

# BEHAVIOR CHANGE:

Behavioral Economics: A Tool to Design Better Programs

*Applications to Antimicrobial Agents in Livestock*

2<sup>nd</sup> OIE Global Conference on Antimicrobial Resistance

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# Overview

- I: What is Behavior Change?
- II: What is Behavioral Economics (BE)?
- III: How Behavioral Economics Expands Program Designs



# Section I: What is Behavior Change?



# Behavior Change

(Very Brief!) Behavior Change Overview

- Start with a ***specific behavior***



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(Very Brief!) Behavior Change Overview

- Start with a ***specific behavior***

“Use antibiotics correctly”



# Behavior Change

## (Very Brief!) Behavior Change Overview

- Start with a ***specific behavior***

~~“Use antibiotics correctly”~~

- Vague...
- Not a specific ***behavior*** for someone to follow



# Behavior Change

## (Very Brief!) Behavior Change Overview

- Start with a ***specific behavior***
- Focus on the actor's ***context while doing the behavior***
  - Where is the actor?
  - Are they acting alone?
  - Who is influencing them?
  - Do they have full knowledge? When did they receive that knowledge?
  - What else is happening in that moment?
  - What else do they see, hear or observe? How do they feel doing that behavior?



# Section II: What is Behavioral Economics?





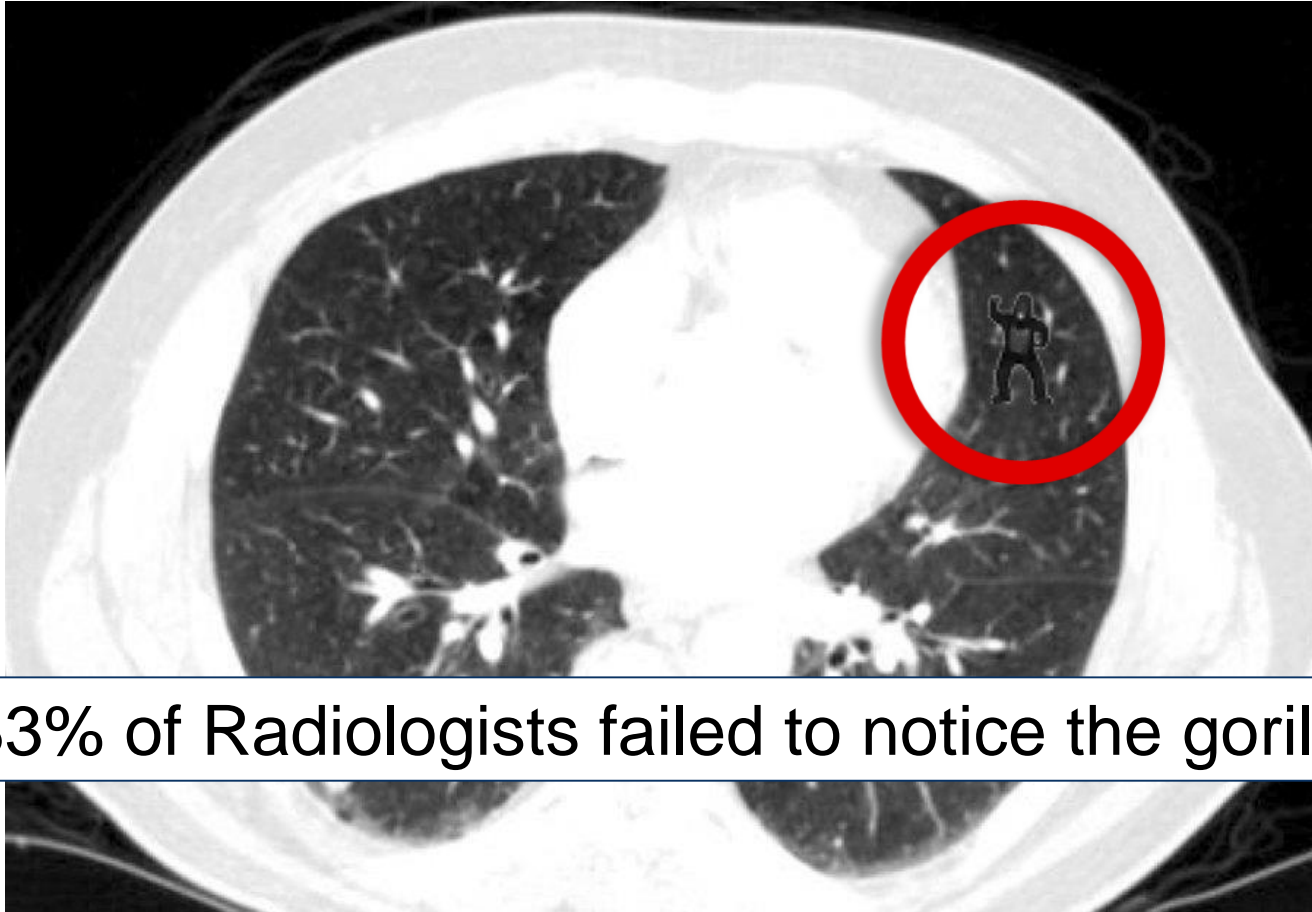
# Radiologists Reading MRIs



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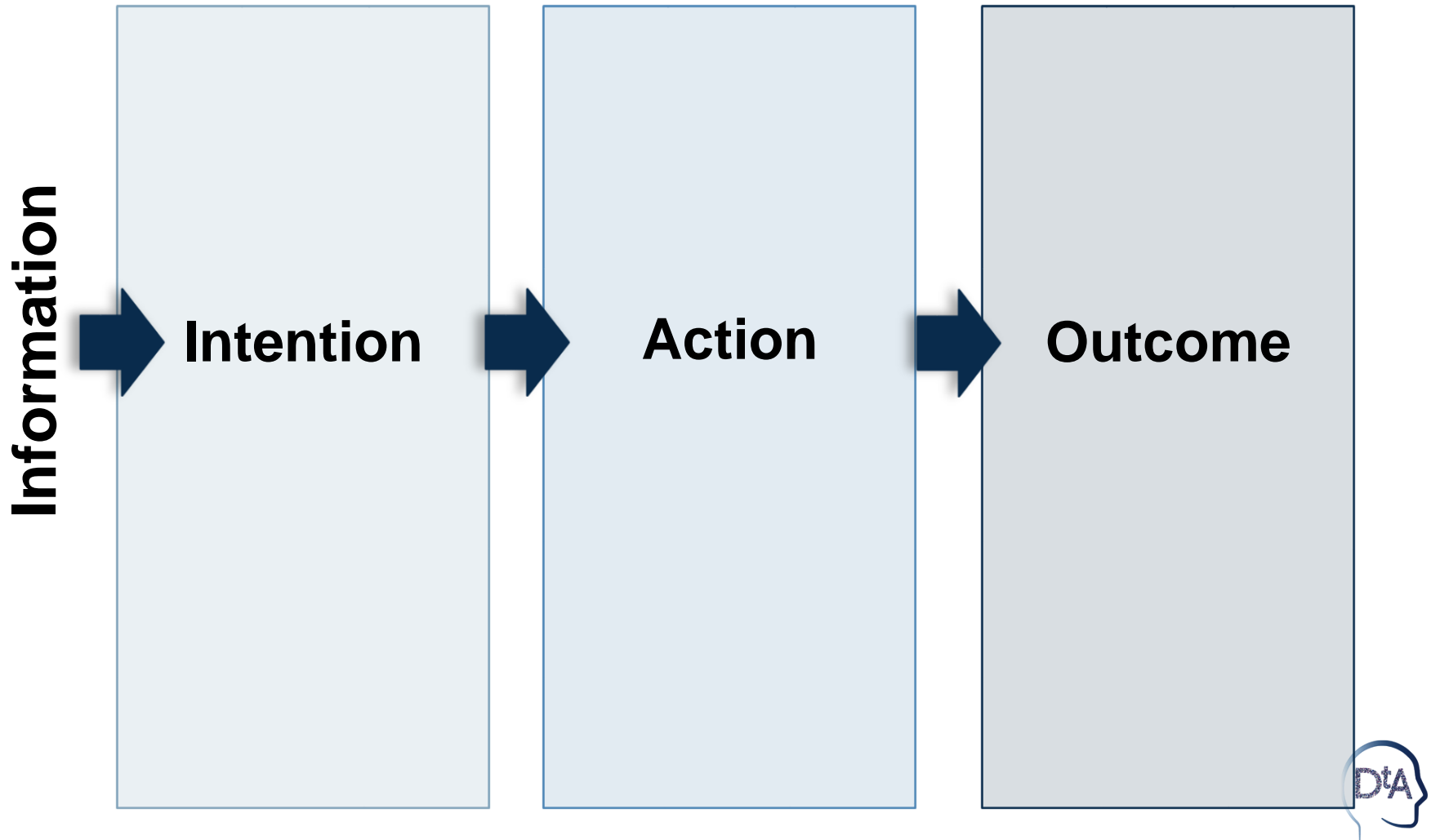


83% of Radiologists failed to notice the gorilla

Drew, T., Vo, M.L.H., & Wolfe, J.M. (2013). The invisible gorilla strikes again: Sustained inattention blindness in expert observers. *Psychological science*, 24(9), 1848-1853.



# “Traditional” Behavior Change Model



# “Real Human” Behavior Change Model

I don't have  
time to think  
about it.

**Information**



**Intention**

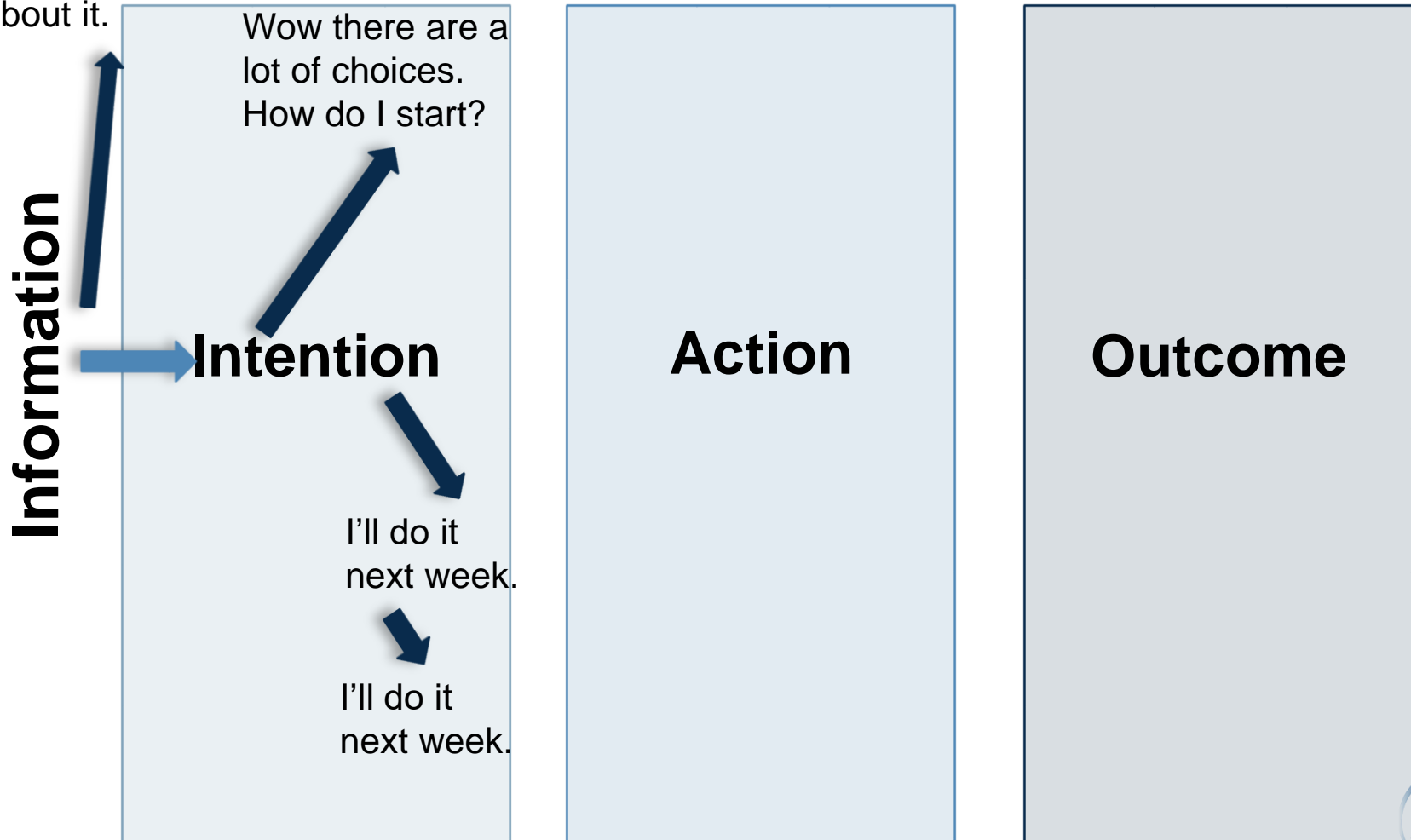
**Action**

**Outcome**



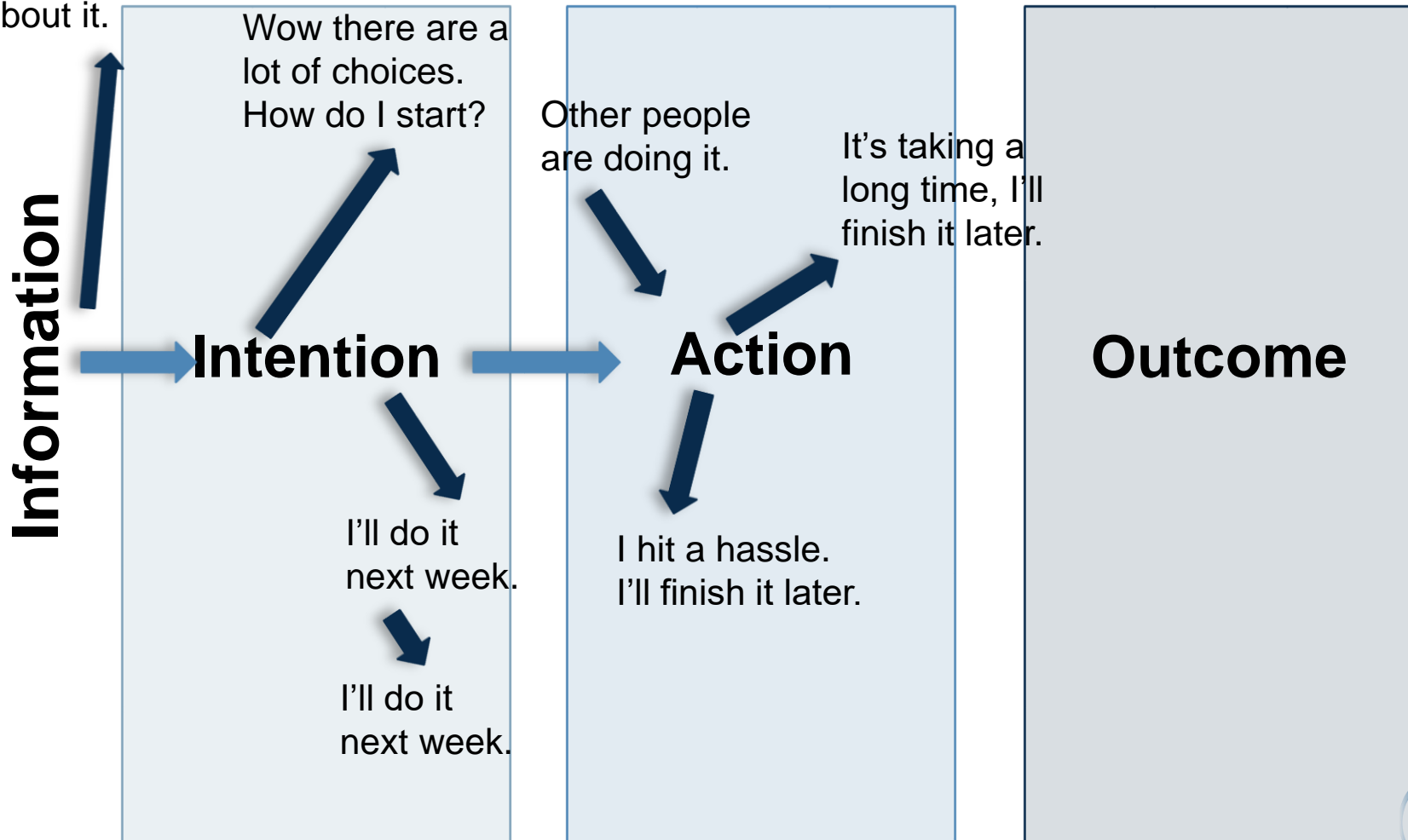
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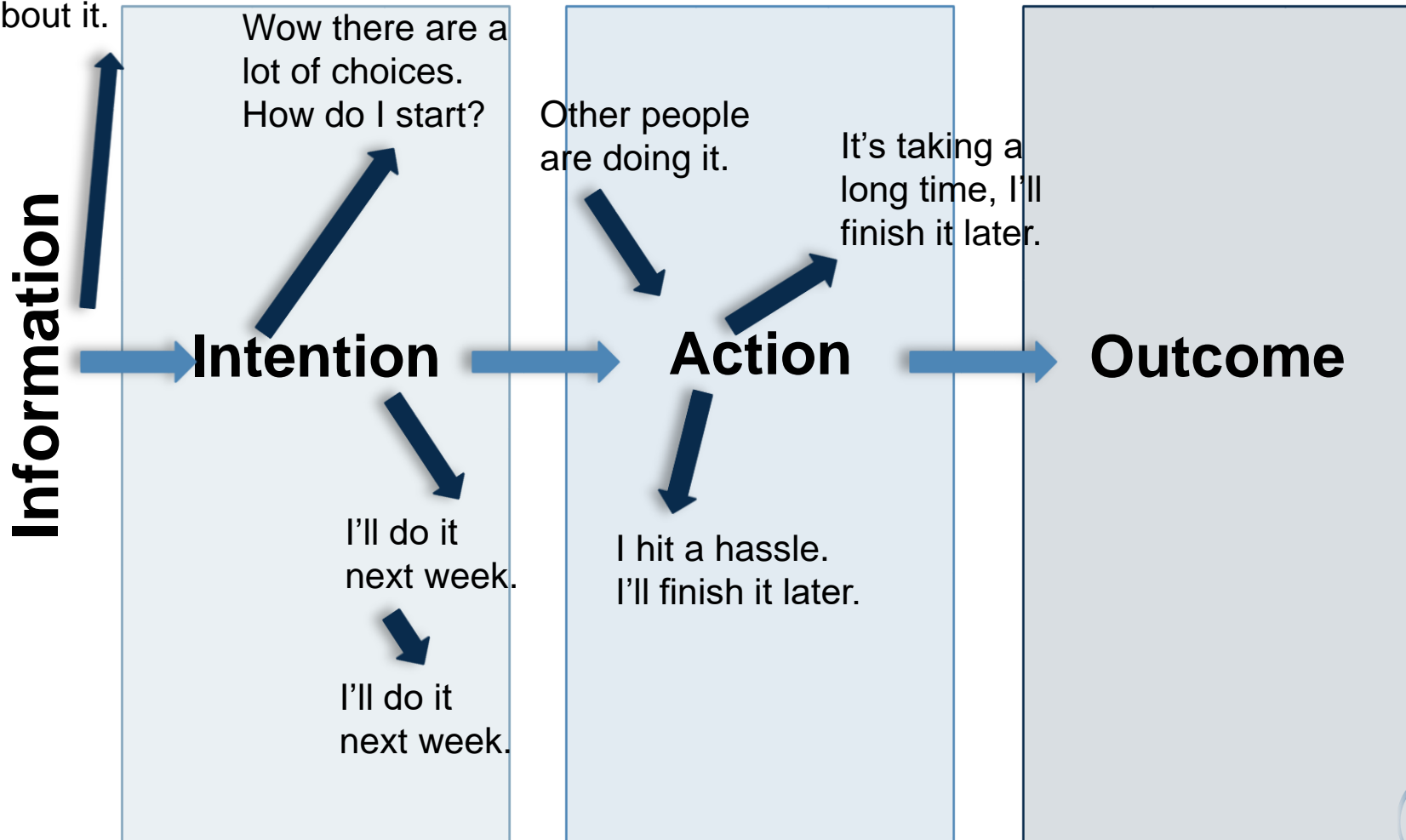
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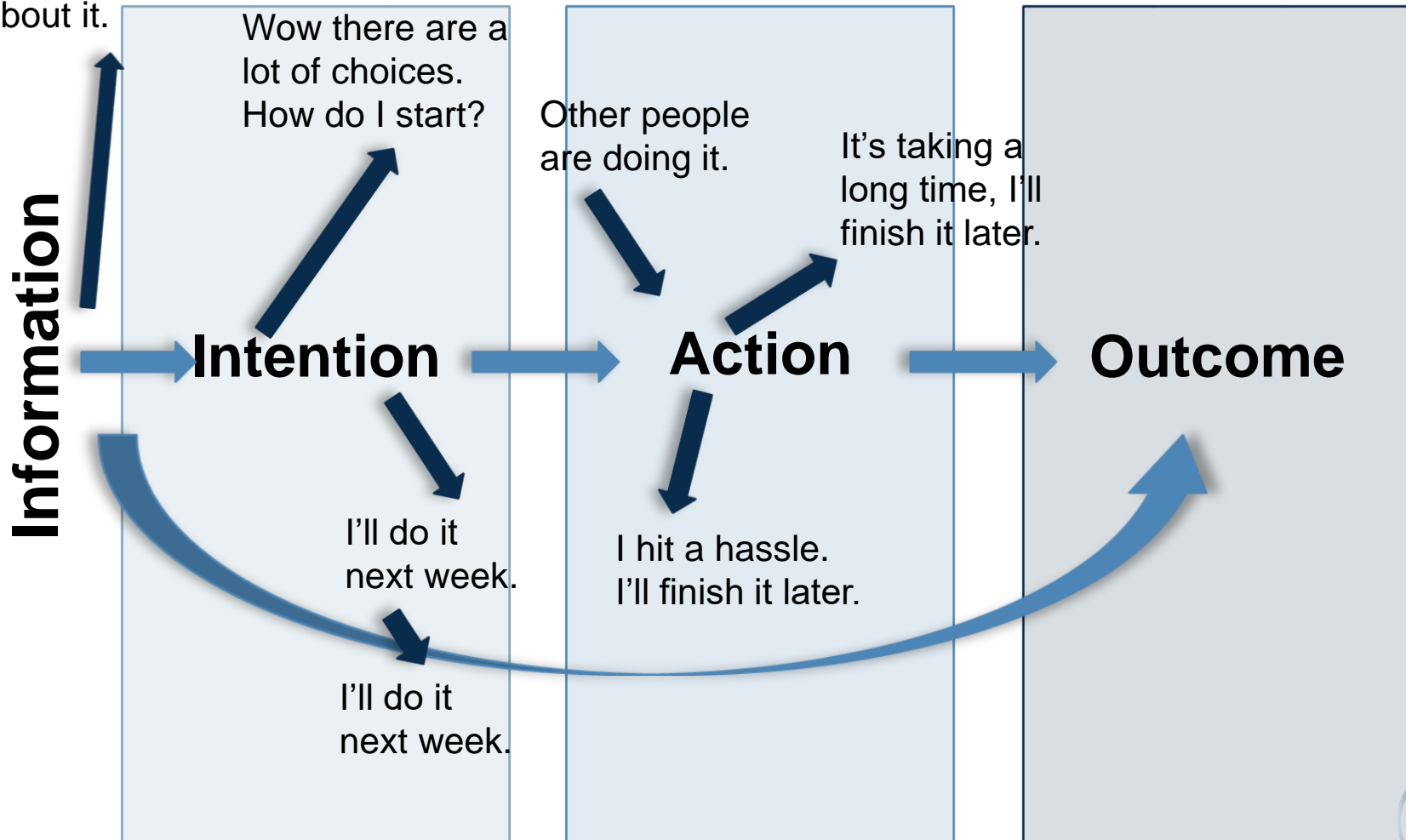
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# “Real Human” Behavior Change Model

I don't have time to think about it.



# Behavioral Economics (Science)

- Behavioral economics takes into account how humans *really* think, behave, and make decisions
- It is a combination of multiple disciplines
  - Psychology
  - Decision-Science
  - Anthropology
  - Behavior Change
  - Behavioral Economics

Core: Humans behave in predictable ways, but in ways that do not always balance benefits and costs



# Overview of BE Thinking

- The brain is more like a muscle than a computer - it gets tired and needs to be replenished
- Mental effort is difficult so the brain tries to be as efficient as possible and relies on mental shortcuts
- Humans value the present more than the future
- Humans make different choices based on their emotional state
- Humans are influenced by what we see others doing
- Humans are triggered by cues from the environment



# Why is BE thinking important?

Behavioral economics thinking is important for behavior change because it

*expands the hypotheses/insights about why humans are not doing specific behaviors and*

**that expands the ideas and options for interventions**



# BE Expands Insights & Designs

Observe: Farmers in Kenya do not use enough fertilizer on their crops.

**Hypothesis**

**Design**



# BE Expands Insights & Designs

Observe: Farmers in Kenya do not use enough fertilizer on their crops.

## Hypothesis

Farmers do not understand the benefits.

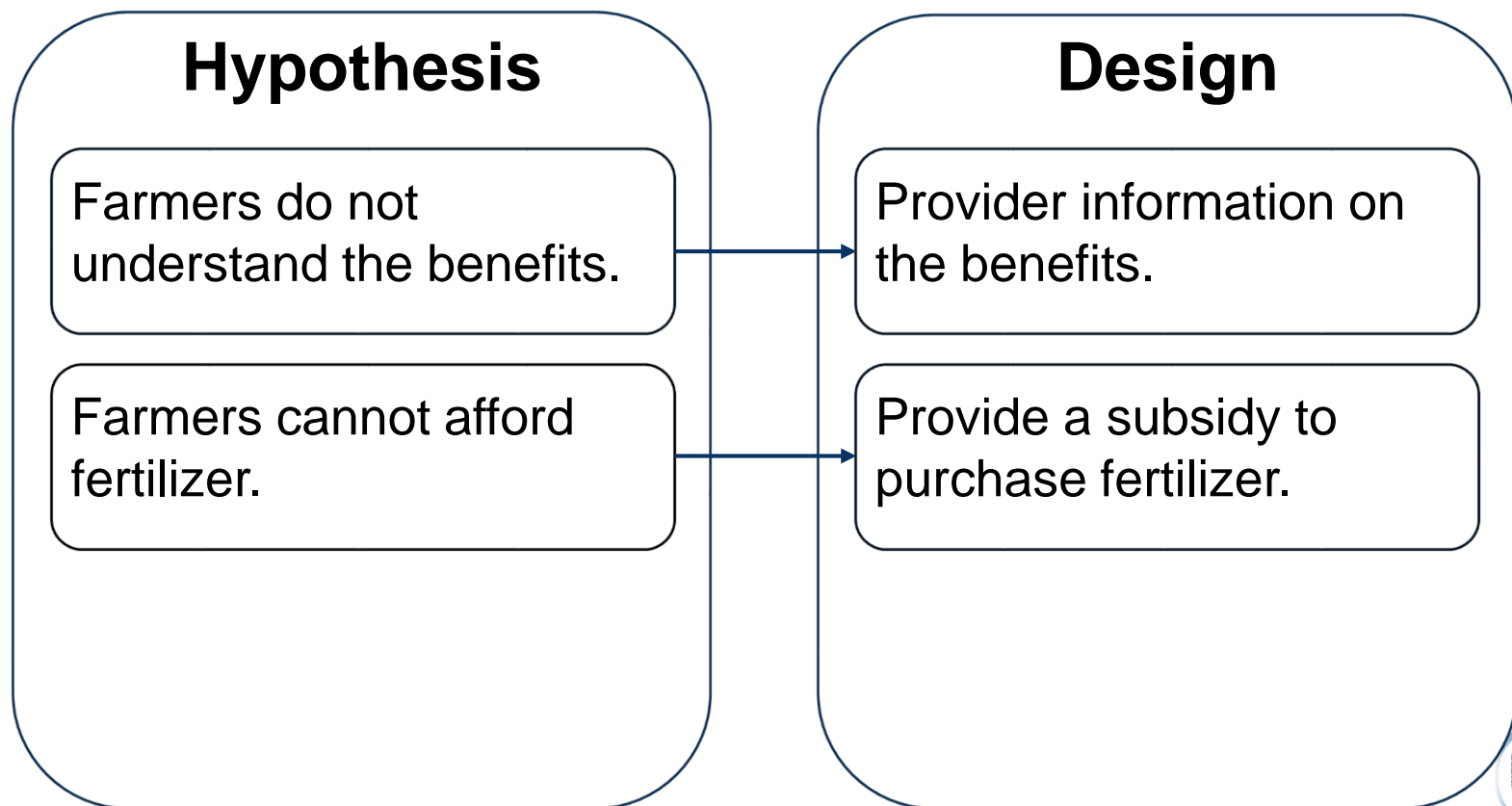
## Design

Provider information on the benefits.

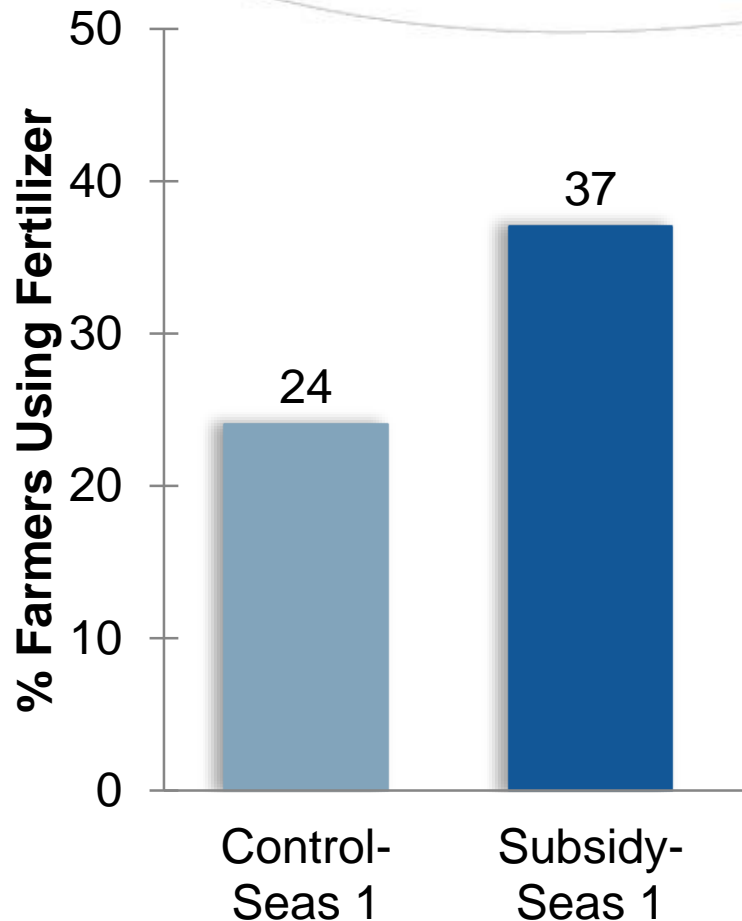


# BE Expands Insights & Designs

Observe: Farmers in Kenya do not use enough fertilizer on their crops.



# BE Expands Insights & Designs



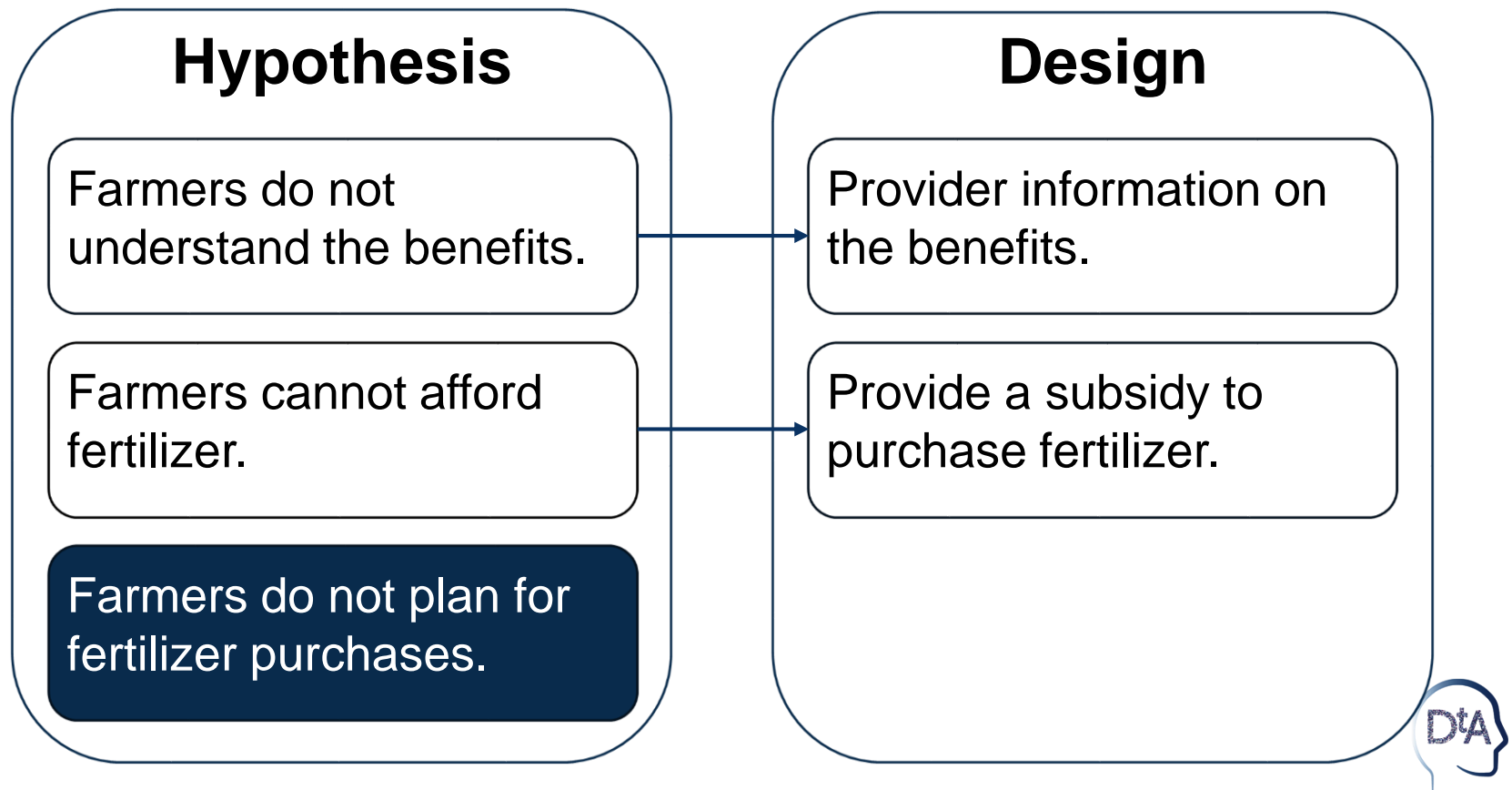
Duflo, E., Kremer, M., & Robinson, J. (2011). "Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya." *American Economic Review*. 101(6):2350-90.





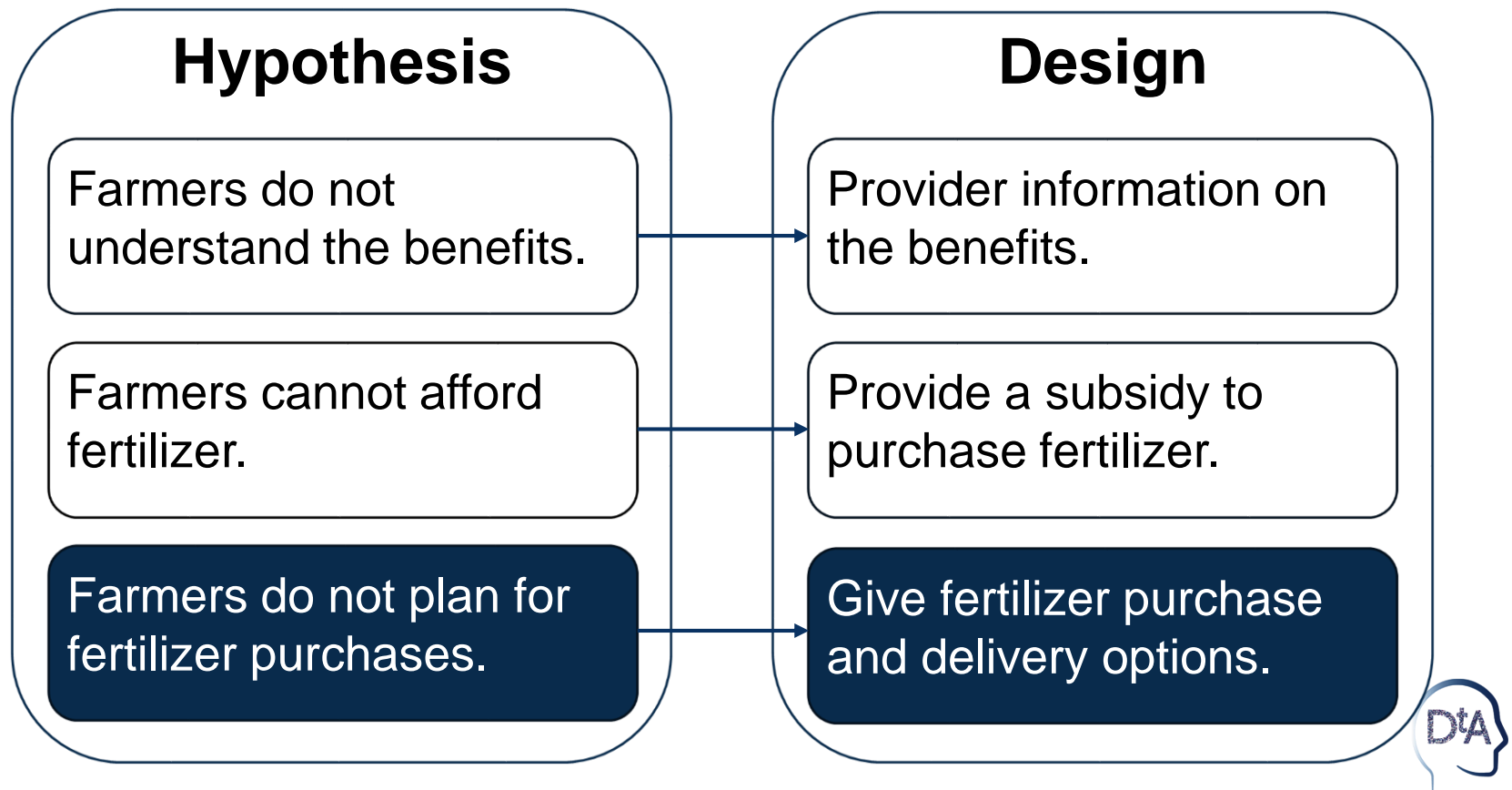
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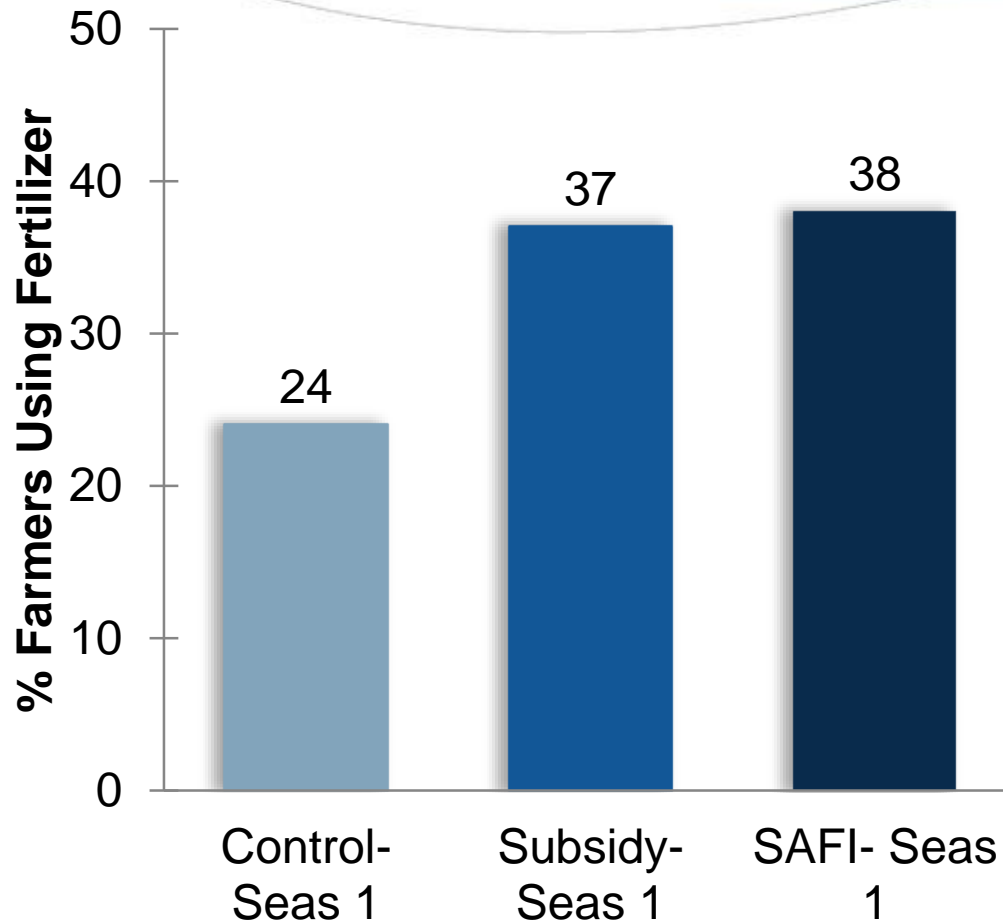


# BE Expands Insights & Designs

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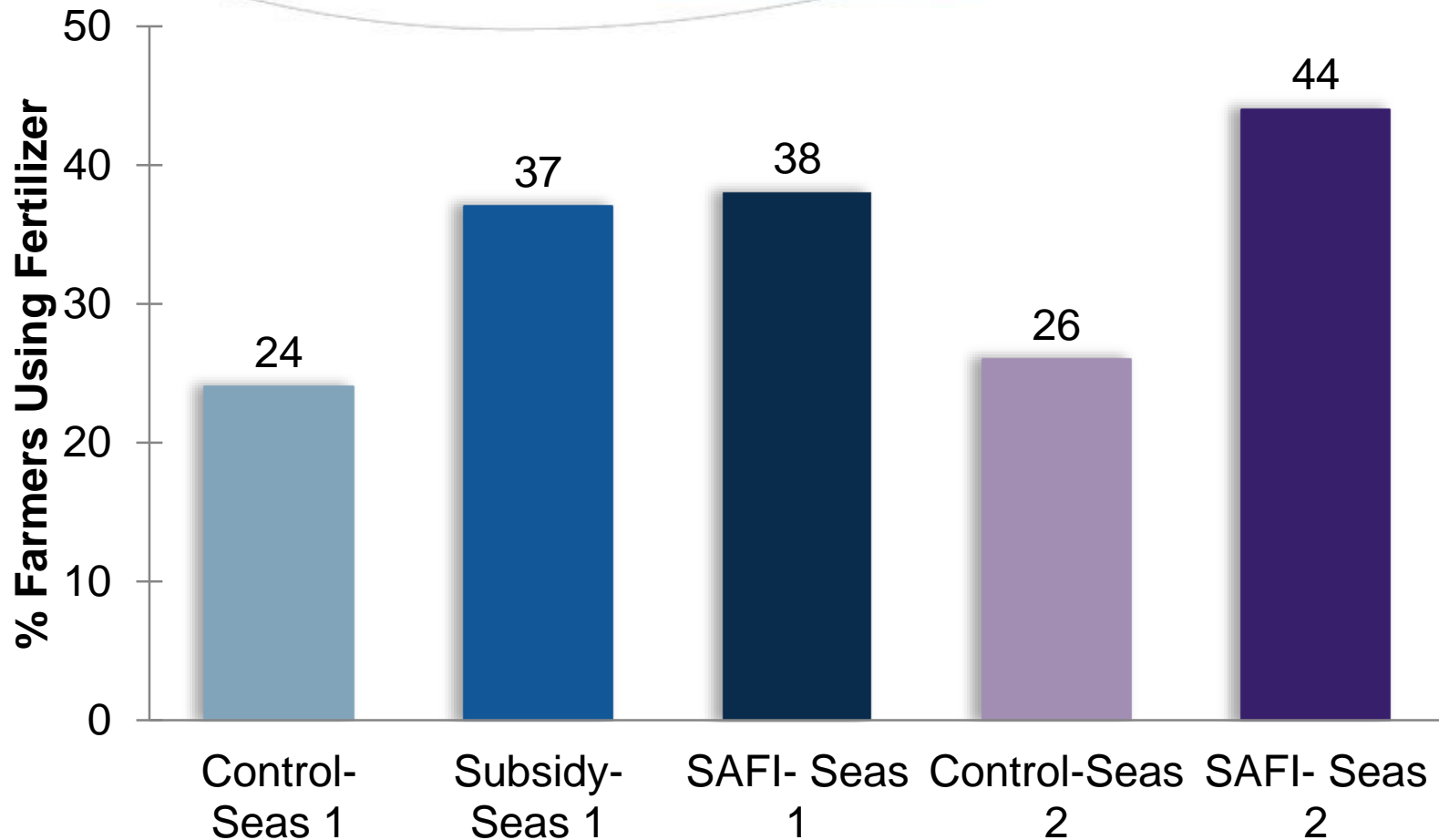
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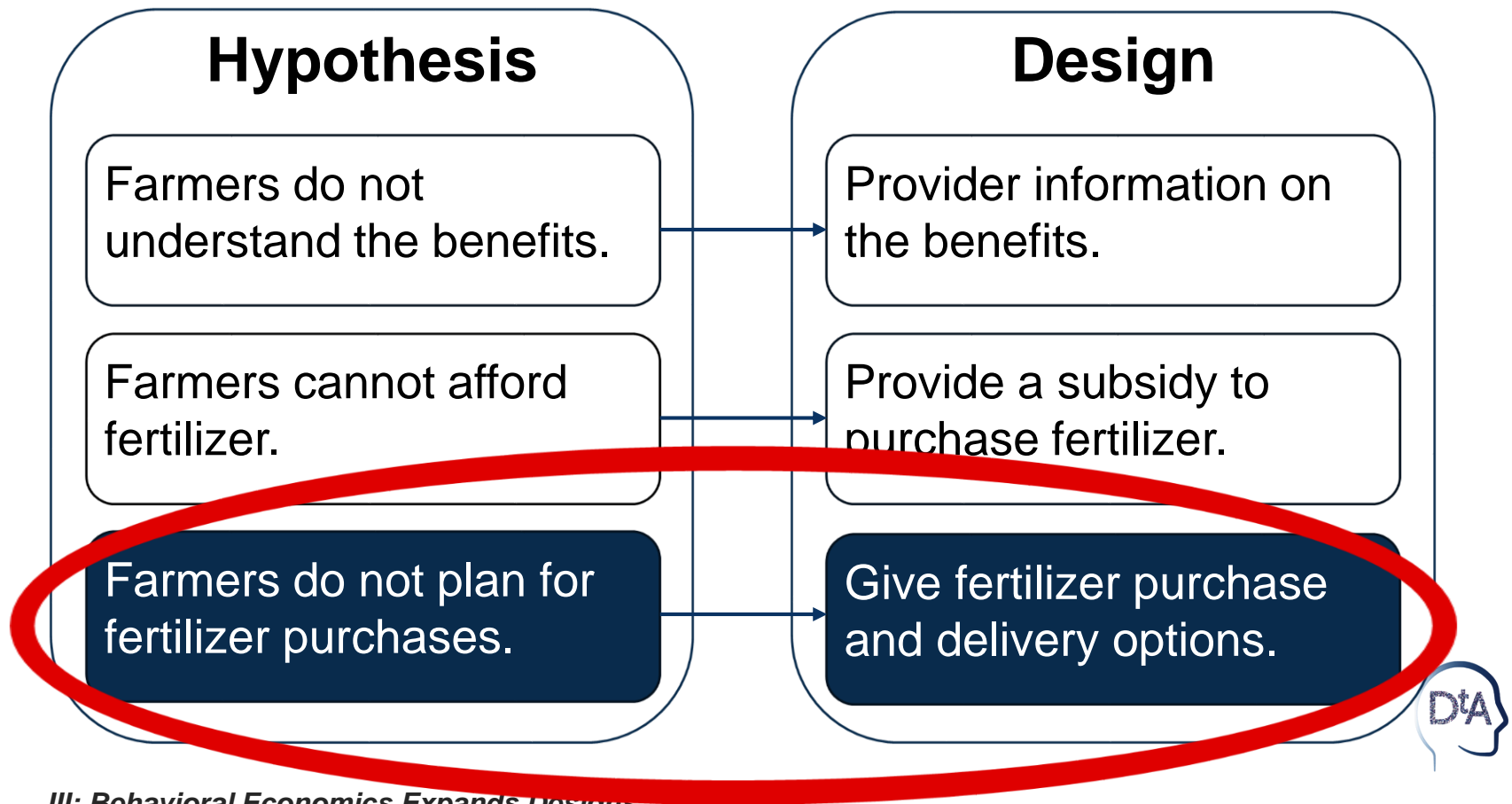


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# BE Expands Insights & Designs

Observe: Farmers in Kenya do not use enough fertilizer on their crops.



# Key takeaways...

- Focus on the ***behavior*** you want someone to do
- Human nature – all of us! – are imperfect
- Don't assume that because someone is not doing something it is because they are “not motivated” or they do “not understand”
- Intention only ***sometimes*** translates to action
- Context matters!



# Let's think about behaviors!

- What **behaviors** does your program want people to do?
- Does your program assume that people lack knowledge?
- Does your program assume that people are getting information at the same time they are able to act on that information?
- Does your program assume that people have money at that same time they have to make decisions about spending that money?
- Does your program show that other people are also using the service?



**Thank you**  
**Merci**  
**Gracias**

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