“Don’t Feed the Pigeons”

Some Principles From Real World Internal Developer Platform Engineering

Russ Miles, TPL, Internal Platform, Clear.Bank





Overwhelmed…

“Make a positive impact with what you love to do”



https://www.linkedin.com/in/corinna-clamp-791ab956


“Metaphors Matter”

My hope for this talk…

Change your perspective on
what a
product is,
and what a
technical product owner
does!

Trigger Warning!

Trigger Warning.


Go back 15 years to…

Terror


Principle:
Make the right thing simple and easy, make the other things possible


Principle:
Principle of Least Surprise


Principle:
Code is Communication between Humans

Platform “Golden Ratio”



No. of Platform Product Engineers



No. of Platform Product Engineers / No. of Platform Users



~20 / ~200



~1 / ~10



~100 / ~1,000,000s




Back to 2020…

More Terror…

Covid.

Cancer.


Sussex Cancer Centre
Outpatients
Sussex Cancer Centre
Outpatients
Sussex Cancer Centre
No smoking
No smoking



A Tale in

Six Weeks

(of **chemoradiotherapy**)

Meet Jules…



ngtree.com


Black Bugs





Week One

What are you here for?

“What are you here for?”



Product?

Is it the **thing** that matters?

Is it **what you do**
that matters?

To Produce??

To Own??

To Manage??

No...

Is it the business impact?

(Cost optimisation, Scale et al?)

Not really...

“So what really ***matters***?”





Week Two

Product is Change

Principle:
Product *Stewardship*

“What’s it called?”



Platform Engineering

Platform ***Engineering***

Platform Engineering

“What does it change?”



Principle:
A product *is* change



From this…





…to this.

Helping people work creatively, safely, and to thrive

Principle:
The Metaphors Matter

“A place to ***inhabit*** to live and work creatively ***safely***…?”



Yes! A ***habitat***

A

complex, socio-technical

habitat

“That’s nice, so what makes a good habitat?”





Week Three

Product as Habitat



Principle:
A Habitat Lifts People Up

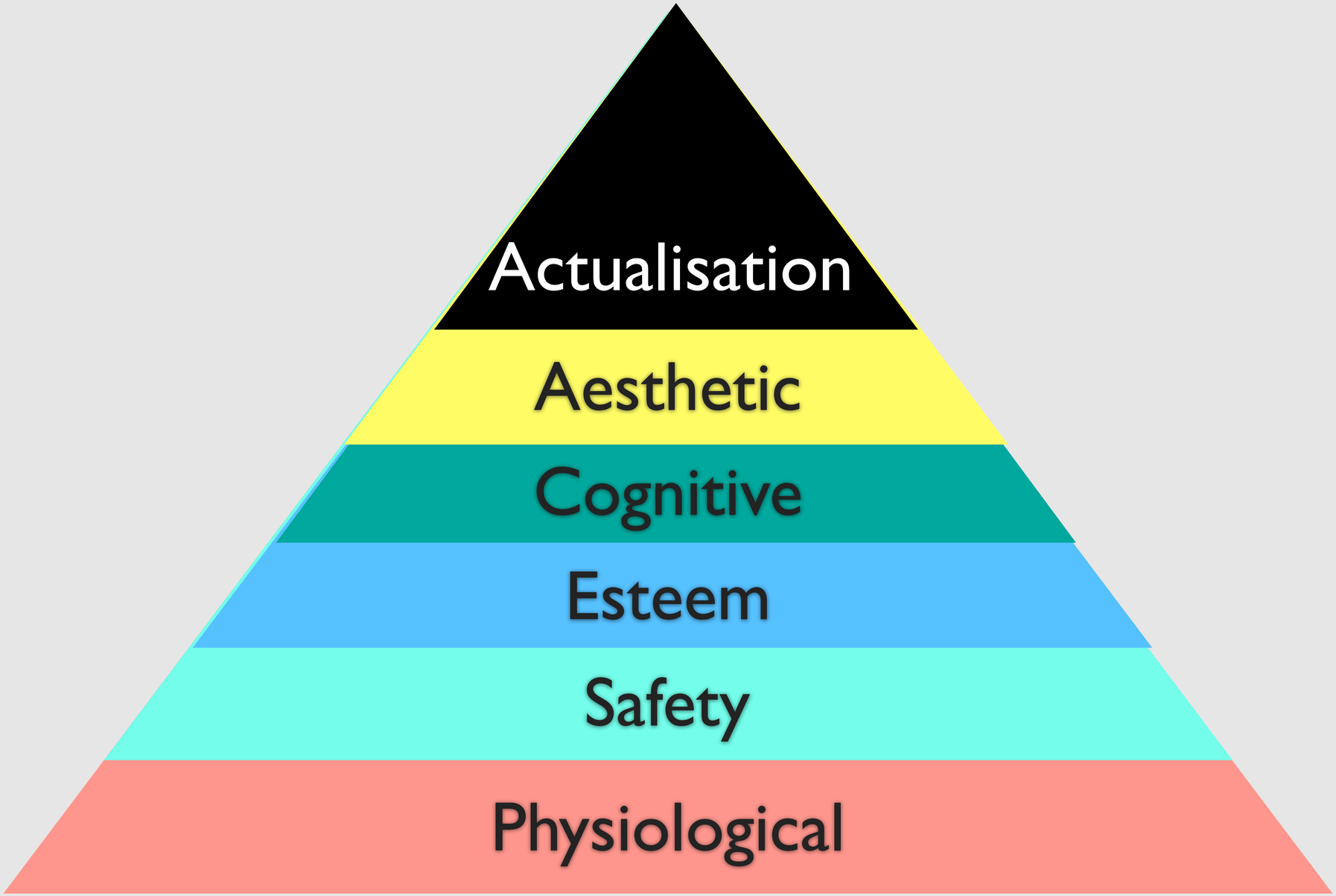
“Lift people in the habitat up? How?

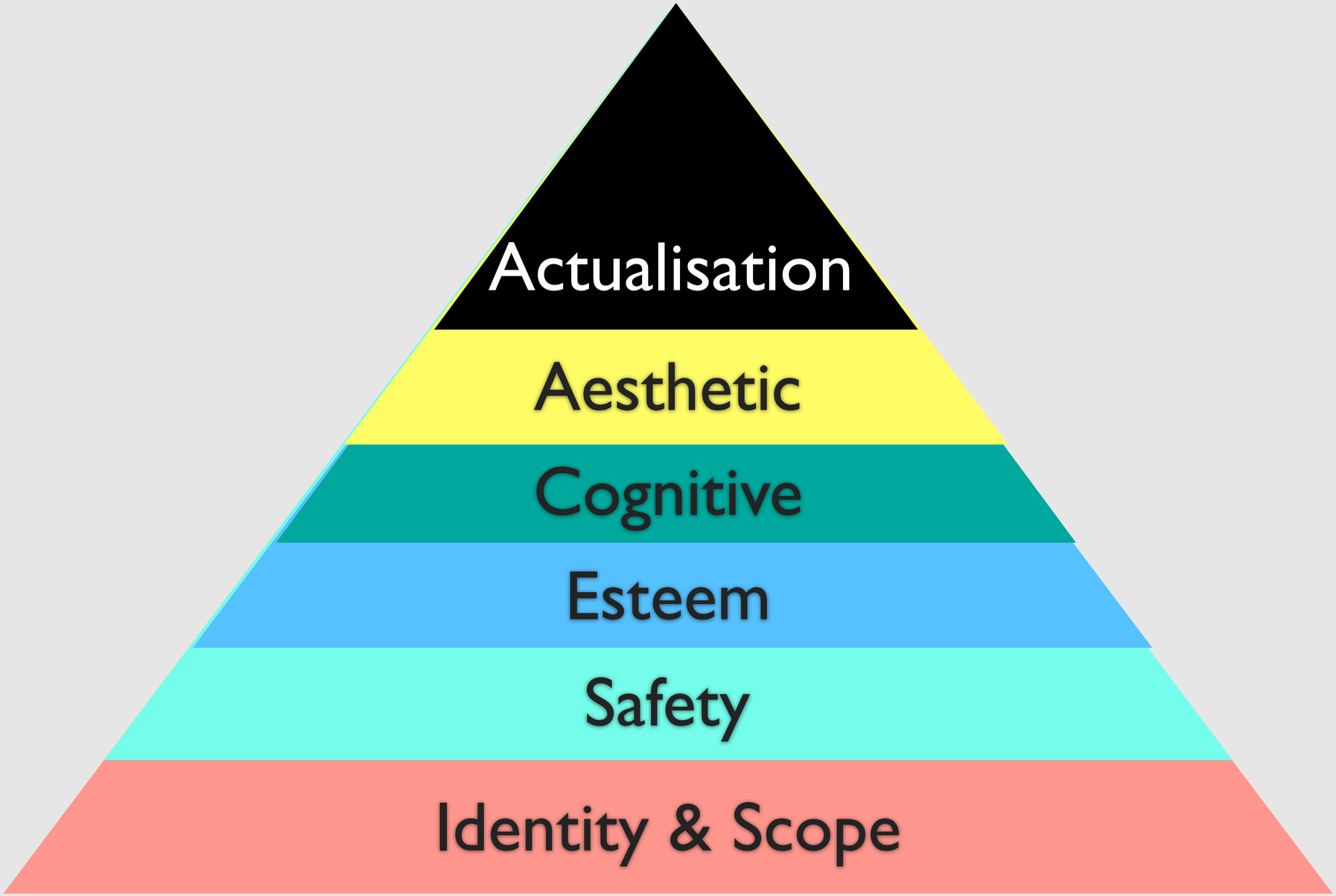


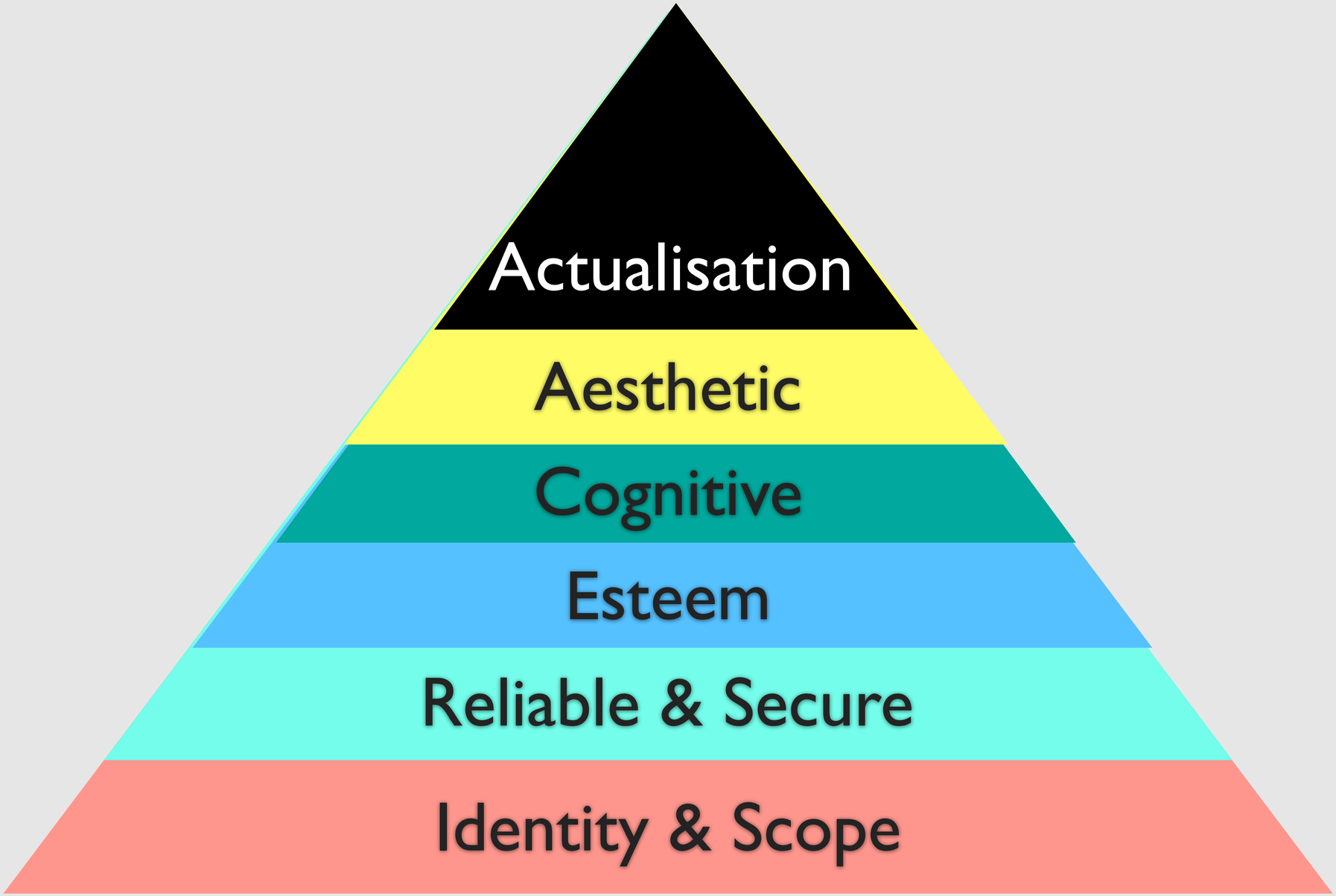
To be creative…

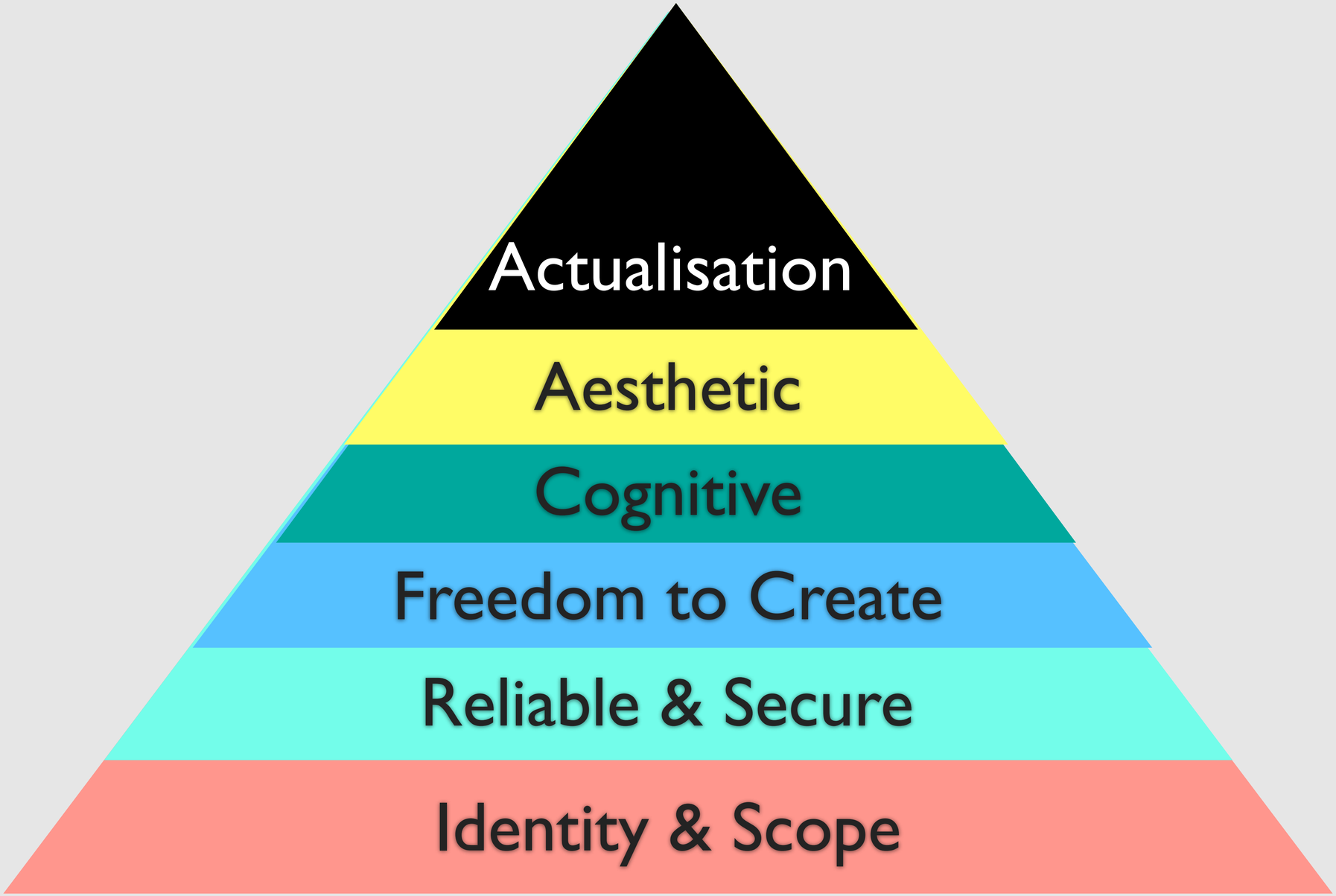
…requires confidence.

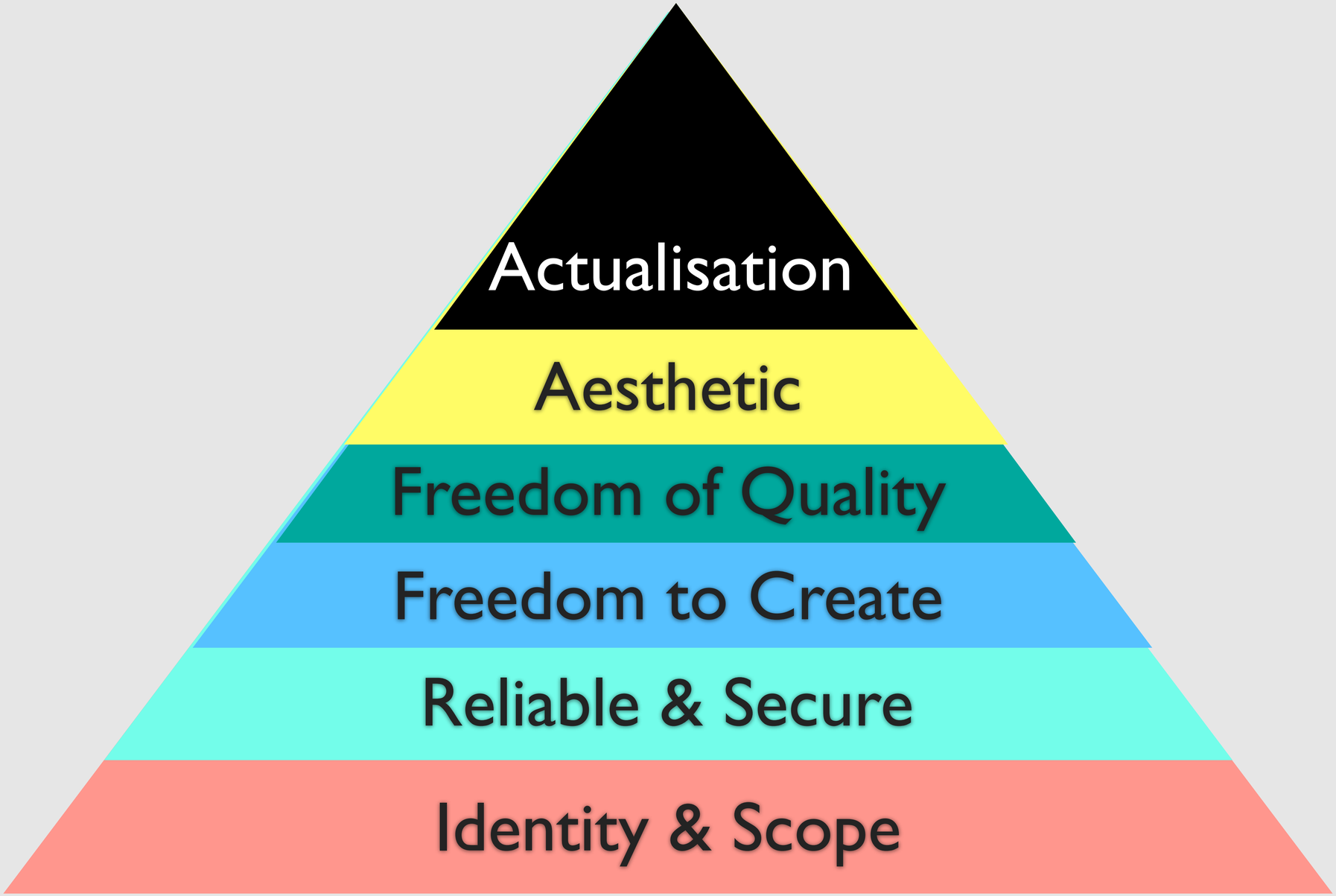
Principle:
Support being in the right place, doing the right thing, at the right moment.

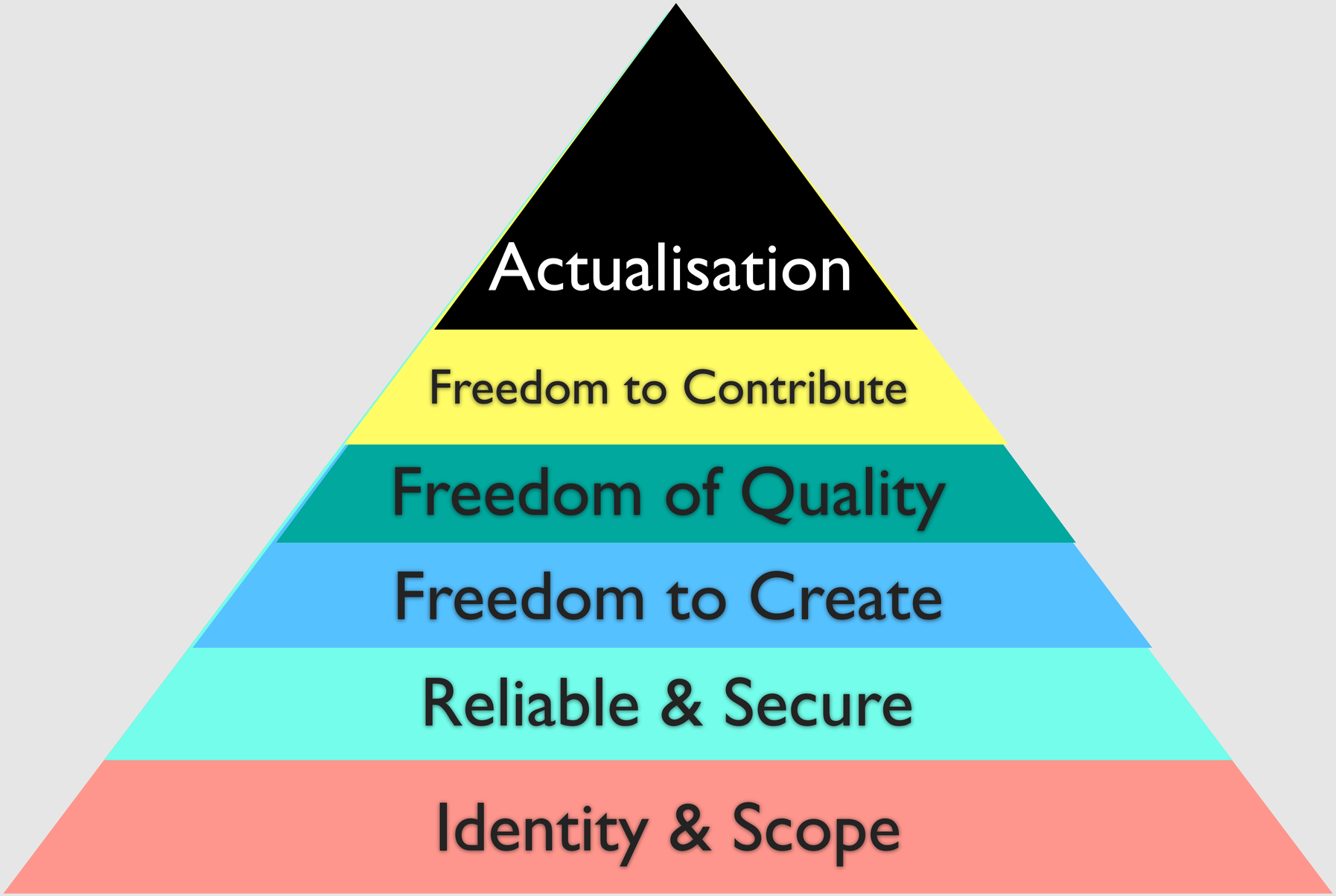

Actualisation
Aesthetic
Cognitive
Esteem
Safety
Physiological

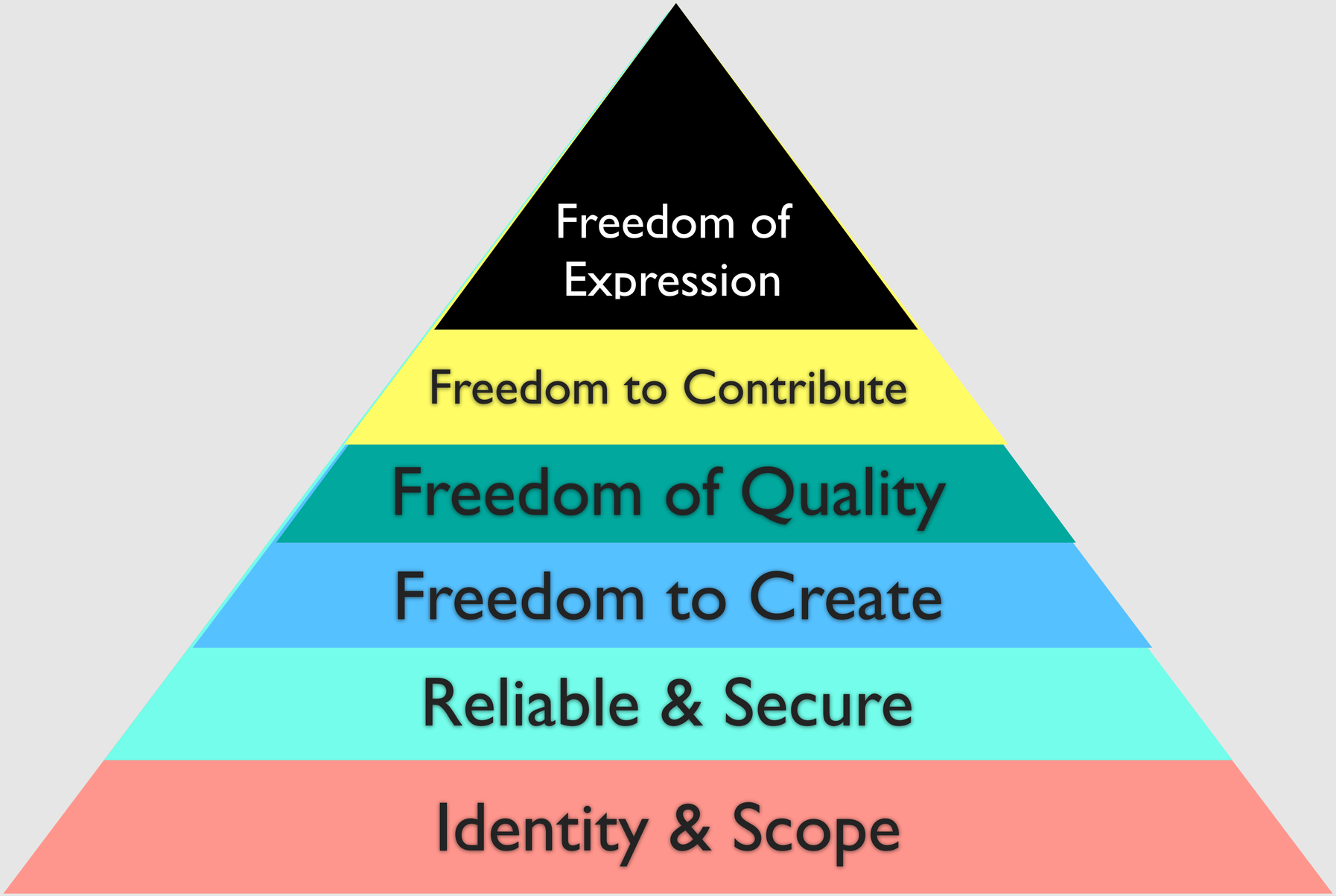

Actualisation
Aesthetic
Cognitive
Esteem
Safety
Identity & Scope


Actualisation
Aesthetic
Cognitive
Esteem
Reliable & Secure
Identity & Scope


Actualisation
Aesthetic
Cognitive
Freedom to Create
Reliable & Secure
Identity & Scope


Actualisation
Aesthetic
Freedom of Quality
Freedom to Create
Reliable & Secure
Identity & Scope


Actualisation
Freedom to Contribute
Freedom of Quality
Freedom to Create
Reliable & Secure
Identity & Scope


Freedom of Expression
Freedom to Contribute
Freedom of Quality
Freedom to Create
Reliable & Secure
Identity & Scope



Platform Product Principle: Balance Freedoms and Constraints to Empower

“How do you tune the empowerment?”



Culturally Sensitive.



Week Four

Meeting the Needs

(Still) Culturally Sensitive.

Autonomy with Accountability & Responsibility

Principle:
Meet the Needs of your Creative Autonomy

Principle:
Meet the Needs of your
Creative Autonomy for a
Broad Community

“That’s nice but…

How are those needs met??”



It’s complicated…



Week Five

Behaviours, OODA loops, abstractions and roadmaps

Actually, it’s not that complicated…

O'REILLY

Cloud Native Application Protection Platforms

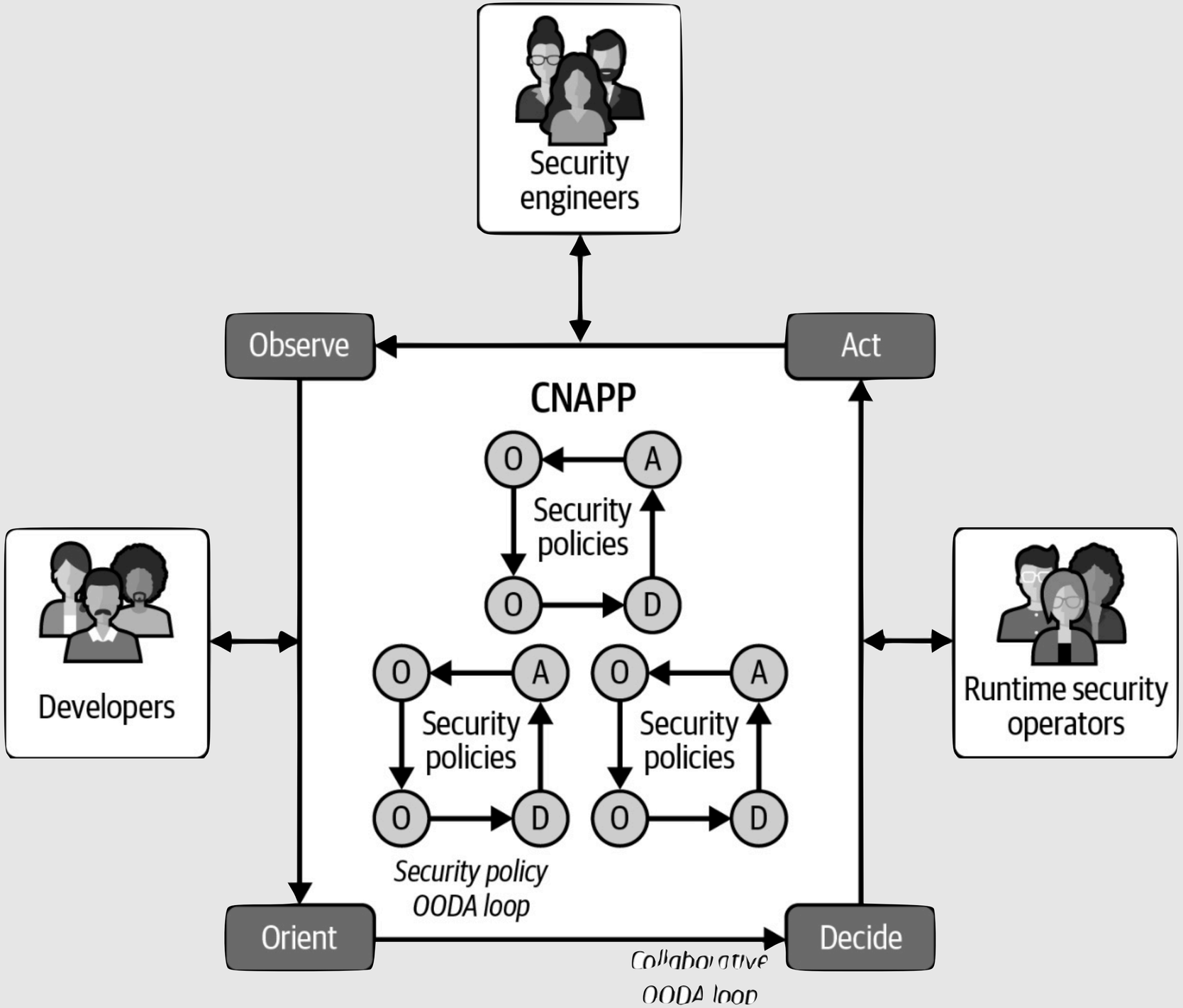
A Guide to CNAPPs and the Foundations of Comprehensive Cloud Security



Compliments of

paloalto NETWORKS

Russ Miles,
Stephen Giguere
& Taylor Smith


Security engineers
Observe
Act
CNAPP
O
A
Security policies
O
D
Developers
Runtime security operators
Security policy OODA loop
Orient
Decide
Collaborative OODA loop

Principle:
Behaviour *over* Structure

Principle:
Your OODA loops are your product experience

“What behaviours?”



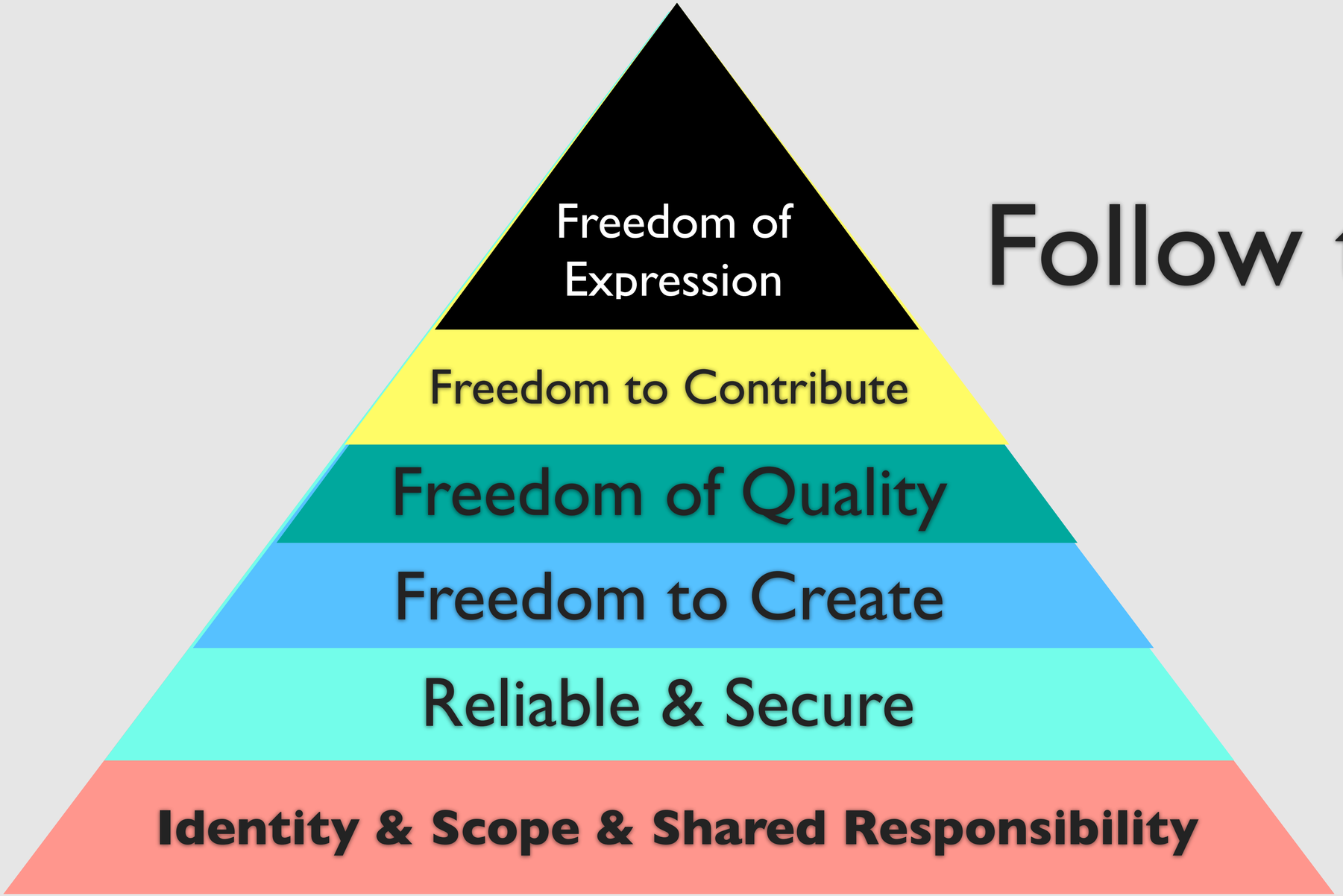
Cogito ergo sum


Cogito ergo sum

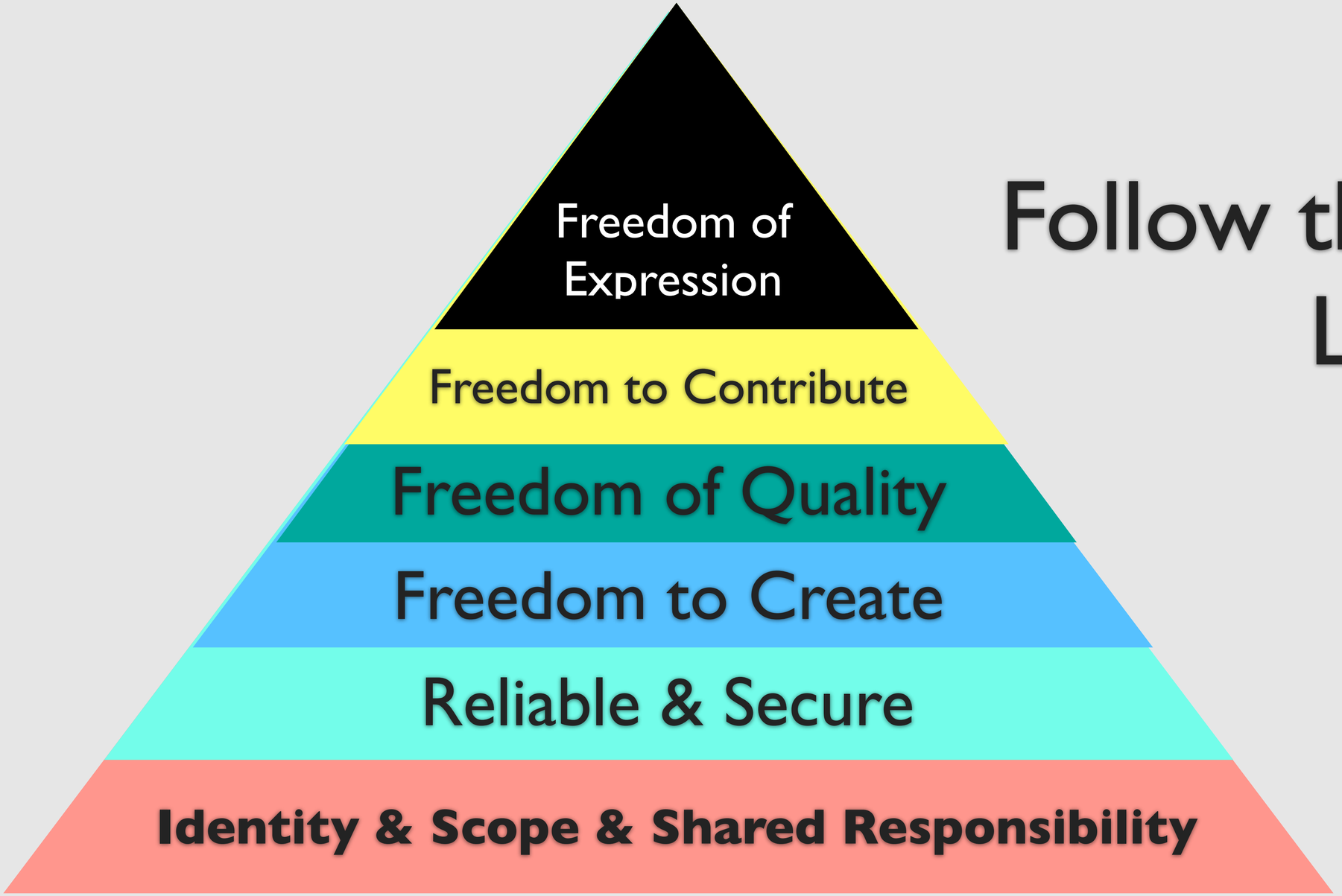
No…


Dubito ergo
cogito ergo sum

Principle:
You are NOT the Expert



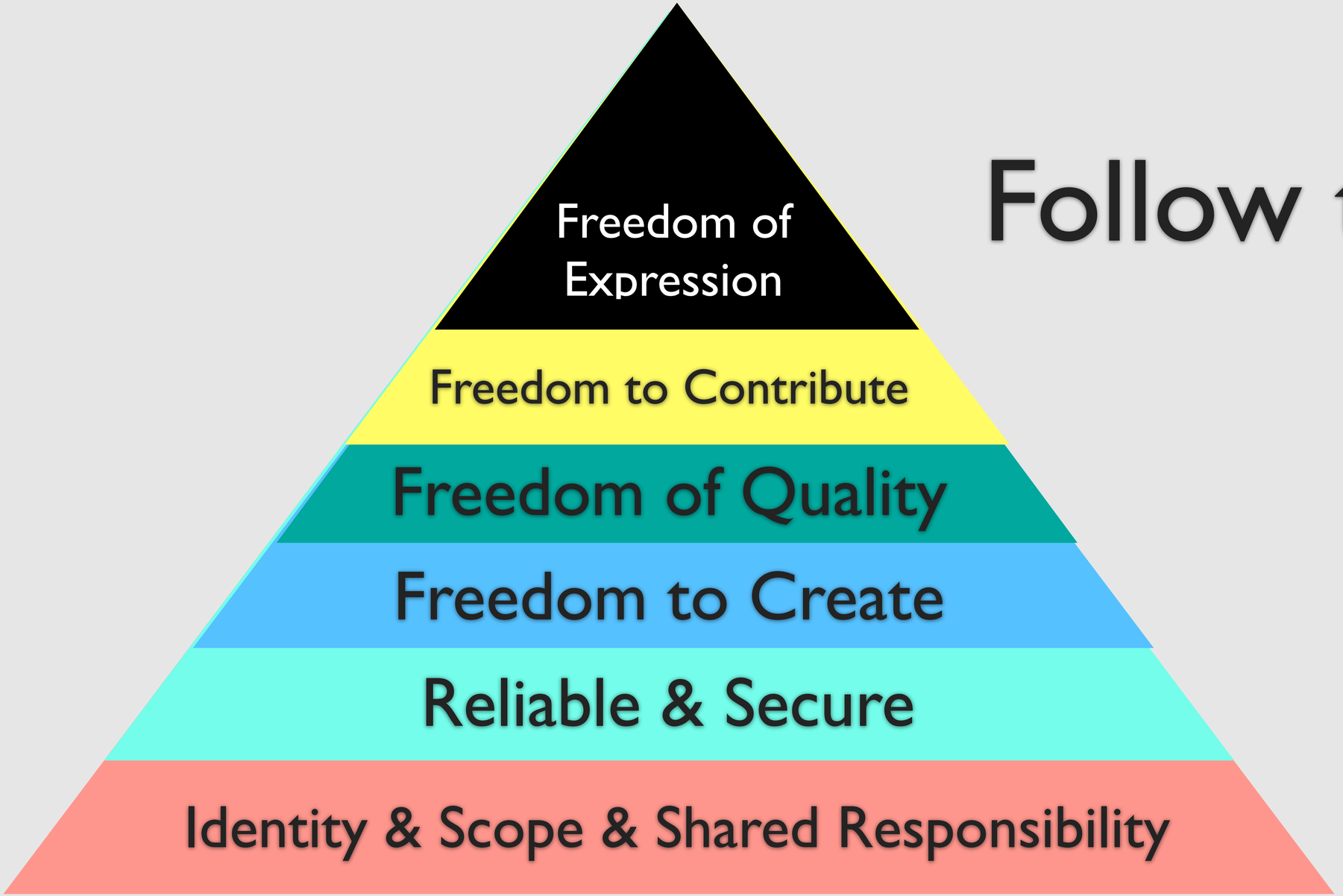
Follow the Needs!



Follow the Cognitive Load!

Principle:
Empower, don’t Dumb Down

Principle:
Don’t standardise heavily where domain-specific is needed



Follow the Chaos!

Principle: There are no stupid users



Principle:
But … Don’t Feed the Pigeons

“How do you map the road ahead?”



Principle:
Everything is
Experiment Driven

“Then… how do you measure success?”



Ugh, measurement…



Week Six

(Final Week of Chemoradiotherapy!)

Measuring Success

Remember Complex and Socio-technical…

DORA, SPACE

Measurements, Questionnaires…

“Most Valuable Thing We’ve Ever Done!” - Dx

Danger: De-humanising abstraction and distraction.

We lose the stories.

Abstraction doesn’t lead to Compassion

Epiphany…

Platform…

(Internal) Platform Product…

Internal Platform Product…

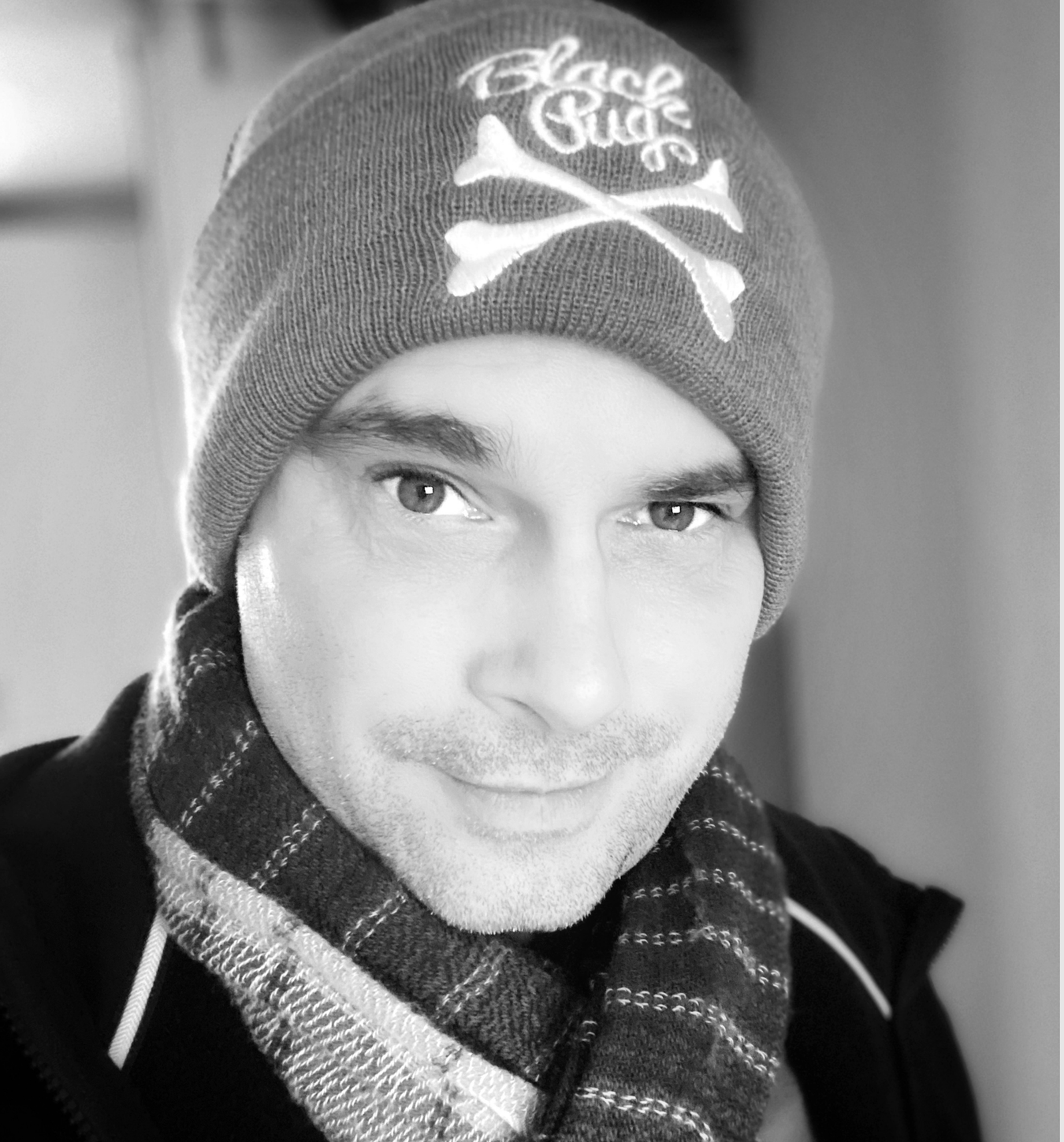
Internal Platform Product…

Principle:
Gemba over Guessing

Building Empathy, Compassion and Connection

Epilogue

What are you here for (revisited)?


Black Buds









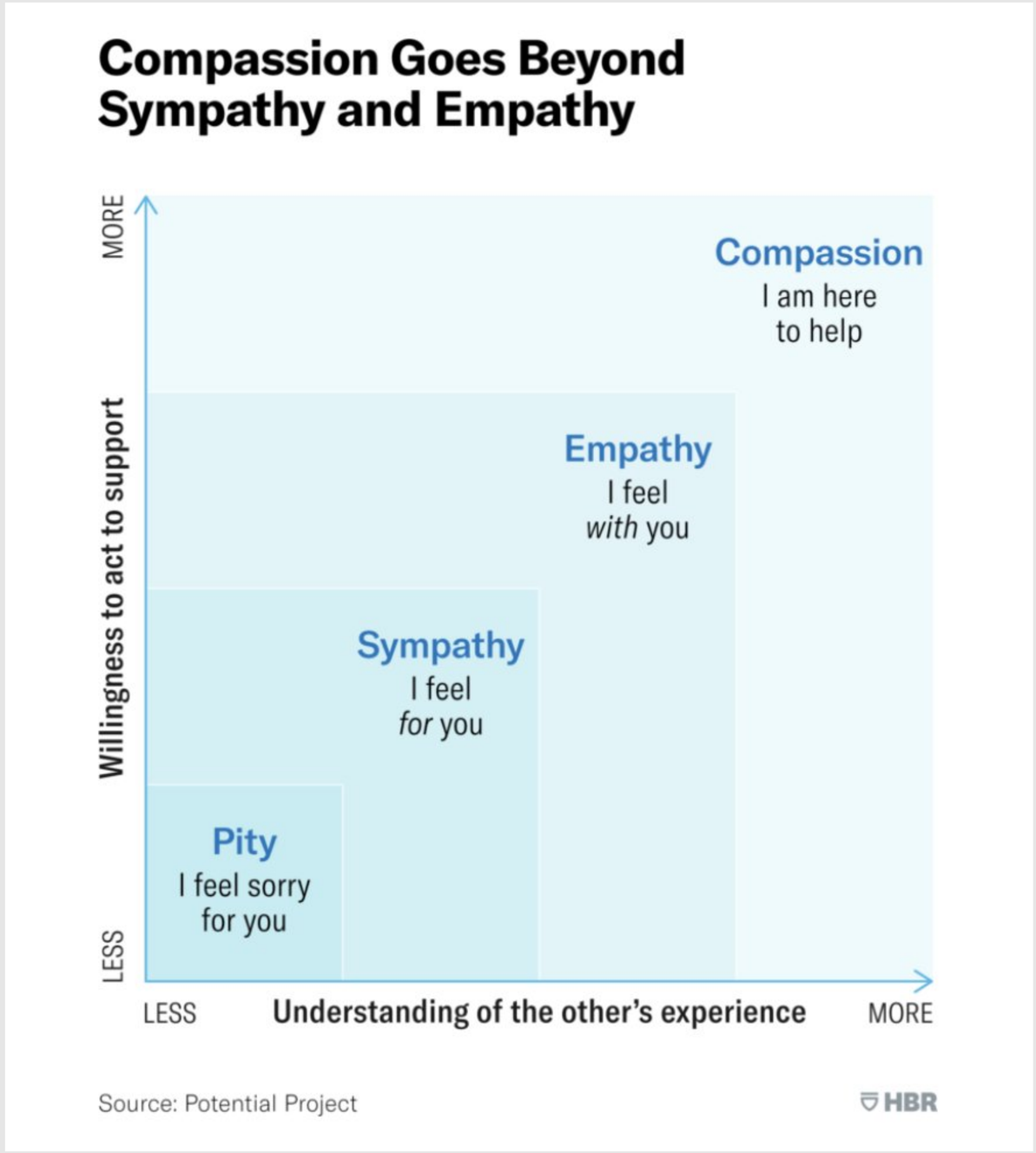

“What are you here for?”

I now know.

Other People

Other People's ***Stories***

Great Platform Products = Saving *their* ***Life***



Experimental & Person-Centred Product **Stewardship**

"Evolving Empowering OODA Loops to make smarter, creative and thriving development teams and people"



Compassionate Coding



Compassionate Coding

Compassionate Technical Product Stewardship



'I've learned that people will forget what you said,
people will forget what you did,
but people will never forget how you made them feel'

Maya Angelou

And…

We need you!



www.freepik.com



Thank you

Blog: https://russmiles.substack.com/

https://www.russmiles.com/

