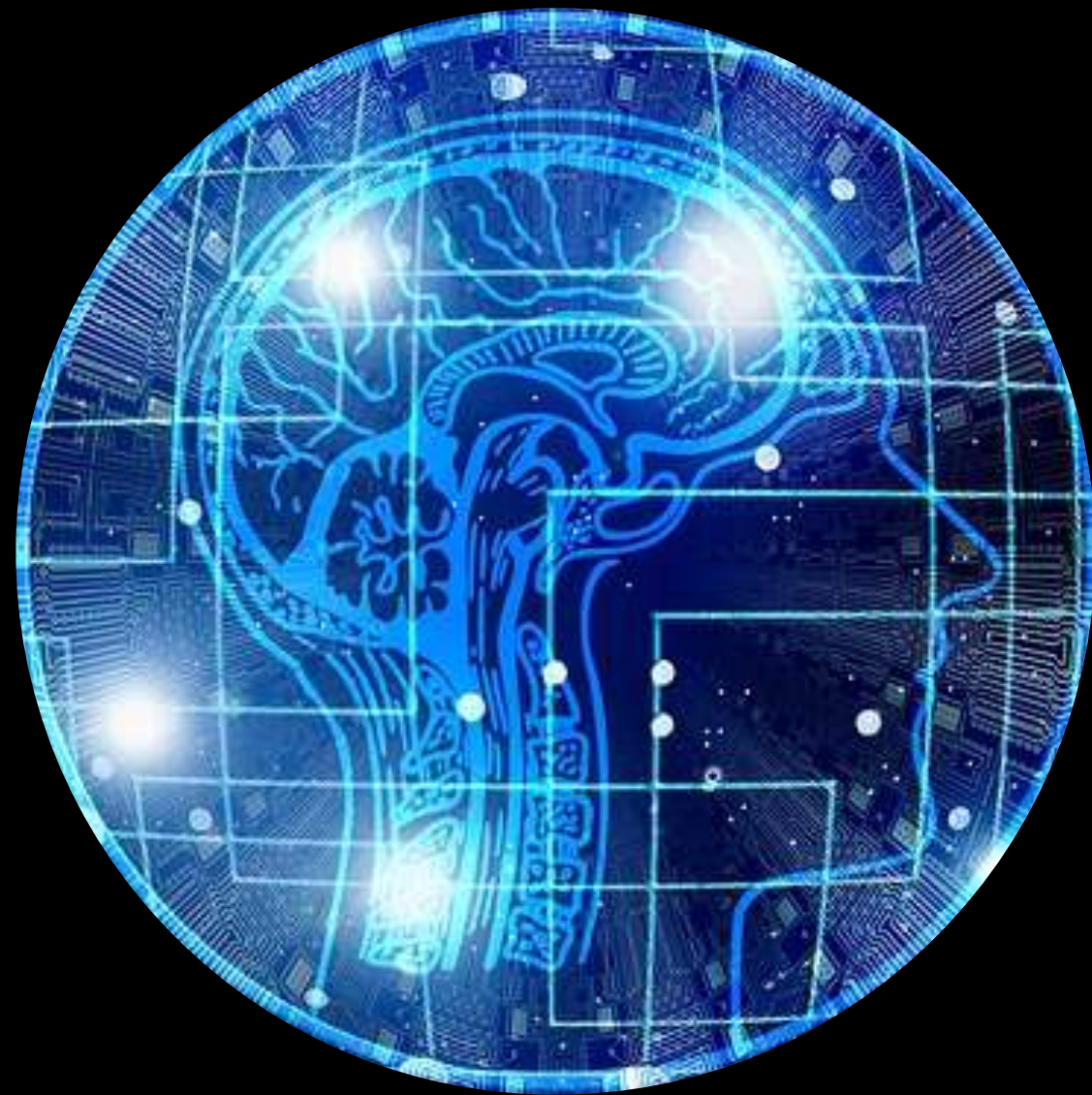


Do less. Accomplish more.

Human powered. Machine aided.

Detect well. Strive to prevent.

SmartQA



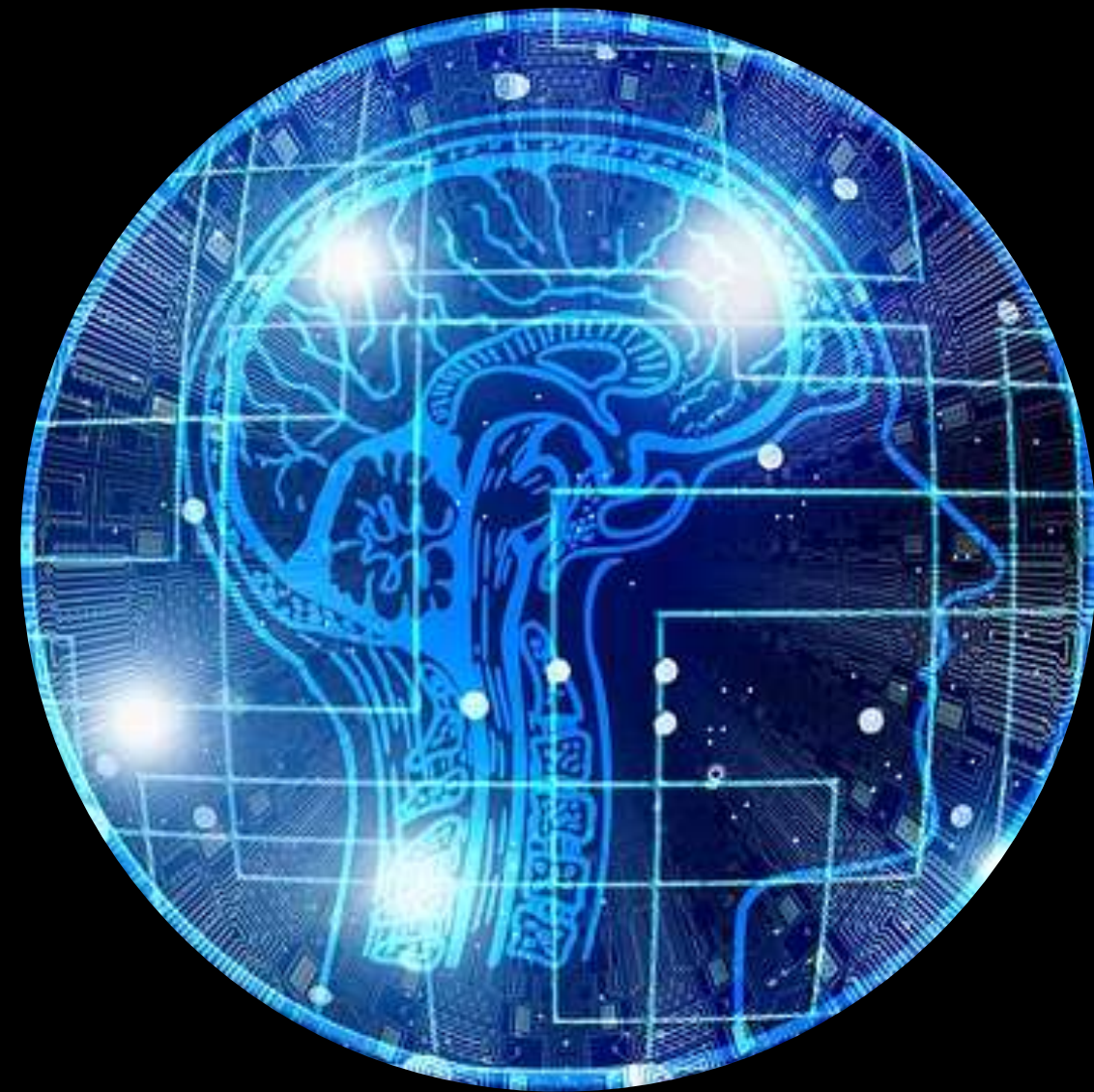
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Detect well. Strive to prevent.

Be lean. Stay agile.

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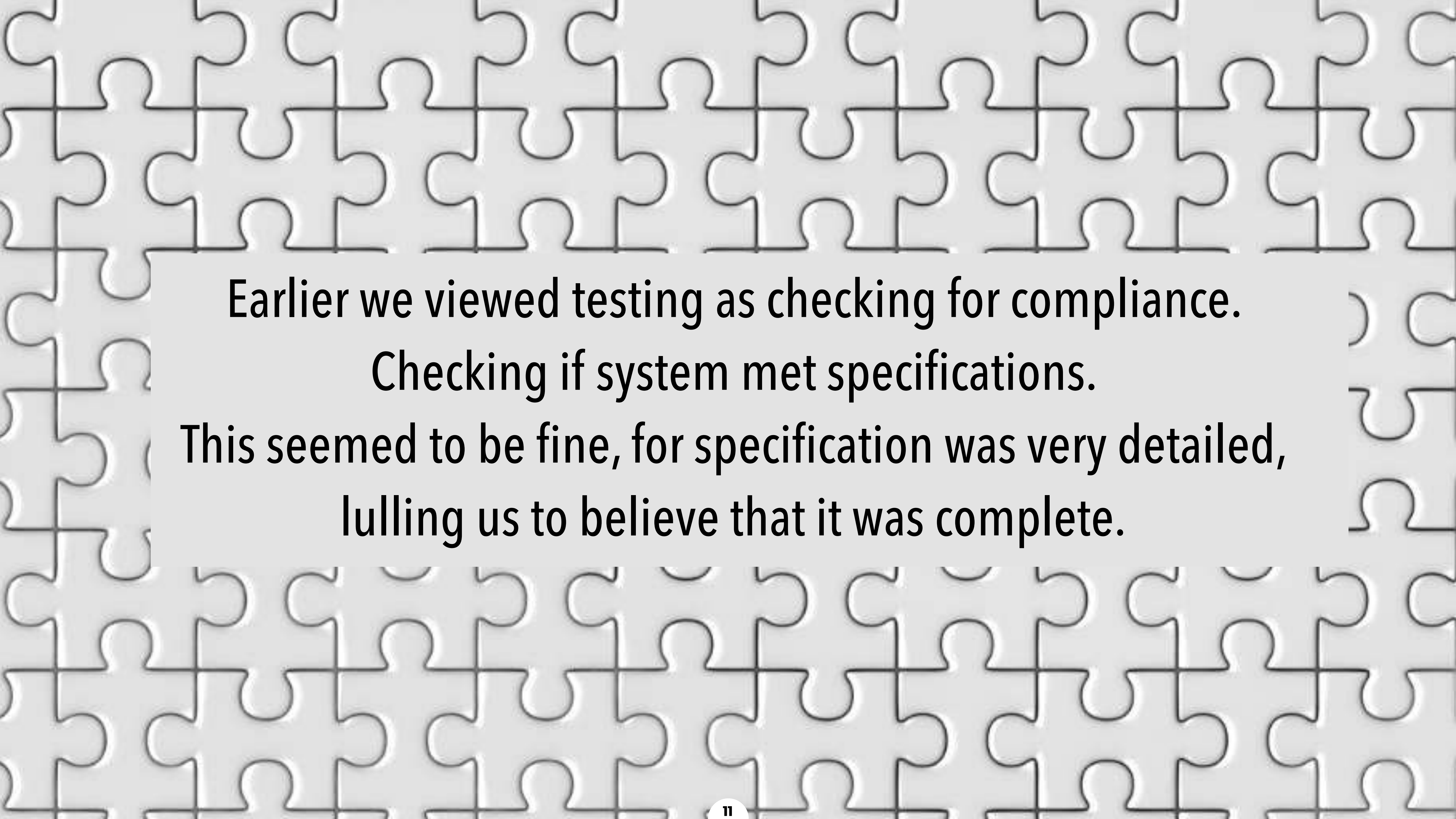
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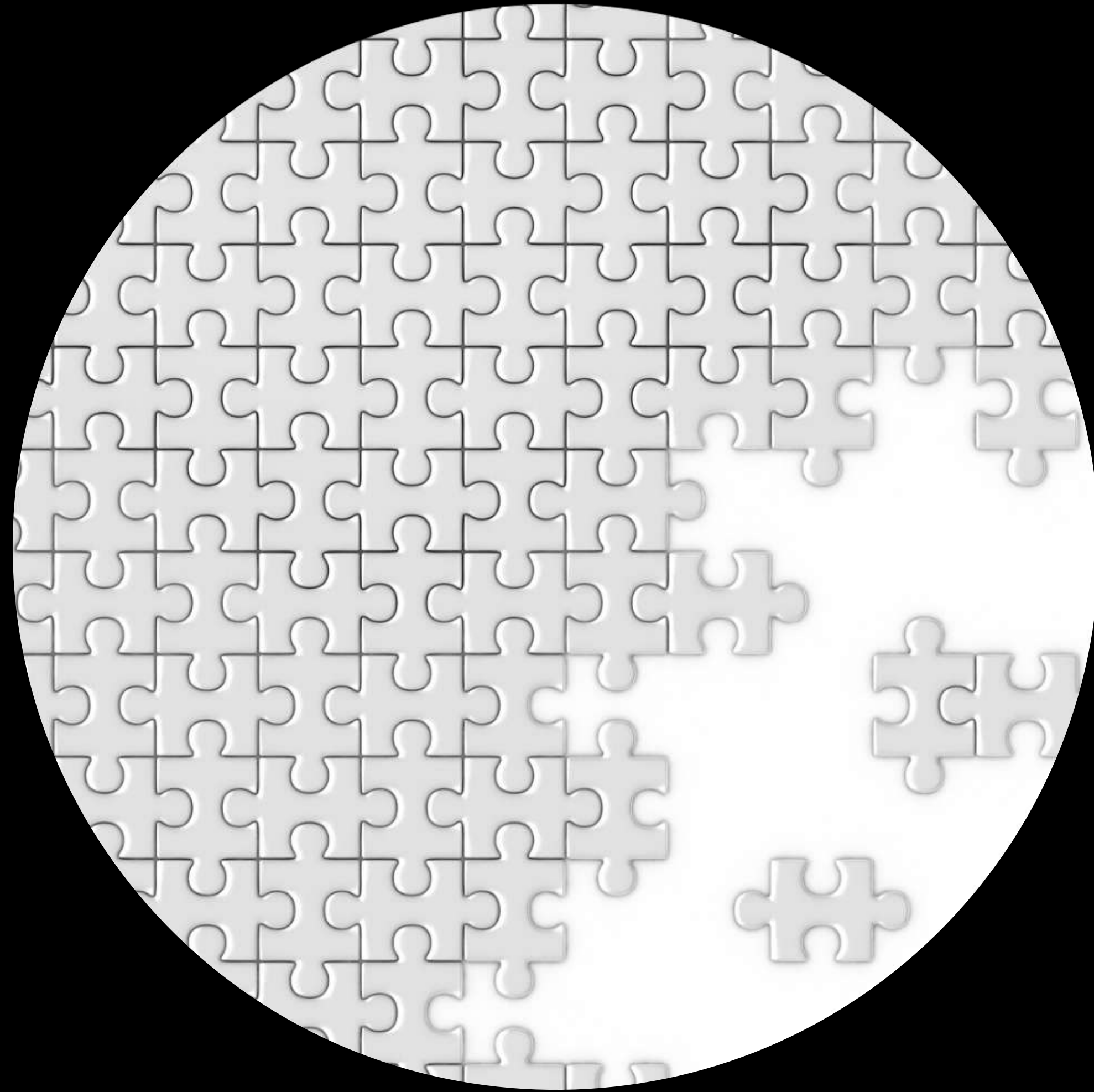
Be lean. Stay agile.

Do great work. Deliver value.

TESTING vs. CHECKING



**Earlier we viewed testing as checking for compliance.
Checking if system met specifications.
This seemed to be fine, for specification was very detailed,
lulling us to believe that it was complete.**



**Truly, no specification can be deemed complete,
as there is no way to prove this.**

Well, specification now is not as detailed, evolves with time, with users revising when they see first cut implementation.

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So we matured, revising our thinking.

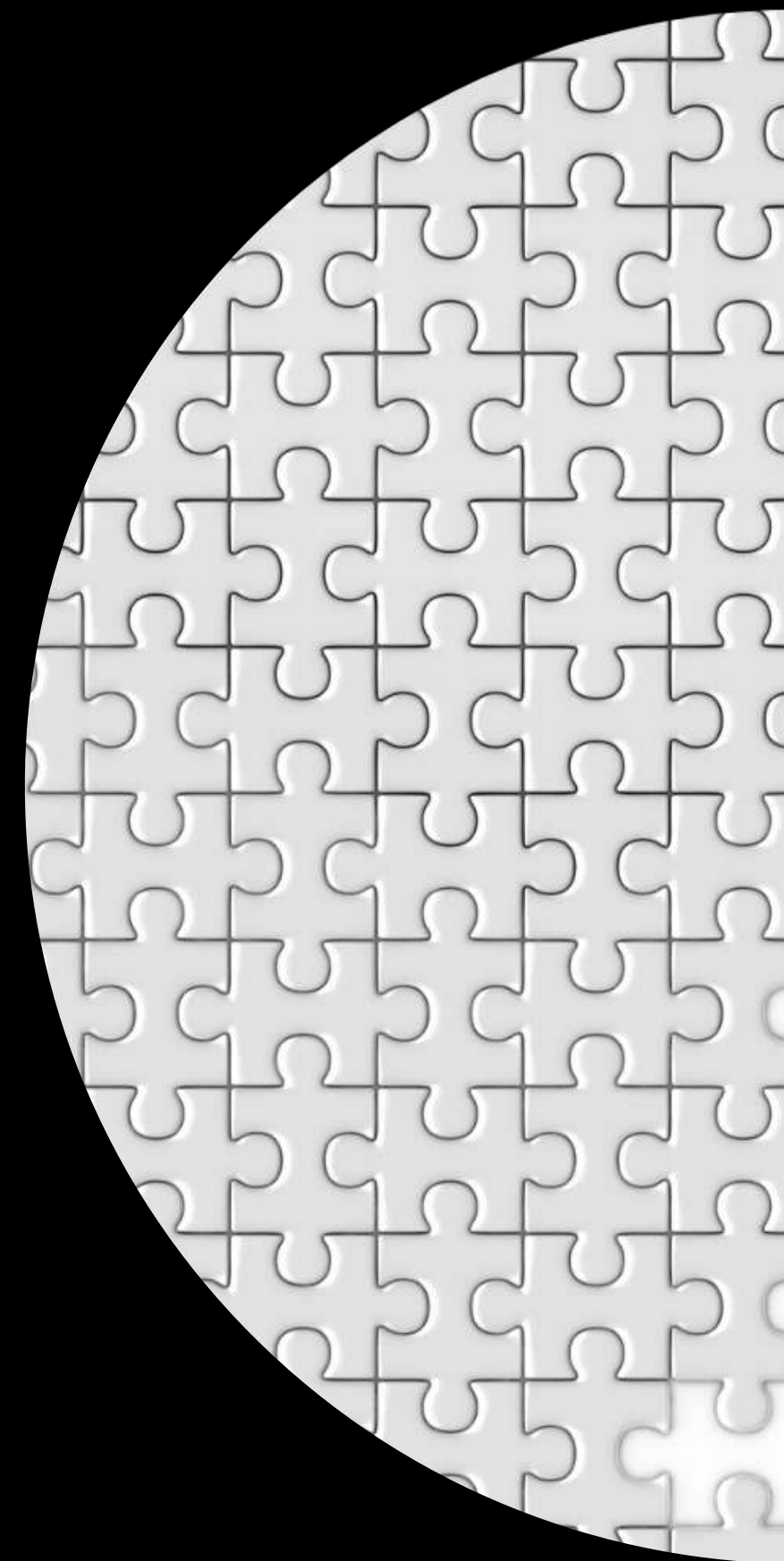
Testing was viewed as exploration.

To understand well, in the process spot anomalies, and suggest ideas that add value to end users/customers.

**Great quality is about
ensuring compliance and discovering potential gaps**

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ensuring compliance and discovering potential gaps

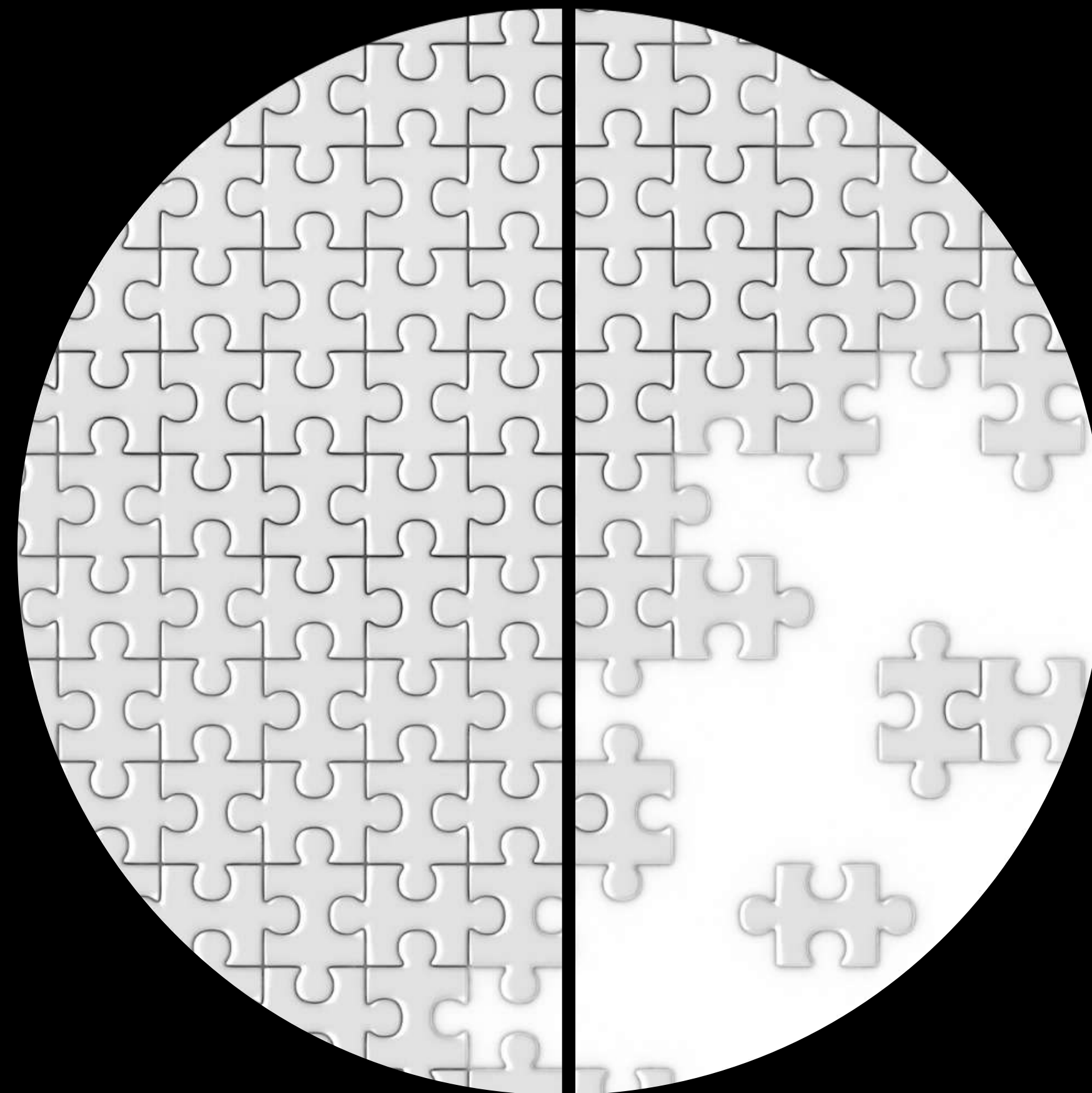
CHECKING



Great quality is about
ensuring compliance and **discovering potential gaps**

CHECKING

TESTING



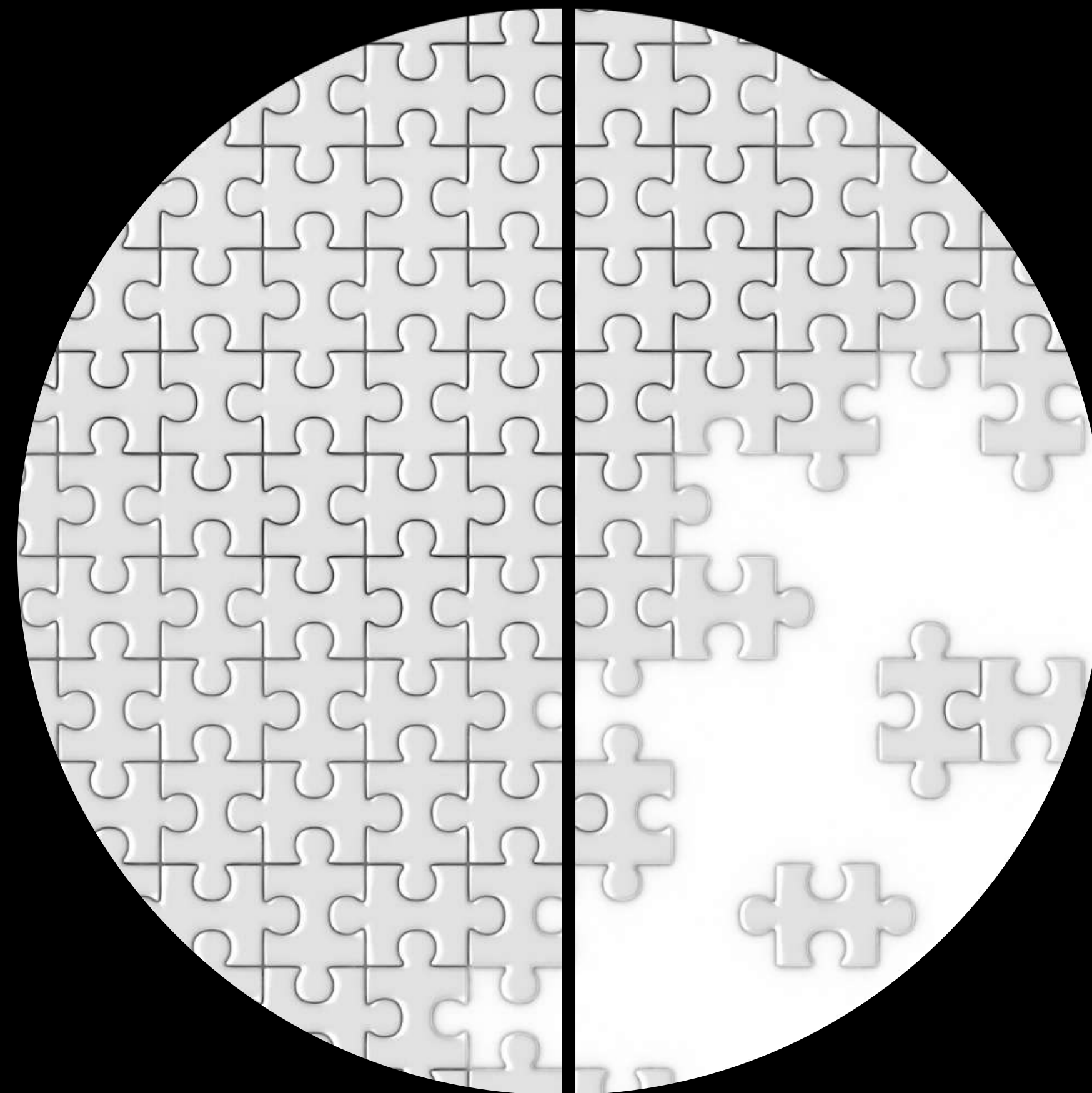
Great quality is about ensuring compliance and **discovering potential gaps**

CHECKING

is comparing
can be scripted
binary outcome Pass/Fail
design approach -
logical, experience

based on spec
wellness
AUTOMATED

TESTING

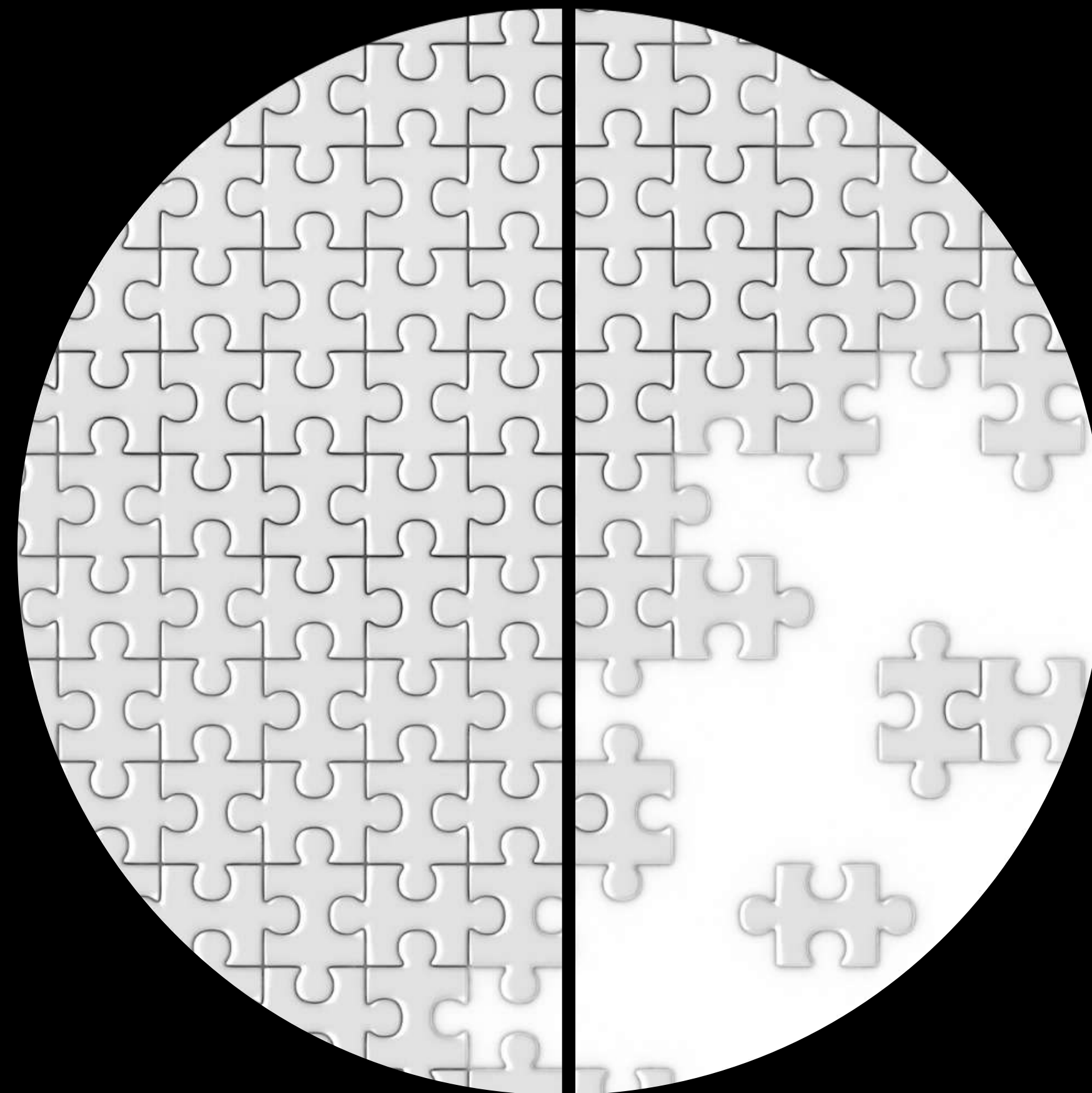


Great quality is about ensuring compliance and **discovering potential gaps**

CHECKING

is comparing
can be scripted
binary outcome Pass/Fail
design approach -
logical, experience

based on spec
wellness
AUTOMATED



TESTING

is questioning
not always scripted
outcome Pass/Fail,??
design approach-
many

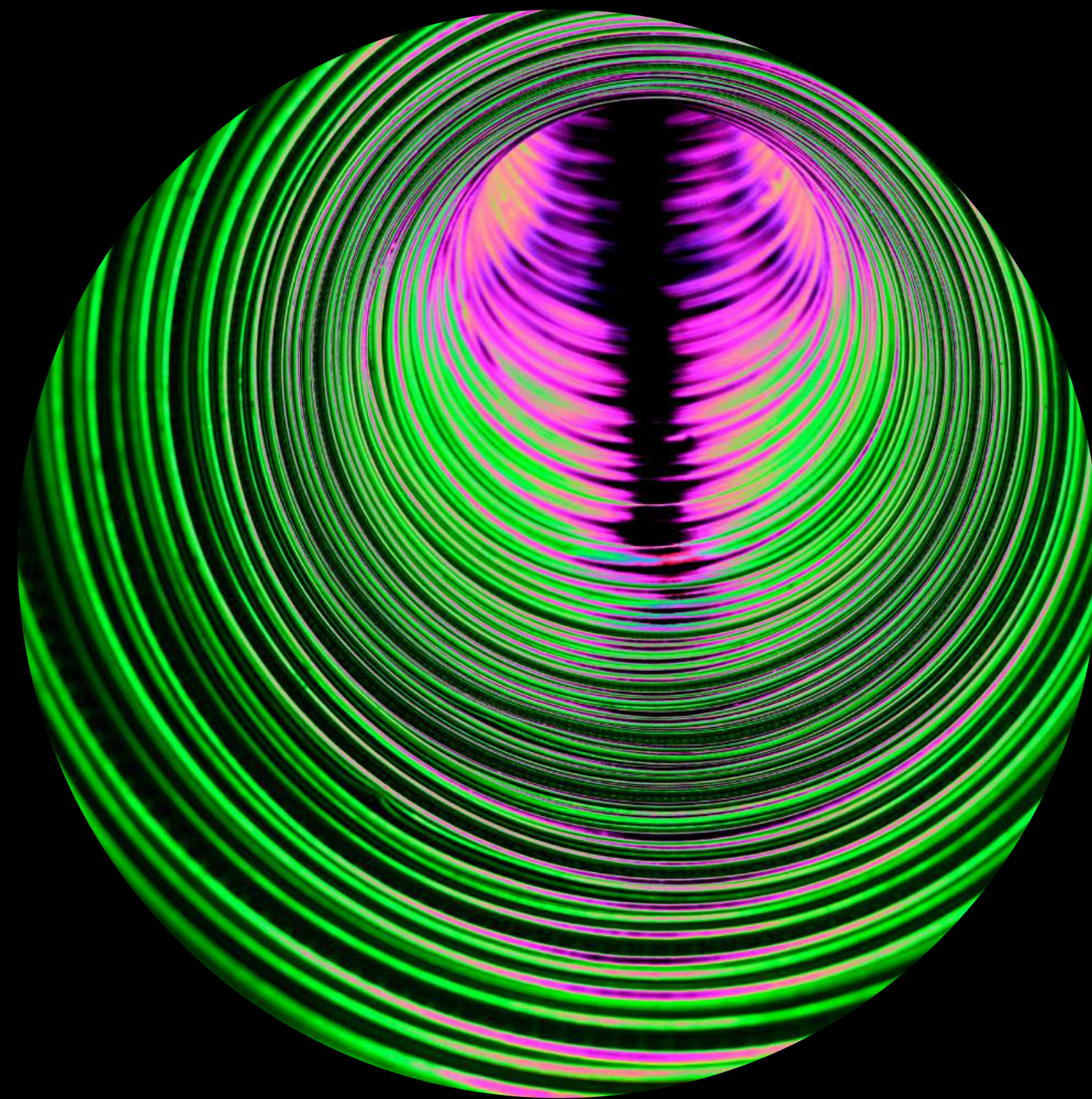
beyond spec
illness
HUMAN

A mature view is :

Testing is a brilliant combination of checking for expected, exploring the whole, looking for unexpected, uncovering issues, suggest needs not yet thought of, improving what is done, and sensitise to prevent issues.



“Testing” really is a gateway to doing good work
and produce systems of value.



Validation approaches

(Scripted, Ad hoc, Exploratory, Automated...)

doing STYLE

activity SEQUENCE

predominantly USES

A

completely SCRIPTED

U

D

E



Validation Approaches

U=understand | D=design | E=evaluate

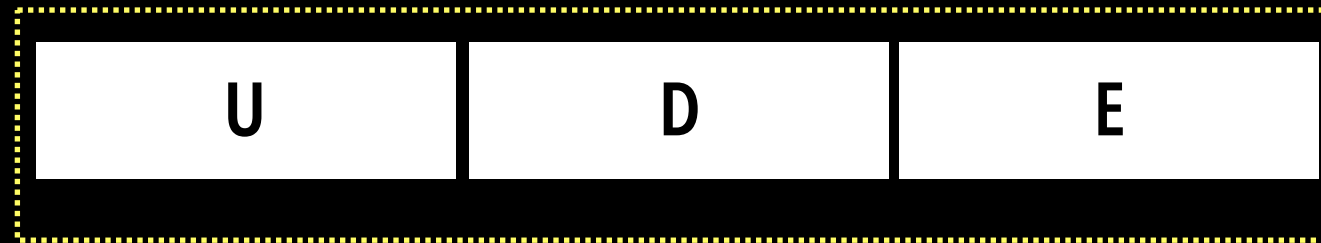
Brain picture from <https://images.app.goo.gl/uvuqi95q7cDupGXS9>

doing STYLE

activity SEQUENCE

predominantly USES

A completely SCRIPTED



B completely UNSCRIPTED
(ad hoc)



Validation Approaches

U=understand | D=design | E=evaluate

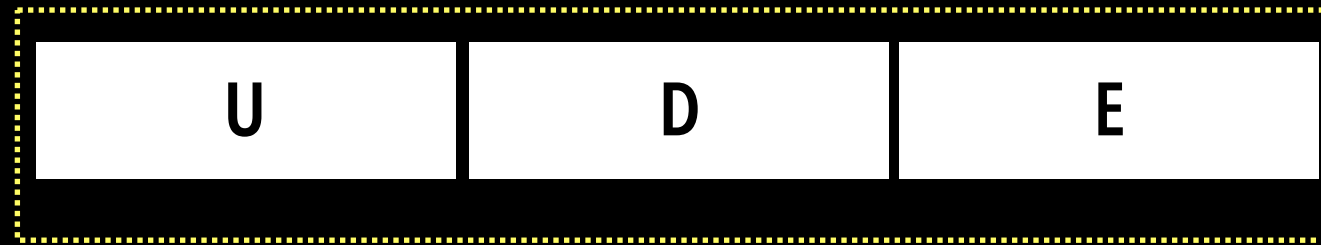
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doing STYLE

activity SEQUENCE

predominantly USES

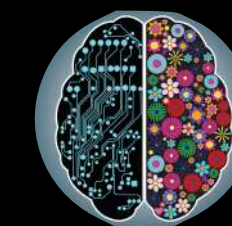
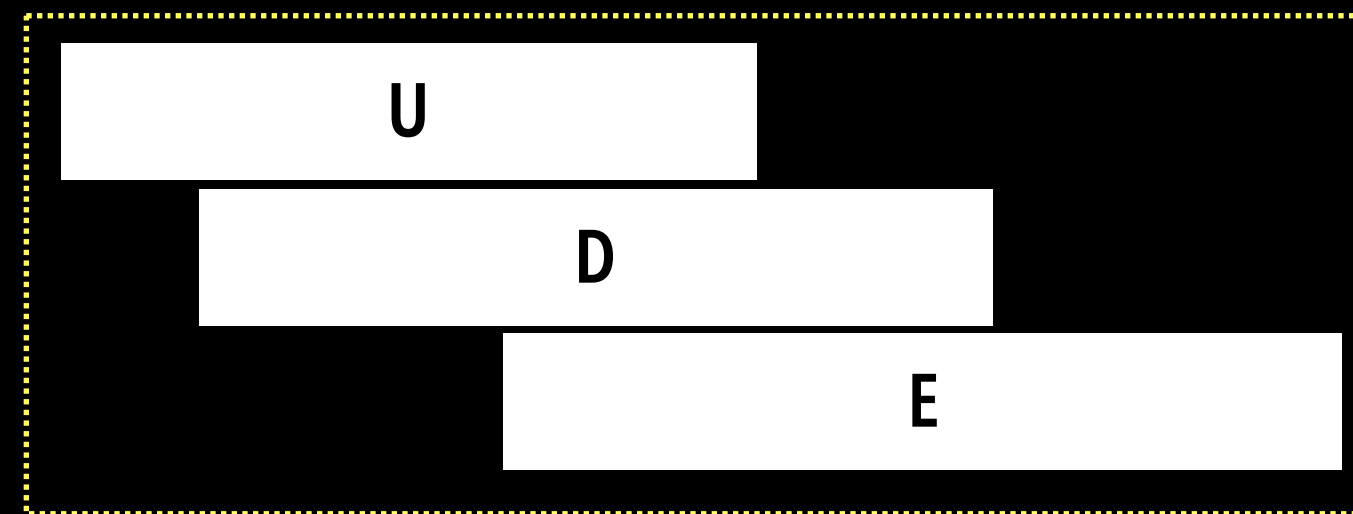
A completely SCRIPTED



B completely UNSCRIPTED
(ad hoc)



C EVOLVING script
(exploratory)

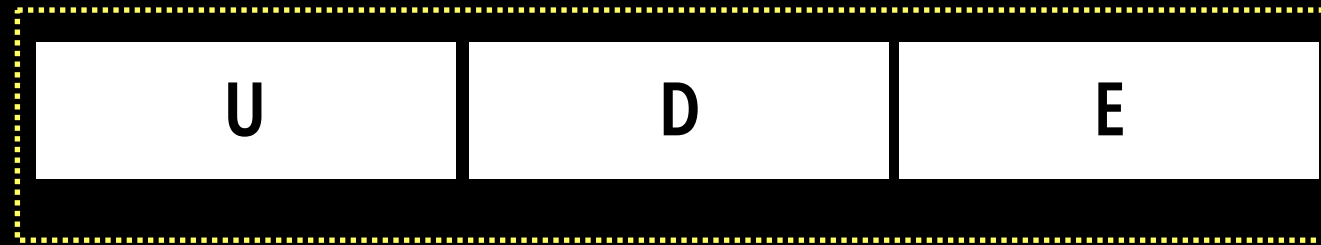


doing STYLE

activity SEQUENCE

predominantly USES

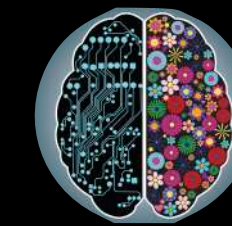
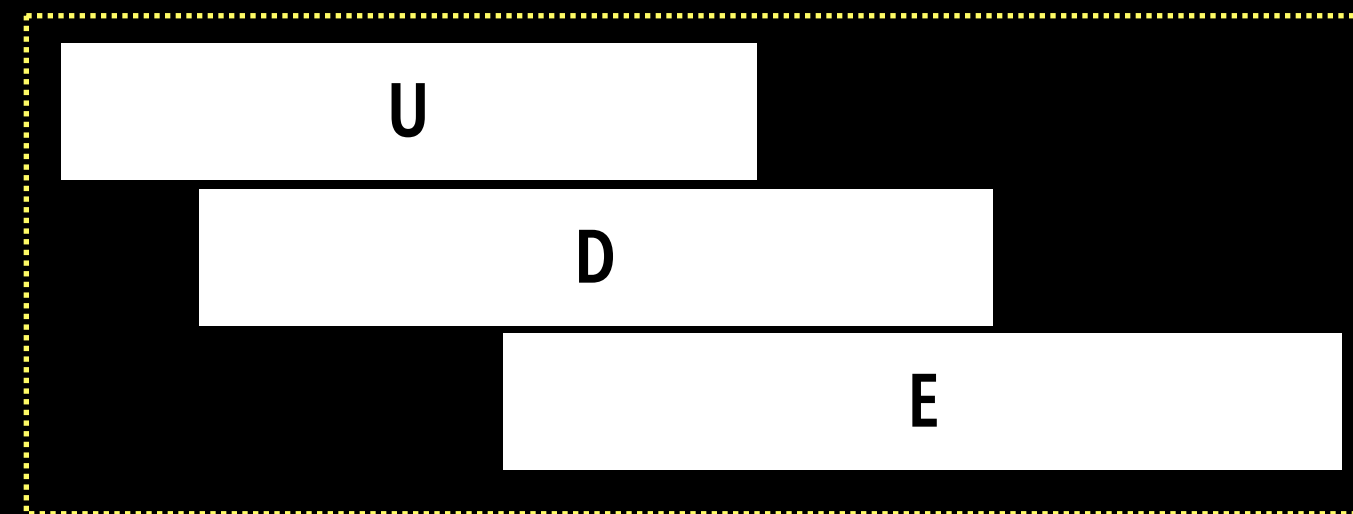
A completely SCRIPTED



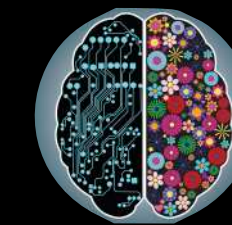
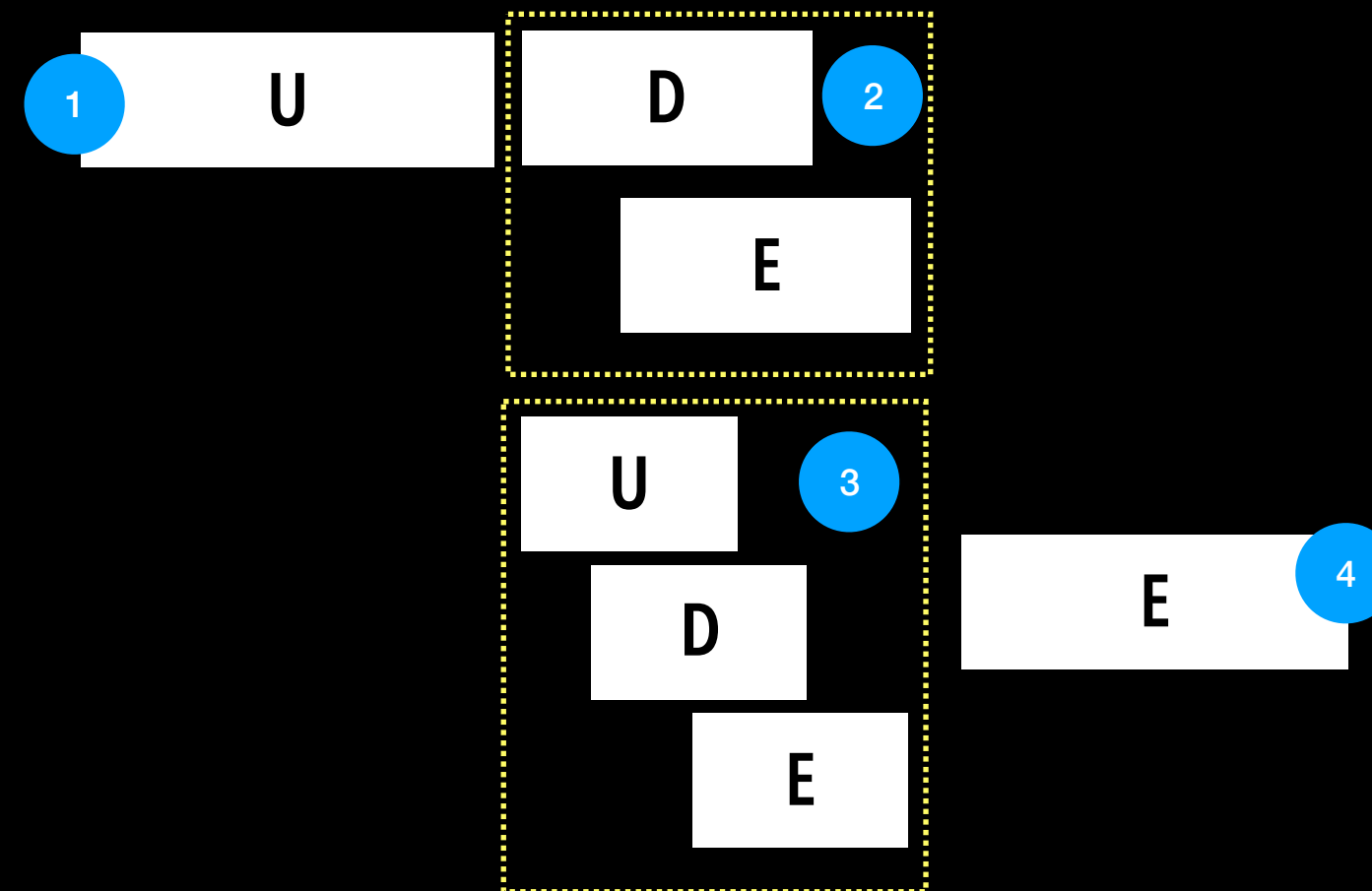
B completely UNSCRIPTED
(ad hoc)



C EVOLVING script
(exploratory)



D EVOLVING script
(SESSION BASED)



Validation Approaches

U=understand | D=design | E=evaluate

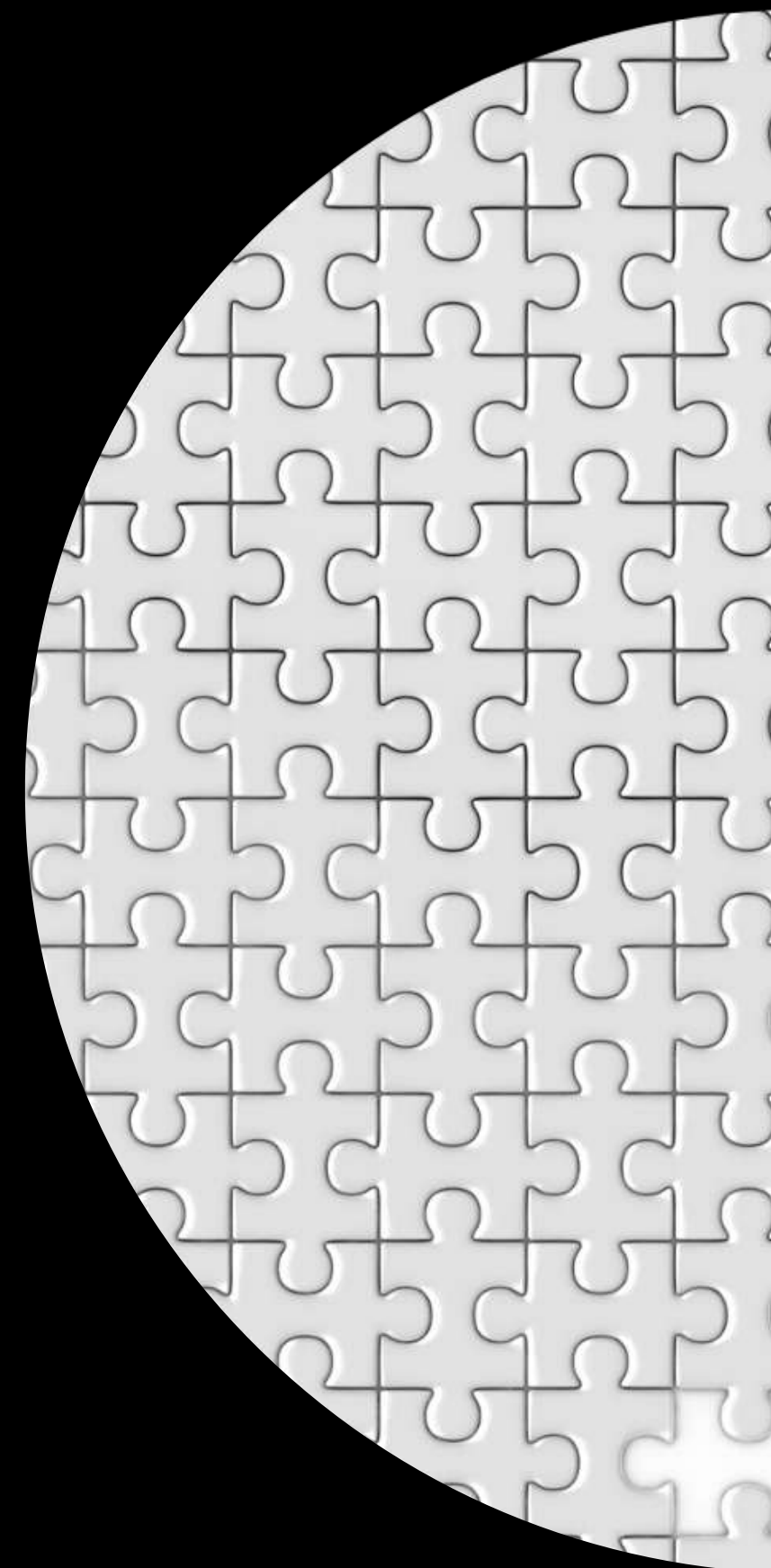
Brain picture from <https://images.app.goo.gl/uvuqi95q7cDupGXS9>

Once we discover SCENARIOS
we can choose to **AUTOMATE** it, this becomes

CHECKING

is comparing
can be scripted
binary outcome Pass/Fail
design approach -
logical, experience

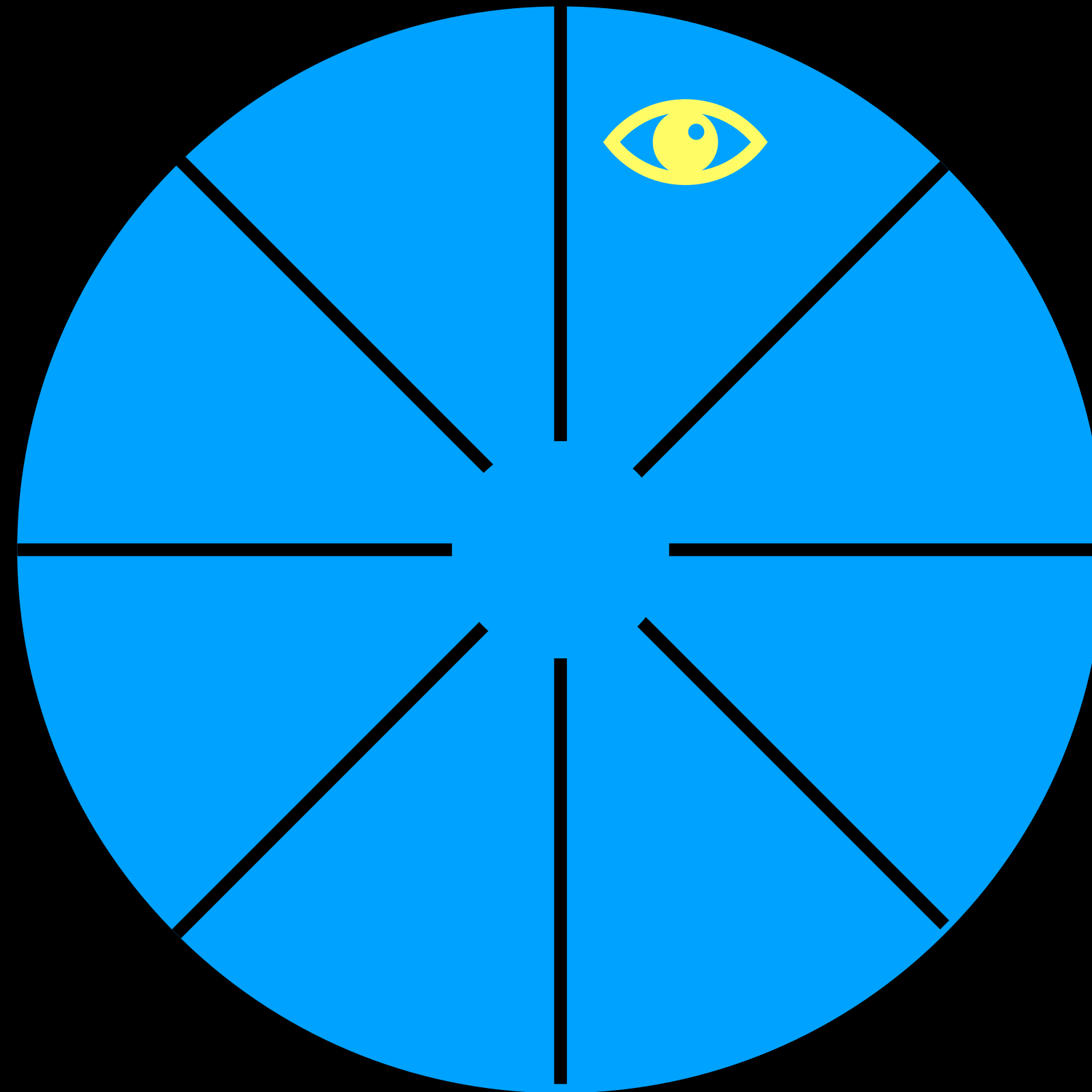
based on spec
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AUTOMATED



Validation POVs

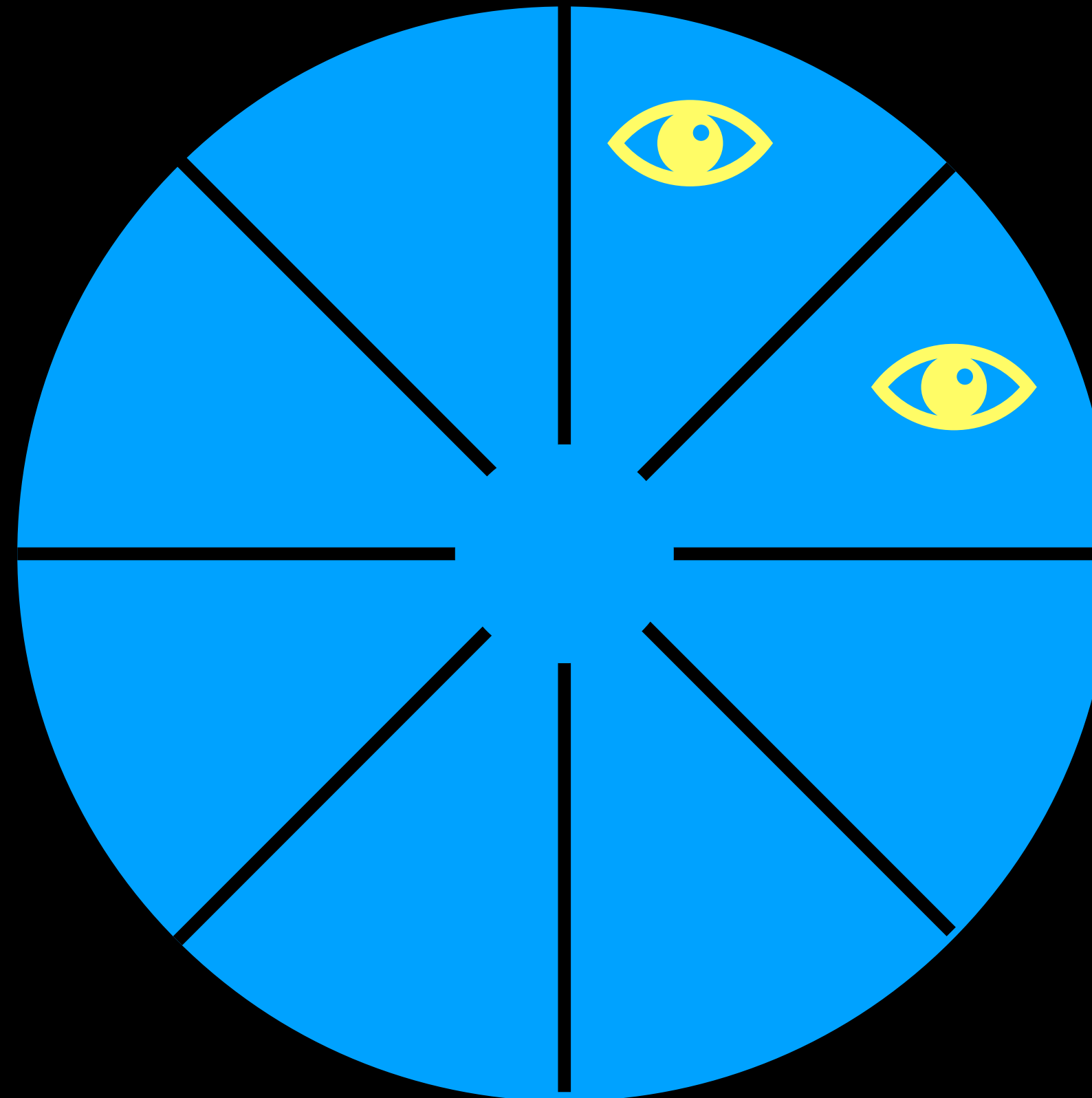
Validation POVs

Business POV



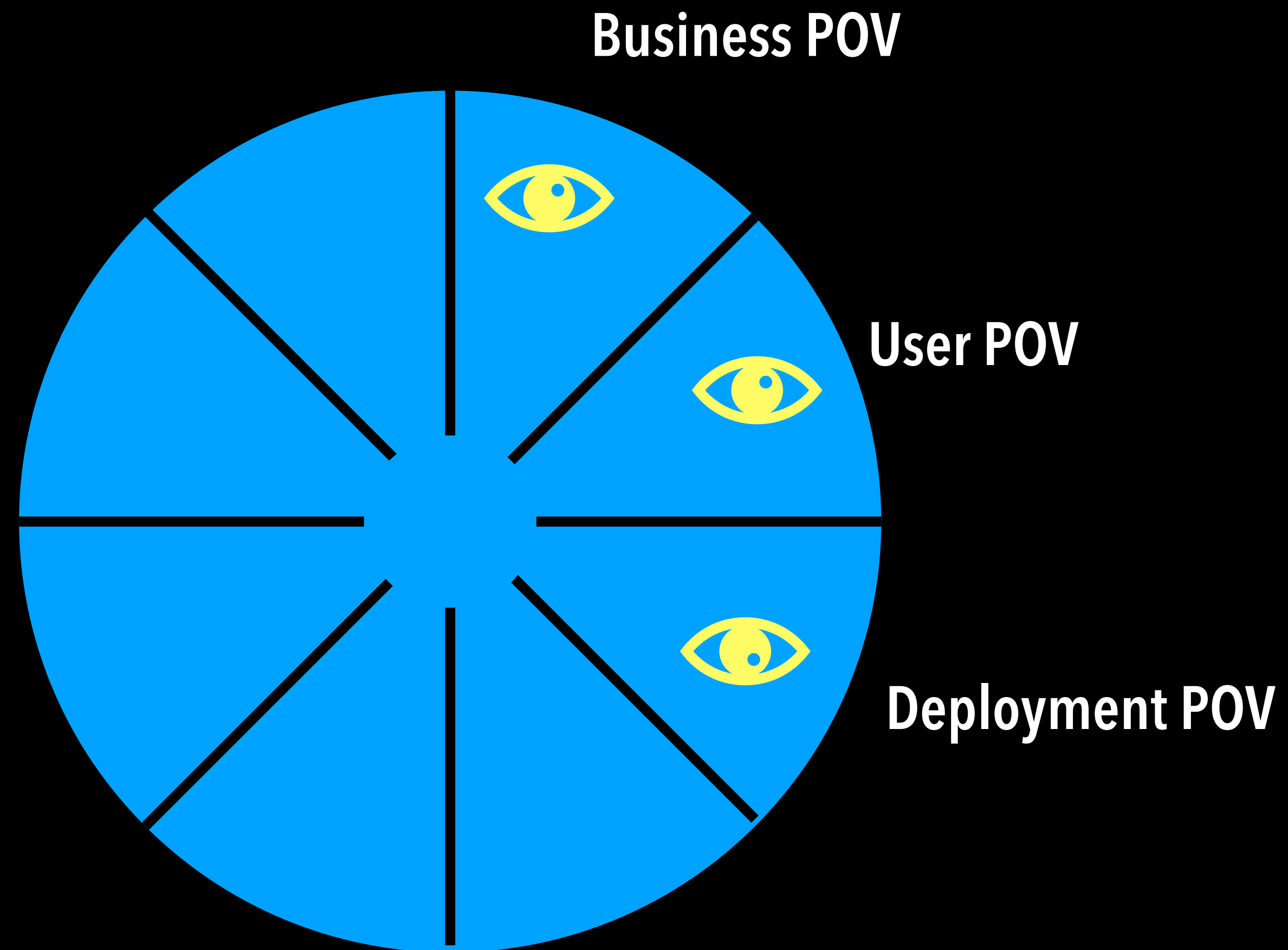
Validation POVs

Business POV

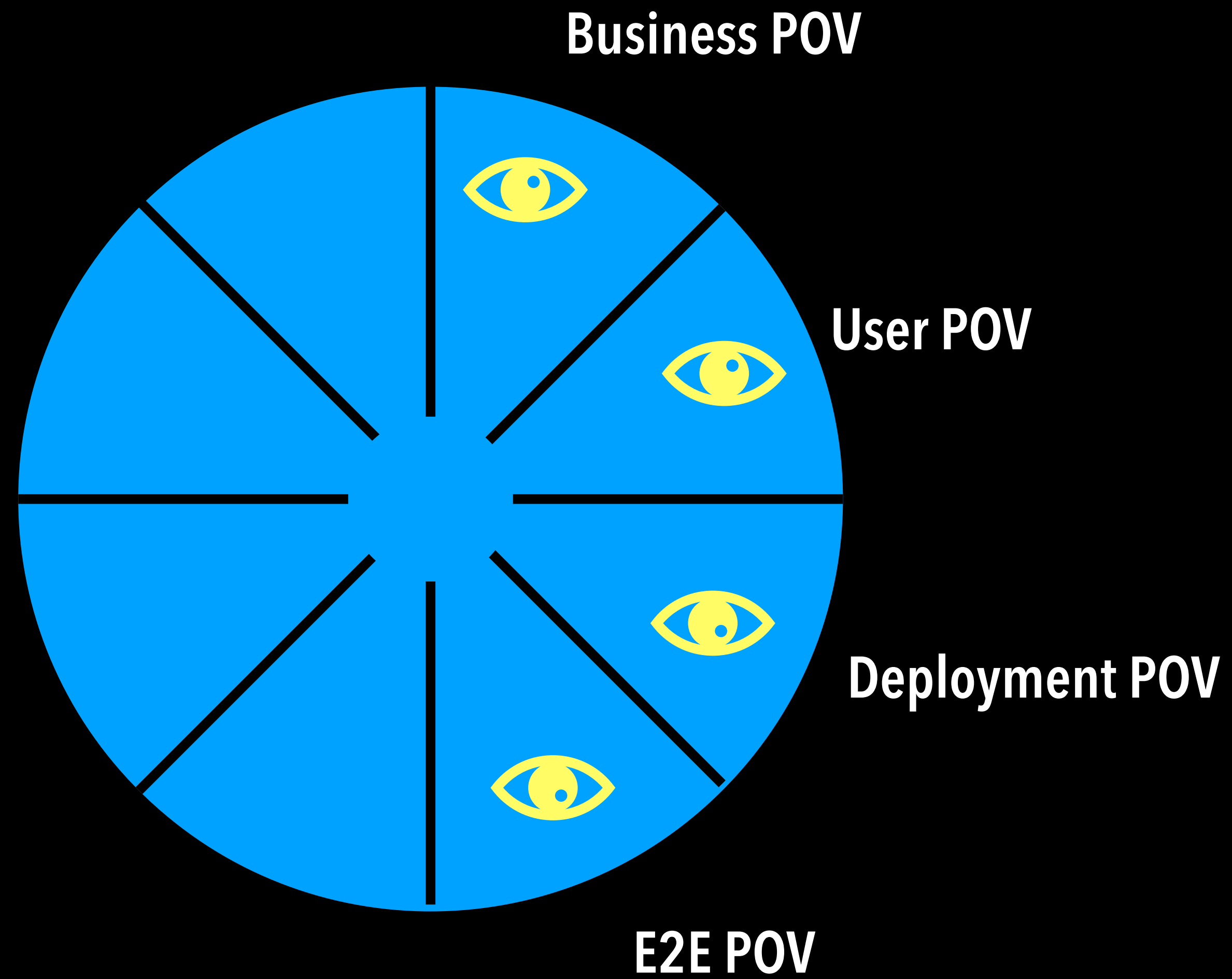


User POV

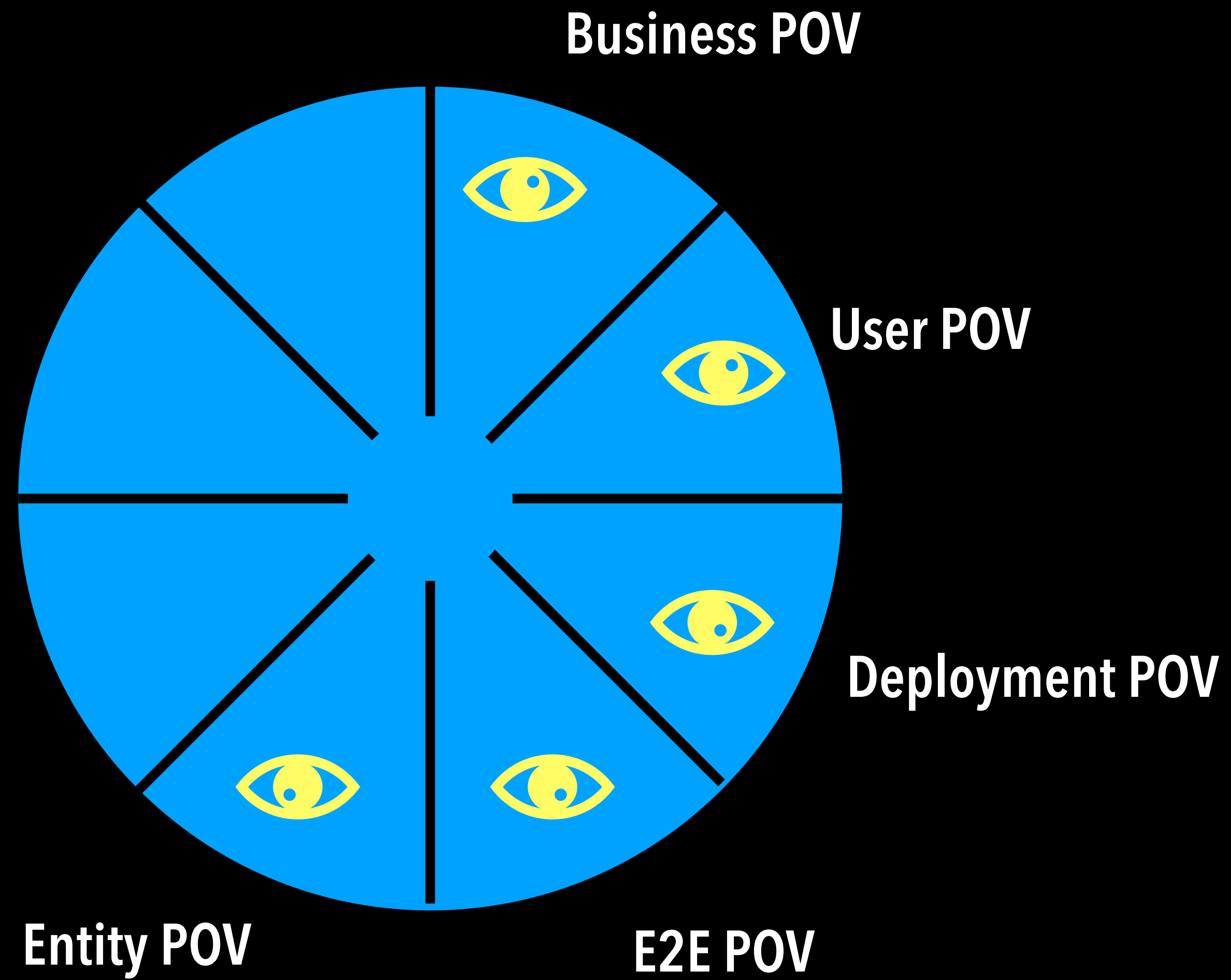
Validation POVs



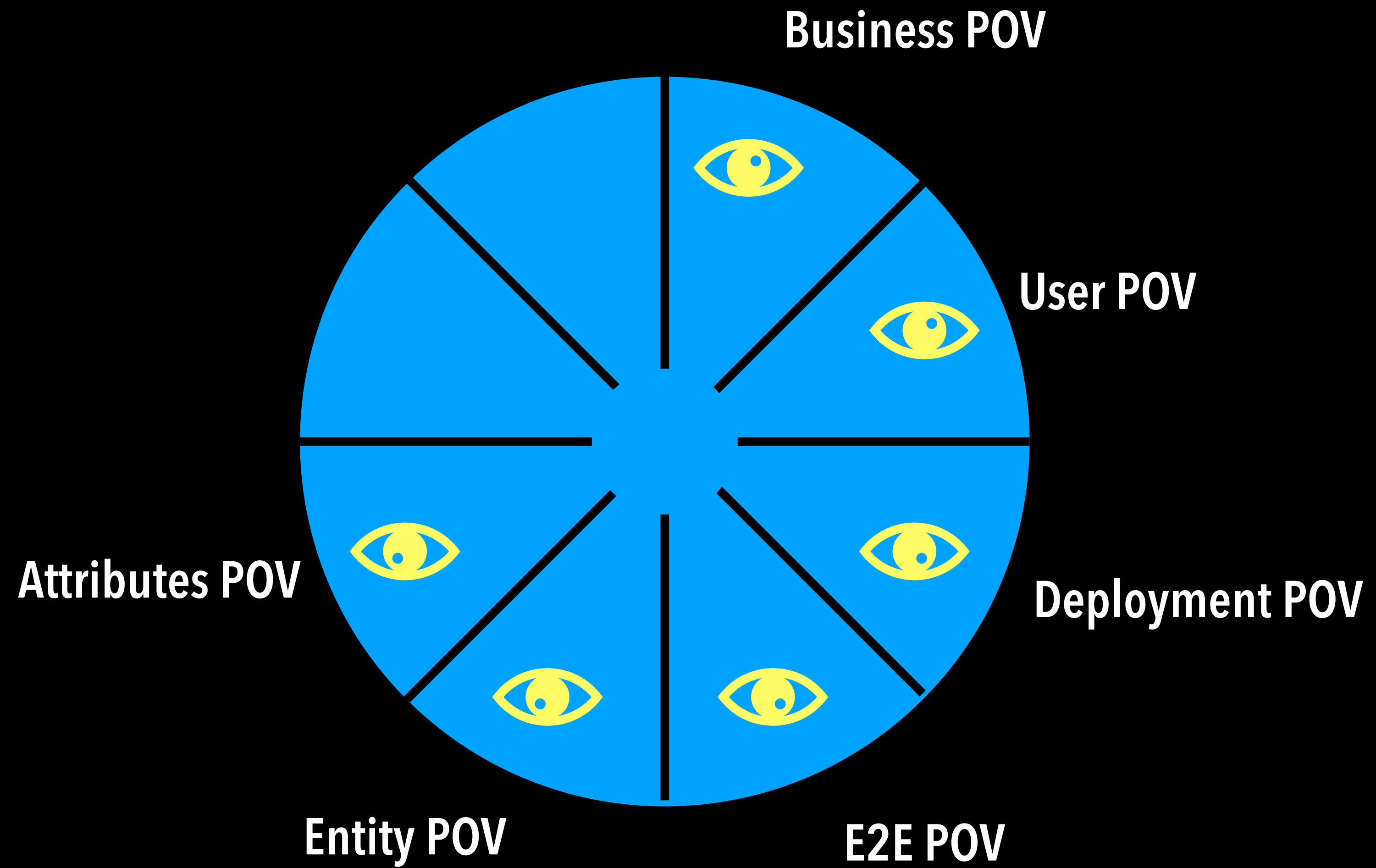
Validation POVs



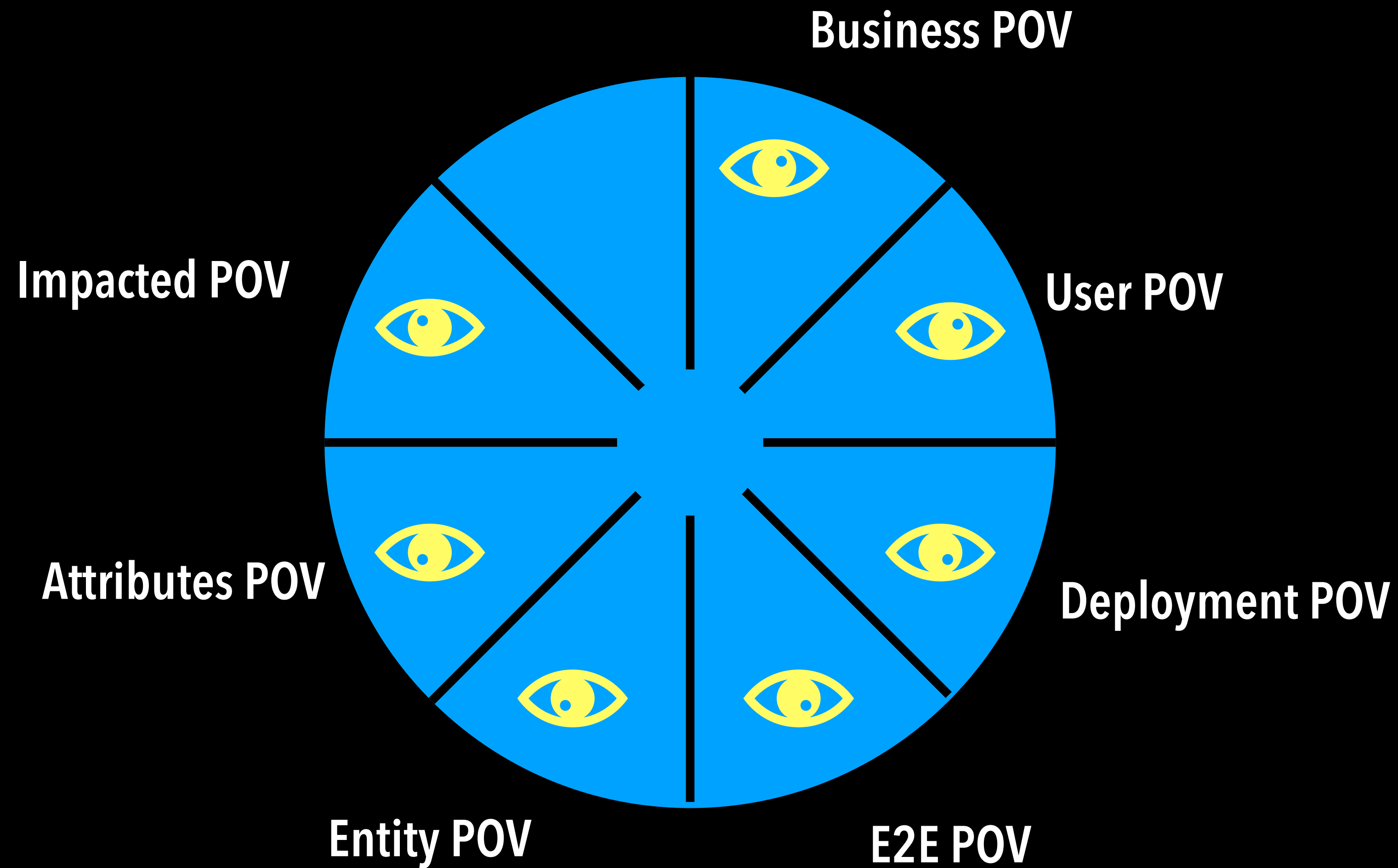
Validation POVs



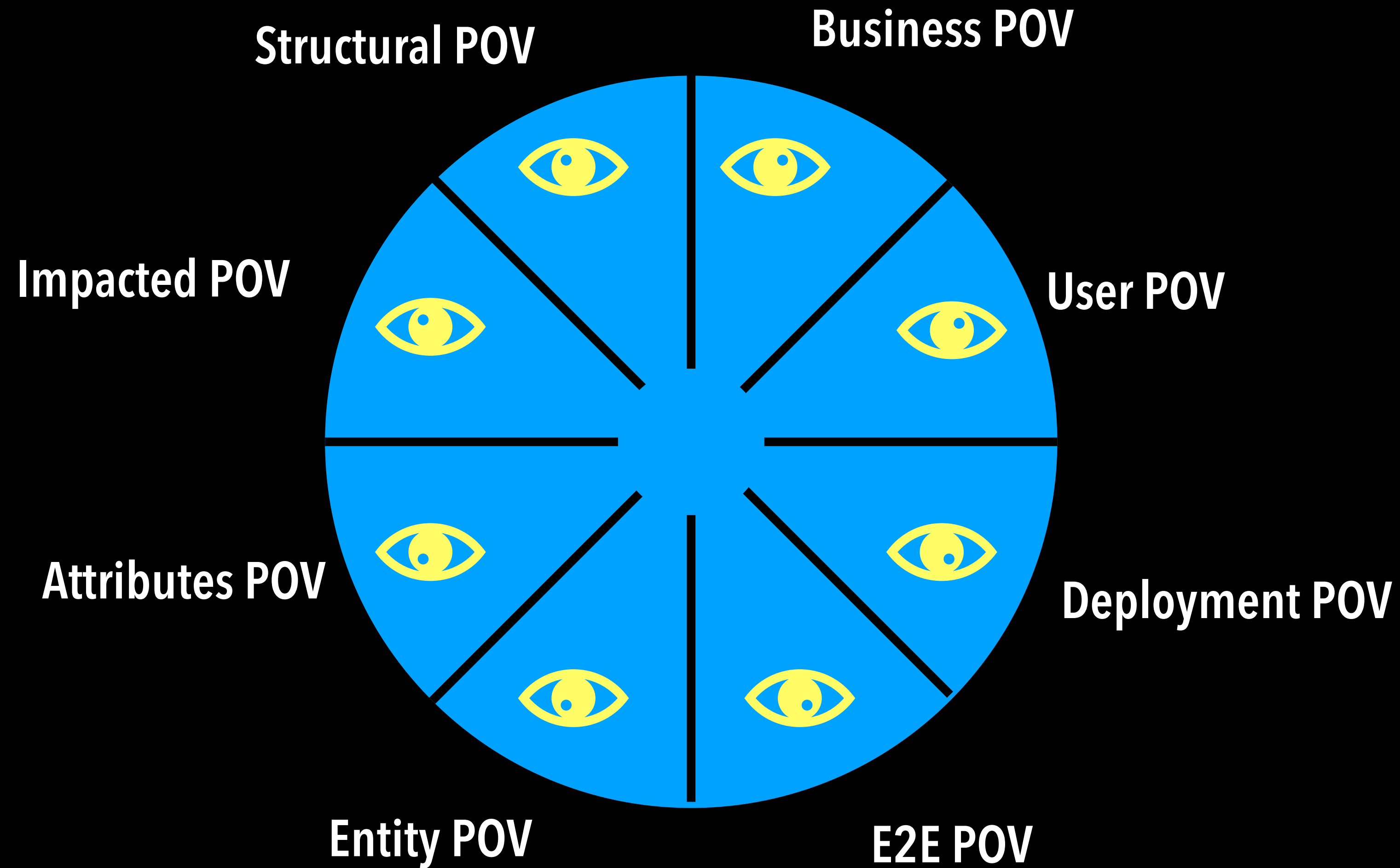
Validation POVs



Validation POVs



Validation POVs



The role of QA

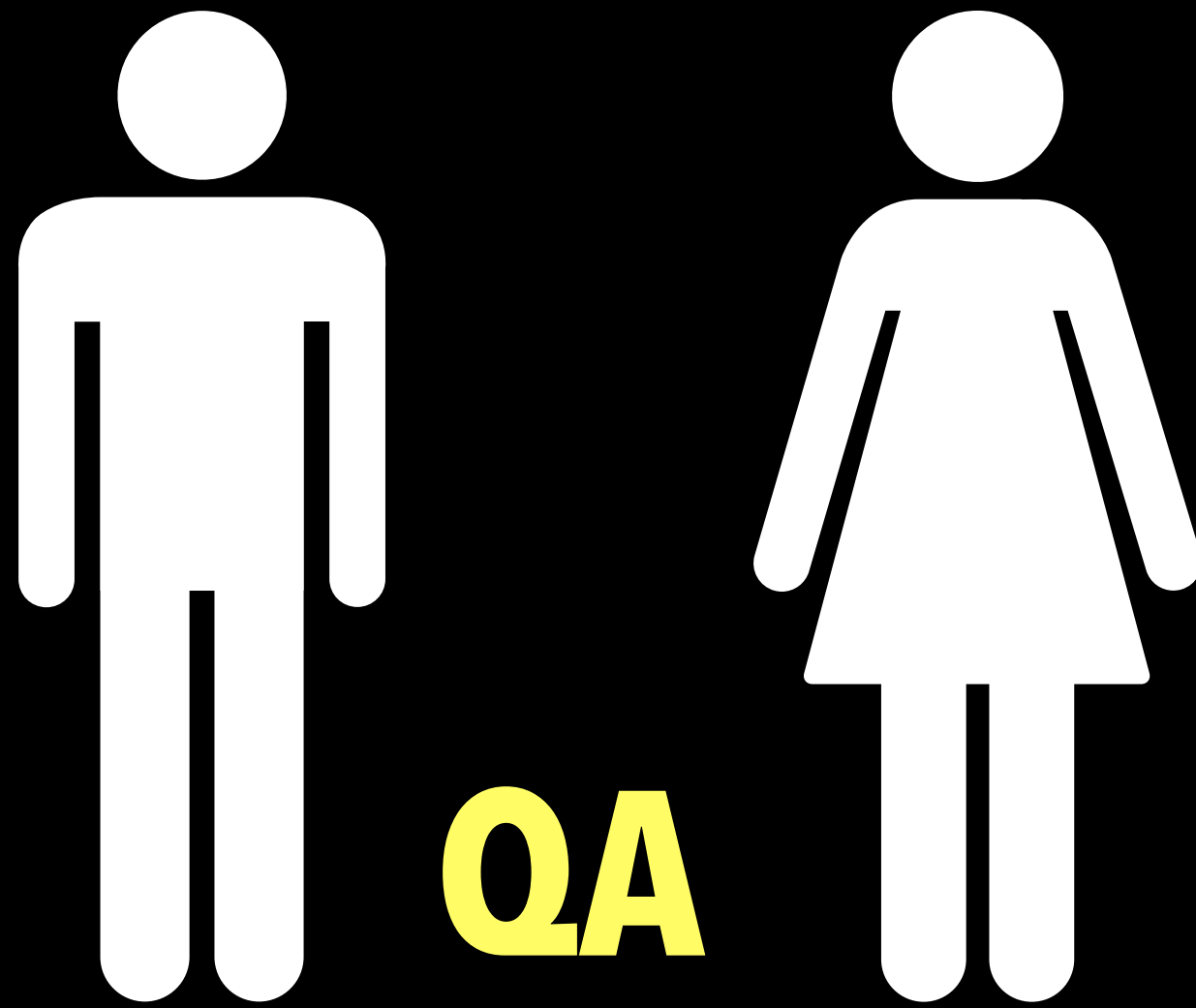
Executor, Automator, Designer,
Questioner, Suggestor, Analyser



What is their role?

Designer

Executor

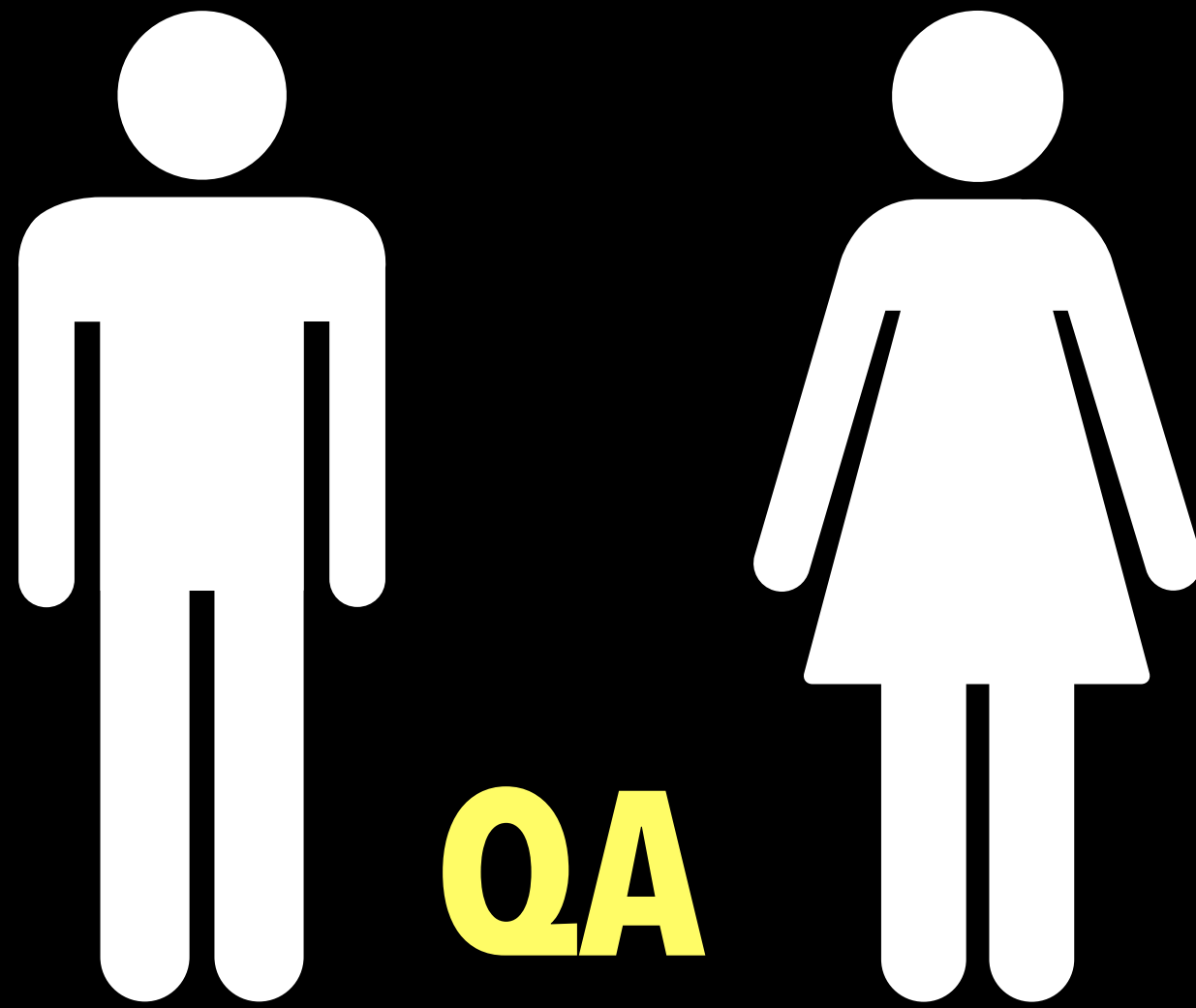


What is their role?

Designer

Automator

Executor



What is their role?

Suggestor

Questioner

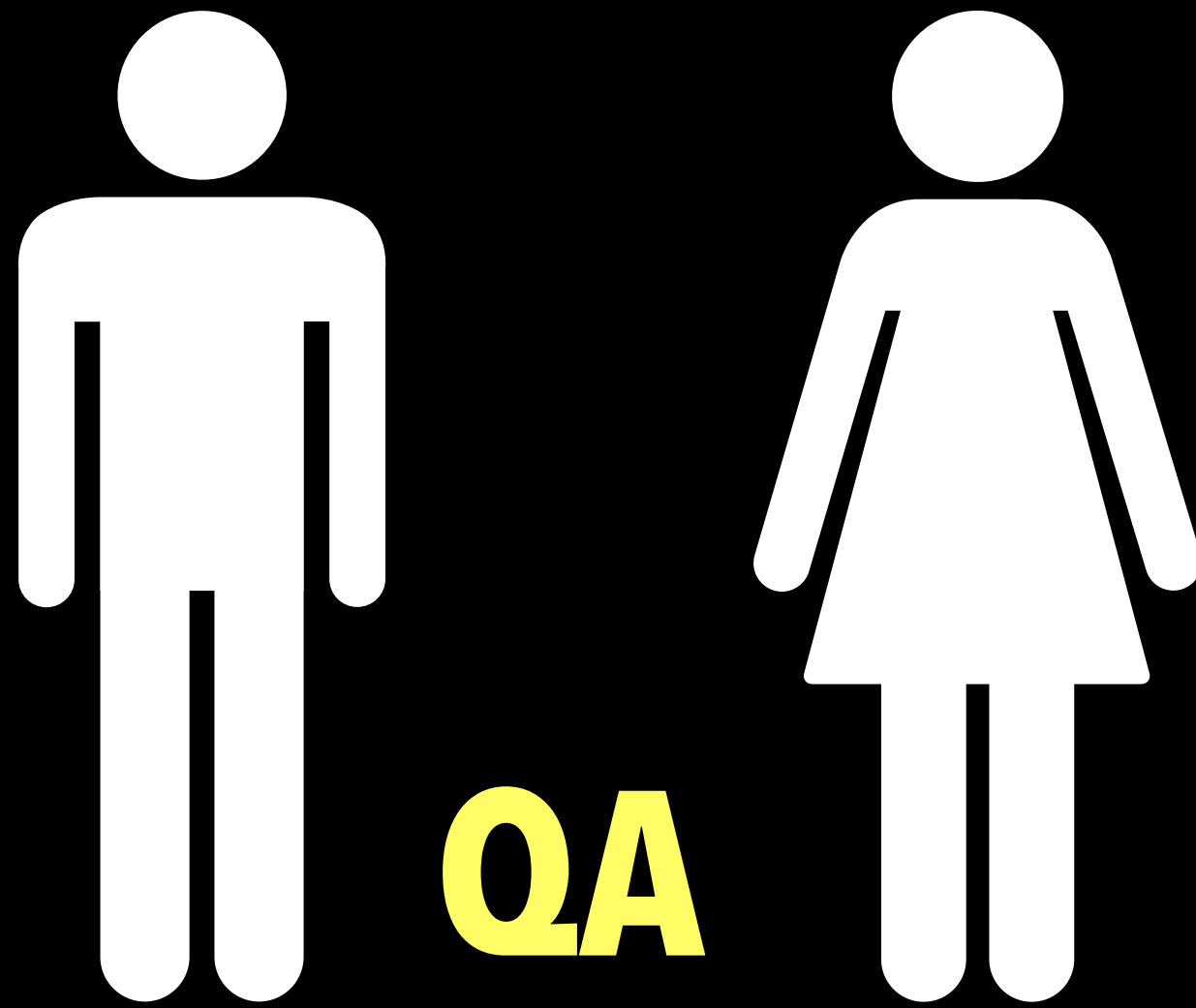
Designer

Automator

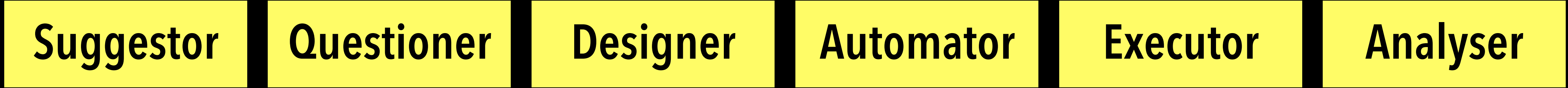
Executor

**Shift LEFT
to do less**

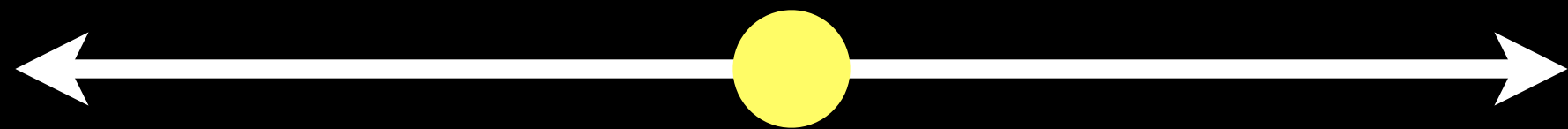




What is their role?



Shift LEFT
to do less



Shift RIGHT
to add value

Introduction to IST

BACKGROUND

Test vs Check



BACKGROUND

Test vs Check
Human & Machine



BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

Discrete vs Continuous

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

Discrete vs Continuous

Early(DevTest) vs Later(QA)

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

Discrete vs Continuous

Early(DevTest) vs Later(QA)

Prevention, Detection

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

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Early(DevTest) vs Later(QA)

Prevention, Detection

Low leakage (tech debt)

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

Discrete vs Continuous

Early(DevTest) vs Later(QA)

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High coverage

BACKGROUND

Test vs Check

Human & Machine

Planned vs. On-the-fly

test Part vs Whole

Discrete vs Continuous

Early(DevTest) vs Later(QA)

Prevention, Detection

Low leakage (tech debt)

High coverage

Do less

SESSION TESTING

Scout (Recon)+ Explore + Design+ Test +Check

SESSION TESTING

Scout (Recon)+ Explore + Design+ Test +Check

Largely human, assisted with tech probes

SESSION TESTING

Scout (Recon)+ Explore + Design+ Test +Check

Largely human, assisted with tech probes

High level plan W2TxTfW + Improvisation

SESSION TESTING

Scout (Recon)+ Explore + Design+ Test +Check

Largely human, assisted with tech probes

High level plan W2TxTfW + Improvisation

Test in the small, Jump to see whole (REPEAT)



IMMERSIVE SESSION TESTING

Short sessions (60-90 mins)



IMMERSIVE SESSION TESTING

Short sessions (60-90 mins)

Focussed - plan session & improvise

IMMERSIVE SESSION TESTING

Short sessions (60-90 mins)

Focussed - plan session & improvise

Systematically analyse, do logically,

meander creatively



IMMERSIVE SESSION TESTING

Short sessions (60-90 mins)

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Systematically analyse, do logically,
meander creatively

Observe, connect, relate, question



IMMERSIVE SESSION TESTING

Short sessions (60-90 mins)

Focussed - plan session & improvise

Systematically analyse, do logically,
meander creatively

Observe, connect, relate, question

Sketch, mindmap, ideate w/short notes



THREE PHASES OF IST

1

RECONNAISSANCE

SURVEY & MAP Users, Entities, Environment,
Attributes, Structure, Deployment



THREE PHASES OF IST



1

RECONNAISSANCE

SURVEY & MAP Users, Entities, Environment,
Attributes, Structure, Deployment

2

EXPLORE

OBSERVE, ANALYSE, QUESTION
Conditions, Scenarios, Potential issues, Notes

THREE PHASES OF IST



1

RECONNAISSANCE

SURVEY & MAP Users, Entities, Environment,
Attributes, Structure, Deployment

2

EXPLORE

OBSERVE, ANALYSE, QUESTION
Conditions, Scenarios, Potential issues, Notes

3

RECOUP

ANALYSE & IMPROVISE
Progress, Action items, Quality, Learn

A SESSION is one/many of 3 Phases of IST



IST is the session-based style of Hypothesis Based Testing

A SESSION is one/many of 3 Phases of IST



IST is the session-based style of Hypothesis Based Testing

A SESSION is one/many of 3 Phases of IST



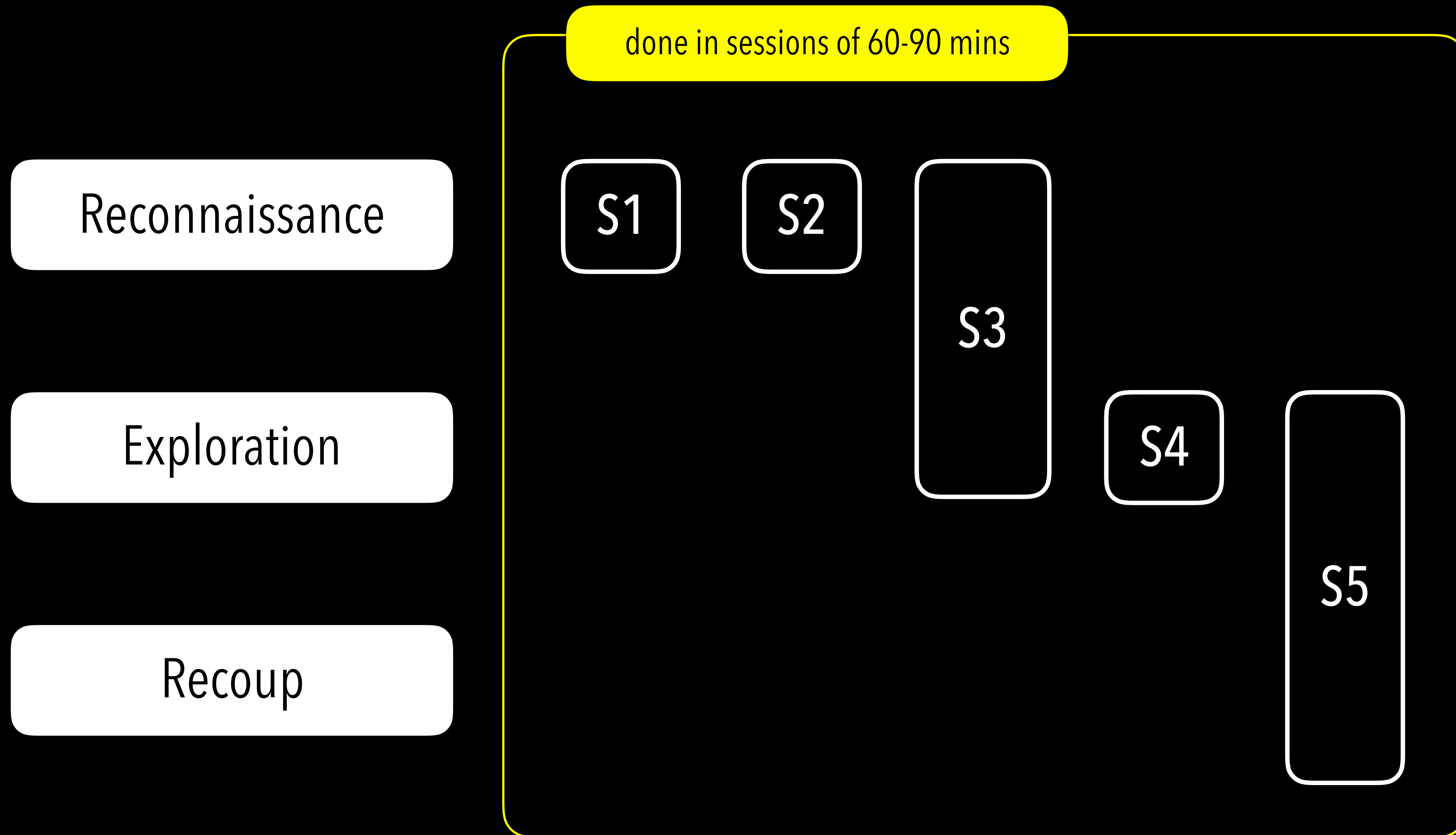
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IST is the session-based style of Hypothesis Based Testing

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IST is the session-based style of Hypothesis Based Testing

Discussion

“Understanding your context”

What are issues/challenges you face?

What are your views on the various styles of testing?

Thank you.



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