



**US DEPARTMENT OF LABOR**

**MULTI-STATE**

**ADVANCED MANUFACTURING CONSORTIUM**

**OVERVIEW / ORIENTATION**

# OVERVIEW TOPICS

1. MISSION & FOCUS
2. ORGANIZATION MODEL
3. THE PROCESS
  - a. WHO
  - b. WHAT
  - c. HOW
  - d. WHEN
4. “SEEING the FUTURE” – PRESENT and PREFERRED STATE
5. THE WORK PLAN . . .



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# THE GRANT – MISSION and FOCUS

## ONE SENTENCE MISSION:

- Improve Manufacturing Education to better align with Industry and Student Requirements (Customers)

## FOCUS:

- National Innovation with Local Implementation
- Competency Based Education Approach
- National Standard Competencies & Assessments
- Continuous Improvement . . . (Never stops)



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# Organization Model

**HFCC Project Director**

(2) Program Managers (PM)  
**Project Support Team:**  
Administration, Data, Financial & Marketing

**OVERSEE PROJECT IMPLEMENTATION**

**EVALUATE PROJECT IMPACT**  
(Continuous Improvement Loop)

Continuous Improvement Process (QS or CI Person)  
Independent Educational Evaluators (3<sup>rd</sup> Party)  
Progress against Plan (Program Monitor)

**HFCC Executive**

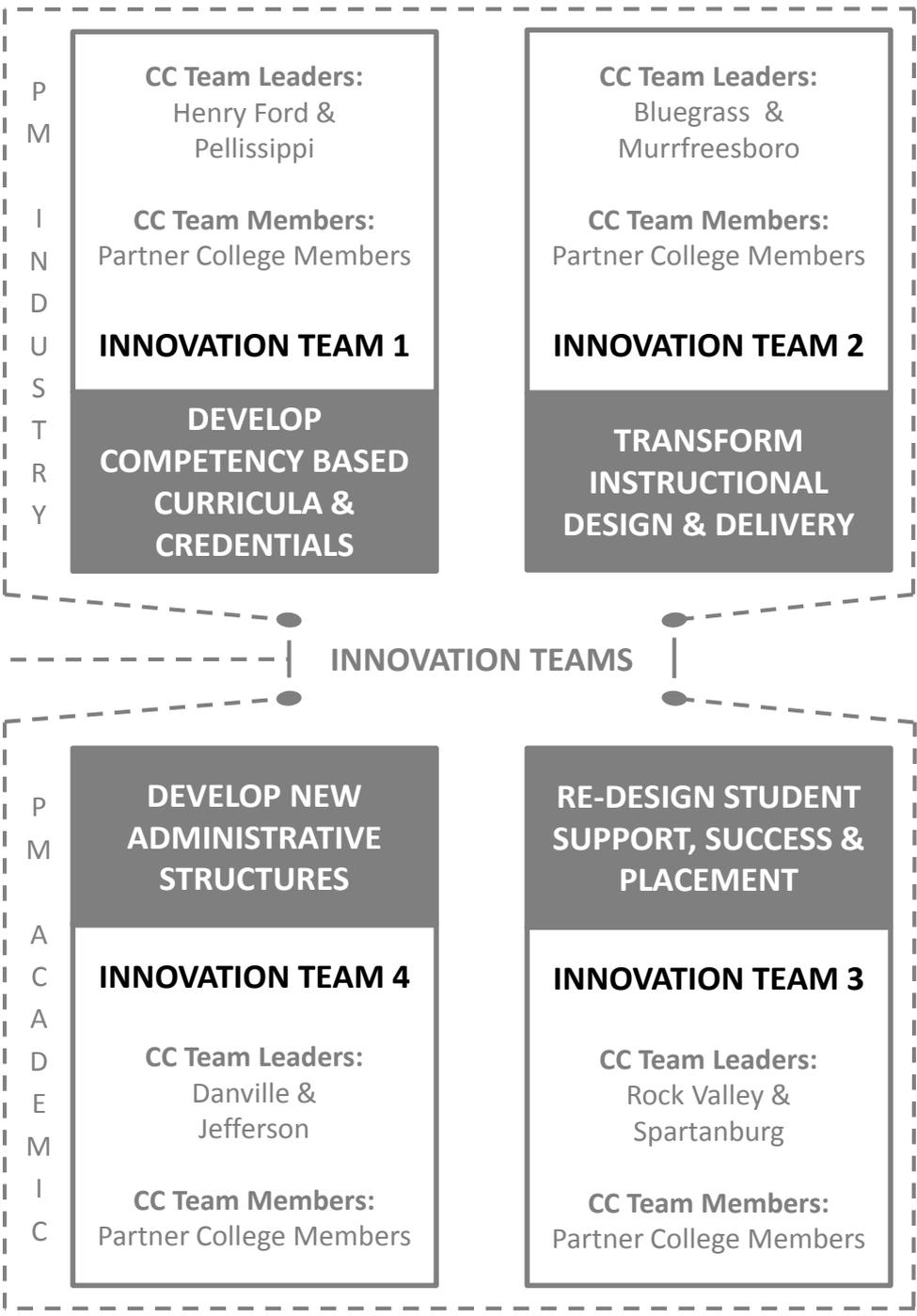
College Presidents, Industry, NAM, & AMTEC  
**EXECUTIVE STEERING COMMITTEE**

**MONITOR STRATEGIC DIRECTION**

**INNOVATE MANUFACTURING PROGRAMS**  
(National Innovation)

**IMPLEMENT PROJECT DELIVERABLES**  
(Local Implementation)

**PROJECT OPERATIONS COMMITTEE**  
13 Full-Time College Implementation Facilitators



**IMPLEMENTATION TEAMS**

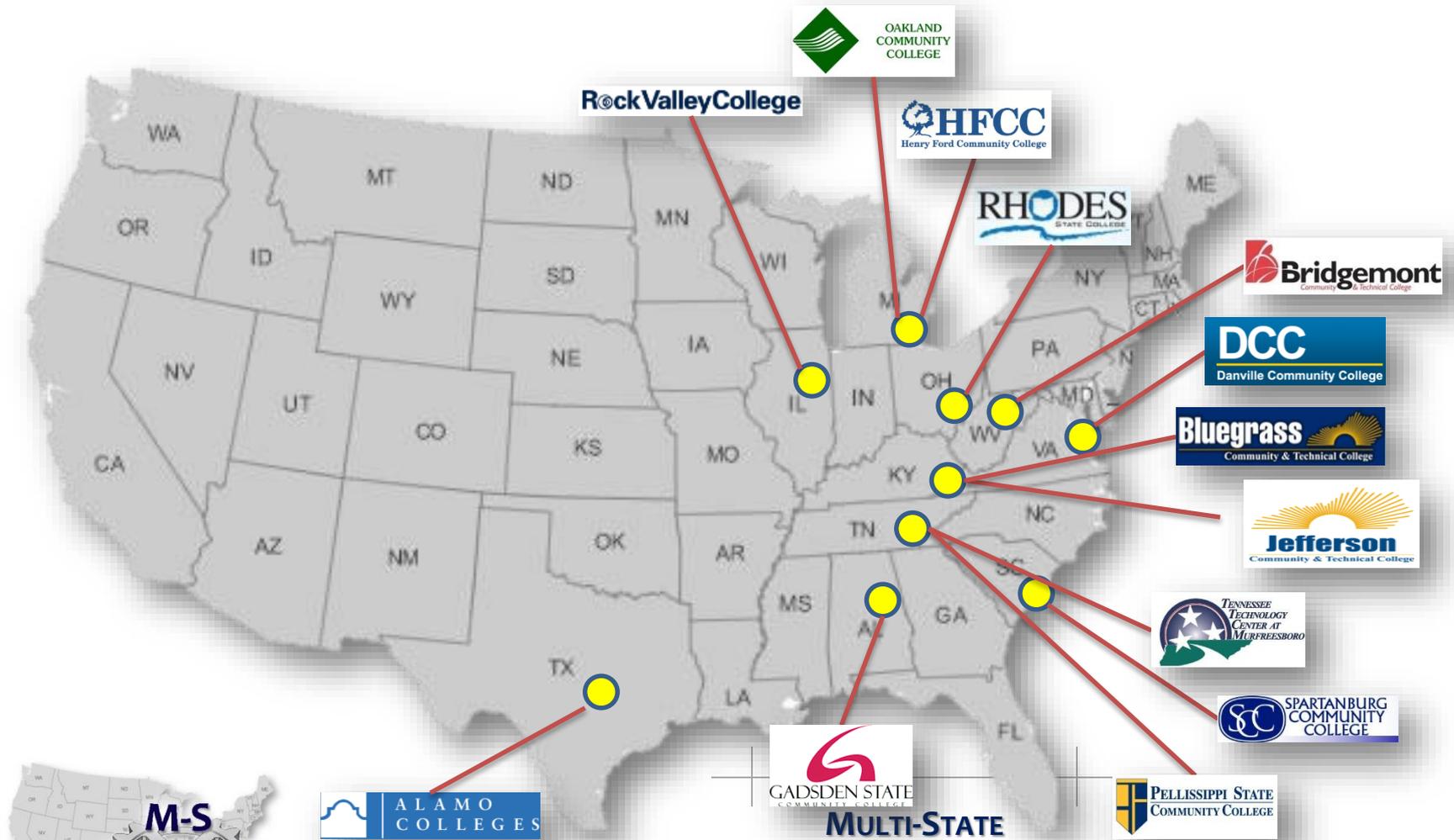
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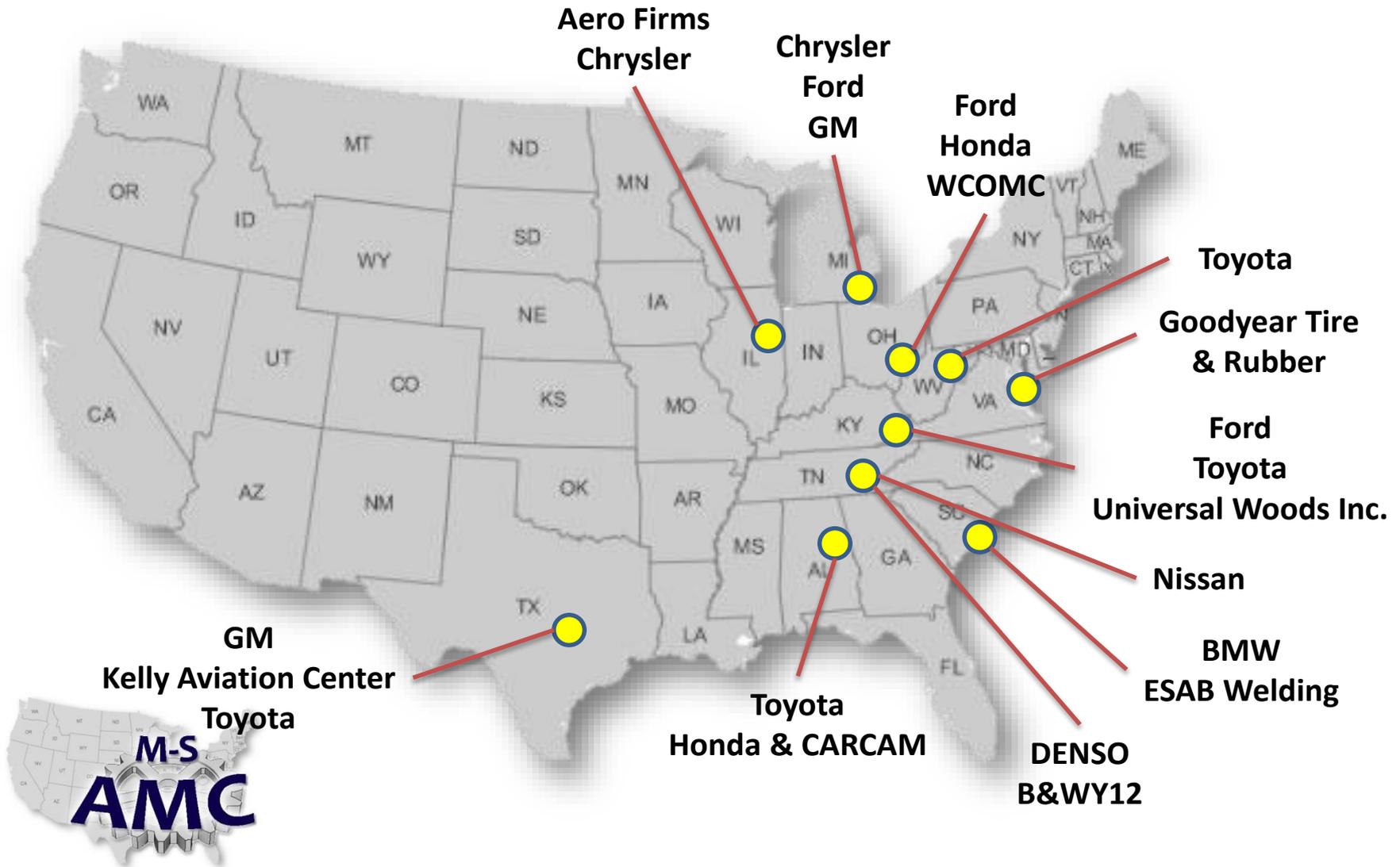
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# M-S AMC: 13 College Partners



**ADVANCED MANUFACTURING CONSORTIUM**

# M-S AMC: Targeted Local Industry Partners



# M-S AMC: 13 College Partners

Community College Partner	Location	Business Partner Letters
Alamo Community College	San Antonio, Texas	Argo Group International Holdngs, Ltd.
Bluegrass Community and Technical College	Georgetown, Kentucky	Leggett and Platt, Inc.
Bridgemont Community College	Charleston, West Virginia	TRG Customer Solutions, Inc.
Danville Community College	Danville, Virginia	Goodyear, Shorewood Packaging
Gadsden State Community College	Gadsden, Alabama	Elwood Manpower, and Personnel Staffing, Inc.
Henry Ford Community College	Dearborn, Michigan	Chrysler, Ford, GM, Severstal Dearborn
Jefferson Community and Technical College	Louisville, Kentucky	Louisville Bedding Company
Oakland Community College	Auburn Hills, Michigan	Delphi Corporation
Pelissippi State Community College	Knoxville, Tennessee	ArcelorMittal Laplace, LLC
Rock Valley Community Colege	Rockford, Illinois	Gatehouse Media IL Holding, Inc.
Rhodes Community College	Lima, Ohio	International Brake Industries, Inc.
Spartanburg Community College	Spartanburg, South Carolina	Teijin Monofilament U.S., Inc.
TCAT – Tennessee College of Applied Technology	Murfreesboro, Tennessee	Nissan



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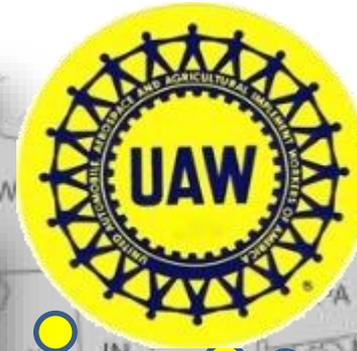
# M-S AMC: National Project Partners



**CSW**

Corporation for a  
**Skilled Workforce**

**Good Jobs. Thriving Communities.**



**FANUC**  
Robotics



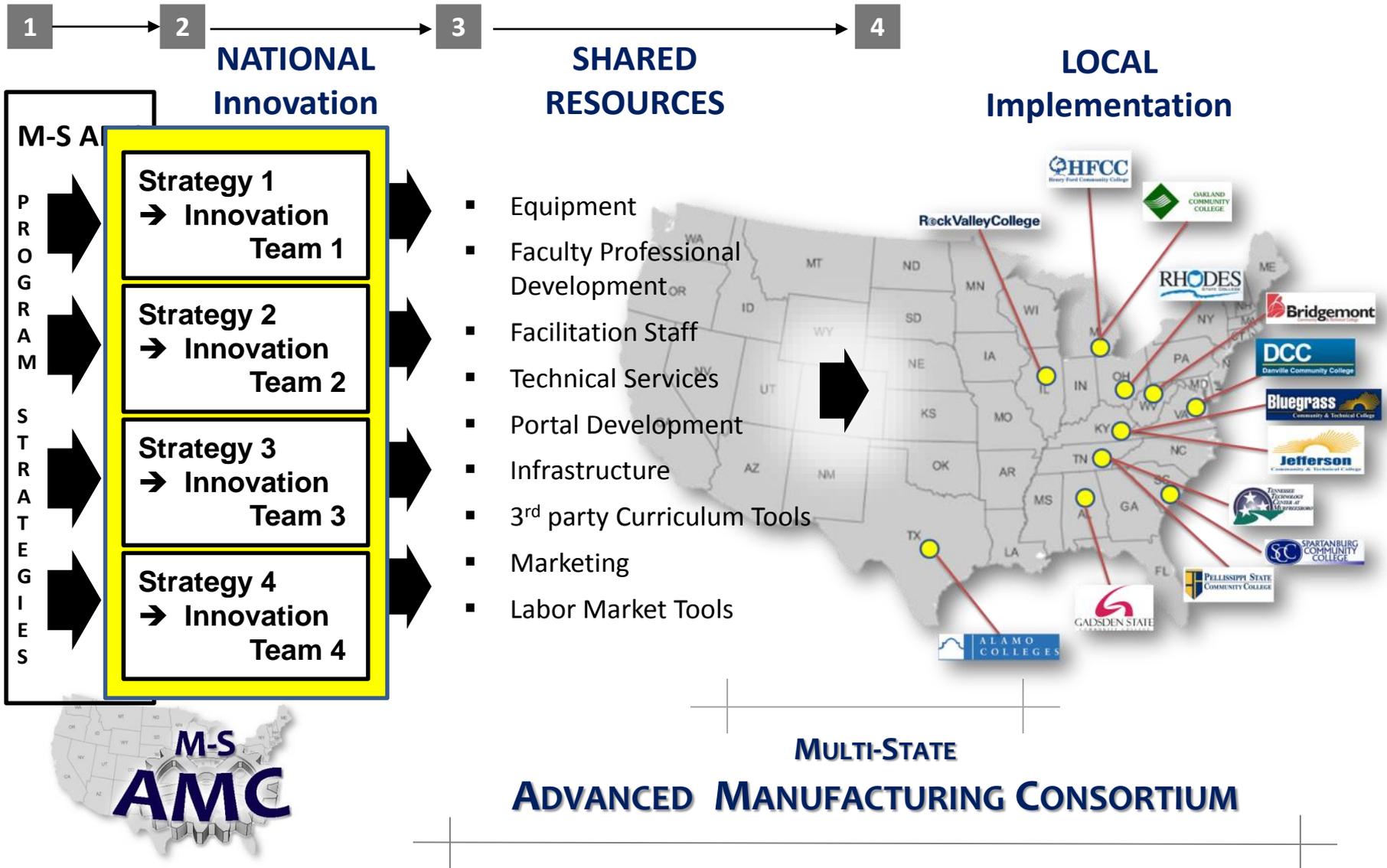
**M.** NATIONAL ASSOCIATION OF  
**Manufacturers**



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# M-S AMC: National Innovation with Regional Implementation



**INNOVATION**



**TEAM 1**



**Pat Riddle - PSCC**  
I-Team Co-Leader



**Joel Milinsky - HFCC**  
I-Team Co-Leader



**Dr. Juan Song - ACC**  
Consensus Member



**Jeff Arnold - DCC**  
Consensus Member



**Lynn Dale - SCC**  
Associate Member



**Dr. Paul Dettmann - RSCC**  
Consensus Member



**Paul Turner - BCTC**  
Consensus Member

**INNOVATION**



**TEAM 2**



**Mike Franklin - BCTC**  
I-Team Co-Leader



**Charlie Wesenberg - TCAT**  
I-Team Co-Leader



**Marv Crowe - SCC**  
Consensus Member



**Norm Mortensen - BCTC**  
Consensus Member



**Paul Turner - BCTC**  
Associate Member



**Peter Klein - OCC**  
Consensus Member



**Stephen Wray - DCC**  
Consensus Member



**Angela Cox - JCTC**  
I-Team Co-Leader



**Gerald Sexton - DCC**  
I-Team Co-Leader



**Beverly Hilderbrand - GSCC**  
Consensus Member



**Jay Coffey - SCC**  
Consensus Member

**INNOVATION**



**TEAM 3**



**Jeff Hunt - SCC**  
I-Team Co-Leader



**John Jamont - RVCC**  
I-Team Co-Leader



**Janene Erne - OCC**  
Consensus Member



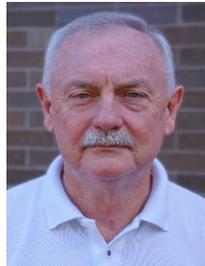
**Linda Morris - GSCC**  
Consensus Member



**Dr. Lynn Kreider - TCAT**  
Consensus Member



**Margo Meyer - RSCC**  
Consensus Member



**Marv Crowe - SCC**  
Associate Member



**Dr. Juan Song - ACC**  
Associate Member



**Lynn Dale - SCC**  
Consensus Member



**Margo Meyer - RSCC**  
Associate Member



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# WHAT

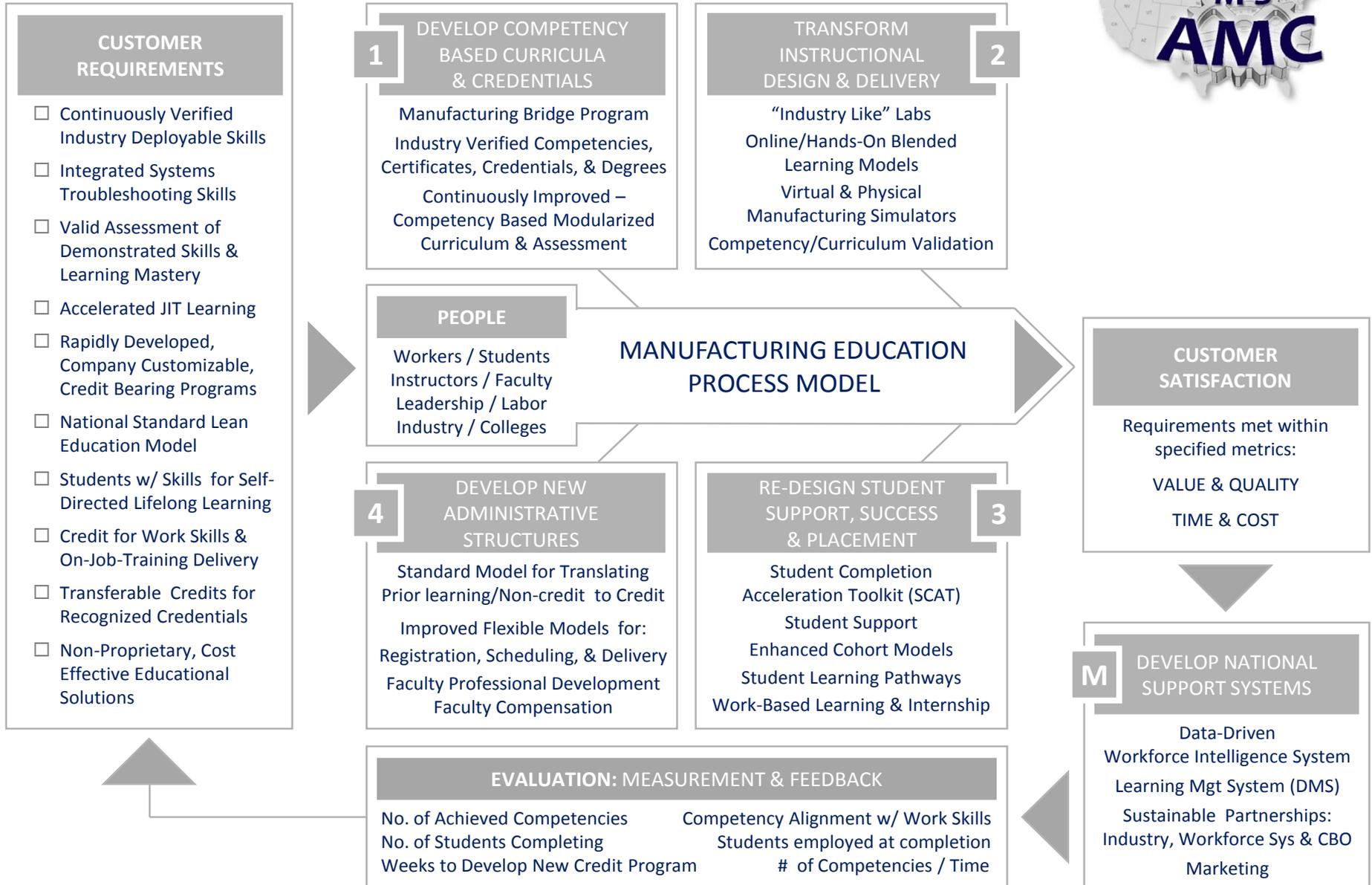
## Using a PROCESS MODEL . . .

- Provides a “Picture of the Process”
  - Driven by Customer Requirements
  - Focused on Customer Satisfaction
  - Considers every category of the work
  - Specifies metrics for Improvement
- 
- Facilitates the PROCESS



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# M-S AMC [Multi-State Advanced Manufacturing Consortium]



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# HOW

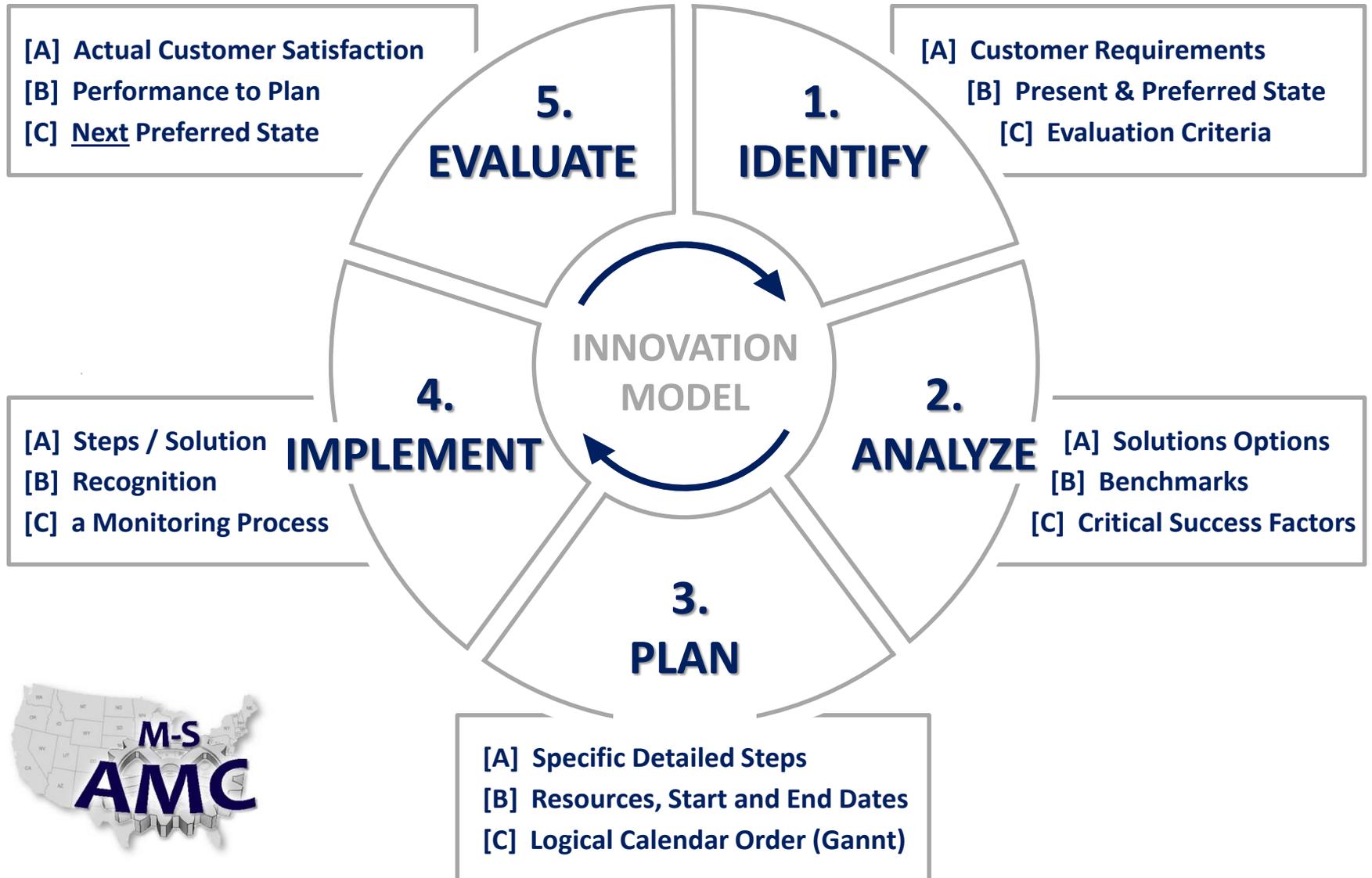
## Using an INNOVATION MODEL . . .

- 5 Steps “Lead people through the process”
- Facilitates the THINKING
- Can result in “Consensus Based Recommendations”



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# 5 STEP INNOVATION MODEL



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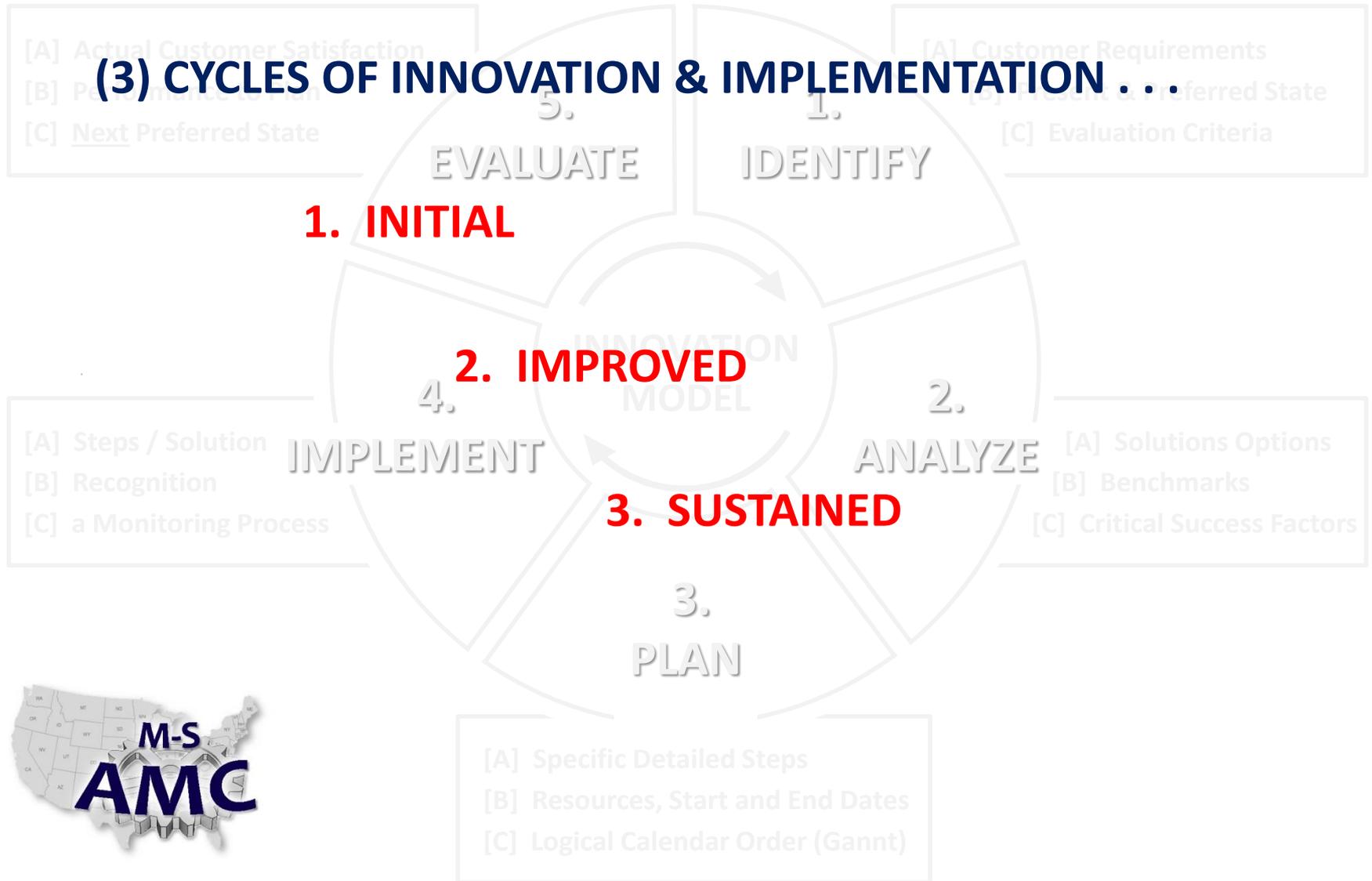
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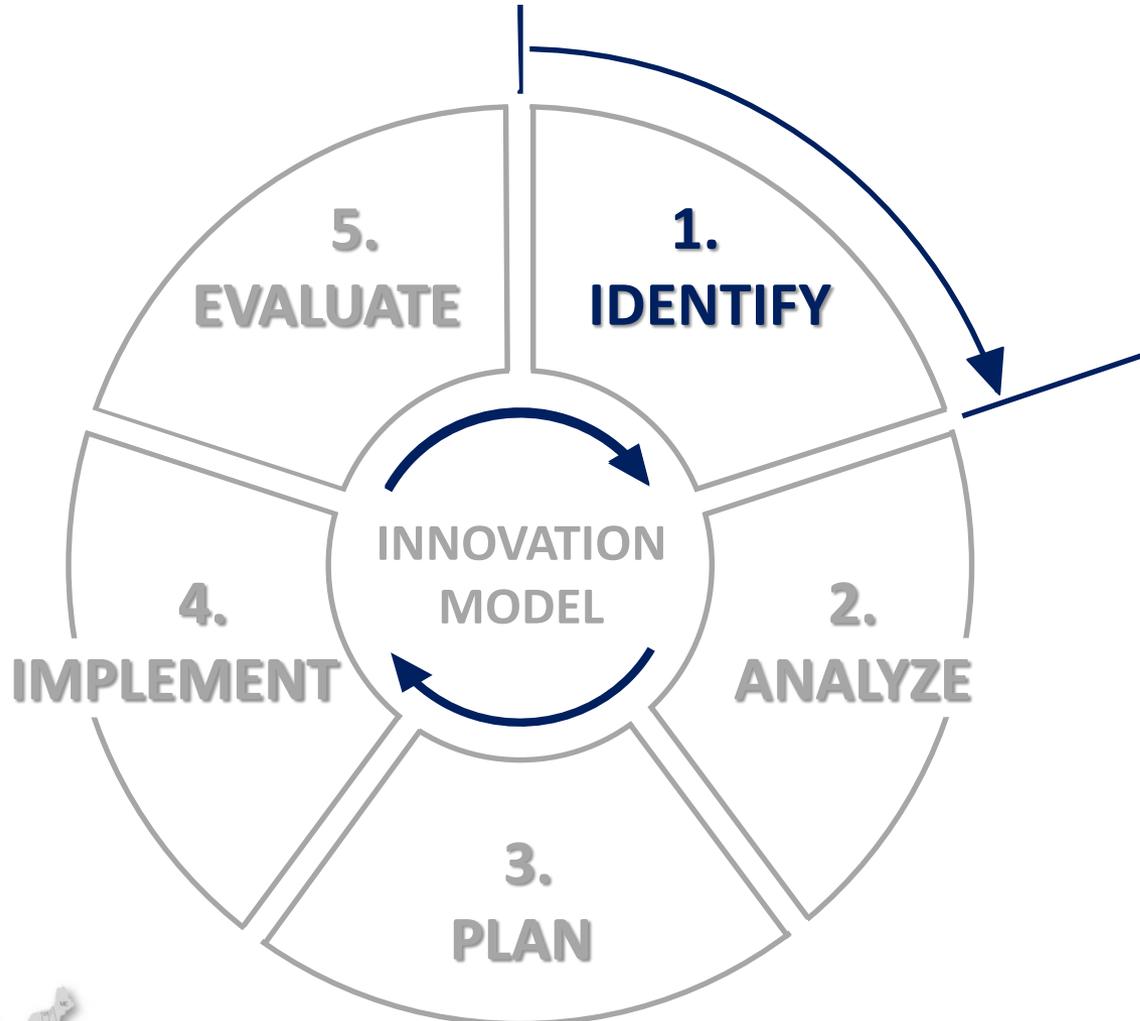
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# WHEN

## (3) CYCLES OF INNOVATION & IMPLEMENTATION . . .



# INNOVATION CYCLE 1 – INITIAL IMPLEMENTATION & TIMING

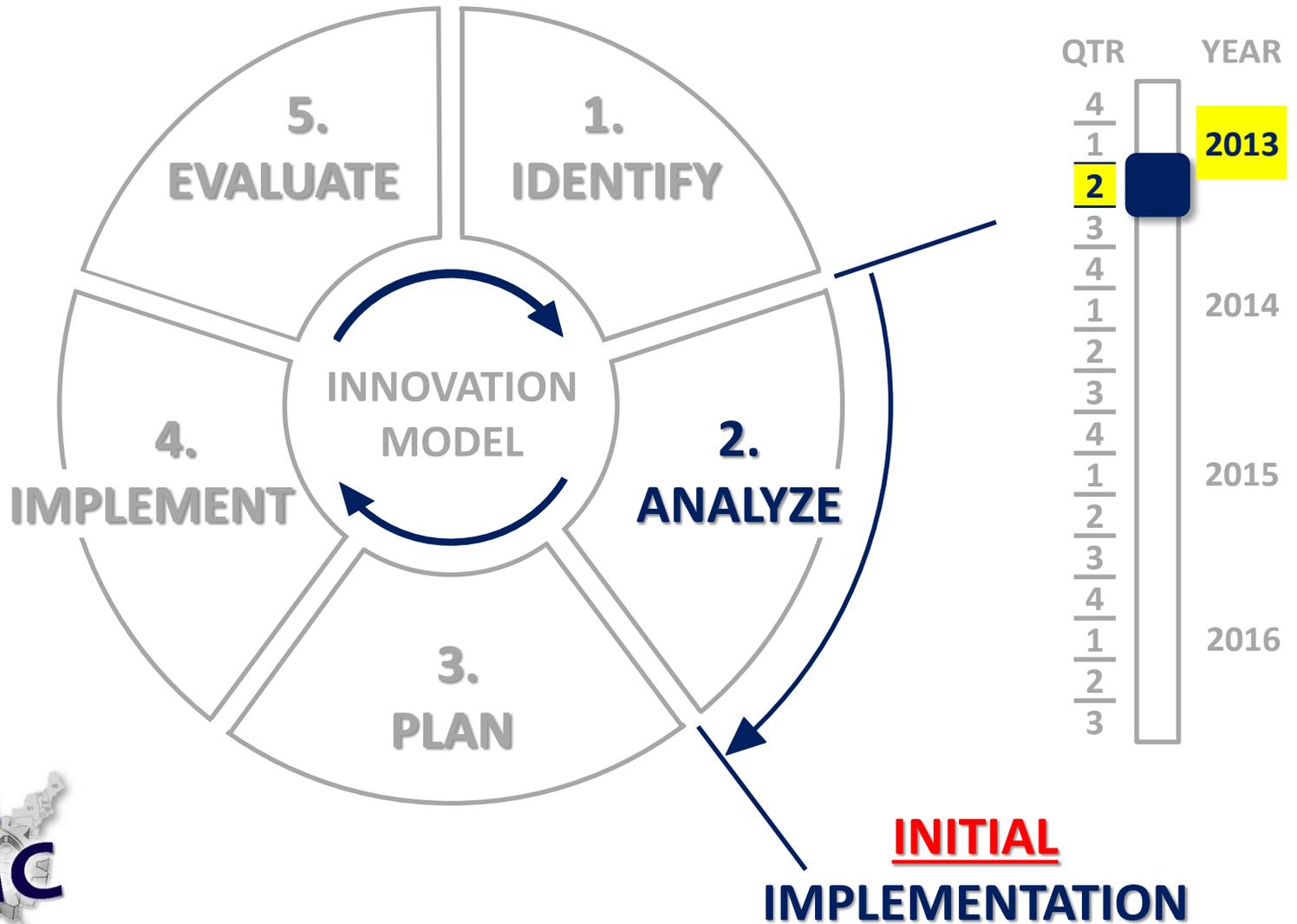


QTR	YEAR
4	2013
1	
2	
3	
4	2014
1	
2	
3	
4	2015
1	
2	
3	
4	2016
1	
2	
3	

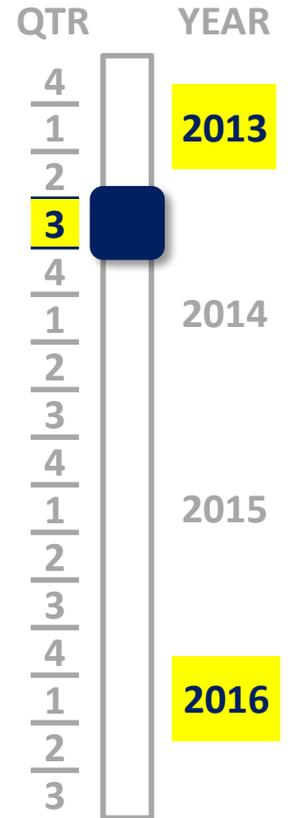


**INITIAL**  
**IMPLEMENTATION**

# INNOVATION CYCLE 1 – INITIAL IMPLEMENTATION & TIMING

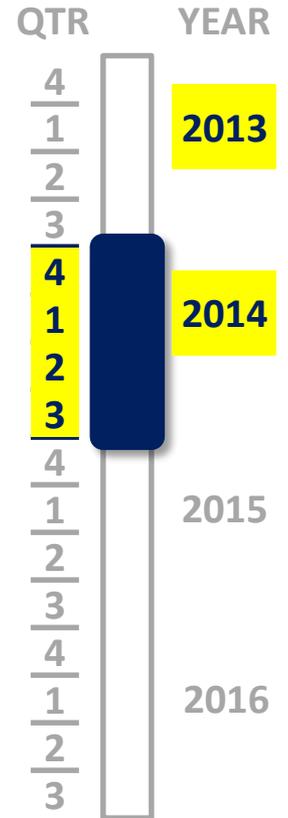
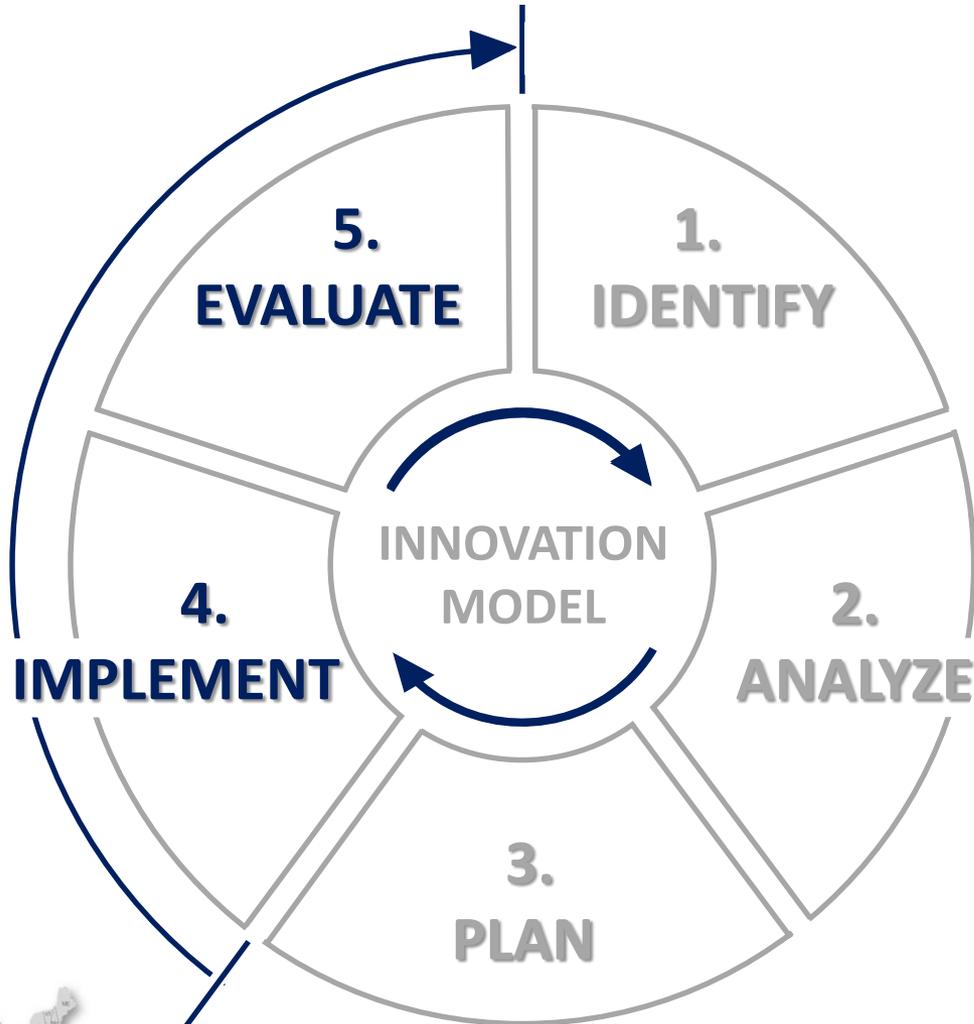


# INNOVATION CYCLE 1 – INITIAL IMPLEMENTATION & TIMING



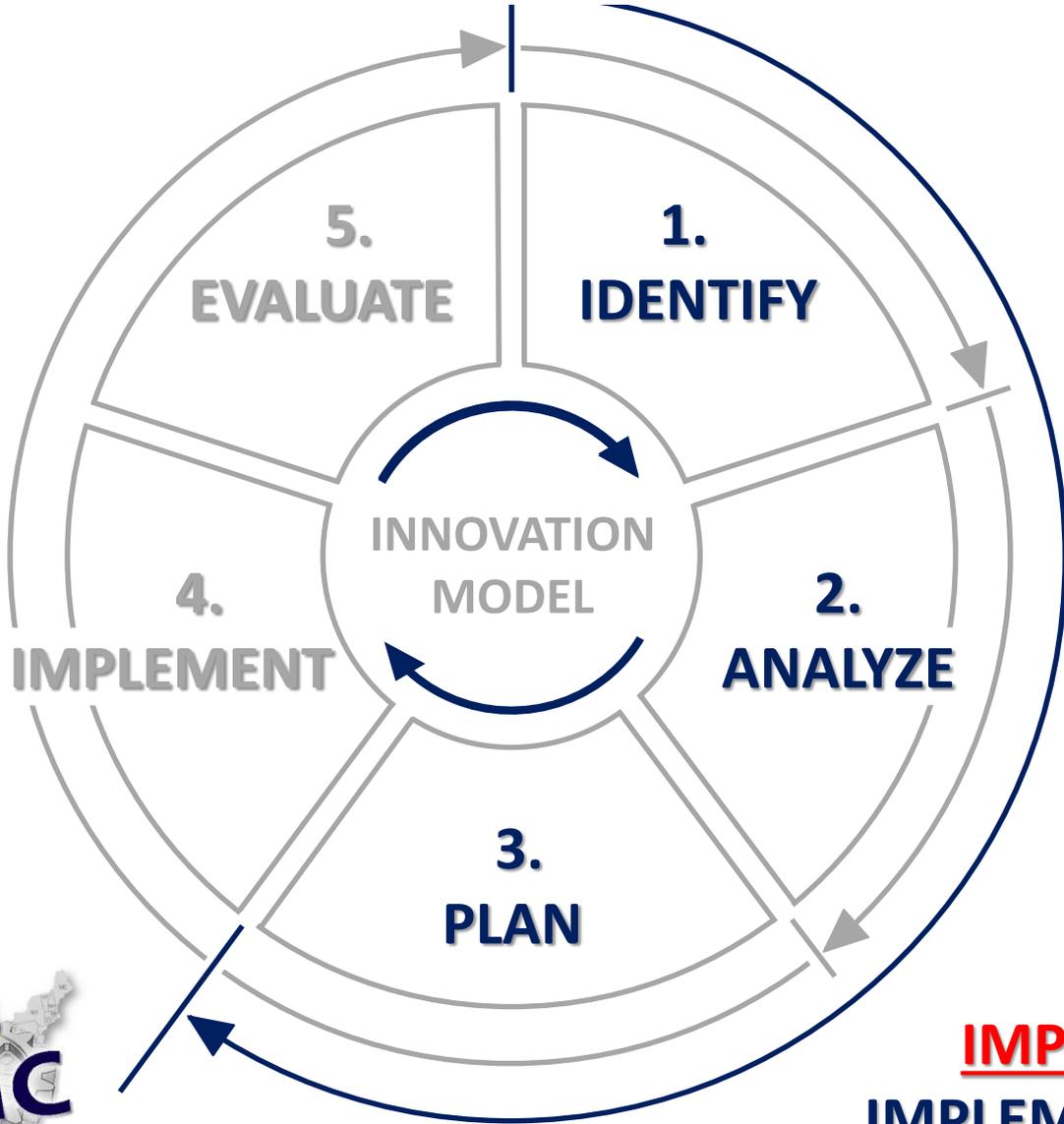
**INITIAL**  
**IMPLEMENTATION**

# INNOVATION CYCLE 1 – INITIAL IMPLEMENTATION & TIMING



**INITIAL**  
**IMPLEMENTATION**

# INNOVATION CYCLE 2 – IMPROVED IMPLEMENTATION & TIMING

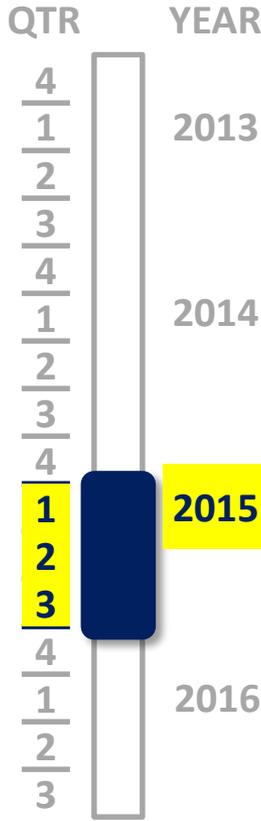
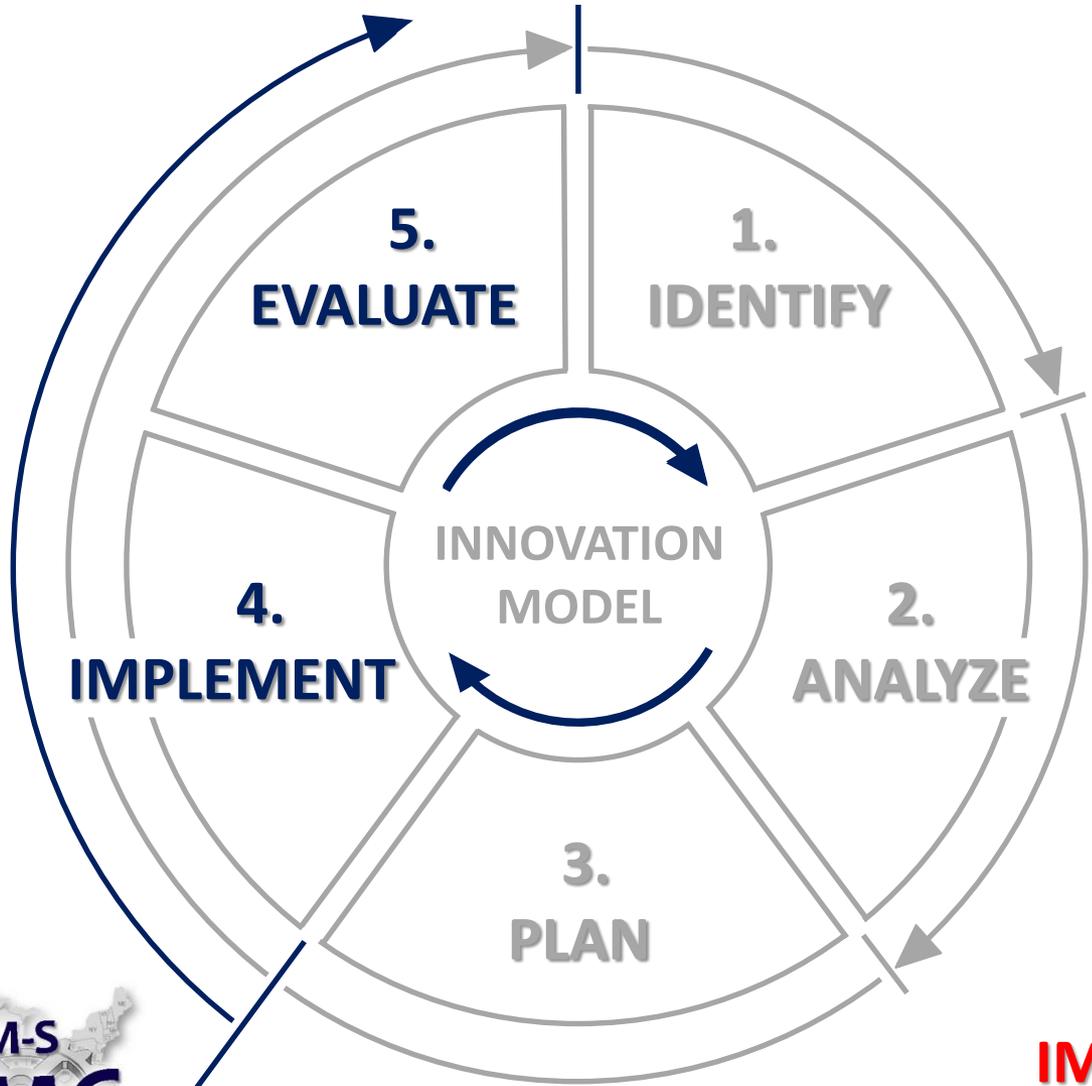


QTR	YEAR
4	2013
1	
2	
3	
4	2014
1	
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3	
4	2015
1	
2	
3	
4	2016
1	
2	
3	



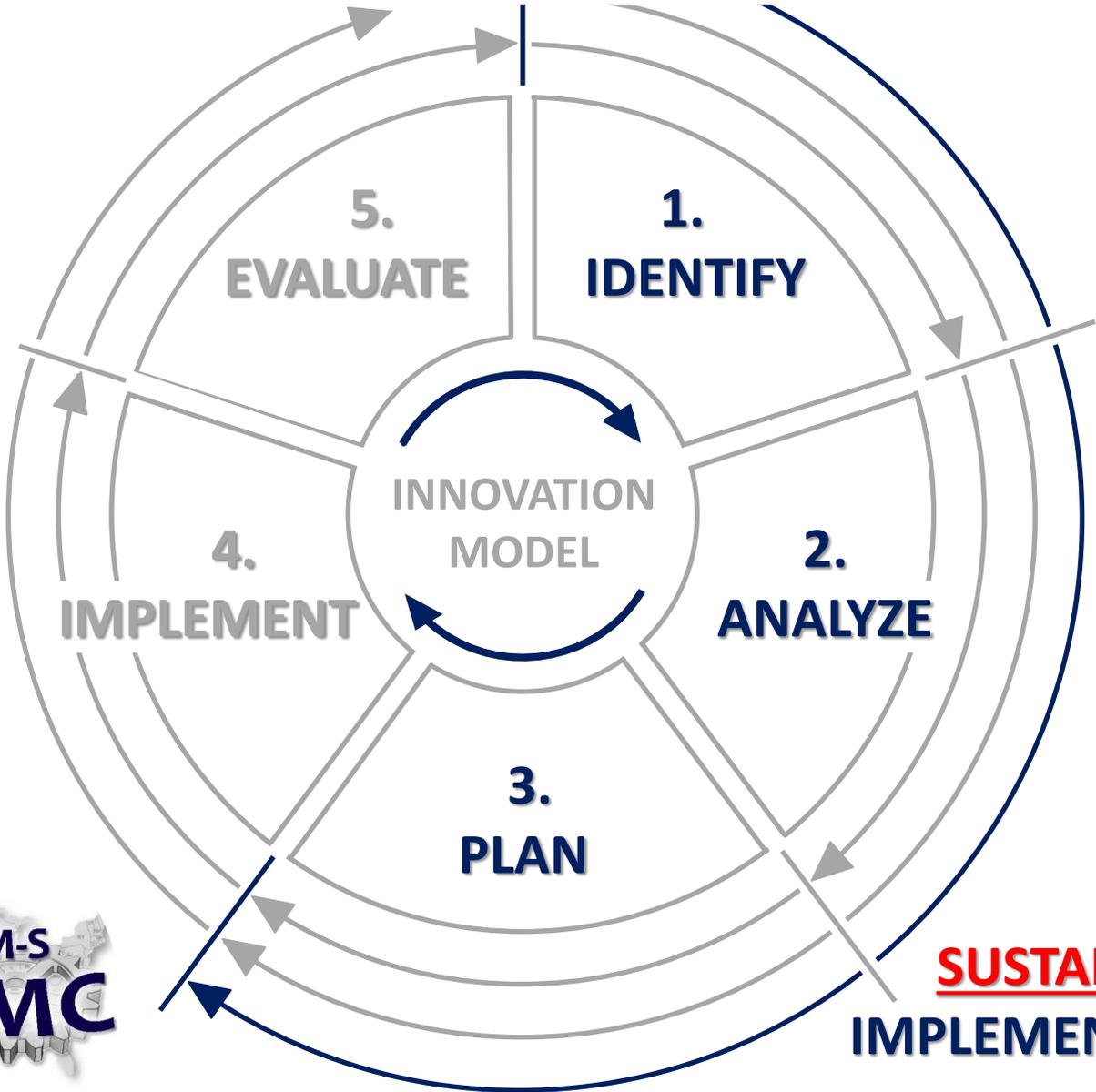
**IMPROVED**  
**IMPLEMENTATION**

# INNOVATION CYCLE 2 – IMPROVED IMPLEMENTATION & TIMING



**IMPROVED**  
**IMPLEMENTATION**

# INNOVATION CYCLE 3 – SUSTAINED IMPLEMENTATION & TIMING

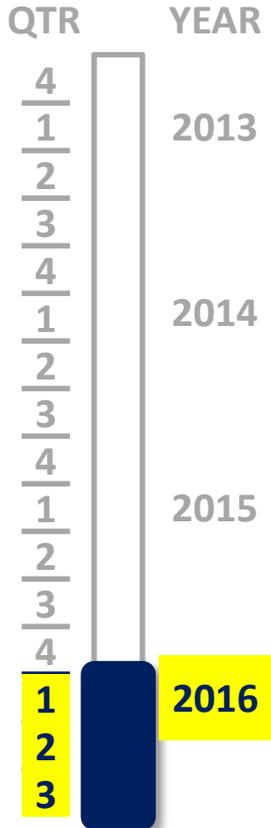
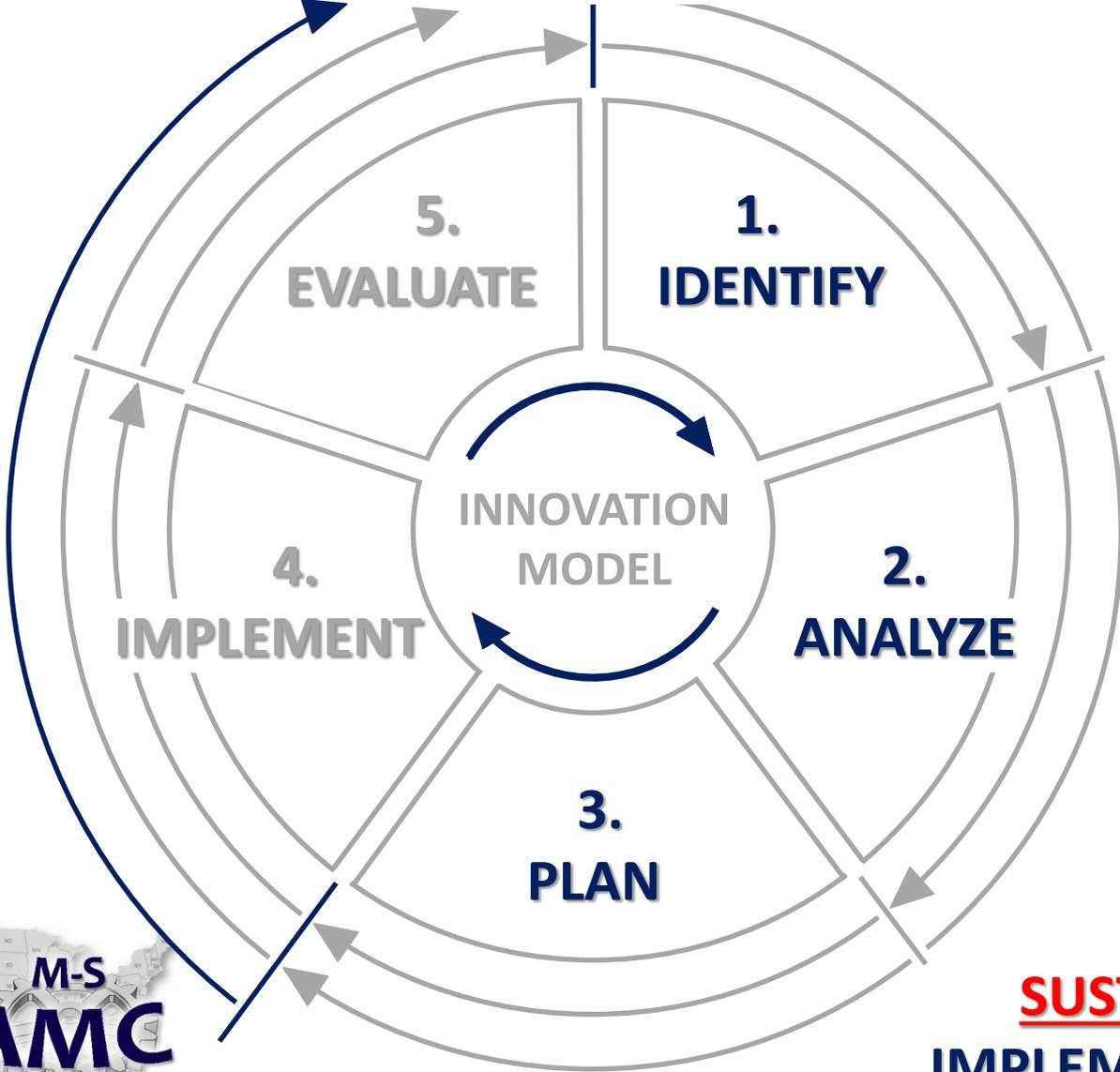


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1	
2	
3	
4	2014
1	
2	
3	
4	2015
1	
2	
3	
4	2016
1	
2	
3	



**SUSTAINED**  
**IMPLEMENTATION**

# INNOVATION CYCLE 3 – SUSTAINED IMPLEMENTATION & TIMING



**SUSTAINED**  
**IMPLEMENTATION**

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# “SEEING THE FUTURE”

Most people  
will now agree  
the best way  
to “know”  
the future  
is to  
**CREATE IT . . .**

## 1. IDENTIFY

[A] Customer Requirements

[B] Present & Preferred State

[C] Evaluation Criteria

**PRESENT STATE:**

**PREFERRED STATE:**





# PEDAGOGY and ASSESSMENT

## PRESENT STATE:

### THE APPROACH [PEDAGOGY]

- \* Typically Component focused
- \* Troubleshooting to solve a problem
- \* Emphasis on (memory) recall
- \* Learn about multiple systems . . .

[but generally]

## PREFERRED STATE:

- \* Predominantly Integrated Systems focused
- \* Troubleshooting through system analysis
- \* Emphasis on information application
- \* Learn 1 System completely . . .

[then apply to others]

### ASSESSMENT

- \* Institution specific (Locally)
- \* Classroom Competence

- \* Common National Standard
- \* On-the-Job Competence



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# EQUIPMENT and LAB ENVIRONMENT

## PRESENT STATE:

### EQUIPMENT

- \* “School sized” components
- \* Designed by/for schools

### LAB ENVIRONMENT

- \* Traditional “school-like”
- \* School safety protocols
- \* Component based
- \* Single purpose labs

## PREFERRED STATE:

- \* “Industry sized” integrated systems
- \* Designed by Industry partners

- \* “Industry-Like”
- \* Industry safety protocols
  - ! Arc flash rules !
- \* Integrated system based
- \* Multi-purpose labs



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# LEADERSHIP

## PRESENT STATE:

### LEADERSHIP

- \* Develop/Hold/Employ Vision
- \* Drive/Measure Degree Completion
- \* Lead periodic Improvement

## PREFERRED STATE:

- \* Facilitate Vision development
- \* Empower staff to operationalize Vision
- \* Determine new metrics for:
  - Student Classroom Competency
  - Student Workplace Competency
- \* Lead development of a process for continuous improvement
- \* Re-orient expenditure decisions based on new criterion for success



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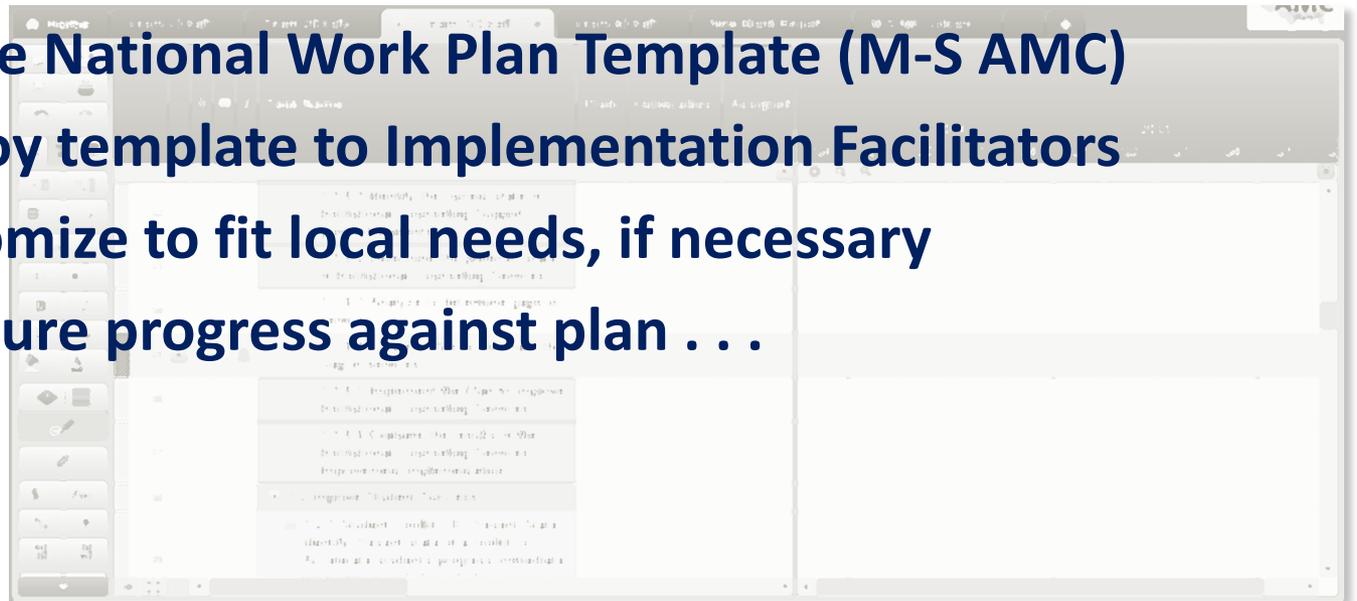
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# THE WORK PLAN

1. Use a Collaborative Planning Tool – SmartSheet (All)
2. Develop appropriate **“Consensus Based Recommendations”** for work plan steps (I-Teams)
3. Create National Work Plan Template (M-S AMC)
4. Deploy template to Implementation Facilitators
5. Customize to fit local needs, if necessary
6. Measure progress against plan . . .



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THANK YOU!

