Slide 1

Transformational vs. Transactional Leadership

Andrew Salvadore, CSP, CUSP
VP - Risk Management and Safety
Carr & Duff, LLC

Slide 2

Topics of Discussion

Build a Common Language
1. Definitions and Word Choices
2. Generations of Safety
3. Neuroscience of Humans

Leadership
1. Styles, Traits, Beliefs
2. Communication Tools
3. Disciplinary Action
4. Integration (change mgmt.) Process

Systems
1. Standards as the Minimum
2. Systematic Approach
3. What to Work on First

Slide 3

Definitions

Transformational

Open approach that enables big change and improvement in a situation.

Encourages thinking outside the box and find new and inventive ways to address needs.

Transactional

Structured approach that relies on rigorous checks and balances.

Rules, regulations, and a high degree of organization is the foundation.

Slide 4

Generations of Safety

Generations of Safety

- **Hazard Identification and Abatement**
- **Behavioral** - Coaching, Peer Check and Interdependence
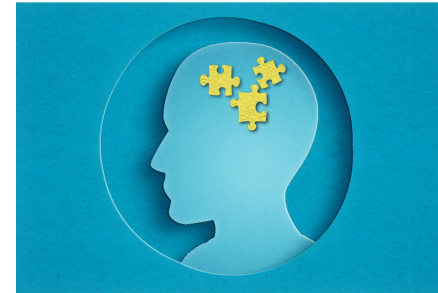- **Neuroscience of Human Behavior**

Glossary: Thinking about safety in terms of subconscious processes that build skill and habits.*

* Third Generation Safety, The Missing Piece, Author(s) Sylvestre

Neuroscience of Humans

Several Ways We Make Routine Mistakes

Dictionary – Mistake

An action, thought or
judgment that
is misguided or wrong.

Human Systems

- **Autonomic Nervous System – Keeps us breathing**
- **Subconscious Neural Maps – 90%+ of Daily Activity**
- **Conscious Thought – Only used when needed**

Challenges

Autonomic Nervous System
- Runs 24/7/365
- Affected by physical conditioning and drugs
- Total Worker Health ™

Subconscious – 95% of Daily Activity and Habits
- Very fast and can do many tasks at the same time – aka Multi-Tasking
- Makes big decisions with very little information – "Tip of Nose Decisions"
- Will only identify serious harm but does not identify small risk

Conscious Thought
- Energy intensive and exhausting
- Hard to maintain long term use and focus
- Can only do one task at a time.
- Biased aka Cognitive Biases

Hydration versus Heat Stress

The Importance of Good Hydration for Day-to-Day Health

The Importance of Good Hydration for Work and Exercise Performance

The Importance of Good Hydration for the Prevention of Chronic Diseases

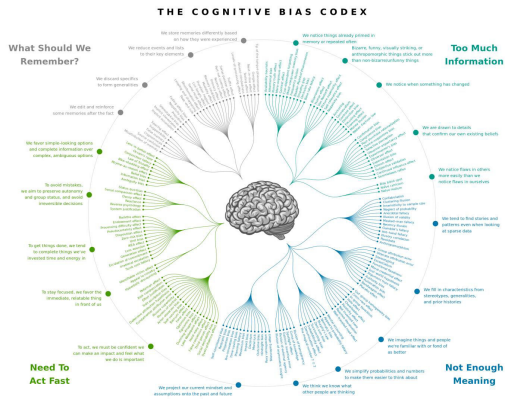Patrick Ritz, MD, PhD, and Gilles Berrut, MD, PhD

June 2005

https://academic.oup.com

Note: Not meant to be legible.

Cognitive Bias Codex – en.wikipedia.org
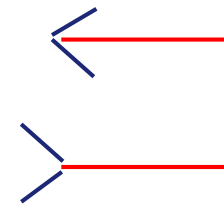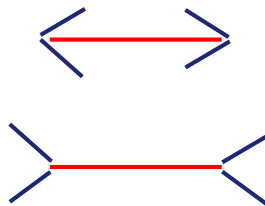
Note: Not meant to be legible.

Cognitive Biases – 181 total

- Anchoring
- Confirmation Bias
- Framing
- Implicit Bias
- Priming
- Over confidence
- Status Quo
- Sunk Cost Fallacy

Group Exercise

Slide 1

—————

—————

Slide 2
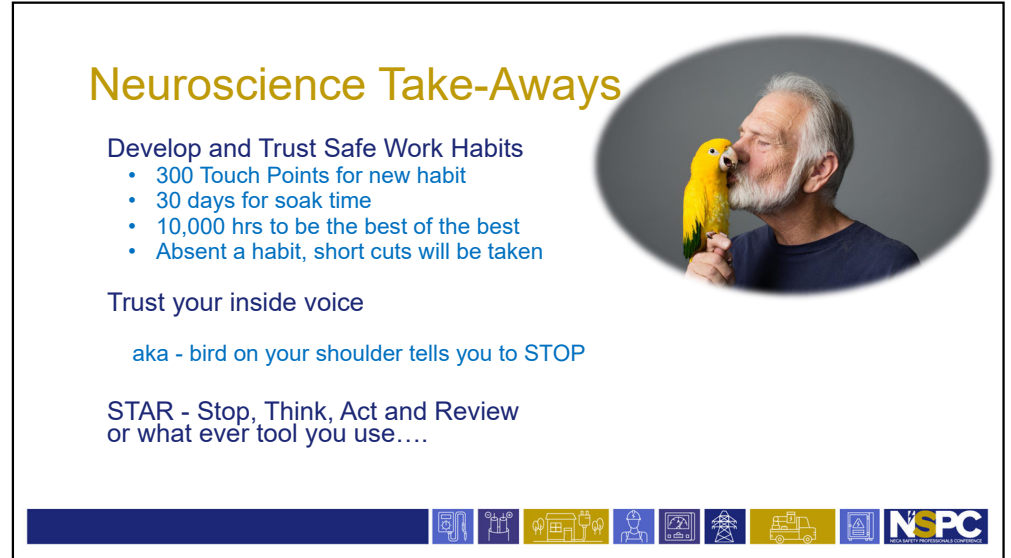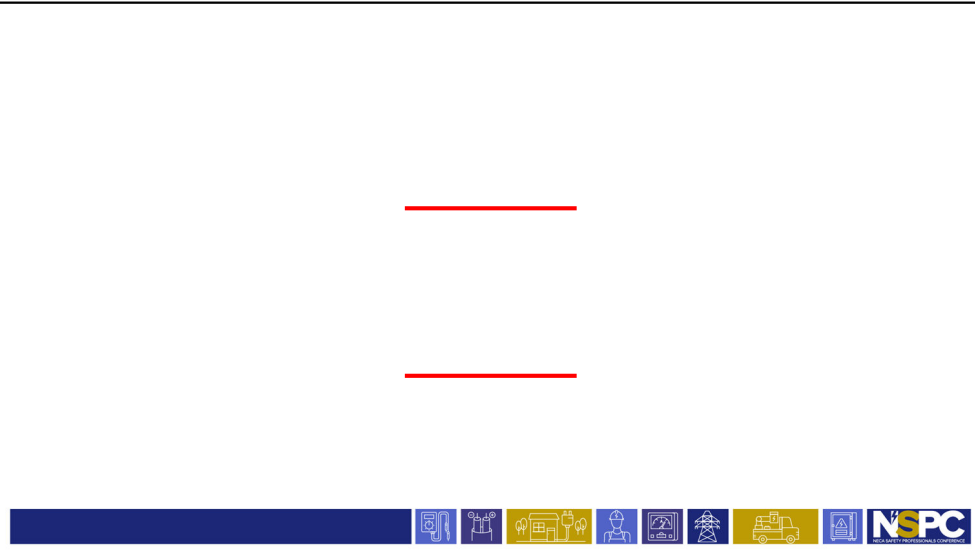
Neuroscience Take-Aways

Develop and Trust Safe Work Habits
- 300 Touch Points for new habit
- 30 days for soak time
- 10,000 hrs to be the best of the best
- Absent a habit, short cuts will be taken

Trust your inside voice

  aka - bird on your shoulder tells you to STOP

STAR - Stop, Think, Act and Review
or what ever tool you use….

Slide 3

Back to Definitions

Safety versus Risk

Slide 4

Definitions – Safety

Dictionary - "Safety" the condition of being protected from or unlikely to cause danger, risk, or injury.

Wikipedia - "Safety" the possibility of something bad happening.

OSHA - "Safety" – General Duty Clause - work environment "free from recognized hazards that are causing or are likely to cause death or serious physical harm.

RIMS - "Safety" a means of controlling risk.

ISO 31000 - "Safety" Not defined.
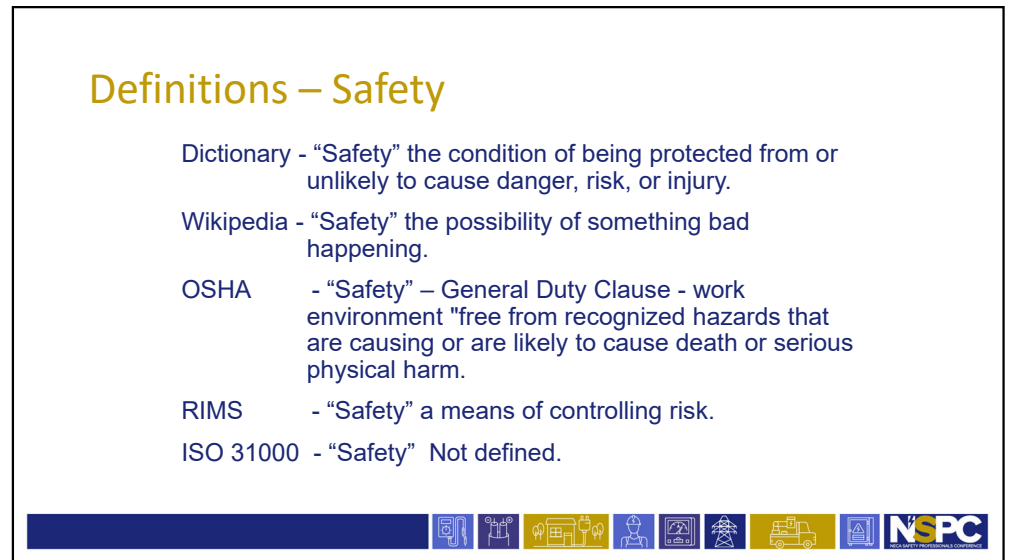
Definitions – Risk

Dictionary - "Risk" a situation involving exposure to danger.

Wikipedia - "Risk" the possibility of something bad happening.

OSHA - "Risk" is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard.

RIMS - "Risk" an uncertain future outcome that can either improve or worsen an organization's position.

ISO 31000 - "Risk" the effect of uncertainty on objectives.

Consider: Safety to Risk

Why change?

It is a euphemism

The substitution of a disagreeable, offensive, or disparaging expression for an agreeable or inoffensive one.

Aligns with Risk Management Methodology

Better reflects the situation and enables conversation

Wider audience of influence

Who owns Risk?

We all do!!!

Definition of Performance*

- Ability
- Role Perception
- Effort

* Safety Supervision 2nd ed., Dan Peterson, 1999

The use of the phrase "That is a "Safety" Hazard."

Consider replacing with ….

- Falling
- Tripping
- Hydration
- Slipping
- Struck by
- Crushed by
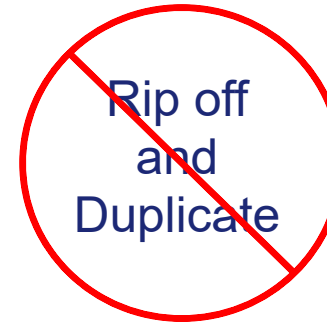- Cut by

Safety Tips

Consider replacing with ....
- Precaution
- Control
- Work Practices
- Procedure
- Protocol
- Rules
- Guidelines
- Best or Better Practice

~~Tips~~

It is a Safety Rule Book not Tip Book?

What does R&D stand for?

~~Rip off and Duplicate~~

Try it this way.

Research and Develop

or

Give credit using appropriate foot note reference, Trade Mark icon or ask for permission to use.

Law and Vision at the Top

Laws – Natural and Written	**Vision**	**– the future after the mission**
Policy	Mission	– purpose for having value
Regulation, Ordinance…	Values	– worth assigned to principles
Procedure, Protocol	Principles	– foundation of beliefs
Guideline	Beliefs	– Assumptions about things
Social Norm	Things	– Everything around us

"We have a POLICY for that…or Do We?"

Lean Version - Combo

Values

Principles

Methods

Tools and Activities
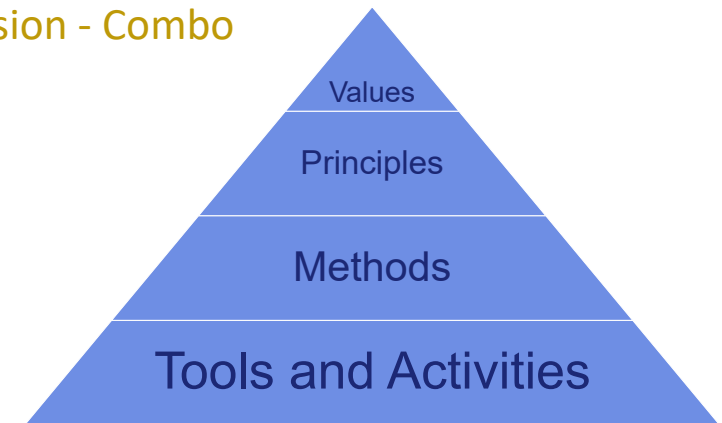
This Is Lean – Resolving The Efficiency Paradox, 2015 Modig Ahlstrom

Leadership

Core Values

Attack Problems Not People

Coach People and Manage Things

Risk Management
Enterprise Principles - Examples

… Starts at the top.

… More than a policy, it is a culture.

… Not just a theory but a strategy.

… Risk-aware for the enterprise.

… Complex is no remedy.

… Never about finding "the answer".

… It is possible to prepare for unknown risks.

… What matters is the "talk", not the "report".

… All risk can be eliminated, transferred, controlled or assumed.

Belief System

All risk can be eliminated, transferred, controlled or assumed. *

1. Eliminated – Engineer it Out (passive and active)
2. Transferred – Insure, Replace, Contract

Transformational

3. Controlled – Safety Programs
4. Assumed   – Employee Behavior

Transactional

*ARM – Associate in Risk Mgmt. study materials.

Leadership Styles

Transactional

Hierarchy – President, VP, Director, Mgr., Supervisor, Field Worker

Seniority – 50 Years, 40 Years, 30 Years,………….

Function – Operations, Finance, Legal, Human Resources………..

AKA – Stay in your lane.

Transformational

o **Principles** – What is right is right !

Leadership Traits

My Words	Dr. Adizes's Words	
1. Know the Rules	- Administrator	Transactional
2. Use the Rules	- Producer	
3. New Ideas	- Innovator	Transformational
4. Integration	- Integrator	

Leadership Consultant, Dr. Ichak Adizes, 2006

Communication Tools

Rhetorical Devices

What are they and why use them?

What is it? - a linguistic tool that employs a particular type of sentence structure, sound, or pattern of meaning in order to evoke a particular reaction from an audience.

Why – Better communication and listening skills

Rhetorical Devices - Examples

Anaphora: Repetition of a word or expression at the beginning of successive phrases, clauses, sentences, or verses especially for rhetorical or poetic effect.
Martin Luther King –Speech "I have a dream" ,"Now is the time" "One hundred years later", "We can never be satisfied", "With this faith", "Let freedom ring", and "free at last"

Antithesis: A contrast of thoughts.
"Slow is smooth and smooth is fast" – U.S. Special Operations Forces

Hyperbole: Exaggerating a description for emphasis.
"It's a jungle out there." idiomatic English expression

Metaphor: Comparing two unlike objects to provide a clearer description.

Parallelism: using a sequence of identical constructions in writing
"Tell me and I forget. Teach me and I may remember. Involve me and I will learn."
– Benjamin Franklin

Readability

Words are inevitable.

How many words per sentence?

How many syllables per word?

Readability

Microsoft Word

When correcting spelling and grammar in Word
- ✓ Check spelling as you type
- ✓ Mark grammar errors as you type
- ✓ Frequently confused words
- ✓ Show readability statistics

Readability Statistics

Counts	
Words	1,325
Characters	6,000
Paragraphs	47
Sentences	80

Averages	
Sentences per Paragraph	2.1
Words per Sentence	15.5
Characters per Word	4.3

Readability	
Flesch Reading Ease	63.8
Flesch-Kincaid Grade Level	8.2
Passive Sentences	21.2%

OK

Readability

% of words versus images?

Best   Good

Slide 1

Readability and Knowledge Transfer

A Picture is Worth
a
Thousand Words

or is it?

Slide 2
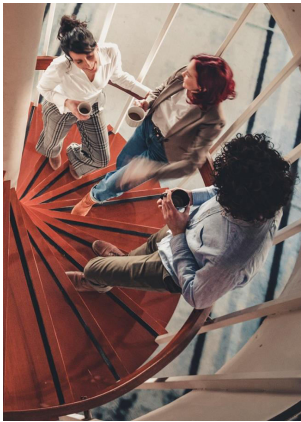
Disciplinary Action

Employee Write Up aka Written Warning

change to

Performance Notice
- Positive
  and
- At-Risk

Slide 3

Integration (change mgmt.) Process

Step 1 - Decision Making

1. Unilateral
2. Collaborative
3. Consensus

Great Business Teams, Cracking the Code for Standout Performance 2008, Guttman

Step 2 – Integration
(checklist)

1. Decision Made – Step 1 Completed
2. Executive Leadership Communication
3. Various Committee discussion / vetting
4. MOU, Bulletin, Alert, or Notice Issued
5. Pilot Program, Survey or Analysis
6. Policy, Procedure, Guideline created
7. Handbook addition and update
8. Daily Work Order / Job Brief updated
9. Posting in affected areas
10. Auditing Tool addition and update
11. Company Calendar "Margin" Tagline
12. Communication Campaign
13. Weekly Messaging
14. Education and Training
15. Annual Meeting Topic of Discussion
16. Check and Adjust Cycle

These will be unique to your company

Slide 4

Systems Approach

Slide 1: Standards are the Minimum — Aim Higher

Standards are the Minimum
Aim Higher

Standard
(transactional - lagging)

- Insurance Minimums
- Workers Compensation
- Anti-Trust
- Bank Covenants
- Licensing and Permits
- Contracts
- Bonding/Surety
- Sarbanes-Oxley, Dodd-Frank
- OSHA, EPA, EEOC, IRS...
- Inspections and Recs.
- Plus…..

Aiming Higher
(transformational - leading)

- 24/7 Philosophy
- ANSI voluntary standards
- Best and Better Practices
- Captive vs Traditional Ins.
- Certification – Prof. Development
- Culture/Risk Survey(s)
- Lean - Continuous Improvement
- Loss Analytics - Correlations
- SIRs, High Deductible
- Total Worker Health™

(Plan-Do-Check-Act cycle diagram)

Slide 2: Systems Approach

Systems Approach

Risk Mgmt. System - International

ISO 31000 Risk Mgmt. Standard
- Universal
- Performance Based
- Non-prescriptive
- w/ SME guides

ISO 31010 Risk assessment techniques
- Tied to the 31000 Standard
- 40 plus tools to choose from
- Risk Indices aka Risk Register and Charting

(ISO 31000:2018 Risk management and IEC 31010 publication covers)

Slide 3: Risk List – Company Specific

Risk List – Company Specific
Not meant to be read – Just to show volume

Health, Safety and Environmental

- Air, boat or other commercial travel
- Apprentices
- Chain Saw Use
- Confined and Enclosed Spaces
- Cultural HSE Strength
- Direct Elect. Voltage Contact > 50 volts
- Dog/Animal Attacks
- Driving Vehicles
- Excavation Work
- Eye Injuries
- Fall from Elevation
- Fire Prevention, Suppression and Protection
- Fork Truck/Scissor lift/ or other personnel lift
- Hand Lacerations
- Heat Stress / Hydration
- Hydraulic Oil Punctures
- Ladder use
- Line-of-Fire Incidents
- Load securement of machinery during transport
- Manhole Handling
- Mobile Equipment Damaged, Out of Specification or Recalls
- PCB Exposure
- Power Operated Hoist
- Sprain and Strains
- Stuck Vehicle/Equipment Recovery
- Transient Work Force
- Vehicle Damage from Electrical Contact
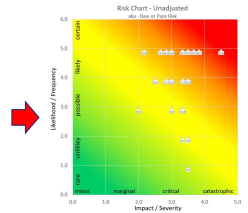- Weather Related Issues
- Wildfire
- Work Zone Traffic Control

ALL OTHERS

- Backlog Management
- Bonding and Surety
- Business Continuity (Fire, Weather, Civil Unrest, Pandemic)
- Cash Flow Liquidity
- Competition
- Contract Risk Transfer
- Culture Strategy and Strength
- Customer Revenue Diversification
- Cyber Security and Information Technology
- Enterprise Diversity Status
- Environmental
- Epidemic/Pandemic
- Equipment Damage/Theft - Major Incident
- ERP Integration
- Environ., Social, and Corporate Governance
- Government and Regulatory Compliance
- Growth and Financing Strategy
- Health and Safety Major Incident
- Information and Asset Protection
- Joint Venture Management
- Labor Availability
- Licensing
- Non-field Related Disaster
- Nuclear Verdict
- Project Implementation/Major Project
- Quality Control and Assurance
- Recession
- Regulatory Settlements and Covenants
- Subcontractor Performance Management
- Union Relationship Management
- Volunteer Work
- Workplace Violence, Civil Unrest or related

75

Slide 4: Risk Register – Carr & Duff

Risk Register – Carr & Duff

(Risk table, unadjusted risk table with scores, and Risk Chart heat map)

Risk List and Rating → **Score/Table** → **Heat map / Chart**

Risk List and Rating	Score/Table	Heat map / Chart
Financial	– % of P&L	
Operational	– Performance Impact	Likelihood/Frequency
Legal/Regulatory	– Minor to Major	Impact / Severity
Customer Concern	– None to Kicked Off	
Loss History	– 10 Year Look Back	
Likelihood	– Every 1 to 2 Years	Pure versus Real
Trend	– Up, Down, Flat	

Risk Assessment Techniques

- **ALARP, ALARA And SFAIRP**
- Bayesian Analysis
- Bayesian Networks
- **Bow Tie Analysis**
- **Brainstorming**
- **Business Impact Analysis**
- **Causal Mapping**
- Cause-Consequence Analysis
- **Checklists, Classifications** and Taxonomies
- Cindynic Approach
- **Consequence/Likelihood Matrix**
- **Cost/Benefit Analysis**
- Cross Impact Analysis
- Decision Tree Analysis
- Delphi Technique
- Event Tree Analysis

- Failure Modes And Effects Analysis
- Fault Tree Analysis
- F-N Diagrams
- Game Theory
- Hazard And Operability Studies (HAZOP)
- Hazard Analysis And Critical Control Points (HACCP)
- Human Reliability Analysis
- **Ishikawa (Fishbone)**
- **Layer Protection Analysis (LOPA)**
- Markov Analysis
- Monte Carlo Simulation
- Multi-Criteria Analysis
- Nominal Group Technique

- Pareto Charts
- Privacy Impact Analysis/ Data Privacy Impact Assessment (PIA/DPIA)
- Reliability Centered Maintenance
- **Risk Indices**
- S-Curves
- **Scenario Analysis**
- Structured Or Semi-Structured Interviews
- Structured "What If?" (SWIFT)
- **Surveys**
- **Toxicological Risk Assessment**
- Value At Risk (Var)

LOPA – Layers of Protection Analysis and Cumulative Act Effect aka Swiss Cheese Model

LOPA (B.4.4) identify the barriers (aka controls) between a source of risk and its possible consequences and can be used to check that the barriers are sufficient.

4 Basic Layers but there can be more…

- Process Design
- Basic Controls
- Procedures
- Supervision

Cumulative Act Effect - causation model using layered controls with active and latent properties.

4 Basic Layers but there can be more…

- Mgmt. Issues
- Basic Controls
- Physical Failures
- At Risk Acts

James Reason's "Swiss Cheese" Model of Accident Causation (1990)

NASA https://roundupreads.jsc.nasa.gov/roundup/894
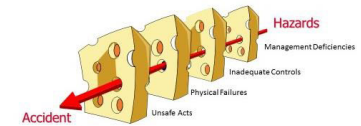
NIOSH – Prevention Through Design Program

The Prevention through Design (PtD) Program seeks to prevent or reduce occupational injuries, illnesses, and fatalities…

through the inclusion of prevention considerations in all **designs** that impact workers. **"Designing out"** occupational hazards and risks is the most effective way to protect workers.
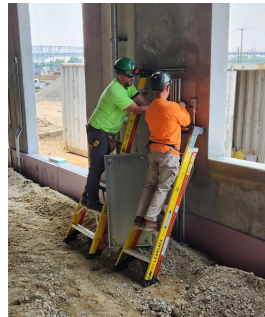
LOPA tied to Best Practices
OSHA Electrical Transmission & Distribution Strategic Partnership

Process Design

- Administrative controls & information transfer
- Job briefings

Basic Controls

- Pre-use inspection of insulating protective equipment and insulating personal protective equipment

Procedures

- Safety at heights
- Cradle-to-cradle use of insulating rubber gloves and sleeves
- Lock-to-lock use of insulating rubber gloves and sleeves
- I&I techniques for the live line tool method on distribution
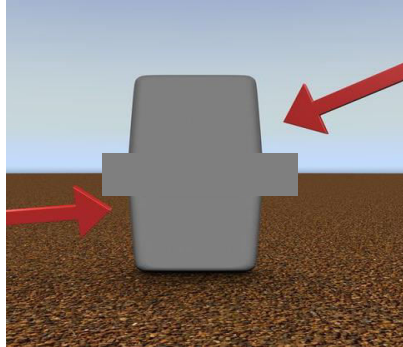- I&I techniques for the rubber glove method.

Qualification and Supervision

- Qualified observer

GRAY SQUARE - RISK EXERCISE

Which gray square is darker, top or bottom?

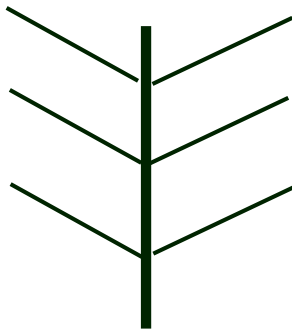NOW!!! Let's ask "WHY" five times . . .

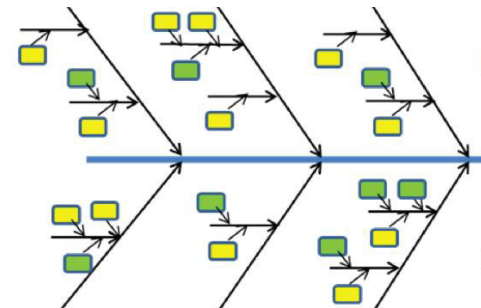# 5 Why, Why Tree or Fishbone – Which came first?

Why   Why

Why   Why

Why

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5 Why, Why Tree or Fishbone

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5 Why, Why Tree or Fishbone

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5 Why, Why Tree or Fishbone
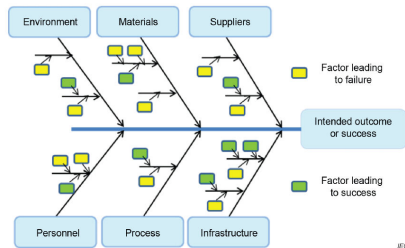
IEC 31010:2019 © IEC 2019   – 59 –

Figure B.1 – Example Ishikawa (fishbone) diagram

The diagram is often developed in a workshop scenario.

1945, Kaoru Ishikawa, first iteration and concept, fishbone diagram
A problem-solving model to aid in determining root causes of problems.

What to work on?

Pick and choose your battles

Or

Battle every Battle

Battle every Battle
it is the ethical thing to do - But how?

- Adopt and Apply a Transformation Mind-Set
- Frequency and severity analysis of all incidents
- Insurance – exposure and control assessment
- Culture or Risk Profile Survey w/ Benchmarks – 4 Year Cycle

1st Year = Assess
2nd Year – Plan and Quick Fix
3rd Year – Implement the plan and Check Adjust
4th Year – Watch the plan and monitor

Read, Read, Read

10 Pages per day = 300 pages per month = 1 Book per Month
Not too much to expect for any professional

Suggested Readings (short List)

1. The First 90 Days, Author(s) Watkins
2. Mistakes were made but not by me, Author(s) Tavris and Aronson
3. Happiness Advantage, Author(s) Acor
4. Thinking Fast and Slow, Author(s) Kahnmann
5. The Power of Habit, Author(s) Duhigg
6. The Checklist Manifesto: How to Get Things Right Author(s) Gawande
7. This is Lean, Author(s) Modig and Ahlstrom
8. Managing the Risk of Organizational Accidents, Author(s) Reason
9. Good to Great, Author(s) Collins
10. Superforecasting, Author(s) Tetlock and Gardner
11. Third Generation Safety, The Missing Piece, Author(s) Sylvestre
12. Bringing Out the Best in People, Author(s) Daniels
13. Measurement of Safety Performance, Author(s) Peterson
14. Great Business Teams, Cracking the Code for Standout Performance, Author(s) Guttman
15. Human Factor Design Handbook – Desk Reference Author(s) Woodson, Tillman, Tillman
16. The Art of War, Author(s) - Sun Tzu, and various others with interpretations.
17. 1501 Ways to reward Employees, Author(s) Nelson

Read, Read, Read
Each book 4 Times
but HOW?

#1 Skim Read – Credits, Intro, TOC, Chapter Endings,
Pictures, Diagrams, Illustrations, Last
Chapter, Index and References

Pass Judgment = Go, No Go

#2 Speed Read – as fast as you can.

#3 Read for Full Understanding
– Markup , Highlight, Dog Ear and Take Notes

#4 Use as a Reference Resource
– Go back and lookup as marked in step #3

Other Topics of Discussion

- Total Worker Health™
- On-The-Job Methodologies and Retention
- Field Inspection and Coaching
- Incident Investigating Techniques
- Interviewing techniques w/ R+ and R-
- Personality Profiling
- Document control
- Return on Investment Methods
- Metrics

Q & A

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Please complete the Online Evaluation

https://www.surveymonkey.com/r/2024NationalSafetyProfessionalsConference

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