

# Predictable Non-Compliance

## *Why Users Ignore CAD/BIM Standards*

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# Speaker Bio

## *Donnie Gladfelter*

- Experience
  - 16 years as a designer, CAD Manager, consultant, and author.
- AU Speaker
  - 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015
- Blogger
  - TheCADGeek.com
- Author
  - AutoCAD and AutoCAD LT: No Experience Required



# Class summary

Although most CAD/ Building Information Modeling (BIM) managers are responsible for creating and maintaining CAD/BIM standards, few have the authority to actually enforce those standards. Despite project teams insisting they could be more productive if the company had a standard, the imbalance between a CAD/BIM manager's responsibilities and his/her authority almost always incubates a culture of noncompliance. This session will focus on ways to achieve the seemingly impossible dream of developing a CAD/BIM standard that's willingly used throughout an organization without enforcement. By understanding the reasons standards are typically ignored, you will learn ways to overcome the most common behaviors that lead to noncompliance, and how to develop standards that are designed for compliance.



# Key learning objectives

At the end of this class, you will be able to:

- Learn how standards enforcement practices affect compliance.
- Establish a CAD/BIM standardization plan that's designed for compliance.
- Learn how to develop CAD/BIM standards based on the internal constraints of an organization.
- Learn how to successfully implement CAD/BIM standards without the authority to enforce their use.

An aerial perspective of a cityscape. In the foreground, a multi-lane bridge with a rainbow-colored line along its edge spans a river. A red car is visible on the bridge. To the right of the bridge is a green park area with a blue oval field. In the background, a large stadium with a circular roof is visible, surrounded by various city buildings and skyscrapers under a clear blue sky.

# Let's Get Started...



# Why do users ignore standards...

Only to ask for help solving problems that only exist because they didn't follow the standard?

**Was it that my users are lazy?**

**Was it because of the way the  
standard was documented?**



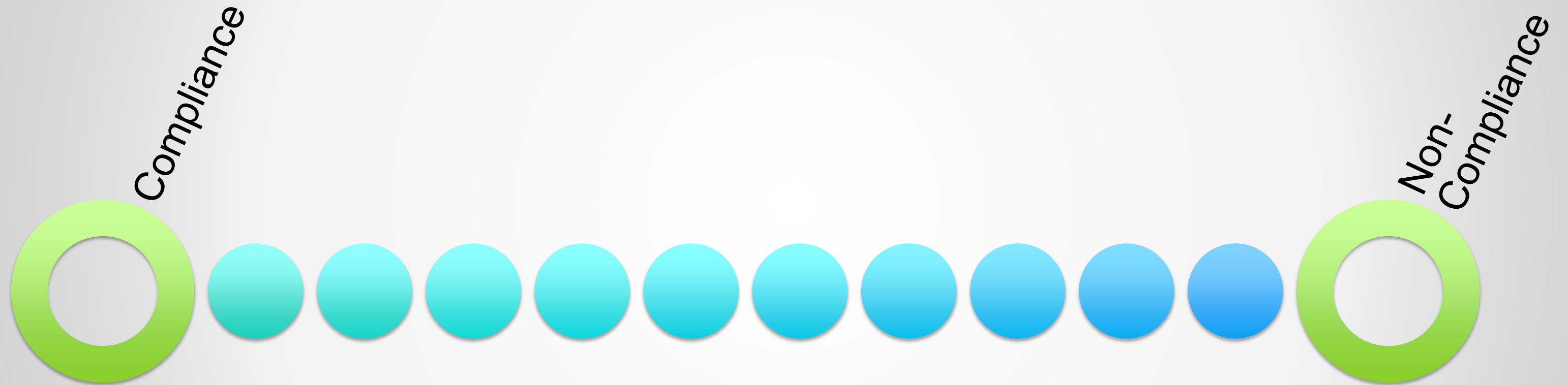
**Was it that my end-users didn't trust me?**

An aerial perspective of a city skyline featuring a large bridge spanning a wide river. A vibrant rainbow is visible on the bridge's deck. The city in the background includes several tall skyscrapers and a large stadium. The foreground shows landscaped green areas with trees and a red car on the bridge.

# Where does compliance come from?



# Compliance Scale





# Effects of Enforcement

**I could achieve a compliant standard if only  
I had the authority to enforce the standards.**

*-CAD/BIM Managers Everywhere*









# Auditing Standards





# Deterrence Theory



# The Deterrence Theory

If you want people to do less of something, add a consequence to reduce/eliminate the unwanted behavior.



# Study: A Fine is a Price



Uri Gneezy



Aldo Rustichini

# Hypothesis: A Fine is a Price

*Psychological effects of deterrence.*

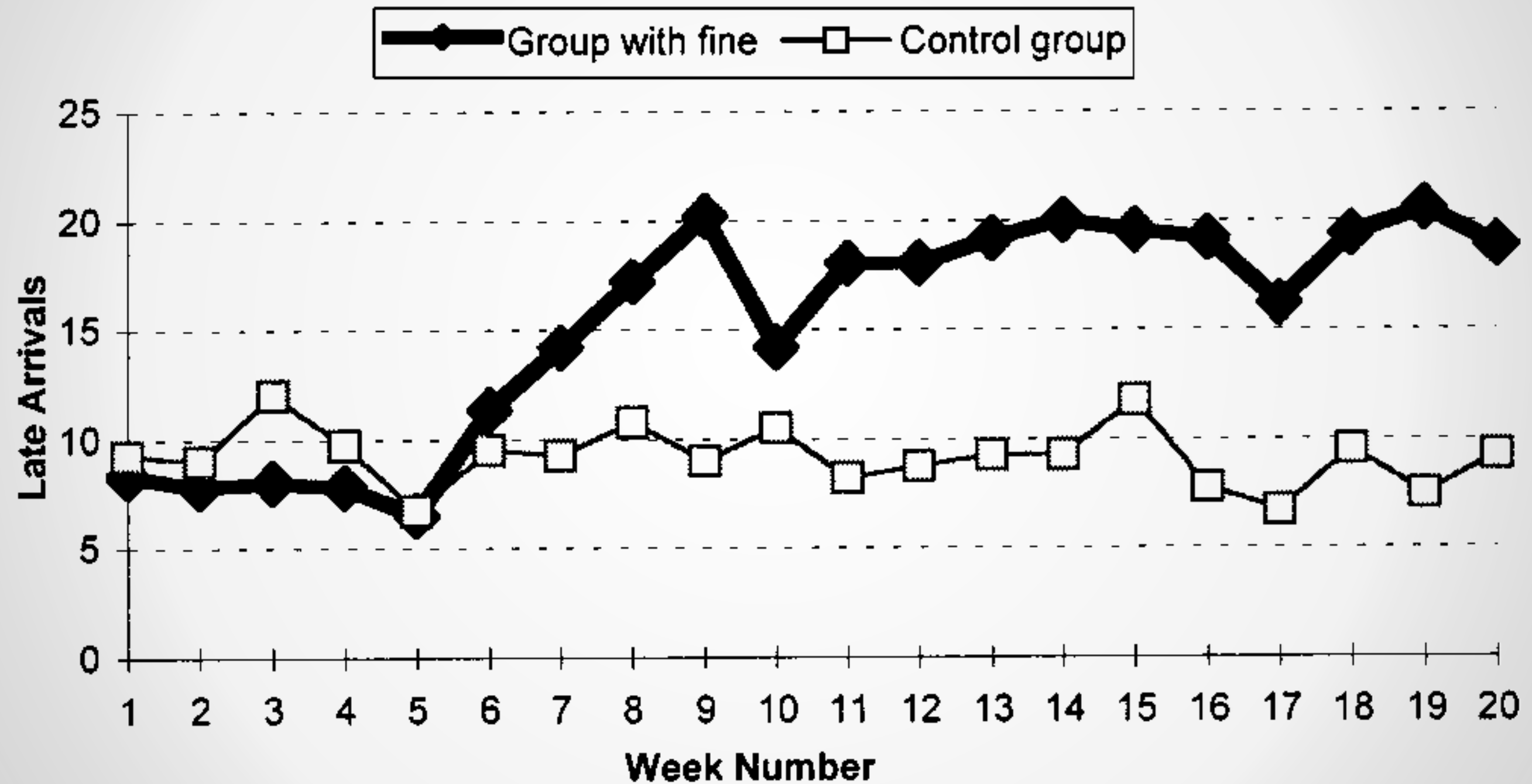
- Negative consequences will reduce behavior.
- Removing consequences will cause behaviors to reappear.



# Study: A Fine is a Price



# A Fine is a Price: Data Visualization

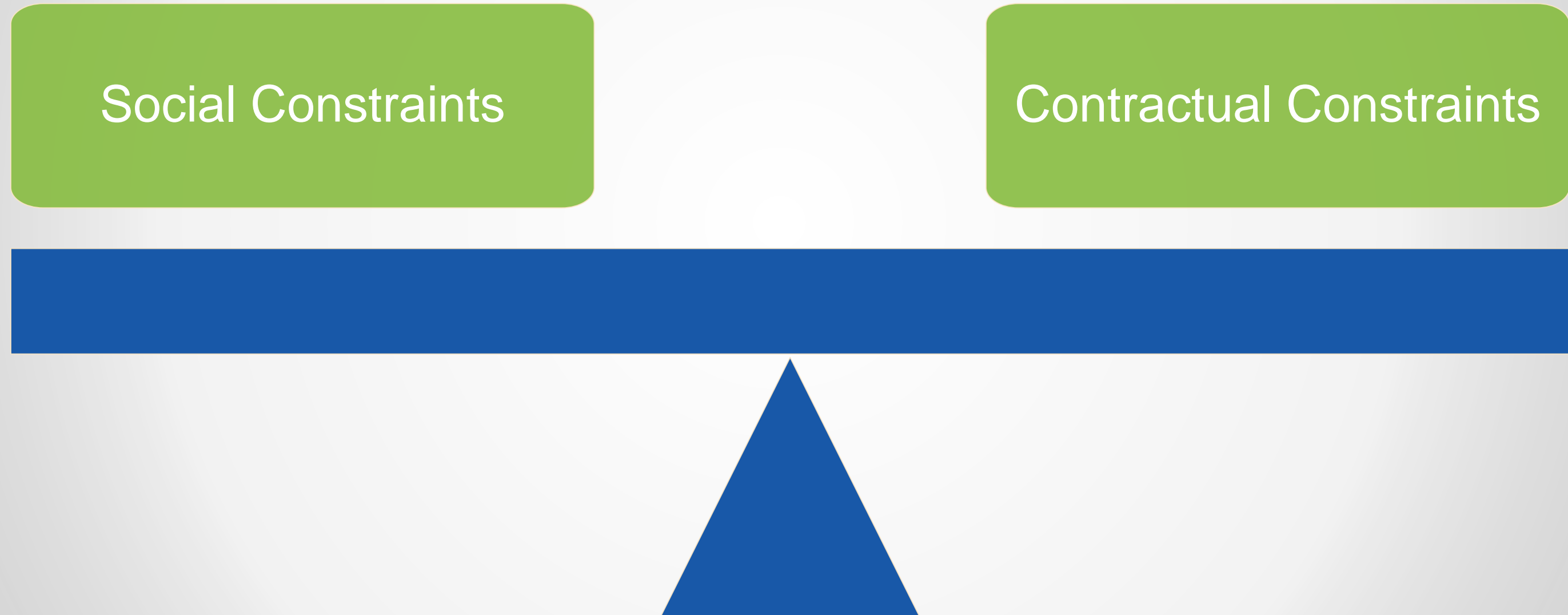




# A Fine is a Price: Observations

1. There was no significant difference in the behavior of the test and control groups during the initial four weeks of the study.
2. Introducing a fine resulted in a significant increase in the number of late-coming parents.
3. Removing the fine didn't not affect the number of late pickups.

# Internal Constraints







# Deterrence Theory and CAD/BIM Standards



# Deterrence Theory and CAD/BIM Standards

1. Enforcement (Negative Consequences) will decrease compliance.
2. Removing negative consequences will not inherently increase compliance.



# Designing for Compliance

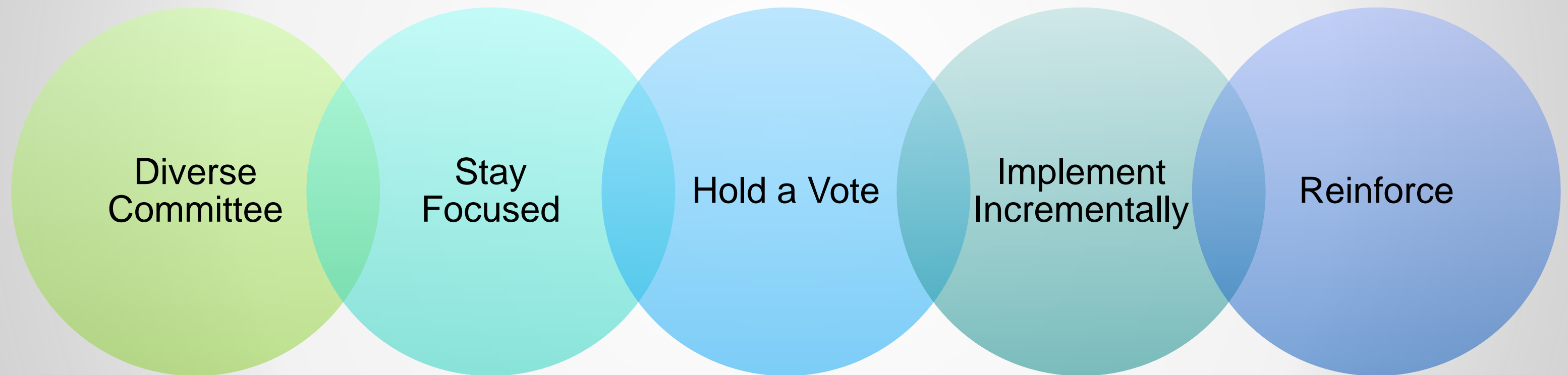
**If you want to go fast, go alone.  
If you want to go far, go with others.**

*- African Proverb*



# Secrets to Compliance

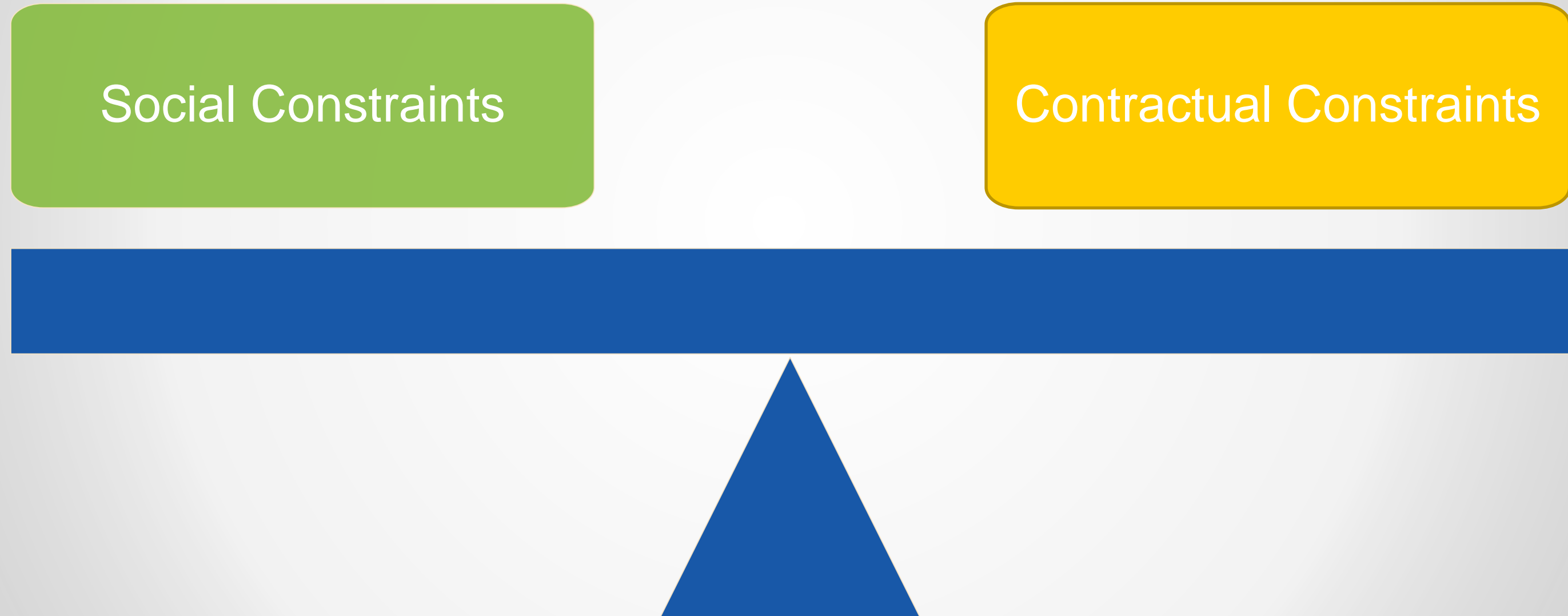
*Aligning ownership with end users.*



# Steer. Don't direct...

# CAD/BIM Managers Role

## *Finding Balance*





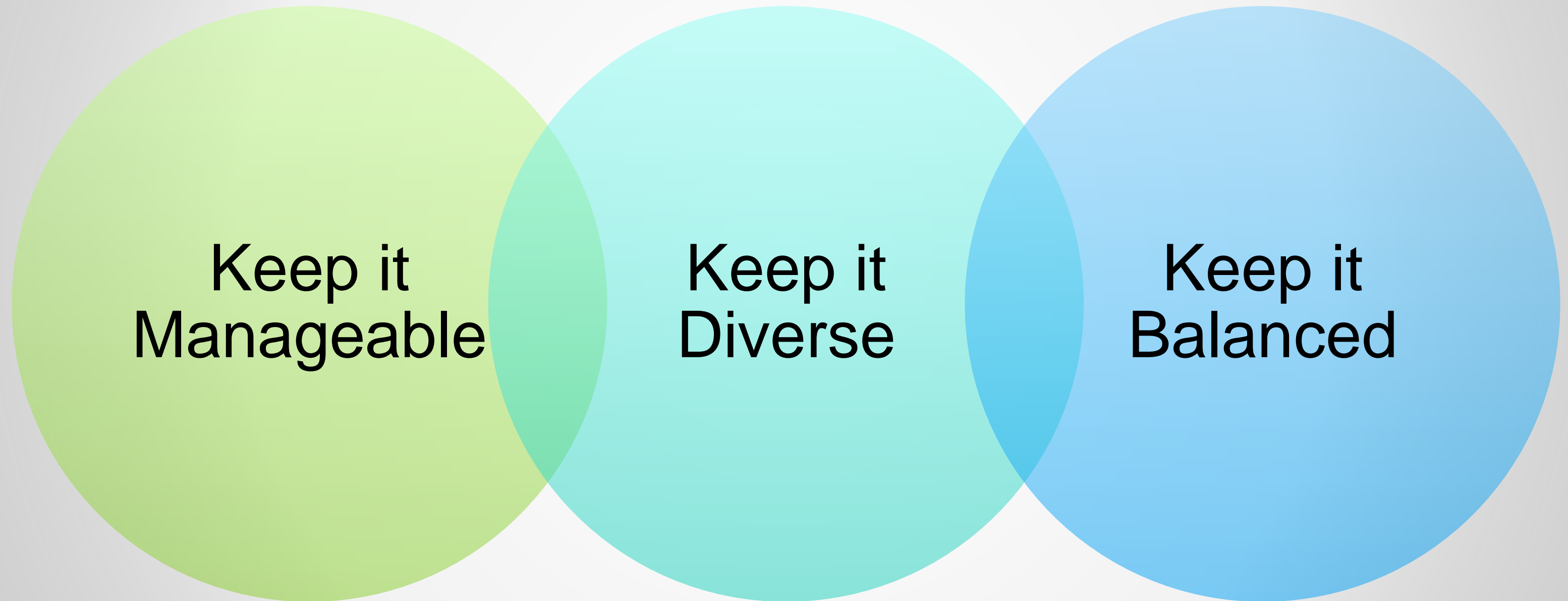


# Establishing a CAD/BIM Committee

# Build for the proper constraints...

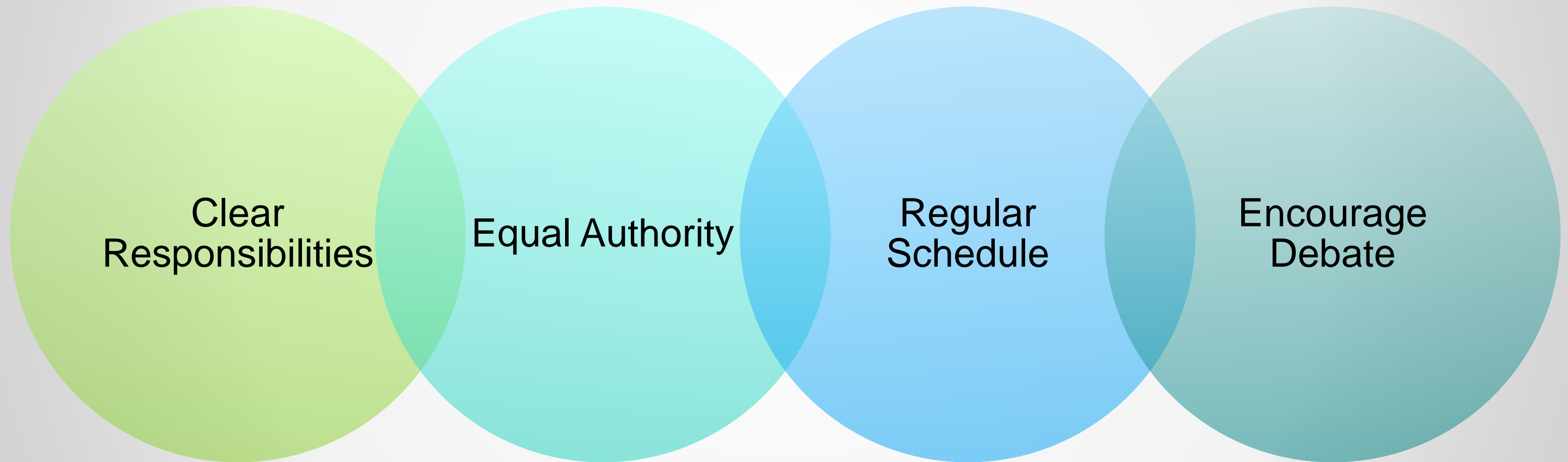


# Establishing a CAD/BIM Committee





# Avoiding CAD/BIM Committee Indecision



# The First CAD/BIM Committee Meeting

## *Analyzing Needs*

- What are the key goals the company hopes to achieve by standardization?
- What are the challenges end-users struggle with today?
- What topics affect the challenges faced by end-users today?
- In what order should the group discuss each of the standardization topics identified?

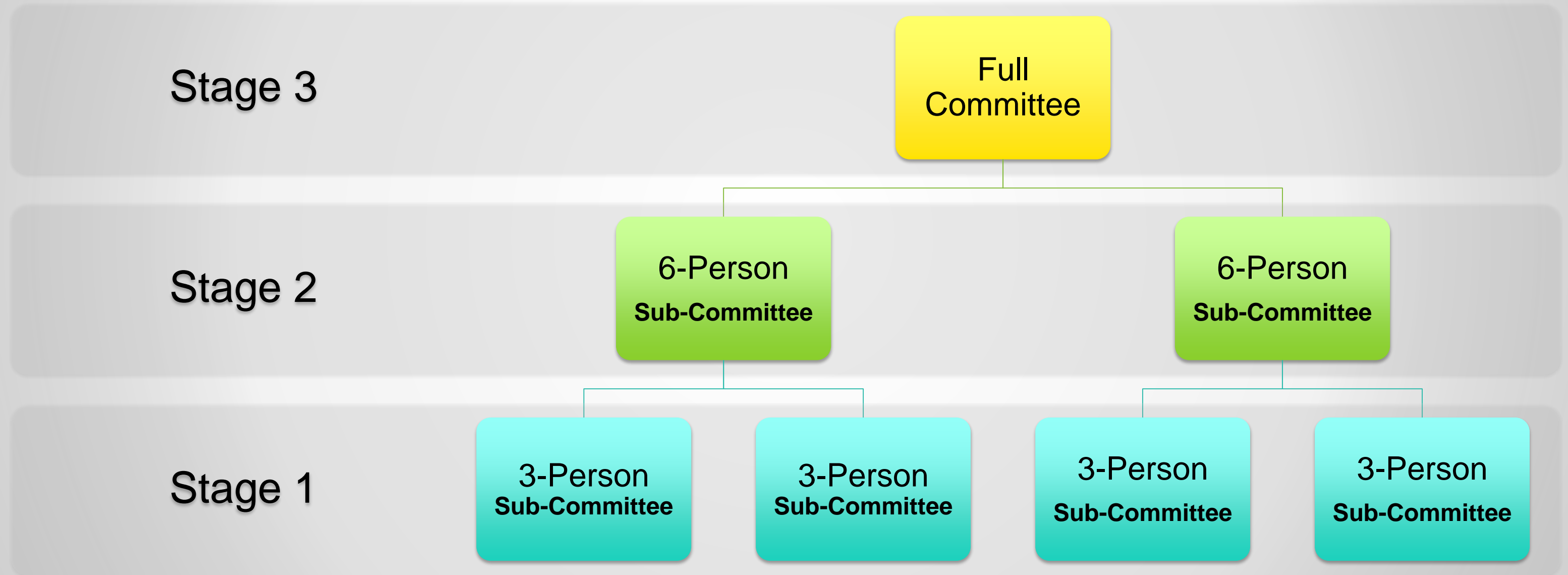
**Don't boil the ocean.**



# FOCUS



# Divide and Conquer





# VOTE





An aerial rendering of a city skyline, likely Chicago, featuring a large stadium and several skyscrapers. In the foreground, a multi-lane bridge spans a body of water. A vibrant rainbow is visible on the bridge's surface, extending from the bottom left towards the center. The scene is set against a clear blue sky.

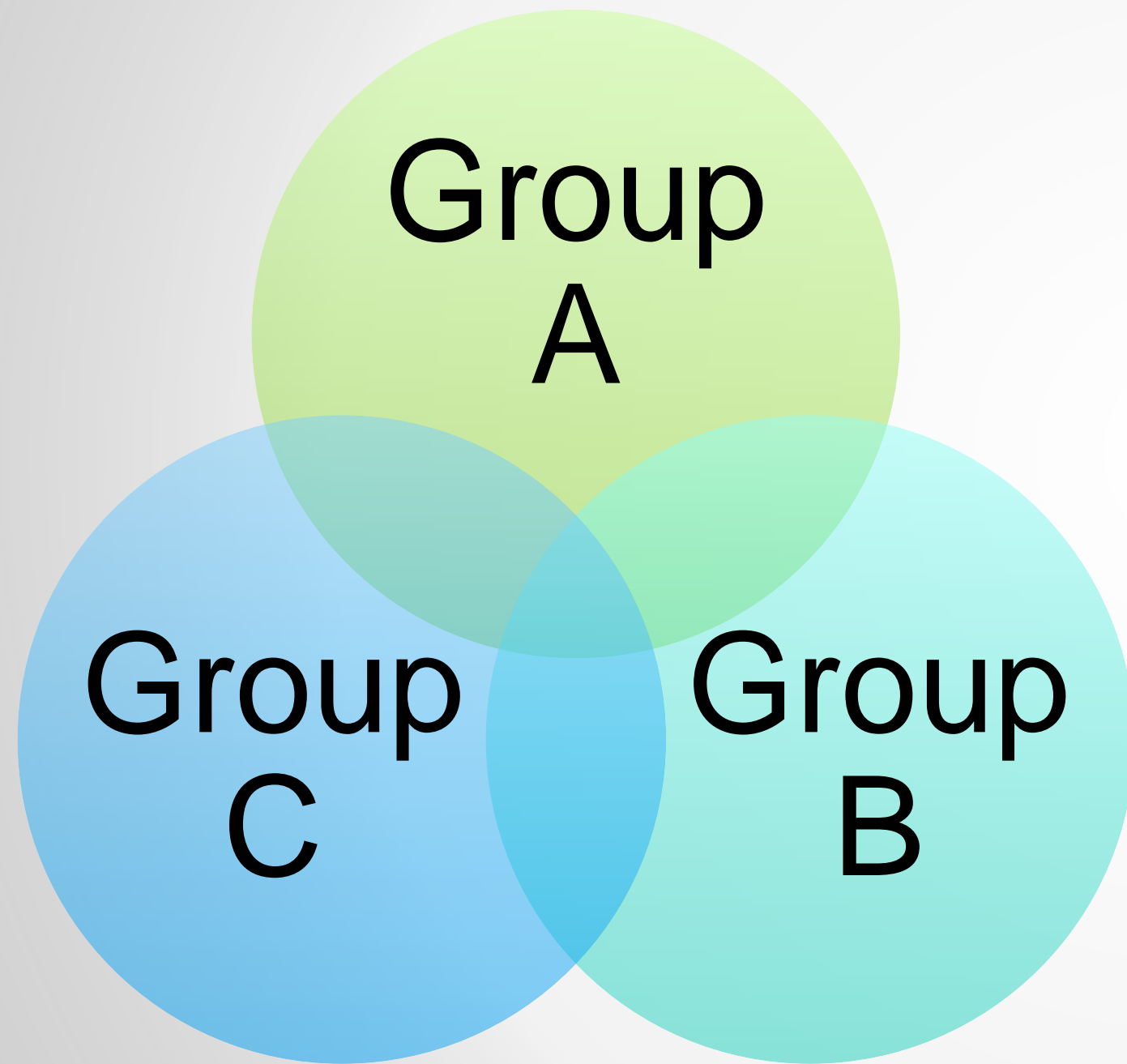
# Implementing Without Authority

**I could achieve a compliant standard if only  
I had the authority to enforce the standards.**

*-CAD/BIM Managers Everywhere*

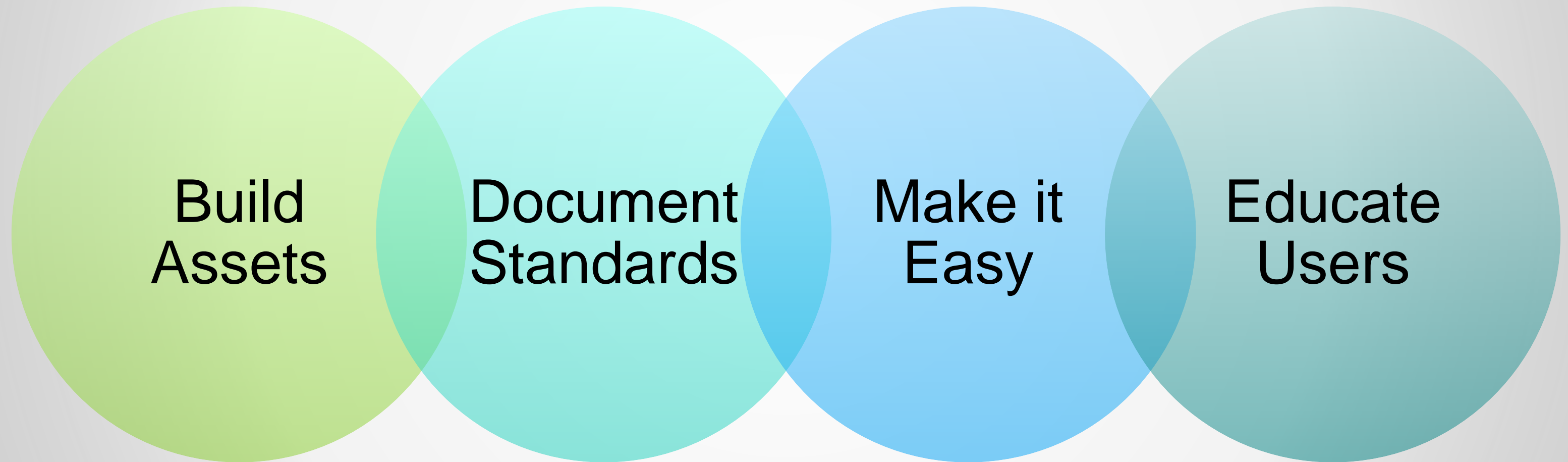


# What is a Compliant Standard?





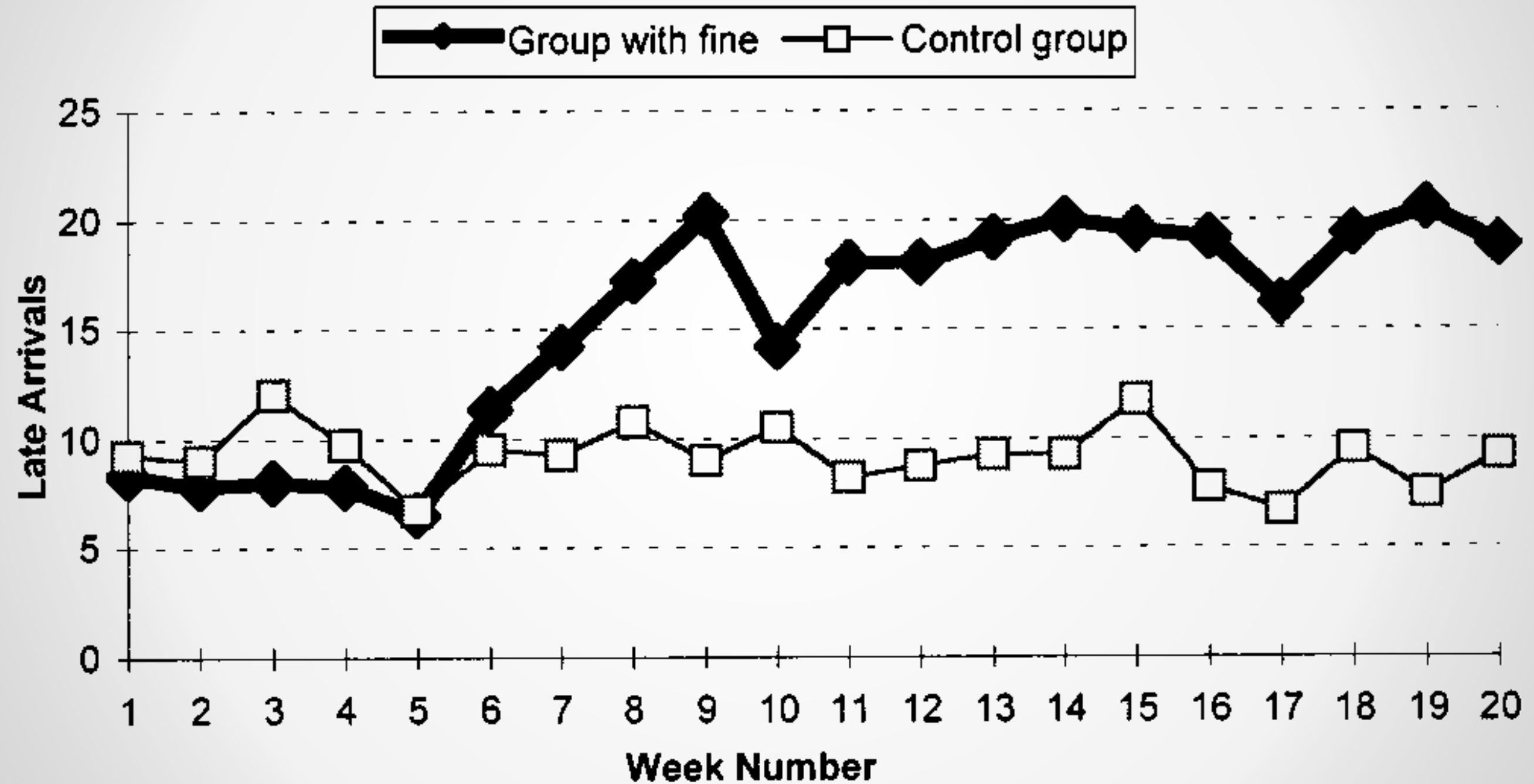
# Steps for Successful Implementation



# Enforcing Without Authority



# Enforcing Without Authority





# Summary

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1. The ***Deterrence Theory*** is ineffective in psychological applications.
2. ***Social Constraints*** promote a more generous, and more predictably compliant environment.
3. ***Ownership*** must be established from the beginning for a standard to function under ***Social Constraints***.



# Questions

## *Stay in Touch*

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