Decision-Making for Maximizing Agreeability

Chelsea Troy

"Generally, it is better to optimize our code for legibility than for speed."

Context: The descriptors that characterize our specific situation.

When we are unaware of the **context** we're in, we can accidentally mistake our specific case with an imaginary general case.

"Generally, it is better to optimize our code for legibility than for speed."

"Generally, composition is preferable to inheritance."

What does generally mean?

"In most cases."

But which cases?

The Point:

You (and I) swim in a sea of context.

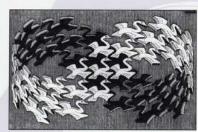




Design Patterns

Elements of Reusable Object-Oriented Software

Erich Gamma Richard Helm Ralph Johnson John Vlissides



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Foreword by Grady Booch





Pitfalls:

- 1. Assumed Context
- 2. Flattened Metrics



maximizers

exhaustively seek the best

compare decisions with others

expend more time and energy

unhappier with outcomes



satisficers

accept good enough

don't obsess over other options

can move on after deciding

happier with outcomes

What does this have to do with domain-driven design?

Modeling decisions in software can be deceptively complicated

What does this have to do with domain-driven design?

- Modeling decisions in software can be deceptively complicated
- Making decisions while executing complex software in teams can be...also complicated

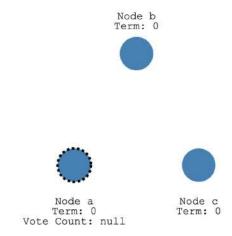
Which perspectives matter the most in decision-making?

One Default: Singular Executive Decision

Office example



Algorithmic example



If followers don't hear from a leader then they can become a candidate.

Collective tech industry example



When does this work?

Which perspectives matter the most in decision-making?

When does this work?

When stakes are low

When does this work?

- When stakes are low
- When literally any decision beats no decision

Threats to agreeability

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 This assumes either no group, or that the group understands whose perspective is most important

Threats to agreeability

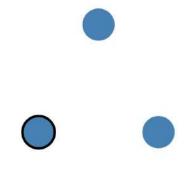
- This assumes either no group, or that the group understands whose perspective is most important
- At the limit (one decider to production), it assumes that only one perspective matters

Other Default: Majority Rule

Office Example

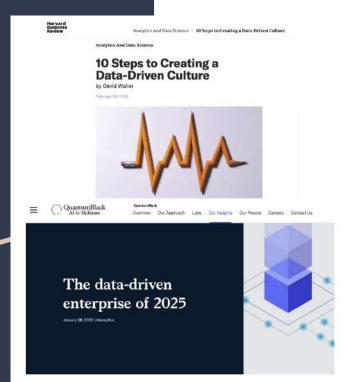


Algorithmic Example: The Voting Classifier



The candidate becomes the leader if it gets votes from a majority of nodes.

Collective Tech Industry Example



Data Driven **Unlocking The Full Power of Analytics** Scale Your Business We help businesses ace their analytics to drive faster, better decision-making, and revenue growth, without building sizeable in-house data teams.

When does this work?

Which perspectives matter the most in decision-making?

When does this work?

When two candidates

When does this work?

- When two candidates
- When both of the options would be acceptable to the entirety of the voting populace.

Threats to Agreeability

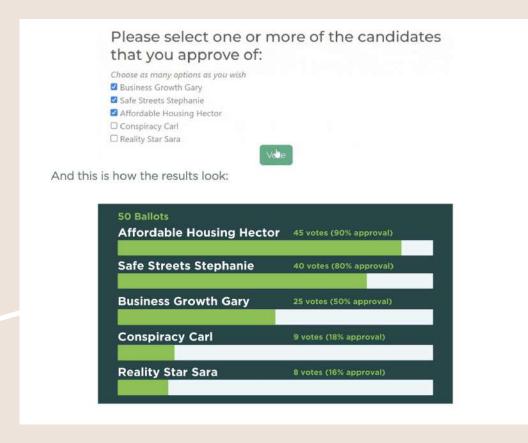
Tyranny of the majority

What are our other options?

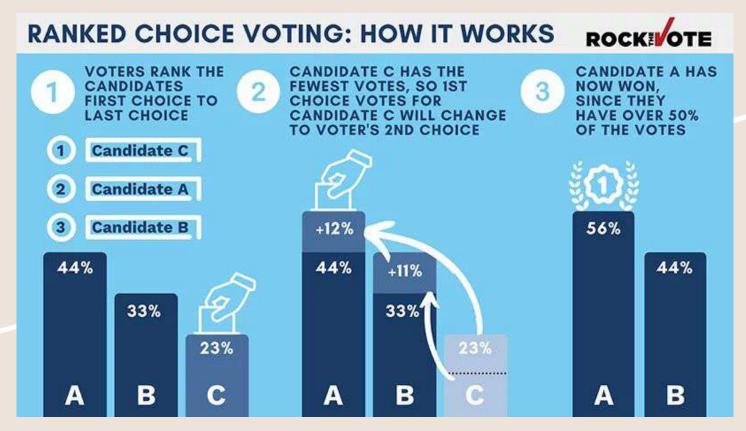
Consensus?



Approval Voting?



Ranked Choice Voting?



Independently Ranked Choice Voting?

	Voter 1 (9 votes)	Voter 2 (9 votes)	Total
Candidate 1	8	4	(winner) 12
Candidate 2	1	5	6

Which perspectives matter the most in decision-making?

One Last Collective Tech Industry Example



One Last Collective Tech Industry Example



FingerWorks founders John Elias and Wayne Westerman pose with the original product. PC <u>Engadget</u>, <u>January 2007</u>.

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- Seek to modify these or add alternatives that are acceptable until all candidates are acceptable to all voters
- Approval voting among acceptable candidates
- 5. Executive decision by one or a few people on the final decision

Which perspectives matter the most in decision-making?

Thank you!

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