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Using ISO 45001 to Enhance Your Industrial Ergonomics Program

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Meet Your Presenters

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Learning Outcomes

Participants will:

- Understand the key concepts of ISO 45001 relative to ergonomics.
- Learn how to integrate ISO 45001 into their ergonomics programs.
- Identify common challenges in implementing ISO 45001 into ergonomics programs and how to overcome them.

Agenda

- Overview of ISO 45001
- Specific Applications of ISO 45001 in Ergonomics
- Common Challenges and How to Overcome Them
- Q&A

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Overview of ISO 45001

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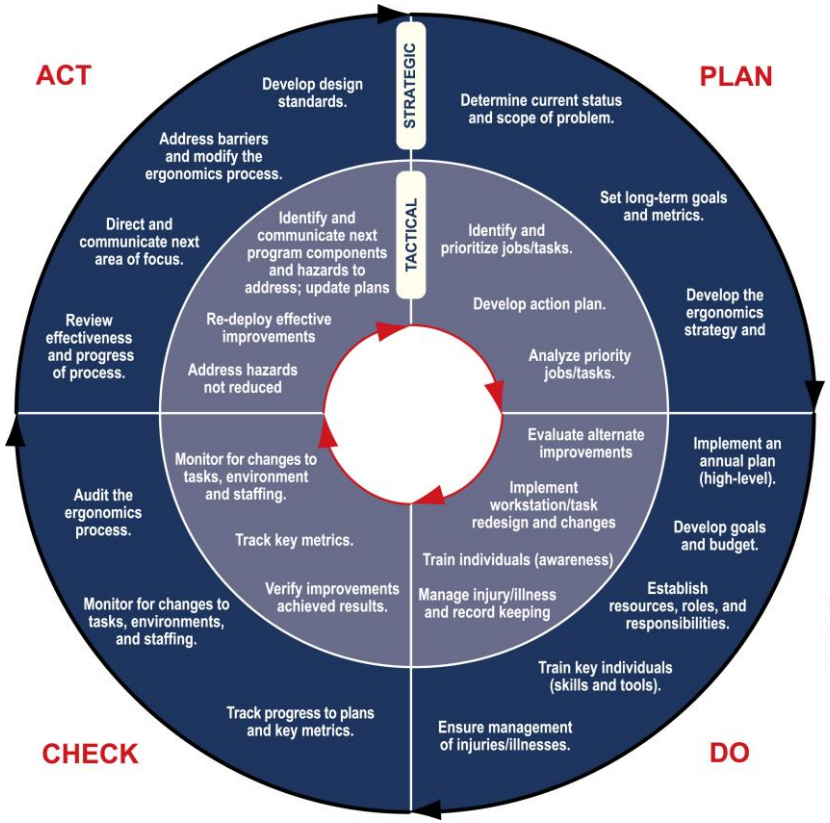
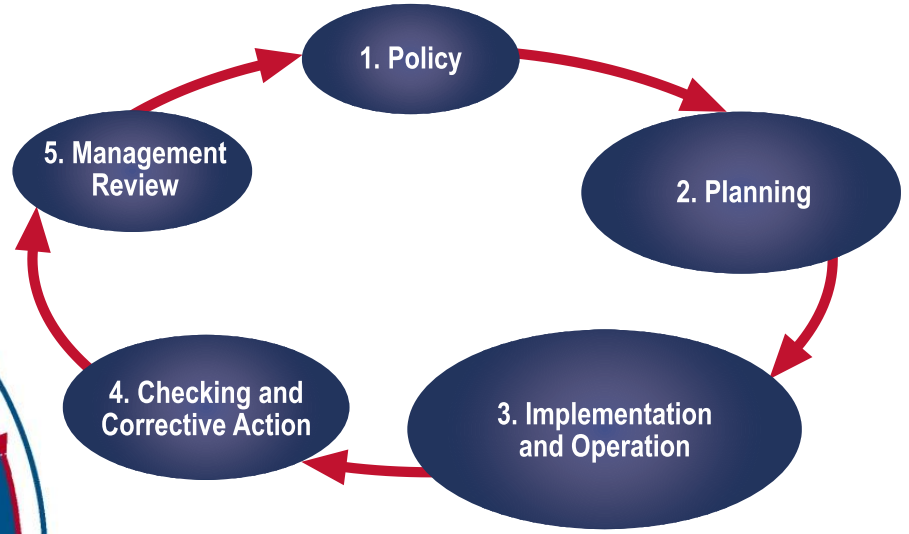
The Most Effective Safety Programs are Built on a Continuous Improvement Model





ISO 45001 Summary

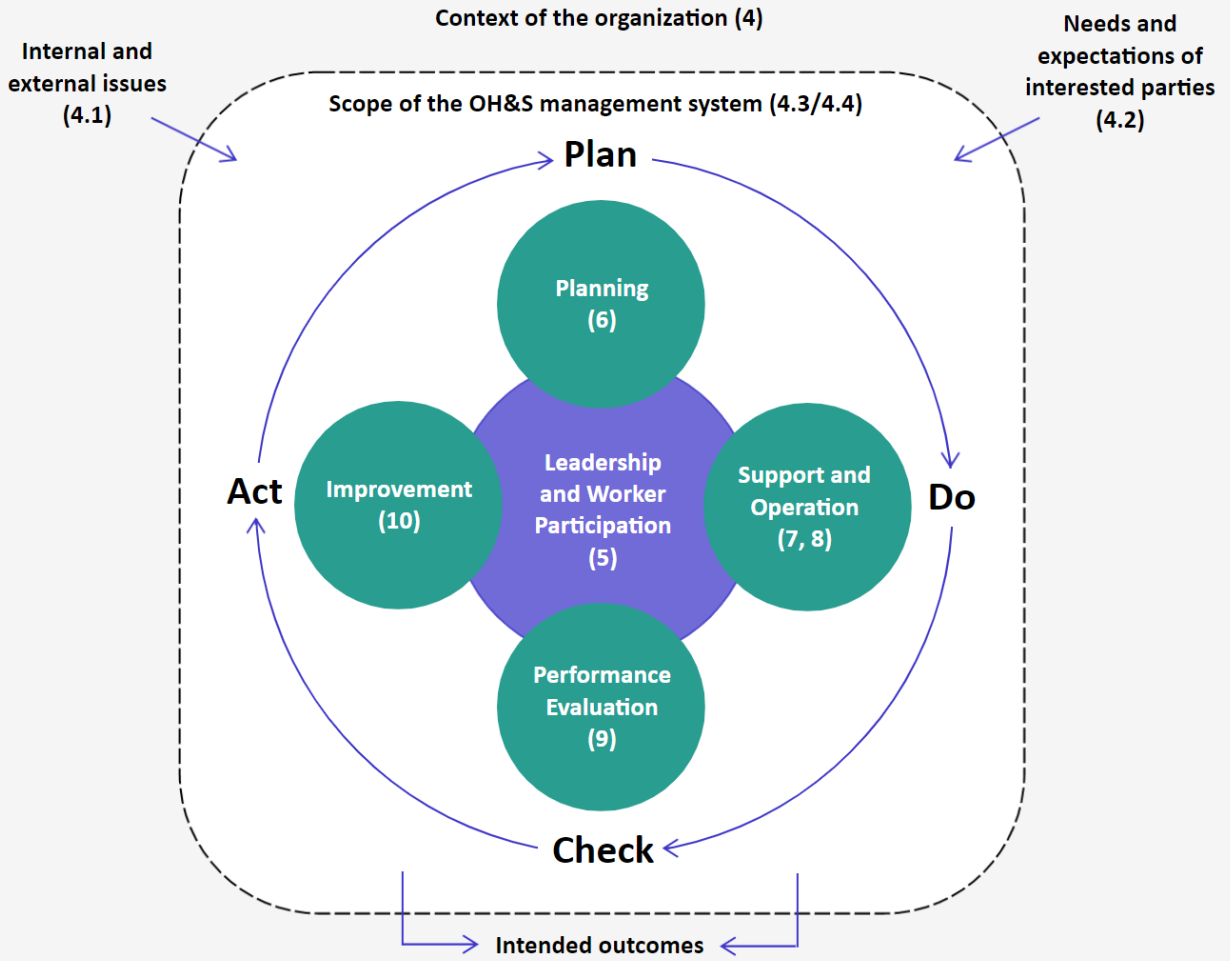
Shewart Cycle	ISO 45001	
	1. Scope	
	2. Normative references	
	3. Terms and definitions	
	4. Context of the organization	4.1 Understanding the organization and its context 4.2 Understanding the needs and expectations of works and other interested parties 4.3 Determining the scope of OH&S management system 4.4 OH&S management system
	5. Leadership and worker participation	5.1 Leadership and commitment 5.2 OH&S policy 5.3 Organizational roles, responsibilities, and authorities 5.4 Consultation and participation of workers

ISO 45001 Summary

Shewart Cycle	ISO 45001	
Plan	6. Planning	6.1 Actions to address risk opportunities 6.2 OH&S objectives and planning to achieve them
Do	7. Support	7.1 Resources 7.2 Competence 7.3 Awareness 7.4 Communication 7.5 Documented information
	8. Operation	8.1 Operational planning and control 8.6 Emergency preparedness and response
Check	9. Performance evaluation	9.1 Monitoring, measurement, analysis and performance analysis 9.2 Internal audit 9.3 Management review
Act	10. Improvement	10.1 General 10.2 Incident, nonconformity and corrective action 10.3 Continual improvement

Key Elements of ISO 45001 for Ergonomics

- Managing and reducing risk
- Prioritizing activity
- Directly involving top management and front-line employees
- Apply a continuous improvement process (PDCA)
- Using metrics to drive process



Specific Applications of ISO 45001 to Industrial Ergonomics

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Leadership & Worker Participation and Consultation

Front Line Workers

- Participatory Ergonomics
- Scope of Participation
  - » Workplace Improvements
  - » Hazard Identification
  - » Risk Assessment
  - » Prioritization
  - » Audit/Review
  - » Policy and Planning

Increasing Front-Line Employee Involvement

What steps can you take to increase front-line employee involvement in:

Policy and Planning

Risk Assessment and Job Improvement

Verifying Effectiveness of Improvements

Process Review and Improvement

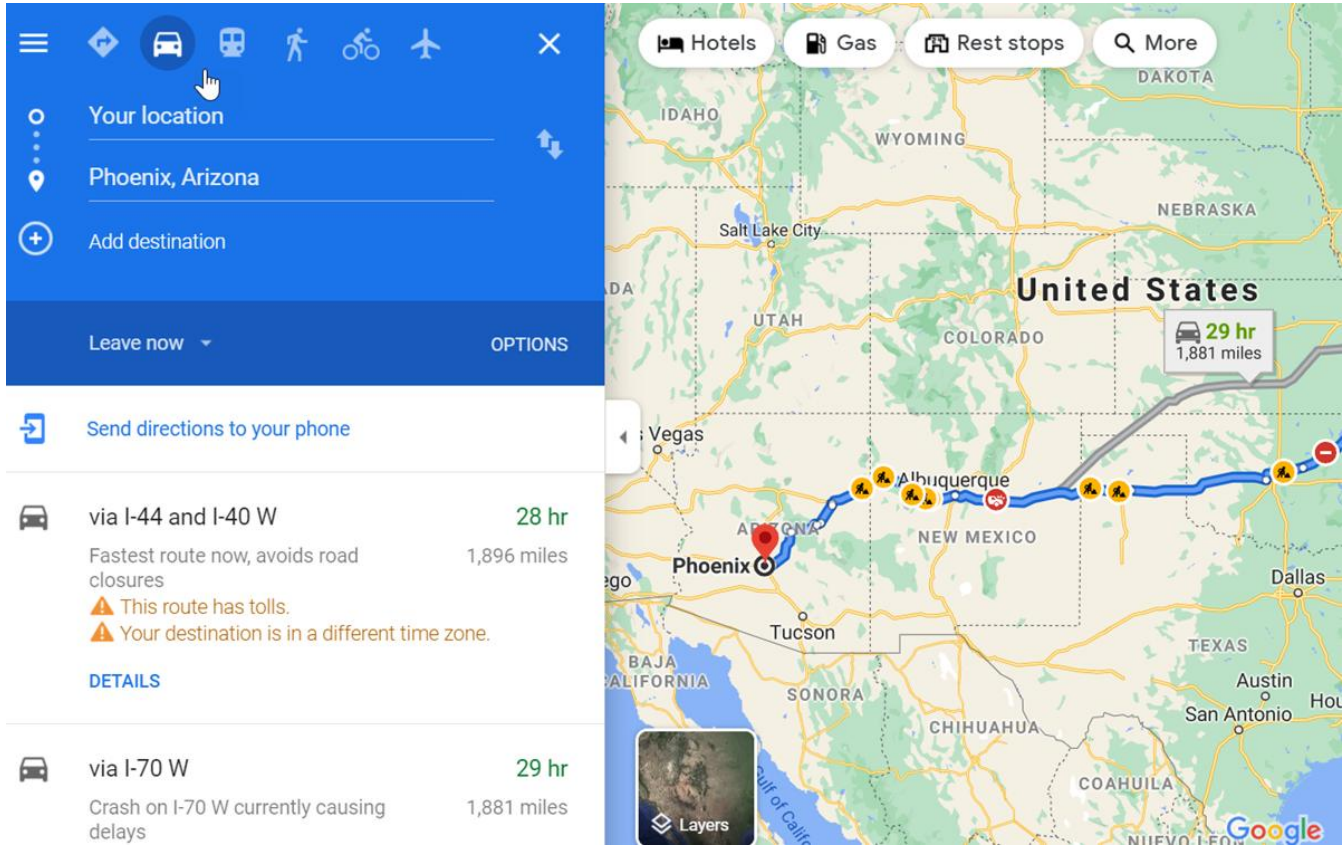
Leadership & Worker Participation and Consultation

What does “good” senior leadership participation in safety/ergonomics look like to you?

How have you conveyed those expectations to Senior Leadership?

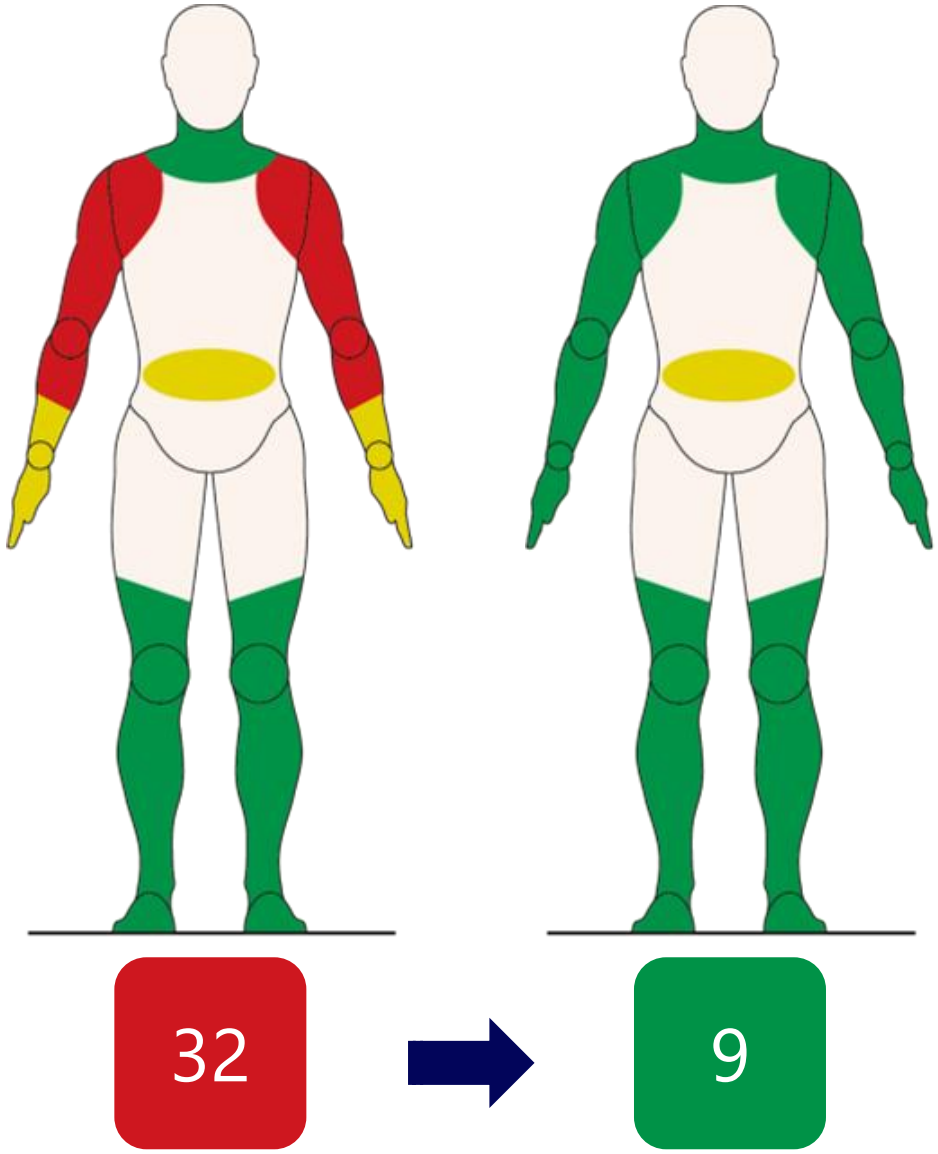
Planning

- Overarching Goal
- Current State
- Resources
- Metrics
- Roles and Responsibilities
- Scope



Setting Objectives

- **Reduce MSD risk** in existing and new jobs to the lowest level that is technically and financially feasible.
- **Eliminate high MSD risk exposure** from existing and new jobs, workstations, and tasks.



Resources

Types of Improvements Necessary

Self-Adjustments

Few — Many

Maintenance

Few — Many

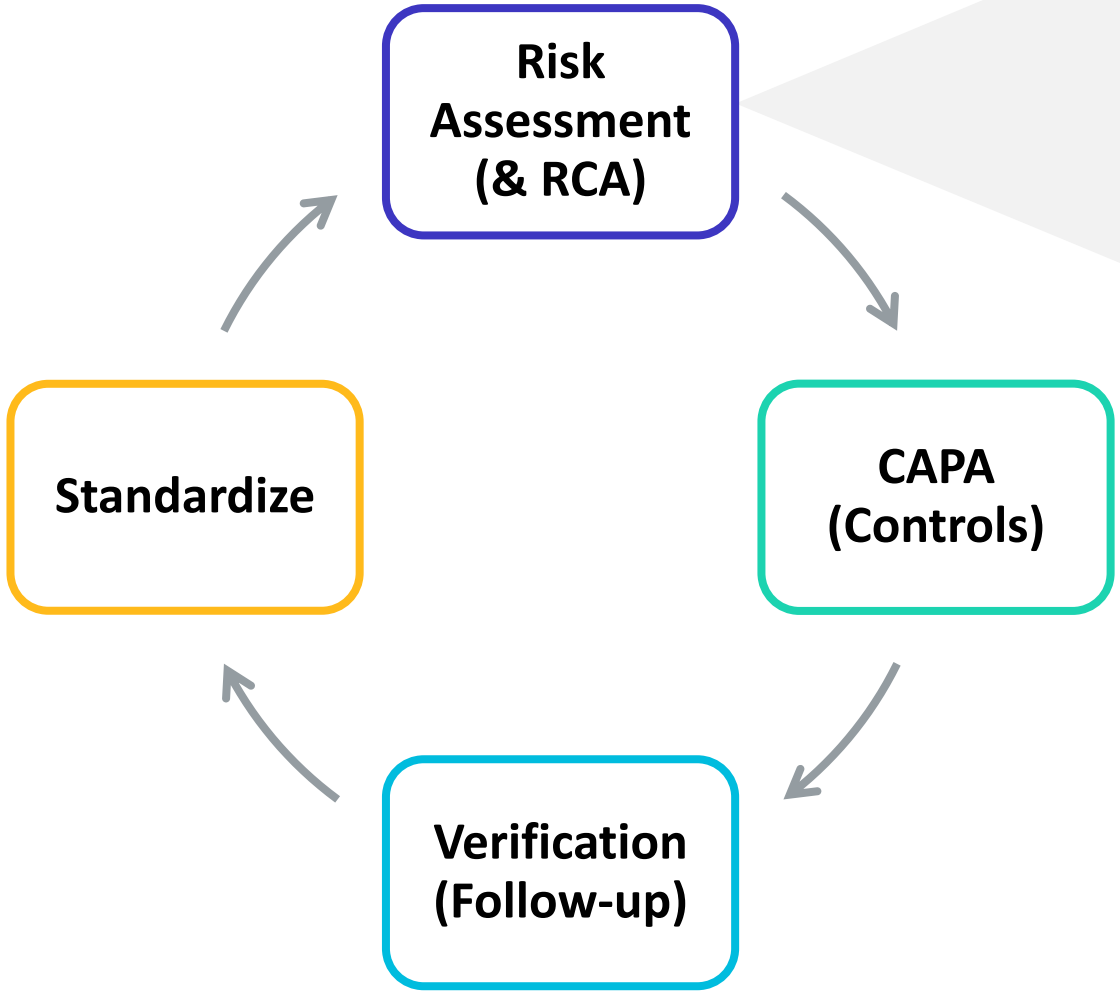
Operating Budget

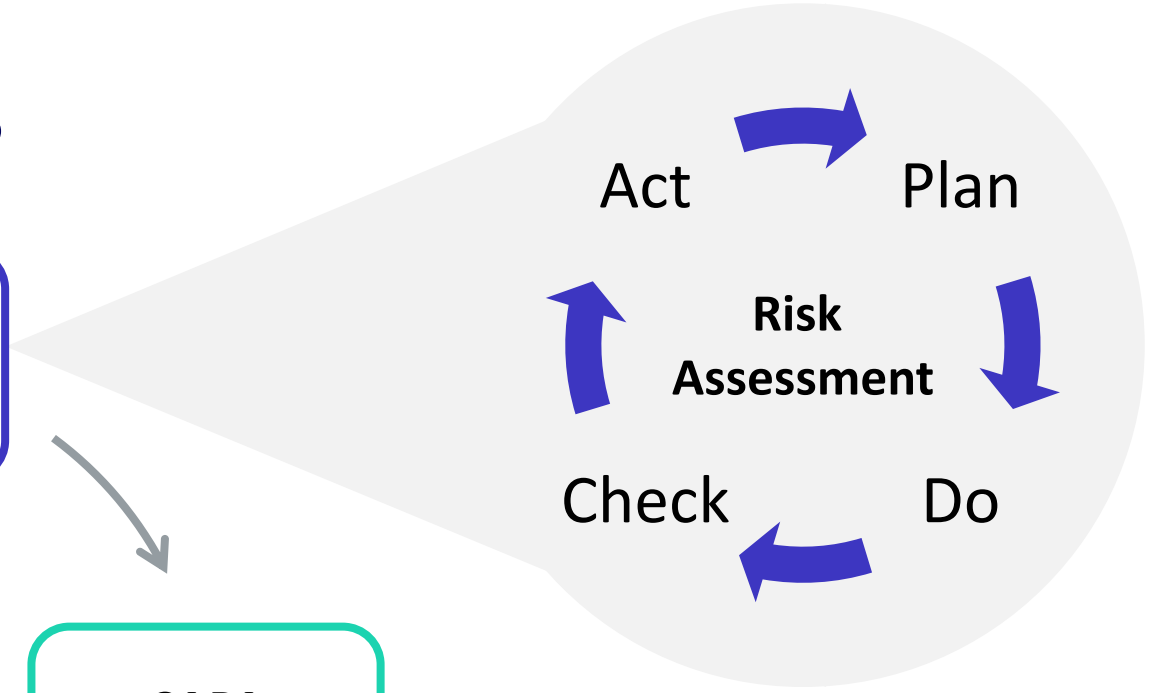
Few — Many

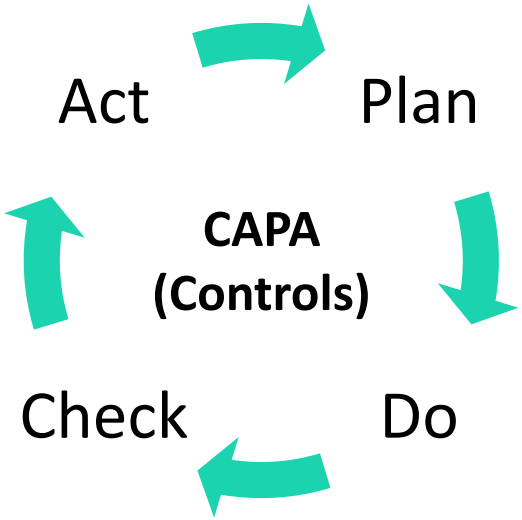
Capital Expenditure

Few — Many

Risk Assessments



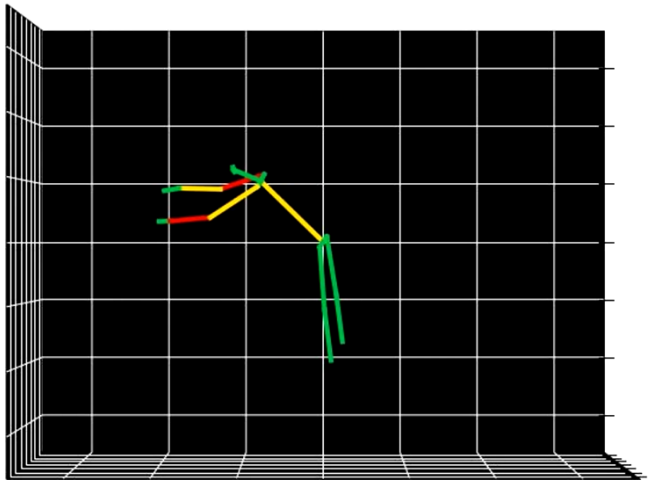




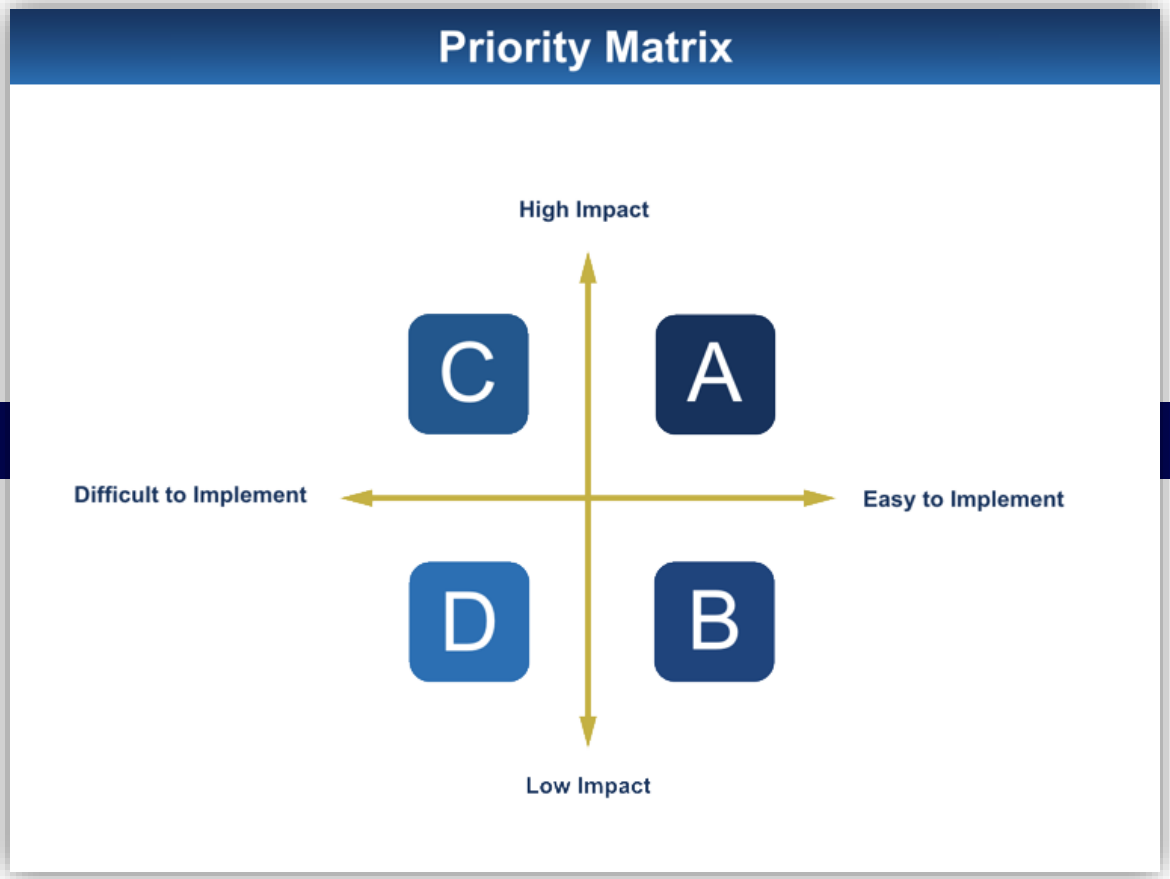
Risk Assessments

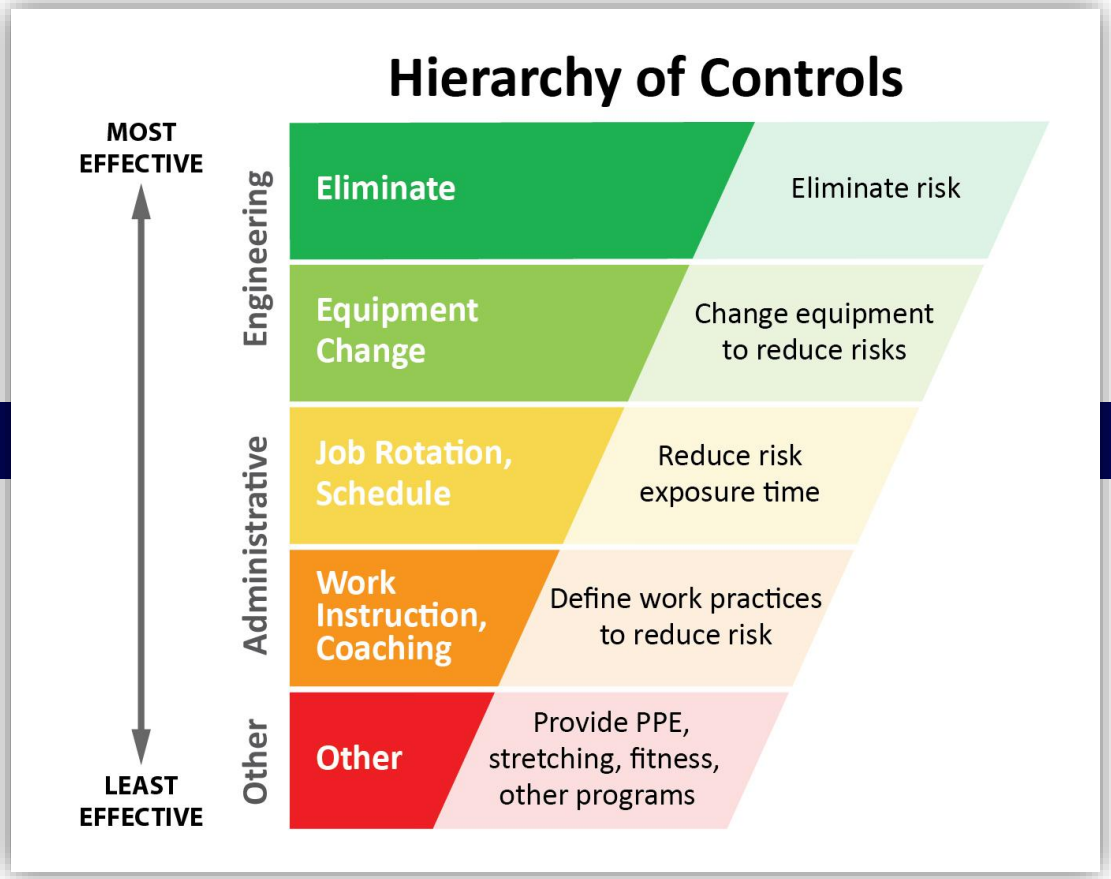
- Consistent
- Simple
- Sensitive (set priorities)
- Useful (causes and controls)

30

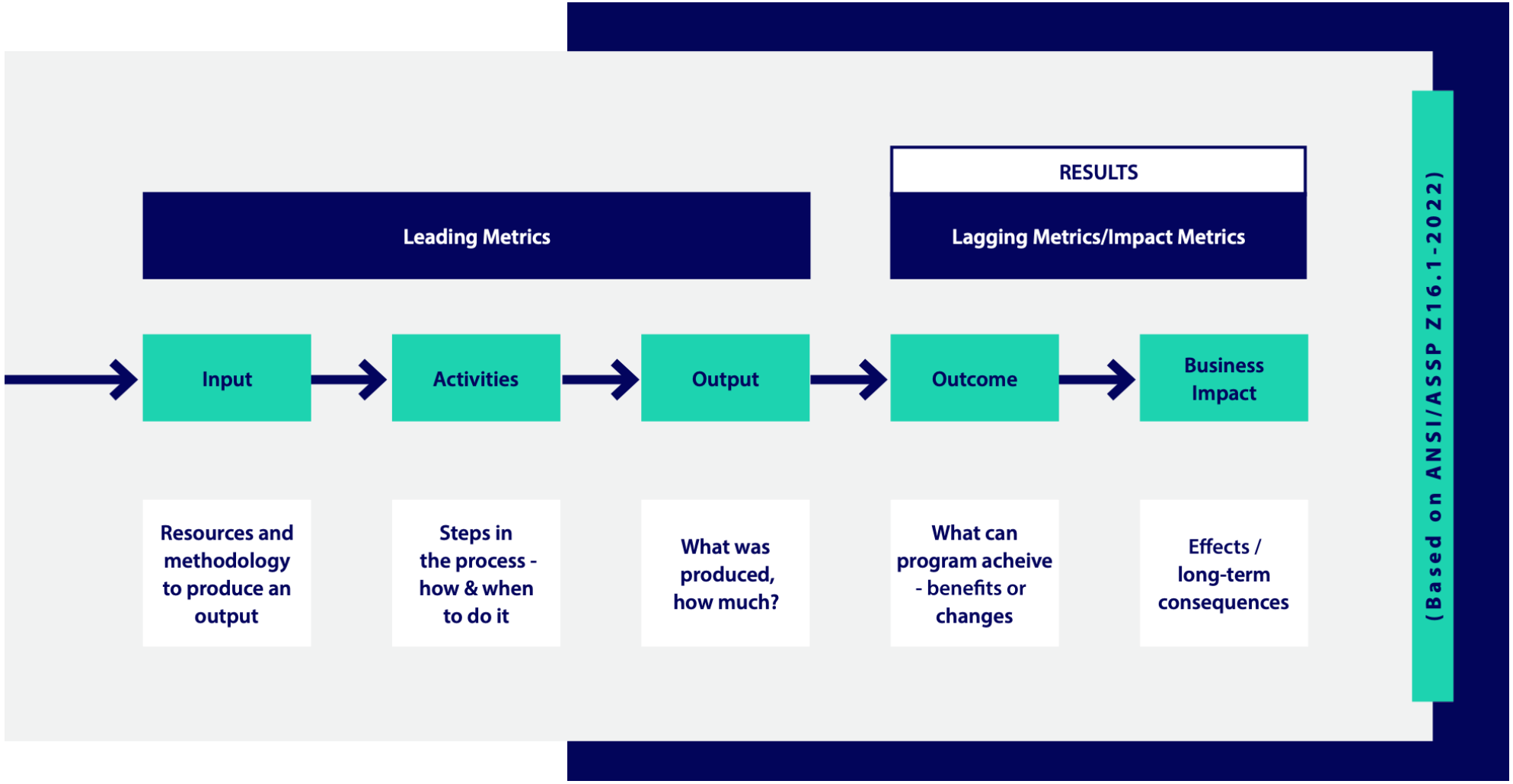


Do: Implement Improvements





Performance Evaluation: Types of Metrics



Performance Evaluation: Common Metrics

Initial Program Measures	Key Performance Indicators
# of workstation improvements implemented	% of new workstations/jobs at high risk
% of targeted employees completing appropriate level of training	% workstations/jobs at high risk
% of targeted workstations/jobs assessed for risk	# workstations/jobs with ≥ 10% risk score reduction % reduction of MSD risk score
MSD incident rate	% reduction of MSD risk score

Common Challenges and How to Overcome Them

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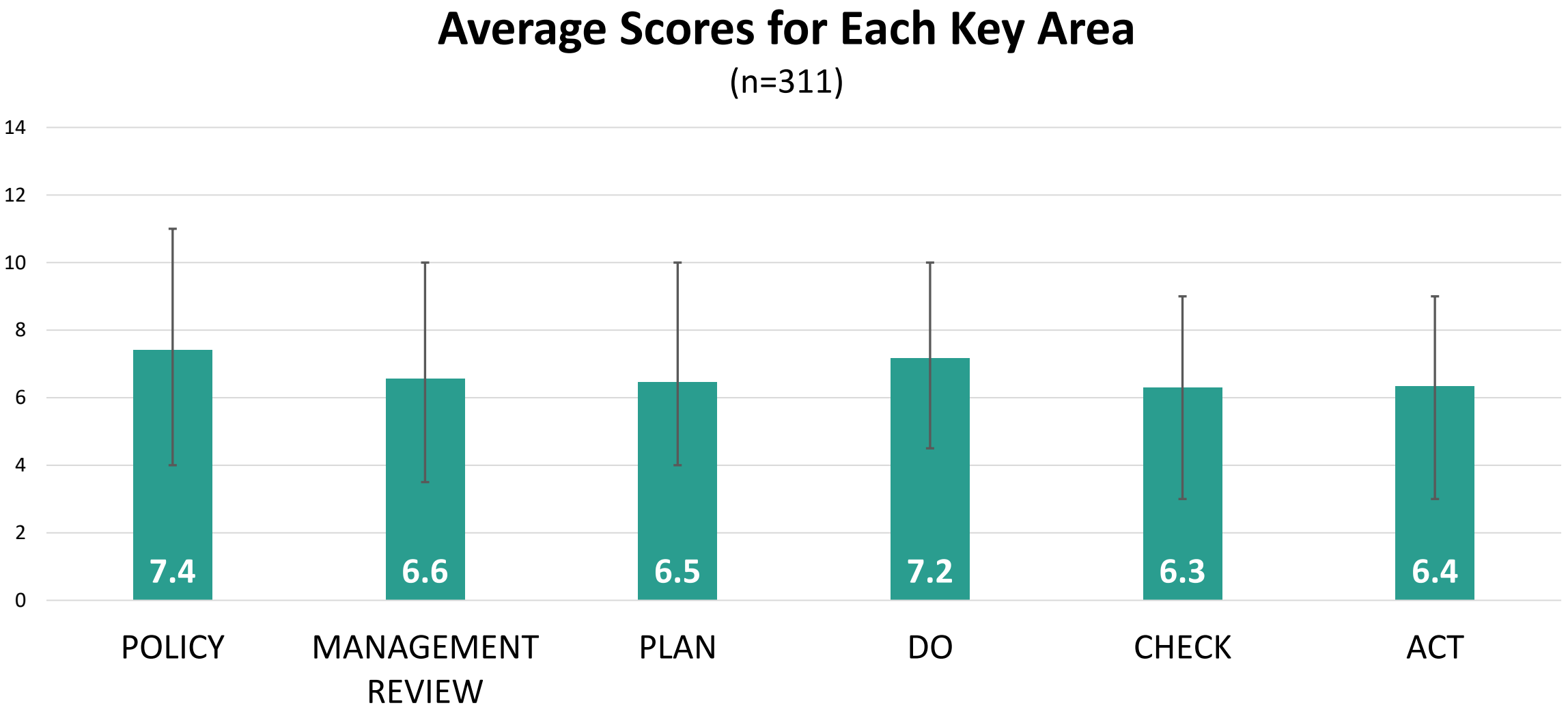
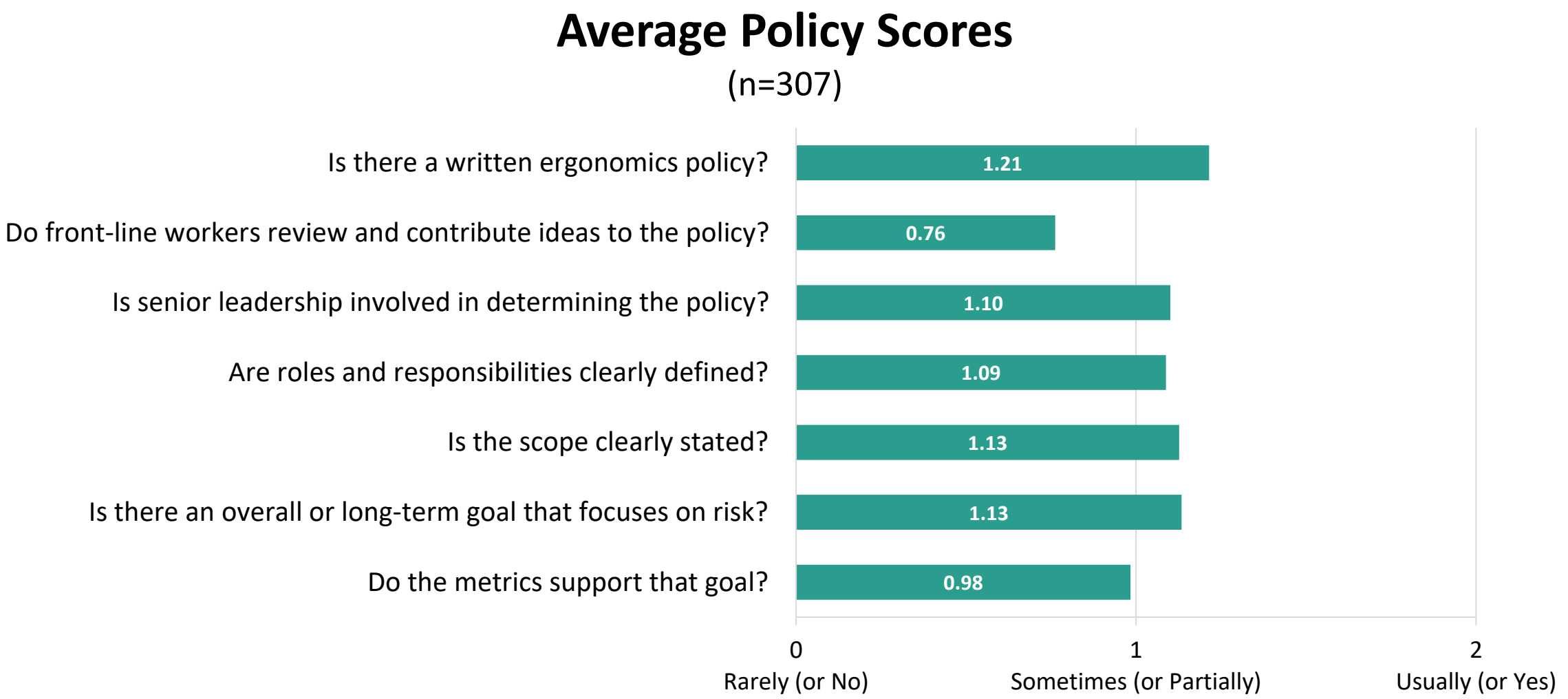
Interactive Ergonomics Program Self-Assessment

Scan the QR code to quickly assess your current program. You'll get **easy-to-read results** & **customized recommendations** for improvement.

Overall Scores



Example of Key Area Scoring: Policy



Top Scoring Elements

Section	Question	Average Score
Do	Do improvements follow the hierarchy of controls, prioritizing hazard elimination and engineering controls over administrative controls of PPE?	1.33
Check	Are ergonomics improvements effective in reducing MSD risk exposures?	1.24
Policy	Is there a written ergonomics policy?	1.21
Act	Is ergonomics included in EHS auditing?	1.16
Policy	*Is the scope clearly stated?*	*1.13*
Policy	*Is there an overall or long-term goal that focuses on risk?*	*1.13*
Management Review	*Does the process review result in follow-up actions?*	*1.13*

Lowest Scoring Elements

Section	Question	Average Score
Check	Are managers held accountable for individual ergonomics performance goals?	0.58
Plan	Have ergonomics program audit criteria been established?	0.70
Act	Are ergonomics improvements evaluated for return on investment (ROI)?	0.71
Check	Are metrics and/or KPIs for ergonomics regularly communicated within the organization?	0.73
Act	Is there a formal process for including lessons learned about ergonomics from existing product lines into new product and equipment design?	0.75
Policy	*Do front-line workers review and contribute ideas to the policy?*	*0.76*
Plan	*Do workplace changes, including staffing levels and production volumes, result in new ergonomics assessments being performed?*	*0.76*

Evaluating the ROI of Improvements

WHY

- Speaking the Language of Business Managers
- Verify Effectiveness
- Demonstrate Value to the Organization
- Future Resources
- Easier to do the Right Thing

HOW

- Accurately Convey Injury Savings
- Get Numbers from Other Areas
  - » Productivity
    - Time Saved
    - Decreased Downtime
  - » Quality
  - » Hiring
    - Turnover
    - Capable Employees
  - » Absenteeism
  - » Engagement

Incorporating Lessons Learned into Design

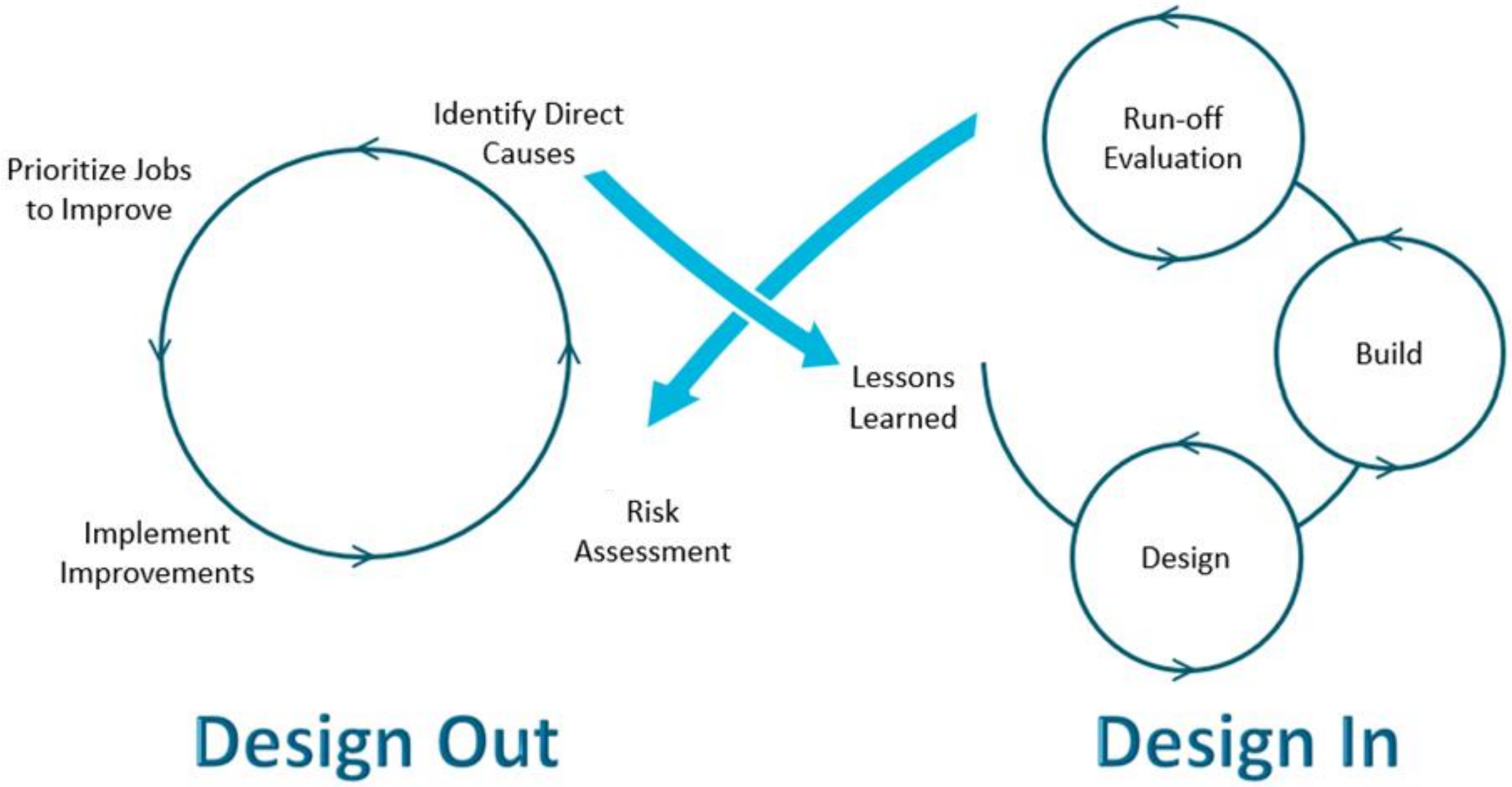
WHY

- Most New Processes are Similar to Old Processes
- Design Guidelines Often Aren't Enough
- Focus on Priorities in Design
- Lessons Learned is Often Familiar Concept to Design Engineers

HOW

- Identify the Most Similar Process
- Examine Risk Level
- Document and Share the Effective Modifications Implemented
- Unaddressed Root Causes:
  - » Document,
  - » Prioritize and
  - » Communicate.

Closing the Loop with Design

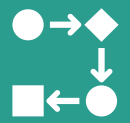


Standardize

- Verify Effectiveness and User Acceptance
- Awareness/Exposure is #1 Barrier
  - » Posters
  - » Internal Ads
  - » Internal Ergo Cup
- Determining Similar Operations
- Processes for Both Push and Pull

Work Procedures

New Employee Training



Re-Deploy Effective Improvements

Bad Habits for Ergonomics Teams

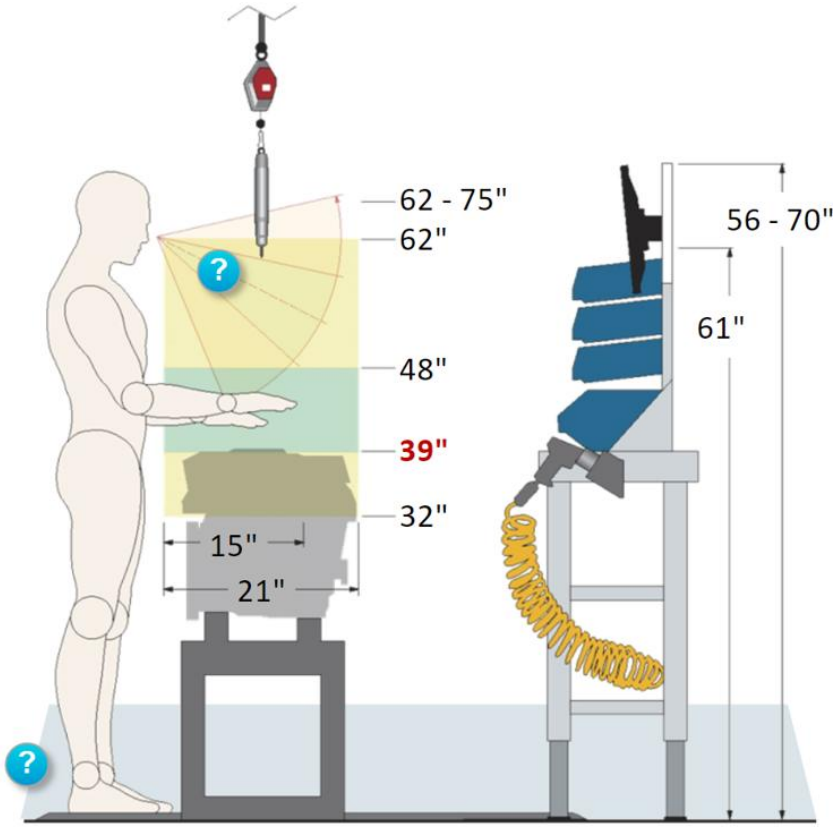
- Failing to consult the operator as the expert on the job
  - » Rush through assessments
  - » Don’t ask enough questions
  - » Don’t fully understand process
- Insufficient prioritization
  - » Don’t consider risk scores
  - » Don’t consider the source of the risk
  - » Don’t consider business impacts

Bad Habits for Ergonomics Teams

- Skipping the root cause analysis
  - » Fix the wrong problems
  - » Don’t reduce risk
- Limited follow-up
  - » Don’t demonstrate risk reduction
  - » Can't assume solutions worked
  - » Don't learn from past

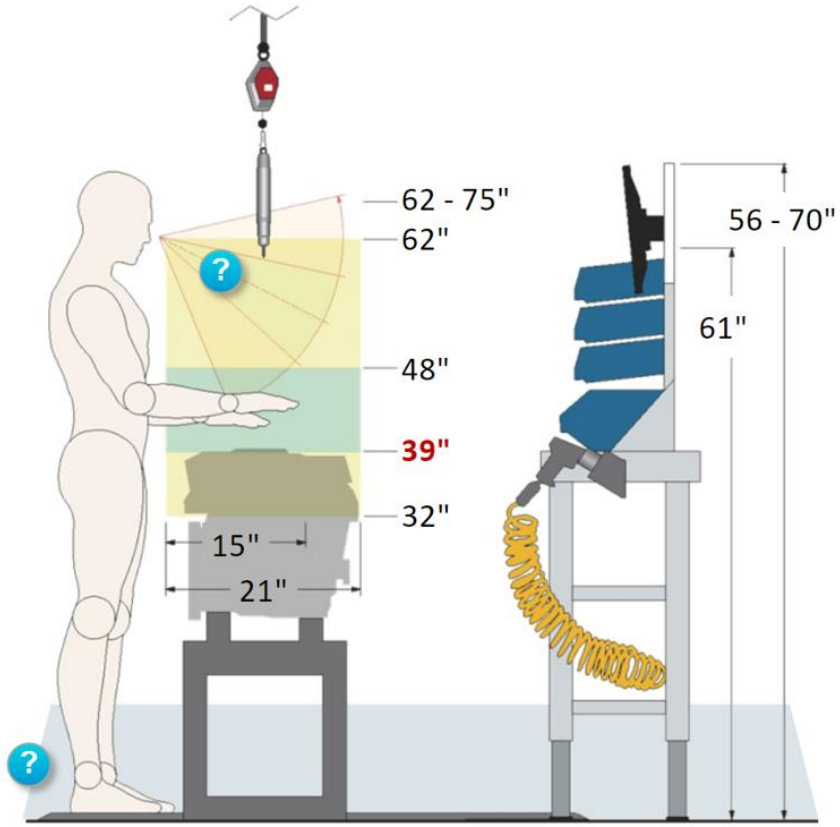
Common Ergonomics Process Traps

- Gaps in metrics reporting
  - » Fail to measure what is important to stakeholders
  - » Report results in ineffective formats/locations
  - » Rely solely on lagging and/or activity measures
- Incorrect mix of ergonomics team members
  - » Front-line employees not sufficiently represented
  - » Over-reliance on front-line employees
  - » Lack of skills training for team members
  - » Team members don't have sufficient time



Common Ergonomics Process Traps

- Failing to incorporate ergonomics into design/purchasing requirements
- Insufficient system auditing of ergonomics



Questions?

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eBook: ISO 45001: A Synergistic Approach to Managing Workplace Safety and Ergonomics

Scan the QR Code to download the eBook about the important links between the global standard for OH&S and ergonomics process management.