

# Team Project

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$ echo "Data Sciences Institute"
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# Yesterday

1. Team Project guidelines
2. Developing a project idea
3. Git review

## Goal

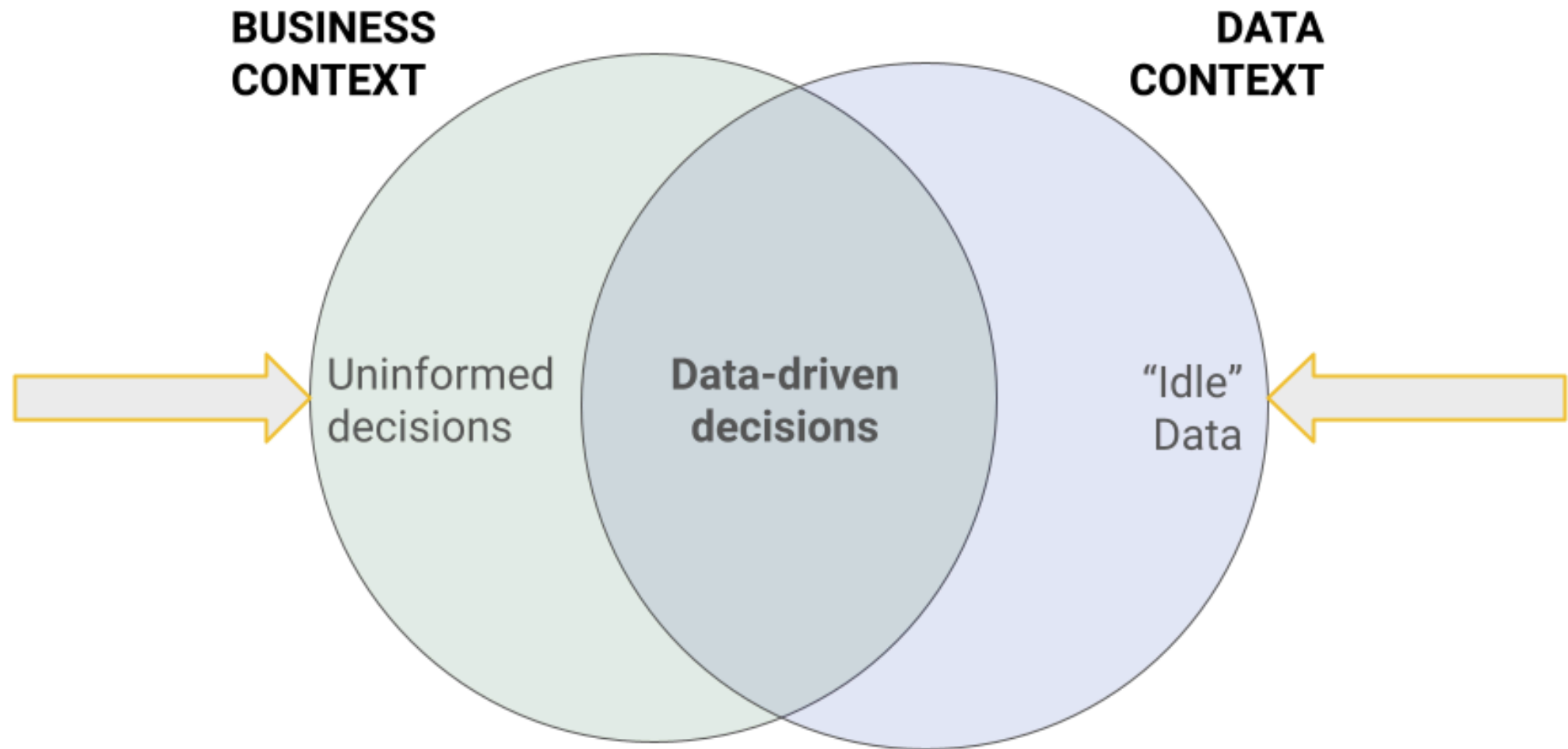
*Develop a program that uses data creatively to solve a problem or provide insights that have a positive business impact.*

## Learning Outcomes

1. Resolve merge conflicts.
2. Describe common problems or challenges a team encounters when working collaboratively using Git and GitHub.
3. Create a program to analyze a dataset with contributions from multiple team members.

**See repository for requirements.**

# Developing a project idea



## Developing a project plan

1. Understand the business context.
2. Identify an opportunity.
3. Develop your analysis.
4. Present your results.



## **Developing a project plan**

**Check:** are your insights actionable?

**Check:** how robust is your analysis?

**Check:** what are the caveats or unknowns?

**See repository for detailed requirements.**

# Today

1. Rules of engagement and strategies for effective teamwork
2. Presenting your work and sharing it with others

**Think about: how did yesterday go?**

Do you think your team functioned well?

What could be improved?

Would the others on your team agree with you?

## Rules of engagement

- Every time will land on slight different rules of engagement!
- The key is to be aware of what works and what doesn't, and adjust accordingly.

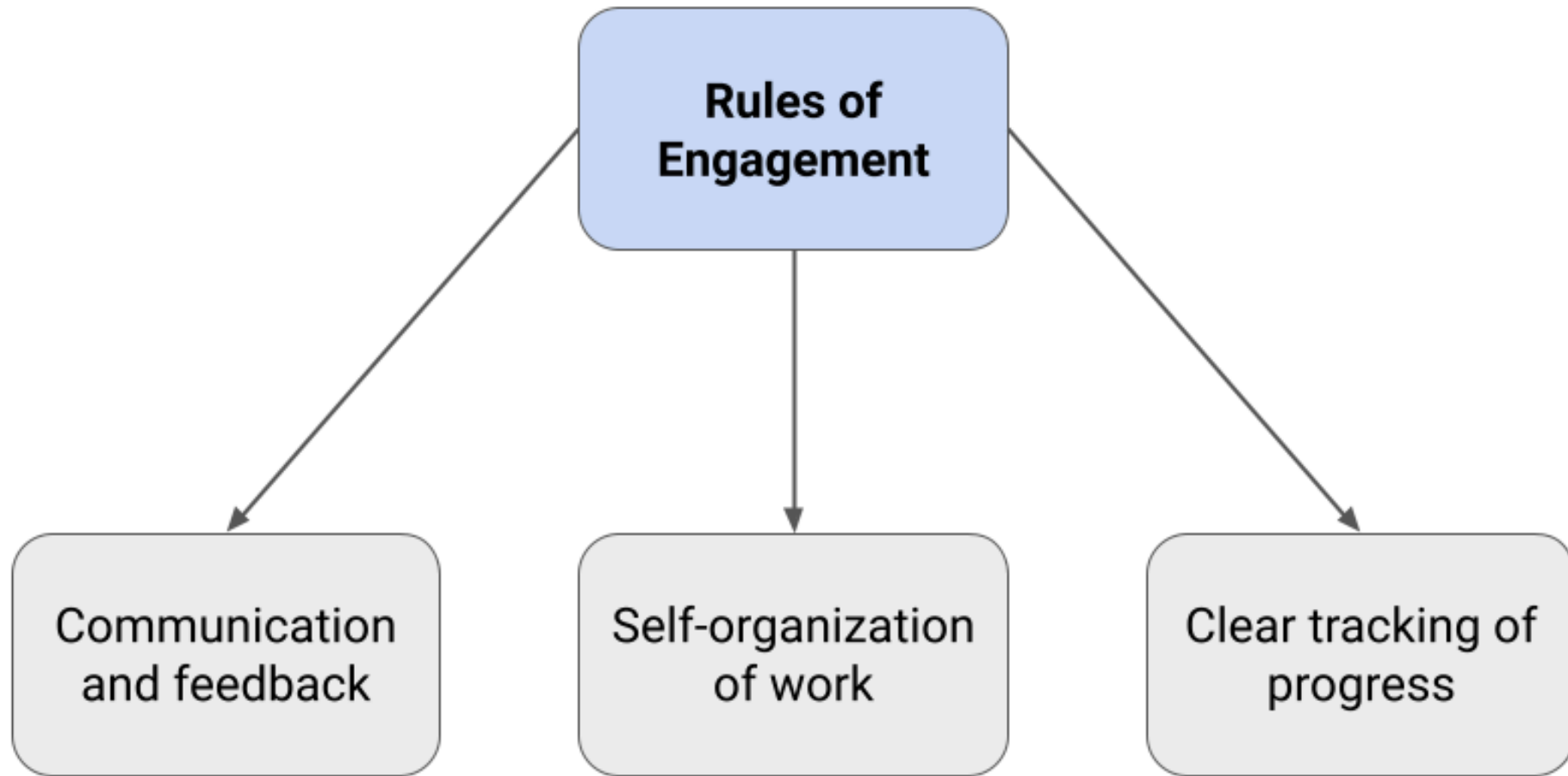
## Rules of engagement

- However, **rules must be explicit.**
- Miscommunication happens when rules are left up to individual interpretation.

# Rules of engagement

## Successful teams:

1. Have strong communication.
2. Have a clear understanding of everyone's role on the team.
3. Work collaboratively towards a common goal.





# Communication and feedback

1. **Feedback as a habit.** A feedback framework helps teams focus on improving processes instead of laying blame.
2. **Respectful and honest communication.**

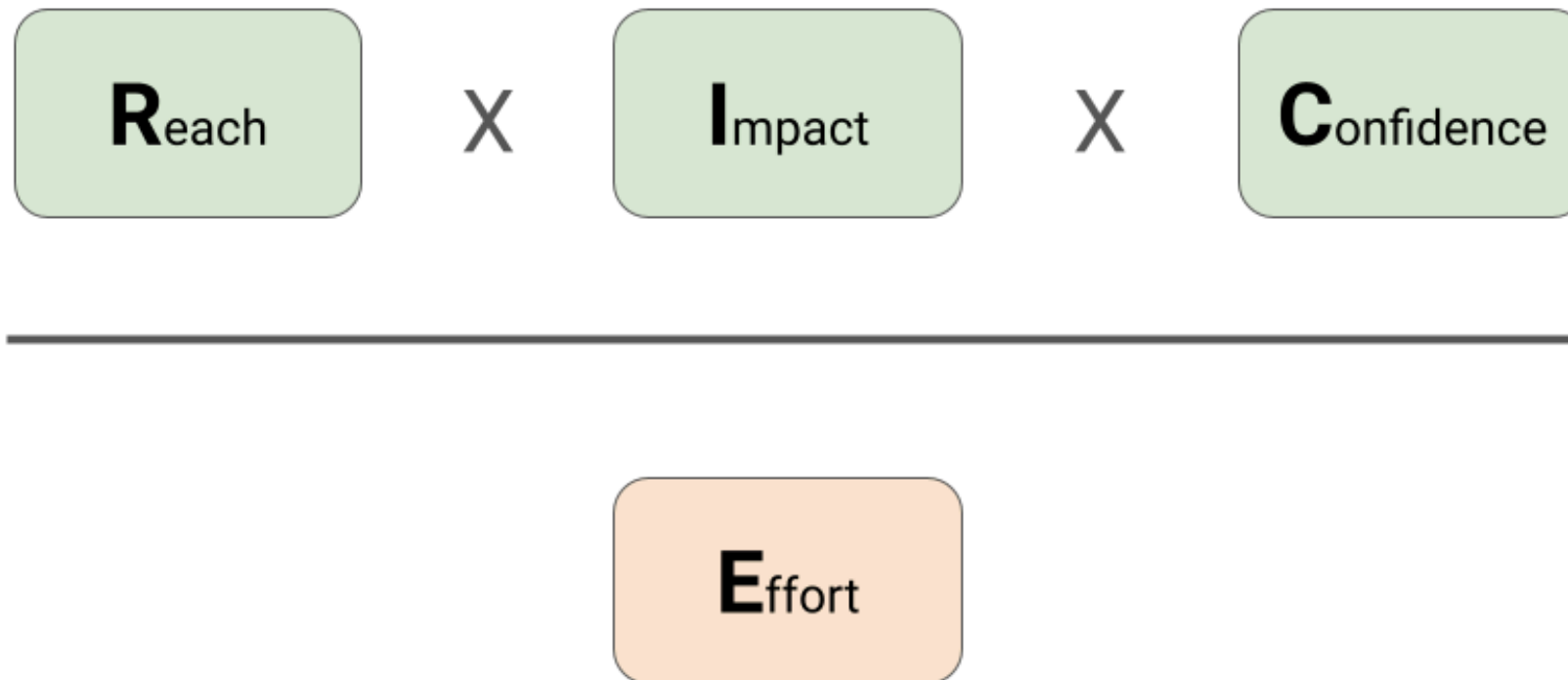
## A self-organizing team

1. **Clear accountability and ownership of tasks.** Every action item should have someone assigned. Of course, the assigned person can change if workloads become unbalanced.
2. **Be solution-oriented.** Instead of only presenting problems, try to always suggest a possible solution along with a problem.

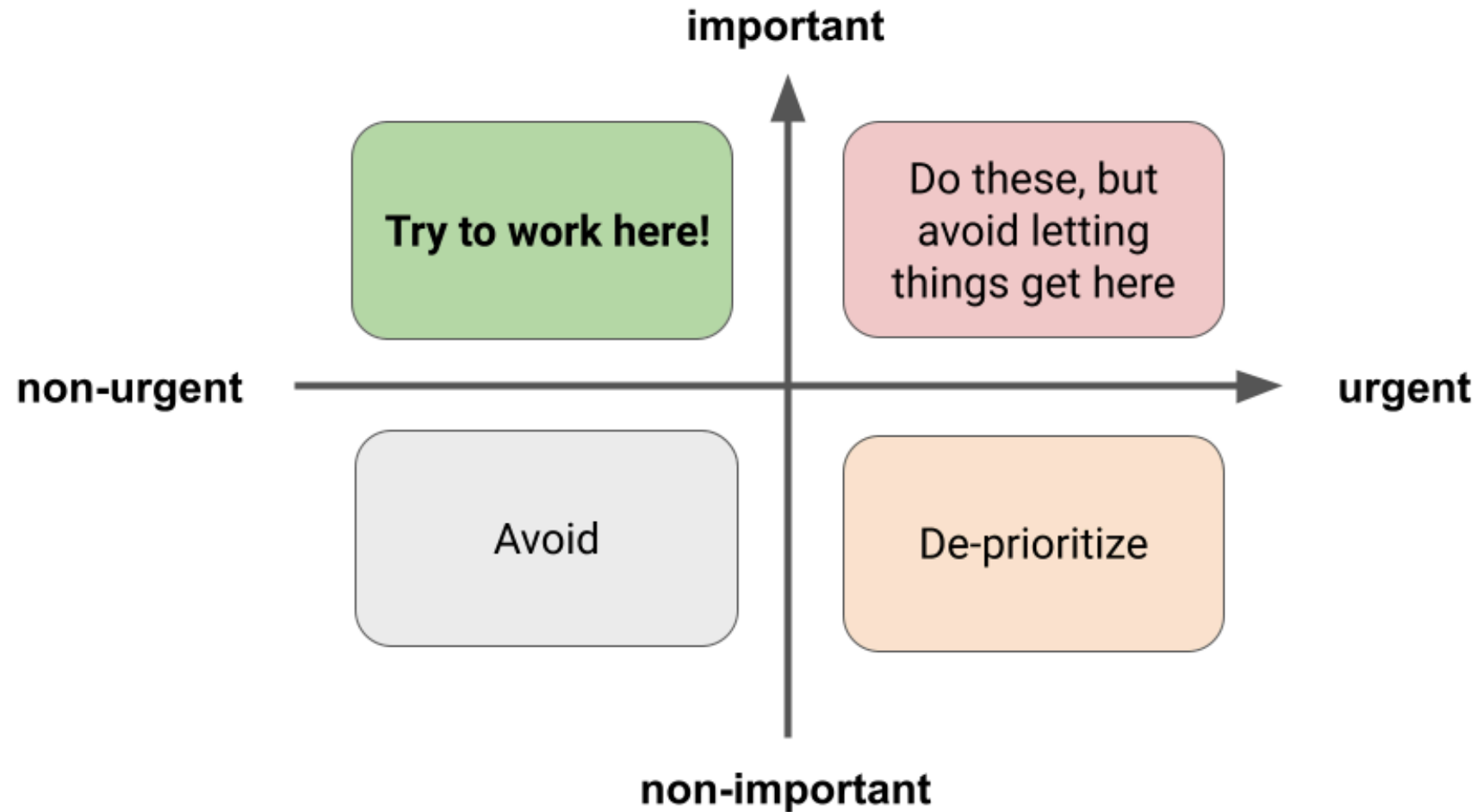
## Clear tracking of progress

1. **Detailed tracking of roadblocks.** It is just as important to communicate roadblocks and failures as successes. The faster problems are identified, the faster they can be addressed.
2. **Use software and/or documentation to help track tasks.**

# Prioritization



# Prioritization



# Presenting your work

# 1. Understand your target audience

- What knowledge do they have about your project?
- Provide the necessary context.
- Reinforce the insights that **they** can act on.

# 1. Understand your target audience

**Example:** We are presenting our analysis of office space usage to the department heads who assign seating. They are not technical, but understand the problem and are looking for a solution. Furthermore, they have their own prior perspectives on office space utilization.



## **2. Clearly articulate the takeaways**

- Make sure your audience understands the most important information.
- Don't add unnecessary detail, but be prepared to speak in depth if asked.

## 2. Clearly articulate the takeaways

**Example:** Our company could reduce real estate overhead, while maintaining productivity and employee comfort, if we removed the assigned seating for 10% of teams but updated 25% of our office space to be flexible seating.

### 3. Highlight the value added

- Quantify as much as possible.
- Indicate how your work improves over previous work or the status quo.

### 3. Highlight the value added

**Example:** Updating the office spaces would add 5% to our real estate costs over the next year, but would save 10% per year once the new seating is implemented.