CATERPILLAR SAFETY SERVICES

APCA Meeting

Creating a Zero Incident Culture

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Objectives

At the end of the session, you will be able to:

§ Demonstrate understanding of the Caterpillar Safety Services approach to creating and sustaining a culture of safety excellence.

§ Find personal inspiration to lead safety excellence in your organization with passion.

Agenda

§Insights into effective safety cultures

- It's all about culture

- Why accidents happen

- Six criteria for safety excellence

- Four steps to accountability

- The leadership factor

§How to make it happen

- The ZIP™ Process

Introducing

Caterpillar Safety Services

Helping organizations world-wide to operate more safely, reduce incidents, and save lives!

"*Few companies have the resources to help us **leverage internal involvement** and make the safety culture message resonate.*"

– Sett Policicchio, CEO
ATCO Electric

"*The services we utilized helped us understand that the* **process of building a safety culture must begin at the top** *and be* **owned by every employee.** *It cannot be negotiable and is largely the product of effective influencing and a commitment to continuous improvement. The statistical and safety improvement results at HOLT Cat speak for themselves.*"

– Guy Clumpner, VP Human Resources
HOLT Cat

*"Establishing an accountability system works — and will continue to work — because it addresses **safety as an integral part of company** culture and productivity."*

– David Watts, EH&S VP
Atkinson Construction

*"Caterpillar Safety Services [formerly CoreMedia] not only helped us change how we encourage near-miss opportunities, they also gave us the tools to transform our safety culture. As of today, **we've gone 3,073,745** hours without a single lost time incident."*

– Doug Nugent, Cleco Safety Manager
Shaw

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*"We've surpassed our goals every year since 2006 and it just gets better: for the **first time in our 75-year history**, we've worked a full quarter without a single lost-time incident."*

– Bill Schneider, President & CEO
Knife River

"*Our employees are identifying potential hazards we never dreamed existed — things we were totally unaware of. Our culture shift represents* **no fewer than 90 people NOT getting hurt** *during the last 12 months.*"

– Curt Siroky, EH&S Manager
Wagner Cat

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What's important to your organization?

What do you talk about/focus on every day?

1. Safety
2. Production
3. Quality
4. Customer Service
5. Budget

Ensure safety is an equal part of the daily business discussion, integrated into the culture in every way.

Reasons for CARING about Safety

§ **Moral/Ethical**

§ **Financial**

§ **Legal**

70-90%

See Appendix for definitions

Direct Costs:
§**Medical**
§**Indemnity**

Indirect Costs:
§**Spoiled Product**
§**Unhappy customers**
§**Cleanup time**
§**Lost time (by injured, coworkers, supervisor)**
§**Schedule delays**
§**Training replacement**
§**Overhead**
§**Legal**
§**Increases in insurance**

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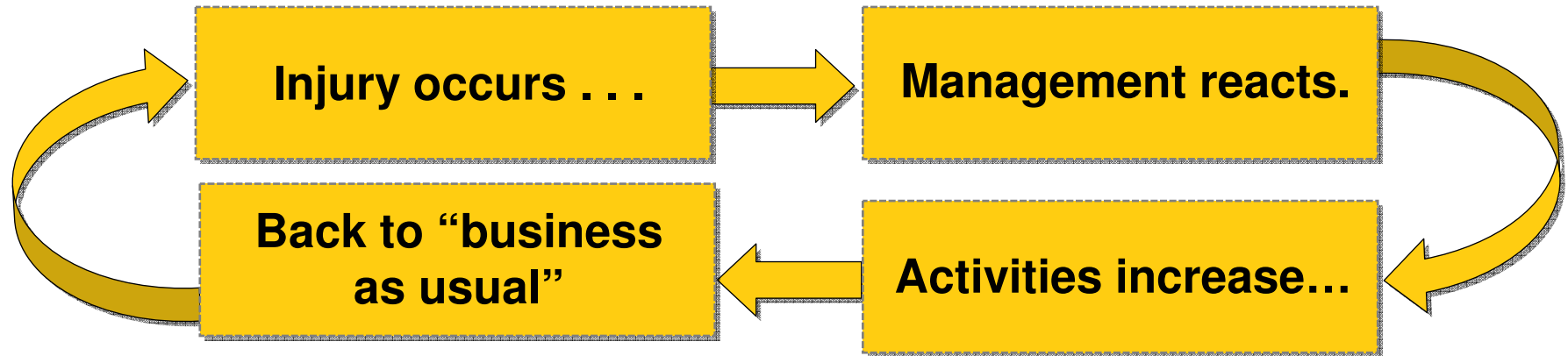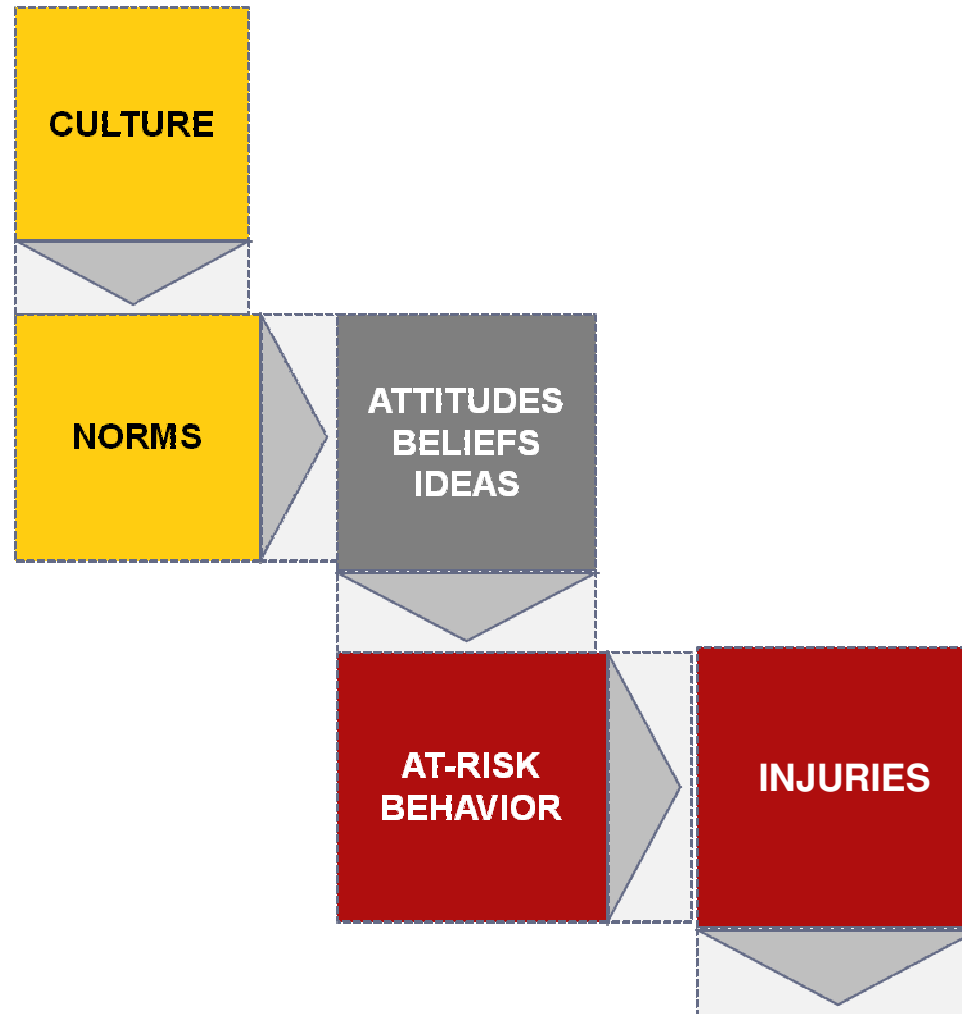
What is culture?

- **The way things are done around here**
- **The presence of safety vs the absence of accidents**
- **Intentional vs unintentional**
- **Is it luck or are we really this good?**

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Incident Reaction Cycle

Injury occurs . . . → Management reacts.

Activities increase… → Back to "business as usual"

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Why do injuries occur?

What makes a difference in safety?

Level One Tools – Reacting | 10 to 20 TRIR, 5 LTIR
Compliance Programs, Work Orders, Incident Investigation, Safety Meetings
40+ year old technology

Level Two Tools – What We See | 3 to 9 TRIR, 1 LTIR
Observation Programs, Job Safety Analysis, Near-Miss Reporting, Inspections
30+ year old technology

Level Three Tools – What We Do | 1 to 2 TRIR, 0.1 LTIR
Safety Accountability Systems
20 year old technology

Level Four Tools – What We Believe | 0.5 to 0.9 TRIR, 0 LTIR
Unseen cultural reality, Survey's, Interviews
5 year old technology

Level Five Tools – How We Engage | 0.2 to 0.4 TRIR, 0 LTIR
Effective data-driven safety teams
Current technology

Level Six Tools – How We Lead | Less than 0.2 TRIR, 0 LTIR
Culture in action: participation, ownership, execution,
live a passion for safety excellence
Current technology

Six Criteria for Excellence

1. Top management is visibly committed
2. Middle management is actively involved
3. Front line supervision is performance-focused
4. Hourly employees are actively participating
5. System is flexible to accommodate site culture
6. Safety system is positively perceived by workforce

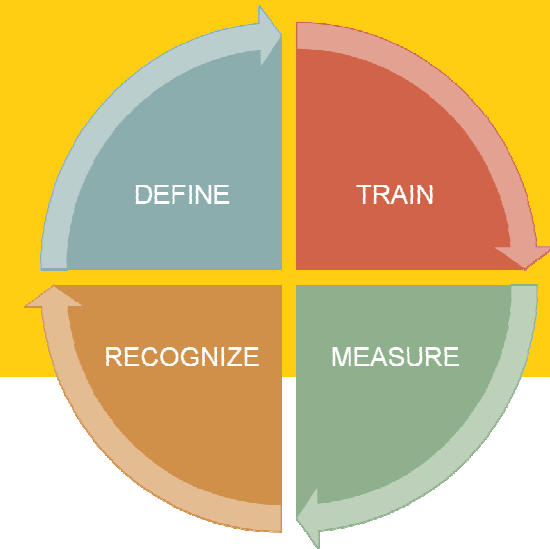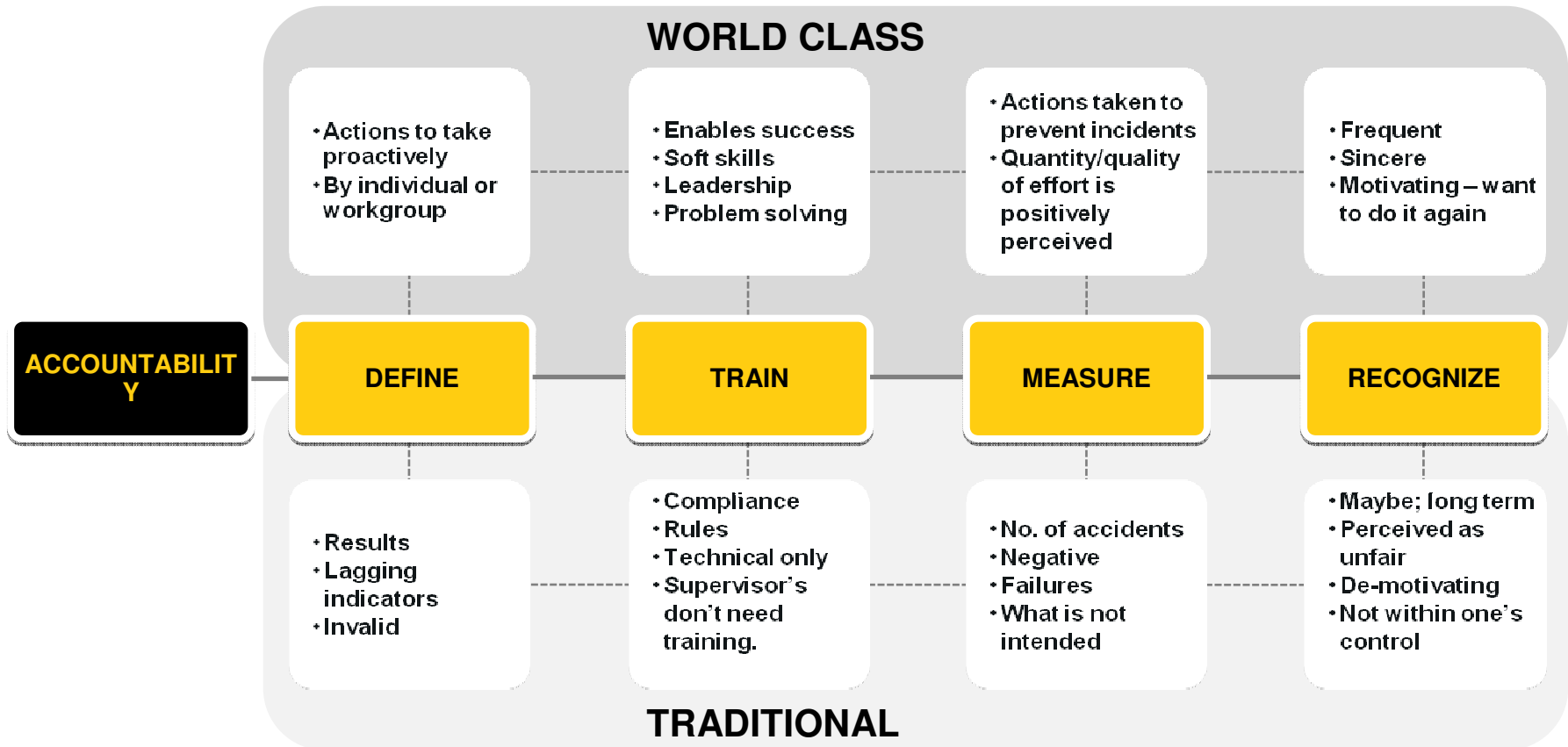— Dan Petersen Ed.D.
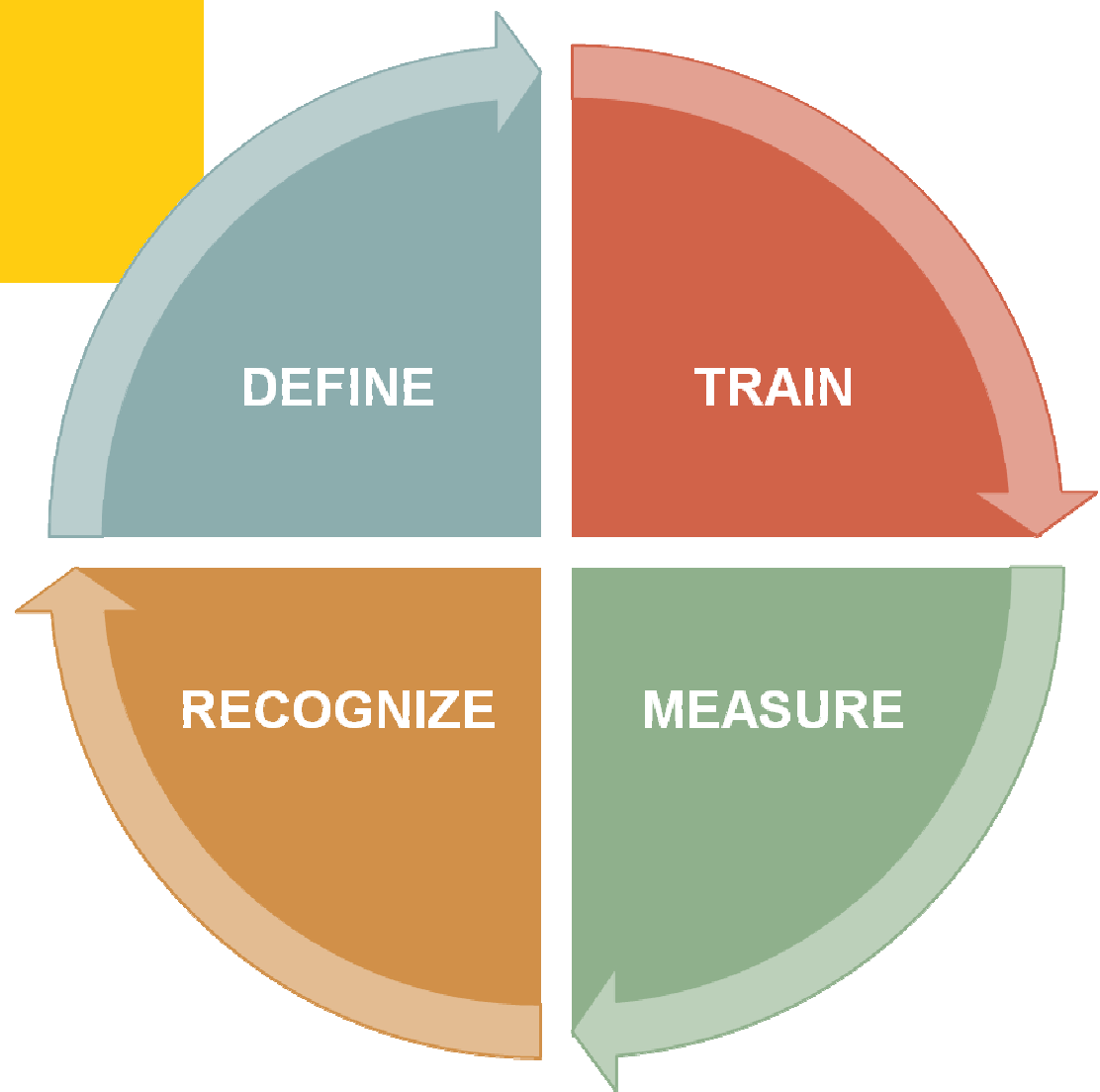
Video Review

Message to Management
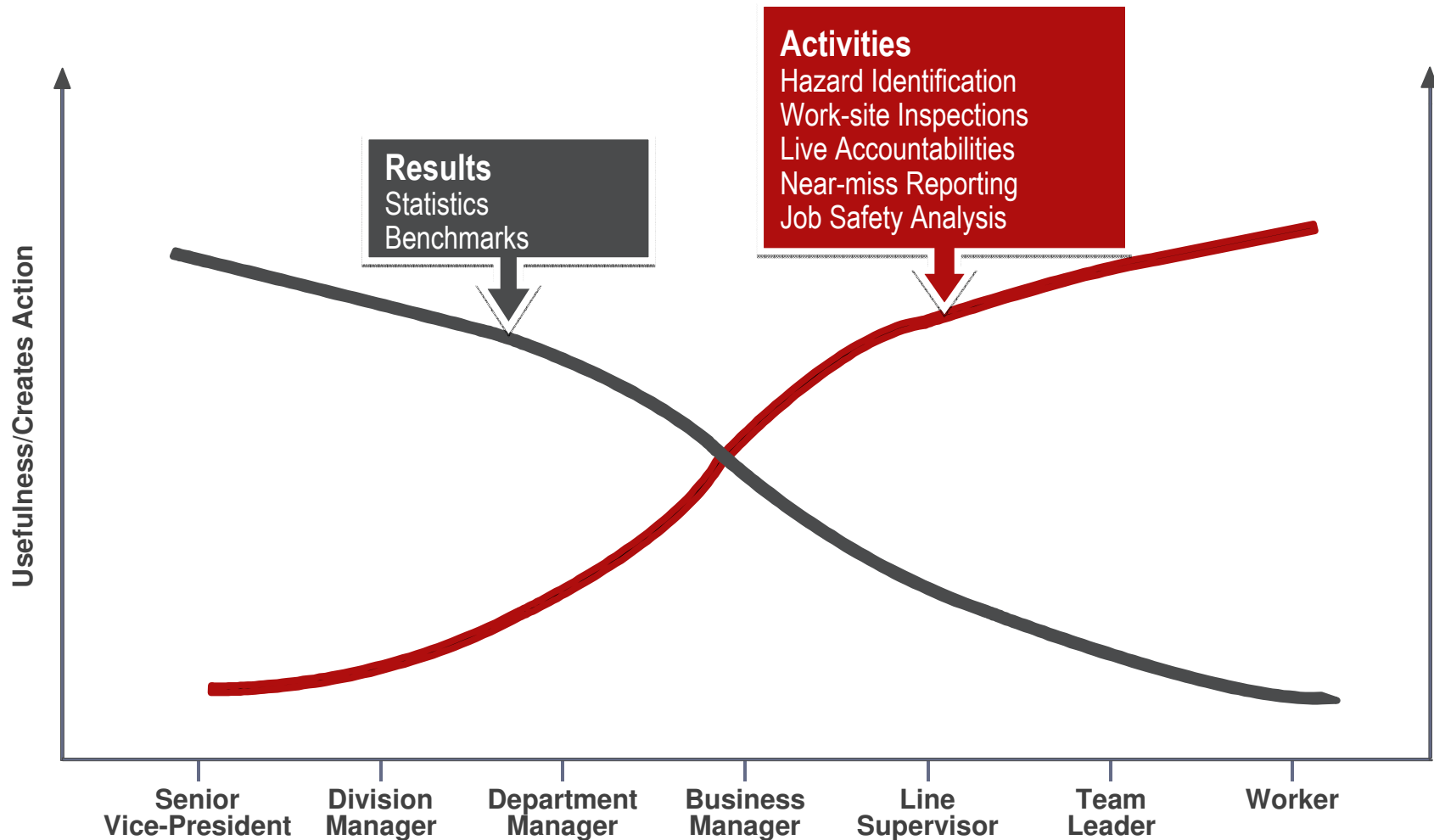
§What gets measured gets done

§Everyone's in charge of safety

§Focus on quality activities that will produce a safe work environment rather than on results you hope to achieve

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Accountability: World Class vs. Traditional

WORLD CLASS

ACCOUNTABILITY	DEFINE	TRAIN	MEASURE	RECOGNIZE

World Class:
- DEFINE:
  - Actions to take proactively
  - By individual or workgroup
- TRAIN:
  - Enables success
  - Soft skills
  - Leadership
  - Problem solving
- MEASURE:
  - Actions taken to prevent incidents
  - Quantity/quality of effort is positively perceived
- RECOGNIZE:
  - Frequent
  - Sincere
  - Motivating – want to do it again

Traditional:
- DEFINE:
  - Results
  - Lagging indicators
  - Invalid
- TRAIN:
  - Compliance
  - Rules
  - Technical only
  - Supervisor's don't need training.
- MEASURE:
  - No. of accidents
  - Negative
  - Failures
  - What is not intended
- RECOGNIZE:
  - Maybe; long term
  - Perceived as unfair
  - De-motivating
  - Not within one's control

TRADITIONAL

Measurement Model

Results
Statistics
Benchmarks

Activities
Hazard Identification
Work-site Inspections
Live Accountabilities
Near-miss Reporting
Job Safety Analysis

Usefulness/Creates Action

Senior Vice-President Division Manager Department Manager Business Manager Line Supervisor Team Leader Worker

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A System of Accountability

§All employees at all levels know what they do on a daily basis to prevent incidents and are held accountable for these activities, just like quality, production and budget

§Define, train, measure, and recognize

§These personal Safety Accountabilities are their own leading metrics

Leadership

The Core Ingredient

"A leader is anyone who has a follower!"

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Leadership is . . .

Influence:

The power to affect others

"The essence of excellence . . ."

Leadership is . . .

Positional
or
Emergent

An effective leader is …a learner, a reader, seeking training, taking classes, listening to others, service-oriented, sees life as a mission, radiates positive energy, cheerful, pleasant, happy, optimistic, upbeat, enthusiastic, hopeful, believing, balanced, socially, physically, emotionally and intellectually active, synergistic, trustworthy, empathetic, definite, decisive, responsible, resilient, passionate, courageous, discerning, disciplined, energetic, a change agent, humble, accountable, urgent, resonant, emotionally intelligent, self-aware, temperate, self-confident, transparent, adaptable, achievement-oriented, organizational aware, inspirational, influential, a coach, a team player, motivational, creative, customer-focused, functionally skilled, intellectual, politically savvy, results-focused, strategic, visionary, honest, compassionate, friendly, approachable, kind, interdependent, understanding, balanced, dedicated, healthy, industrious, just, professional, technologically savvy, passionate, morally sound, fair, loyal, dependable, organized, reliable, expressive, keen-minded, resourceful, logical, planful, informative, efficient, coope   tious, authentic, talen   resome, flexible, directiv

Leadership is . . .

An e   nproves, inspires a share   e goals, builds trust, gives pow   ort, sets the example, behav   s individual contributions, celebrates team accomplishments, deals with poor performance, initiates difficult but necessary conversations, takes initiative, uses good judgment, speaks with authority, strengthens others, never compromises on absolutes, focuses on objectives, empowers others, cultivates loyalty, faces brutal facts, keeps a clear conscience, knows when to change his mind, does not abuse authority, is sure of her calling, knows his limitations, knows how to delegate, moves with the cheese, focuses on the present, breaks all the rules, prioritizes, practices what he preaches, demands accountability in others, leads with love, has a positive attitude, develops others, manages conflict, builds teams, harnesses peer pressure, deals with ambiguity, has strong business acumen, is comfortable around higher management, possesses command skills, manages innovation, learns on the fly, solves problems, manages processes, manages vision and purpose, analyzes issues, sets goals, communicates powerfully, listens, builds good relationships, champions change, connects internal groups, begins with the end in mind, thinks win-win, seeks to understand, works hard, follows up, controls costs, eliminates waste, keeps good records, handles emergencies, trains others, builds bridges, manages risks, focuses on the big picture, empowers others, selects good talent, fosters a family environment, accepts the consequences of their actions, absorbs interpersonal stress, tolerates frustration and delay, and directs others.

3 Skills
that enable Emergent Leadership

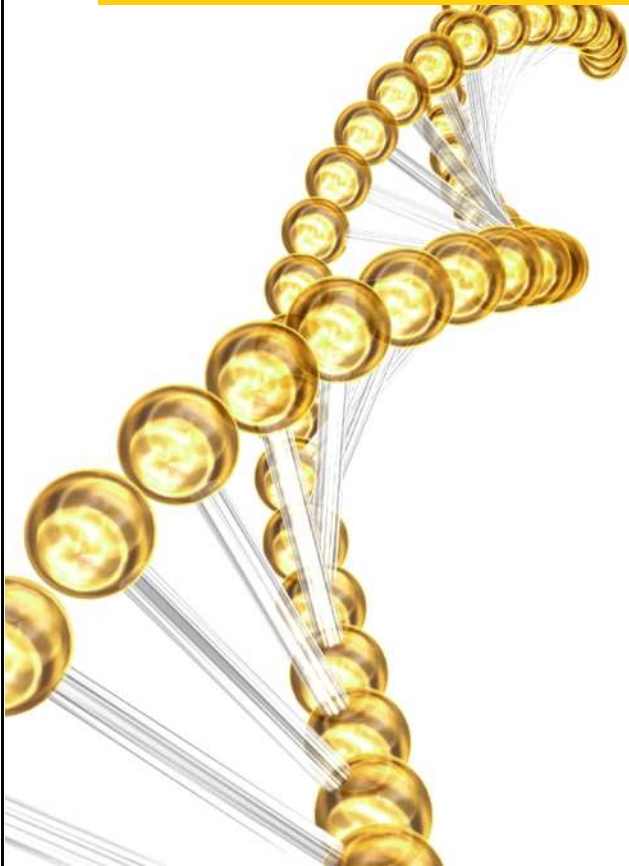**build** • Trust

create • Accountability

lead with • Passion

Trust

"It's the one thing that changes everything!"

Stephen M.R. Covey
"The Speed of Trust"

Build Trust

Dependable
- *Trustworthiness*

Never tell a lie
- *Integrity*

Apologize
- *Humility*

Accountability
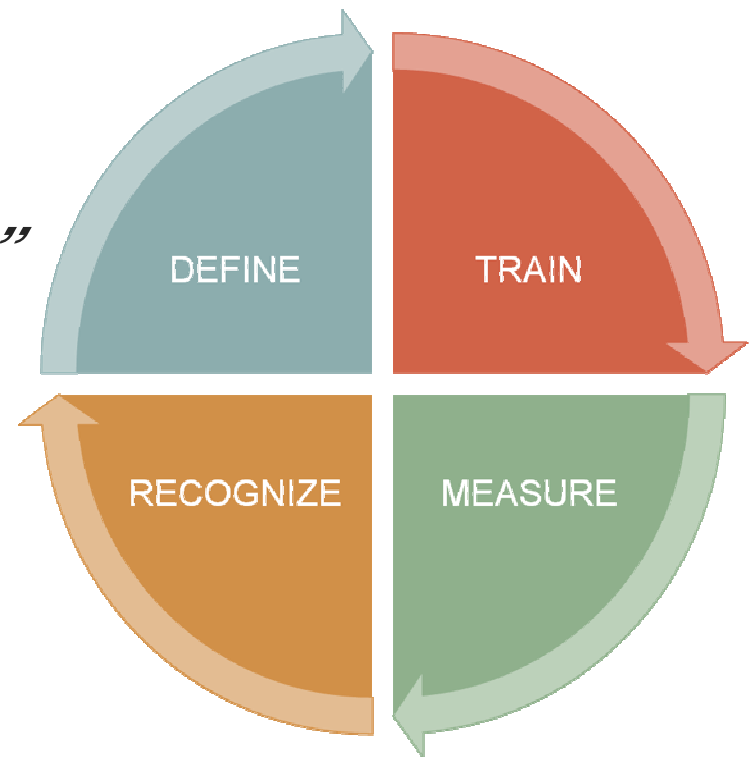
"You must inspect what you expect!"

Zig Ziglar
"See You at the Top"

Create Accountability

Optimize 3 *"Moments of Truth"*

**The Beginning
Every day
Periodic Summary**

DEFINE
TRAIN
RECOGNIZE
MEASURE

Passion

"A great leader's courage to fulfill his vision comes from passion, not position!"

John Maxwell

Author & Speaker

Lead with Passion

Martin Luther King Jr.

Mother Teresa

Mahatma Gandhi

Mission
Vision
Principles

Gifts
Occurrences
Loyalties
Disposition

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3 Skills
that enable Emergent Leadership

When you . . .

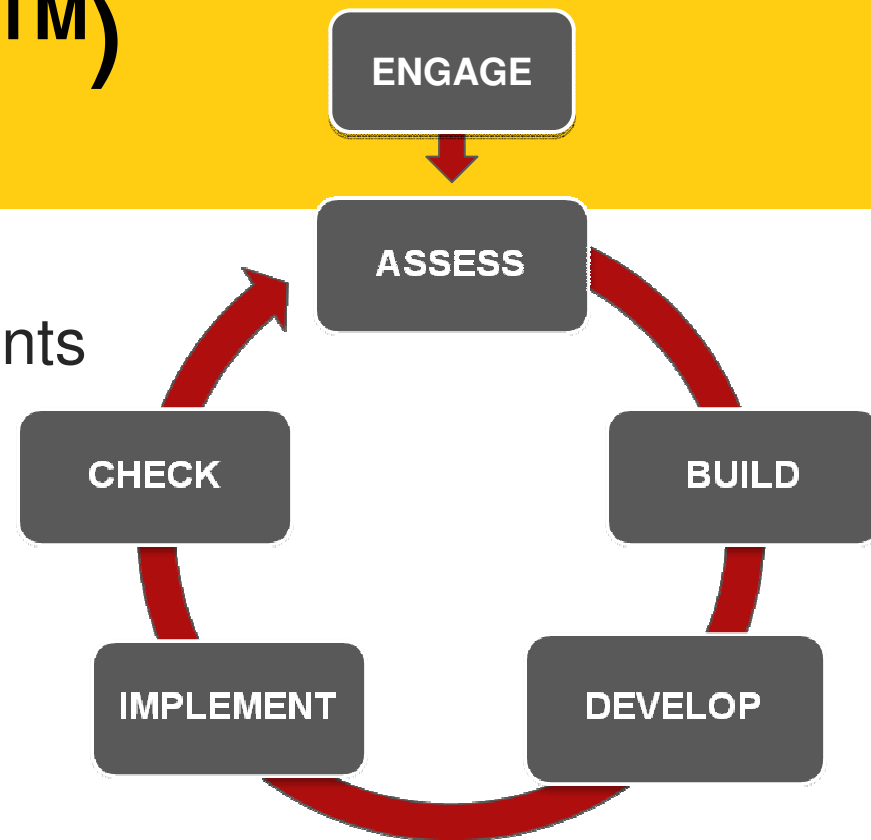|	
build	• Trust
create	• Accountability, and
lead with	• Passion . . .

You become an *emergent leader* who influences others to give their best every day. When everyone gives their best each day, zero-incident performance becomes a real possibility!
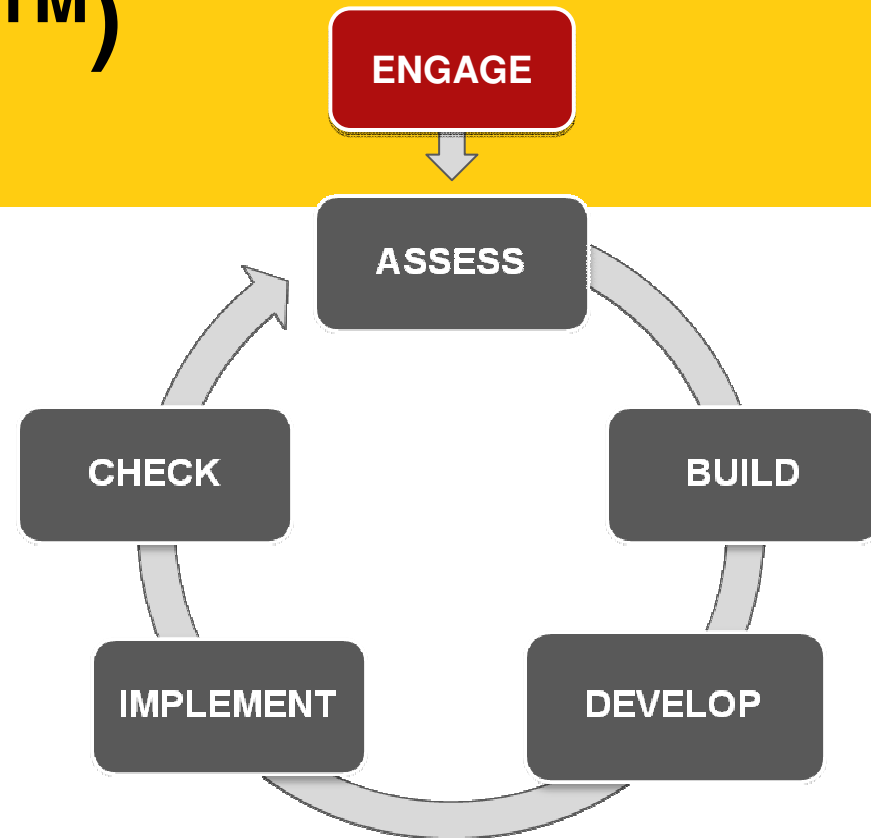
Zero-Incident Performance (ZIP™)

A process to achieve sustainable safety improvements

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Zero-Incident Performance (ZIP™)
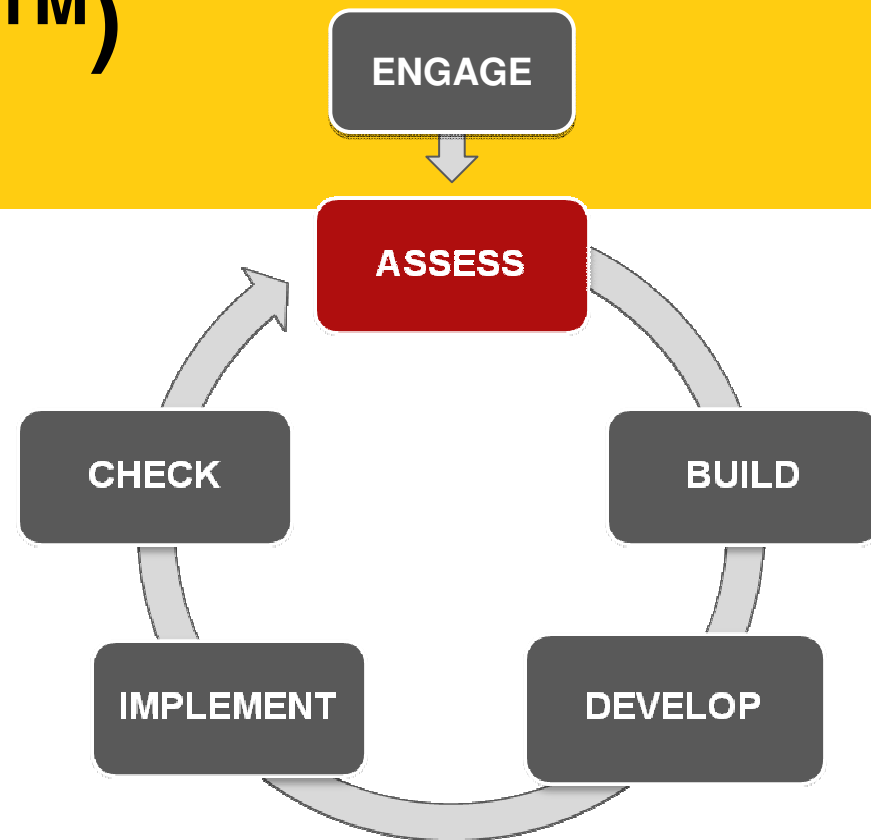
Engage Leadership

§ Leadership Roundtable

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Zero-Incident Performance (ZIP™)

Assess the Culture

§ Safety Perception Survey

§ One-on-One Interviews

Safety Perception Survey

§Define participant groups

- Statistically valid representative sample of all workgroups

§Administer the survey

- Computer or manual

§Tabulate and publicize results

§Statistically validated

§Measure percent positive responses

§Gap analysis between personnel segments

§Comparison against multi-industry database

Survey Safety Management Categories

§ Attitude Towards Safety

§ Awareness Programs

§ Communication

§ Discipline

§ Employee Training

§ Goals of Safety Performance

§ Hazard Correction

§ Incident Analysis

§ Inspections

§ Involvement of Employees

§ Management Credibility

§ New Employees

§ Operating Procedures

§ Quality of Supervision

§ Recognition for Performance

§ Safety Climate

§ Safety Contacts

§ Stress

§ Substance Abuse

§ Supervisor Training

§ Support for Safety

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What do the numbers mean?

Percent Positive Perception		
🟥	Under 75%	Needs immediate attention
🟨	75% to 89%	Needs improvement
🟩	Over 90%	Strong performance

🟥	14%+ perception gap	Needs attention

Calculating the Perception Gap

Managers Perception — Employees Perception
———————————————————————————— = Perception Gap
Employees Perception
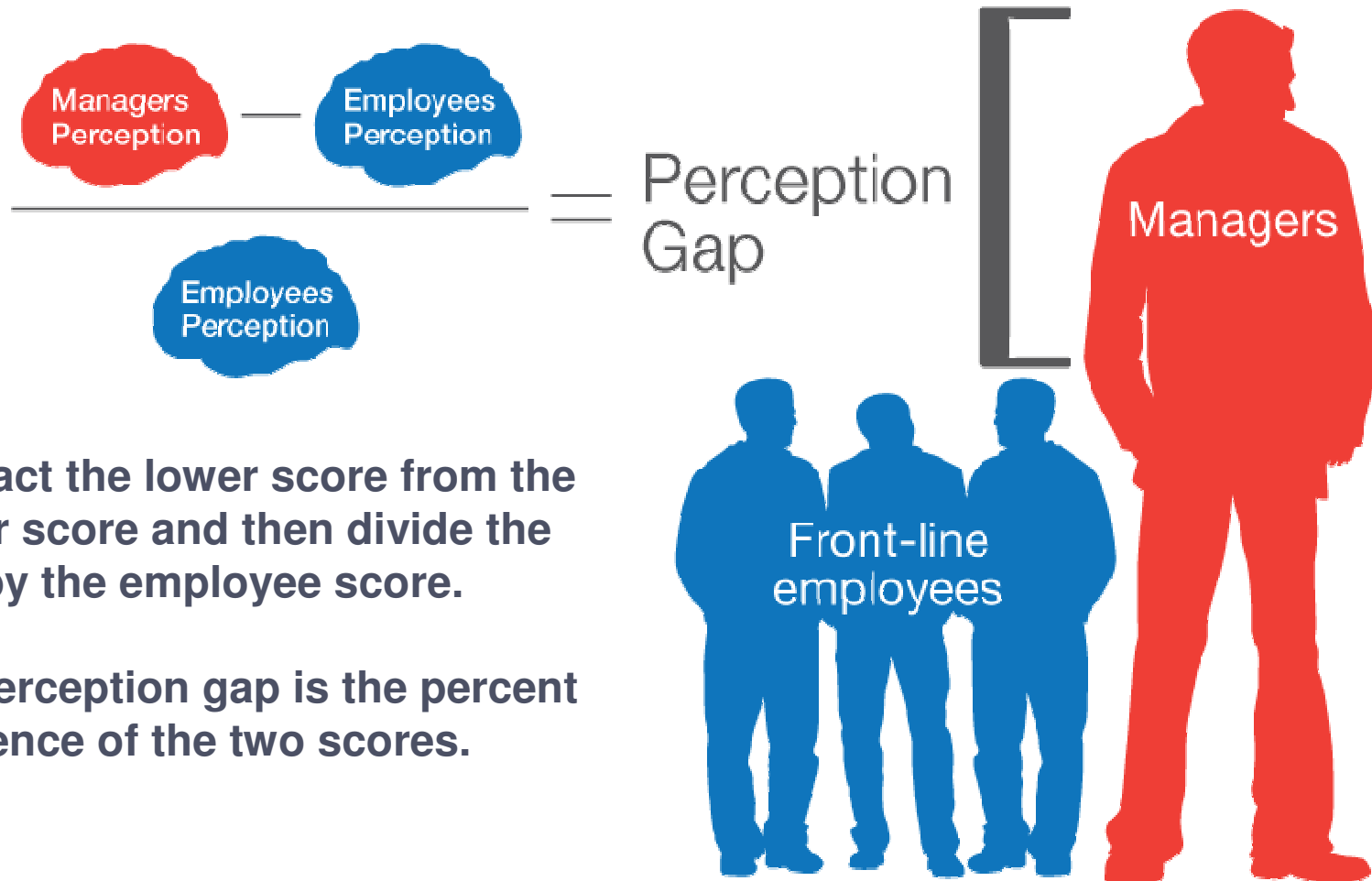
Subtract the lower score from the higher score and then divide the sum by the employee score.

The perception gap is the percent difference of the two scores.

Managers

Front-line employees

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Zero-Incident Performance (ZIP™)

Build the Plan

- § Report Assessment Results
- § Train Safety Steering Team
- § Agree on Strategic Plan

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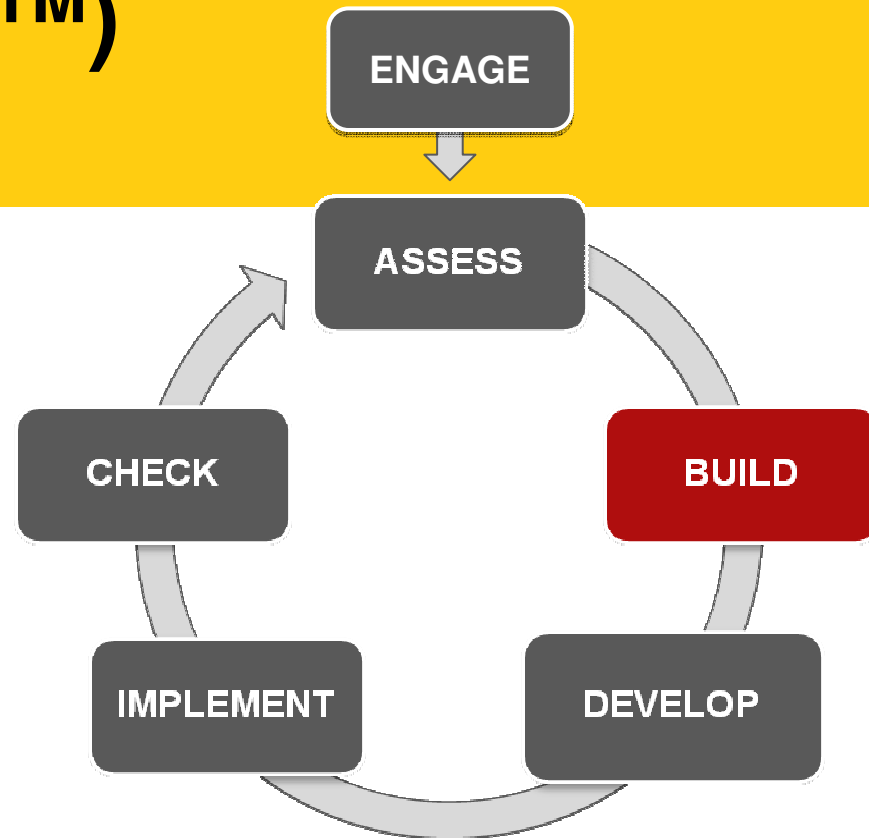
Zero-Incident Performance (ZIP™)

Develop the Process

§ Lead Safety Culture Excellence Workshops

§ Form Continuous Improvement (C.I.) Teams

§ Coach and Lead C.I. Teams

ENGAGE

ASSESS

BUILD

CHECK

IMPLEMENT

DEVELOP

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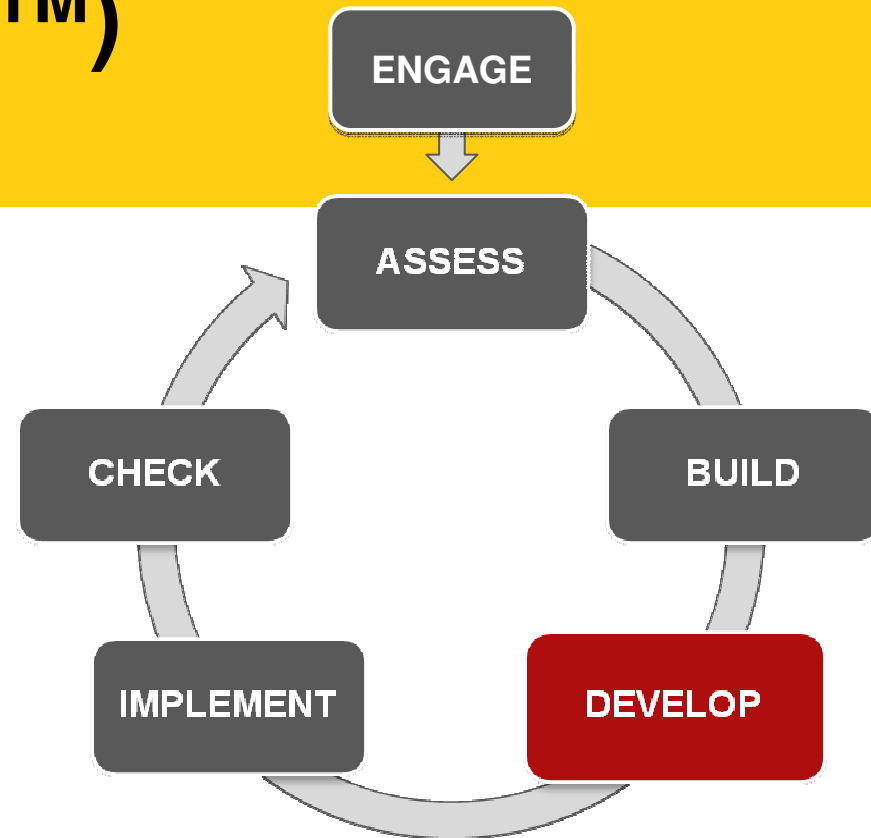
Zero-Incident Performance (ZIP™)

The Tools
POP Statement

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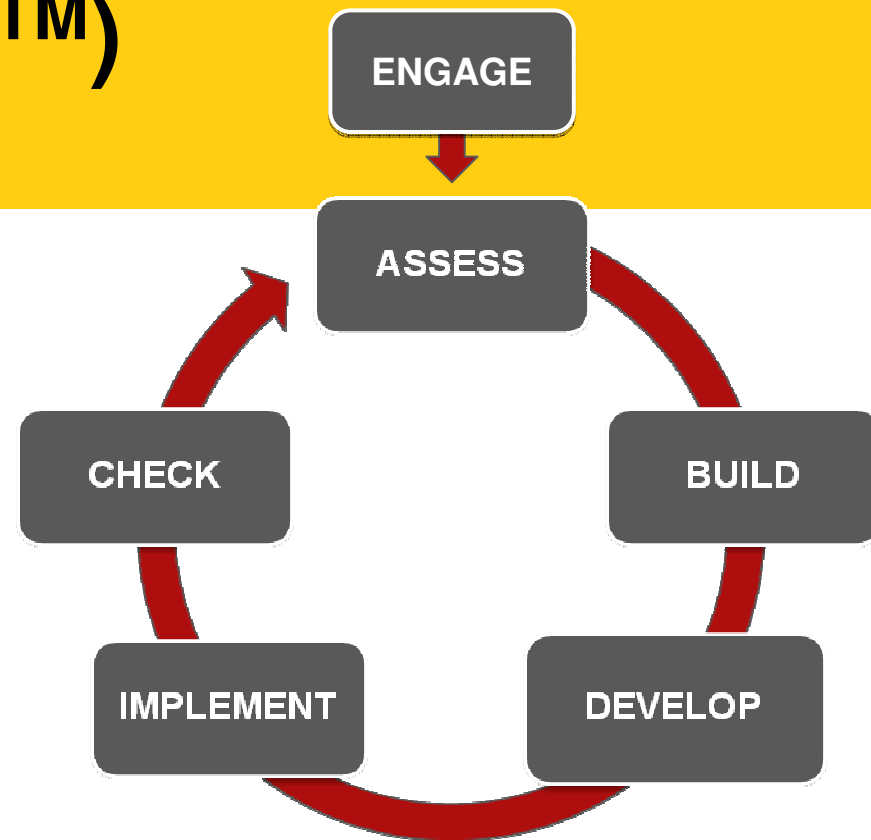
Start Every Meeting with a POP

Purpose

Outcome

Process

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Action Item Matrix | Key Components

§Tasks/Action Items

§Team Members

§Targeted Delivery

Accelerated "Kaizen"

Improved Safety Meeting Team (example)

§ Purpose of the team is to create a safety meeting process that is more productive by defining the roles of everyone, encouraging active participation, and promoting a positive and safe work environment. .

§ Outcomes (deliverables) for this team are:

- Each meeting starts with recognition of one positive employee action
- Develop outline of new meeting process
- Develop defined activities
- Develop training plan
- Develop measurement plan
- Develop recognition plan
- Develop timeline
- Identify pilot areas
- Develop communication plan

§ Process (by which this will be accomplished):
One Week Kaizen team to identify key process changes, and deliver the final product to management for review.

Fault tree - Example

Recognition for Safe Behavior

◇ AND

| Does the current system focus on catching employees doing things right or doing things wrong? | Are managers trained in proper recognition techniques? | Are supervisors trained in recognizing and reinforcing safe behavior? | Does a system exist to make sure observation for safe behavior are routinely done? | Does a system exist to make sure positive reinforcement is done? | Is recognition for safe work managed equal to recognition for quality and productivity? |

◇ AND (under each column)

| Does safe work mean no accidents or activities that lead to no accidents? | Do managers recognize safe behaviors? | Do supervisors recognize safe behaivors? | Do supervisors accept responsibility for doing safe behaivor observations? | Do supervisors and managers know they are responsible for positively reinforcing employees? | Have short-term recognition activities been identified for all levels? |

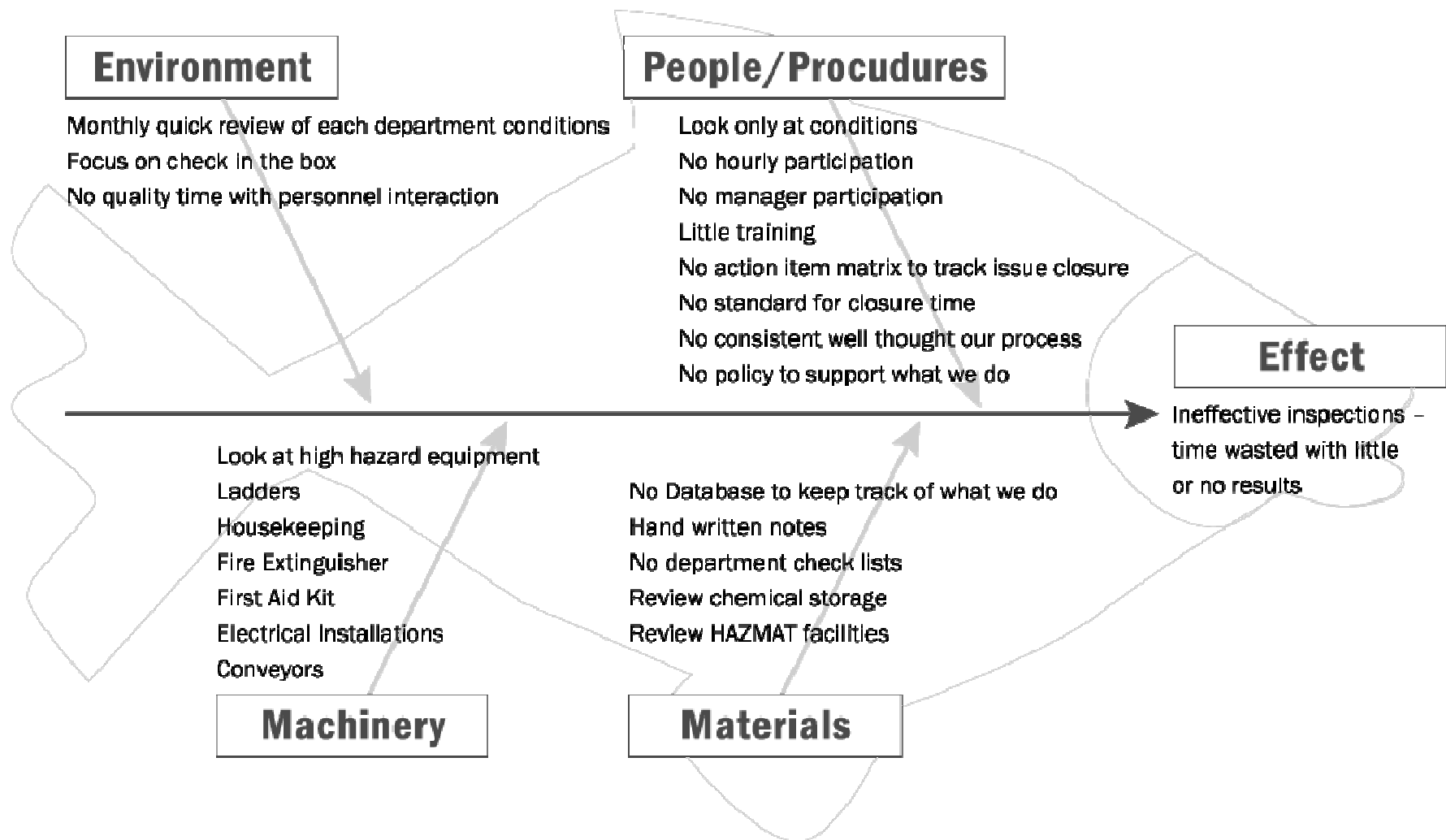| Do employees and supervisors agree on what safe work is? | Do managers have routine times when they look for safe behavior? | Do supervisors know how to deliver effective recognition to people who work safely? | Does management check to make sure observations are done? | Are there routine checks to make sure the reinforcement is done? | Have specific activities been identified to ensure measurable performance? |

| | Do managers know how to express appreciation to people who work safely? | | | | Is safety built into the long-term recognition plan? (e.g., performance reviews, bonuses, wage increase) |

| | Do managers know how to reinforce supervisors for running safe departments? | | | | |

Cause & Effect (example)

Environment

Monthly quick review of each department conditions

Focus on check in the box

No quality time with personnel interaction

People/Procudures

Look only at conditions

No hourly participation

No manager participation

Little training

No action item matrix to track issue closure

No standard for closure time

No consistent well thought our process

No policy to support what we do

Effect

Ineffective inspections – time wasted with little or no results

Machinery

Look at high hazard equipment

Ladders

Housekeeping

Fire Extinguisher

First Aid Kit

Electrical Installations

Conveyors

Materials

No Database to keep track of what we do

Hand written notes

No department check lists

Review chemical storage

Review HAZMAT facilities

Policy statement

§ All personnel shall be familiar with this policy.

§ Employee's responsibility: Periodically perform inspections and to participate in audits when required.

§ Supervisor's responsibility: Ensure all required inspections are performed within their area of responsibility, to ensure employees are trained to perform inspections, and to participate in audits when required.

§ Manager's responsibility: Periodically perform audits to ensure inspections are being performed, to ensure records of audits are kept, and to ensure observations or findings of inspections and audits are acted upon.

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Inspection Guidelines

Audit/inspector:
Employee assigned to make safety audit/inspection.

Responsibility
All employees are responsible to participate in a safety audit/inspection of their work area or group according to the following pre-defined schedule:

§ General Manager – at least one per quarter

- Directors – at least one / quarter

- Managers – at least one / quarter

- Supervisors – on a frequency developed by the individual department or at least as often as they inspect for production and quality issues (minimum of once per month)

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Action Item Matrix

Item	Action Item/Task	Who	Target	Comments
1	Review the provided Fault Tree Diagram for recognizing safe behavior and recommend any changes	SR	Complete	Reviewed Fault Tree diagram and identified shortcomings – implemented into June 3-28 action items
2	Develop audit of new process after 6 months at the pilot site(s)	TB BC TC	Complete	To based on the list of audit questions developed. Include in report
3	Determine what Training is required for the Pilot Group	Team	GF/WD	Refine for inclusion in the final report
4	Delivered approach that is applicable to employees in safety sensitive positions	N/A	4-7	On completion of the final report
5	Present Policy Statement, Charter and POP Statement to the Steering Team Committee	GM	Complete	

The Process

1. Continuous improvement teams that include all levels of employees in 1 week kaizens or 90-day projects

2. Teams are trained to conduct meetings using POP Statement

3. Track team performance using an Action Item Matrix

4. Management, Supervisors, and Employee Training

5. Focus on error proofing 1-2 proven safety processes (Initially)

6. Repeat the process

Tasks

Which ones to tackle, which ones to avoid

§Volunteer Principle

§Pareto Voting

- Complaint = Goal
- World Hunger

§Diverge – Converge

How Many Teams?

§ Start small and do them well

§ Short Term – 90 Day Teams or 1 week rapid improvement
- Effective Facilitation
- Effective Leadership
- Effective Closure

How Often Do They Meet?

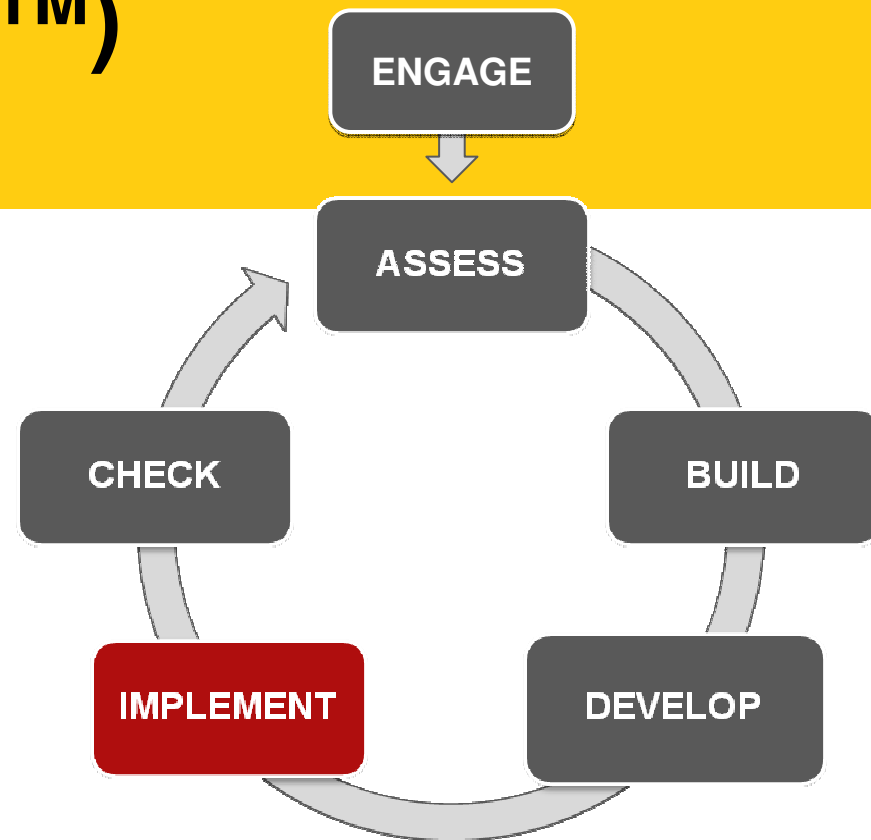Every two weeks
Subteams to meet
as needed

} **90 day process**

Kaizen Team

} **daily for one week**
8 | hrs. | day
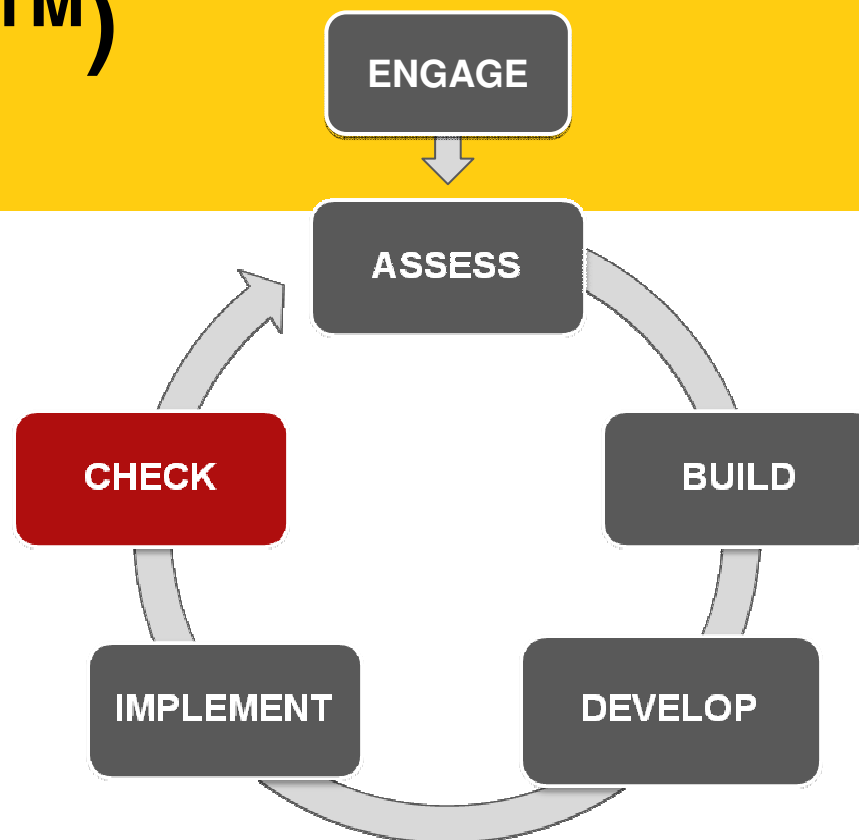
Zero-Incident Performance (ZIP™)

Implement the Process

§ Pilot Improvements within Organization

§ Implement New Processes

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Zero-Incident Performance (ZIP™)

Check the Process

§ Evaluate new process

§ Evaluate progress within strategic plan

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Success Breeds Success

Culture Transformation Leadership

§Engage upper management

§Assess the current state of the culture (survey)

§Build a strategic plan

- 6 criteria, 4 steps of accountability

§Ensure leadership capability

- Accountability, , continuous improvement, leadership skill, TAP

§Develop tactical improvements

- CRITICAL: Engage all employees with CI Teams

§Implement new error-proof processes

§Evaluate and repeat

Caterpillar Safety Services

§ Consulting Services

§ Leadership Training & Development

- S.T.A.R.T. (Supervisor Training in Accident Reduction Techniques)
- Speak Up! Listen Up!
- Recognize It!
- Emergent Leadership
- On the Front Line
- Safety Accountability

§ Other Products/Services

Partial Customer List

§ ATCO Electric, Edmonton, Alberta, Canada

§ Atkinson Construction, Broomfield, CO

§ Baxter Healthcare, Deerfield, IL

§ CPS Energy, Public Utility, San Antonio, TX

§ Hawaiian Electric Company, Honolulu, HI

§ Lane Electric, Eugene, OR

§ Knife River Construction, Bismark, ND

§ MeadWestvaco Paper Company, Columbus, GA

§ NVEnergy, Public Utility, Las Vegas, NV

§ Pembina Pipeline, Calgary, Alberta, Canada

§ Progress Rail, Paducah, KY

§ Snohomish Public Utility, Snohomish, WA

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For more information…

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Thank you!

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APCA Meeting

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