

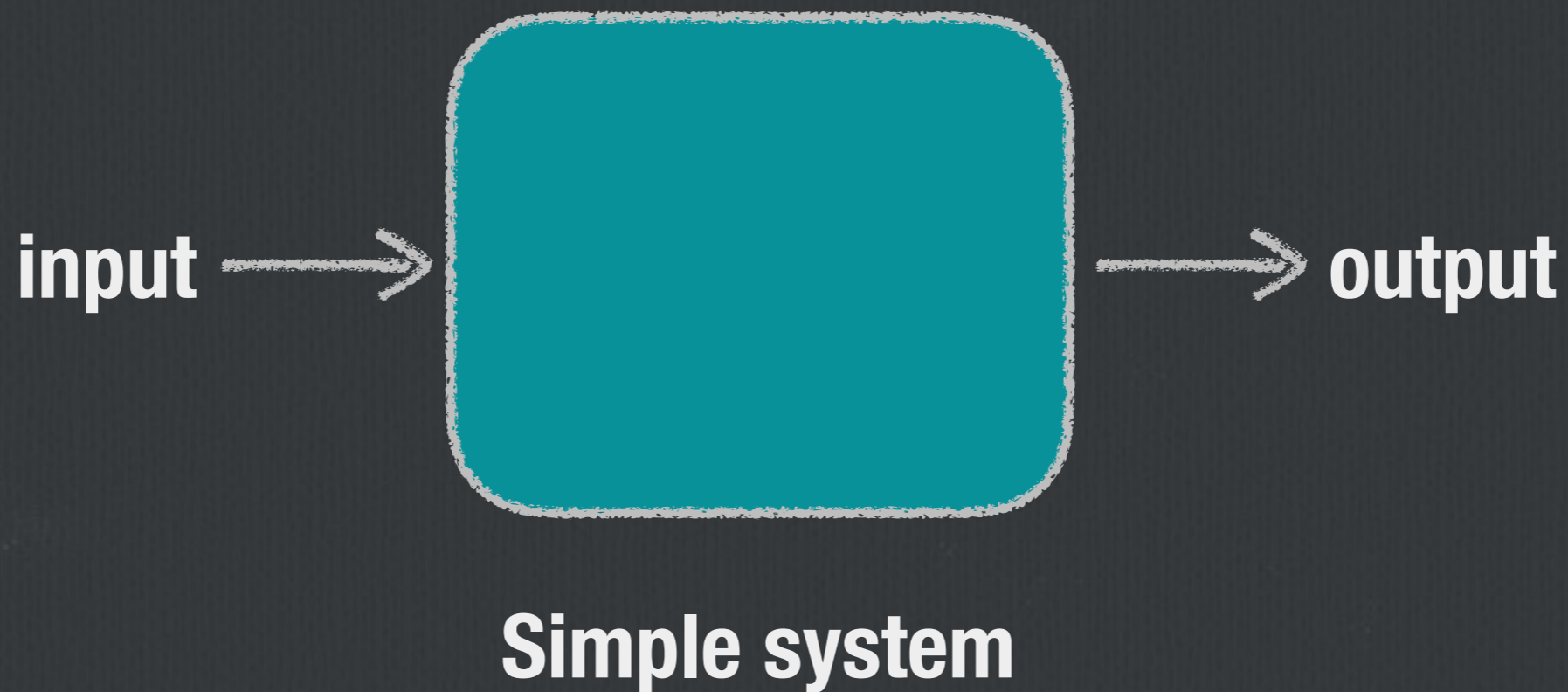
# How to Make a Sandwich

Dan North  
@tastapod

# **Part 1: What is feedback?**

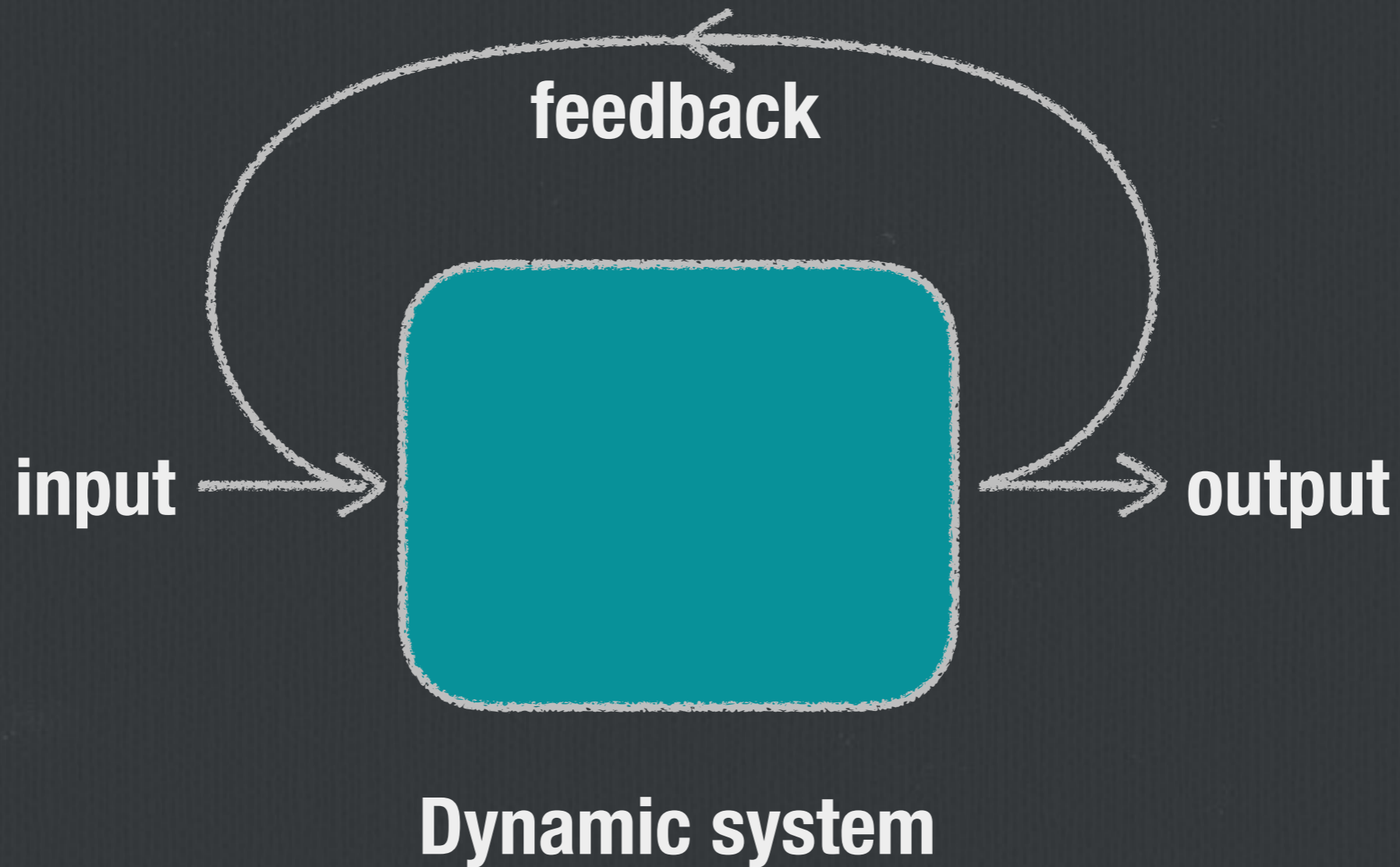
# Originates in Systems Theory

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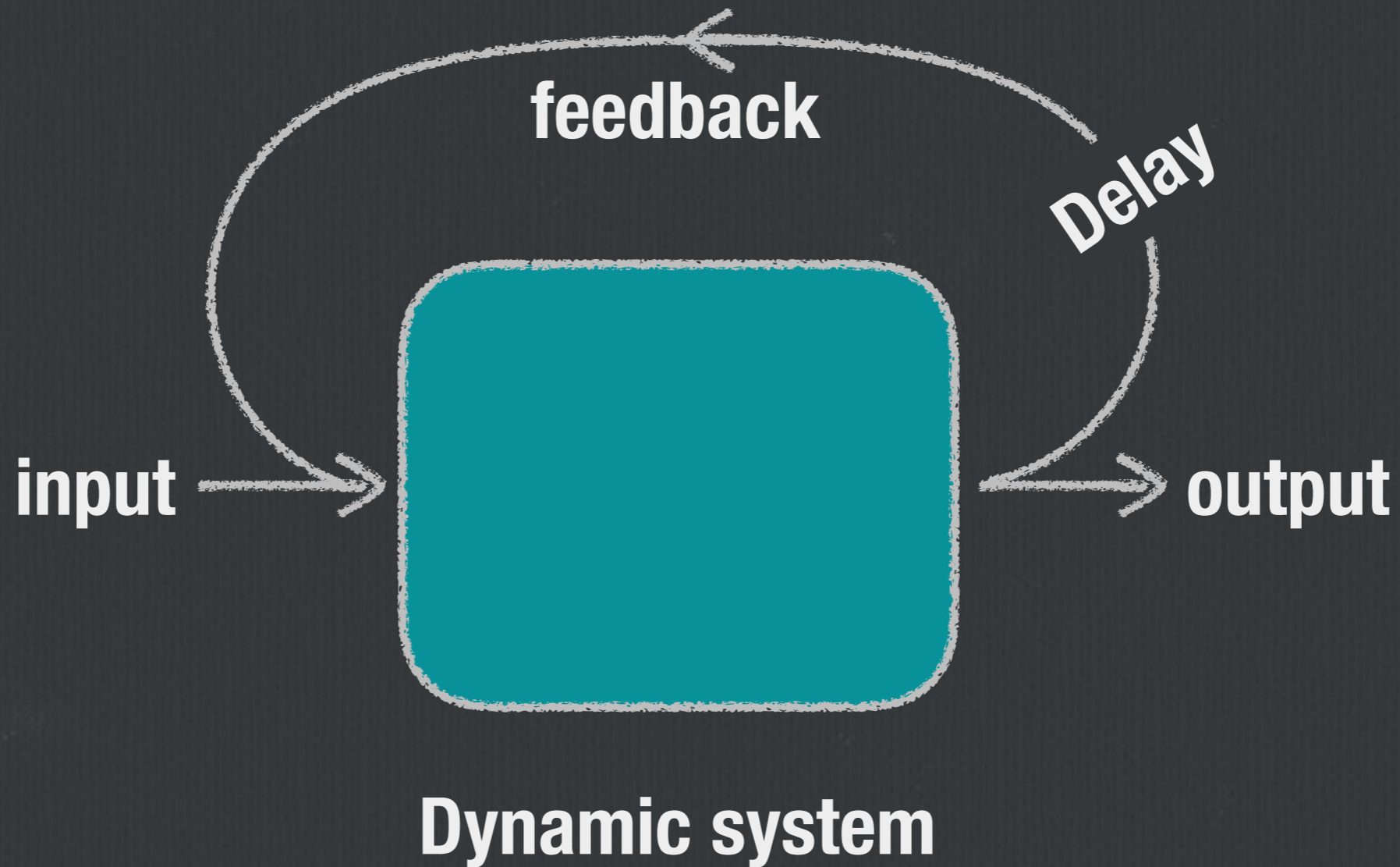
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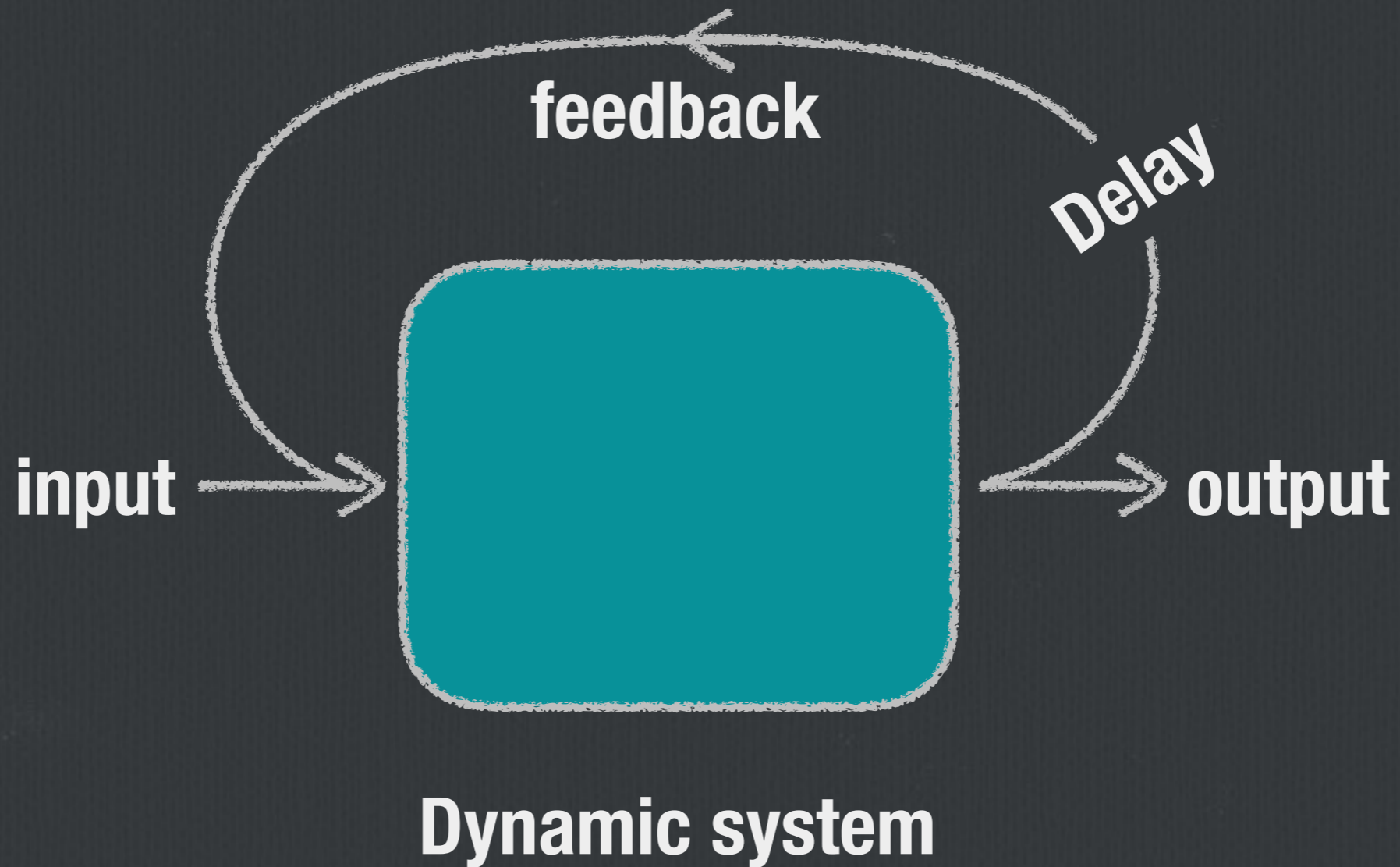
# Originates in Systems Theory

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# Originates in Systems Theory

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**Adaptive systems rely on  
feedback**

# Reinforcing feedback

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**Accelerating** loop



# Reinforcing feedback

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**Accelerating** loop

- feedback **amplifies** behaviour

# Reinforcing feedback

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## Accelerating loop

- feedback **amplifies** behaviour
- e.g. financial aid, addiction

# Reinforcing feedback

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## Accelerating loop

- feedback **amplifies** behaviour
- e.g. financial aid, addiction
- “Shifting the Burden”

# Reinforcing feedback

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**Diminishing** loop

# Reinforcing feedback

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**Diminishing** loop

- feedback **suppresses** behaviour

# Reinforcing feedback

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## Diminishing loop

- feedback **suppresses** behaviour
- e.g. deterrent, resource starvation

# Reinforcing feedback

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## Diminishing loop

- feedback **suppresses** behaviour
- e.g. deterrent, resource starvation
  
- “Tragedy of the Commons”

# Stabilising feedback

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Balancing loop





# Stabilising feedback

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## Balancing loop

- feedback tends towards **stable goal**



# Stabilising feedback

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## Balancing loop

- feedback tends towards **stable goal**
- e.g. cooperation, upstream inlet



# Stabilising feedback

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## Balancing loop

- feedback tends towards **stable goal**
- e.g. cooperation, upstream inlet
- “Limits to Growth”



# Oscillating feedback

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**Thrashing** “loop”



# Oscillating feedback

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**Thrashing** “loop”

- feedback **flips** between states



# Oscillating feedback

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## Thrashing “loop”

- feedback **flips** between states
- e.g. shower control, The Beer Game\*

\* [wikipedia.org/wiki/Beer\\_distribution\\_game](https://wikipedia.org/wiki/Beer_distribution_game)

# Oscillating feedback

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## Thrashing “loop”

- feedback **flips** between states
- e.g. shower control, The Beer Game\*
  
- “Boom and Bust”

\* [wikipedia.org/wiki/Beer\\_distribution\\_game](http://wikipedia.org/wiki/Beer_distribution_game)

**Timing is everything**

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# **Timing is everything**

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**Small and frequent is better than large and infrequent**

# **Timing is everything**

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**Delay in feedback increases “drift”**

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- **reduces system’s responsiveness**

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- **increases processing effort**

# Timing is everything

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**Small and frequent is better than large and infrequent**

**Delay in feedback increases “drift”**

- **reduces system’s responsiveness**
- **limits options**
- **increases processing effort**

**This is why Lean Operations prefers small batch size**

**Why do we ask for feedback?**

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# Why do we ask for feedback?

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- to **improve** or modify our behaviour



# Why do we ask for feedback?

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- to **improve** or modify our behaviour
- for **help** when we are stuck

# Why do we ask for feedback?

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- to **improve** or modify our behaviour
- for **help** when we are stuck
- for **recognition** when we think we are doing well

**Why do we offer feedback?**

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# Why do we offer feedback?

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- to **improve** the system of work

# Why do we offer feedback?

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- to **improve** the system of work
- to **model a culture** of encouraging feedback

# Why do we offer feedback?

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- to **improve** the system of work
- to **model a culture** of encouraging feedback
- to **control** others

# Why do we offer feedback?

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- to **improve** the system of work
- to **model a culture** of encouraging feedback
- to **control** others
- to demonstrate our **superior knowledge**

# **Feedback is a System**

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# Feedback is a System

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Offered or  
Sought

# Feedback is a System

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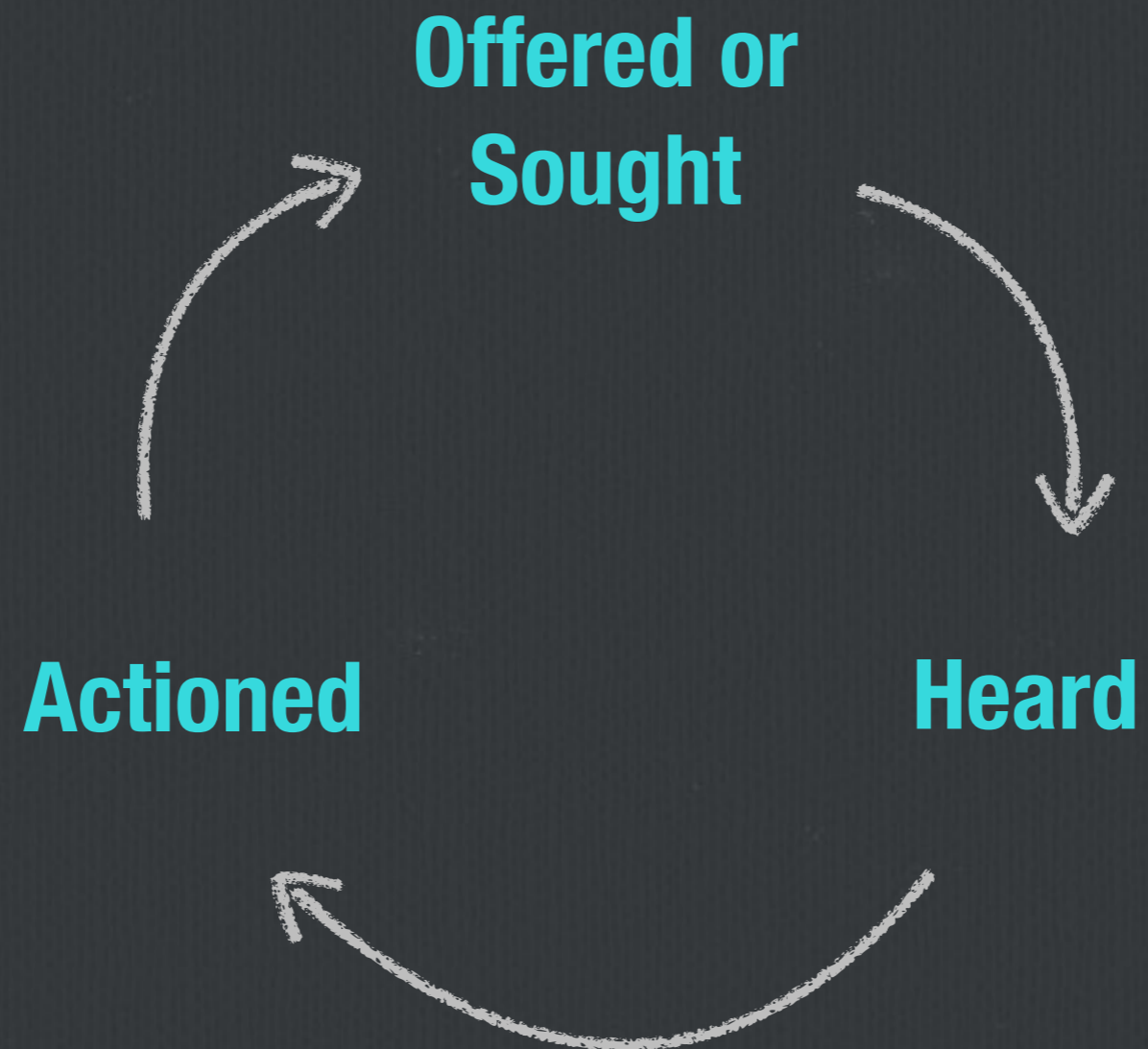
Offered or  
Sought



Heard

# Feedback is a System

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# **Part 2: Delivering feedback**

**Feedback should be  
about behaviour**

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# **Feedback should be about behaviour**

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**Feedback is usually heard at a personal level**

# Feedback should be about behaviour

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Feedback is usually heard at a personal level

- “Your work is sloppy” heard as  
“You are a sloppy worker”

# Feedback should be about behaviour

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Feedback is usually heard at a personal level

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“You are a sloppy worker”

How about:



# Feedback should be about behaviour

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Feedback is usually heard at a personal level

- **“Your work is sloppy”** heard as **“You are a sloppy worker”**

How about:

- **Your work has been sloppy recently**

# Feedback should be about behaviour

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Feedback is usually heard at a personal level

- **“Your work is sloppy”** heard as **“You are a sloppy worker”**

How about:

- **Your work has been sloppy recently**
- **On this specific occasion** your work was substandard

# Feedback should be about behaviour

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Feedback is usually heard at a personal level

- **“Your work is sloppy”** heard as **“You are a sloppy worker”**

How about:

- **Your work has been sloppy recently**
- **On this specific occasion** your work was substandard
- If you did these things your work quality **would improve**

# Feedback should be about behaviour

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Feedback is usually heard at a personal level

- **“Your work is sloppy”** heard as **“You are a sloppy worker”**

How about:

- **Your work has been sloppy recently**
- **On this specific occasion** your work was substandard
- If you did these things your work quality **would improve**
- If you did these things it would **make me happier**

# **SBI: a model**

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# SBI: a model

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**Situation**

# **SBI: a model**

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**Situation**

**Behaviour**

# **SBI: a model**

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**Situation**

**Behaviour**

**Impact**



# **SBI: a model**

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**In the team meeting on Friday**

**Behaviour**

**Impact**

# **SBI: a model**

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**In the team meeting on Friday**

**you spoke across me several times**

**Impact**

# **SBI: a model**

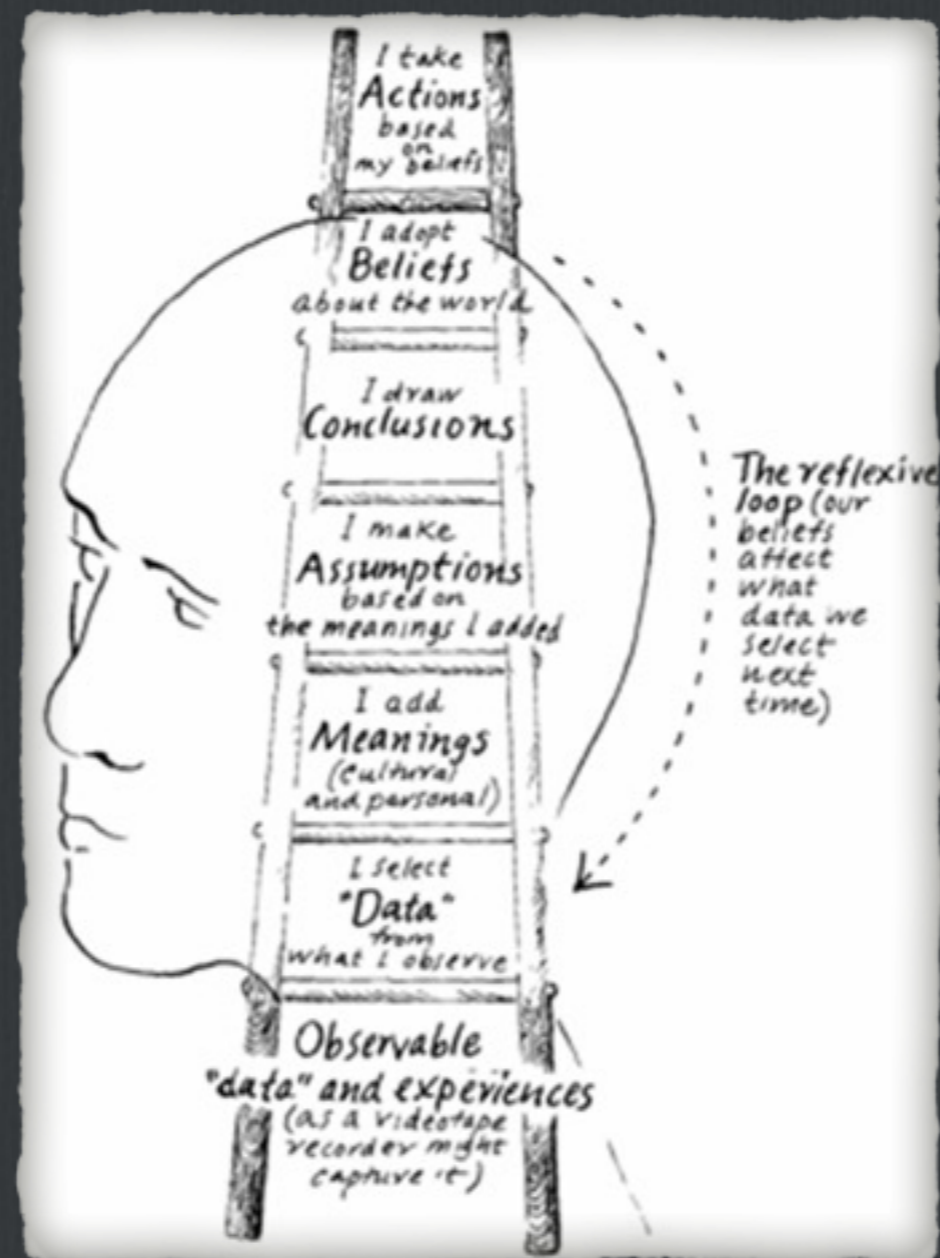
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**In the team meeting on Friday**

**you spoke across me several times**

**so I felt like I wasn't being allowed  
to share my opinion with the team**

# Sidebar: the Ladder of Inference



# **Part 3: Structuring feedback**

# Porpoise feedback

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# Porpoise feedback

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- ✓ Offer **specific positive regard**

# Porpoise feedback

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- ✓ Offer **specific positive regard**
- ✓ Assume everything else will self-correct



# Porpoise feedback

---



- ✓ Offer **specific positive regard**
- ✓ Assume everything else will self-correct
- ✓ Everything else will self-correct

# Sandwich feedback

---



# Sandwich feedback

---



- ✓ Offer **specific positive regard**

# Sandwich feedback

---



- ✓ Offer **specific positive regard**
- ✓ Offer **a growing edge**

# Sandwich feedback

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- ✓ Offer **specific positive regard**
- ✓ Offer **a growing edge**
- ✓ End with **general positive regard**

# “Atkins” feedback

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- ✓ Offer **specific positive regard**
- ✓ Offer **a growing edge**
- ✓ End with **general positive regard**

# “Atkins” feedback

---



✓ Offer **a growing edge**

# **Part 5: Receiving feedback**

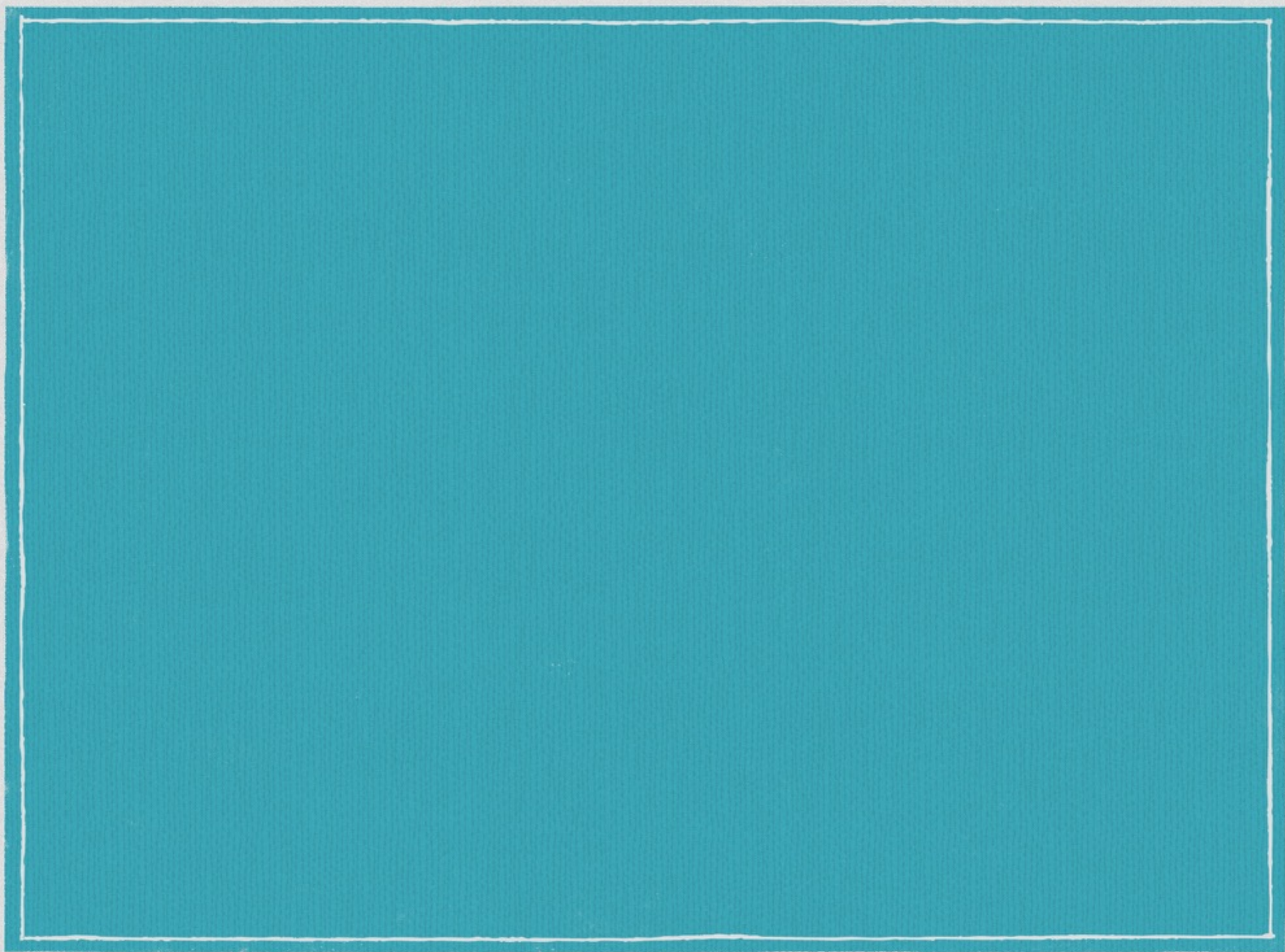


**Say “Thank you”**

**Say “Thank you”**

**There is no step 2**

# Concluding thoughts



**Feedback affects the system**

**Feedback affects the system**

**Be honest about your own motives**

**Feedback affects the system**

**Be honest about your own motives**

**Practise giving and receiving feedback**

**Feedback affects the system**

**Be honest about your own motives**

**Practise giving and receiving feedback**

**Always say “Thank you”**



**Thank you**