# Combatting Decision Paralysis

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# What is decision paralysis?

**Decision paralysis** | inability to make a choice or take action due to over-thinking, resulting in a state of paralysis

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# Decisions in graduate school (and beyond)

## when decision paralysis can affect you

Which advisor

Which collaborators

Which research project

The "right" research project

What developing environment

What papers to read and include

What software to use to test, implement, benchmark

Design + implementation decisions

When to stop optimizing

What to do each week

When to ask for help

What graph plotting software

How to structure a paper

How to present an idea

How to address reviewer concerns

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# Why do we experience decision paralysis?

Information overload

Avoid wasted effort

Desire to optimize

Model minority

Fear of doing the wrong thing

Imposter's syndrome

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# Rabbit holes
Stalemates due to decision paralysis

"It's been done before" (so I should do nothing)

"I don't really know how to write this paper" (so I should do nothing)

"I don't know know how to implement this" (so I should do nothing)

## "Doing nothing is better than doing the wrong thing"

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# Rabbit holes
## Stalemates due to decision paralysis
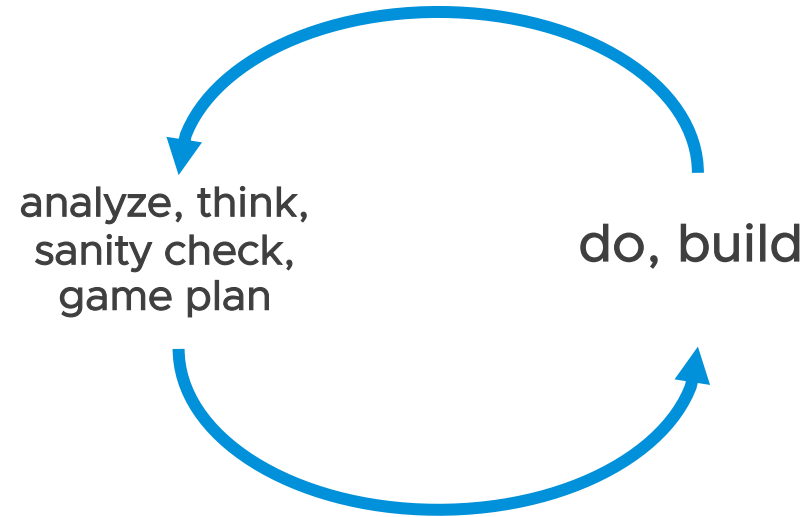
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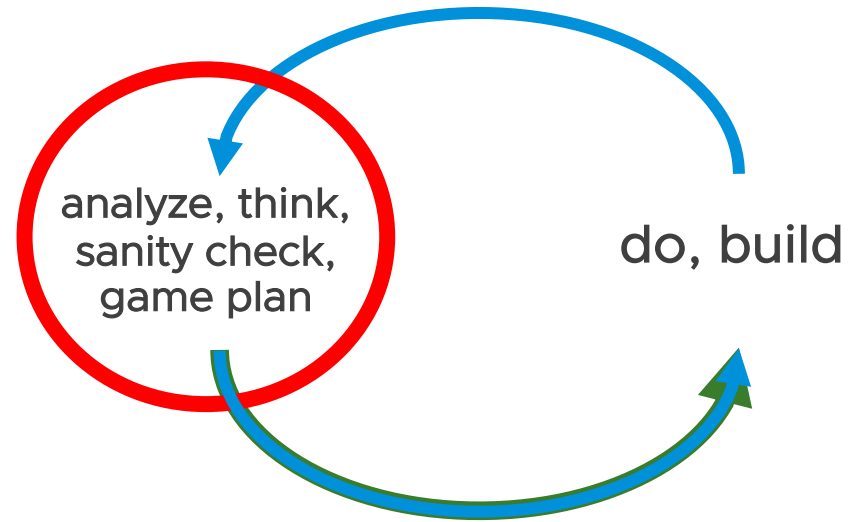~~"Doing nothing is better than doing the wrong thing"~~

## Just do something

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# It is ok to weigh decisions properly



analyze, think, sanity check, game plan

do, build

# Becoming stuck in the decision phase is bad

**decision paralysis**

fear, imposter's syndrome, etc.

analyze, think, sanity check, game plan

do, build

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# Combatting decision paralysis

analyze, think, sanity check, game plan

do, build

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# Combatting decision paralysis

## Honest self-assessment

### Am I spending too much time in the current state?

- How much or little progress has been made due to staying in the same state?

- Is this acceptable for the current stage of the project?

### What can I do to help make a decision?

- How can I gather more data?

  Examples: quick simulation, back-of-envelope calculations
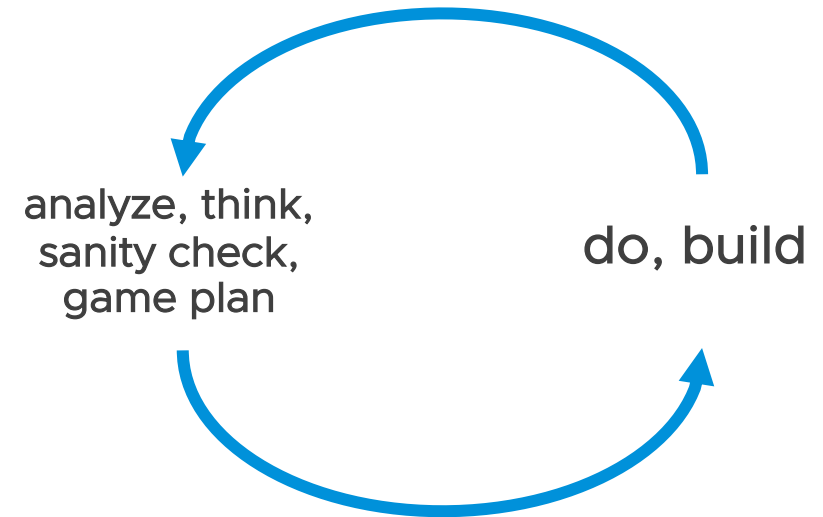
### How can I briefly explore a decision?

- Move yourself to the "do, build" phase

- Determine actions to escape the paralysis rut

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# Combatting decision paralysis

## Honest self-assessment

| Am I spending too much time in the current state? | What can I do to help make a decision? | How can I briefly explore a decision? |
|---|---|---|
| • How much or little progress has been made due to staying in the same state?<br><br>• Is this acceptable for the current stage of the project? | • How can I gather more data?<br><br>Examples: quick simulation, back-of-envelope calculations | • Move yourself to the "do, build" phase<br><br>• Determine actions to escape the paralysis rut |

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# Am I spending too much time in the current state?

| Phase | Analyze | Do |
|---|---|---|
| Recon (project selection) | 90% | 10% |
| Implementation | 30% | 70% |
| Paper writing | 50% | 50% |

Design

Evaluation

analyze, think, sanity check, game plan

do, build

# Combatting decision paralysis

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# What can I do to help make a decision?
## Gathering more data

| Decision | Action |
| --- | --- |
| How to define a project | Do some back-of-envelope calculations |
| Will an idea work? | Do a quick simulation |
| How to write a paper | Run your outline by someone |

## Always look for concrete next steps

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# Combatting decision paralysis

## Honest self-assessment

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# How can I briefly explore a decision?
Just do something

## Set up scaffolding to undo decisions

- Record hardcoded constants / create parameters

- Create a new git branch

- Write a paper draft

# Combatting decision paralysis

**Identify decision paralysis**

**Seek external stimulus**

**Make a low-risk decision**

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If you ever find yourself stuck..

# JUST DO ... something

Please get in touch:

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