

# Implementing and Sustaining Evidence-Based Programs: Have We Got A Sporting Chance?



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# ....A Sporting Chance!



# There are Challenges

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## Science to Service Gap

- What is known is generally not what is adopted

## Implementation Gap

- There are not clear pathways to implementation
- What is adopted often is not used with fidelity and good effect
- What is implemented can disappear over time and with staff turnover

# Learning About Effective Implementation



## Craft knowledge

- National meeting of EBP Program Developers
- National meeting of EBP Implementation Sites
- National meeting of Implementation Researchers
- Interviews with 64 Program Developers
- Work with Program Developers, States, Agencies across domains



## Formal and scientific information

- Current Projects (Catawba County, Education, Early Childhood)
- Program Efforts and Replication Data
- Review of evaluation and research literature related to implementation
- Publication of *Implementation Research: A Synthesis of the Literature (2005)*



## ***WHAT HAVE WE LEARNED?***

# There are Shared Challenges!!

## Implementation is implementation in:

- Health and Medicine
- Mental health,
- Agriculture and Forestry
- Manufacturing and Business
- Substance abuse
- Child welfare,
- Education,
- Engineering,
- Juvenile Justice,
- Nursing, ...and more

 They have similar implementation problems

 They have similar implementation solutions

 We can learn more ...more quickly

# Positive Intervention Outcomes ≠ Effective Implementation






Implementation has not been achieved by doing more or better research on interventions.

The **usability** of a program or practice has nothing to do with the weight of the evidence regarding that program


- “Evidence” on effectiveness helps you select what to implement for whom
- “Evidence” on outcomes does not help you implement the program

# Implementation Science

**Data Show These Methods, When Used Alone, Do Not Result In Implementation As Intended:**

-  **Diffusion/ Dissemination of information**
-  **Training**
-  **Passing laws/ mandates/ regulations**
-  **Providing funding/ incentives**
-  **Organization change/ reorganization**

# Problem

 **Children, families, and communities cannot benefit from violence prevention or intervention strategies that they do not experience**



# Implementation Science

## IMPLEMENTATION – The “How”

		Effective	NOT Effective
INTERVENTION – The “What”	Effective	<b>Actual Benefits</b>	Inconsistent; Not Sustainable; Poor outcomes
	NOT Effective	Poor outcomes	Poor outcomes; Sometimes harmful

(Institute of Medicine, 2000; 2001; 2009; New Freedom Commission on Mental Health, 2003; National Commission on Excellence in Education, 1983; Department of Health and Human Services, 1999)

# What works?...Fidelity Matters

 **Higher Fidelity is correlated with better outcomes across a wide range of programs and practices**

 **School-Based MH Prevention Programs - PATHS**

 **Children's Services – FFT, MST, Wraparound, TFM**




 **Adult Mental Health – ACT, IDDT, Motivational Interviewing**

 **Medicine – DOTS, Texas Algorithm, OMAP**

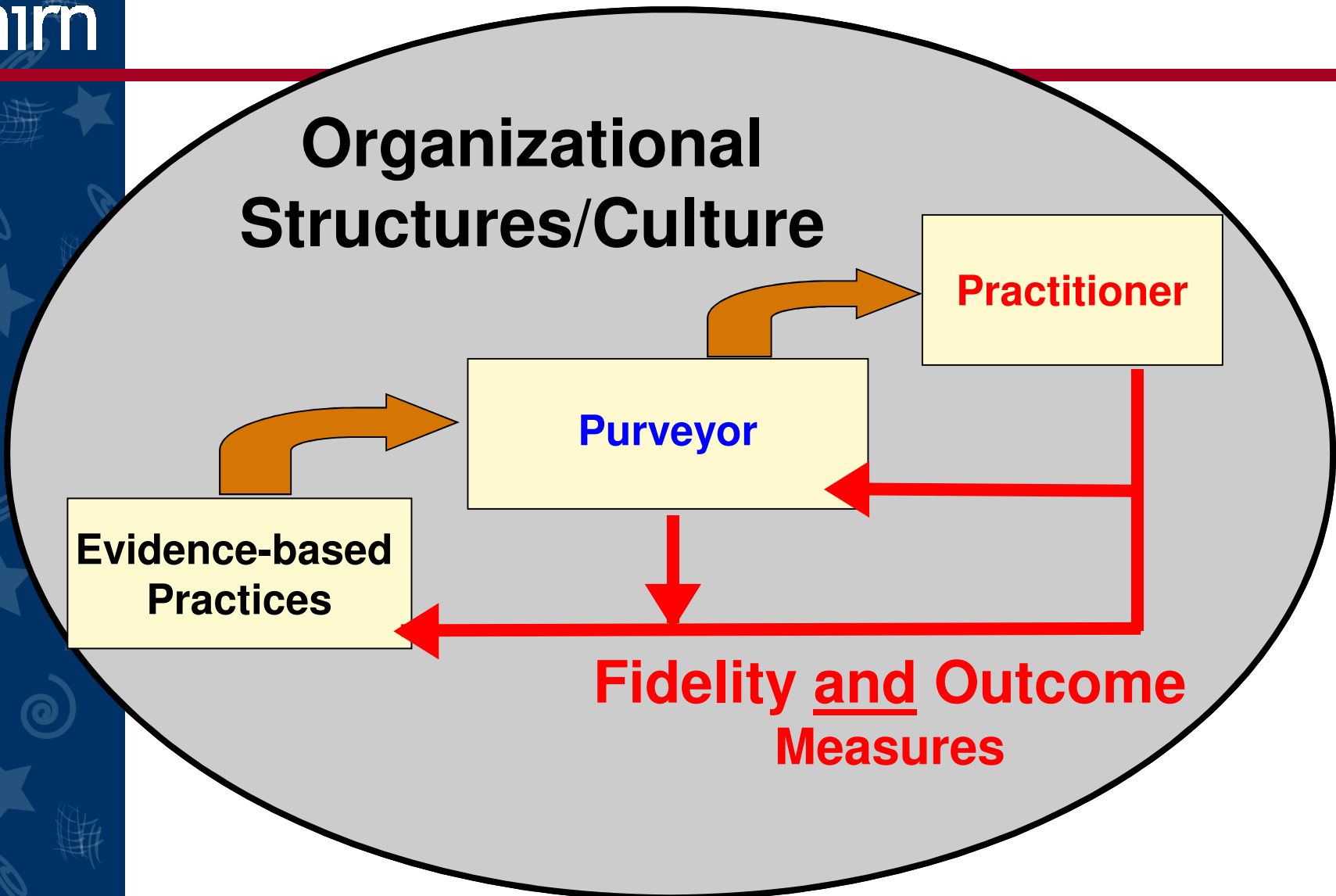
 **Education – HiPlaces, SWPBS, STEP**

# What works...

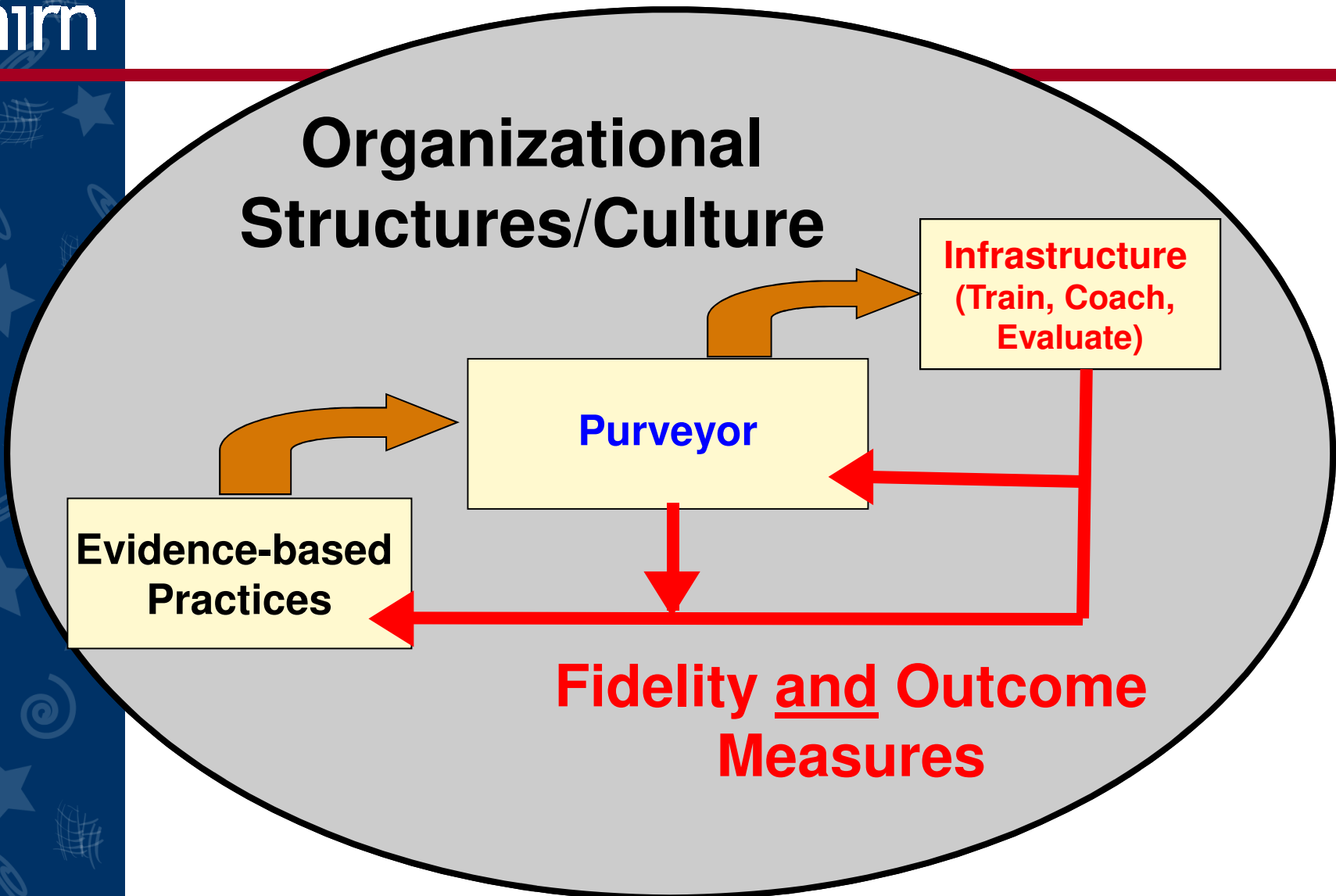
## Successful implementation on a useful scale requires a **purveyor**

-  An individual or group of individuals representing a program or practice who actively work to implement that practice or program with fidelity and good effect
-  Purveyors accumulate data & experiential knowledge, & become more effective and efficient over time
-  Purveyors differ in what they offer and how they help

# Implementation Framework

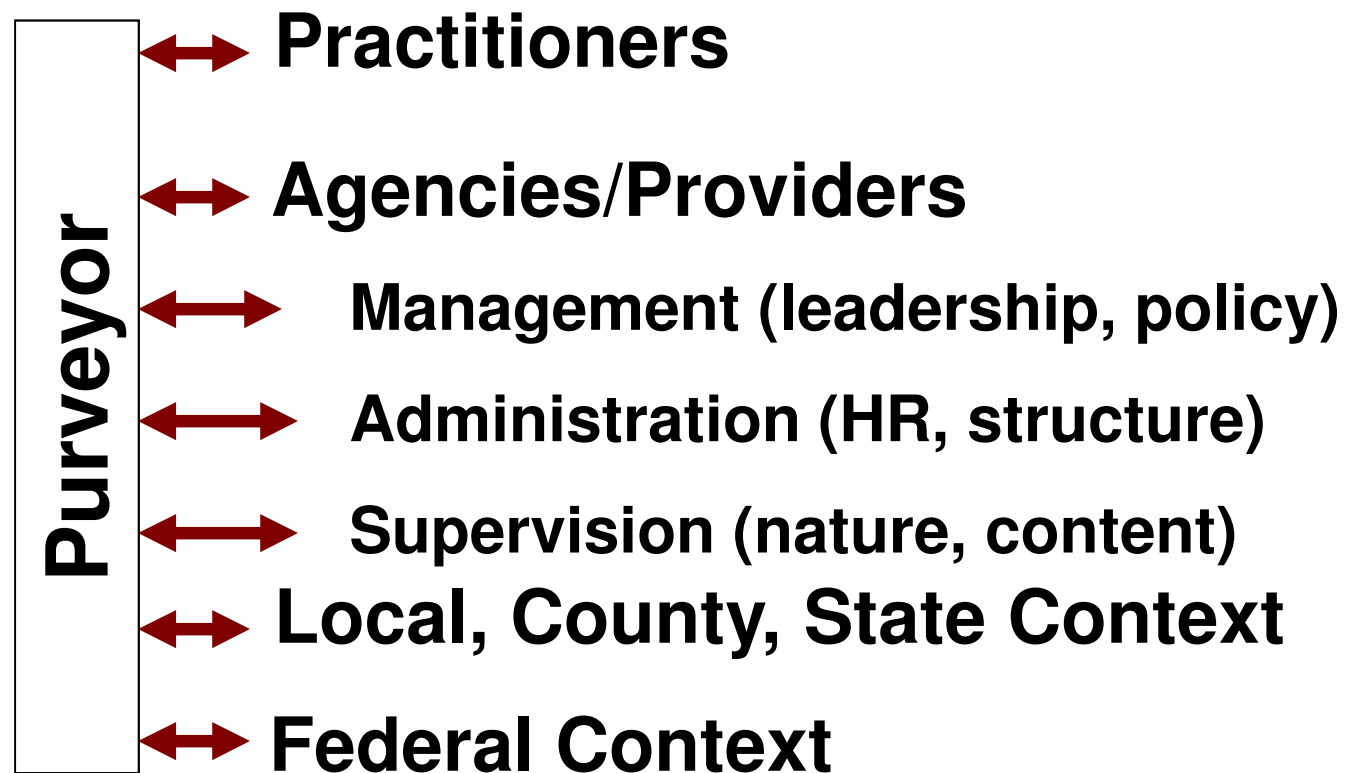


# Implementation Framework



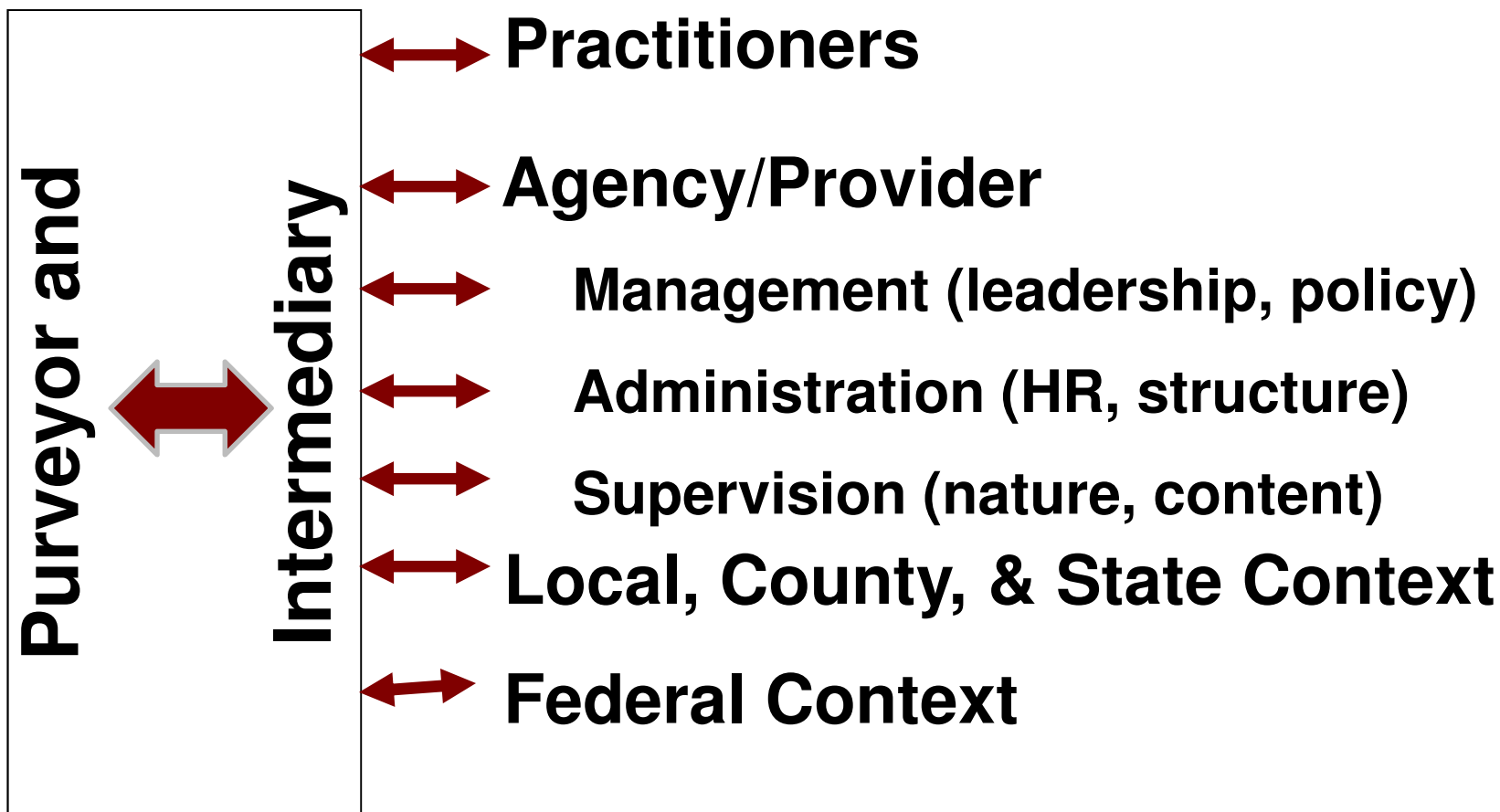
# Active Purveyor Role

## Simultaneous, Multi-Level Interventions



# Purveyor AND Intermediary Structures and Strategies

## Simultaneous, Multi-Level Interventions



# Sustainable Infrastructure

## Intermediary Organizations (IO):

**A state-based or statewide infrastructure to facilitate the adoption, implementation and sustainability of a number of evidence-based programs by:**

- Broadly educating
- Assessing need, stimulating interest
- Assessing the “science”
- Connecting purveyors with organizations
- Helping adopters manage risk
- Ensuring implementation and fidelity
- Accumulating knowledge
- Building capacity
- Integrating efforts
- Managing ‘scale-up shifts’
- Assisting with alignment



# Implementation Frameworks

**Multi-dimensional, Fully integrated**

 **Implementation Drivers**

 **Implementation Stages**

 **Implementation Teams**

 **Improvement Cycles**

# Implementation Frameworks

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**Multi-dimensional, Fully integrated**

 **Implementation Drivers**

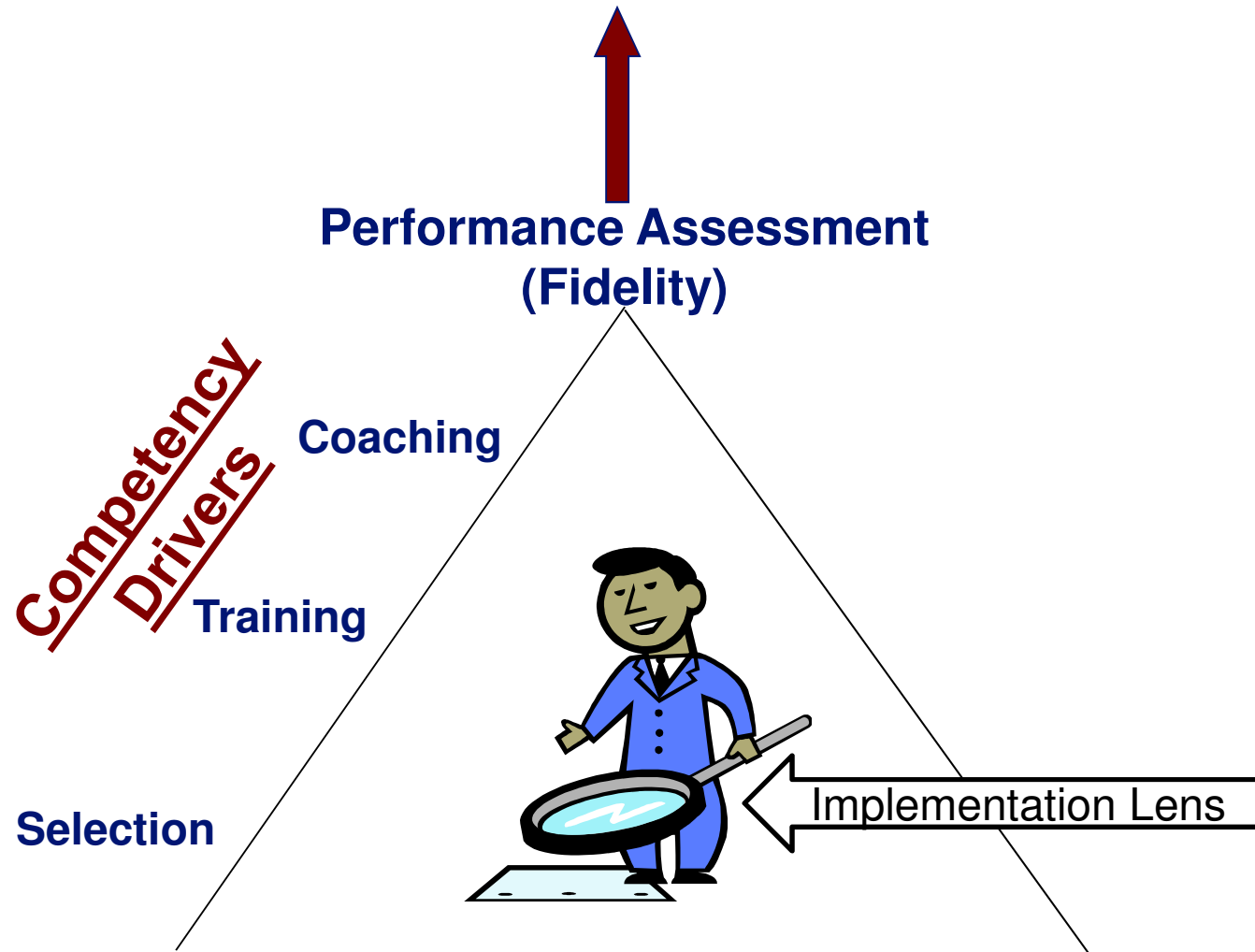
 Implementation Stages

 Implementation Teams

 Improvement Cycles

***Implementation  
Drivers***

**Positive Outcomes**



# Sobering Observations

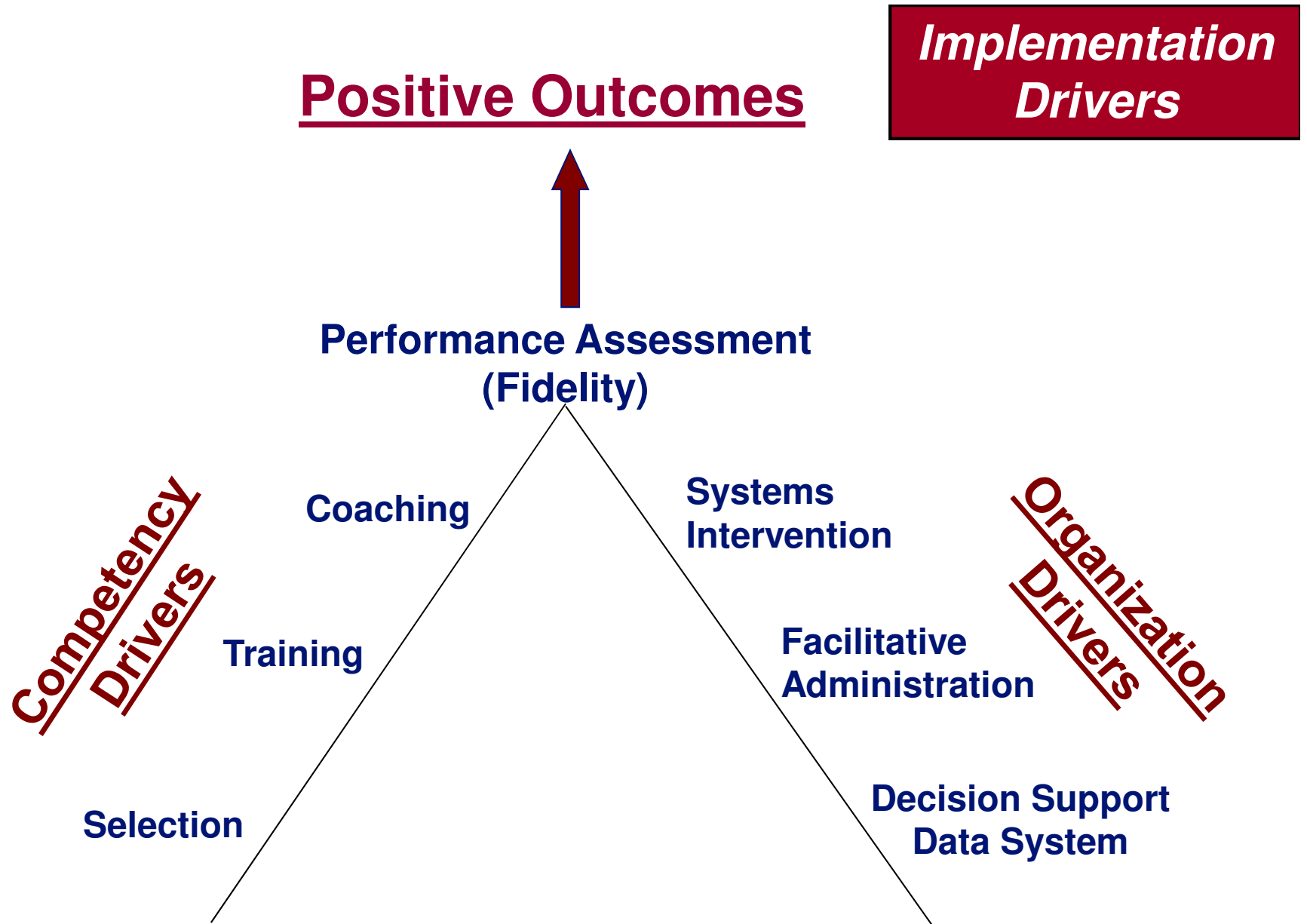
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**"All organizations [and systems] are designed, intentionally or unwittingly, to achieve precisely the results they get."**

**R. Spencer Darling  
Business Expert**

**"The tyranny of the status quo."**

**Fritz Oser  
Educator**



# System Stability

**EXISTING SYSTEM**



**Effective Innovations are  
Changed to Fit the  
System  
Or Operate in the Shadows  
(The Ghost System)**

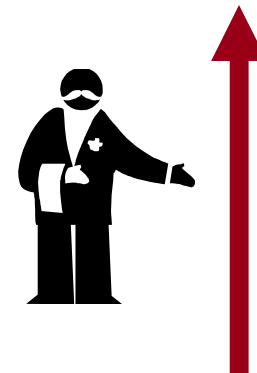
# Effective System Change

**EXISTING SYSTEM**

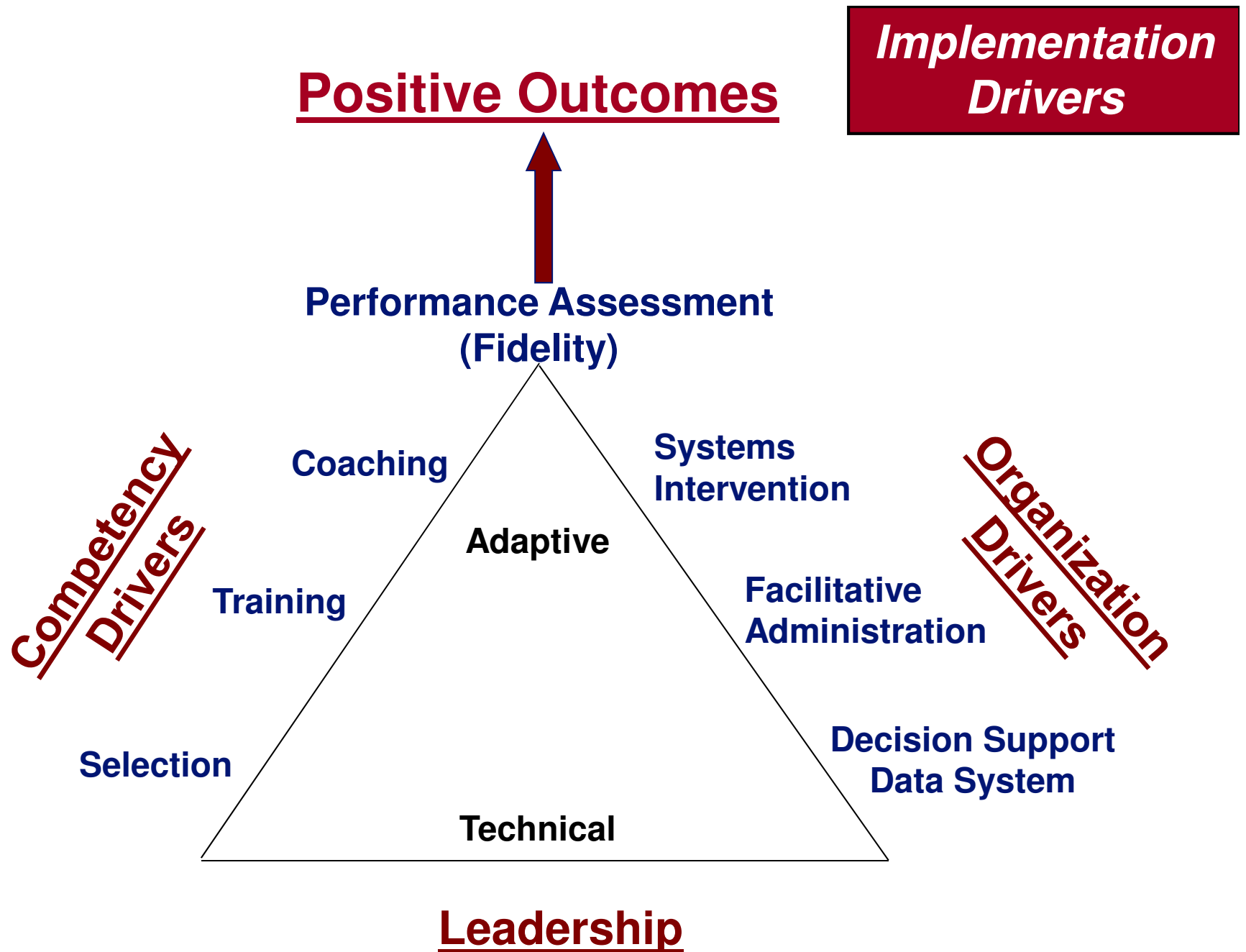


**Effective Innovations are  
Changed to Fit the  
System  
Or Operate in the Shadows  
(Ghost System)**

**EXISTING SYSTEM IS  
CHANGED TO SUPPORT  
THE EFFECTIVENESS OF  
THE INNOVATION**



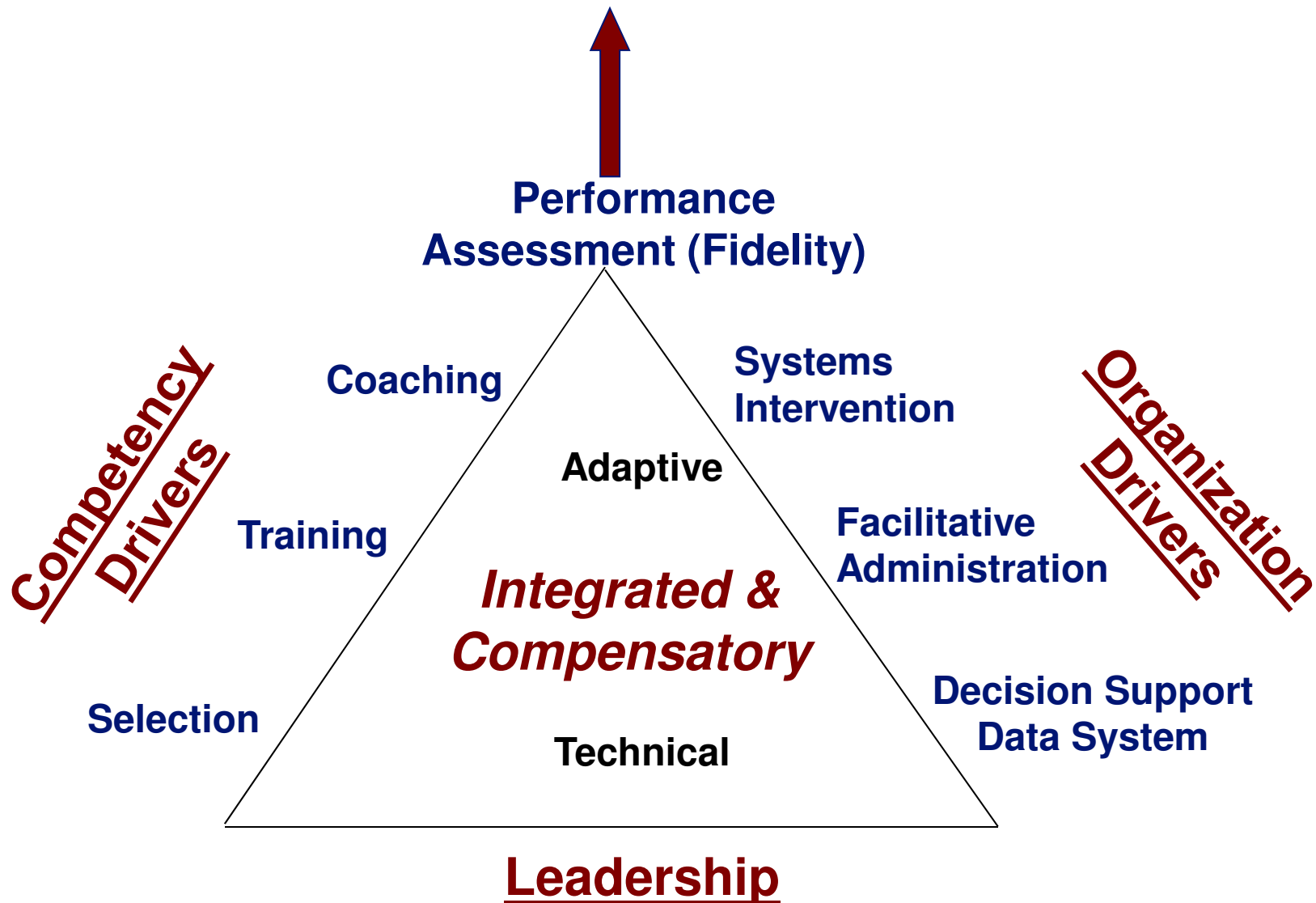
**(Host System)  
EFFECTIVE INNOVATION**





***Implementation  
Drivers***

**Positive Outcomes**



# Implementation Frameworks

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 **Implementation Drivers**

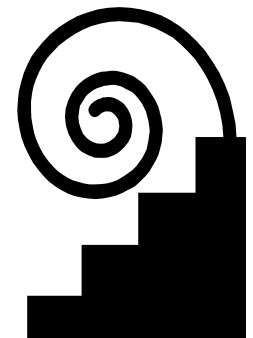
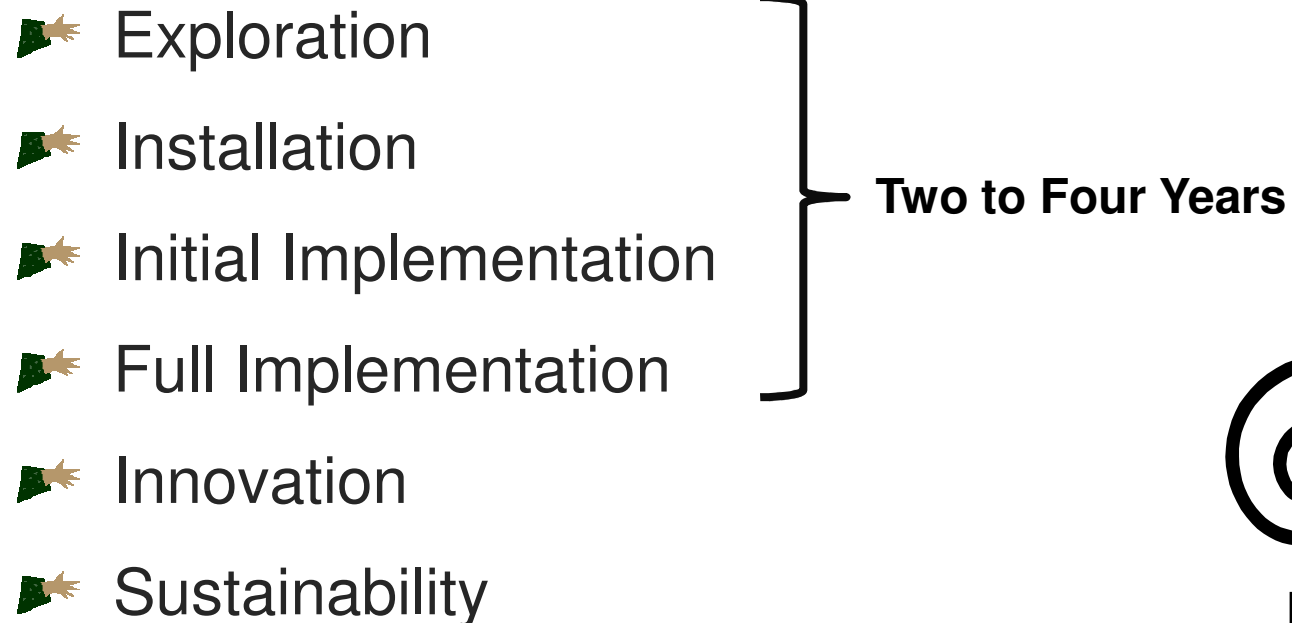
 **Implementation Stages**

 **Implementation Teams**

 **Improvement Cycles**

# Stages of Implementation

Major Implementation Initiatives occur in stages:



# Implementation Frameworks

**Multi-dimensional, Fully integrated**

 Implementation Drivers

 Implementation Stages

 **Implementation Teams**

 Improvement Cycles

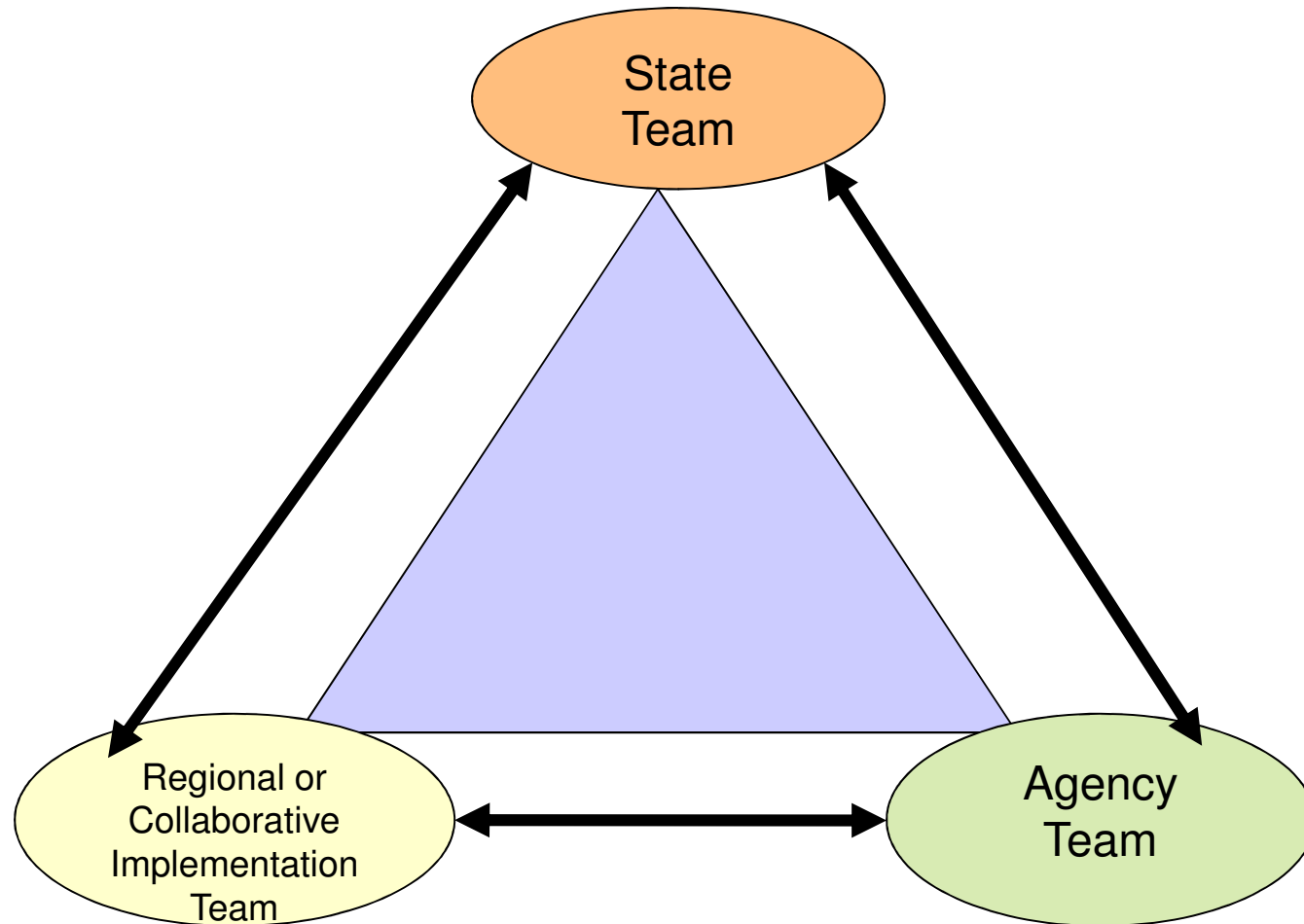
# Implementation Team

- A group that knows the innovation very well (formal and practice knowledge)
- A group that knows implementation very well (formal and practice knowledge)
- A group that knows improvement cycles to make intervention and implementation methods more effective and efficient over time

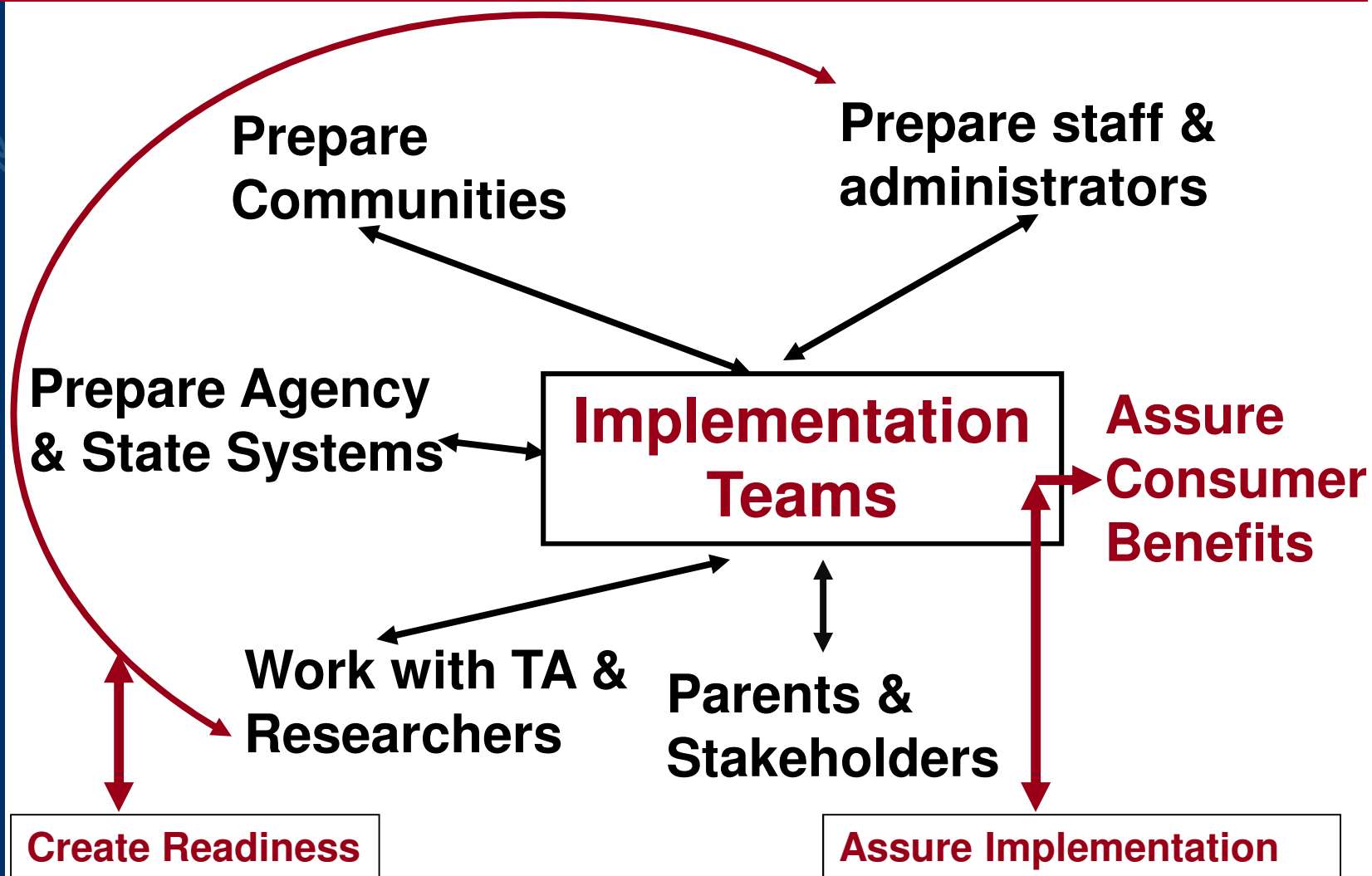
# Implementation Teams

-  At multiple levels
-  Integrated and Interlocking
  -  Agency Teams
  -  Community Teams
  -  State Team
-  Focus is on
  -  Fidelity & outcomes,
  -  Alignment (funding and policy)
  -  Problem-Solving and Sustainability
  -  Capacity building

# Linked Implementation Teams



# Implementation Team





# Implementation Frameworks

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**Multi-dimensional, Fully integrated**

 **Implementation Drivers**

 **Implementation Stages**

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 **Improvement Cycles**

# Improvement Cycles

 **Transformation Zones**

 **Policy to Practice to Policy Cycles**

 **Rapid Cycle Teams**

 **Problem-solving**

 **Practice Improvement**

 **Usability Testing**

## What Do They Have In Common?

# PDSA Cycles

Shewhart (1924); Deming (1948); Six-Sigma (1990)

▶ **Plan** – Develop specific things to do

▶ **Do** – Do them (make sure)

▶ **Study** – See what happens


▶ **Act** – Make adjustments

▶ **Cycle** – Do over and over again until the goal is reached or the problem is clear (again)








# Improvement Cycle Uses

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 **Transformation Zones**

 **Policy-Practice Feedback  
Cycles**

# System Change

-  **Demonstrations or “pilots” are a place to start for innovations (“it’s possible!”)**
-  **Don’t usually lead to sustainable service and system change**
  -  **Random acts of innovation**
  -  **Person and passion dependent**
  -  **Can “ghost” system its way to success**
  -  **Executed by the “extraordinary”**
  -  **No replicable implementation infrastructure**

# Transformation Zone

**A representative but manageable  
“service zone” to focus on**



**Adopting and installing the  
innovation**



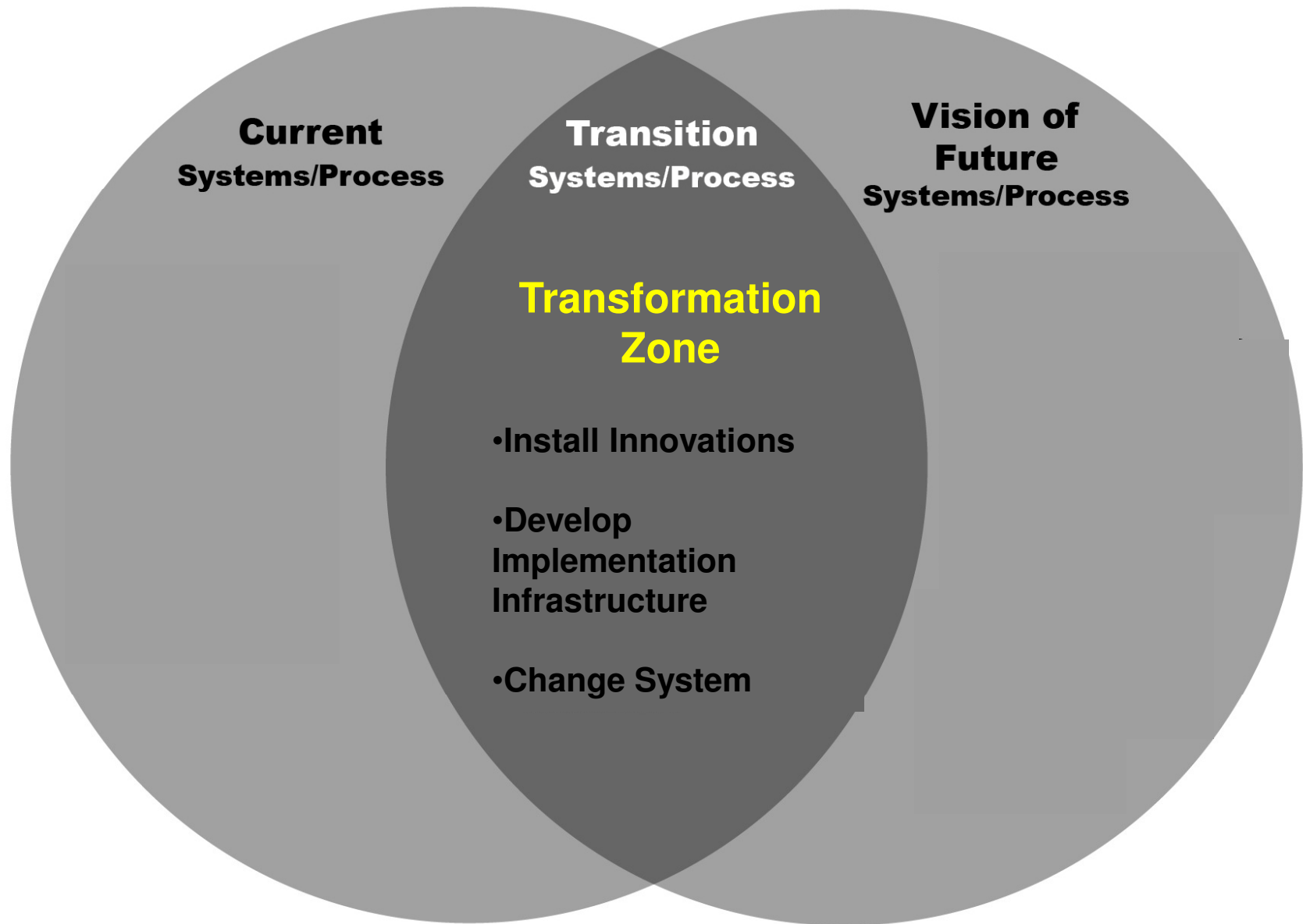
**And implementation infrastructure  
development**



**And organizational change**



**And systems change processes**



**Current  
Systems/Process**





**Transition  
Systems/Process**

**Vision of  
Future  
Systems/Process**

**Transformation  
Zone**

- Install Innovations
- Develop  
Implementation  
Infrastructure
- Change System

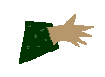



# Transformation Zone

- 
**A “vertical slice” of the service system (from the front-line to the Capitol)**
- 
**The “slice” is small enough to be manageable**
- 
**The “slice” is large enough to include all aspects of the system (providers, partners, service system, urban, rural, frontier, diverse communities)**
- 
**The “slice” is large enough to “disturb the system” – a “ghost” system won’t work.**



# Transformation Zone

 **Transformation Zones provide opportunities to...**

-  **Manage the risks (most innovations don't work at first) and experience intended and unintended outcomes**
-  **Limit the damage (quick detection, recovery, repair)**
-  **Document “what works”**
-  **Consider the implications of scaling-up**

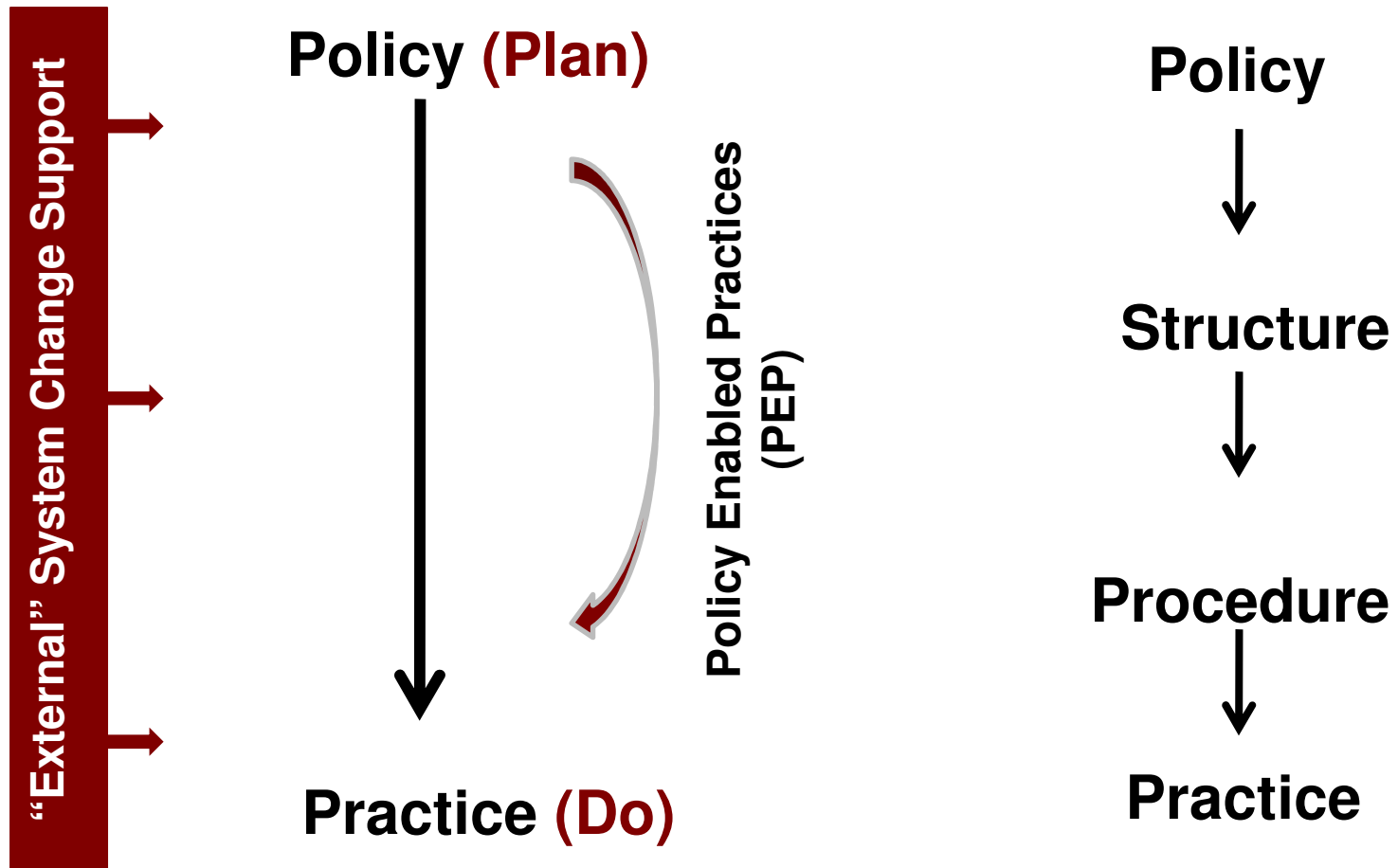
# Improvement Cycle Uses

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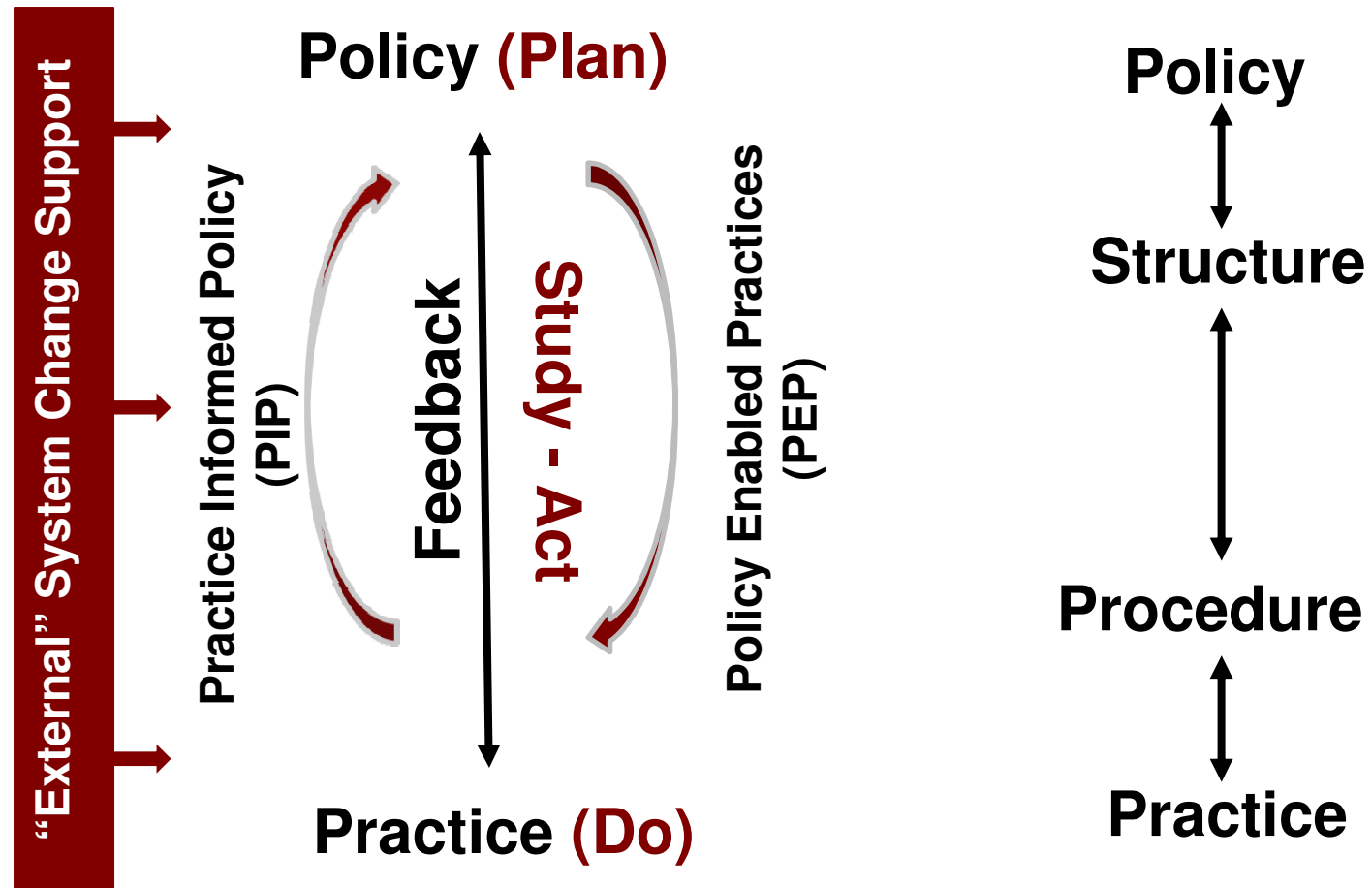
 Transformation Zones

 **Policy-Practice Feedback Cycles**

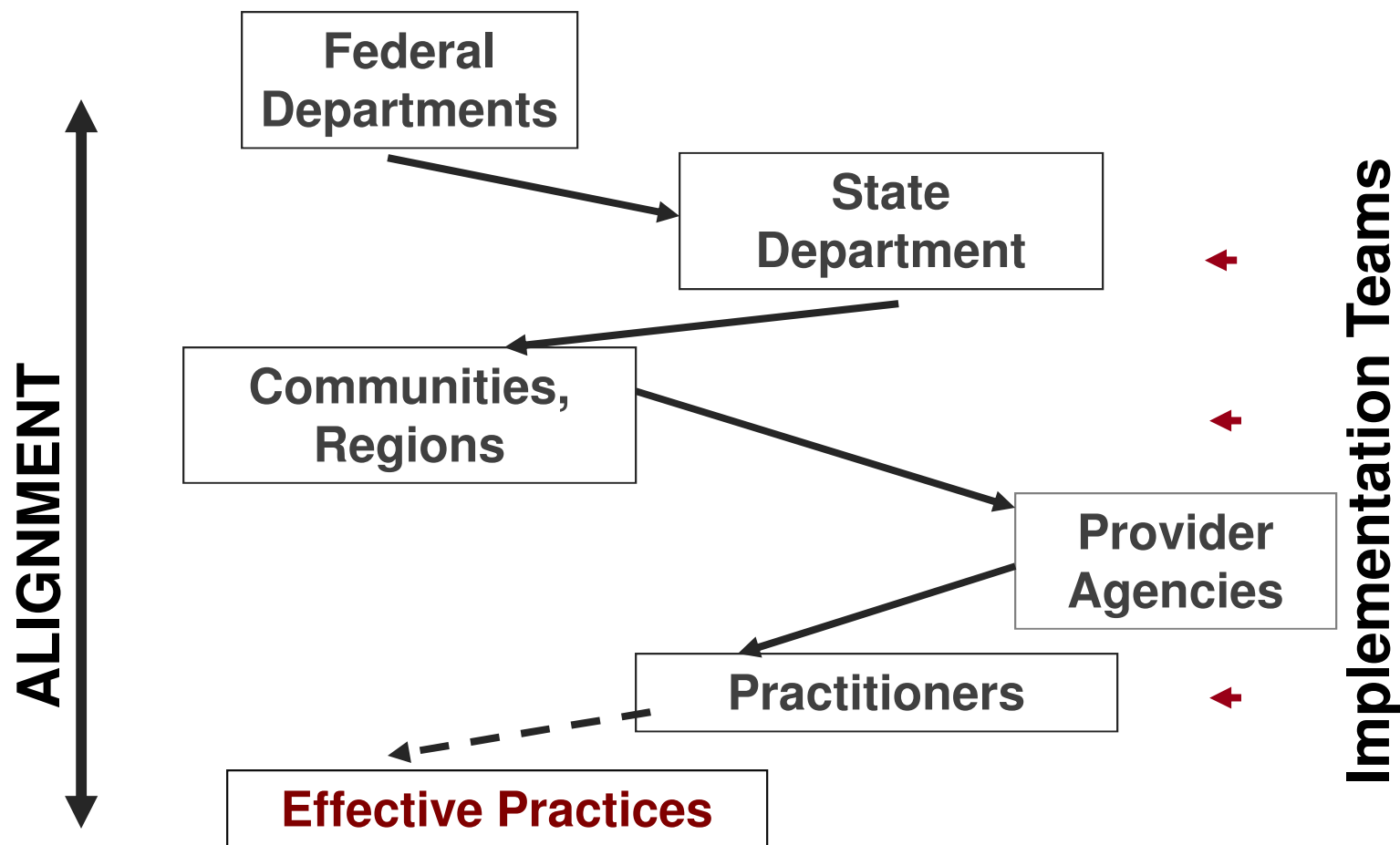
# Policy → Practice



# Policy ↔ Practice Feedback Loops



# System Alignment







**FORM SUPPORTS FUNCTION**

# Implementation Frameworks

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**Multi-dimensional, Fully integrated**

-  **Implementation Drivers**
-  **Implementation Stages**
-  **Implementation Teams**
-  **Improvement Cycles**

# Scalability

- 🚩 **What do we mean by “going to scale”**
- 🚩 **NIRN definition: An evidence-based intervention that reaches 60% of the population that could benefit**

# Implementation and Scale -Up

- First we *implement successfully* – then we scale-up ....successful scale-up requires attention to the science and practice of *implementation*
- Need to start with “demonstrations” but within a plan to scale-up
- Requires change at the
  - Practice Level (Front Line Staff)
  - Organization Level (Supervisor, Agency Administrators, Collaborative Groups)
  - System Level (Funders, Government, Regulatory Bodies)



# ...Can we go to scale?

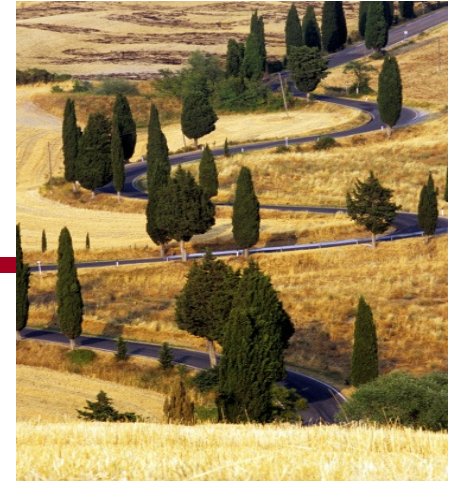
🚩 EBP now are “boutique” operations

👉 Now have convincing demonstrations that EBP can be implemented in the real world

👉 Wonderful! But they need to be used and sustained on a scale sufficient to solve social problems

👉 Current estimates of some “best” usage data = 10% of the population who could benefit



# Scalability Challenges



- It's a long and winding road
- The infrastructure costs to build the road are not understood or accepted
- Requires ***aligned*** changes at many levels
- We aren't always good at recognizing when it's time for a “**scale-up shift**”
- Each “link” in the scale-up chain requires resources, rigor, and research

# What Will It Take to Give Us A Sporting Chance!



-  Science Related to....
  -  Interventions and Programs
  -  Implementation, Organization and Systems Change
-  Funded Infrastructure (Drivers)
-  Informed Communities
-  Skillful Purveyors & Intermediaries
-  Competent Providers
-  Supportive Organizations
-  Hospitable & Aligned Systems
-  Leadership at All Levels



# Implementation Science

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## **Global Implementation Conference 2011**

 [www.implementationconference.org](http://www.implementationconference.org)

 **Integrate the science, practice, policy of implementation, organization change, and system transformation**



# For More Information

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[www.scalingup.org](http://www.scalingup.org)

<http://nirn.fpg.unc.edu/>

<http://www.fpg.unc.edu/~nirn/resources/publications/Monograph/>

# For More Information

## Implementation Research: A Synthesis of the Literature



Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

*Download all or part of the monograph at:*

<http://www.fpg.unc.edu/~nirn/resources/detail.cfm?resourceID=31>

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