

Building an Evidence-Based Practices Culture

5TH ANNUAL APPALACHIAN HIGHER EDUCATION NETWORK
CONFERENCE



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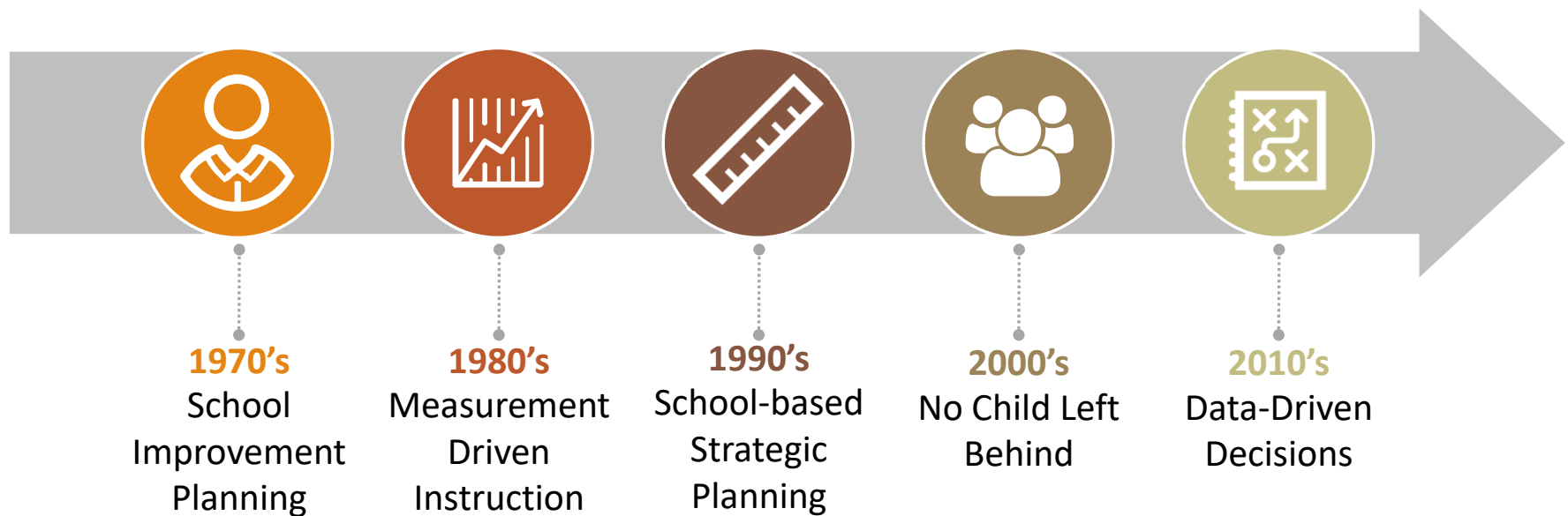
Who are these people?



Evidence-based decision-making



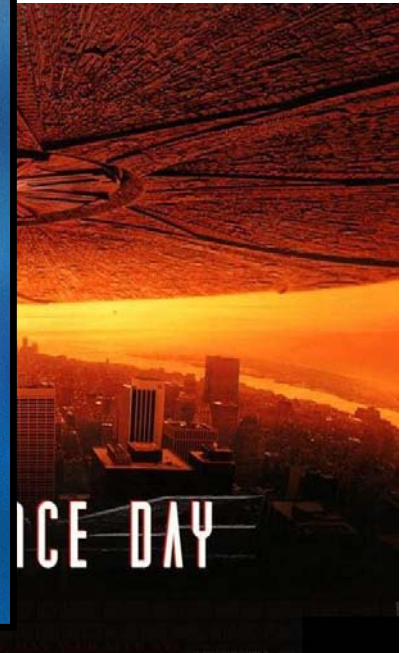
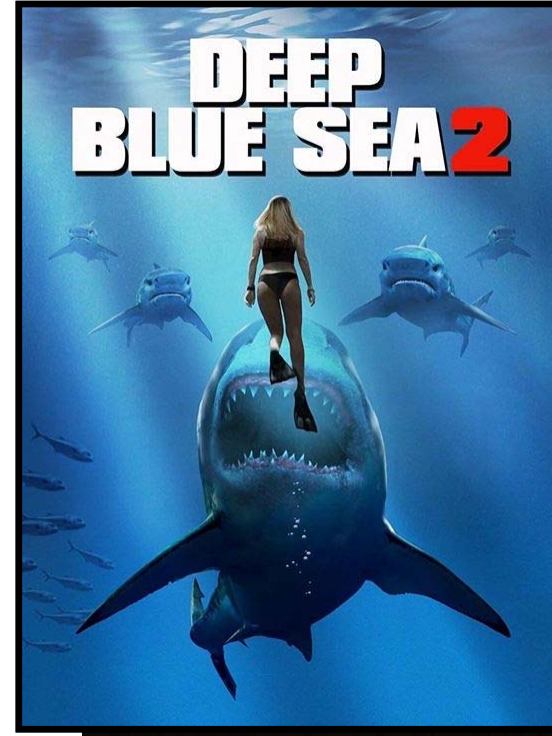
How did we get here?



Data-driven decisions:
Where are we now?



Ignoring the evidence:
Even the scientists



No regard for science:
Hollywood too?

Data and evidence-based decisions: The cycle and the culture

Culture



Data and evidence-based decisions: The cycle and the culture

Culture



Analytics & Education

Working Together



**Do's &
Don'ts**
Data-Driven Cultures



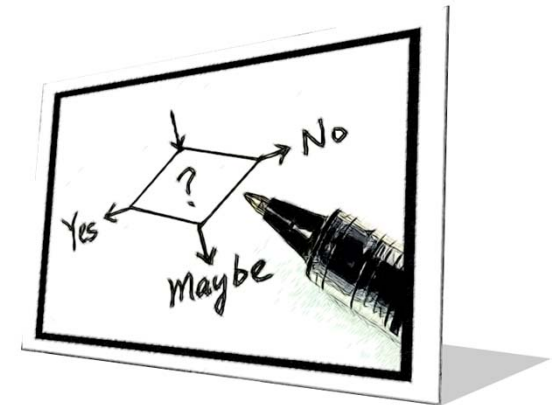
Next Steps
Finding the Right Mix

Discussion overview

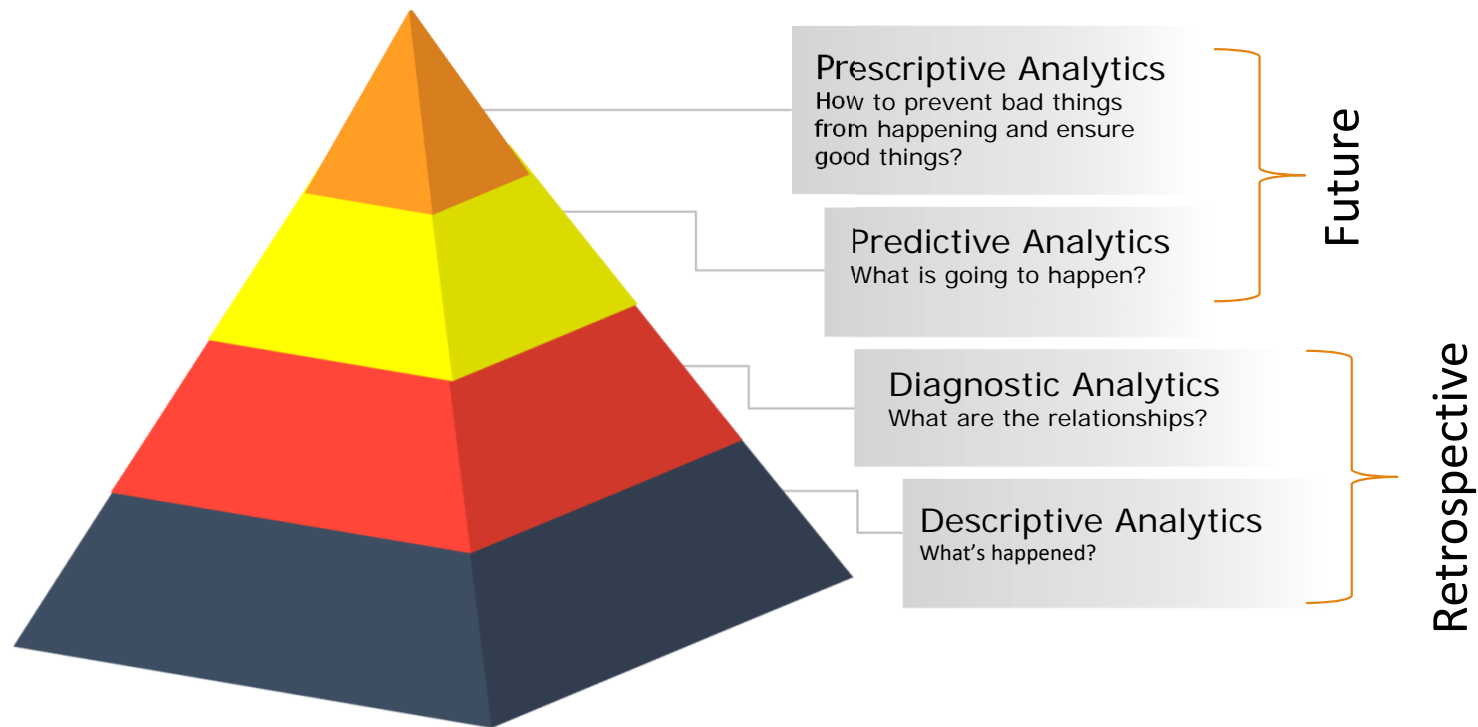
Analytics: What is it?

Scientific process transforming data into insights to better decisions

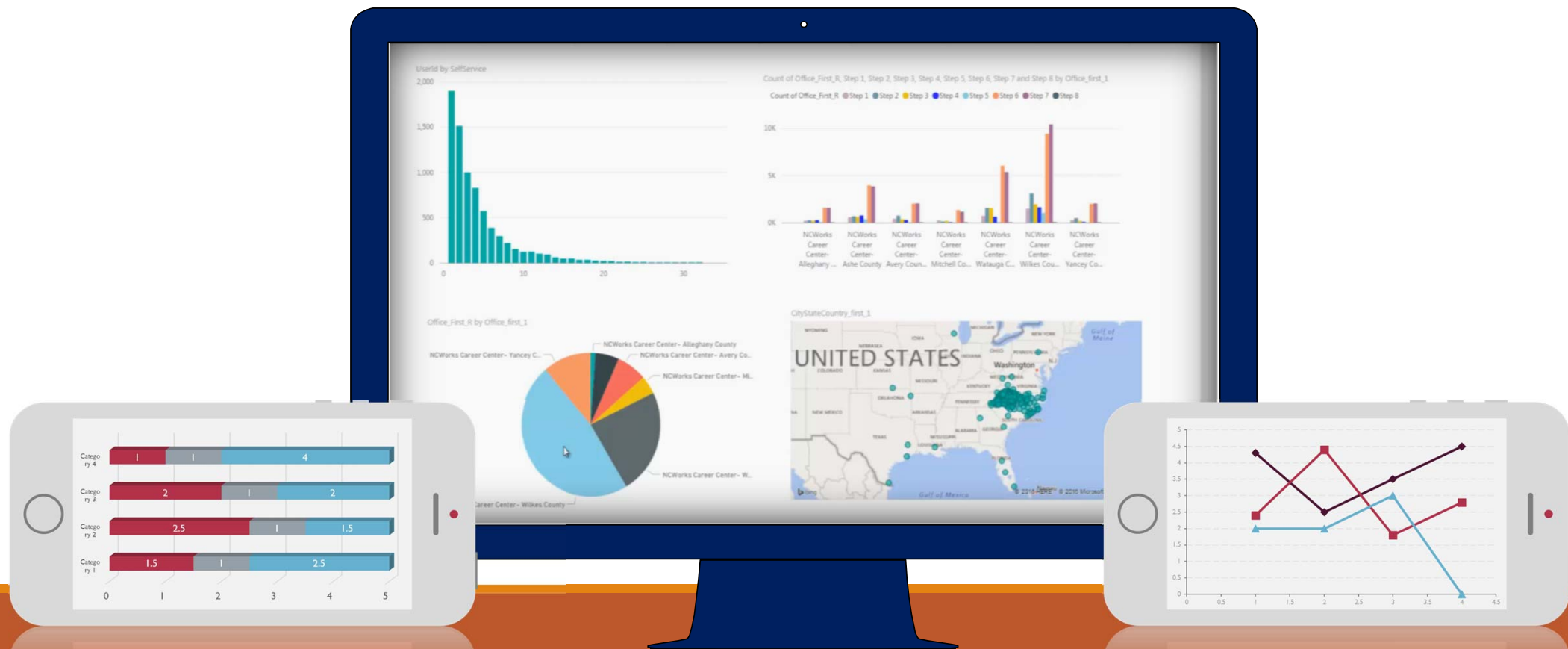
- Discover
- Visualize
- Communicate



Four Analytic Applications

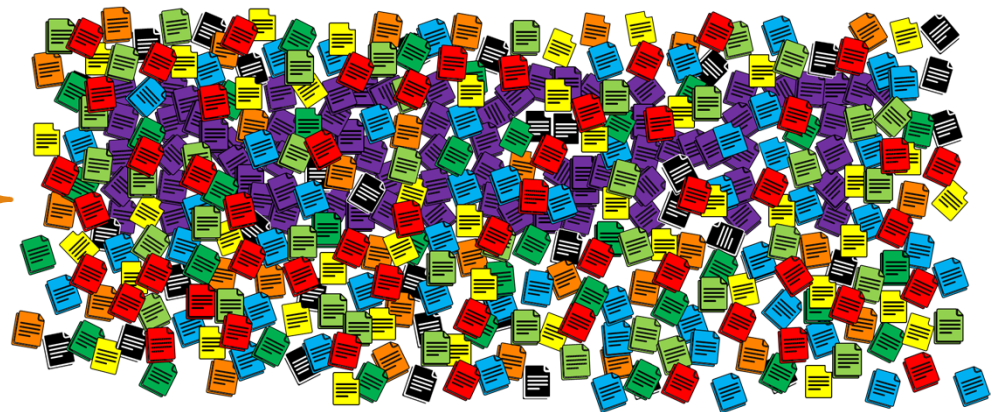


Advisory analytics: Dashboards and embedded interactive results



Innovation: Analytics and education

Services Received
Academic Performance
Engagement and Absences
FAFSA Completion
Efficacy and Mindset
College Going Culture



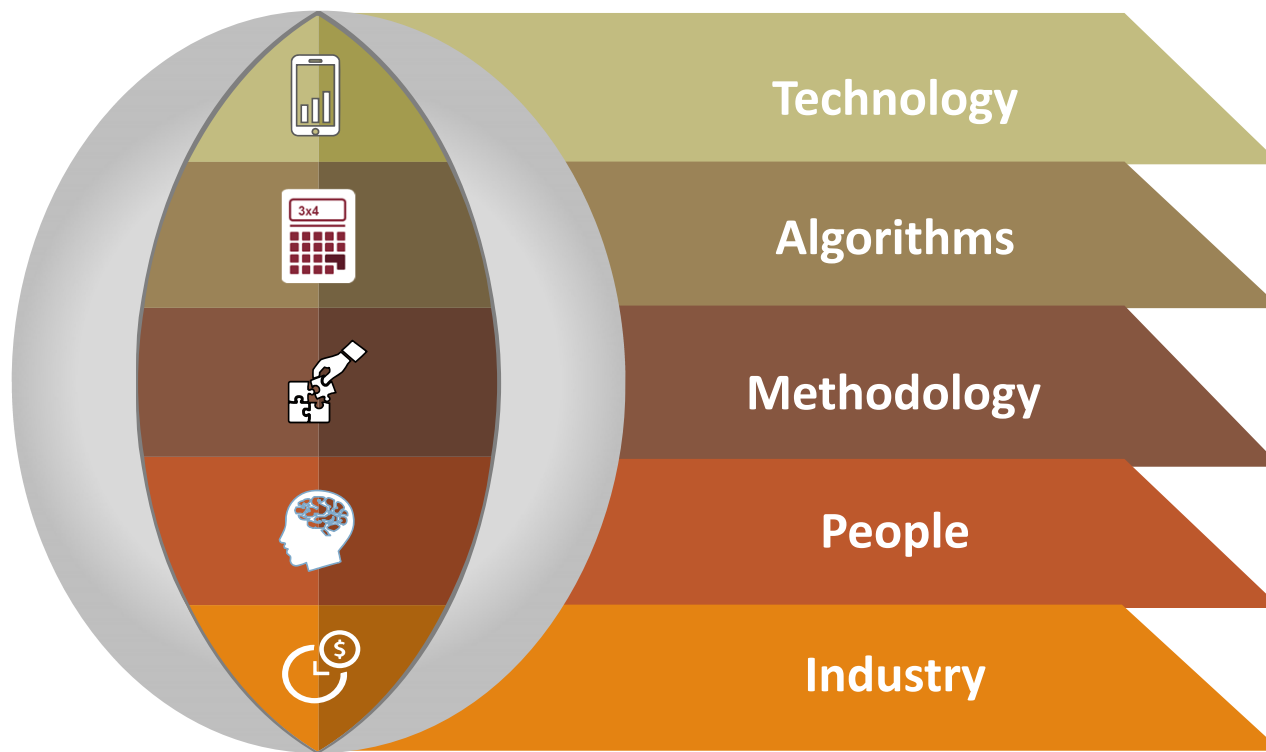


Great!



What could possibly go wrong?

Applied Data Analytics: More than just numbers



Applied Data Analytics: It is about people



People

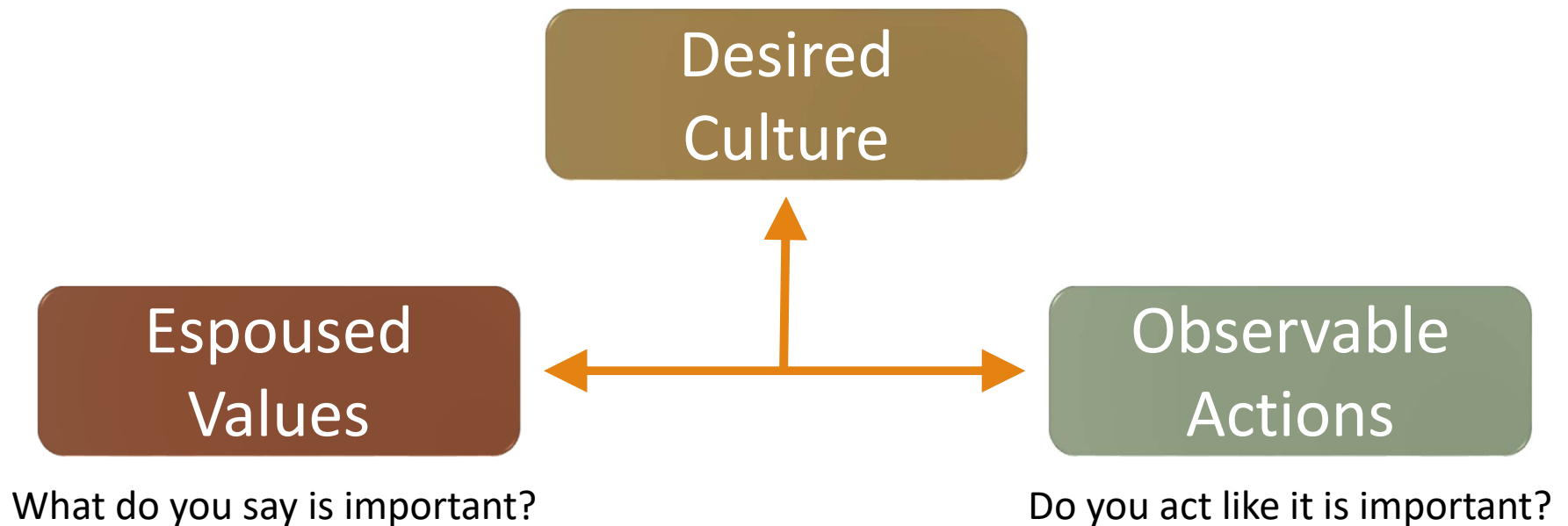


Data and evidence-based decisions: The cycle and the culture

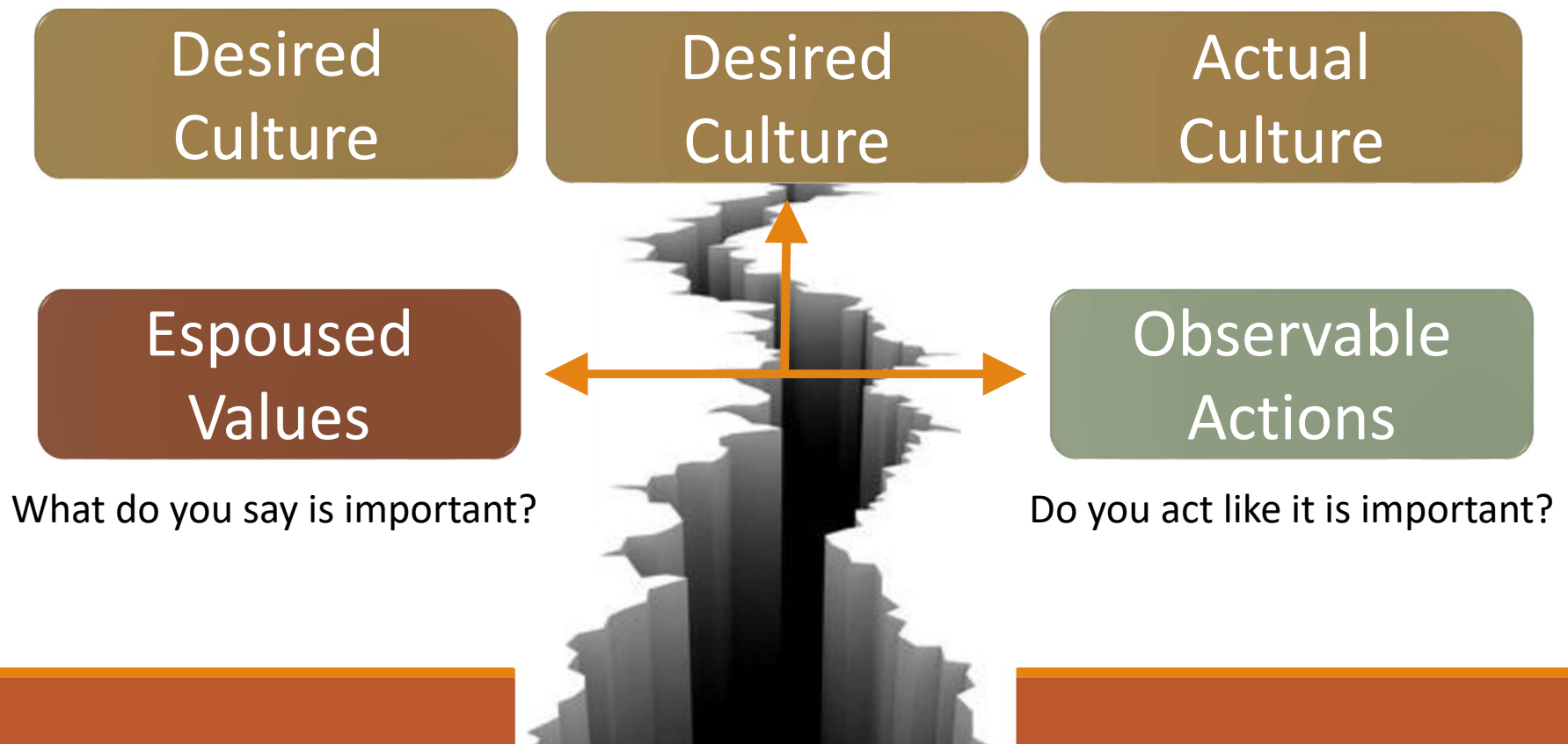
Culture



Espoused values and observable actions: Creating the desired culture



Espoused values and observable actions: The culture gap



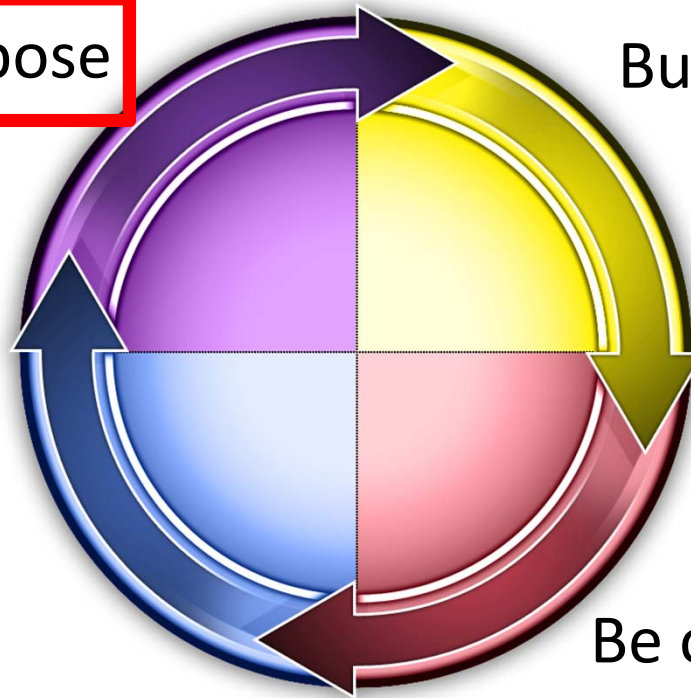
Culture do's and don'ts: Removing barriers to data-driven decisions

1. Have a vision and purpose
2. Solicit from all levels
3. Get the right information
4. Build trust and be positive
5. Be open to new possibilities
6. Get people what they need
7. Expect and reduce anxiety
8. Train and provide resources
9. Reinforce progress
10. Communicate ROI

Culture do's and don'ts: Removing barriers to data-driven decisions

Have a vision and purpose

Build trust and be positive



Reinforce progress

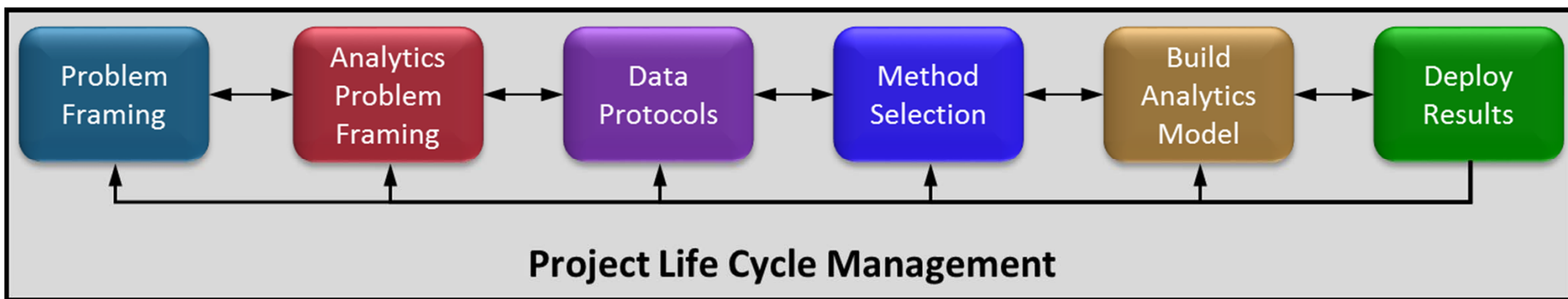
Be open to new possibilities

Data Analytics Process: Think about the end at the beginning

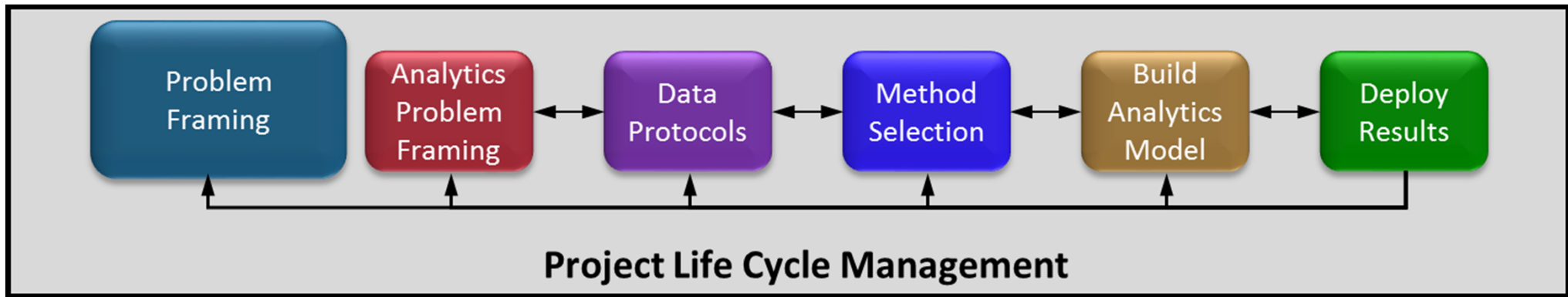
Systematic way to implement data and analytics

Ensures projects produce desired results

Iterative process that requires collaboration



Have a vision and purpose: Problem framing

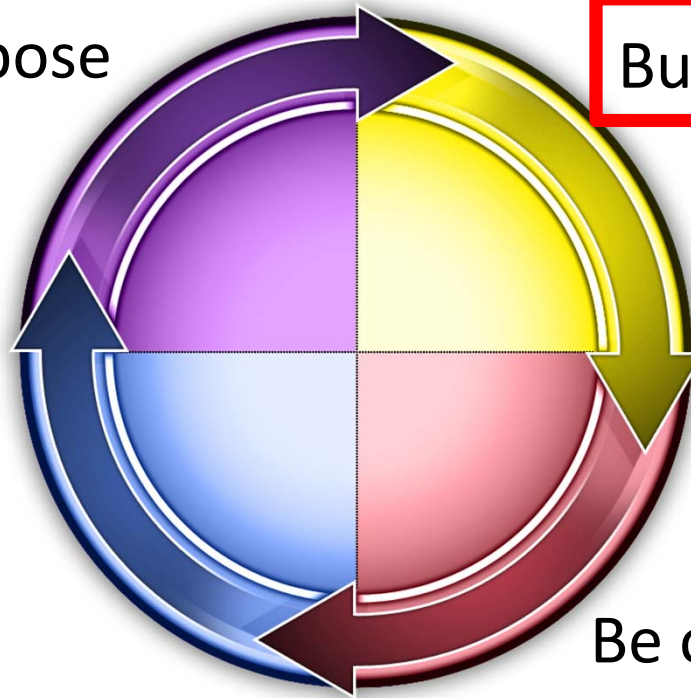


- **Most important**, because it **sets expectations** and limitations
- Establishes a firm foundation on which analytics will be implemented

Culture do's and don'ts: Removing barriers to data-driven decisions

Have a vision and purpose

Build trust and be positive



Reinforce progress

Be open to new possibilities

Build trust and be positive:
Align your values and actions

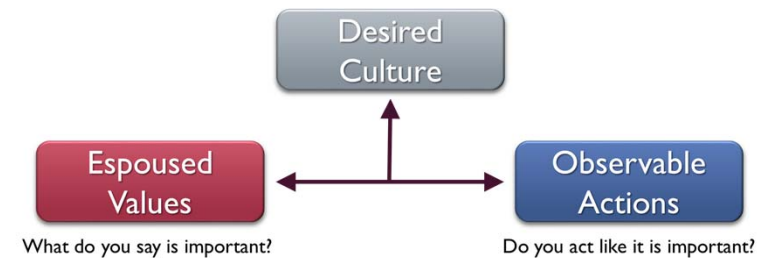
Trust in data

- Data collected has to be accurate

Build positive relationships with people

Be positive and up front

- Make sure values and actions align



Build trust and be positive: Align your espoused values and actions

Trust in people (Balboni, Finch, Reese, & Shockley, 2013)

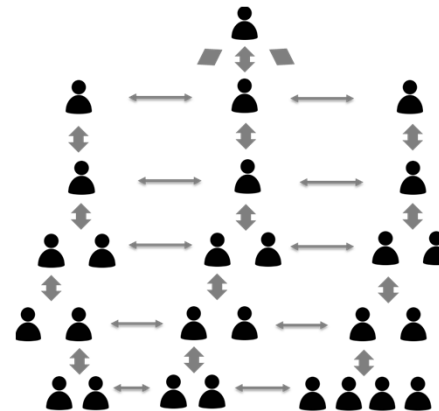
- Lack of trust one of most significant hurdles



Made by Mugdha Damle

Make sure you have a communication strategy

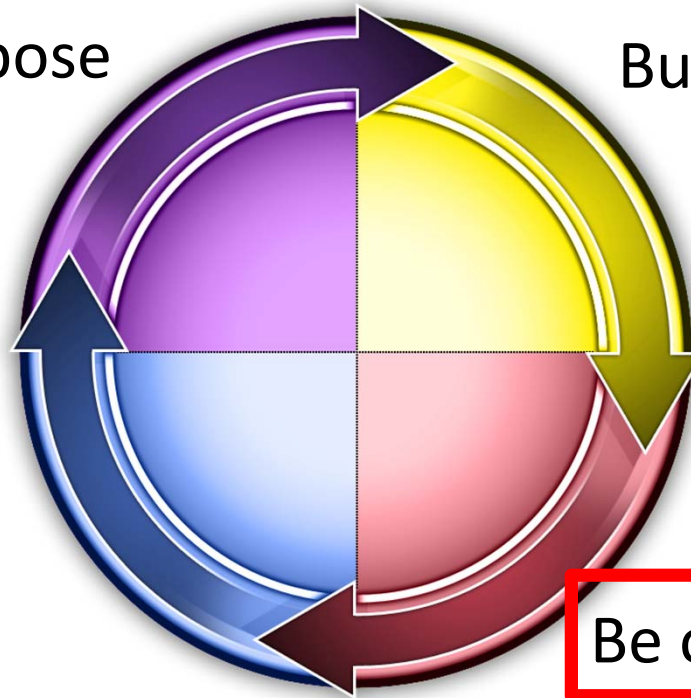
- In the absence of information
 - People will _____ the blanks



Culture do's and don'ts: Removing barriers to data-driven decisions

Have a vision and purpose

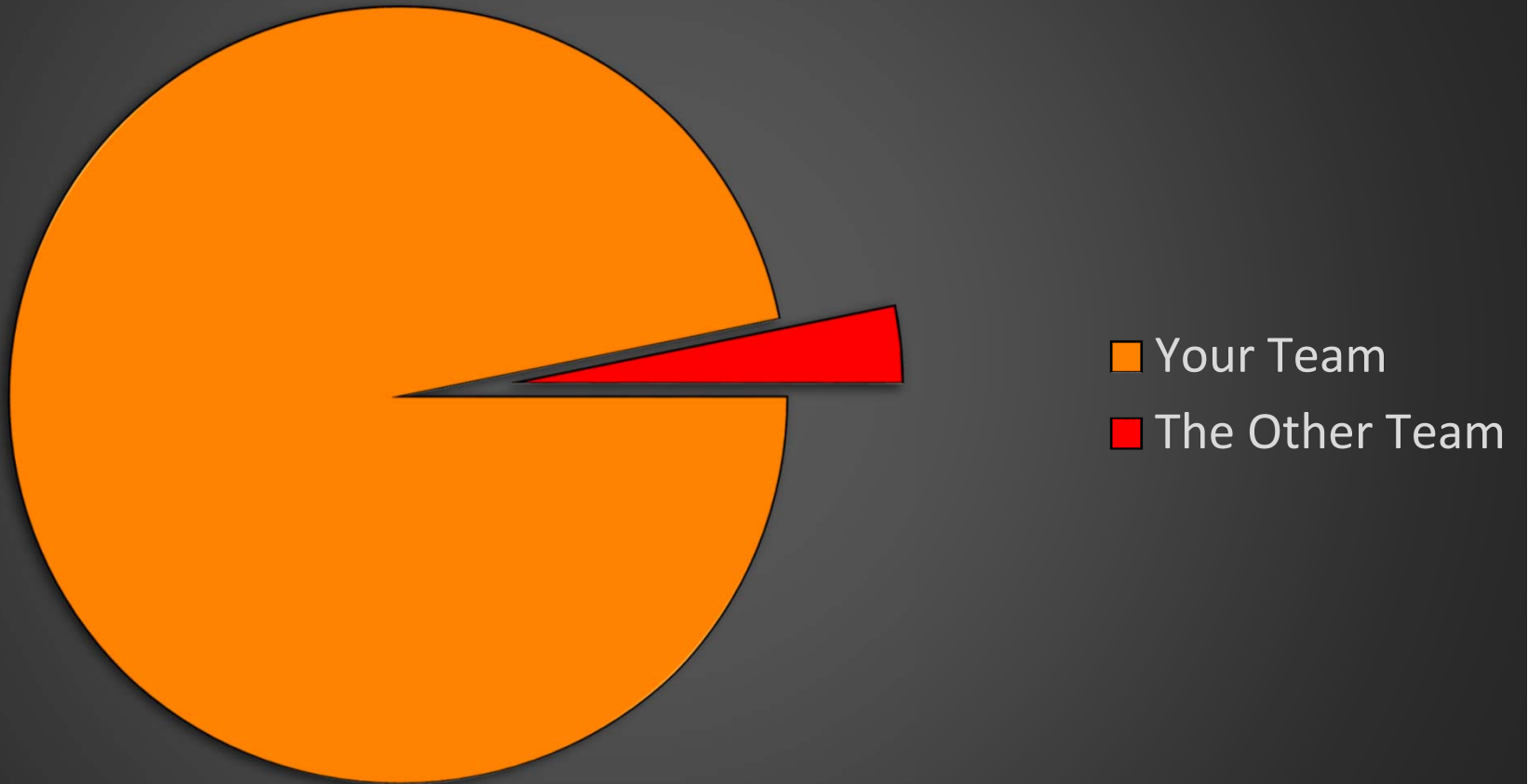
Build trust and be positive



Reinforce progress

Be open to new possibilities

Teams Refs Make Bad Calls Against



Research and analytics: Signal and noise

Referee Analytics: Bias in Major College Football Officiating

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holcomtr@miamioh.edu

Ryan M. Rodenberg
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No evidence of bias in favor of top-rated teams

Found bias in favor of underdogs

- Bias varied by conference

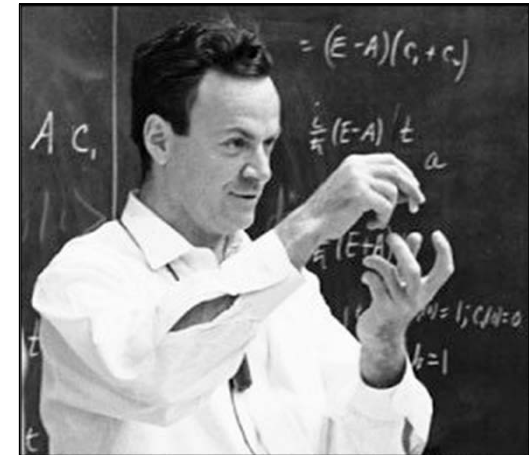
This is a test:
This is only a test

Write down how many times the players
wearing white passed the ball.



Know yourself:
Be open to new possibilities

"The first principle is that you must not fool yourself – and you are the easiest person to fool."



Richard Feynman

Be open to new possibilities:
Unexpected results

INTEGRITY
IS DOING THE
RIGHT THING.

EVEN WHEN
NO ONE IS
WATCHING.

C.S. LEWIS

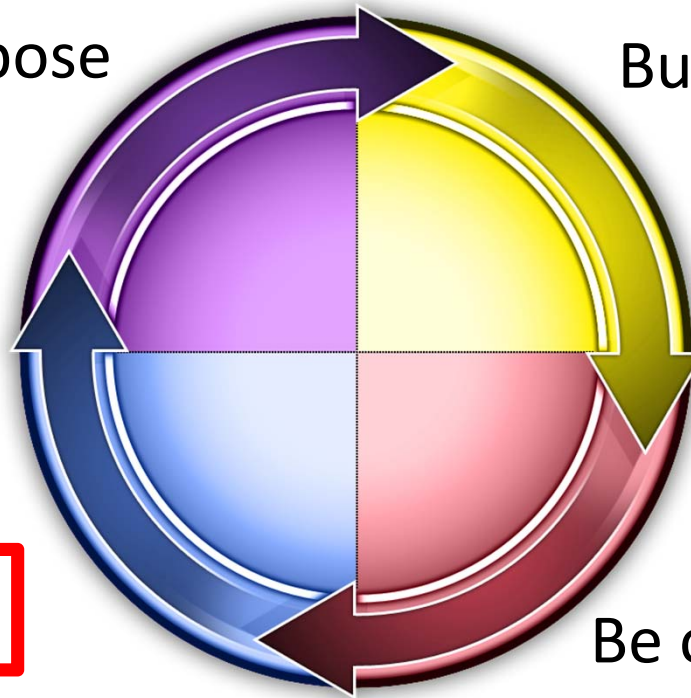


Opportunities

Culture do's and don'ts: Removing barriers to data-driven decisions

Have a vision and purpose

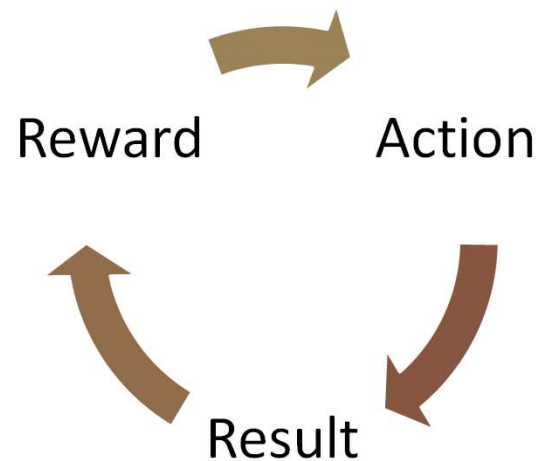
Build trust and be positive



Reinforce progress

Be open to new possibilities

Reinforce progress: People like to be reinforced



Reinforce progress: People like to be reinforced

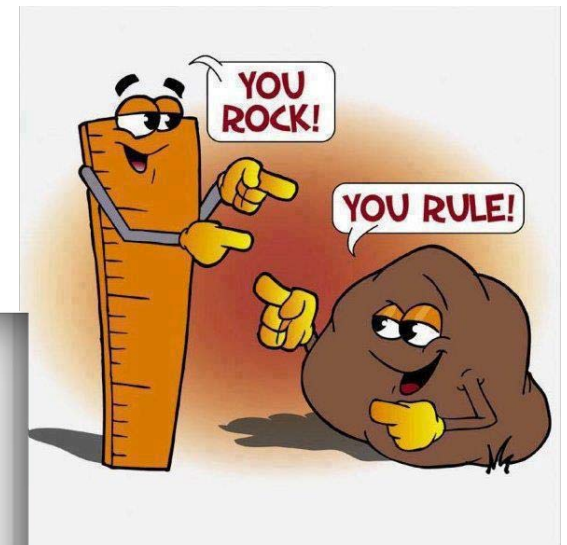
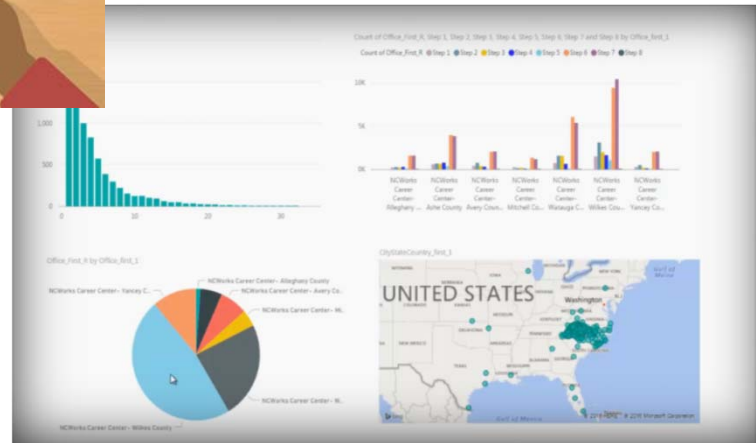


Reinforce progress: People like to be reinforced

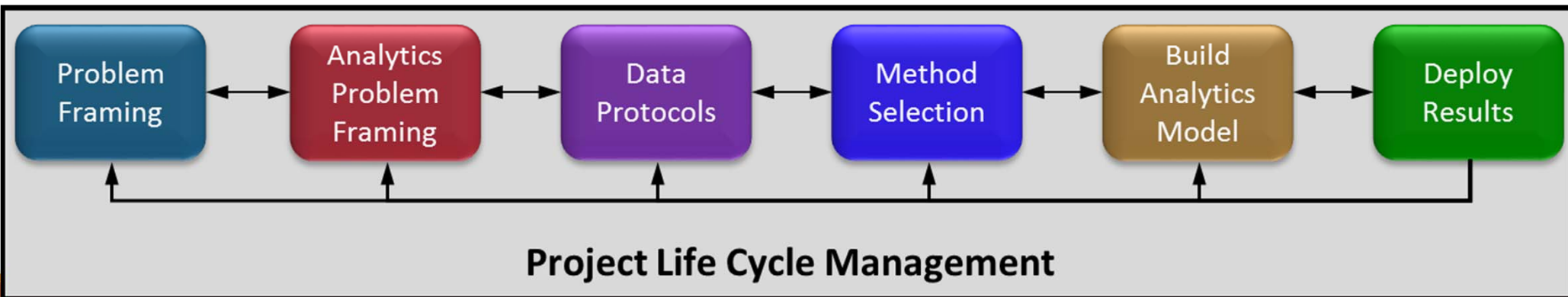
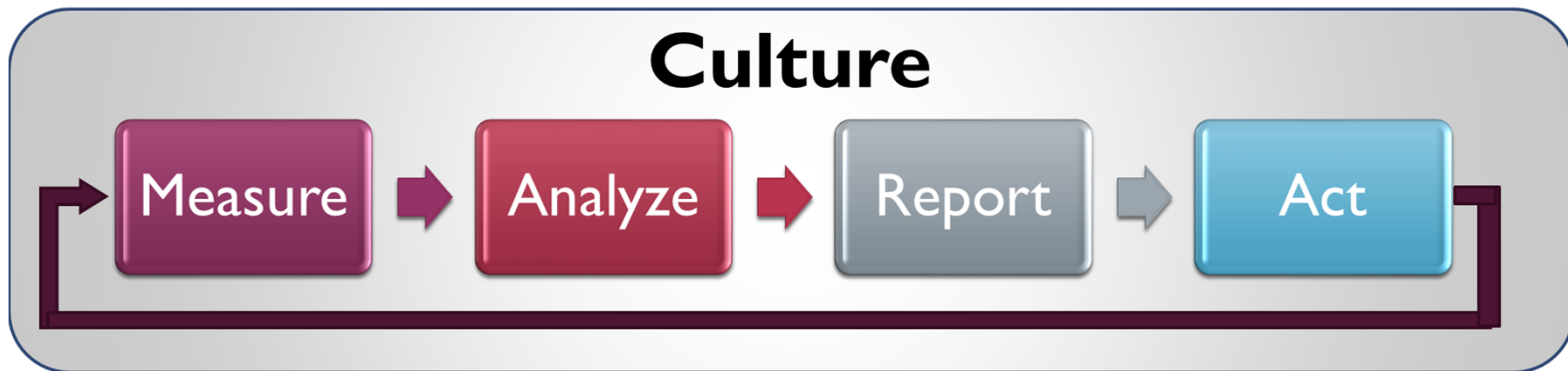


Communicate ROI:

People like to know what has been done



Culture and analytics: Working together



Culture change: But what can I do?

1. Be concrete with specific changes you would like to make
2. Make small changes that will have lasting impact
3. Pilot study and proof of concepts
 - a) Gain buy-in
 - b) Build trust



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Thank you!

