

Create-ing Demand for Sanitation in Urban Zambia



INDABA YAMA
LANDLORDS





- CIDRZ: Jenala Chipungu, Roma Chilengi
- LSHTM: Ben Tidwell, Bob Aunger
- Iris DDB



Why?

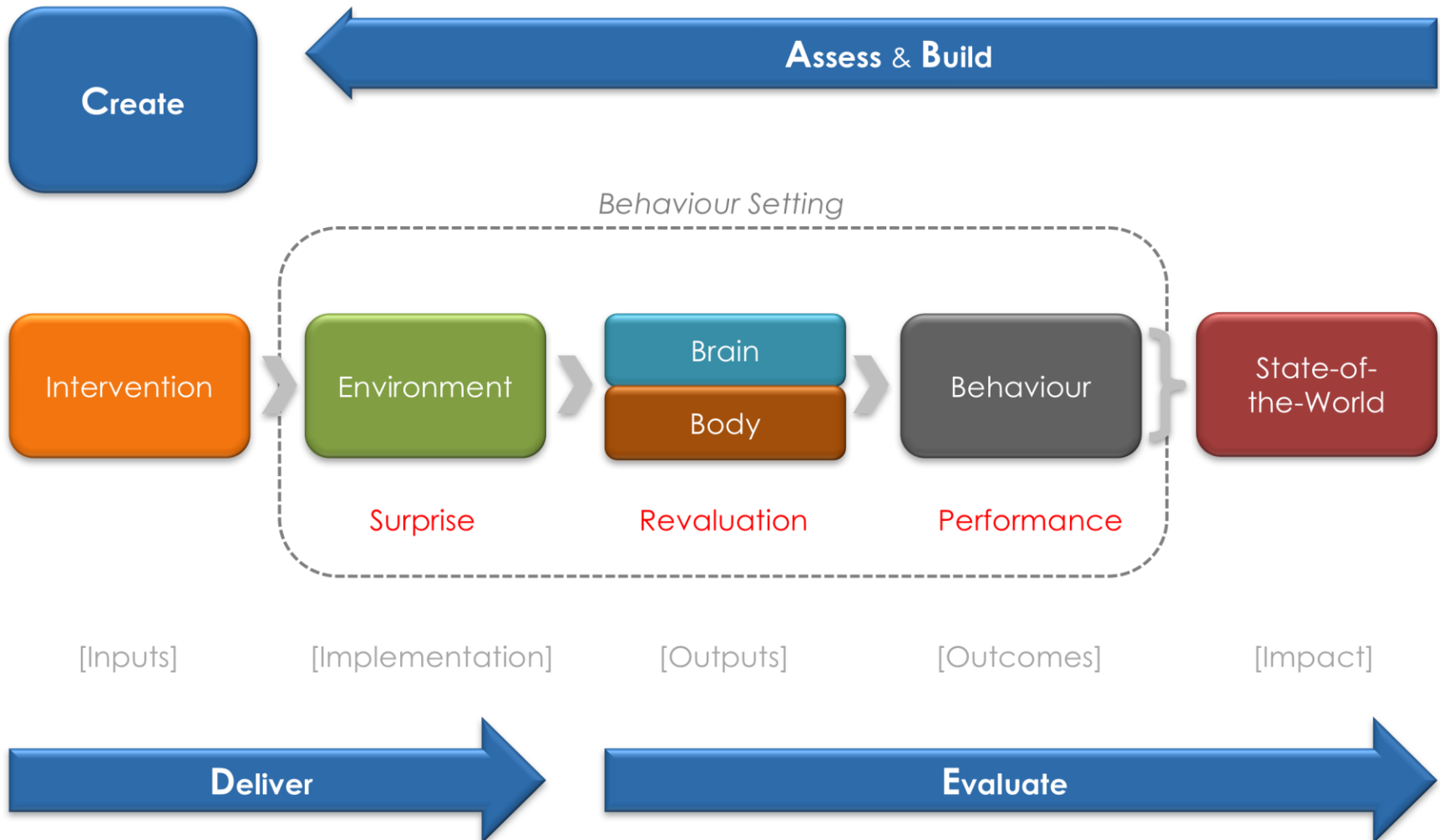
- Population growth concentrated in informal settlements
- Poorer health outcomes than population in general (Ezeh, 2017)
- Sanitation is neglected
- Political will emerging
- But no simple solutions

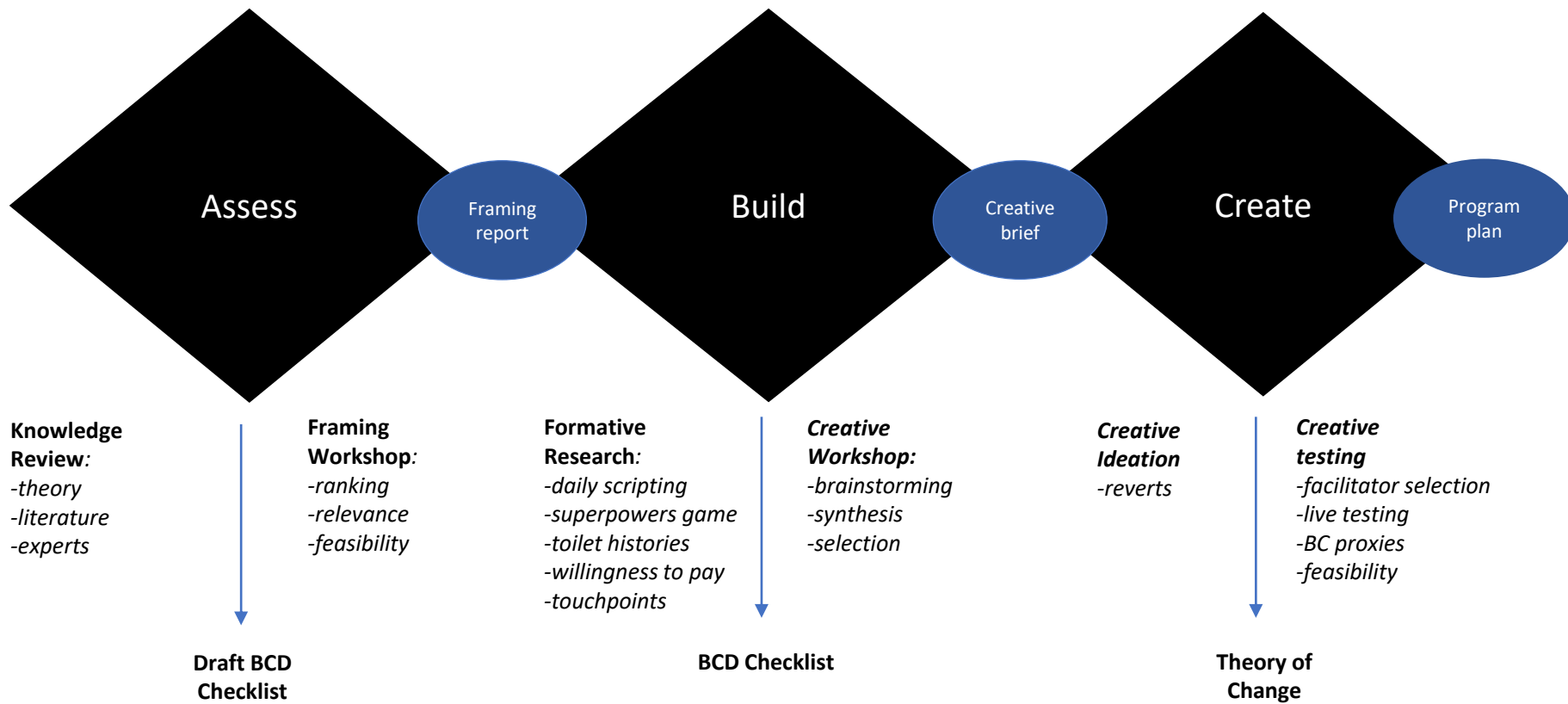


Hypothesis:

An intelligent behaviour change intervention could improve quality of on-site sanitation with no materials or subsidy.

Behaviour Centred Design





A: Assess

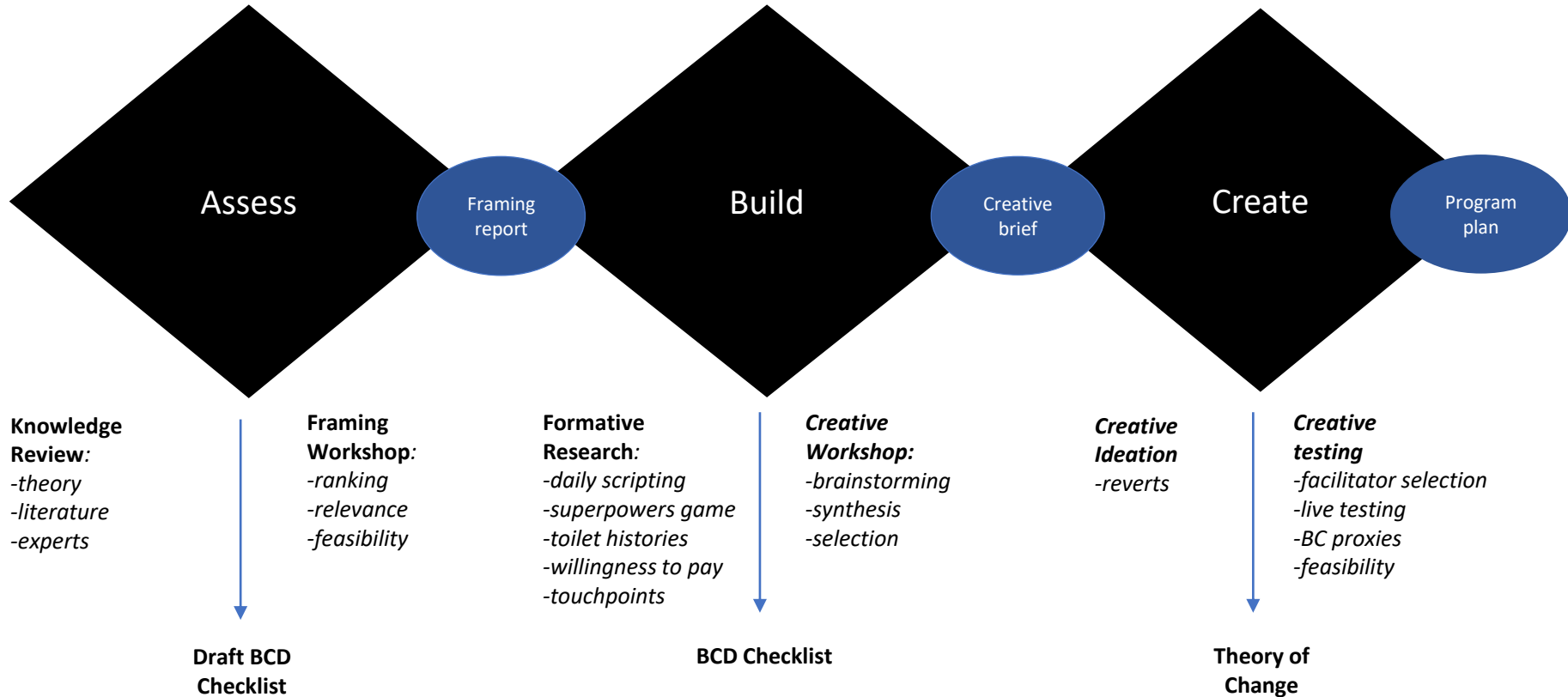
- Literature review
- Framing workshop



Shared toilets
Crowding
Land tenancy
Toilet cleaning

Shared toilets:
Common pool
resources
Toilet cleaning
Space
Land tenancy
Finance
Subsidy
Regulation:
Fines

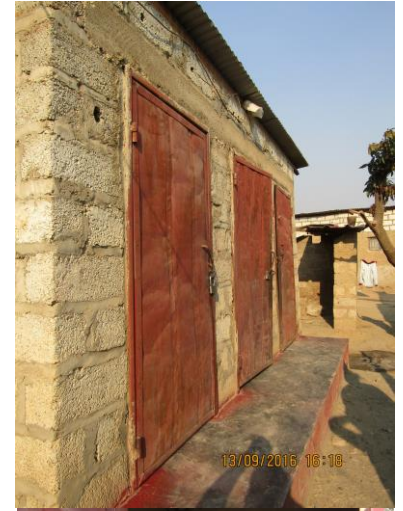
Common pool
resources
Toilet cleaning
Landlord/tenant
relations
Hygiene



B: Build

- Formative Research:
 - 30 landlords, 30 tenants
- Methods:
 - Plot characteristics
 - Toilet histories
 - Toilet improvement choice
 - Motivation mapping
 - Financial decision making





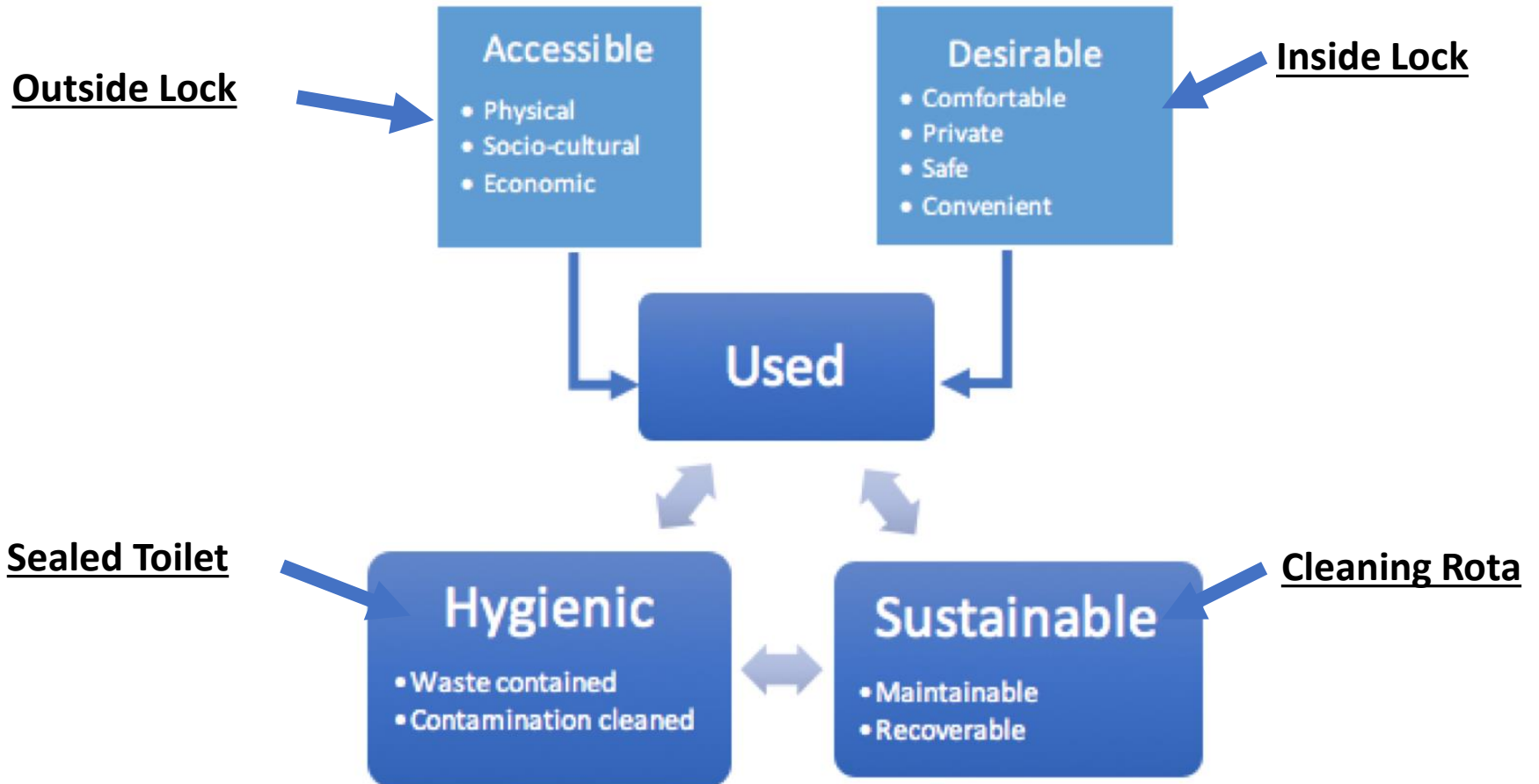
10%

50%

35%

5%

Improvements



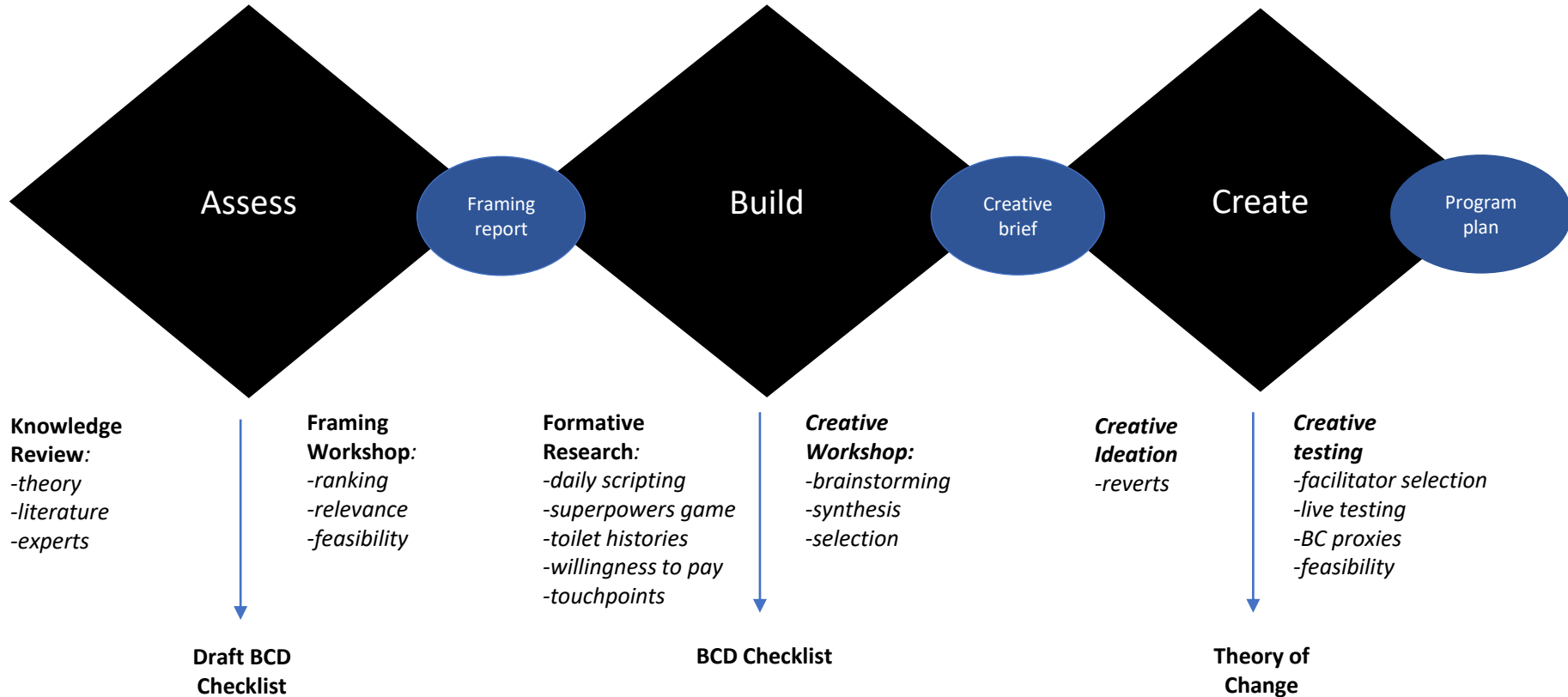
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Landlord: Profit
Tenant:
-Comfort
-Privacy
-Security
-Convenience
-Smell
-Cleanliness
-Unsafe
Social
disruption

Landlord: Profit
Tenant implicit
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-Privacy
-Smell
-Security
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C: Create

- LL's main driver is status (money), but they don't see the potential ROI for toilets compared to doors
- Surprise, revaluation, performance



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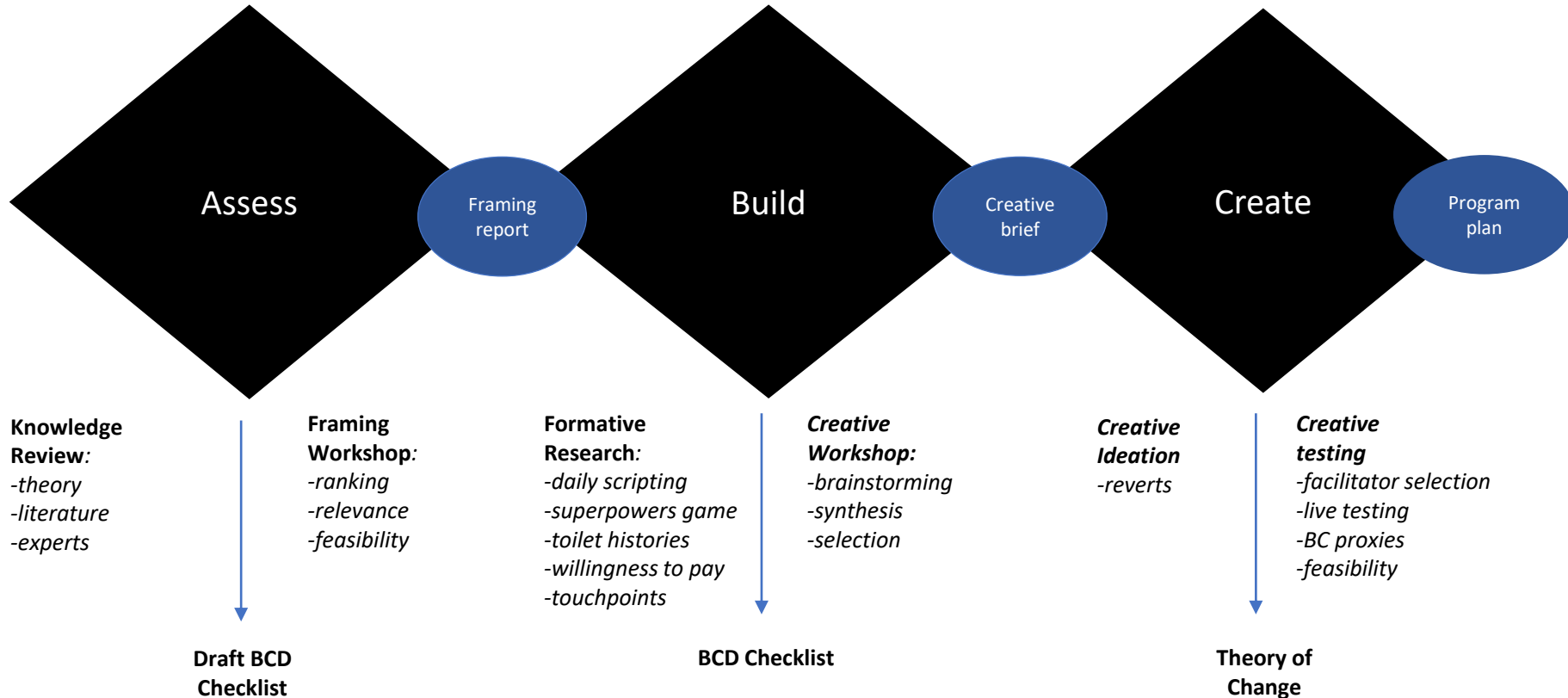
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Magic talking toilet
Secret society
Street theatre

**Secret society
meetings**



The “Bauleni Secret”



The BIG IDEA:

Landlords meet in invitation-only groups to receive “wealth-building secrets”— how to increase income, decrease turnover, and reduce conflict on their plot

- One actor and one Community Health Worker present a series of 4 lessons every two weeks
 1. A problem video giving “secret info” (**SURPRISE**)
 2. A demonstration or game leading to the answer (**REVALUATION**)
 3. A practical session to facilitate the behavior (**PERFORMANCE**)
- Monitoring visits



Emo Demos



Practical Demos



Rota Symbols



Theory of Change



D: Deliver

- 85% of landlords attended at least once

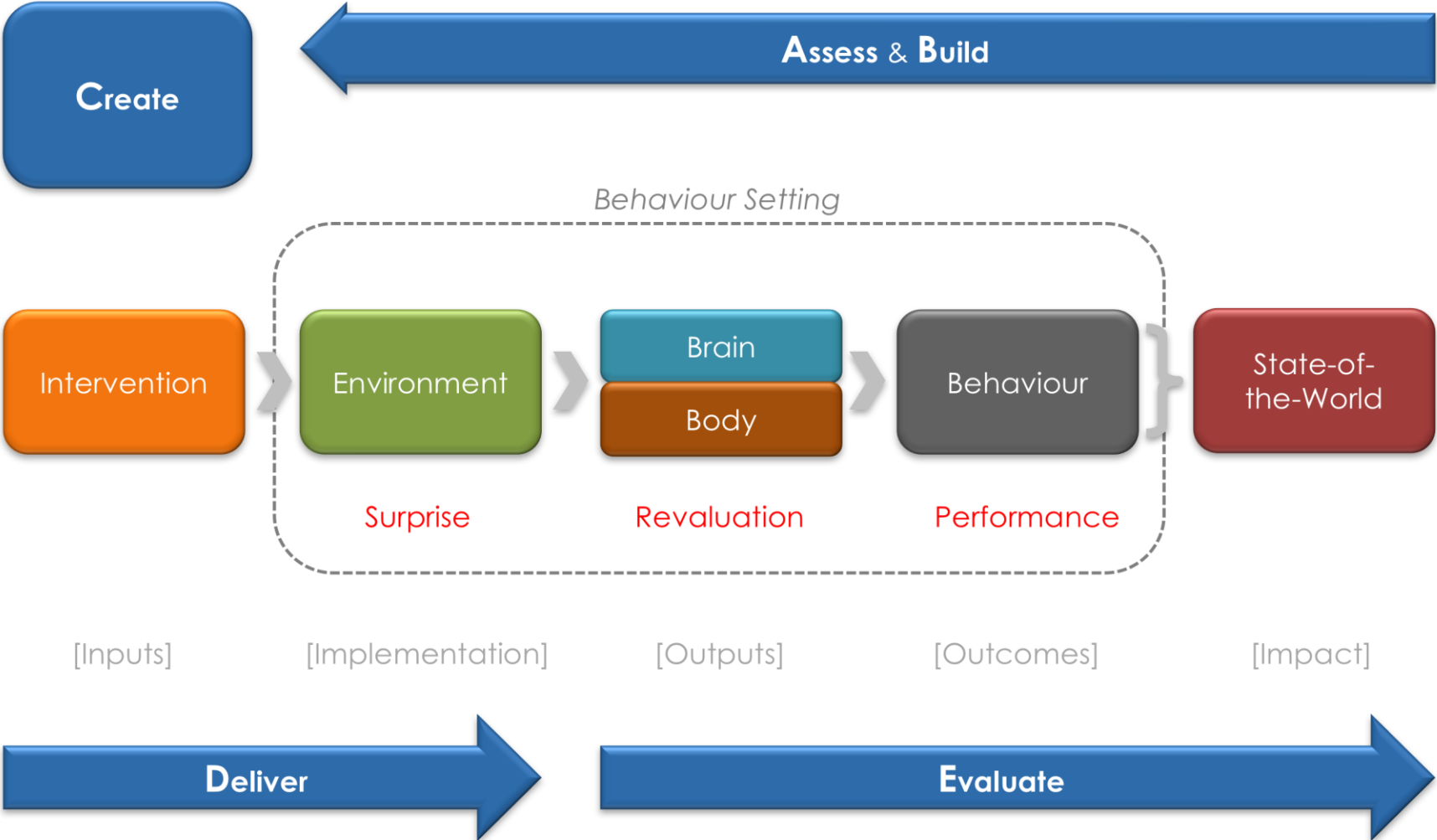


E: Evaluation

Improvement	Function	RR	P
Inside lock	Privacy	1.34	<.001
Outside lock	Security	1.27	.001
Simple cover / water seal	Improve smell and reduce contamination	1.25	.006
Written cleaning rota	Improve hygiene	1.16	.001
Door symbol for rota	Improve hygiene	1.26	.010

9% more landlords were in the process of making toilet improvements (i.e., saved money, purchased materials, began construction) in the intervention arm (95% CI: 3.0 - 15.1, $p=.003$)

Behaviour Centred Design



CREATE: lessons

- Often neglected
 - Builds out of the A and B step
 - Finding the right agency is HARD
 - And so is keeping them on brief
 - Pilot and pilot and pilot
-
- See BCD manual
<https://www.lshtm.ac.uk/research/centres-projects-groups/bcd>



Thanks

**SECRET
NUMBER 1**



My landlord has instituted a cleaning rota at my plot.

Name: _____
Signature: _____
Date: _____

**SECRET
NUMBER 2**



My landlord has made sure I can lock the toilet once I am inside.

Name: _____
Signature: _____
Date: _____

**SECRET
NUMBER 3**



My landlord has made sure people do not just walk in and out of the toilet.

Name: _____
Signature: _____
Date: _____

**SECRET
NUMBER 4**



My landlord is making sure I can lock my toilet once I am inside.

Outcome	Key Message	Game Summary
Improved Cleaning Rota	A system must be simple and visible to work well.	Two teams are chosen with a landlord and three tenants each, and the tenants are assigned numbers—one team in blocks (i.e., 1-10) that are visible, and another in a more complicated, unwritten manner (i.e., every 3 rd number from 1-30 starting with 2). Landlords are asked to identify the person with a given number.
Inside Lock	An internal lock protects your tenants' privacy.	Facilitator asks for a chosen landlord to open their handbag and reveal every detail of the items inside and emphasizes the discomfort this lack of privacy causes.
Outside Lock	It's not fair to make your tenants clean someone else's disgusting mess.	Several participants are asked to come up one at a time to hold a tissue while the facilitator pretends to blow their nose loudly and messily. Facilitator translates this into the disgust tenants feel in having to clean up after others who are messy (outsiders who aren't responsible to clean).
Covered or Water-sealed Toilet	A smelly toilet full of flies scares away paying tenants.	Two participants each start with a plot of equal numbers of "good" and "bad" tenants. A die is thrown to randomly generate "conflicts" which cause tenants to leave and rental income to be lost. When new tenants arrive, the "good" ones (who are less likely to cause conflict) will only go to the plot with a good toilet, leading to plots with good toilets having stable tenants with few conflicts and plots with bad toilets having unstable plots generating less income.
General Toilet Improvement	A wise landlord invests in his or her toilet.	Two participants are assigned to invest either in improving the toilet or building a new room to rent. The toilet generates income sooner, rental gains are multiplied by the number of tenants, and a scenario where income is reduced shows that this is a more reliable and lucrative way to generate wealth from a plot.

Upgrade percentages

- **Inside lock:** installed by 40% of those with solid doors
- **Outside lock:** installed by 30% of those with solid doors
- **Emblem-based Rota:** used by 71% of landlords, with 88% of them reporting it still operated at endline
- **Seal:** installed by 9% of landlords