



Intelligent Intervention Design

Joanna Esteves Mills, LSHTM

Jane Mumma, GLUK

Robert Dreibelbis, LSHTM

Val Curtis, LSHTM

Boluwatito Awe, United Purpose



Session aim

Use a theory-based behaviour-centred design framework to unpack what we mean by intentional intervention design

Through a series of case studies where a WASH behaviour-change intervention has been designed, tested and evaluated, to present and discuss the benefits and challenges of this approach.

Afternoon session: relevance of our narrative to current policy-makers and practitioners



Session agenda

Framing presentation

Successful behaviour-centred intervention design: a framework

Four case studies

Jane Mumma – Dir. Research, Great Lakes University Kisumu (GLUK)

Robert Breibelbis - Assistant Professor, LSHTM

Val Curtis - Environmental Health Group Director, LSHTM

Boluwatito Awe - Comms & Learning Offcr, United Purpose, Nigeria

Audience Q&A and discussion

Closing remarks – Carolien Van der Voorden, Water & Sanitation Supply Collaborative Council



Successful behaviour-centred intervention design: a framework

Joanna Esteves Mills, LSHTM
on behalf of
Val Curtis, LSHTM
Bob Aunger, LSHTM
Sian White, LSHTM



Outline

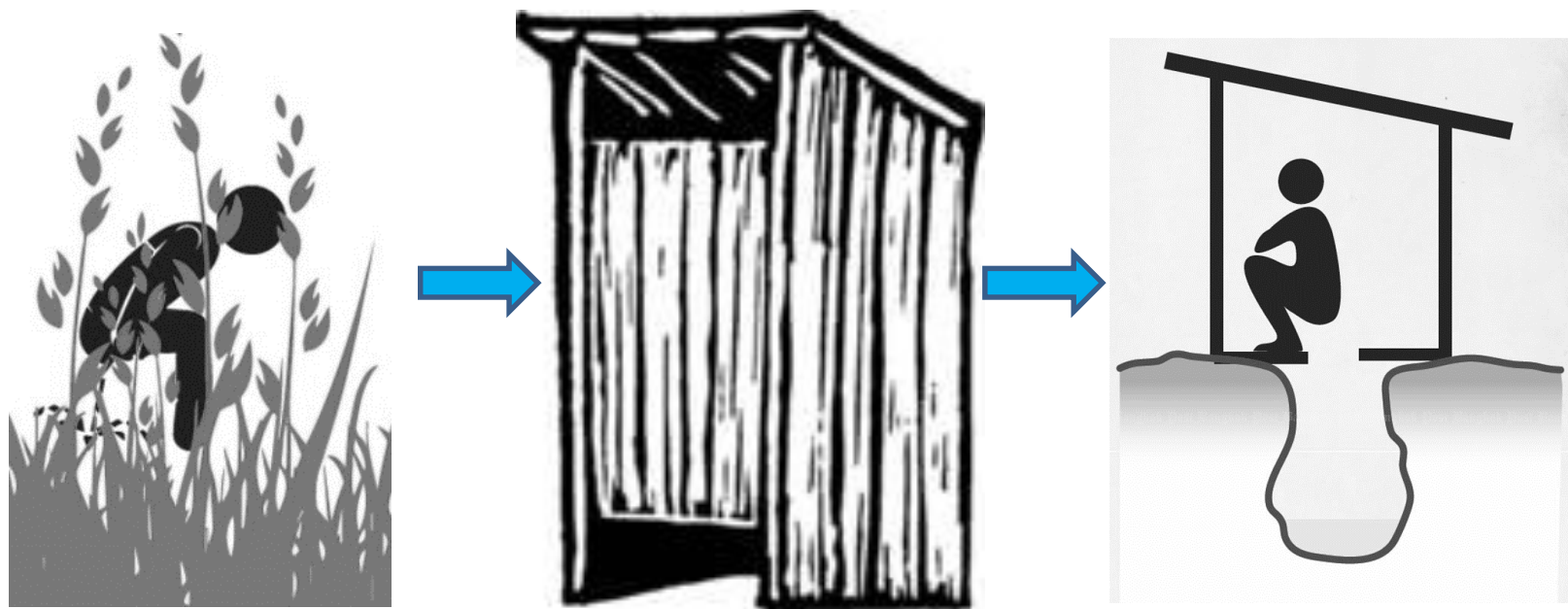
- What is behaviour change?
- Why can it be difficult?
- A framework for behaviour-centred design



What is behaviour change?



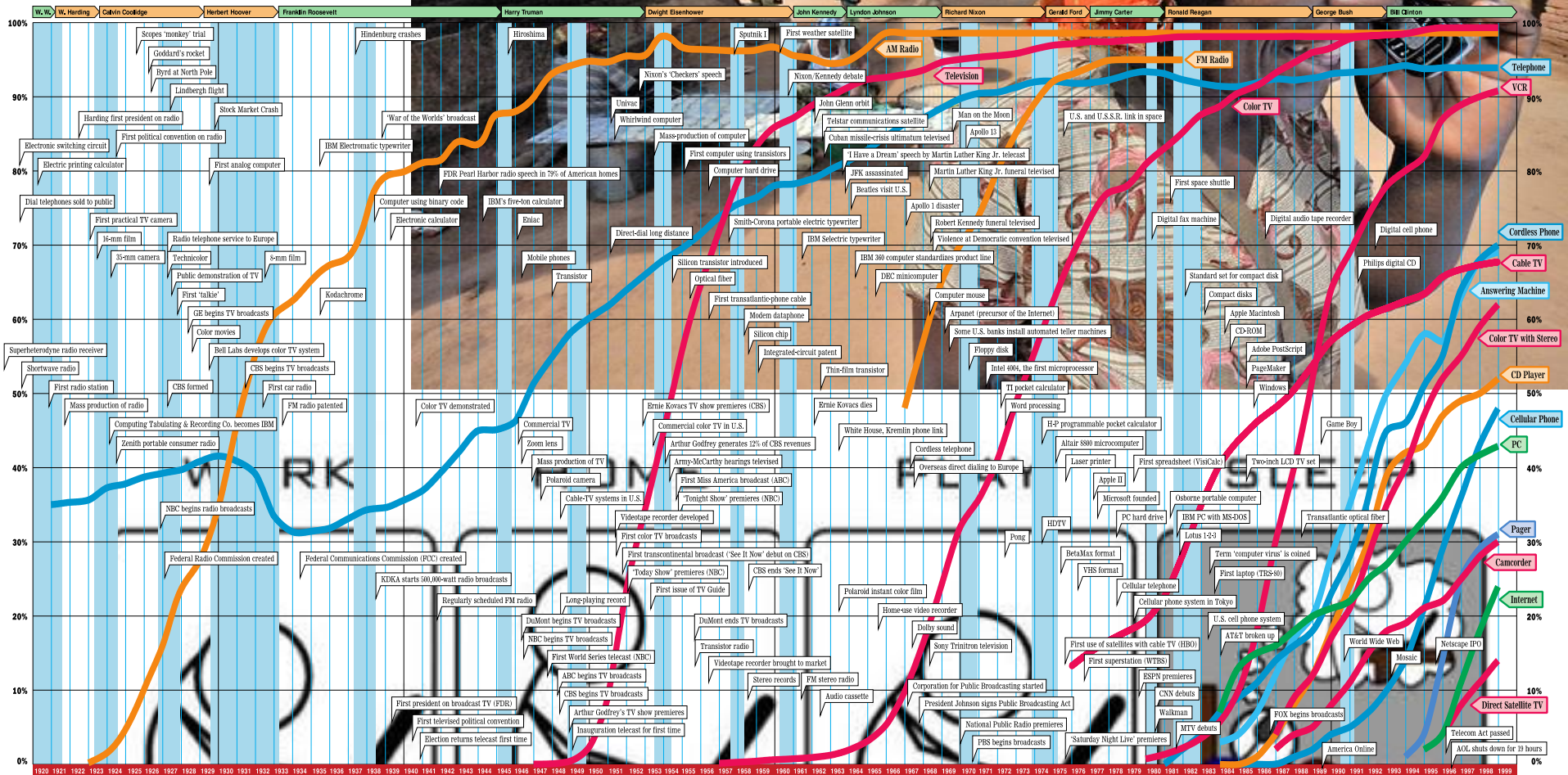
Behaviour change occurs when someone is faced with a familiar situation but suddenly does something new or different.





Why can it be so difficult?

Technology adoption curves





And yet...

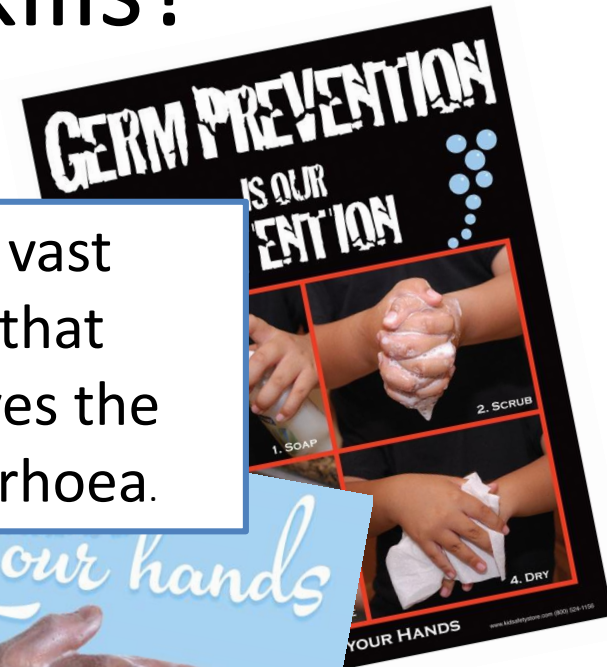




What determines behaviours?
How can we influence these
determinants?

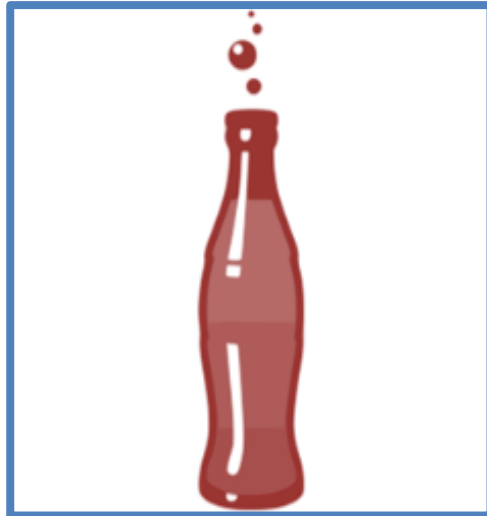
Knowledge and skills?

Studies have shown that the vast majority of caregivers know that handwashing with soap removes the invisible germs that cause diarrhoea.



1. Remove jewelry whenever possible
2. Wash with warm water and soap, and lather well
3. Scrub your hands, fingers, wrists and forearms
4. Scrub for as long as it takes to sing Happy Birthday to yourself
5. Rinse thoroughly
6. Dry using paper towel
7. Use towel to turn off taps and open the door

Psychological mismatch



It might be bad but it tastes really good!



It might be good but I wouldn't be good to start off with and I would have to spend lots on equipment!



It might be good but I have been fine up until now!



Drivers



TARGET

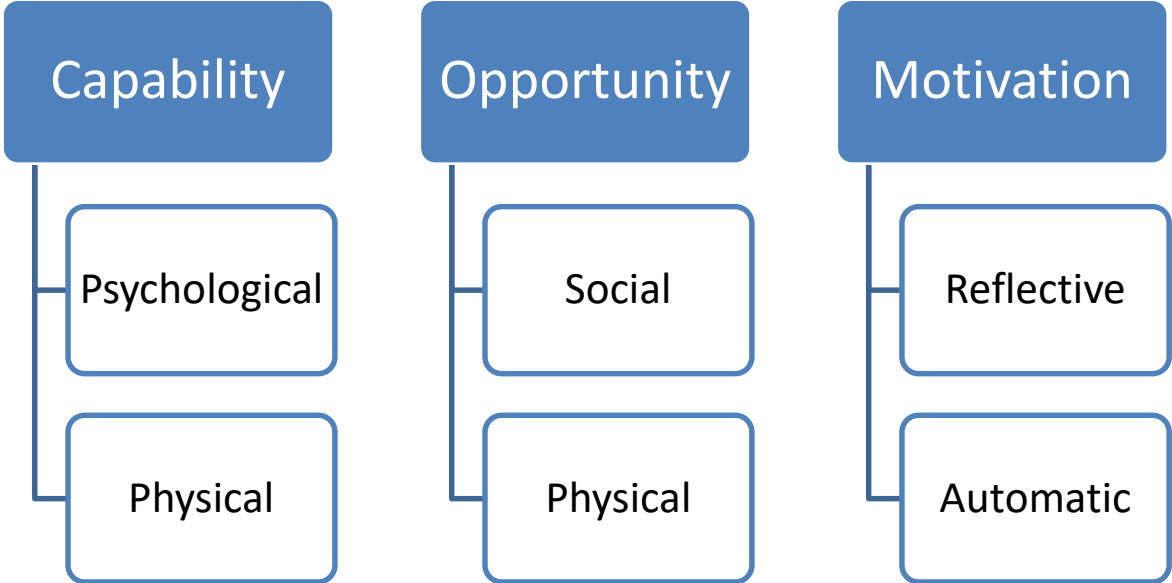
Barriers



BEHAVIOUR



Determinants
are multiple
and behavior-
specific



COM-B Framework, Michie et al 20...

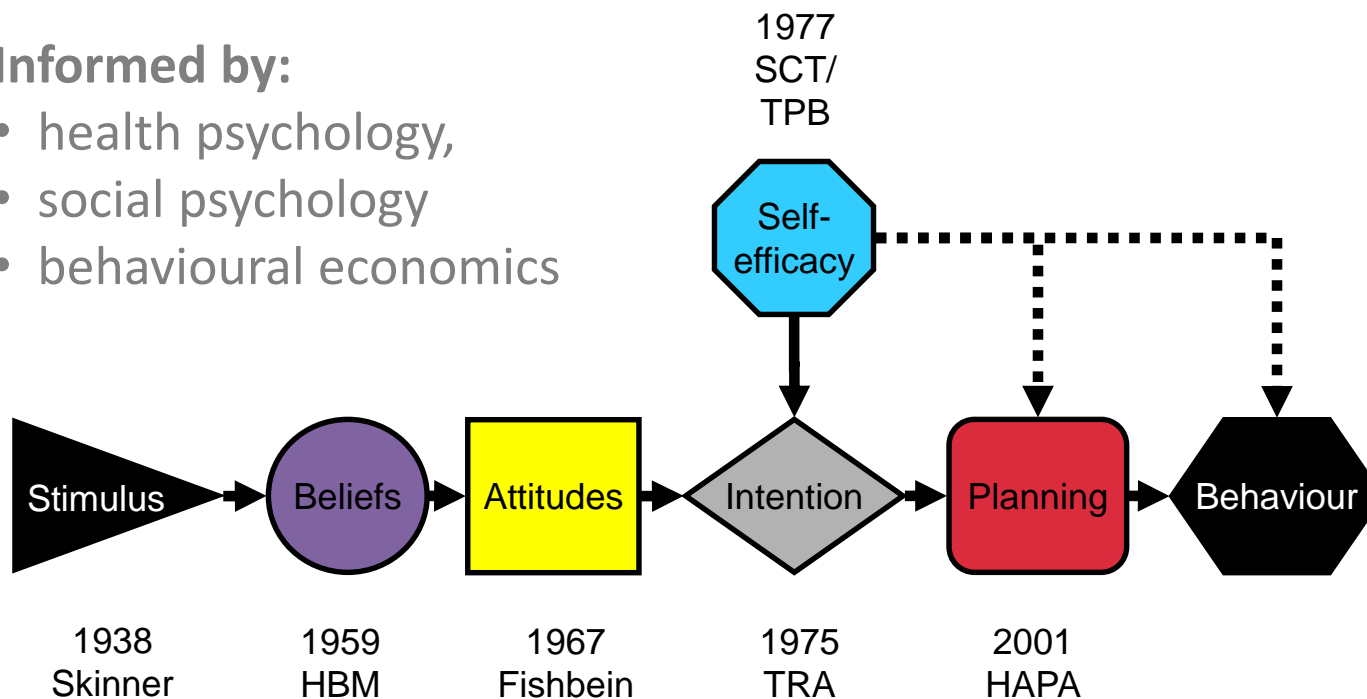


A framework for behavior centred intervention design

How our understanding of behaviour has changed over time

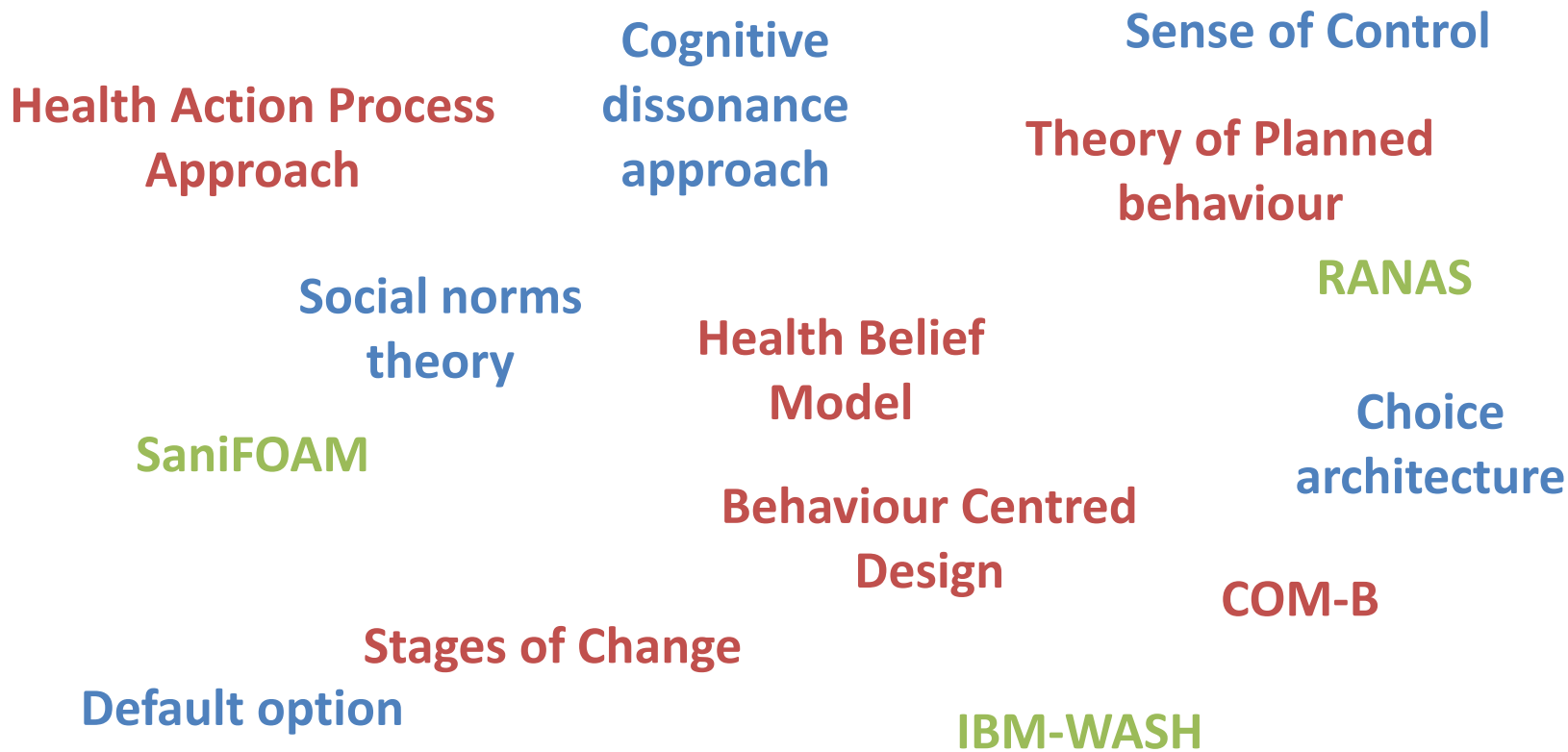
Informed by:

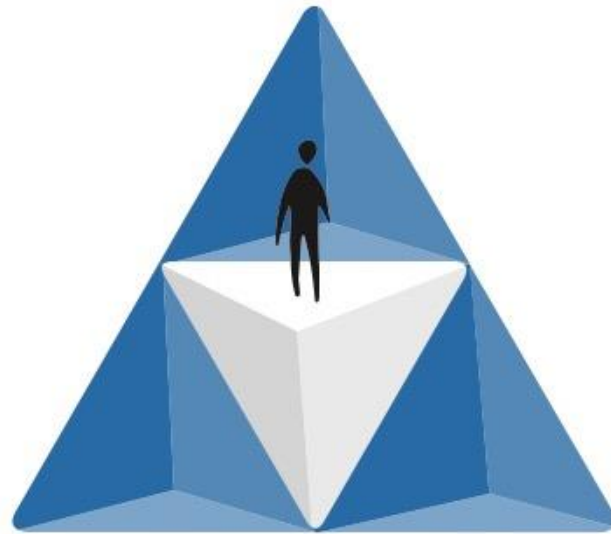
- health psychology,
- social psychology
- behavioural economics





What behaviour change theories are there?





behaviour
centered design

Assess

Build

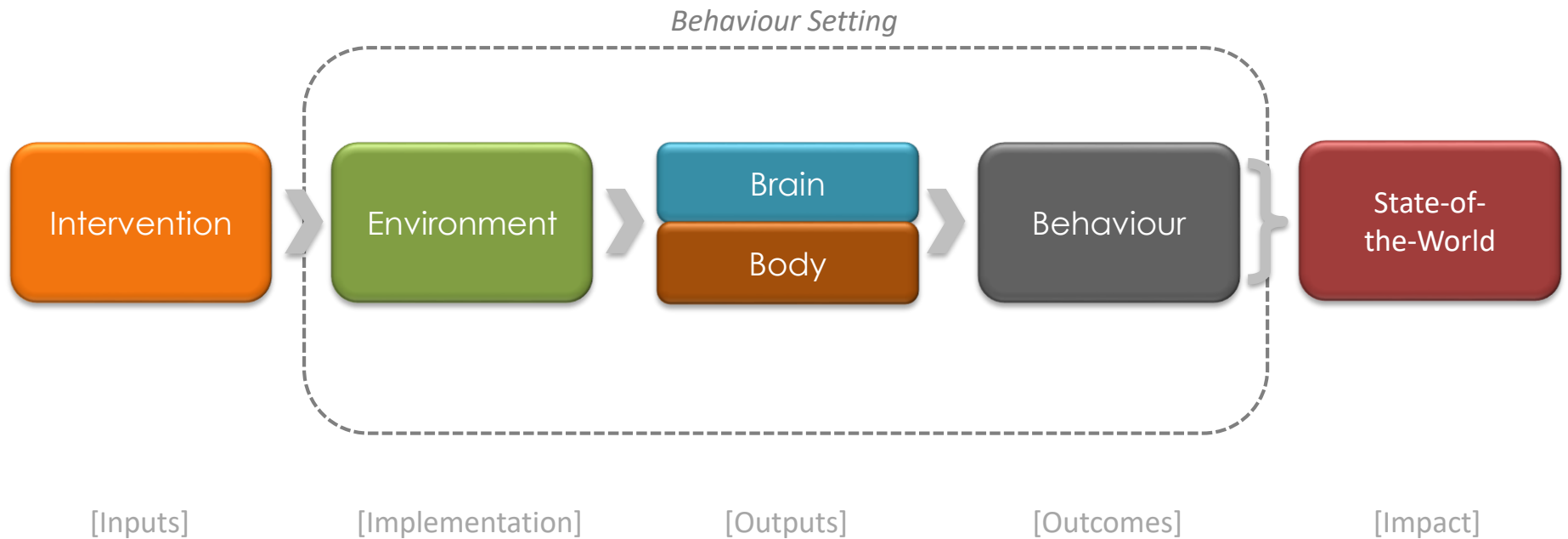
Create

Deliver

Evaluate

Robert Aunger
Val Curtis
Sian White

BCD: Theory of Change



The Behaviour Change 'Challenge'

- 1. Create ***Surprise***
 - Get exposure
 - Grab attention
- 2. Cause ***Revaluation***
 - Modify value
 - Alter rewards
- 3. Enable ***Performance***
 - Disrupt setting
 - Get selected

The Behaviour Change 'Challenge'

- 1. Create ***Surprise***
 - Get exposure
 - Grab attention
- 2. Cause ***Revaluation***
 - Modify value
 - Alter rewards
- 3. Enable ***Performance***
 - Disrupt setting
 - Get selected

Surprise: Get exposure

You
have to
be
where
people
already
are.



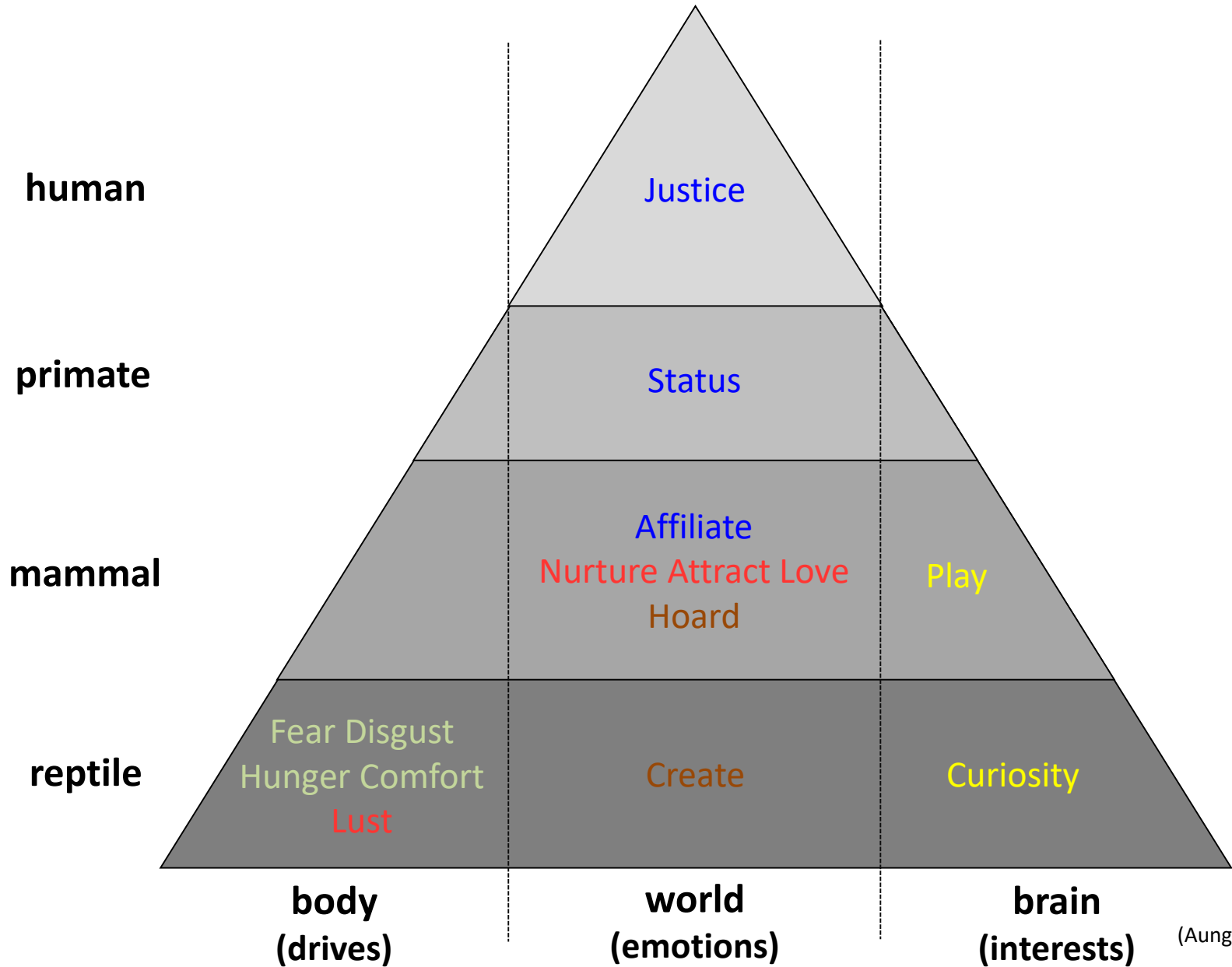
Wonderbra® Yellow Safety Line

This ambient idea plays on the yellow safety line at above-the-ground MRT stations, which tells people how far from the track they need to stand to be safe. A second yellow line was used to demonstrate that, with the bust-enhancing effects of Wonderbra®, those who use the product need to be even farther back.

The Behaviour Change 'Challenge'

- 1. *Environment*: Create *Surprise*
 - Get exposure
 - Grab attention
- 2. *Brain*: Cause ***Revaluation***
 - Modify value
 - Alter rewards
- 3. *Behaviour*: Enable *Performance*
 - Disrupt setting
 - Get selected

Human Motives



The Behaviour Change 'Challenge'

- 1. *Environment*: Create **Surprise**
 - Get exposure
 - Grab attention
- 2. *Brain*: Cause **Revaluation**
 - Modify value
 - Alter rewards
- 3. *Behaviour*: Enable **Performance**
 - Disrupt setting
 - Get selected

Facilitate Performance



DISRUPT SETTING

“This can't be Lifebuoy...

“... because it smells too good. I could always smell Lifebuoy coming a mile away!”

“Jane, I'm trying to tell you. This is new Lifebuoy. That old 'medicine' smell is gone.”

“But this smells so wonderful! I'd swear it was some high-priced beauty soap or something.”

“Look. Read the name yourself: L-I-F-E-B-U-O-Y!”

*“Well, it sure smells good. But how about...” **

***... How about B.O. protection?** Good question, Jane! But don't let Lifebuoy's new beauty-soap fragrance fool you! You're safer from B.O. than ever before.

You see, we found a brand new deodorizer for Lifebuoy called Puralin. And Puralin changed Lifebuoy completely. Gave it a new coral-pink color. A new beauty-soap fragrance. And a brand-new kind of B.O. protection—*bath-to-bath* protection.

That's because Puralin stays with your skin long *after* you bathe. You can't see it, feel it or smell it, but Puralin is there—protecting you against offending for as long as 3 days. That's longer than most of us need!

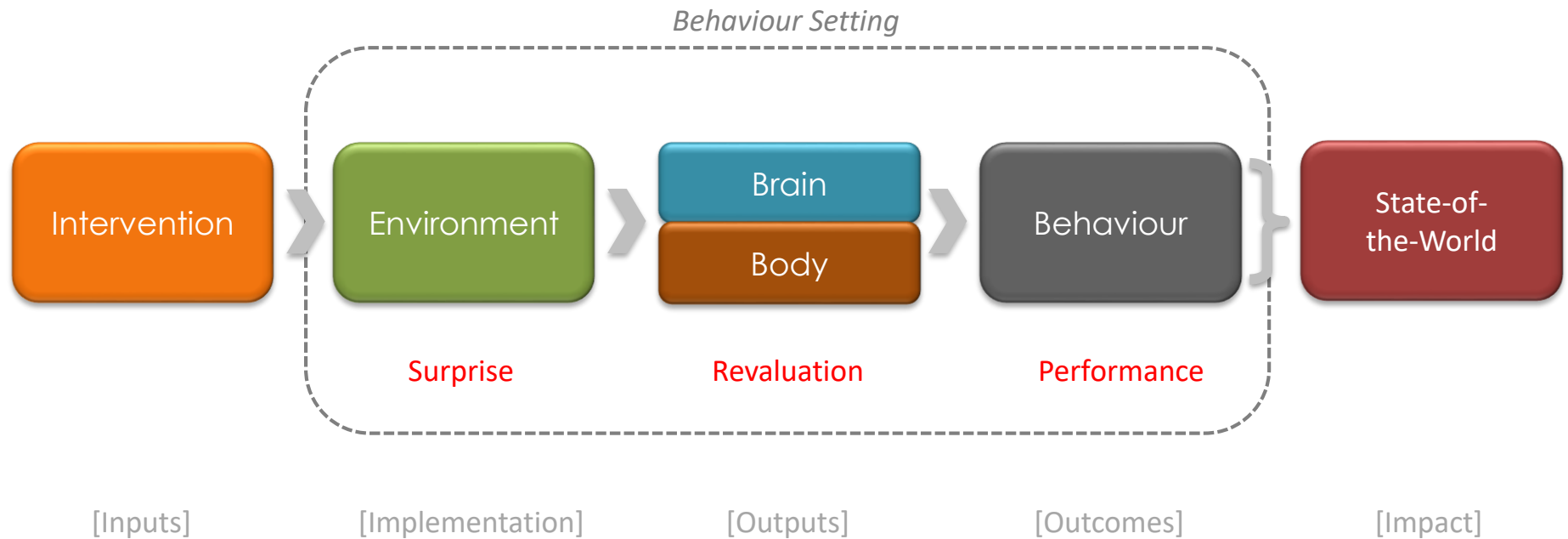
Get new Lifebuoy now, at its down-to-earth price. Use it in your daily bath. You'll *lose* Lifebuoy's new fragrance and protection—or you get your money back from Lever Brothers!

**New Beauty-Soap Fragrance!
New Bath-to-Bath B.O. Protection
—Thanks to Puralin!**

A woman wearing a white headscarf is looking at a bar of Lifebuoy soap held by a hand. The soap is coral-pink and has the word "LIFEBOUY" printed on it. The background is a plain, light-colored wall.

GET SELECTED

BCD: Theory of Change



A

B

C

D

E

ASSESS

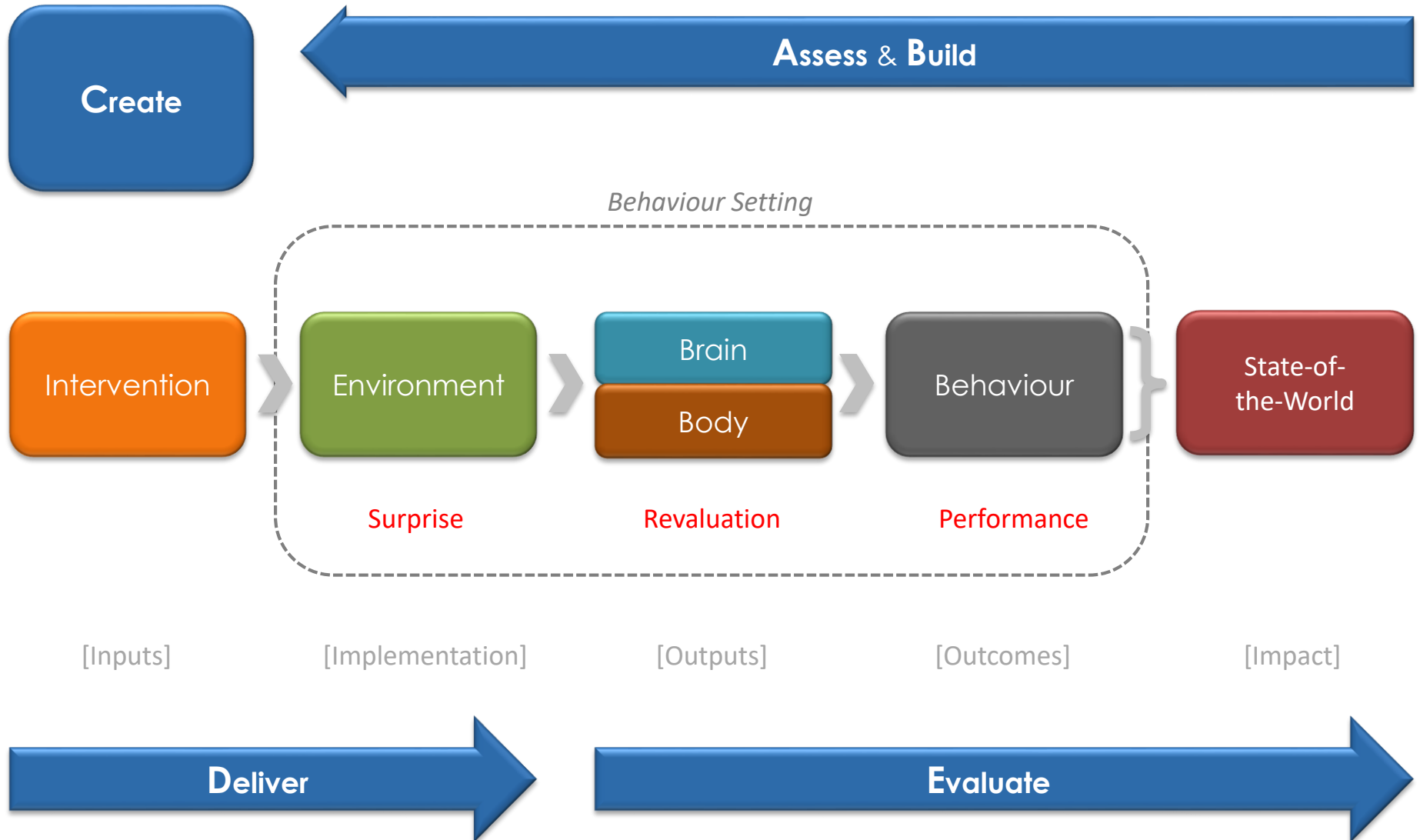
BUILD

CREATE

DELIVER

EVALUATE

Behaviour Centred Design



Conclusions

- BCD is a **generic framework**
- BCD is based on **strong theory** (reinforcement learning, evolutionary and ecological psychology)
- BCD process is based in **design thinking** and **creative interventions**
- BCD **produces behaviour change**