



MPG

PERFORMANCE DRIVEN

Gear Technologies



The Kata Journey

Powdered Metal – Subiaco, Arkansas



- **Plant Manager – Randy Blaschke**
- **177,000 sq. ft. facility**
- **431 Employees**

- **Products**
 - **Transfer case components**
 - **VVT components**
 - **Timing drive components**
 - **Water pump sprockets**
 - **Balance shaft sprockets**
 - **Compressor valve plates**



Machined Products – Paris, Arkansas

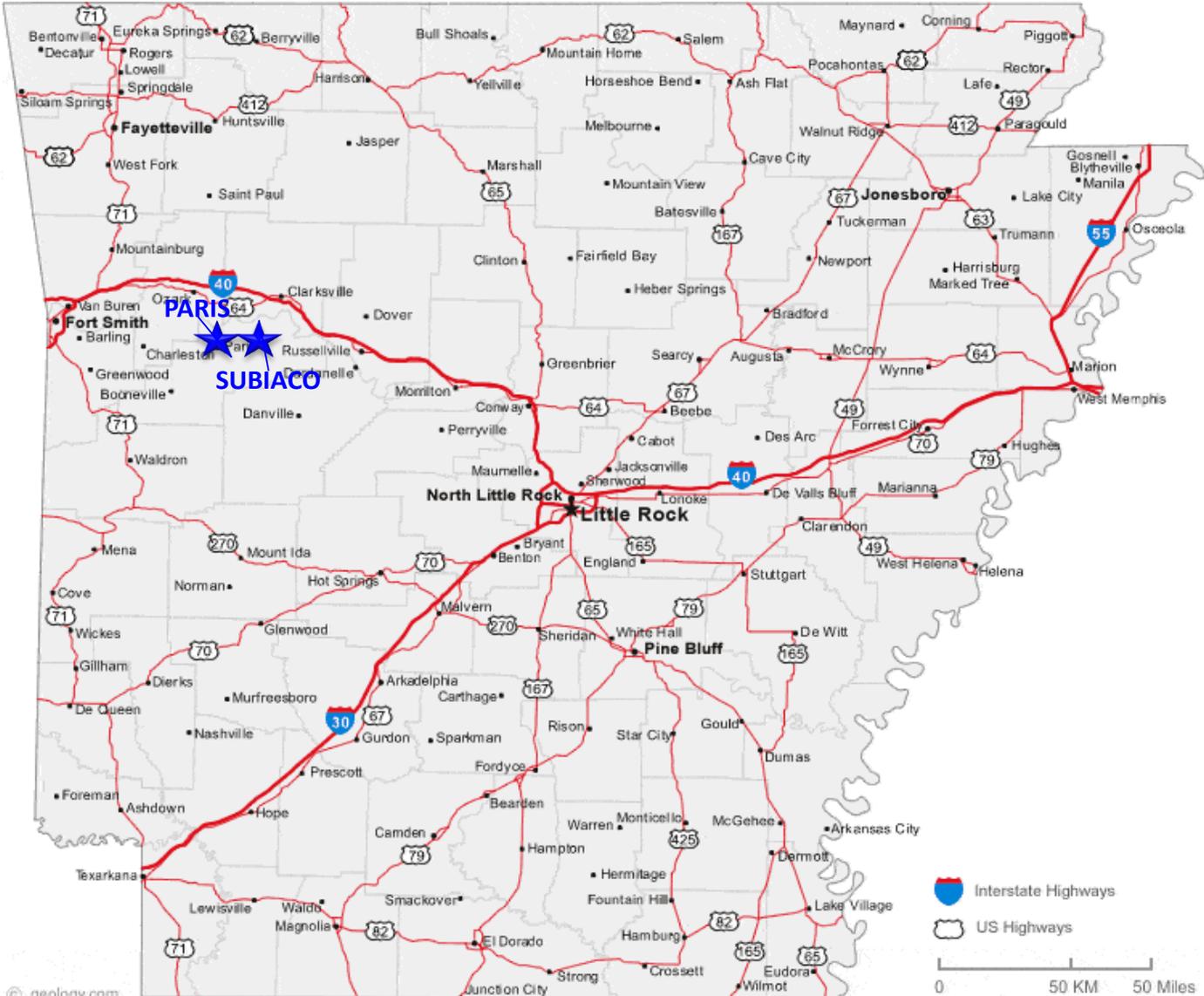


- Plant Manager – Steve Fairbanks
- 150,900 sq. ft. facility
- 274 Employees

- Products
 - Timing Drive Components
 - Water Pump Sprockets
 - Transmission Gears and Shafts
 - Balance Shaft Gears
 - Scissor Gears
 - H/P Aftermarket Timing Components



Plant Locations



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Major Customers



MAGNA POWERTRAIN



HILITE
INTERNATIONAL



MPG KATA DEPLOYMENT



MPG KATA DEPLOYMENT

AWARENESS

VALUE STREAM MAPPING



**BILL KRAUS – EXTERNAL
KATA COACH/INSTRUCTOR**

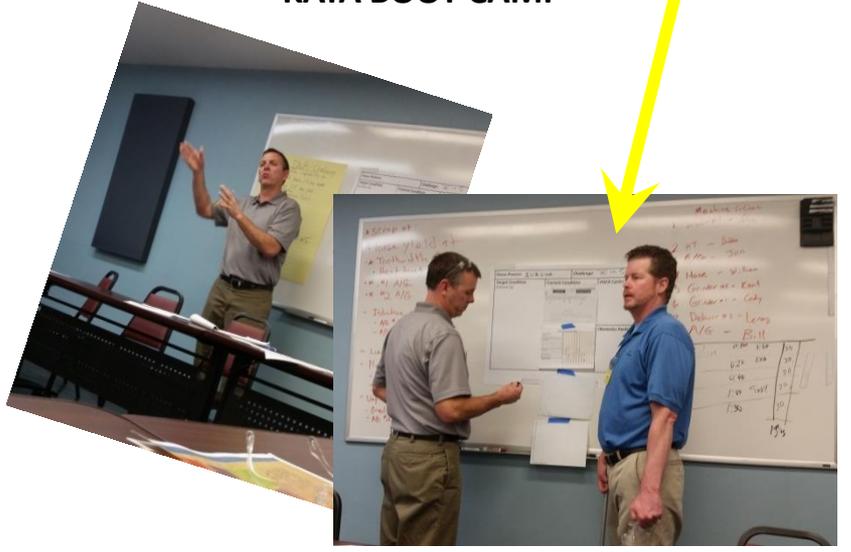
SUBIACO - MARCH 2015

**BRANDON BROWN –
EXTERNAL MASTER KATA
COACH**

BUZZ ELECTRONICS WORKSHOP



KATA BOOT CAMP



MPG KATA DEPLOYMENT

AWARENESS

WILLIAM CHILDS –
PROCESS ENG. MGR.

BRAD NELMS – DIRECTOR
OF ENG.

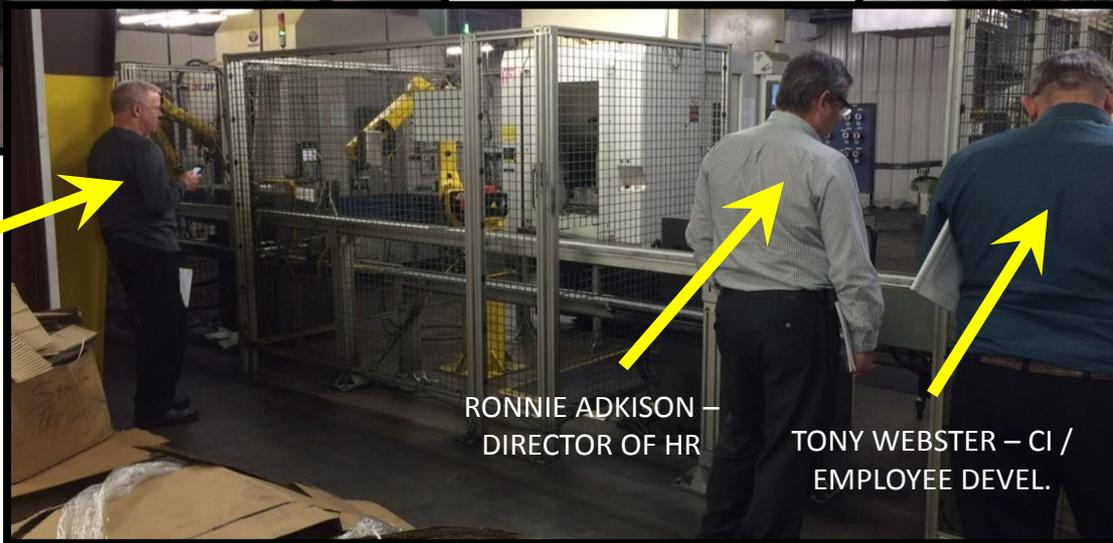
Advance Group



RANDY BLASCHKE – PLANT
MANAGER



JOHN BRANDT –
VP OF QUALITY &
CI



RONNIE ADKISON –
DIRECTOR OF HR

TONY WEBSTER – CI /
EMPLOYEE LEVEL.

GLEN INMAN – QUALITY &
CI MANAGER

MPG KATA DEPLOYMENT



- VSM
- BUZZ
- BOOT CAMP #1
 - #1 IK/CK
 - #2 IK/CK
 - KATA OF KATA

- VSM
- BUZZ
- BOOT CAMP #2
 - #3 IK/CK
 - #4 IK/CK

- VSM
- BUZZ
- BOOT CAMP #3
 - #5 IK/CK
 - #6 IK/CK

**MPG AG MEMBERS
TEACH 3 SUBJECTS IN
BUZZ / BOOT CAMP
#2**

**MPG AG MEMBERS
TEACH ADDITIONAL
SUBJECTS IN BUZZ /
BOOT CAMP #3**

MPG KATA DEPLOYMENT

ABLE TO DO IT

**STEVE FAIRBANKS—
PARIS, AR
PLANT MGR
AND AG
LEARNER AT
BOOTCAMP**

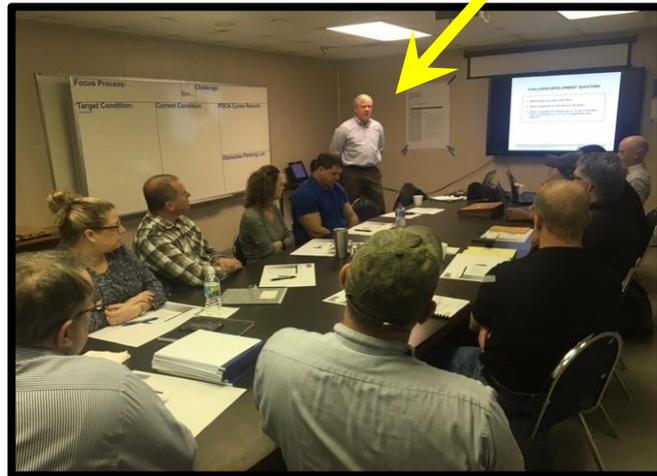


**JOHN BRANDT – VP
OF QUALITY & CI
AG 2nd COACH AND
TEACHING
“UNDERSTAND
DIRECTION” AT
BOOTCAMP**

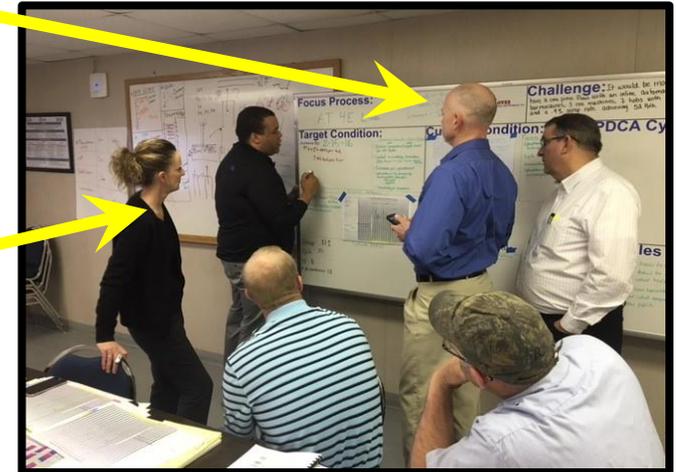


**STEVE
FAIRBANKS—
PARIS PLANT
MGR AND AG
LEARNER AT
BOOTCAMP**

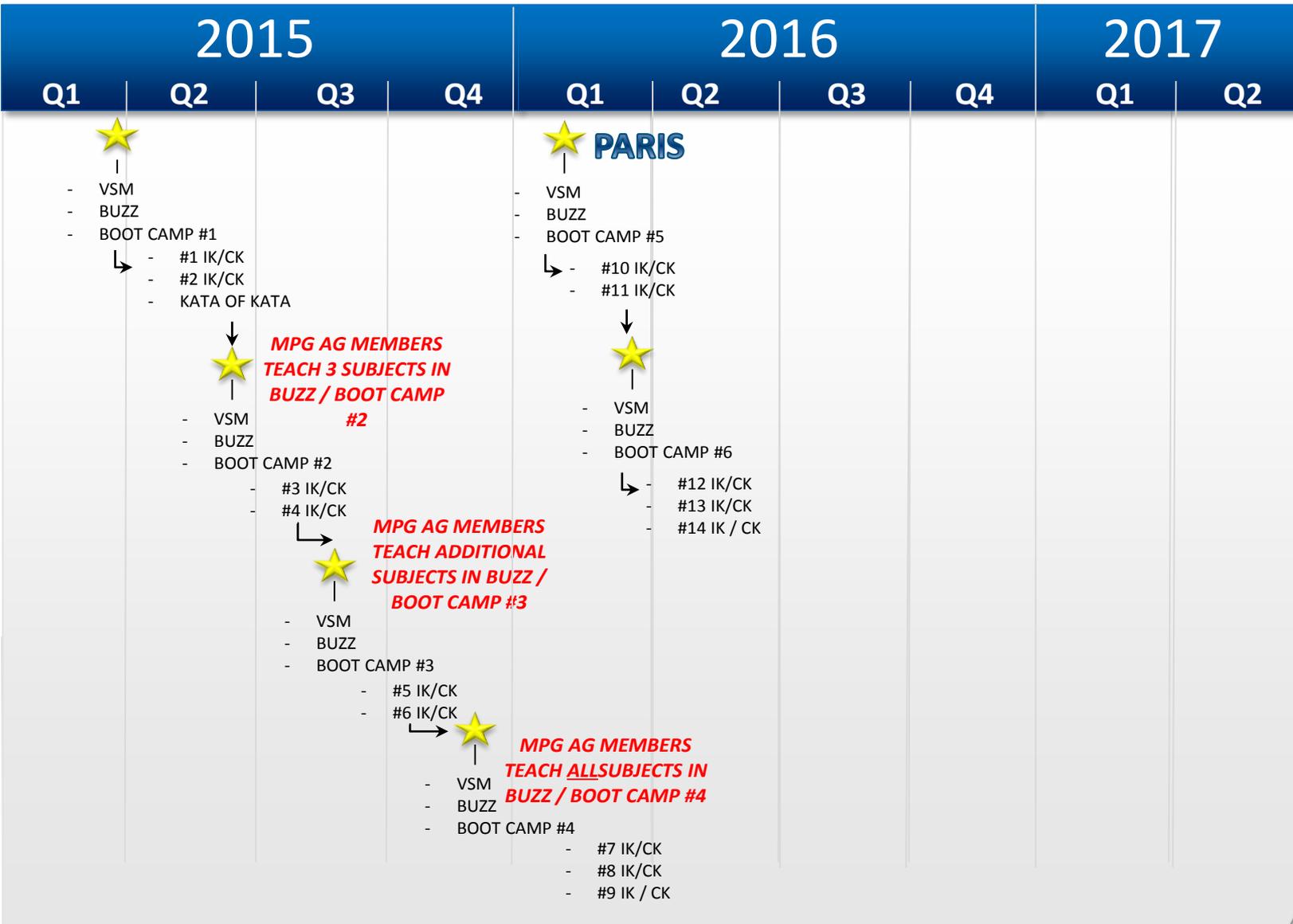
**GLEN INMAN – QUALITY
& CI MANAGER AG 2nd
COACHING AND
TEACHING PDCA AT
BOOTCAMP**



**SANDY HUNTER— ASST.
PLANT MGR – AG
LEARNER AT PARIS, AR AT
BOOTCAMP**



MPG KATA DEPLOYMENT



**MPG AG MEMBERS
TEACH 3 SUBJECTS IN
BUZZ / BOOT CAMP
#2**

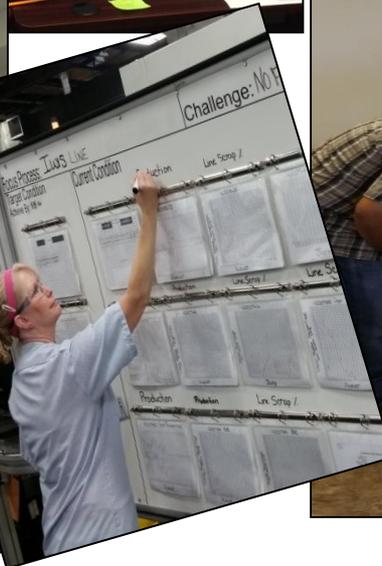
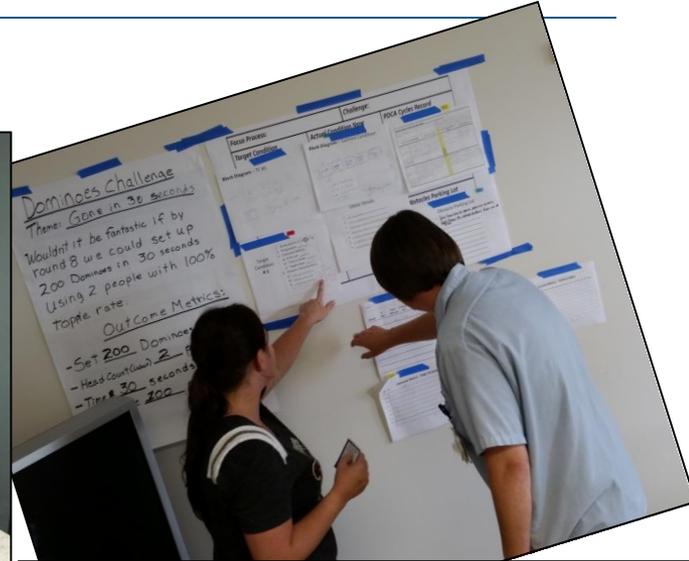
**MPG AG MEMBERS
TEACH ADDITIONAL
SUBJECTS IN BUZZ /
BOOT CAMP #3**

**MPG AG MEMBERS
TEACH ALL SUBJECTS IN
BUZZ / BOOT CAMP #4**

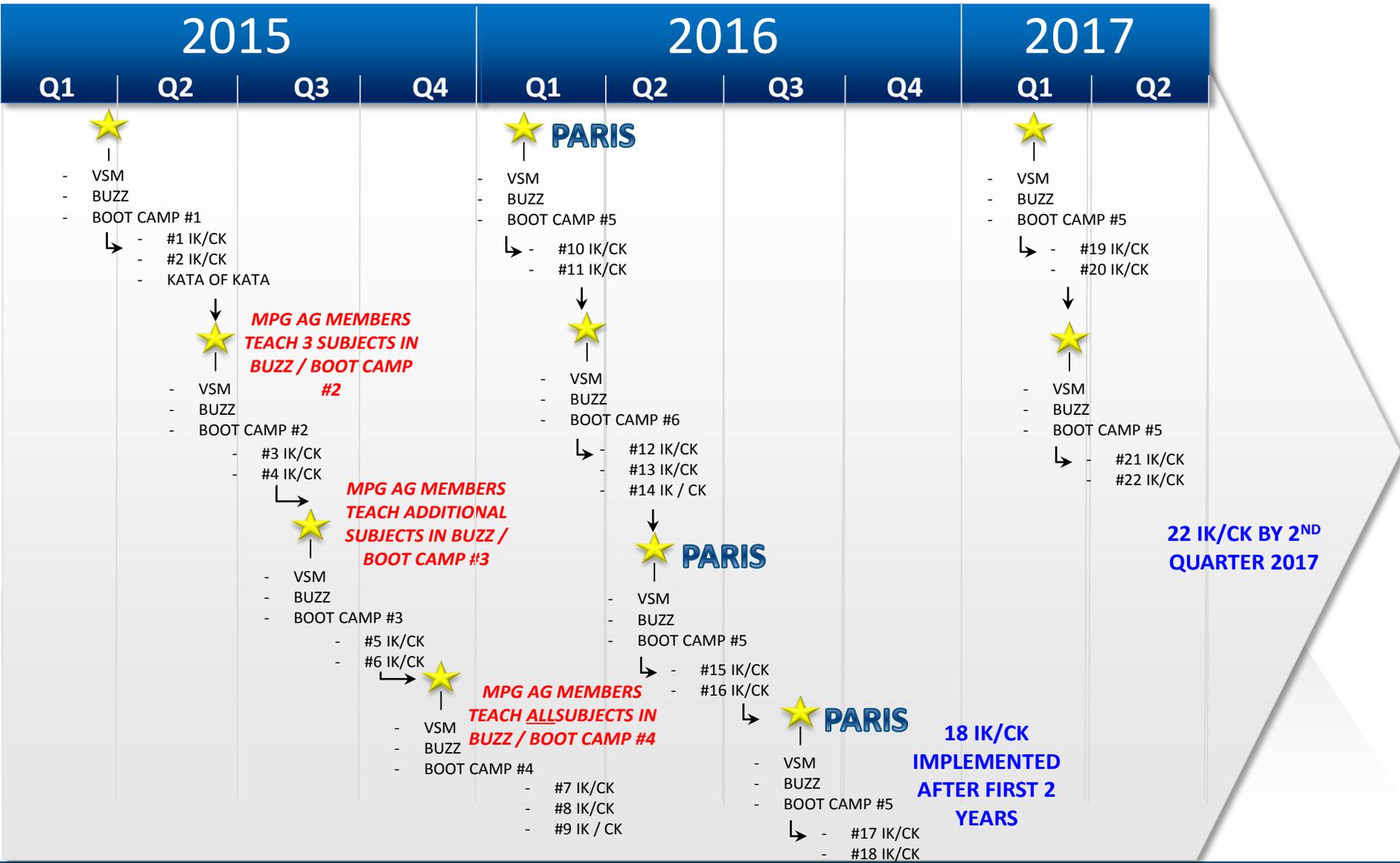
★ PARIS

MPG KATA DEPLOYMENT

ABLE TO TEACH IT



MPG KATA DEPLOYMENT



MPG GEAR TECHNOLOGIES KATA DEPLOYMENT

ABLE TO EVOLVE IT

Align the Challenge with the Vision

2016 VISION

- Develop continuous improvement leader
- Recognition
- Expand KATA & KPIs
- Empowered by communication, collaboration, and teamwork
- Data driven & results oriented
- Passionately committed to continually improve

Challenge: It would be _____ if _____ we could: _____

Current State Map

Future State Map

Series of Target Conditions necessary to reach Challenge

Desired State 6-18 months out, leading towards the Vision & Future State Map

The Cannon

What two variable determine

About Process Characteristics, Outcome Metrics, and Process Metrics, and

What has the Learner described and what has he not described about his PDCA?

Is your Learner struggling to develop meaningful PDCA's? Coach him/her to: **Make the invisible visible.... Use data!**

KATA PDCA CYCLES RECORD

What is the demand of CNC that he is looking for the comparison?

How long will the experiment be last?

Will the operators use a particular standard work?

Will FPH change anywhere else besides Bar?

Any change in MPP?

How will the data be collected? From where?

Challenge Theme: Cut the Fat

Challenge - Wouldn't it be amazing if by July 1st, 2017 we could lose 25 lbs. of body fat and 6" from our waist line.

Out Come Metrics:

- Lose 25 lbs. (currently weighing 220)
- Have 12% body fat (currently have 22%)
- 6" waist line reduction (currently 38")

Target Condition Block Diagram

Current Condition Block Diagram

Obstacle Parking Lot

PDCA's

Process Characteristics: 1. No fat food

Process Metrics:

Expressing and Understanding Variation

Welcome!

COACHING CYCLE / EXPERIMENTS

WHAT SPECIFICALLY WILL BE DONE FROM THE CURRENT CONDITION?

WHAT ARE THE METRICS AND CHARACTERISTICS FOR THE WANT ARE THEY THEM OUT?

WHAT ARE THE CURRENT VALUES, POSSES, AND WHAT WILL THE VALUES BE AT THE END OF THE TARGET CONDITION PERIOD?

WHAT OBSTACLE ARE YOU FOCUSED ON?

WHAT ARE THE METRIC AND CHARACTERISTIC VALUES COMPARED TO THEM FROM OUT - WHAT IS THE % OF ATTAINMENT?

WHAT IMPROVEMENTS WERE MADE, WHEN?

WHAT ARE THE METRIC AND CHARACTERISTIC VALUES COMPARED TO THEM FROM OUT - WHAT IS THE % OF ATTAINMENT?

ABOUT THE PROCESS?

ABOUT THE OBSTACLE?

ABOUT SCIENTIFIC PROBLEM SOLVING?

ABOUT SETTING TARGET CONDITIONS FOR THE CHALLENGE?

The Coaching Cycle as a PDCA

1. Did I execute the PDCA as I had intended to?
2. Did it get the response and direction I needed?
3. Was understanding and direction improved?
4. What does the next step need to be?

1. What is my plan?
2. What is evident today that indicates the gap still exists?
3. What questions do I need to ask today to help address the gap?
4. What questions are appropriate to ask?

1. Coaching cycle effective?

2. Did I coach in the way that I had planned?

3. What questions did I ask? What were his/her responses?

4. How participative versus directive was the coaching?

Key Behaviors

Attention to Detail

Experimental PDCA's

Targeted Improvement

Use of Data

Never

Always

• PDCA's Target Conditions read like a story

• Outcomes and implications defined

• Data complete and organized

• Knowledge of process details and KATA evident

• Learner is fully leading towards the target condition along with advice by the target

• Learning and subsequent action take place as a natural result of the outcomes of the PDCA.

• All PDCA's and actions are carefully designed to natural result of the outcomes of the PDCA.

• Metrics are carefully monitored to ensure that progress is made towards TC and Challenge.

• Hypotheses and assumptions only based on clear data

• Progress from "Go See" to "Experiment" to "Hypothesis" PDCA's evident through data.

Can you read the story?

What Clarifying Questions Do You Need To Ask?

COACHING CYCLE / EXPERIMENTS

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ABOUT THE PROCESS?

ABOUT THE OBSTACLE?

ABOUT SCIENTIFIC PROBLEM SOLVING?

ABOUT SETTING TARGET CONDITIONS FOR THE CHALLENGE?

GET CONDITIONS RECORD

PERIOD: DATE: TIME: END DATE OF NEW TARGET CONDITION PERIOD:

COACH: 2nd COACH: LEARNER:

WHAT HAPPENED? (observe closely) WHAT DID YOU LEARN? (what you observed) (what learned)

COACHING CYCLE / EXPERIMENTS

WHAT SPECIFICALLY WILL BE DONE FROM THE CURRENT CONDITION?

WHAT ARE THE METRICS AND CHARACTERISTICS FOR THE WANT ARE THEY THEM OUT?

WHAT ARE THE CURRENT VALUES, POSSES, AND WHAT WILL THE VALUES BE AT THE END OF THE TARGET CONDITION PERIOD?

WHAT OBSTACLE ARE YOU FOCUSED ON?

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WHAT IMPROVEMENTS WERE MADE, WHEN?

WHAT ARE THE METRIC AND CHARACTERISTIC VALUES COMPARED TO THEM FROM OUT - WHAT IS THE % OF ATTAINMENT?

ABOUT THE PROCESS?

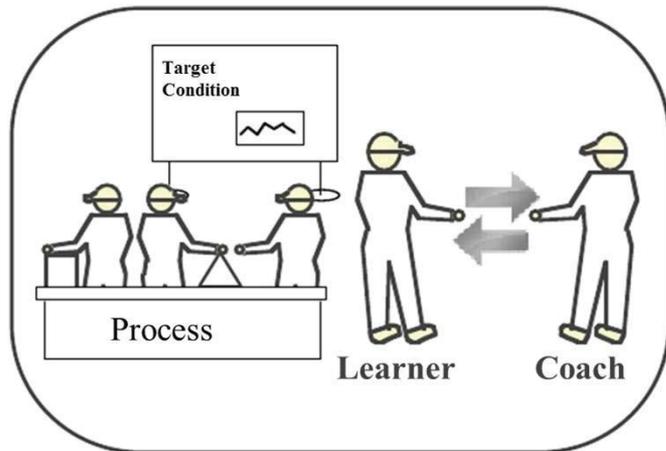
ABOUT THE OBSTACLE?

ABOUT SCIENTIFIC PROBLEM SOLVING?

ABOUT SETTING TARGET CONDITIONS FOR THE CHALLENGE?

RESULTS: TWO SIDES OF A COIN

PEOPLE DEVELOPMENT



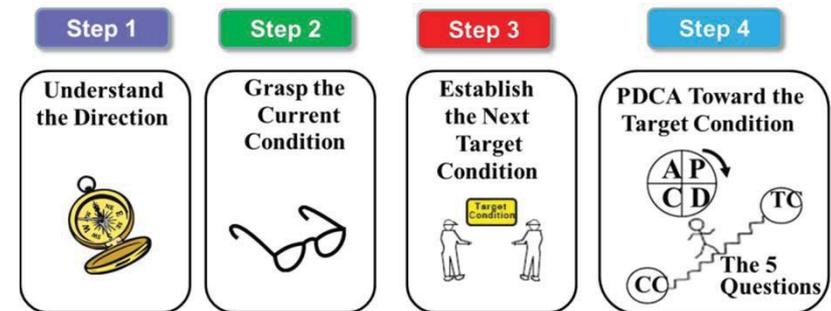
The Coaching Kata

Pattern for Teaching the Improvement Kata

Standardized approach to facilitate Improvement Kata skill development in daily work



PROCESS IMPROVEMENT



The Improvement Kata

Where do you want to go, then iterate to get there

Advancing toward something beyond your threshold of knowledge in a systematic, scientific way

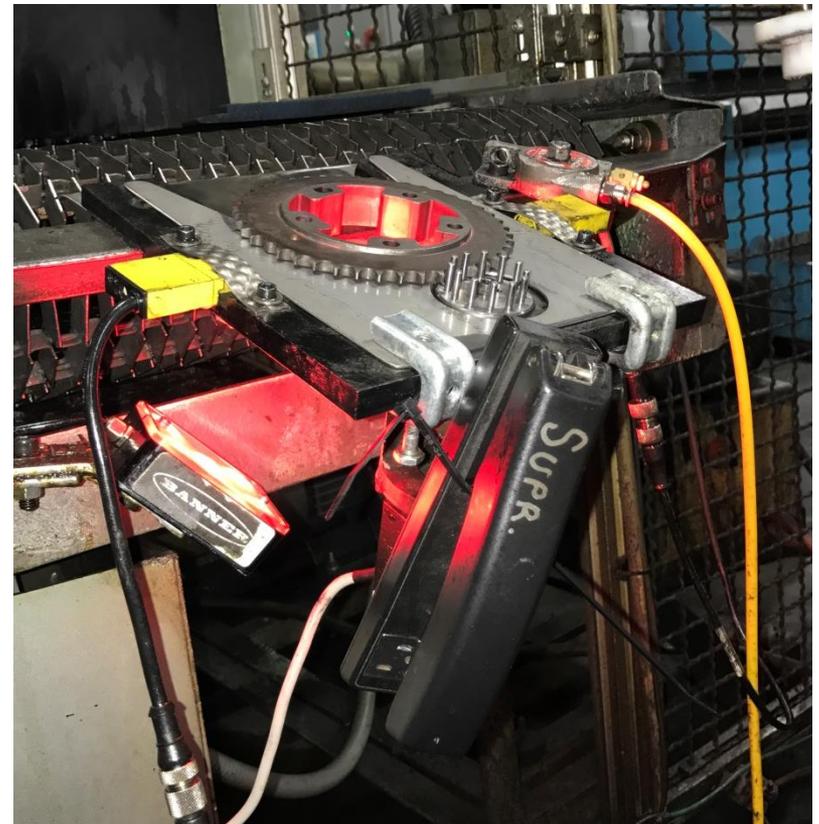
PEOPLE DEVELOPMENT

TRANSFORMATIONAL THINKING

- IT'S OK TO BE WRONG, THAT'S HOW WE LEARN
- EVEN IF YOU THINK IT'S NOT GOING TO WORK, TRY IT AND SEE WHAT HAPPENS
- DON'T RELY ON PERSONAL KNOWLEDGE
- BE PERSISTENT, IT OFTEN TAKES MULTIPLE ATTEMPTS TO BREAK THROUGH AN OBSTACLE
- IMPROVEMENTS THAT SEEM SMALL ADD UP TO BIG GAINS
- THE POWER OF ASKING WHY
- REALIZATION OF THE POWER OF PROCESS CHARACTERISTICS, PROCESS METRICS, AND OUTCOME METRICS

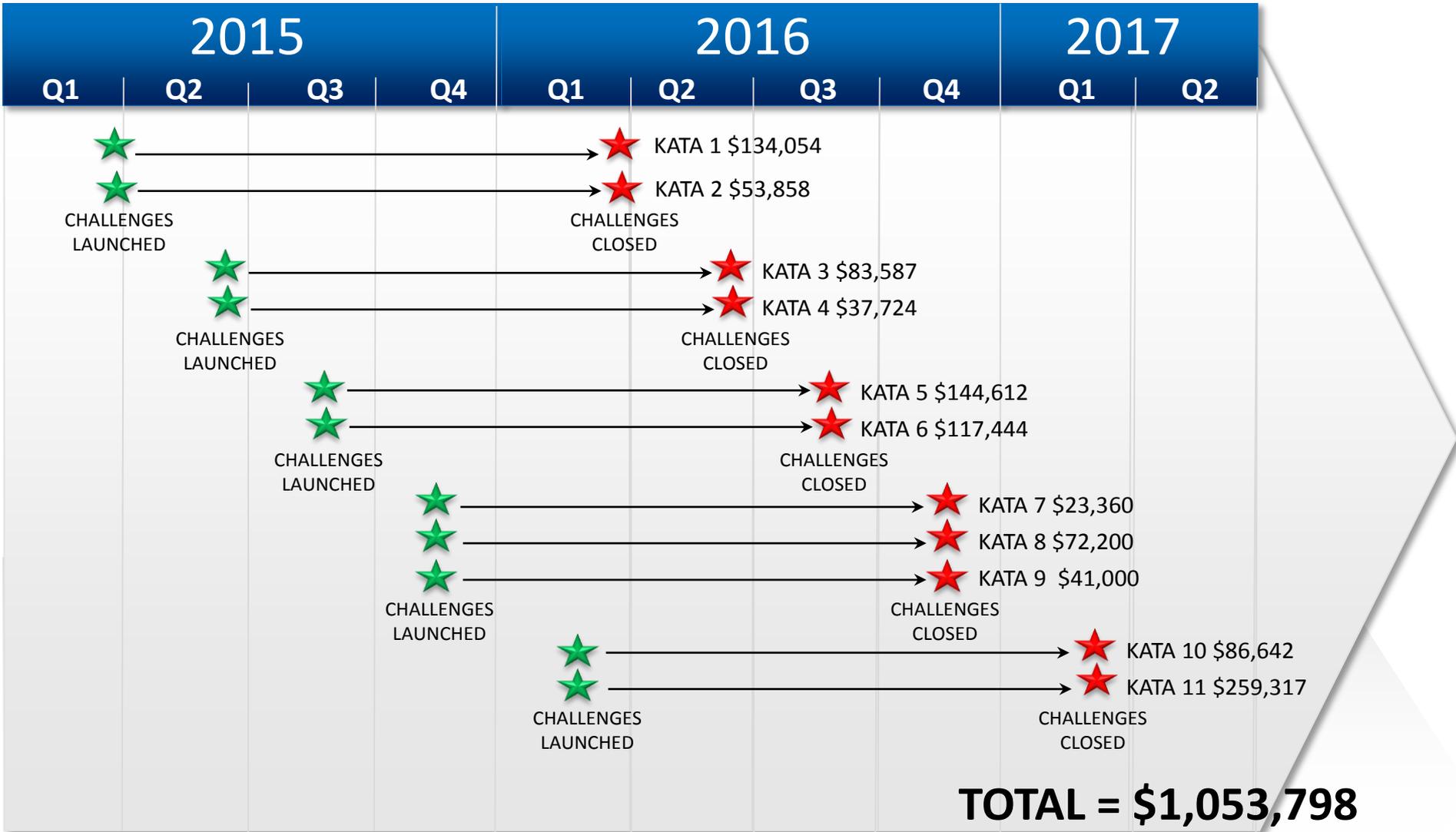
TRANSFORMATIONAL BEHAVIOR

- HOLD IT... THEN TAPE IT... THEN WELD IT



MPG KATA DEPLOYMENT

PROCESS IMPROVEMENT



THANK YOU

