



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



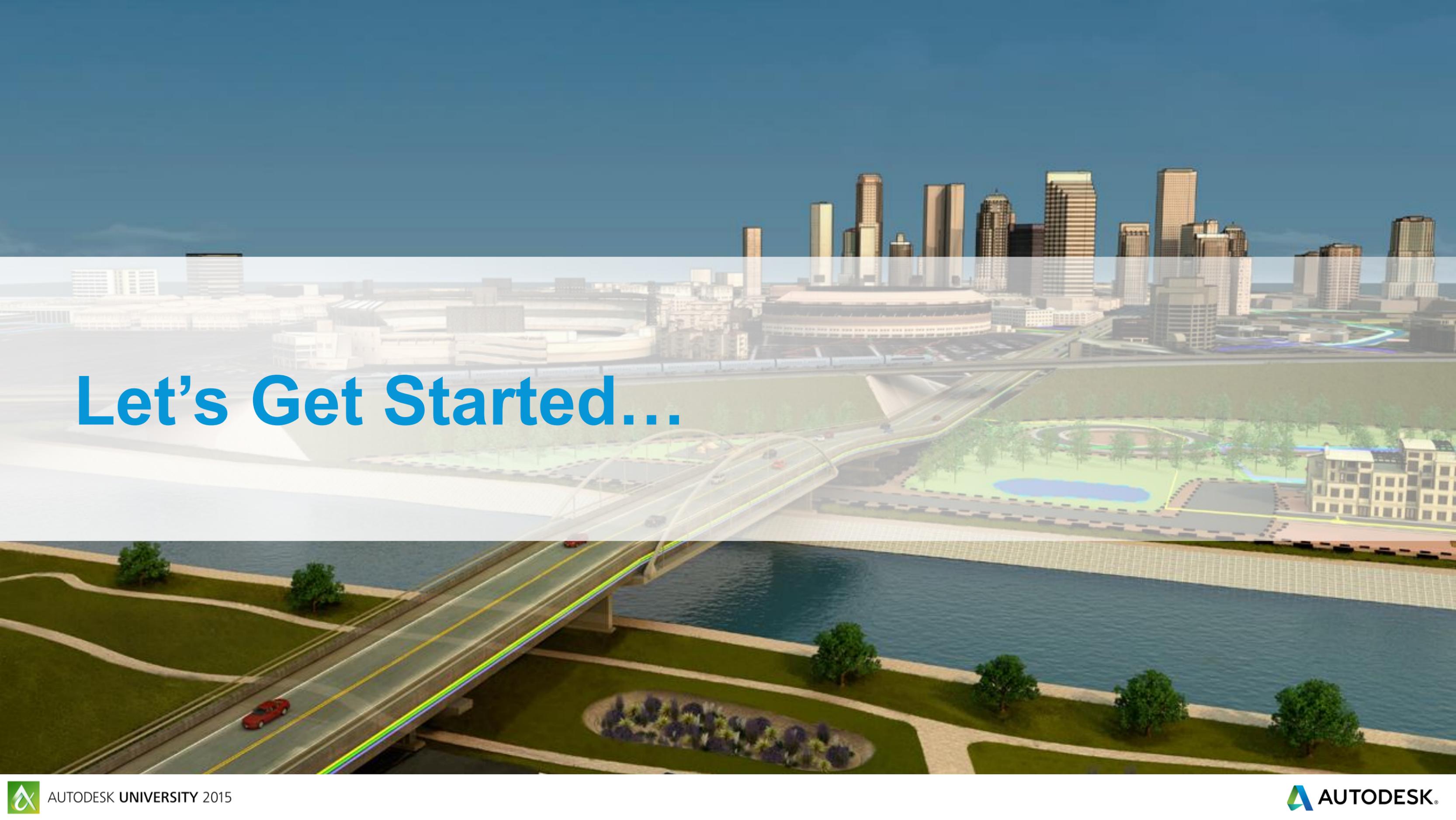
Class summary

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.



Let's Get Started...

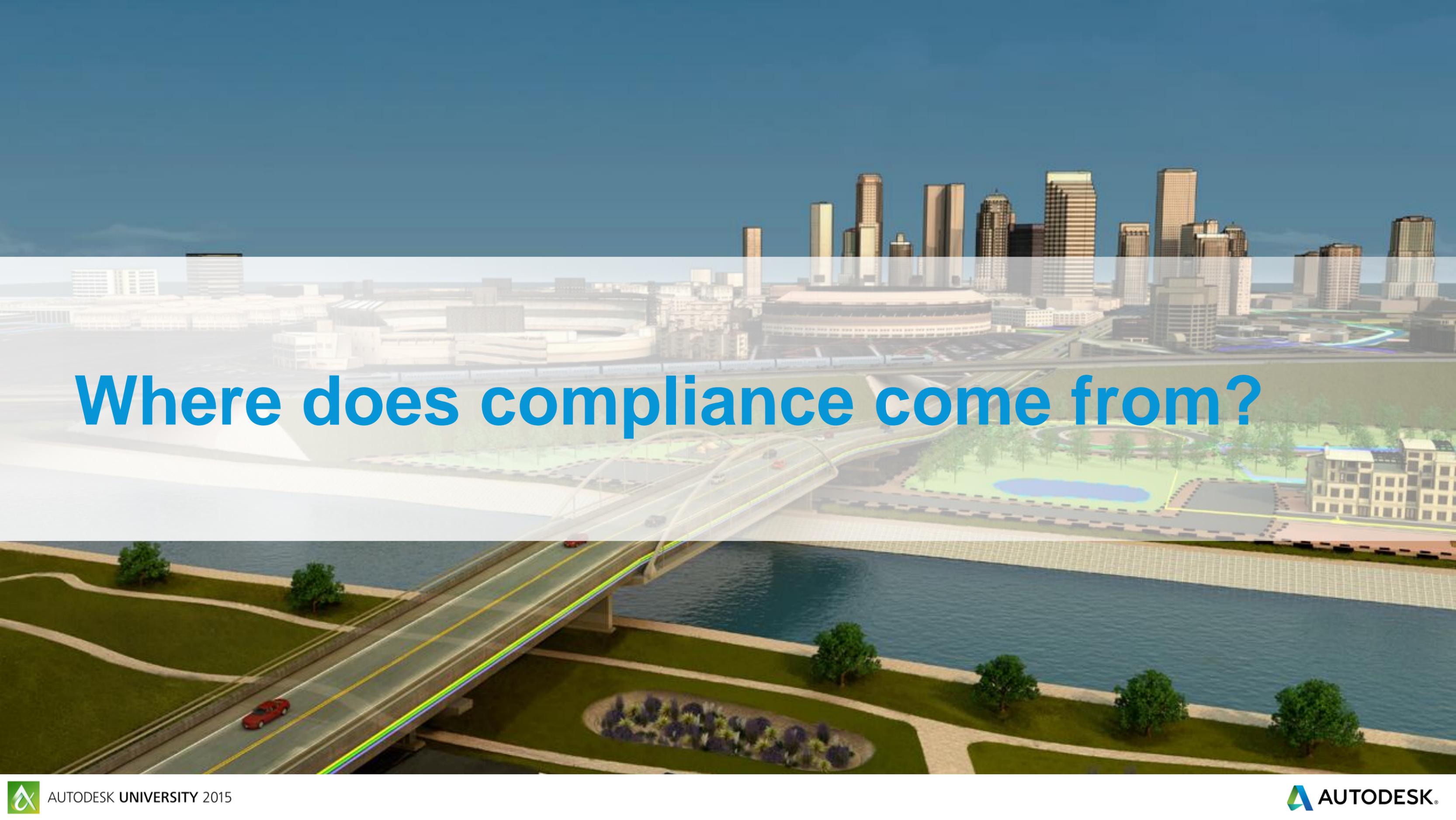
Why do users ignore standards...

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

Was it that my users are lazy?

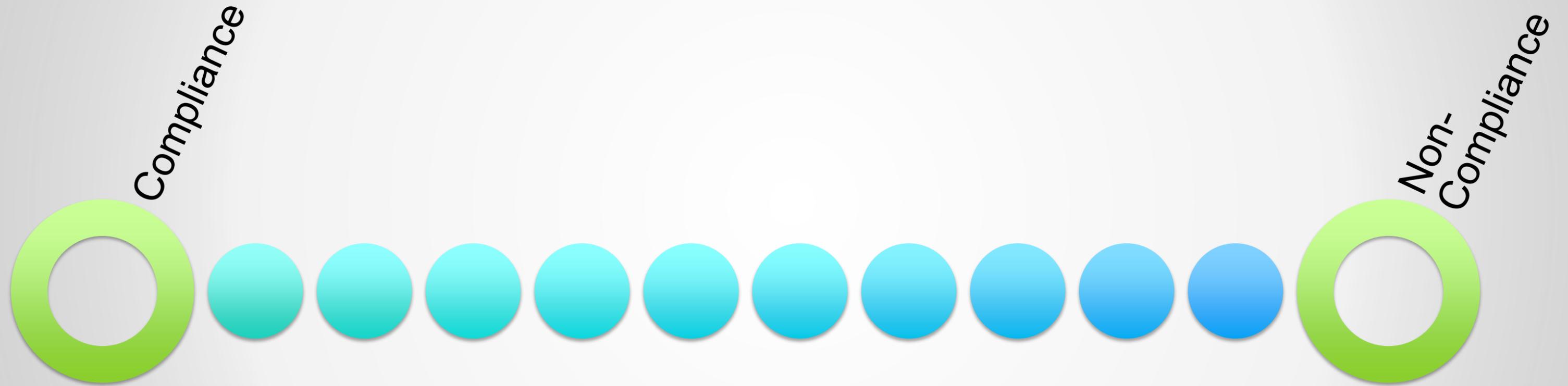
**Was it because of the way the
standard was documented?**

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

An aerial view of a city skyline with a bridge over a river and a stadium in the foreground. The text "Where does compliance come from?" is overlaid in blue on a semi-transparent white banner.

Where does compliance come from?

Compliance Scale



An aerial rendering of a cityscape with a prominent highway bridge crossing a wide river. The bridge has a vibrant rainbow light trail along its length. In the background, a dense urban skyline with various skyscrapers is visible under a clear blue sky. The foreground shows landscaped greenery and a few cars on the bridge.

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

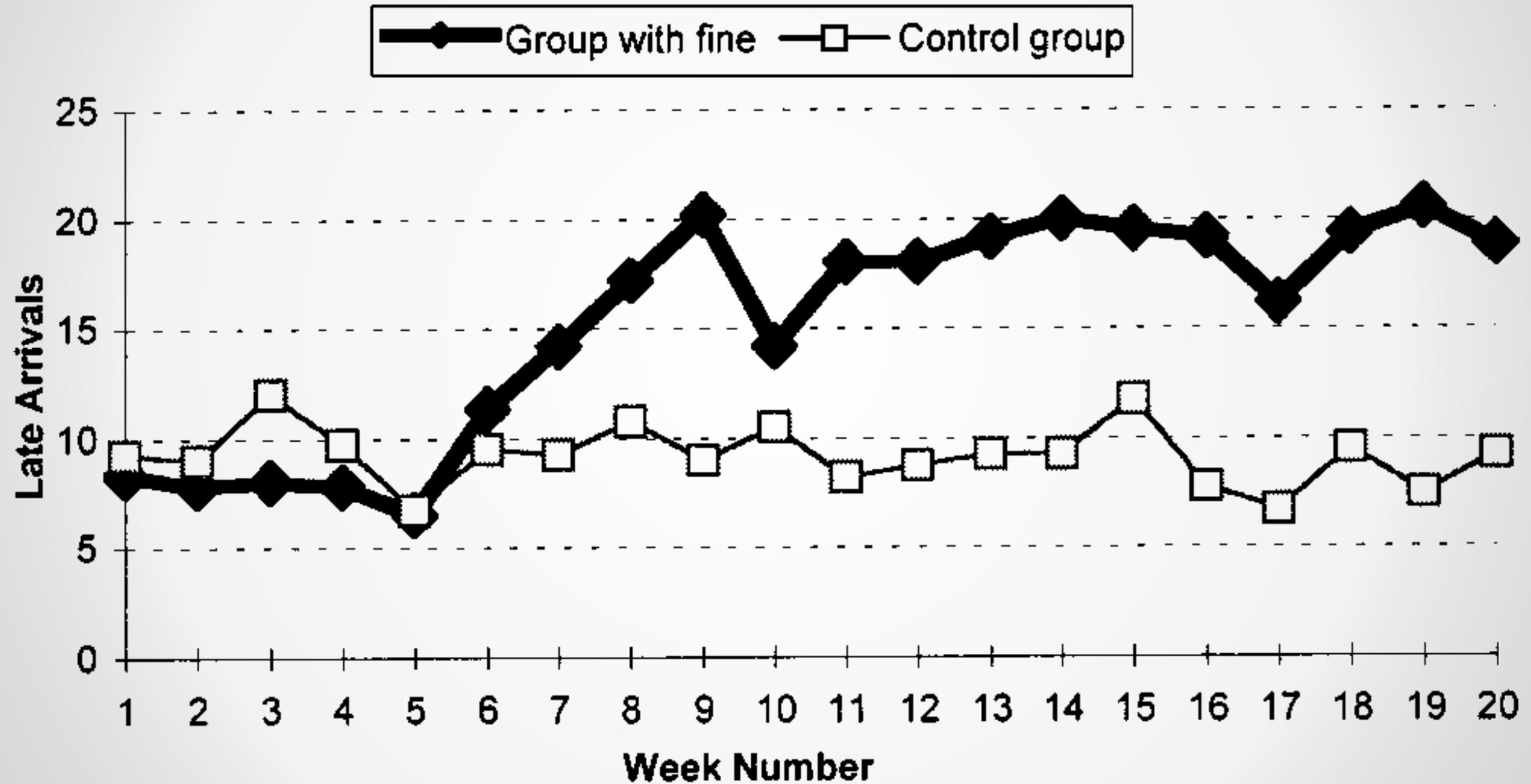
Psychological effects of deterrence.

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

Study: A Fine is a Price



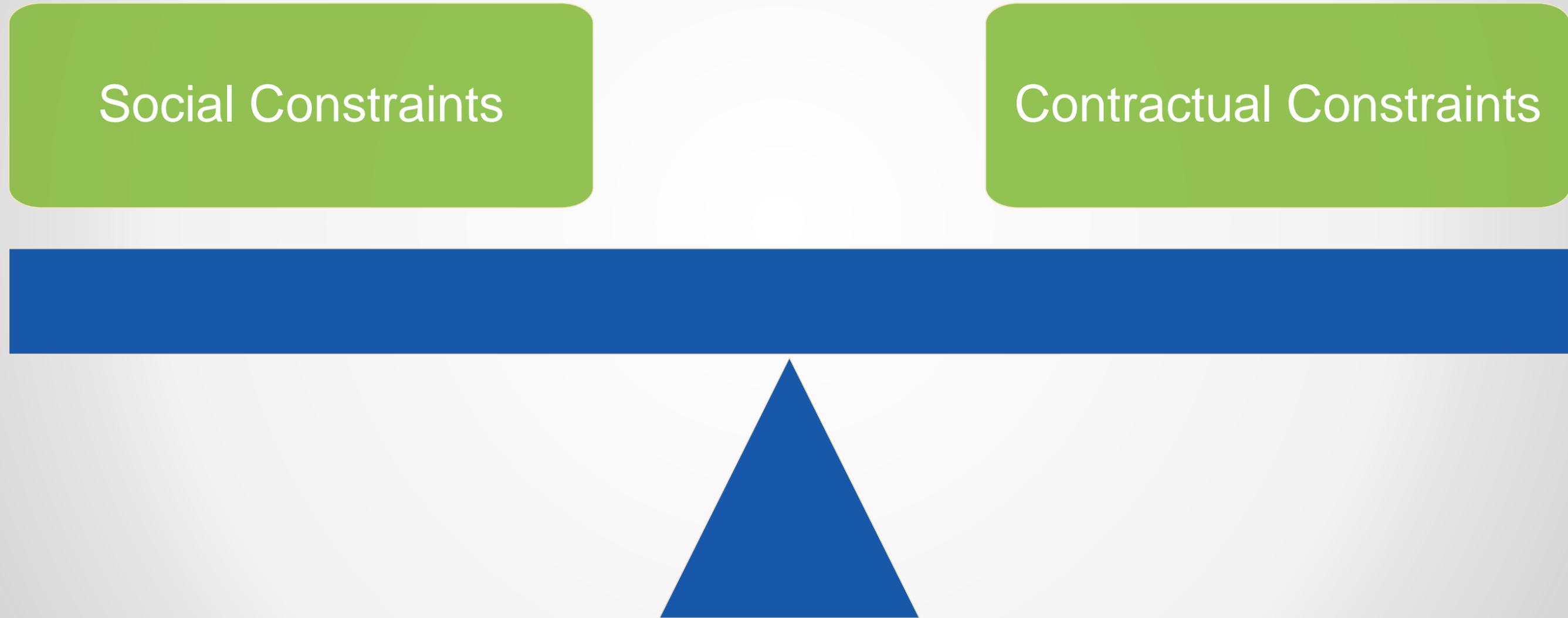
A Fine is a Price: Data Visualization



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

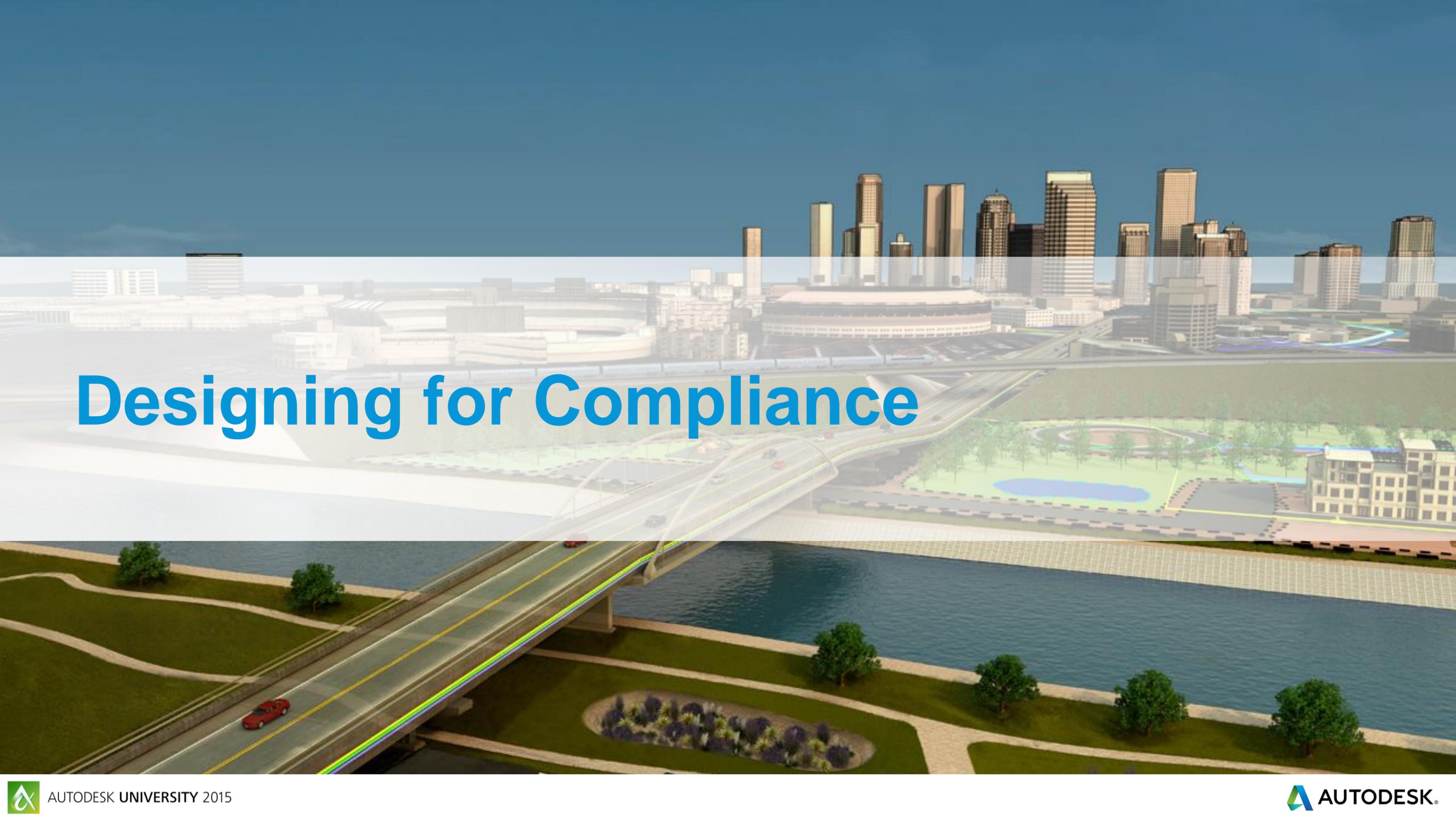




Deterrence Theory and CAD/BIM Standards

Deterrence Theory and CAD/BIM Standards

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

An aerial view of a city with a river and a highway bridge. The city skyline is visible in the background, featuring several tall skyscrapers. In the foreground, a multi-lane highway bridge spans across a wide river. The bridge has a rainbow-colored light strip along its edge. The surrounding area includes green spaces, trees, and a parking lot. The sky is clear and blue.

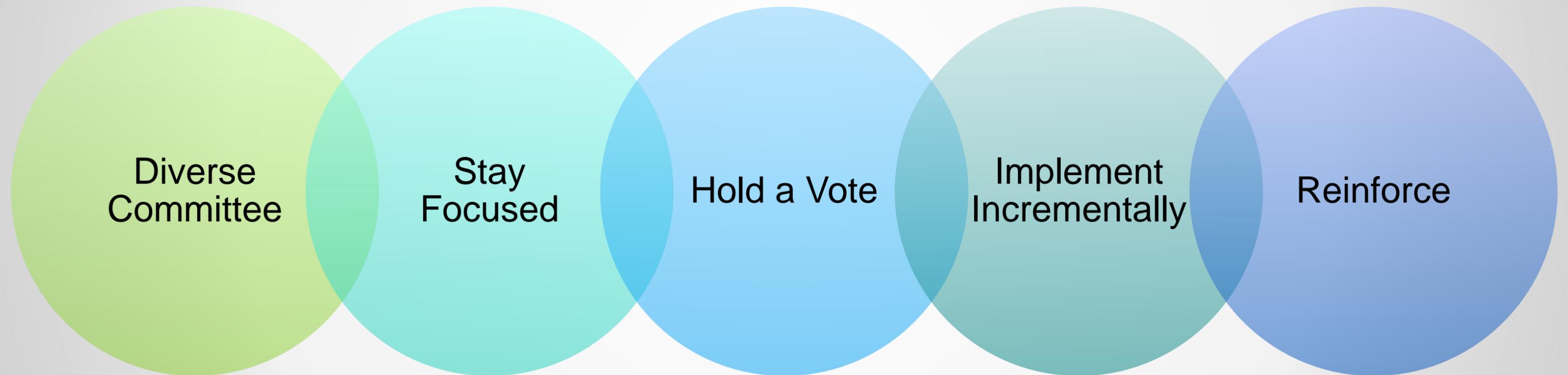
Designing for Compliance

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

- African Proverb

Secrets to Compliance

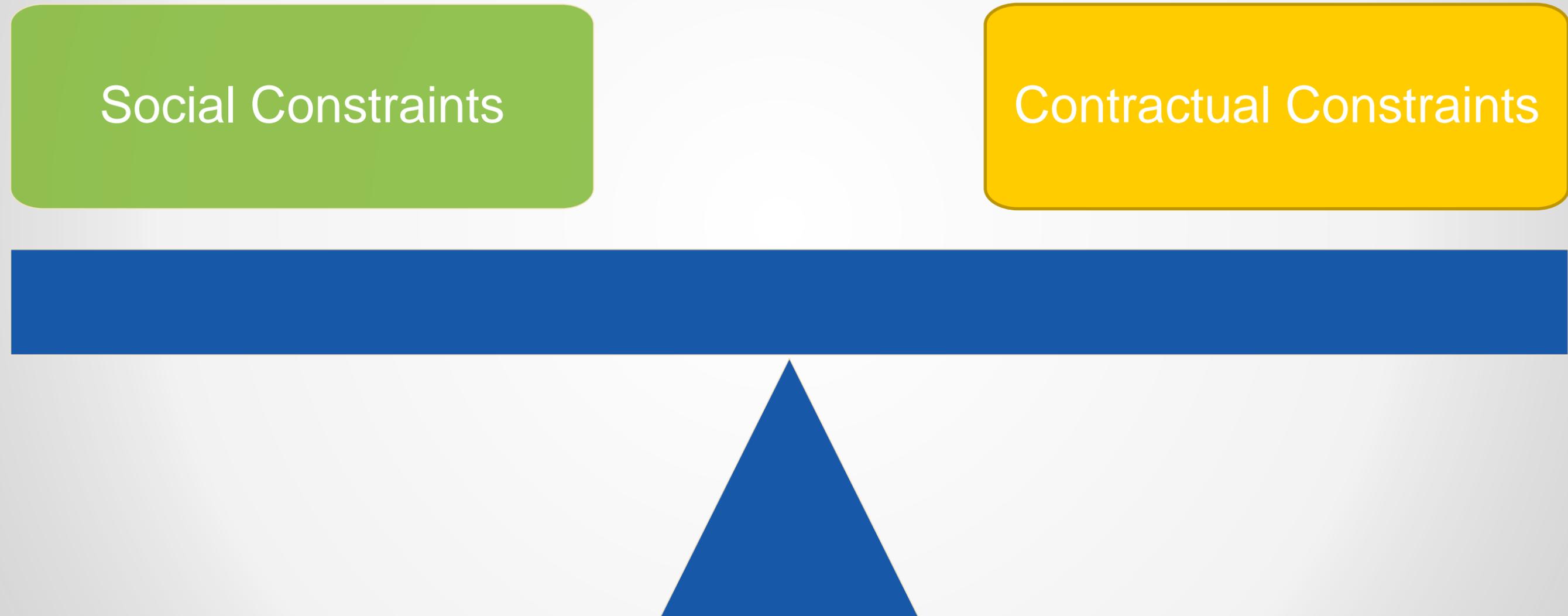
Aligning ownership with end users.



Steer. Don't direct...

CAD/BIM Managers Role

Finding Balance

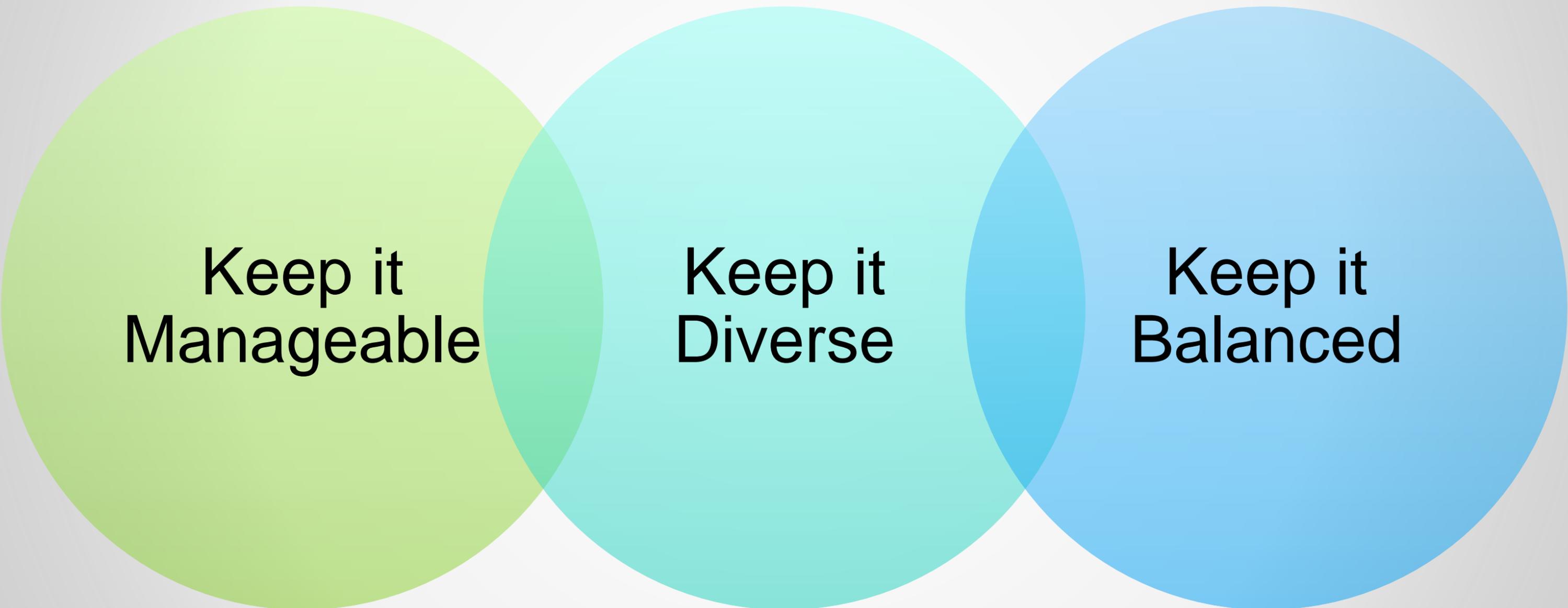




Establishing a CAD/BIM Committee

Build for the proper constraints...

Establishing a CAD/BIM Committee

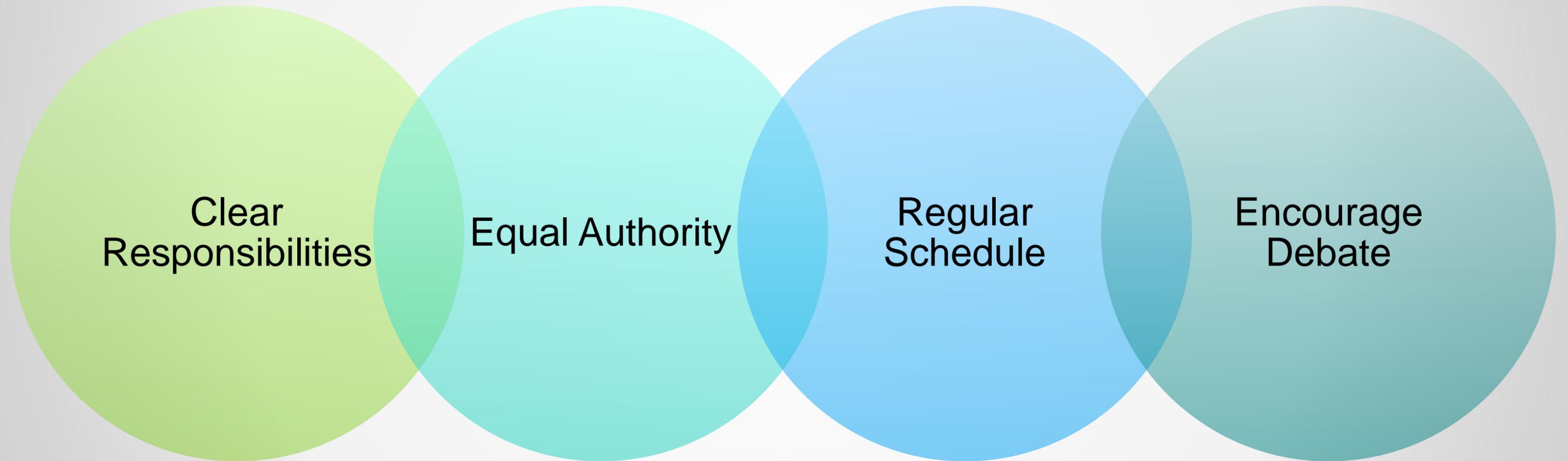


Keep it
Manageable

Keep it
Diverse

Keep it
Balanced

Avoiding CAD/BIM Committee Indecision



The First CAD/BIM Committee Meeting

Analyzing Needs

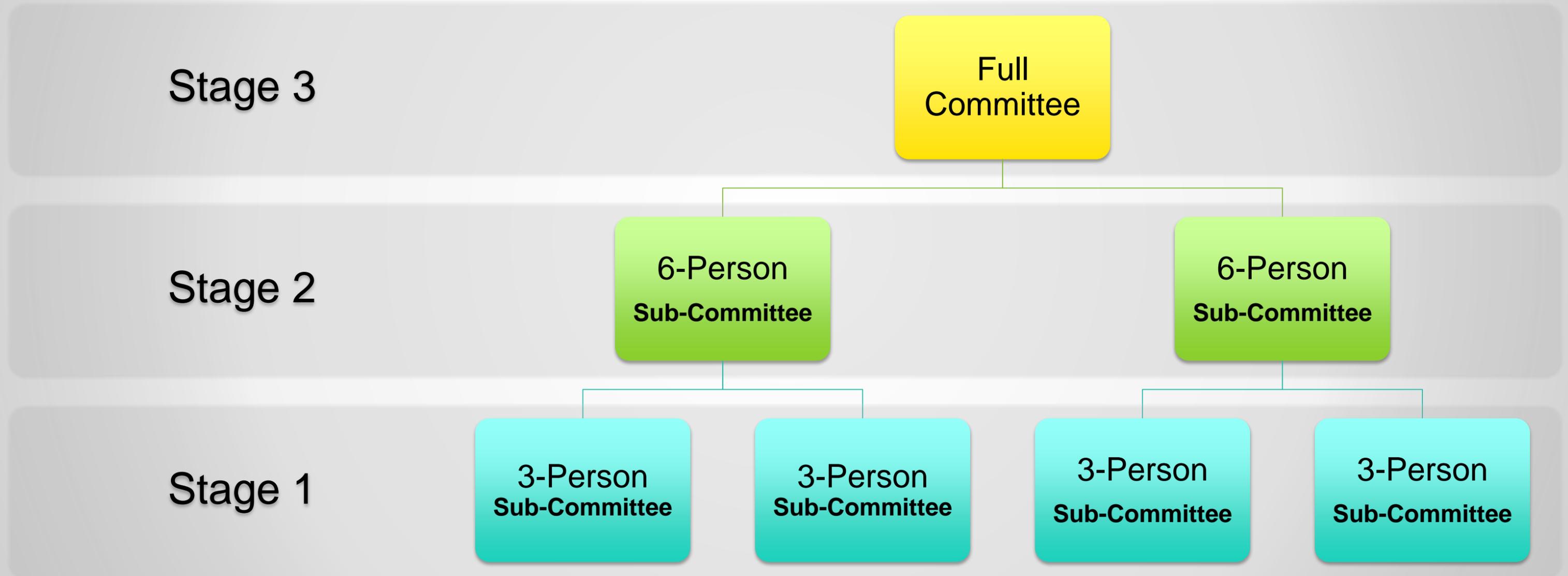
- What are the key goals the company hopes to achieve by standardization?
- What are the challenges end-users struggle with today?
- What topics affect the challenges faced by end-users today?
- In what order should the group discuss each of the standardization topics identified?

Don't boil the ocean.

FOCUS



Divide and Conquer



VOTE



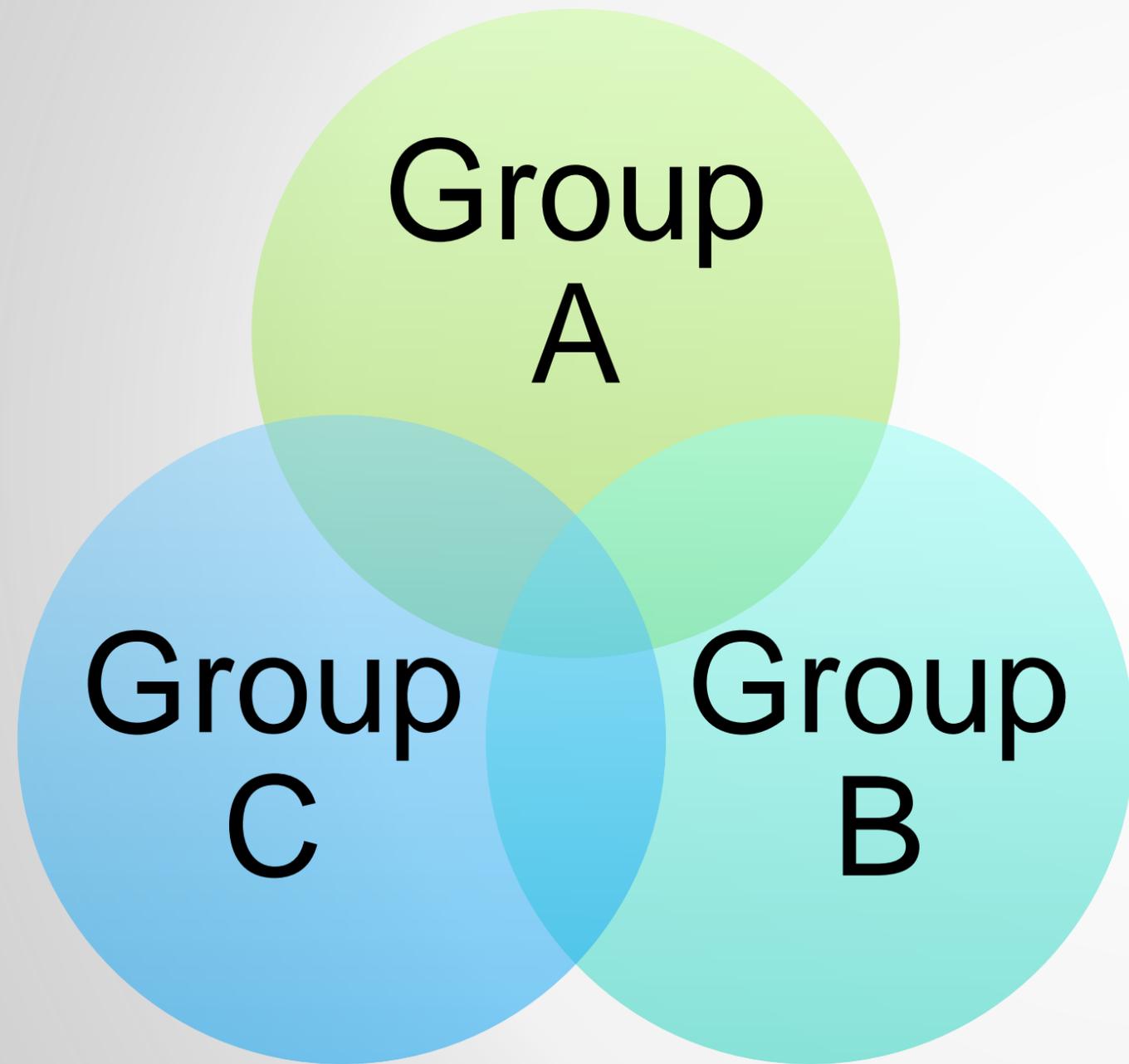
An aerial rendering of a city skyline. In the foreground, a multi-lane bridge with a rainbow-colored light strip along its edge spans across a wide river. A red car is visible on the bridge. To the right of the bridge, there is a green park area with a blue pond and a modern building. In the background, a dense city skyline with various skyscrapers is visible under a clear blue sky. A semi-transparent white banner is overlaid across the middle of the image, containing the title text.

Implementing Without Authority

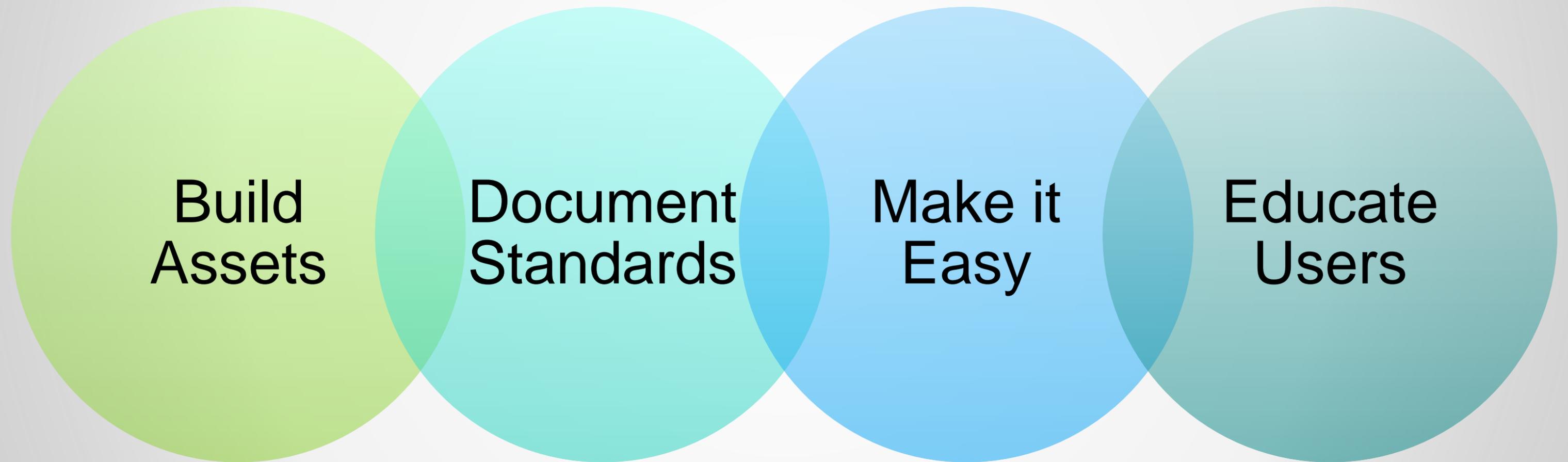
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-CAD/BIM Managers Everywhere

What is a Compliant Standard?



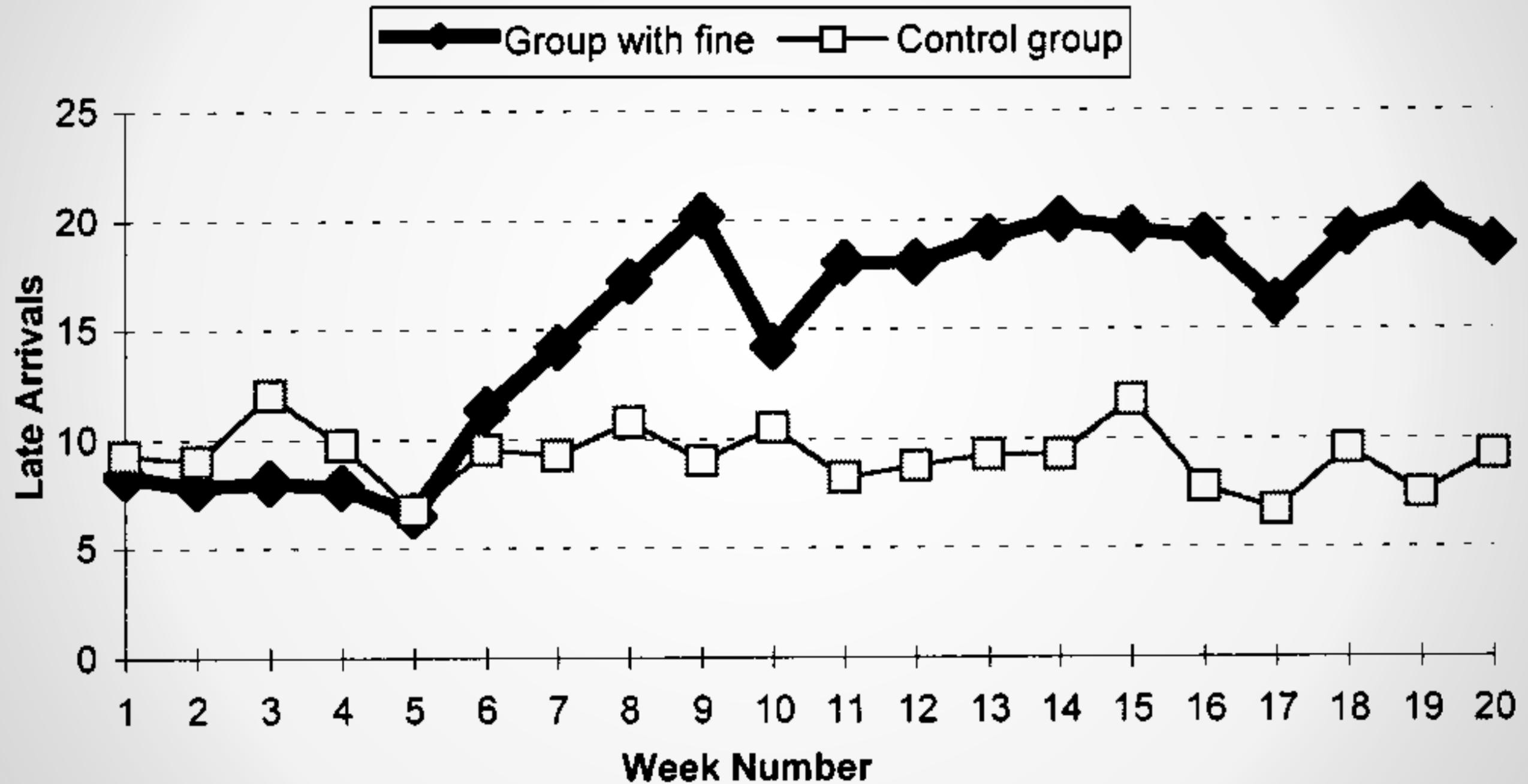
Steps for Successful Implementation





Enforcing Without Authority

Enforcing Without Authority



Summary



Summary

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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