



BACK TO BASICS- SYSTEMATIC APPROACH TO TRAINING

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TODAY'S TAKEAWAY OBJECTIVE



IDENTIFY THE FRAMEWORK AND GUIDELINES THAT THE SYSTEMATIC APPROACH TO TRAINING (SAT) PROVIDES AND THE RESULTING IMPACTS.

OBJECTIVES

By the end of this training, you will be able to:

- Describe what the Systematic Approach to Training is.
- Explain how the different components interact.
- Evaluate risks related to not following SAT process.
- Relate the benefits and importance of using a systematic process.

BACK TO BASICS

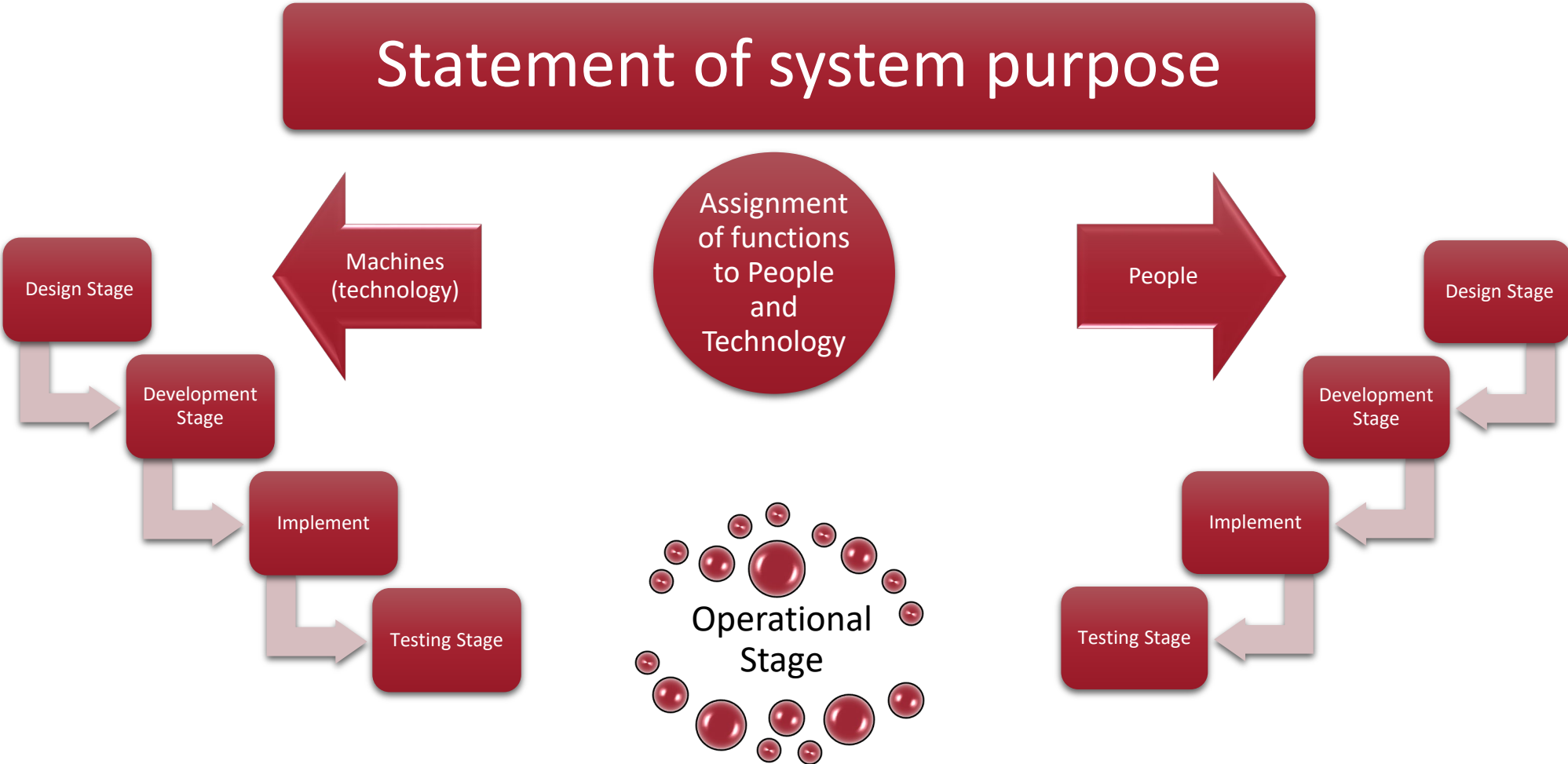
- Giving attention to the simplest and most important matters after ignoring them for a while.
- Returning to the fundamental aspects of something.
- Focus on core business.



SYSTEMS THINKING

- Structured approach that has a collection of interacting elements that contribute to success of a 'whole'.
- Each element is specialized and of importance to the whole.
- The elements need coordination to unify as a whole.
- A defined system has boundaries, stands apart to look at a problem and its solutions.

REVIEW OF SYSTEM DEVELOPMENT



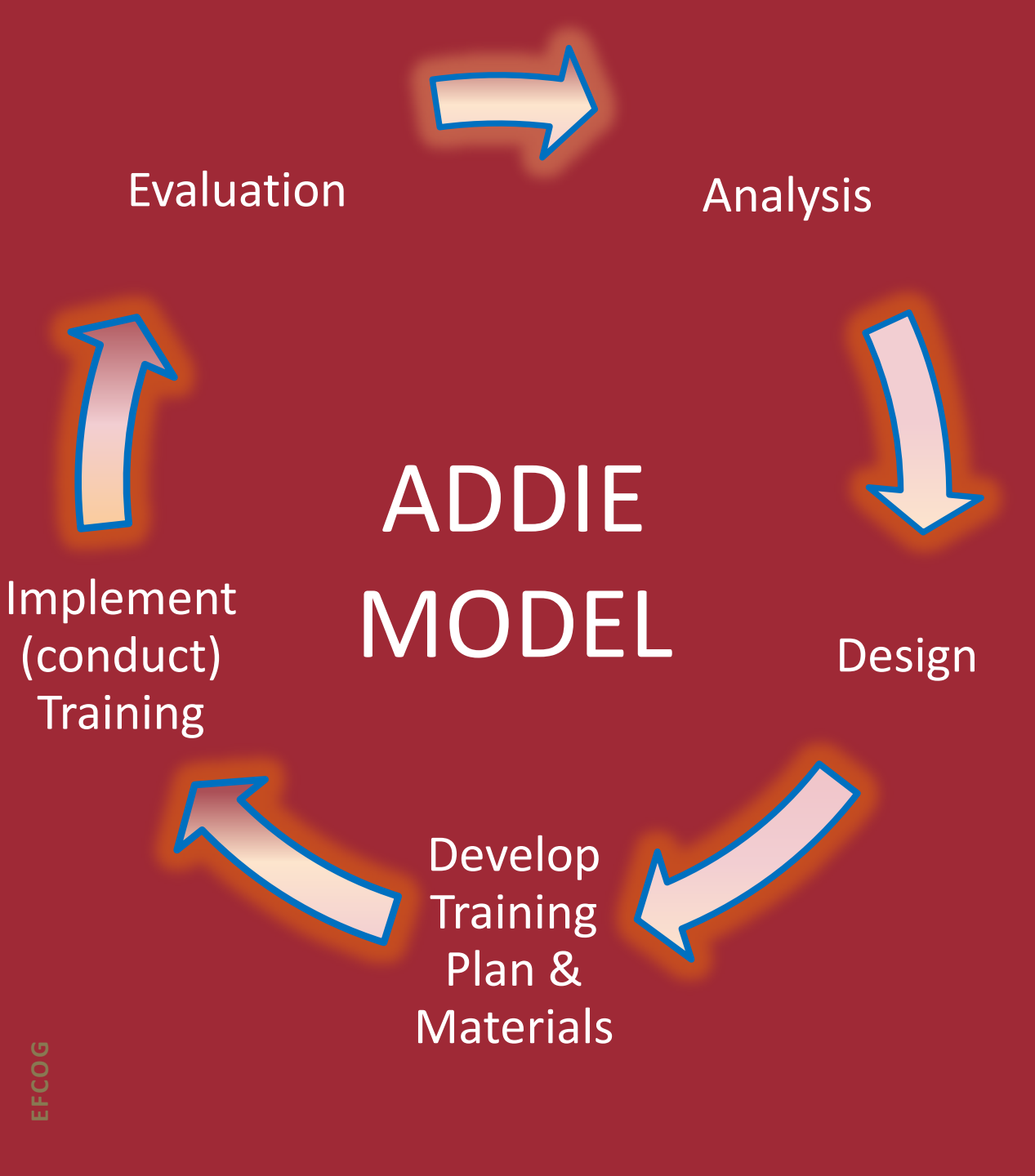
SYSTEMATIC APPROACH TO TRAINING

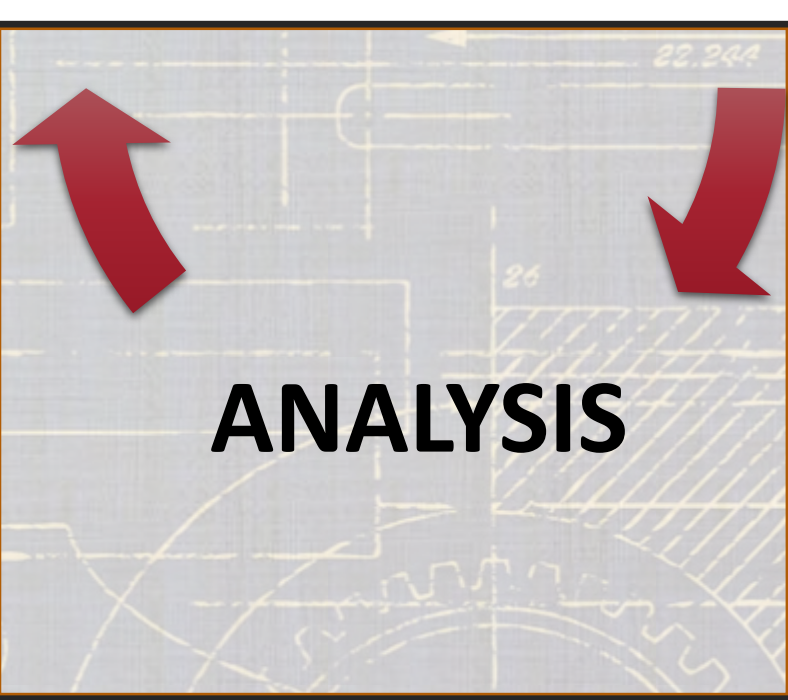
System Purpose

To prepare workers to do their jobs safely, efficiently, and effectively, and to protect the work force, the public, and the environment.

A process that supports the delivery of training within a continuous improvement and evaluation process.

- Views problems and solutions
- Progress systematically toward desired outcome
- Specific interrelated and interdependent steps
- Set of principles and frameworks

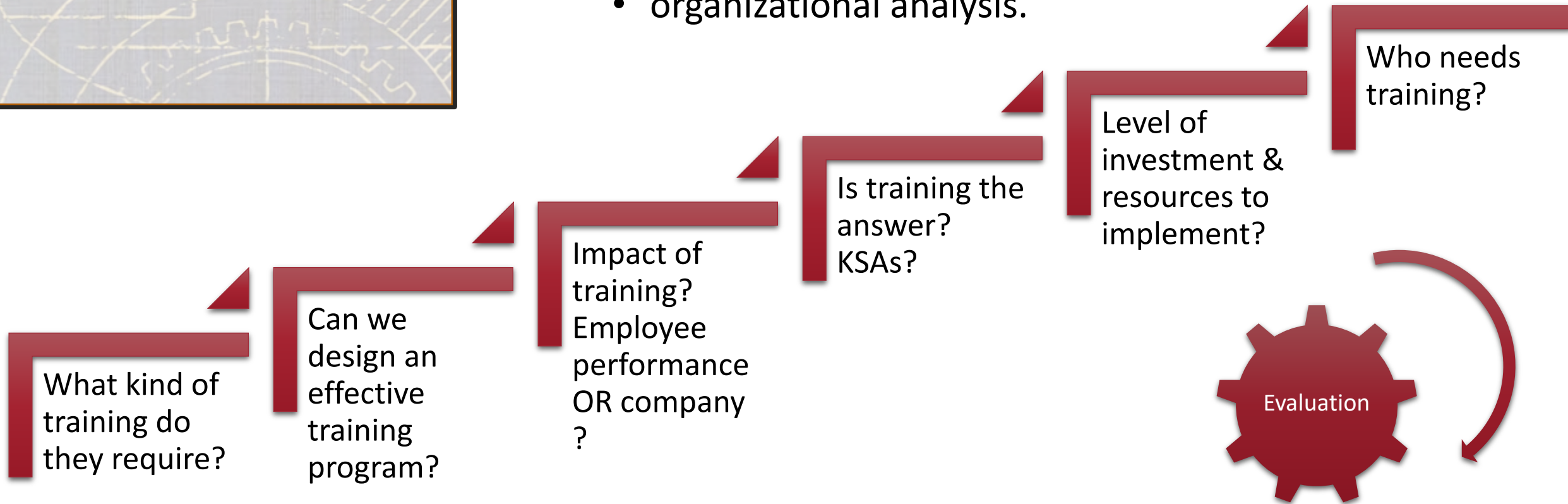


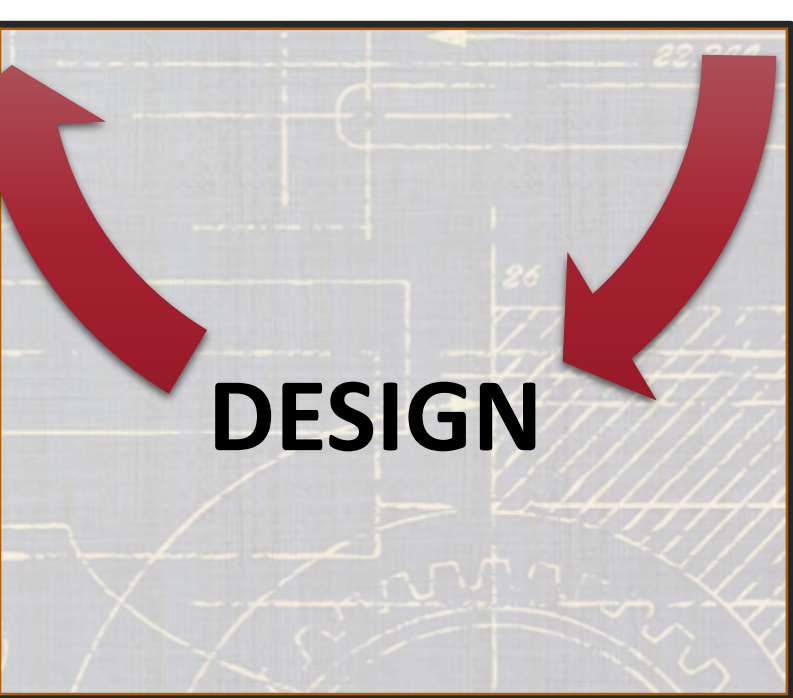


Needs Assessment and a Training Needs Analysis.

Needs analysis undertaken at three levels

- the job
- the individual
- organizational analysis.



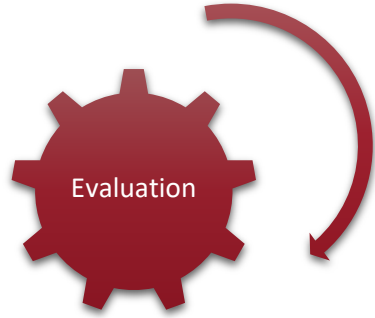


Entry Behaviors
for the Learner;
prerequisite
knowledge

Learning Steps;
How to perform
the task

Performance Test
Standards,
performing task
or activity

Learning
Objectives;
Learners will be
able to perform
at completion



LEARNING PLATFORM

DEVELOP

Organize material in a logical manner.

Develop Instruction, Create Learner activities & experiences

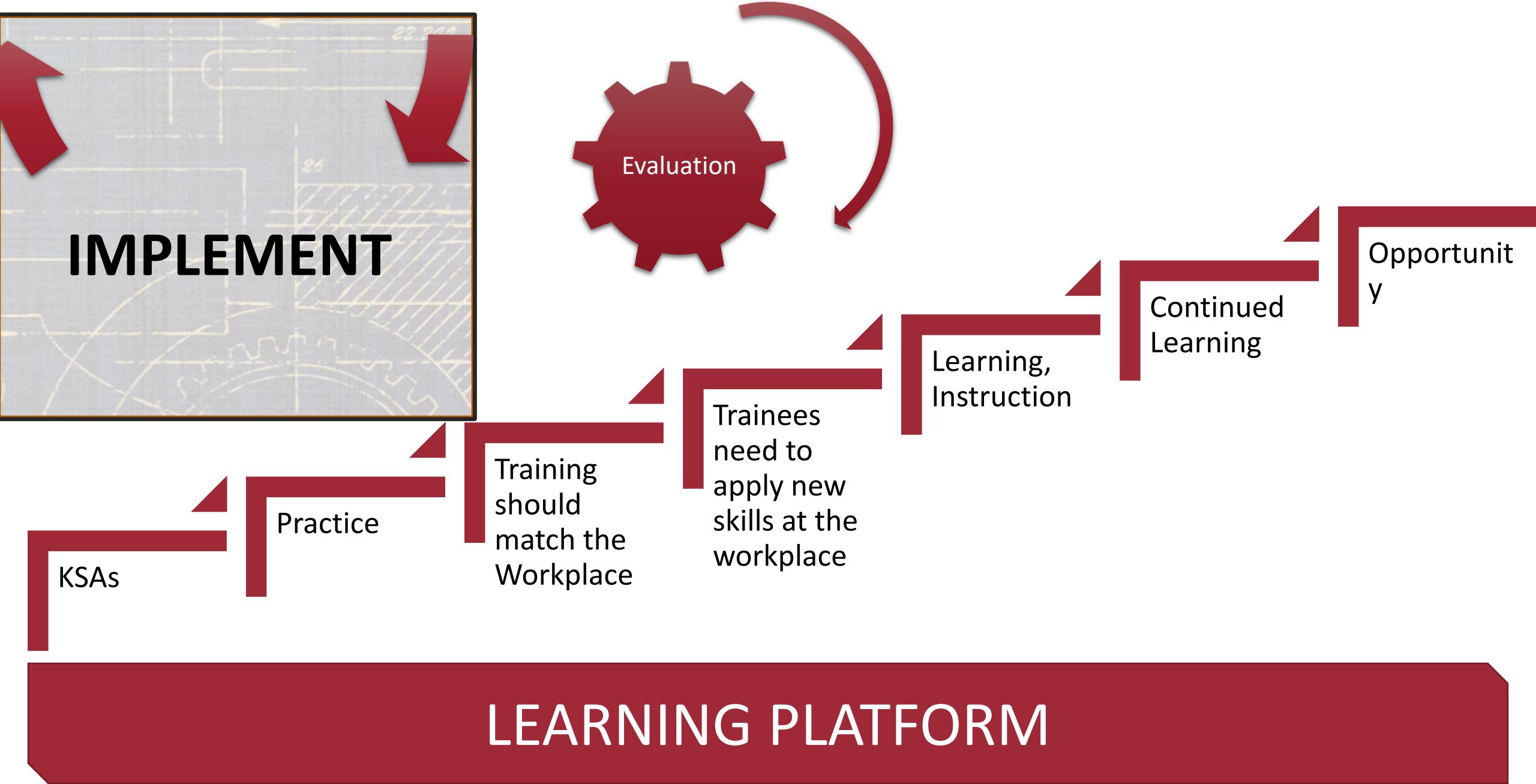
Evaluate understanding

Training setting, delivery system

Prerequisites- review existing material

Validate, review and approvals

Evaluation



Kirkpatrick's Model of Evaluation

EVALUATE



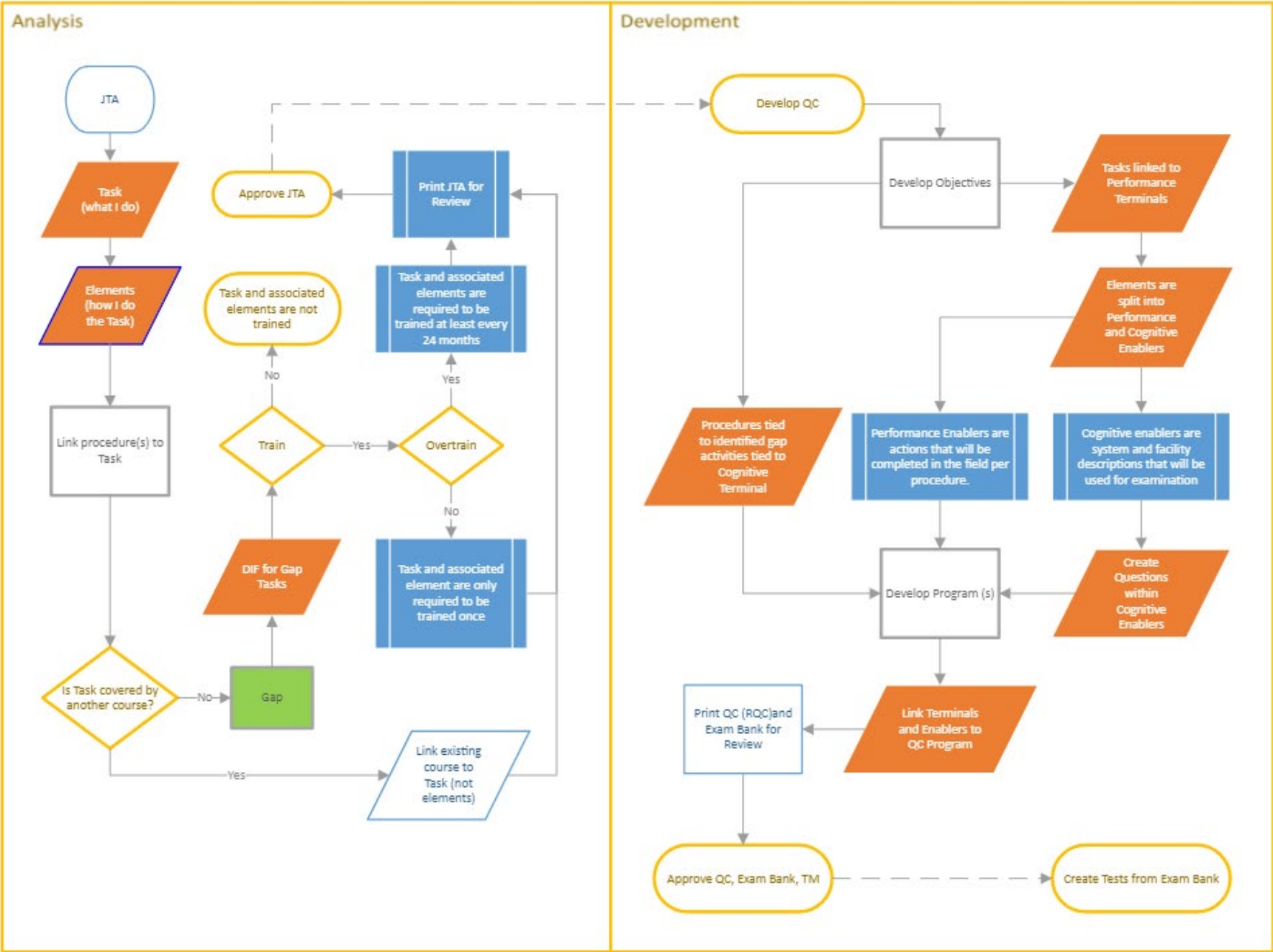
Summative



Formative

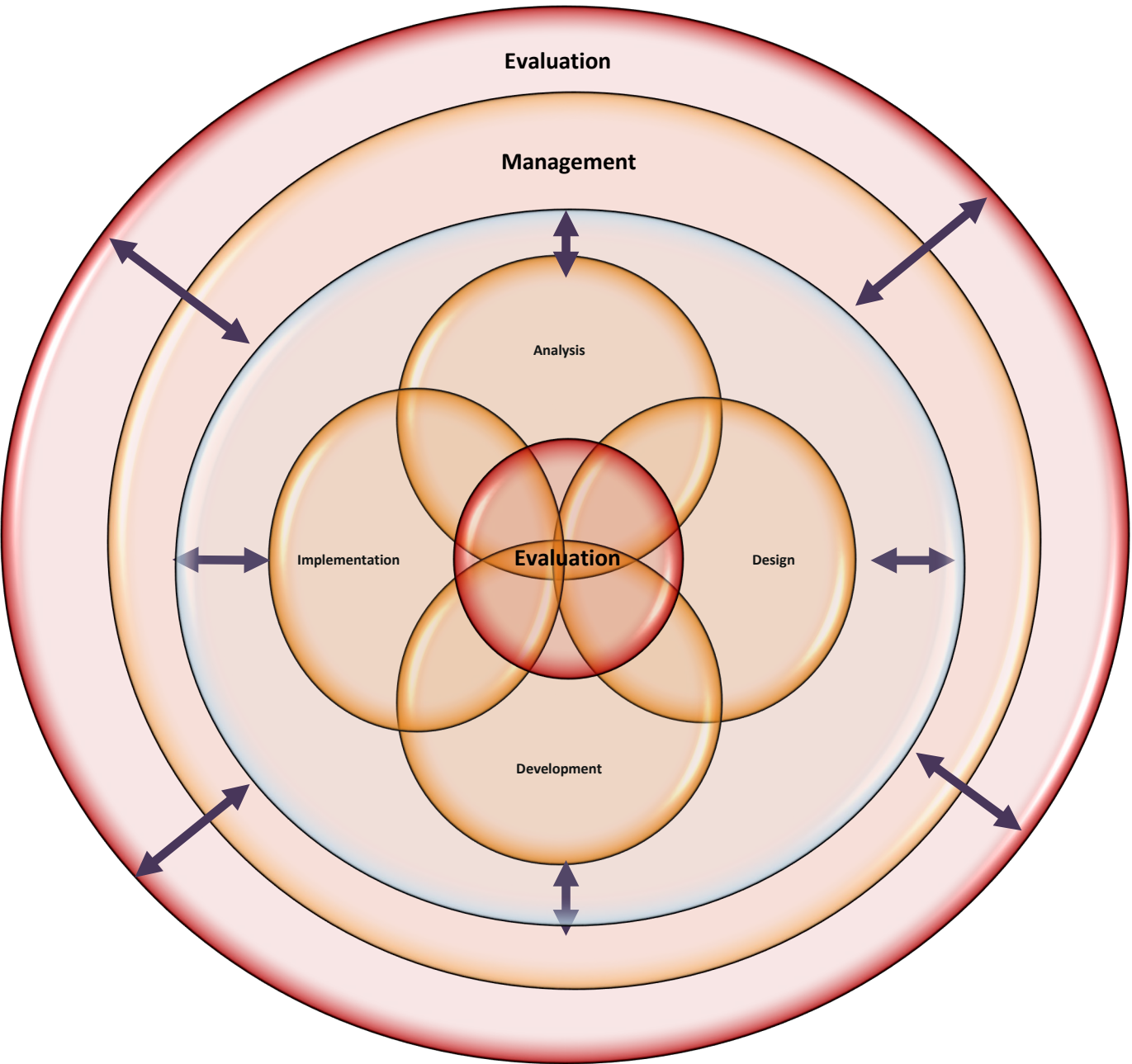


SAMPLE RELATIONSHIP



Request for Training. Reason for Analysis

The Systematic Approach to Training (SAT) includes five distinct, yet interrelated, phases. These phases include analysis, design, development, implementation, and Evaluation (ADDIE).





RISKS OF NOT FOLLOWING THE BOUNDARIES OR
FRAMEWORK OF THE SAT PROCESS.

LESSONS LEARNED

Wilmington-Newark, Delaware, November 2, 2006 - A tragic accident in which two workers were asphyxiated inside a nitrogen filled confined space...

Lead Investigator John Vorderbrueggen, PE, said *“the CSB determined that workers at Valero and elsewhere **are not properly trained on the dangers** of low-oxygen atmospheres around the unsealed openings of vessels and equipment that are undergoing purges with inert gases such as nitrogen.”*

Recommendation recipients were all **urged to include critical information in training materials** for workers

INEFFECTIVE OR INADEQUATE TRAINING

Risks that an employer may face not providing role-appropriate, adequate training include, but are not limited to:

LEGAL



- LAWSUITS
- FINES
- CRIMINAL NEGLIGENCE
- SAFEGUARDING RISK
- DISCRIMINATION RISKS
- FINANCIAL REPORTING
- AUDITING RISKS

INJURIES



- FALLING FROM SCAFFOLDING
- SUFFEREING A LIFTING INJURY
- ELECTRIC SHOCK
- CHEMICAL BURNS
- OCCUPATIONA HEALTH AND SAFETY RISKS
- MEDICAL RISKS

REGULATORY



- PERMITS
- EPA
- RCRA/CERLA
- HEALTH & SAFETY
- REPUTATION AND CLIENT
- ENVIRONMENTAL

SAT CREEP

Example 1:

Directed to utilize new technology in lesson plans as a modification instead of a revision.

Issue:

- Picking the training method before the design & development phase

Solution:

Example 2:

If an employee isn't doing something "right," then they must need more training.



Issue:

- Common Assumption that if an employee isn't doing something "right," then they need more training.

Solution:

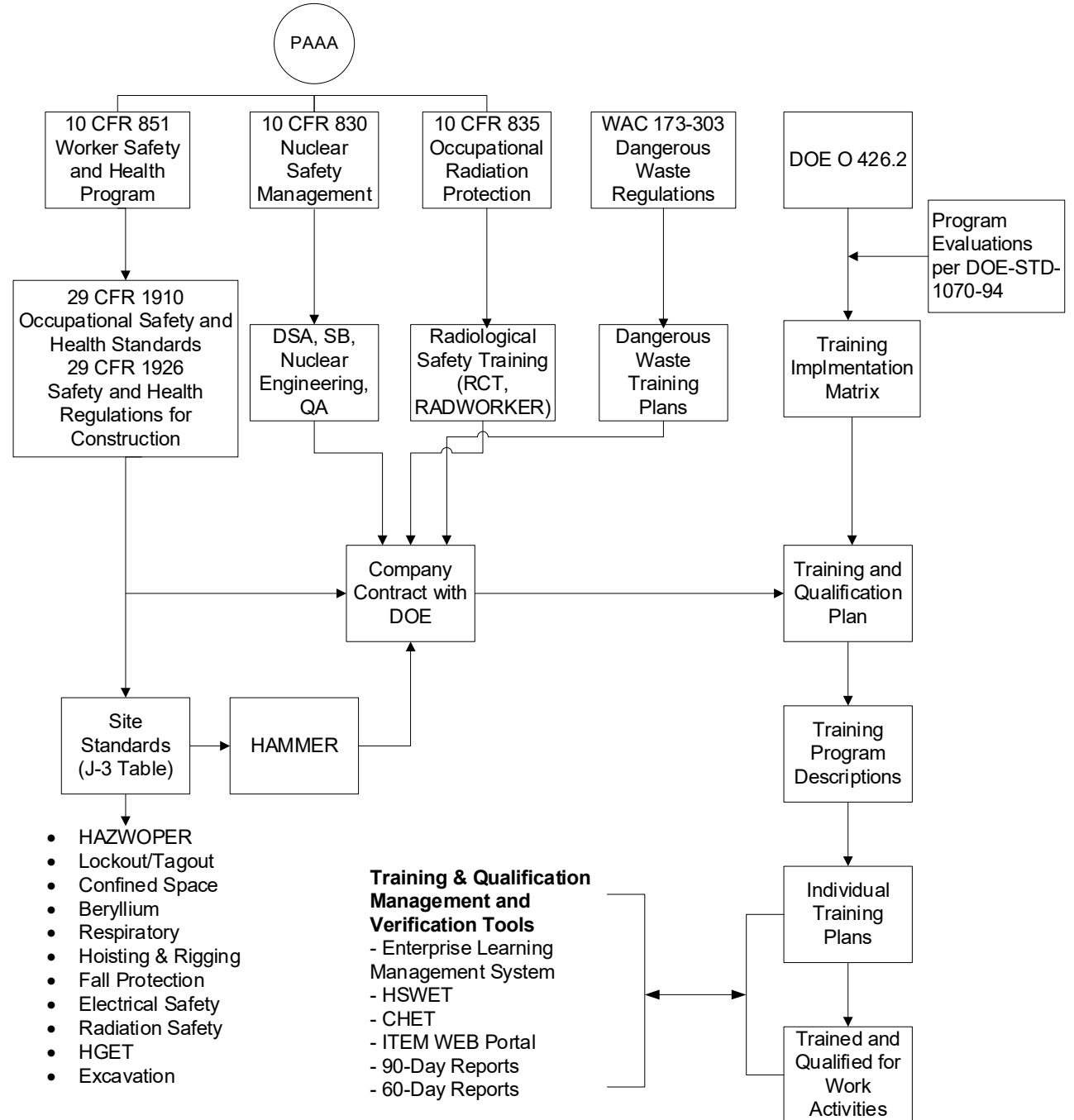
EXAMPLE(S) OF SAT CREEP

GROUP-

- PROVIDE EXAMPLES OF SAT CREEP OR POTENTIAL SAT CREEP
- WHERE DID THE PROCESS GO ASTRAY?
- PROVIDE METHODS TO IDENTIFY AND SOLVE PROBLEMS WITHIN THE SAT PROCESS.
- WHAT PIECE WAS MISSING?



BENEFITS AND IMPORTANCE OF USING A SYSTEMATIC PROCESS



ADDIE BENEFITS

- Knowledge and skills identified provide a task-specific content reference for both new and existing programs.
- Reveals reliable information on safe work practices.
- Confirms a valid training need, job analysis uses existing job data and employees to identify and rate job tasks.
- Correct performance and underlying competencies are then determined through task analysis.

ANALYSIS



- Specifies, in measurable terms, the knowledge, skills, and aptitudes that training will develop in the employee.
- Job performance measures are prepared for each task.
- Defines how individual tasks are performed focuses training development efforts and supports in-plant training and qualification.

DESIGN



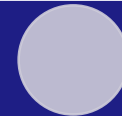
- Organizes the instructional materials needed for employees to achieve the learning objectives.
- Maximizes the use of existing materials and resources.
- Defines Instructor and employee activities.
- Describes how the instructor and employees will perform during training to achieve the learning objectives.

DEVELOPMENT



- Puts training programs into operation.
- Activates the training plan
- Selects and trains Instructors.
- Delivers training as planned and approved.
- Evaluates employees and instructor performance.

IMPLEMENTATION



- Ensures training's continuing ability to produce qualified employees
- Helps maintain and improve the training program
- Assesses dynamically.
- Assesses performance, identifying concerns, and initiating corrective actions

EVALUATION

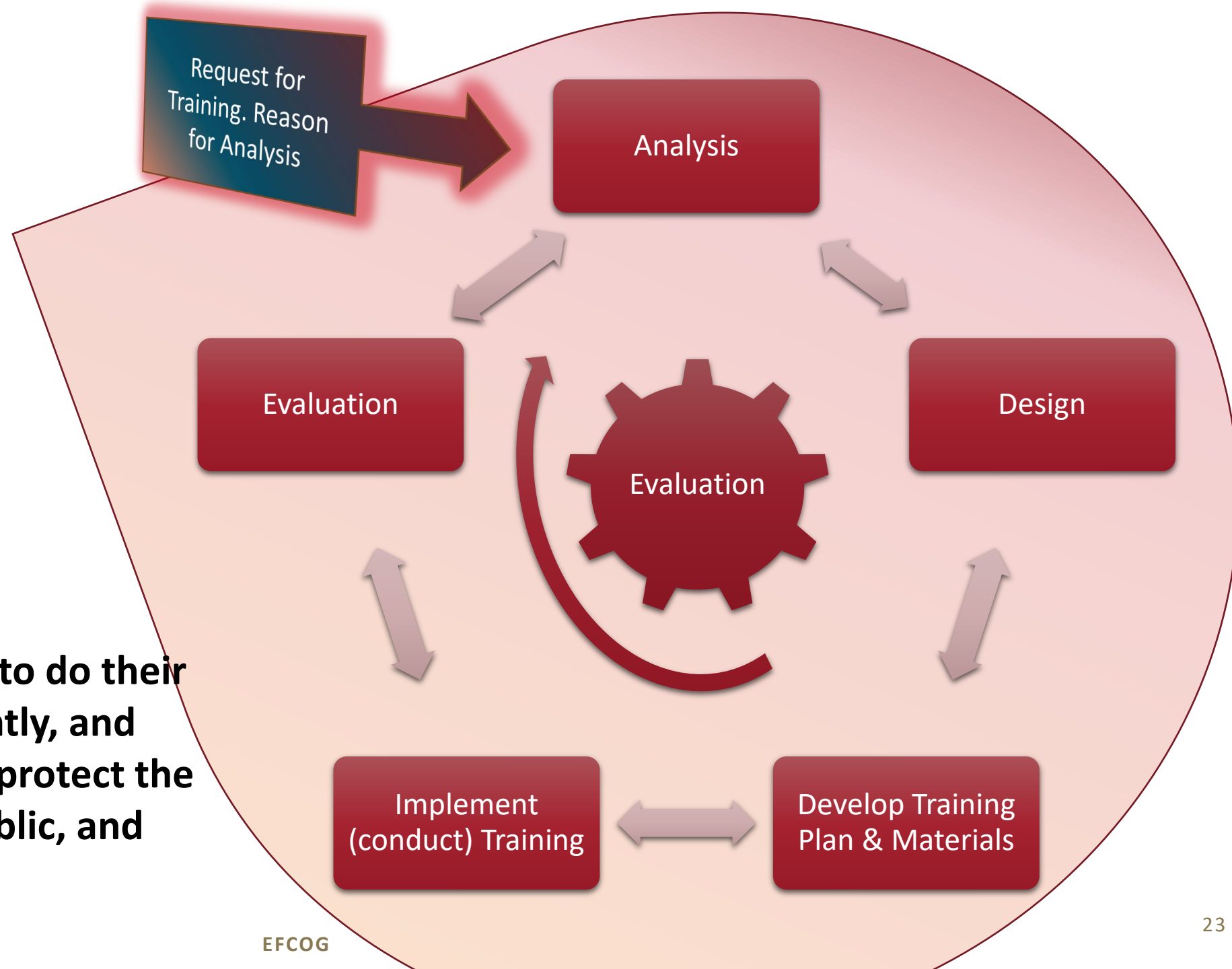


SUCCESSFUL TRAINING =

Safe and compliant with an increase in the work ability, skill or competency in the trainee.

DOE SUCCESSFUL TRAINING =

Workers prepared to do their jobs safely, efficiently, and effectively, and to protect the work force, the public, and the environment.



THE SAT METHODOLOGY ON JOB PERFORMANCE

“Performance based training is a focus not only on how a system works, but on how to work the system”. The benefits of the performance-based approach are clear: It is cost effective, and it ensures that trainees are able to operate a machine or system safely and reliably.

The Systematic Approach to Training can be streamlined and lightened while it is critical to maintain the integrity of the system. Each of the phases can be more efficiently used and electronically tied together, and still assure training program effectiveness and proficient job performance.

A graded or more simplified Systematic Approach to Training can be tool for instructors and training management.