

---

# The Behaviourally Informed Organization

@dilipsoman



Behavioural Economics  
in Action at Rotman



Behaviourally Informed  
Organizations



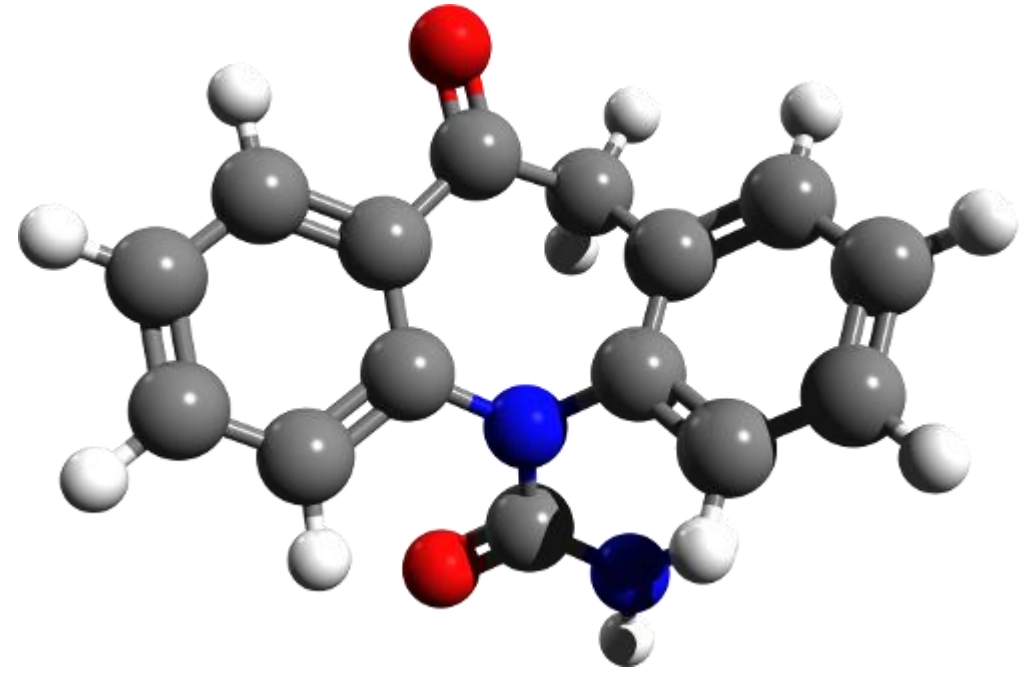
# Chapter 1





# Structure of remarks

- Claims and observations
- Psychological considerations
- Plumbing problems and Sludge
- Using Behavioural Insights



# Everyone is in the Business of Changing Behaviour...

**COMPLIANCE**

**SWITCHING /  
PURCHASING**

**CONSUMPTION**

**ACCELERATION**

15.B.2 Consider an E Box with consumers w/ C-D utility:

$$u_1(x_{11}, x_{21}) = x_{11}^\alpha x_{21}^{1-\alpha} \quad u_2(x_{12}, x_{22}) = x_{12}^\beta x_{22}^{1-\beta} \quad (w_{11}, w_{21}) \gg 0$$

Solve for equilibrium price ratio + allocations.

How do these change w/ a differential  $\Delta$  in  $w_{11}$ ?

consumer 1:  $\max_x u(x) \quad x_{11}^\alpha x_{21}^{1-\alpha} - \lambda [p_1 x_{11} - p_2 x_{21} - p w_1]$

$$\text{FOC: } \partial u / \partial x_{11} = \alpha x_{11}^{\alpha-1} x_{21}^{1-\alpha} - \lambda p_1 = 0$$

$$\partial u / \partial x_{21} = (1-\alpha) x_{11}^\alpha x_{21}^{-\alpha} - \lambda p_2 = 0$$

$$\frac{\alpha x_{11}^{\alpha-1} x_{21}^{1-\alpha} = \lambda p_1}{(1-\alpha) x_{11}^\alpha x_{21}^{-\alpha} = \lambda p_2} \Rightarrow \frac{\alpha}{(1-\alpha)} x_{11}^{-1} x_{21} = \frac{p_1}{p_2} \Rightarrow x_{21} = \frac{p_1}{p_2} x_{11} \left( \frac{1-\alpha}{\alpha} \right)$$

$$p_1 x_{11} - p_2 x_{21} - p w_1 \Rightarrow p_1 x_{11} - p_2 \left[ \frac{p_1}{p_2} x_{11} \left( \frac{1-\alpha}{\alpha} \right) \right] - p w_1$$

$$p_1 x_{11} \left[ \frac{1}{\alpha} \right] = p w_1 \Rightarrow x_{11} = \frac{\alpha p w_1}{p_1}, \quad x_{21} = \frac{(1-\alpha) p w_1}{p_2}$$

**Econs!**



*Humans!*



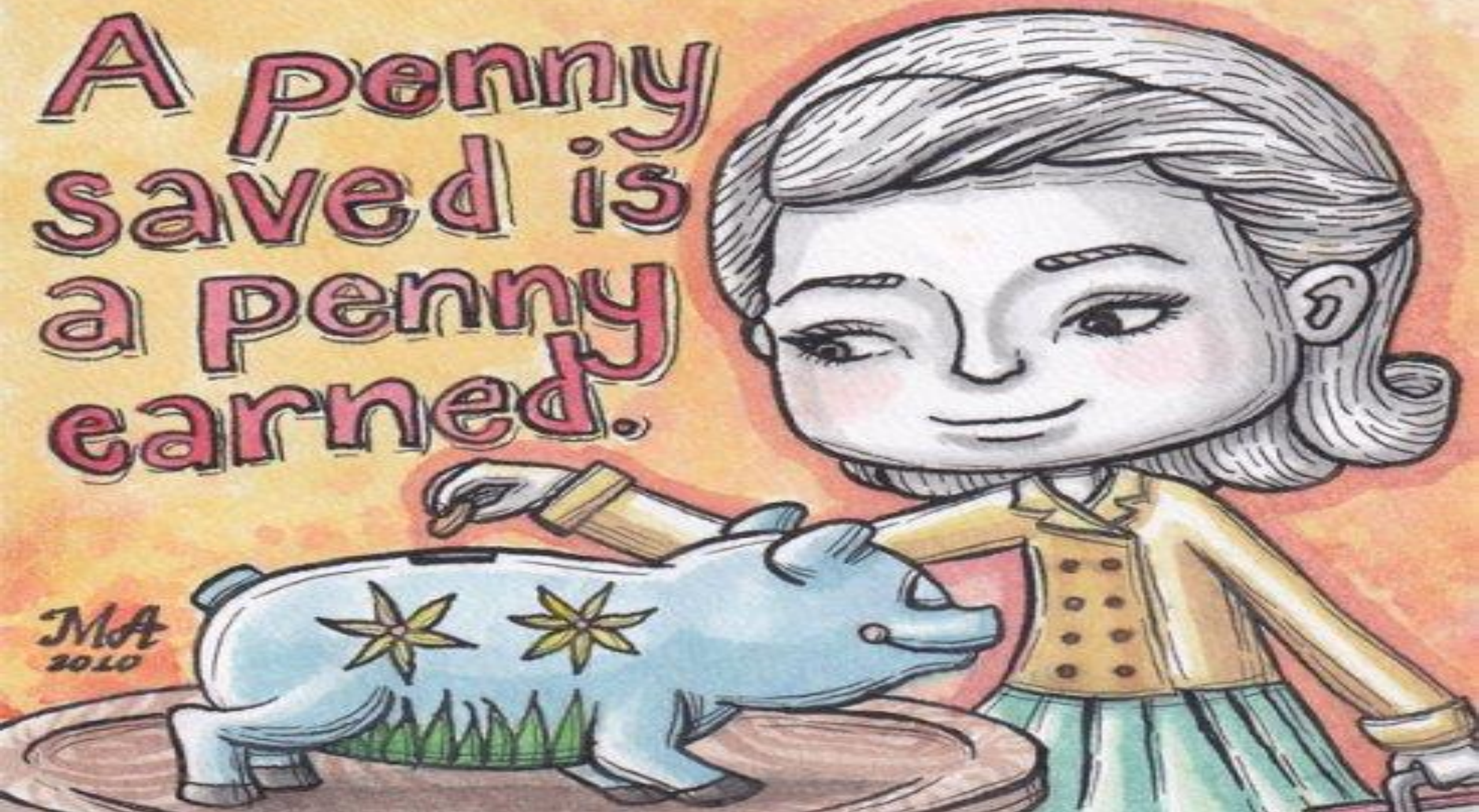
# *Design for Humans, not for Econs*

# A behaviourally informed organization

- Understands that its external and internal stakeholders are humans, and not econs
- Knows what it means to be human
- Designs for humans
- Is evidence driven (and knows that mere data  $\neq$  evidence)
- Believes in the test – learn – adapt approach
- Reduces sludge / tried to be human compliant



A penny  
saved is  
a penny  
earned.



MA  
2010





# What does it mean to be human?

- Instagram does not claim ownership of any Content that you post on or through the Service. Instead, you grant to Instagram a non-exclusive, fully paid and royalty-free, transferable, sub-licensable, worldwide license to use the Content that you post on or through the Service, except that you can control who can view certain your Content and activities on the Service as described in the Service's Privacy Policy, available here: <http://instagram.com/legal/privacy/>.
2. Some or all of the Service may be supported by advertising revenue. To help us deliver interesting paid or sponsored content or promotions, you agree that a business or other entity may pay us to display your username, likeness, photos (along with any associated metadata), and/or actions you take, in connection with paid or sponsored content or promotions, without any compensation to you. If you are under the age of eight (8), or under any other applicable age of majority, you represent that at least one of your parents or legal guardians has also agreed to this provision (and the use of your name, likeness, username, and/or photos (along with any associated metadata)) on your behalf.
  3. You acknowledge that we may not always identify paid services, sponsored content, or commercial communications as such.
  4. You represent and warrant that: (i) you own the Content posted by you on or through the Service or otherwise have the right to grant the rights and licenses set forth in these Terms of Use; (ii) the posting and use of your Content on or through the Service does not violate, misappropriate or infringe on the rights of any third party, including, without limitation, privacy rights, publicity rights, copyrights, trademark and/or other intellectual property rights; (iii) you agree to pay for all royalties, fees, and any other monies owed by reason of Content you post on or through the Service; and (iv) you have the legal right and capacity to enter into these Terms of Use in your jurisdiction.
- The Service contains content owned or licensed by Instagram. All rights reserved. © 2014 Instagram. All rights reserved. The Service is protected by copyright.





# The Four – “ition”s

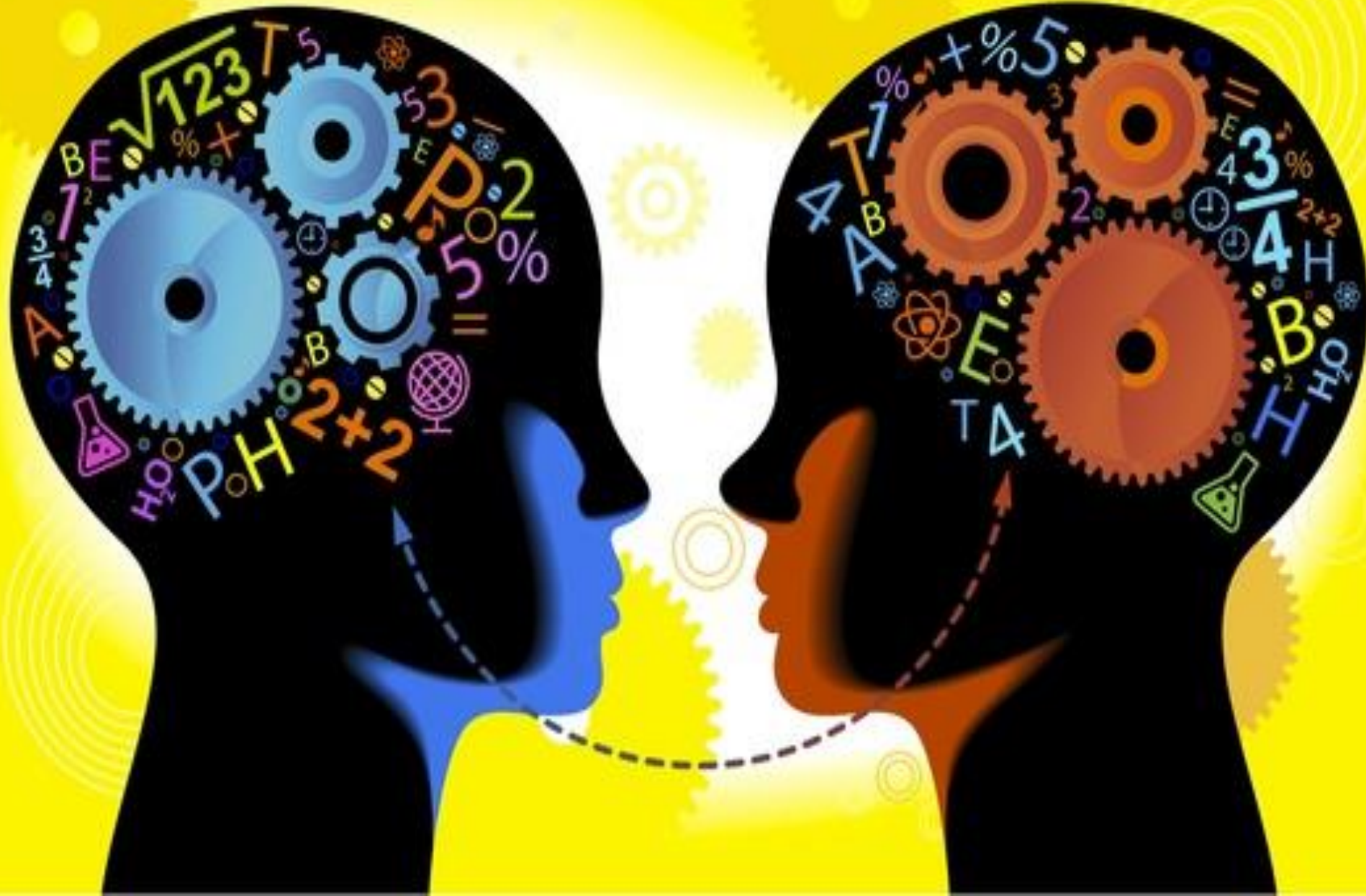
Motivation

Cognition

Perception

Emotion

*Context*     *Procrastination*     *Inertia*





**BEAR** 

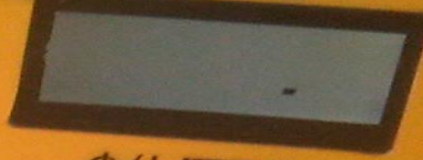
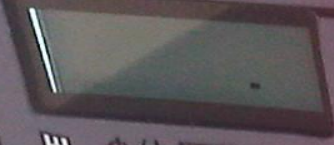
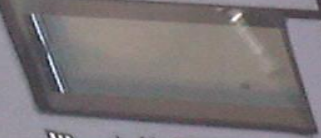


Regular Clean

Plus Clean

SuperClean

ULTRA94



TACTROL ADDITIVE  
€/LITRE

TACTROL ADDITIVE  
€/LITRE

TACTROL ADDITIVE  
€/LITRE

€/LITRE

PUSH TO START

OCTANE  
**87**

PUSH TO START

OCTANE  
**89**

PUSH TO START

OCTANE  
**91**

PUSH TO START

OCTANE  
**94**

GILHARCO  
VEEDER-ROOT







## Welcome to stickK!

Ready to finally stickK to your commitments? Then stand up, and put your reputation, or even your money, where your mouth is, and change your life. Reap the rewards of your hard work.

### Change Starts Now

4 simple steps to achieve your goal

- 1** Select your Goal
- 2** Set the Stakes
- 3** Get a Referee
- 4** Add Friends for Support

**I commit to:**

(Select your Goal)

[CONTINUE](#)

Start your  
Commitment  
**TODAY!**

[start now](#)

#### Suggested goals

- Make appointment with dentist
- Make appointment with doctor

#### Recent Commitments

- Naki – Naki
- Study for GRE
- Create To Do List Every Week

[Login](#)

[Register](#)

Email:

Password:

Remember me

[Forgot your password?](#)

[LOGIN](#)

Take the stickK  
**GUIDED TOUR!**



[Follow us on twitter](#)



#### stickK Expert Word

##### NEW FEATURE

Check out our new stickK Expert Word to help you achieve your goals

[View Recent Articles](#)



# Three segments in Behaviour Change!



**Motivated  
Enthusiasts**

***“Done”***



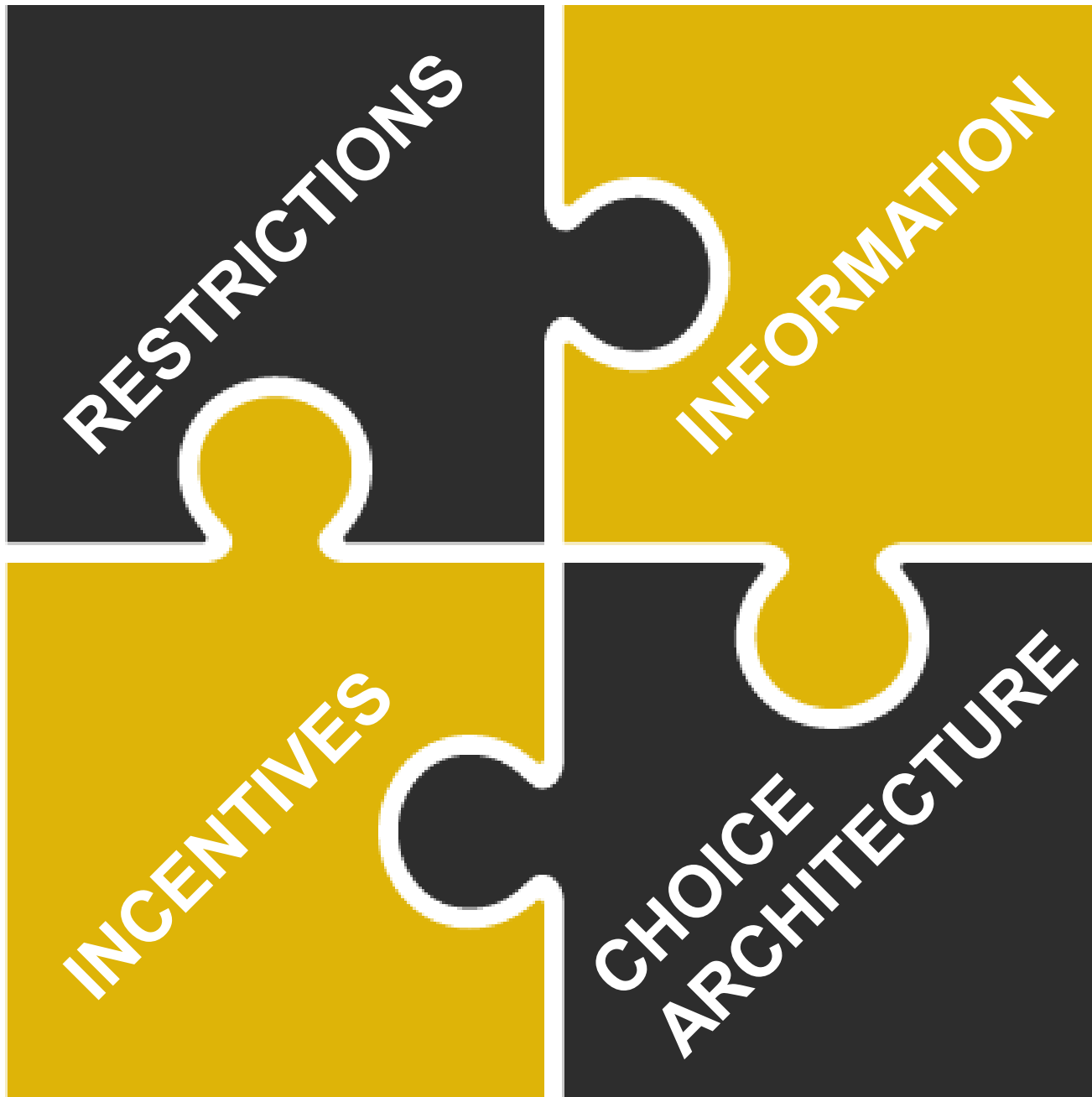
**Diehard  
Opponents**

***“No way”***



**Naïve  
Intenders**

***Yes, I’ll do it tomorrow”***



# The Behaviour Change Puzzle











# Behaviour Change as a Plumbing Problem

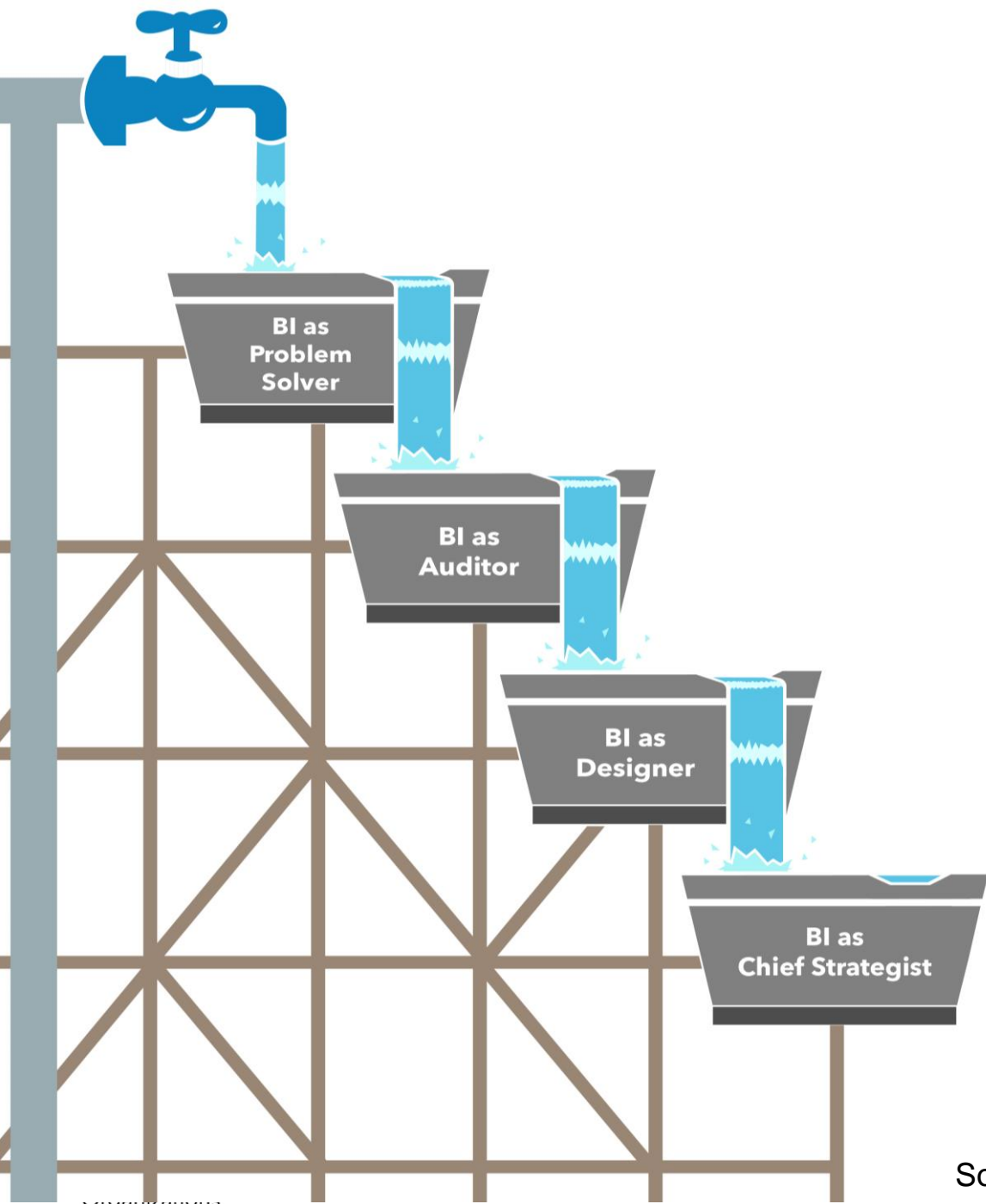
Source: Soman (2015), The Last Mile





# Sludge

	FACILITATE DECISION	IMPEDE DECISIONS
Increase Citizen Welfare	Much of what is covered in Thaler and Sunstein's book!	Decision Points, inserting an epsilon cost during consumption to <b>prompt</b> vigilance. <b>Cooling off periods</b>
Decrease Citizen Welfare	Defaulting consumers into high price options, or into products that they do not need or value	Making it difficult to cancel subscriptions, to return products, to change privacy settings
With no particular intent	Legacy defaults or legacy regulations that "endow" people with products or services	Legacy processes that now do not reflect how people act (e.g., paper disclosures)



# The Roles of BI

Behavioural Scientist as **Problem Solver**  
(last mile challenges)

Behavioural Scientist as **Auditor**  
(proactive problem identification)

Behavioural Scientist as **Designer**  
(policy and program design)

Behavioural Scientist as **Strategist**  
(overall organizational operations)

Source: Feng et al. (2018)











$$S = \frac{a \cdot h}{2} = \frac{1}{2} \cdot ab \cdot \sin \varphi = p \cdot r$$

$$S = \frac{1}{2} ab = \frac{1}{2} c \cdot h$$

$$S = \frac{a \cdot h}{2} = \frac{1}{2} \cdot a \cdot b \cdot \sin \varphi = p \cdot r$$



$$S = ab$$

$$S = a$$

physics



$$t = 0,5 \text{ min} = 30$$
$$v = h = 12 \text{ m}$$
$$= 320$$

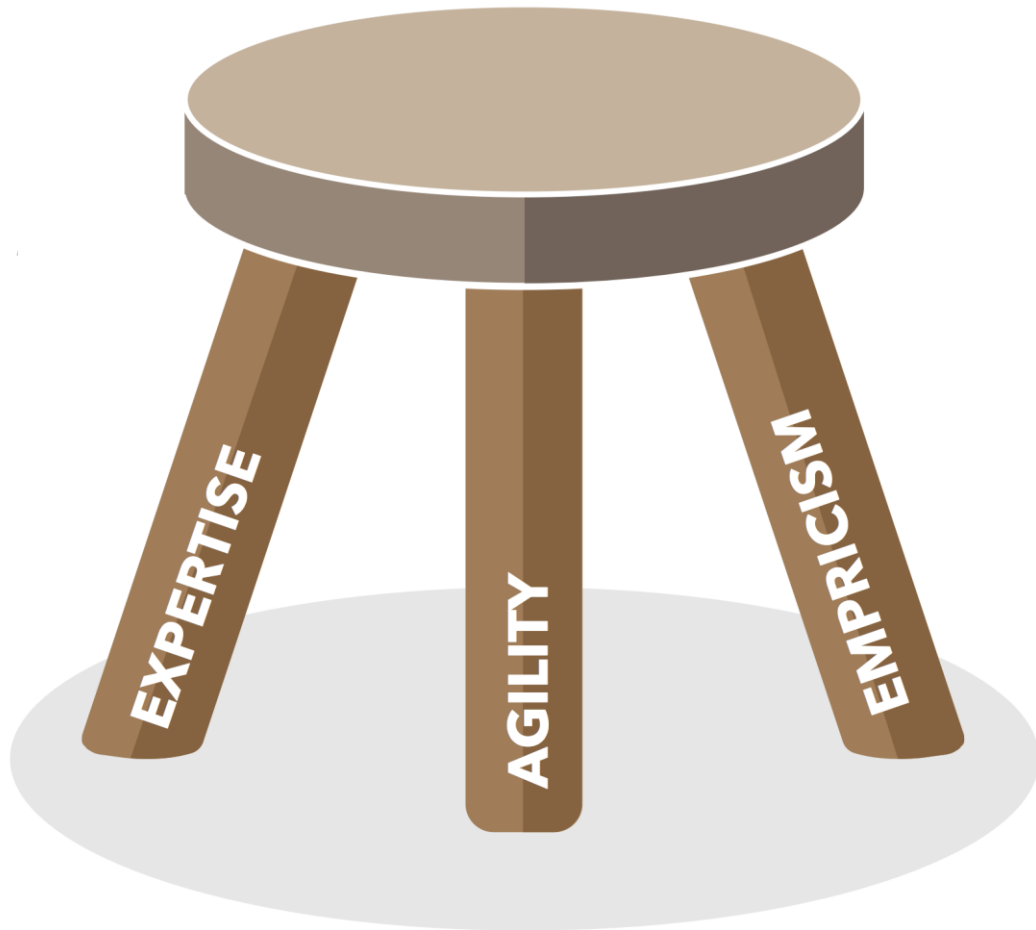
chemistry

$$S = \pi r^2$$

$$a^2 + b^2$$



# The Three Legged Stool for Success



## EXPERTISE

**Behavioural science** (and understanding of human psychology) & **empathy**. **Behavioural engineering** (choice architecture and the approaches Data & **empirical science** (analytics, experimental design, and ability to analyze and interpret experiments)).

## AGILITY

An organizational structure and processes that allow for **quick feedback loops** to be incorporated, and for the organization to be able to change course so that a **test-learn-adapt** strategy can be put in place.

## EMPIRICISM

A **mindset** that data (rather than theory or a pre-committed course of action) drive decision making in the organization. This mindset calls for an empathic mindset at the intersection of BI and design thinking, and a relentless desire to test using experiments through RCT's or other methodologies.

# How Do I Reduce the Costs of Experimentation?

1. Investing in hard and soft infrastructure
2. Appropriate problem selection
3. Building whatworks databases
4. Ethics in experimentation
5. Reframing failure and Incentivizing Experimentation

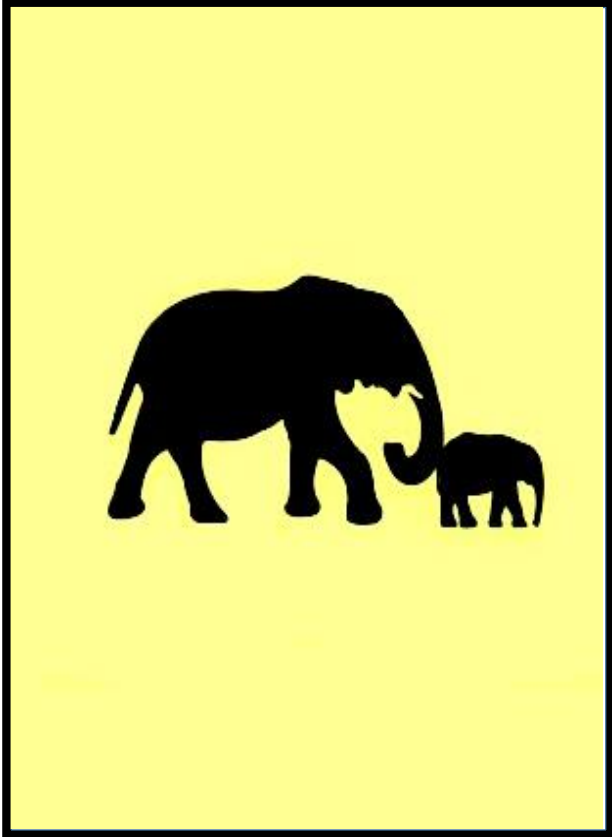


# Taking Interventions to the Field: Four Challenges

- The nature of evidence in behavioural science is different
- Solution mindedness
- Over-reliance on frameworks like EAST and SIMPLER
- Many organizations operate in silos of capability



# In sum





# Resources



[www.rotman.utoronto.ca/bear](http://www.rotman.utoronto.ca/bear)



@UofT\_BEAR @dilipsoman @BE101x

- Soman, D. (2015). *The Last Mile: Creating Social and Economic Value from Behavioural Insights*. Toronto: University of Toronto Press.
- Feng, Bing, Jima Oyunsuren, Mykyta Tymko, Melanie Kim and Dilip Soman (2018), *How Should Organizations Best Embed and Harness Behavioural Insights? A Playbook*, Toronto, Canada: Behavioural Economics in Action at Rotman (BEAR) Report series, available at <http://www.rotman.utoronto.ca/bear>
- Behavioural Economics in Action (BE101x) MOOC: <https://www.edx.org/course/behavioural-economics-in-action>
- All photographic images have been used under the creative commons licensing arrangement. Illustrations are © BEAR. Details on sources are available on request.