Human and Organizational Performance

Cargill HOP Strategy Overview 09 May 2023



Cargill at a glance

225,000 **Employee &** Contractors



70 Countries



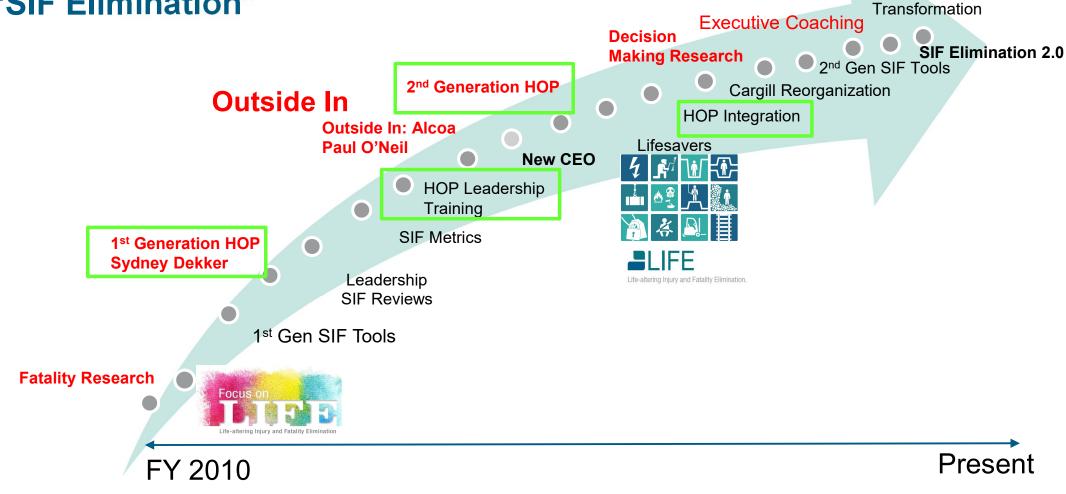




155+ Years of **Experience**



Pursuit Of Zero "SIF Elimination"



EHS Strategy and

Focusing on SIF

SIF – Serious Injuries and Fatalities

- Cargill has 12 LIFEsaver activities where we are more likely to have a SIF exposure or SIF event
- Appling HOP thinking and methods helps us:
 - Identify systemic drivers and weaknesses
 - Look for single-point vulnerabilities
 - Verify the presence and capacity of the controls that keep us safe
 - Learn how well we support our employees and contractors performing high risk work



O que é HOP?



- HOP é uma sigla em inglês para Desempenho Humano e Organizacional
- Não é um programa novo, é uma forma diferente de pensar e agir
- HOP é uma iniciativa global da Cargill para que possamos compreender que o sistema influencia a forma como as pessoas agem, assim como a pessoa no centro também influencia o sistema.



- Algumas indústrias estão implementando HOP há décadas e alcançaram alta confiabilidade, qualidade, eficiência e segurança no ambiente de trabalho
 - Nuclear
 - Aviação
- Outras indústrias, assim como a Cargill, estão integrando os príncipios do HOP nas suas operações e como fazem negócios.

HOP Principles at Cargill

People Make Mistakes*

People are fallible, and even the best people make mistakes.

Error-likely Situations are Preventable

Error-likely situations are predictable, manageable, and preventable

Organization Influences Behavior**

Individual behavior is influenced by organizational processes and values.

Positive Reinforcement Builds Trust

People achieve high performance because of encouragement and reinforcement from leaders, peers and subordinates

We Learn From **Past Incidents**

Events can be avoided through an understanding of the reasons mistakes occur and lessons learned.

Deviations Are Rarely Malicious

Deviations are rarely malicious, but wellmeaning behaviors, intended to get the job done.

Leadership **Response Matters**

How leaders respond to mistakes and deviations matters.

Deployment Strategy

Senior Leader Engagement

- SIF Elimination learning pathways
- Conversations with thought leaders

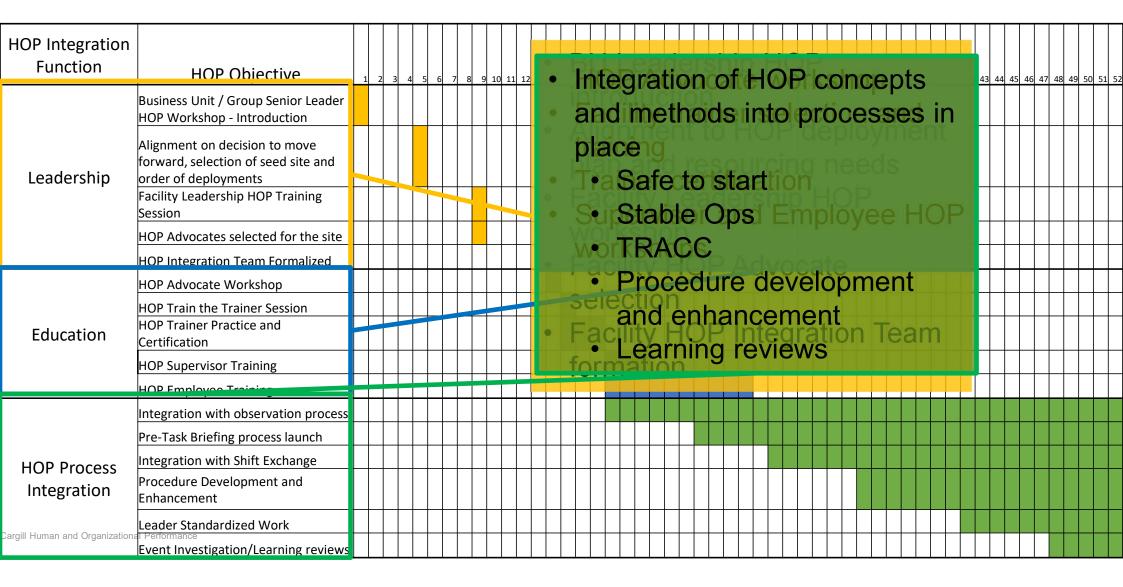
Awareness-level learning

- eLearning pathways
- SME discussions with ops teams, groups

Facility-Level Deployment and Integration into Daily Work

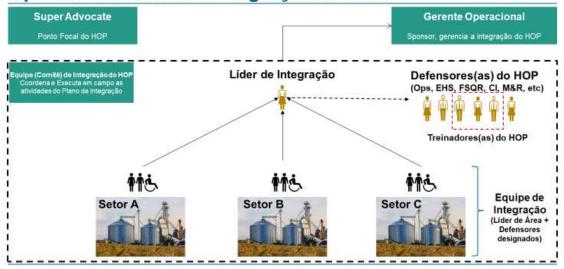
- Formal process, strategy and planning
- Since 2016, has worked on a pull-system from businesses
- Engages Fisher Improvement Technologies methods, materials for deployment and integration

Deployment Methods – Facility Level



Deployment Methods – Facility Level

Operacionalizando a Integração do HOP



Funções-chave para Integração do HOP

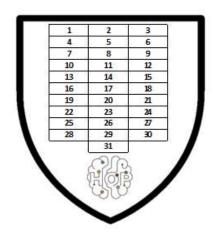
Um TIME - Parceria para o Sucesso

| Função | Propósito | Quem | |
|--------------------------------|--|---|--|
| Sponsor | Determinar prioridades para integração Availar as iniciativas atualmente em andamento e as iniciativas a serem lançadas para identificar sinergias com integração do HOP Acompanhamento regular do plano de integração definido para reconhecer as pessoas envolvidas e remover barreiras | BOSC leader Ops Leader Plant Managers | |
| Lider de Integração do HOP | Pessoa ou pessoas (comitê) encarregadas de coordenar a implantação do HOP Coordenar workshops para defensores(as), lideres e funcionários A carga de trabalho tende a ser mais pesada nos primeiros 9-12 meses de implantação | A definir | |
| Equipe de Integração do HOP | Objetivo desta equipe é definir metas e monitorar o progresso da integração do HOP no site Apoiar lider(es) de integração do HOP Usar o roteiro de integração do HOP como seu guia de direção e para monitorar marcos Fornecer orientação e apolo aos defensores do HOP Pode fazer parte de uma equipe estabelecida (Exemplo: ITF) | A definir | |
| Defensores(as) do HOP | Atuar como especialistas do HOP na sua localidade/departamento Responsáveis por integrar métodos e ferramentas do HOP aos processos atuais Sugere-se que 10% do pessoal seja treinado ao nível de Defensor(a) Se o site liver menos de 125 pessoas, busque um(a) defensor(a) por equipe / por tumo Almeje uma distribuição 50/50 de funções de liderança e funcionários de linha de frente | A definir | |
| Treinadores(as) do HOP | Defensores(as) do HOP selecionados(as) para treinar a força de trabalho no Workshop do HOP para funcionários de 1 día Processo de treinamento inclul uma sessão inicial para treinar o treinador, um período para praticar e um processo de certificação antes do inicio do treinamento da força de trabalho | A definir | |

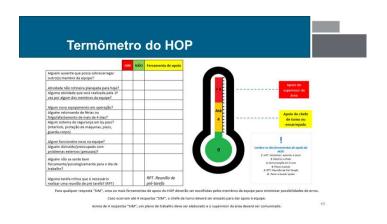
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| Cargill HOP Integration Roadmap and Assessment Tool | | | | | | |
|---|--|---|--|--|--|--|
| HOP Integration Elements | Level 1 | Level 2 | Level 3 | Level 4 | | |
| nor integration Elements | Exploring/Gaining Sponsorship | Building Capability | Mastering the Tools | Maximizing the Value | | |
| | | | | | | |
| LEADERSHIP / COMMUNICATION | Some basic HOP Language and terminology is used in shift exchange, production meetings, toolboxes, facility communications, newsletters, etc. | Senior management sponsorship exists. Senior level leadership is directing integration and allocating the resources. Metrics in place and discussed. Site HOP steering team established and meeting regularly. | Department & Plant Mgrs. attend at least 1 shift exchange per week. Linkage with stable ops, Quality and reliability, delivery office becoming more apparent, not just safety. | HOP Advocates are available to attend shift exchanges, observations, and to assist with PTBs, investigations, coaching, etc. Links with Stable Ops, Quality, reliability and delivery. | | |
| TRAINING | Some basic HOP training conducted. Generally vested in EHS staff and a few individuals. Senior Leadership may have been exposed to an overview training session. | At a minimum shift leaders, engineering, HOP Advocates and supervisors trained. | Line leadership, HOP Advocates, supervisors, shift leaders and most of operations-level employees trained. | Line leadership, HOP Advocates, supervisors and operations-level employees trained. Process in place to train new employees early in their employment. Continuing / Refresher training established. | | |
| SHIFT EXCHANGE AND PRODUCTION MEETINGS | Some HOP tools may be in use but not deployed as part of an integrated deployment plan. | HRTD is selected using HOP concepts (Error Traps, Perf. Modes, Triggers) | Crews are actively participating, using the HOP language. Stop and Seek Help discussions have been incorporated into the shift exchange and production meetings, with help from stop criteria signage. | Toolbox discussions roll-up to the dept. and/or Site Daily Mgmt. meeting, where the High Risk Tasks of the day are reported and selection explained. Lessons-learned from pre-task briefs discussed and institutionalized in SOPs. | | |
| PRE-TASK BRIEF | Pre-task briefs may be completed for High Risk Tasks of the day with some discussion of error traps. | Criteria in place for when to perform a Pre-Task Brief. Pre-task briefs are completed for HRTD and other non-routine tasks. Predominantly led by engineers or supervisors. PTB Coaching (Verify) tool used to devlop competency | routine tasks - typically as a means to test and | A majority of crew engages in the discussion about perf. modes, hazards, critical steps, error traps, stop job criteria. Lessons-learned from pre-task briefs are institutionalized in SOPs. | | |
| STOP & SEEK OUT HELP CRITERIA | Limited use of Stop and Seek Help for routine tasks. May be used selectively on non-routine or HRTD applications. | Specific Stop and Seek Help criteria has been identified for most departments, and posted at equipment / break areas. Pre-task briefs will have Stop Work criteria specified. | Review pre-task briefs to determine if Stop and Seek Help Criteria is established for task specific risks. New learnings incorporated into SOPs and signage. | Stop and Seek out process is becoming institutionalized. Posted Stop and Seek Help Criteria is reviewed and refreshed periodically (typically every 6 months). | | |
| FIELD OBSERVATION / VALIDATION | Field observation will be conducted with the HRTD. SIF Assessments and supporting document audits may be incorporated and completed with the observation. | Field observations conducted on HRTD and other tasks where a pre-task brief was performed. Process exists for conducting field observations to validate effectiveness of pre-task brief (PTB Field Assmt Form) | Field observations conducted on HRTD and other task where a pre-task brief was performed and targeted error likely situations (employee returns from extended leave, distracted work around holidays) | Field observations conducted for error likely situations other than safety related risks (stable ops, quality, reliability, delivery, customer impact) | | |
| INCIDENT INVESTIGATION and ROOT CAUSE ANALYSIS | Some basic assessment of performance modes and error traps may be used - typically by EHS staff for significant incident investigations. | Assessment of performance modes and error traps becoming more common beyond significant incident investigations. | Much deeper focus on this person, on this task at this time and the why behind "what made sense to the person at the time." Introduction of the deviation analysis model to recalibrate how we view shared accountability in the context of HOP. | Apparent causal factors analysis are routinely used. Root cause analysis, trending and predicting systemic error traps, latent conditions are emerging such that they can be prevented. | | |
| PROCEDURE USE AND ENHANCEMENT (STEP-BY-STEP) | Inconsistent expectations for procedure use. Use is rarely observed. No monitoring of work document problems. | Sporadic use of procedures. Minimal ownership by supervisors and workers. Frequent work-around when inconsistency or problems encountered. Little enhancement / problem resolution. No formal monitoring of problems. | Inconsistent use of procedures. Some ownership by supervisors and workers results in occasional resolution of problems or enhancement, which are formally monitored. | Procedure use consistently demonstrated. Supervisors and workers demonstrate ownership, routinely identifying problems for resolution. Significant increase in number of problems identified and resolved. | | |
| SELF CHECKING/VPT | Little to no use of VPT recognized during the performance of Skill or Rule Based tasks | Sporadic use of VPT observed. Pointing and verbalizing rarely observed. VPT occasionally listed on PTB as a tool to be used. | VPT is occasionally observed during the performance of Skill Based and Rule Based tasks. Pointing and verbalizing occasionally observed. VPT used reinforced in PTB discussions. | VPT, including physical pointing and verbalization components are routinely observed during performance of Skill Based and Rule Based tasks. | | |

Toolkit do HOP - IDEx







Termômetro do HOP

Visão Geral do Processo da TARD

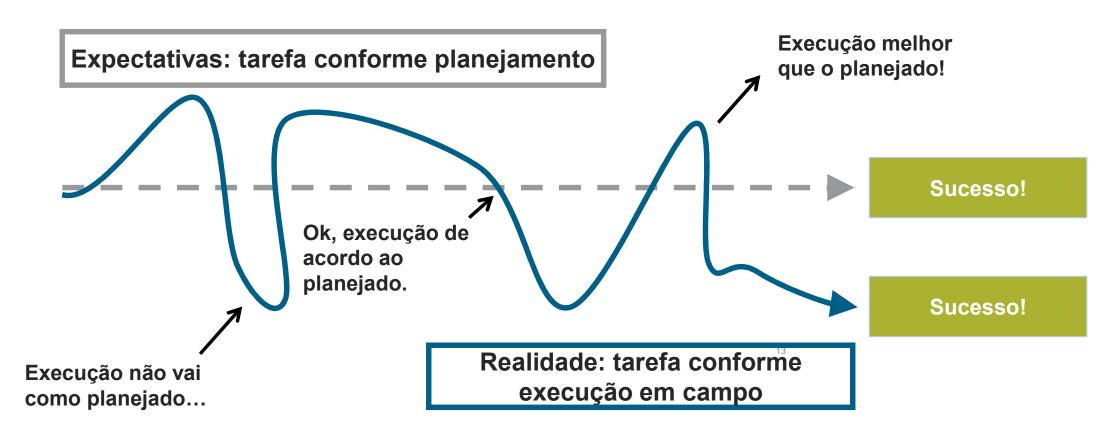


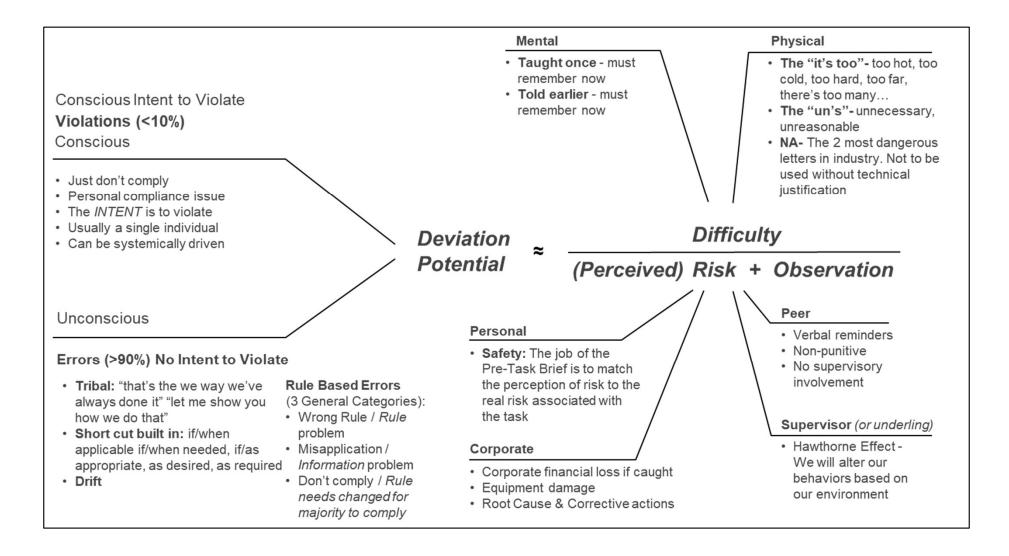
- O líder selecionado para apoiar a TARD se engaja com o pessoal que executa a tarefa
- Aprendizagem através de observações, avaliações ou reunião pós-tarefa ou ação corretiva são fornecidos à equipe que executa a tarefa
- As ações corretivas necessárias para resolver as lacunas identificadas são comunicadas à equipe e identificação do responsável pela ação é realizada
- Os aprendizados são levados na próxima reunião de área da planta para compartilhamento, conscientização ou melhoria sistêmica

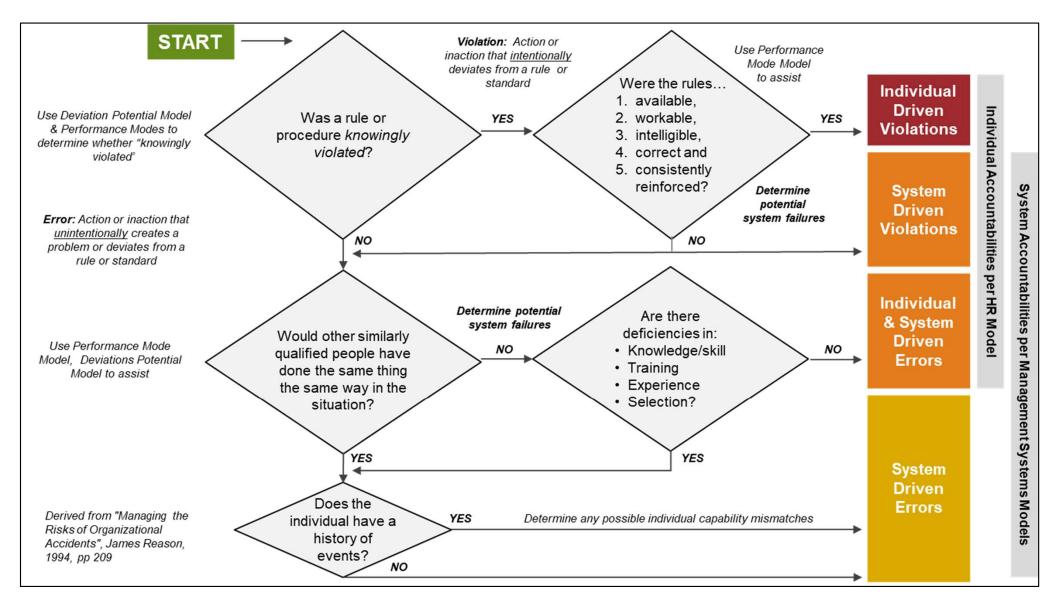
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Tarefa de Alto Risco do Dia

Aprendendo sobre Trabalho Normal







HOP Thermometer

| | YES | NO | Support tool |
|--|------|----|--------------|
| Any tasks that are unique, | | | |
| performed infrequently or being | | | |
| performed by a team member for | | | |
| the first time? | | | |
| Unplanned absences that could | | | |
| overload another team member? | | | |
| Anyone returning to work with a | | | |
| distraction (i.e. >4 or more days | | | |
| away, new EE, external distractions)? | | | |
| Are there any KPI's outside of control | | | |
| limits? | | | |
| | | | |
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For any "YES" response, one or more HOP support tools should be chosen by team members to minimize error potential (i.e. Job Task Board, PTB, HRTD, Procedures, etc).

If 1-2 "YES" responses occur, the supervisor / advocates / team leader should be actively engaged to support the team.

For 3 or more "YES" answers, a work plan should be developed and the Team Leader, Advocate, Facility Manager engaged to support the team.

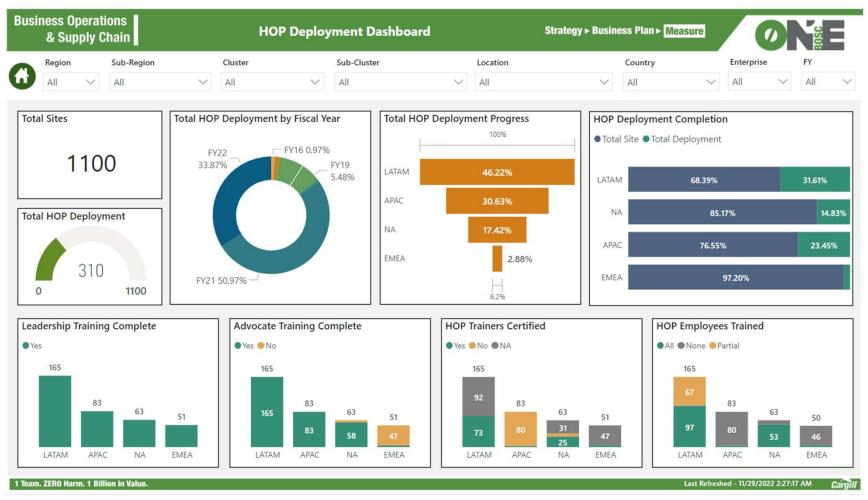
HOP Competency Model

| Emerging | Building | Leading |
|---|--|--|
| HOP fundamentals for field application Leadership introduction to HOP and HOP methods Leader HOP development for deployment One step beyond awareness-level HOP learning | SME-level of competency Referred to as HOP Advocates Competency enable SMEs to support HOP deployment, measure HOP maturity building Subset of SME group selected to be HOP trainers for Emerging level employee training | Leaders and developers of the experts Referred to a Super Advocates Leading-level SMEs take on the work that would normally be facilitated by HOP consultants Super Advocates support training at all levels, coach HOP deployments and advise on HOP maturity building |

HOP Training Methods

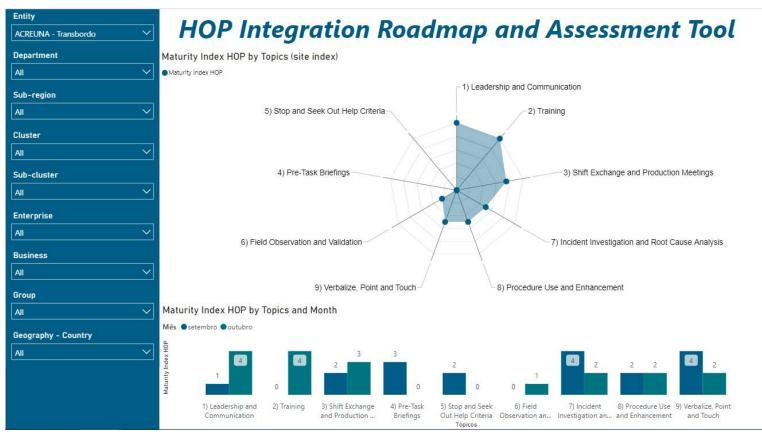
| Awareness | Building | Emerging | Leading |
|---|---|--|--|
| In-PersonVaries depending on the audience and request | In-Person – 8hrs HOP Fundamentals (Employee) Workshop HOP Leadership Workshop | In-Person – 24hrs HOP Advocate | In-PersonSuper Advocate development |
| Virtual Awareness-focuses eLearning module focused on HOP principles | Virtual – 3x2rhs or 4x2hrs • Fundamentals Workshop • Leadership Workshop | Virtual – 8x2hrs • HOP Advocate Workshop | Initial Super Advocate development – 20hrs (10x2hrs) with ongoing coaching, practice and certification |

Metrics - Deployment



Avaliação de Maturidade do HOP





Principais Aspectos para Integração do HOP

Elementos que Aceleram a Integração do HOP

Líderes sendo exemplo:

- · Usando terminologia e conceitos do HOP
- Mudando sua abordagem para planejar e executar o trabalho
- · Compartilhando como estão aplicando HOP em seu trabalho

Aplicar métodos do HOP à todas atividades

- HOP traz um grande benefício para a redução de incidentes de alto potencial e severidade
- Os mesmos métodos podem ser aplicados sempre que houver risco de falha (qualidade, produção, confiabilidade, etc)

Foco na integração do HOP nas atividades e iniciativas atuais

- Não separe os esforços do HOP de outras iniciativas ou processos
- Integrar HOP a outras estratégias de excelência operacional: Stable Ops, TRACC, Lean Six Sigma, Innovatia...
- HOP é uma jornada, busque sustentação e melhorar continuamente





