

FSO Institute: Why We Do What We Do

Encore Career Platform

Applied Science, not theory

The Manufacturing Health People

Solving Your Greatest Manufacturing Challenges

QUICK - AFFORDABLE - EXPERTISE

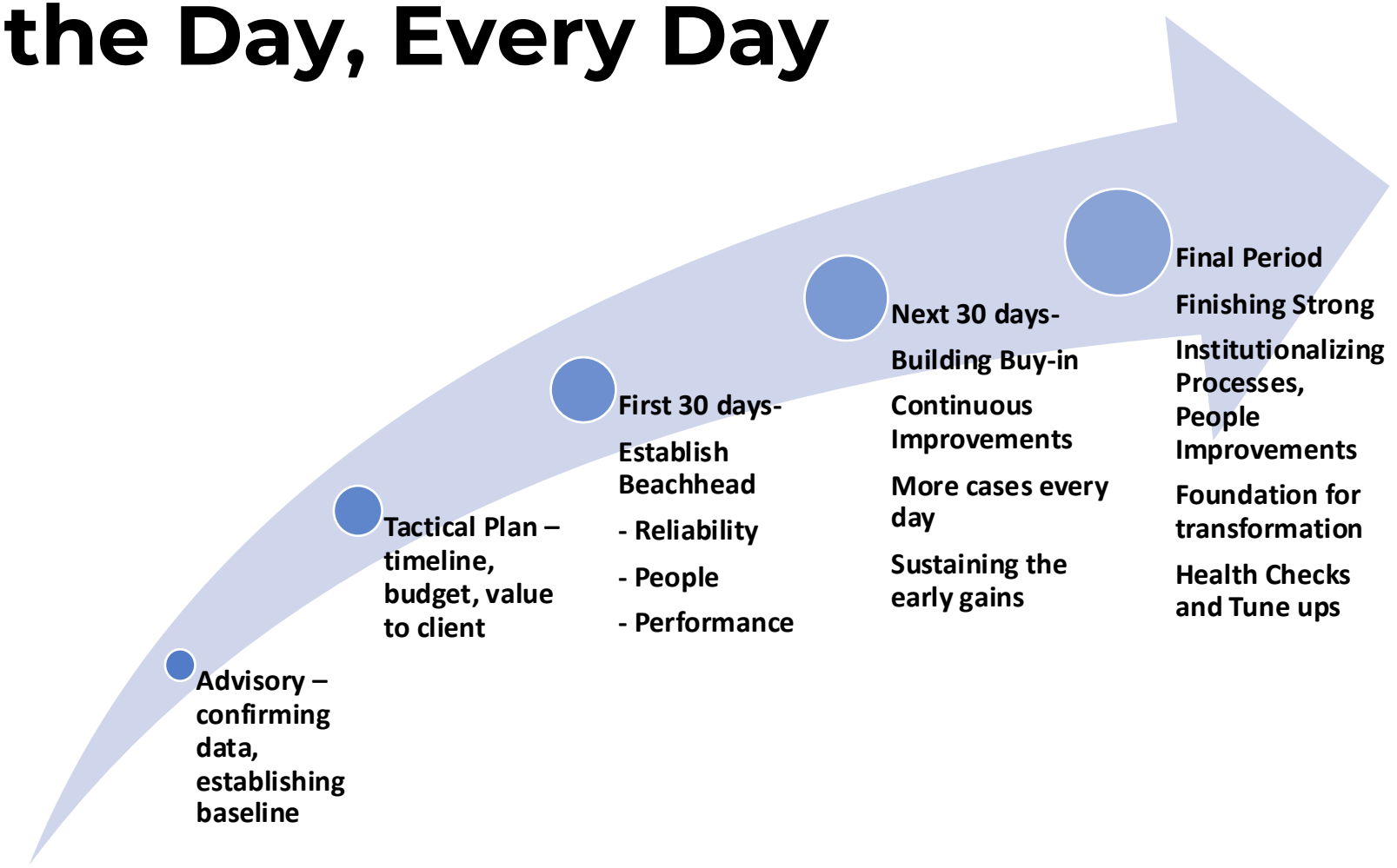
We are...

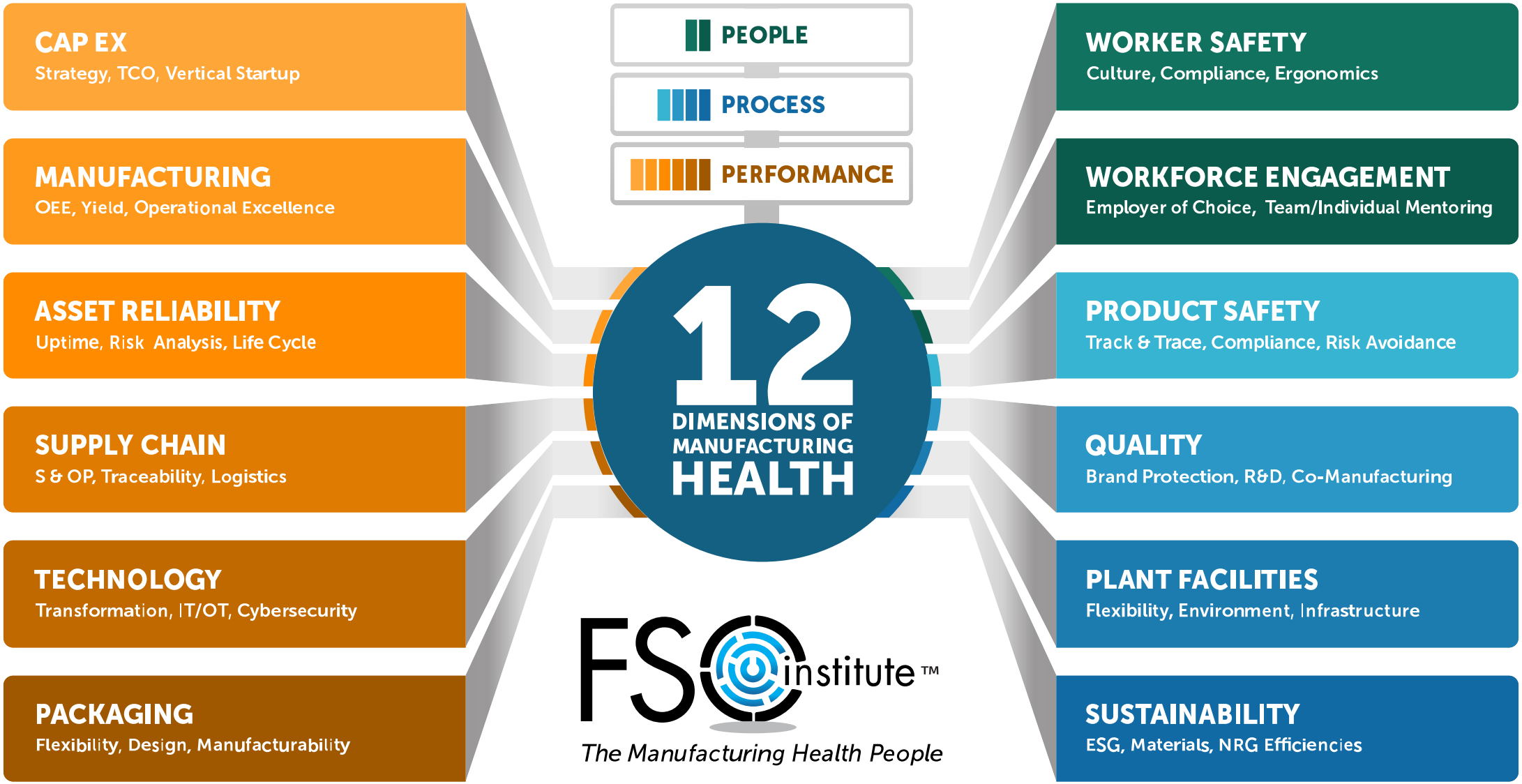
- coaches, not consultants
- actual manufacturing professionals with broad and specific expertise
- aligned with your business goals
- focused on early success, not locking you into long-term commitments
- compensated only by our clients, totally agnostic with any industry suppliers

We do...

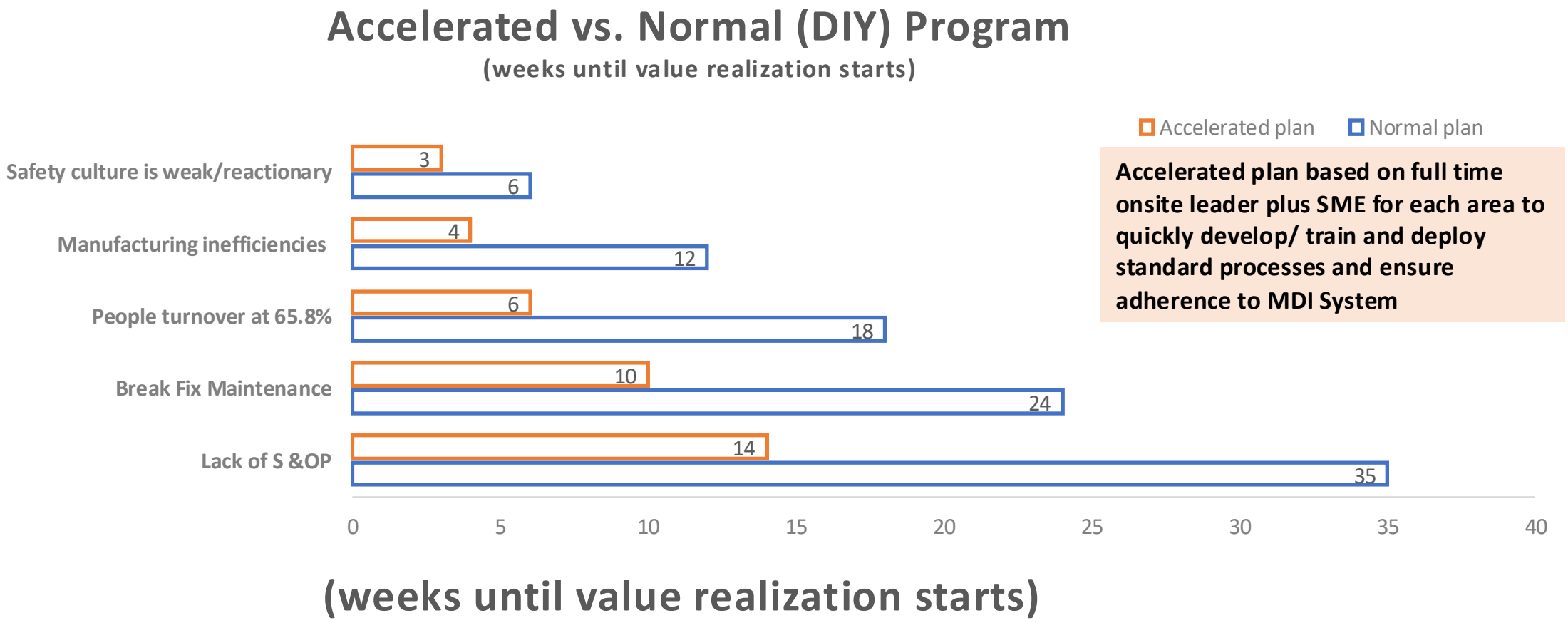
- “figure stuff out” in your unique situation with processes that deliver
- listen first, then diagnose and suggest potential solutions
- collaborate with you to help figure things out
- pilot first, then seek to scale
- help your team align on the right path forward

FSO's Process for coaching clients to Win the Day, Every Day




CAP EX
Strategy, TCO, Vertical Startup
MANUFACTURING
OEE, Yield, Operational Excellence
ASSET RELIABILITY
Uptime, Risk Analysis, Life Cycle
SUPPLY CHAIN
S & OP, Traceability, Logistics
TECHNOLOGY
Transformation, IT/OT, Cybersecurity
PACKAGING
Flexibility, Design, Manufacturability
PEOPLE
PROCESS
PERFORMANCE
12
DIMENSIONS OF MANUFACTURING HEALTH
FSO institute™
The Manufacturing Health People
WORKER SAFETY
Culture, Compliance, Ergonomics
WORKFORCE ENGAGEMENT
Employer of Choice, Team/Individual Mentoring
PRODUCT SAFETY
Track & Trace, Compliance, Risk Avoidance
QUALITY
Brand Protection, R&D, Co-Manufacturing
PLANT FACILITIES
Flexibility, Environment, Infrastructure
SUSTAINABILITY
ESG, Materials, NRG Efficiencies

Client's Acceleration program options



FSO Turnaround Project Results

In the last 15 months, the following represents the focus and outcomes of different-sized engagements with our clients

Large size Client Engagement: Accelerating Turnaround Performance

Observations	Solutions & Tools / Deliverables	Outcomes / Savings
Safety Culture is Weak/Reactionary TRIR is ~10 or 2.5 times higher than 2023 OSHA Standard for the average Cheese Facility	Drive to Zero but deliver 30% reduction in run rate of 27/year to 19/year in 100 days MDI, RCA	Engaged workforce Reduced Insurance Avoidance of Fines **TRIR rate ending at 1.8 or $500K cost avoidance**
Manufacturing Inefficiencies Minimal Standard Work processes Sense of urgency	MDI, Throughput, 1st Hour Full Power, Centerline	**Increase line efficiencies by 25% = $ 2.2 Million** **25% Waste/ rework Decrease = $4MM**
Break Fix Maintenance Firefighter mentality >5% time spent on Corrective PM is too little for current state of equipment World class PM rate is 90%	Asset Reliability Roadmap MDI	**Increased production capacity by 10 days/month** **Reduced OT from 7 days/3 shifts to 5 days /3 shifts**
Lack of Simple S&OP Lead time 2 weeks, but show 1 day to floor Raw Material/Packing Material outages	Team-Based Planning Standard work for Leaders MDI – floor and leadership	**Schedule Attainment improved from 55% to 99%**

Total Performance Improvement paid for FSO fees in 4.5 months

Mid-size Client Engagement: Accelerating Turnaround Performance

Observations	Solutions / Deliverables	Outcomes / Savings
Manufacturing inefficiencies No Standard Work processes Cannot meet Business growth (30 – 70MM)	Workforce Engagement MDI, OEE, 1st hour full power	Increase production **OEE Increase by 15 pts. = $1.5 Million throughput increase** **Exceeded customer demand requirements**
People turnover at 65.8% Perpetual training of new employees	Turnover calculator; on-boarding thru 6 months MDI	**Reduced turnover to 30% saving over $1 Million**
Break Fix Maintenance fire fighter mentality 20% time spent on PM World class is 80% on PM	Asset Reliability Roadmap Total Cost of Ownership	**Increased production capacity by 5 days/month** **Reduced OT from 7 days /3 shifts to 5 days /3 shifts**
Lack of S&OP Lead time moving from (4 to 8 weeks) Last minute new product runs	Team-Based Planning Standard work for Leaders MDI – floor and leadership	**Schedule Attainment improved from 60% to 95%**

Total Performance Improvement paid for FSO fees in < 3 months

Small size Client Engagement: Accelerating Turnaround Performance

Observations	Solutions / Deliverables	Outcomes / Savings
Manufacturing inefficiencies No MDI, Visual Boards, Standard work processes	Workforce Engagement, MDI, Hourly Boards, 1st hour full power	**FHFP vertical start up gain of 2 hours/line = 60% increase in cases produced = $1.2 Million/ week**
Break Fix Maintenance firefighter mentality No PM system	Asset Reliability Roadmap Total Cost of Ownership	**Reduction in equipment breakdowns enabled the increase in run time, achieving 107% of daily total**

Total Performance Improvement paid for FSO fees in 1 month

FSO Turnaround Experiences and Tools

The following represents the varied experiences from the floor and tools utilized to drive accelerated performance.

Manufacturing inefficiencies



Size of the Prize

1% OEE Increase = $100K
1% Yield Decrease = $304K

Daily management for Improvement

- TWO GOALS:
  1. Identify and Solve Problems
  2. Develop Yourself & People

WE NEED TO TEACH A LARGE GROUP OF PEOPLE TO DO A FEW SIMPLE THINGS CONSISTENTLY

Article



Managing for daily improvement-the x-factor in employee engagement.pdf

People turnover at 65.8%

Turnover cost calculator

Cost of Turnover Calculator

ANNUAL COST OF TURNOVER
$2,558,102

ANNUAL EMPLOYEE TURNOVER
127

AVERAGE COST PER EMPLOYEE
$20,143

Potential Savings

IF WE COULD REDUCE TURNOVER BY
40%

40%

SAVINGS FROM REDUCING TURNOVER
$1,023,241

OPPORTUNITY COST SAVINGS

Difference between targeted turnover and actual turnover

INPUTS	POSITION 1	POSITION 2	POSITION 3	TOTAL
Position Title	Blended rate			
Annual Salary	$34,000			
Benefits				
Employees In Position	193	0	0	193
Annual Turnover %	66%			66%
Annual Turnover #	127	0	0	127
Cost To Replace 1 Employee	$20,143			$20,143
Total Cost	$2,558,102	$0	$0	$2,558,102

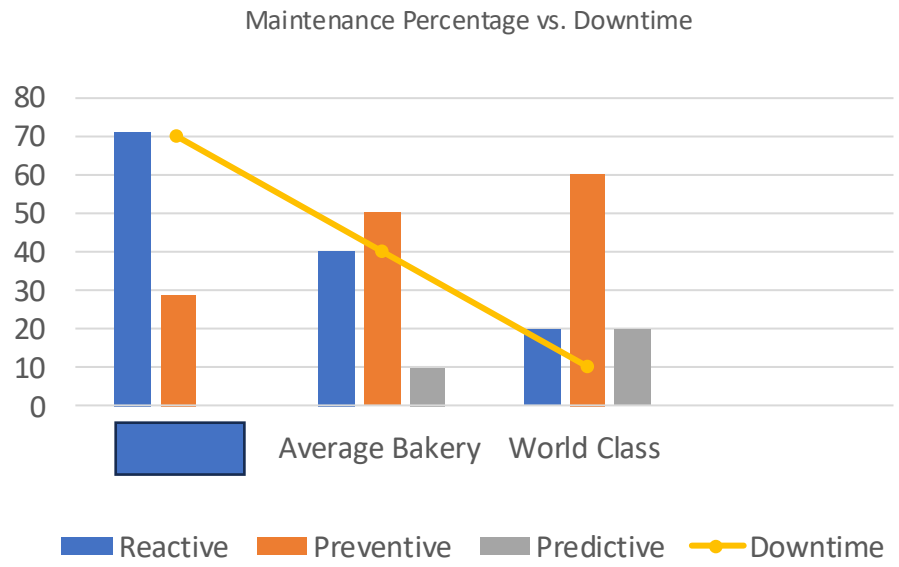
This calculator is directionally correct, accounting for the learning-curve inefficiency of new employees.

OEE calculations may include a learning curve, which could lead to double counting and falsely inflate the perceived savings.



Labor Turnover Cost Calculator: Beyond a Gut Feeling

Break Fix Maintenance



Asset Reliability Opportunity Calculator©

OpX Leadership Network — FSO institute™ the manufacturing health people

PURPOSE OF THIS WORKSHEET: *Gain a rough estimate of the "size of the prize" of potential savings to be gained by implementing a strong Asset Reliability Program.*

Plant Name | Date Prepared | Prepared by

Data Required to Estimate the "Size of the Prize"

Basic Production Downtime Data	Total (hours)	Improvement Goal (%)	Benefit (hours)
Annual Planned Downtime Hours			0
Annual Unplanned Downtime Hours			0
Annual hours returned to Production			**0**

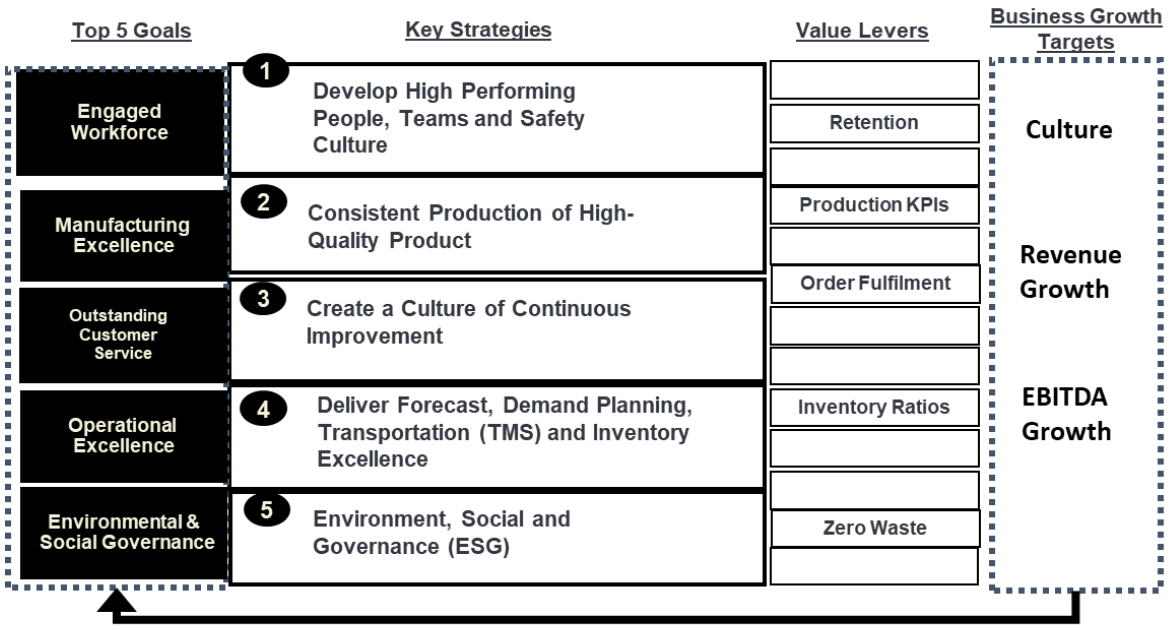
Annual Production Data	Total	Improvement (%)	Data Source
Planned Units Produced per Hour			Budget (Actuals)
Planned Production Hours per Week			Budget (Actuals)
Planned Production Weeks per Year			Budget (Actuals)
Planned Annual Units Produced	0		Calculation
Cost of Goods Sold (COGS)			Budget
Total Units Produced after improvement	**0**	**#DIV/0!**	

Annual Maintenance Cost Data	Total ($)	Improvement Goal (%)	Benefit ($)
Annual Maintenance Labor Costs			$0.0
Annual MRO Costs			$0.0
Total Maintenance Cost savings	**$0**		**$0**

•**Predictive maintenance**, which is analogous to condition-based maintenance, is initiated based on predictions of failure made using observed data such as temperature, noise, and vibration.
•**Preventive maintenance**, which is related to scheduled maintenance and planned maintenance, is scheduled, timed, or based on a cycle
•**Reactive maintenance**, which is related to run-to-failure, corrective maintenance, failure-based maintenance, and breakdown maintenance, is maintenance done, typically, after equipment has failed or stopped.

Lack of S&OP

FSO Manufacturing Operating System
Value Creation Planning



Value Creation Plan Framework



Four Critical Factors in Fortifying Your Supply Chain

Strengthen your supply chain through integrated business planning, reliability engineering and asset optimization, digital insights, and transformational OEM relationships.

FSO Turnaround Sharing Experiences

The following represents a collection of our thoughts and lessons learned that we want to share with the industry.

Most 100-day turnarounds don’t fail because of capital, strategy, or even talent.

Across recent Manufacturing Health Roundtable discussions, leaders consistently pointed to a different failure point: leadership behavior doesn’t change fast enough.

In rapid turnarounds, culture isn’t a long-term initiative. It’s the fastest operational lever available.

When leaders shift from command-and-control to enabling frontline ownership—daily huddles, visible KPIs, empowered supervisors—results accelerate. Not because people suddenly care more, but because the system nally allows them to win.

The uncomfortable truth many MHRT leaders shared: You can’t out-execute yesterday’s leadership habits.



One of the most common misconceptions surfaced inside MHRT turnaround discussions is that urgency requires tighter control.

What leaders actually see in practice is the opposite.

Command-and-control leadership creates speed at the top—and drag everywhere else. Decisions bottleneck. Problems get hidden. Frontline teams wait.

The fastest turnarounds shift accountability down, not up:
- Operators track KPIs in real time
- Supervisors own problem-solving
- Leaders remove obstacles instead of issuing directives

It feels riskier—but it's how momentum actually builds.



One consistent takeaway from recent MHRT turnaround conversations: Turnarounds don't stall because teams don't know what to do.

They stall because daily execution systems don't reinforce how work actually gets done.

Leaders across multiple manufacturers shared similar lessons:

- Strategy without daily management stays theoretical
- KPIs without ownership don't change behavior
- Speed without structure creates chaos

These are the kinds of peer-level, experience-driven conversations happening continuously inside the Manufacturing Health Roundtable.



Daily management systems are often mistaken for meetings.

In MHRT discussions on turnarounds, leaders repeatedly emphasized that daily management is really about decision velocity.

Effective huddles aren't status updates. They answer:
- What broke yesterday?
- What threatens today's plan?
- Who owns the fix—and by when?

When KPIs live on the shop floor and are led by frontline teams, accountability stops being abstract. Work becomes visible. Problems surface early.



Most turnaround KPIs don’t fail because they’re wrong.

They fail because they don’t change behavior.

Across MHRT conversations, leaders described tracking dozens of metrics—OEE, scrap, downtime, throughput—yet struggling to move results.

The issue isn’t metric selection.

It’s that metrics are:
- Reviewed too late
- Owned at the wrong level
- Disconnected from daily decisions

The hardest shift isn’t choosing the right KPI.

It’s letting go of owning it yourself.



One insight that continues to surface inside MHRT turnaround discussions:

Disciplined execution over 100 days beats heroic effort every time. Not because people work harder—but because systems make the right work unavoidable.

These challenges aren't isolated. Leaders across industries, plant sizes, and ownership models describe the same friction points.

That's why MHRT exists—not as an event series, but as an ongoing peer network where operational leaders learn faster together.

If these turnaround themes feel familiar, you're in good company.



We’ve been fortunate to work alongside manufacturers we respect—and what we’re seeing in the field is worth sharing.

Turnaround Tuesday is a weekly series of real-world insights from inside factories focused on people, processes, and performance that actually moves the needle.



I've watched a lot of leaders walk into the first 100 days of a turnaround with the same instinct:

"Clamp down. Tighten approvals. Centralize decisions."

It looks like speed.
But command-and-control only accelerates the top of the org chart—and slows everything else down.
Decisions bottleneck. Problems get managed upward. Teams wait.

As Theodore Roosevelt put it:
"The best executive is one who has sense enough to pick good people to do what he wants done, and self-restraint enough to keep from meddling with them while they do it."

The quickest turnarounds I've seen follow a different playbook—one you'll hear echoed by strong ops leaders and high-performing plant teams:

Push decisions to where work happens.
- Operators track KPIs in real time
- Supervisors own problem-solving
- Leaders clear obstacles and protect flow

That's servant leadership—and it's not soft.

Serving your team means removing obstacles without lowering standards.
The best sites demand accountability and back it with support.
That's how teams start owning results instead of renting them.
It feels riskier—but it's how momentum actually builds.



We've watched a lot of leaders walk into performance gaps with the same instinct:
"Let's launch a major initiative."
"Let's redesign the whole process."
"Let's wait until we have the full plan."

It sounds strategic.
But waiting for the "big fix" quietly kills momentum.

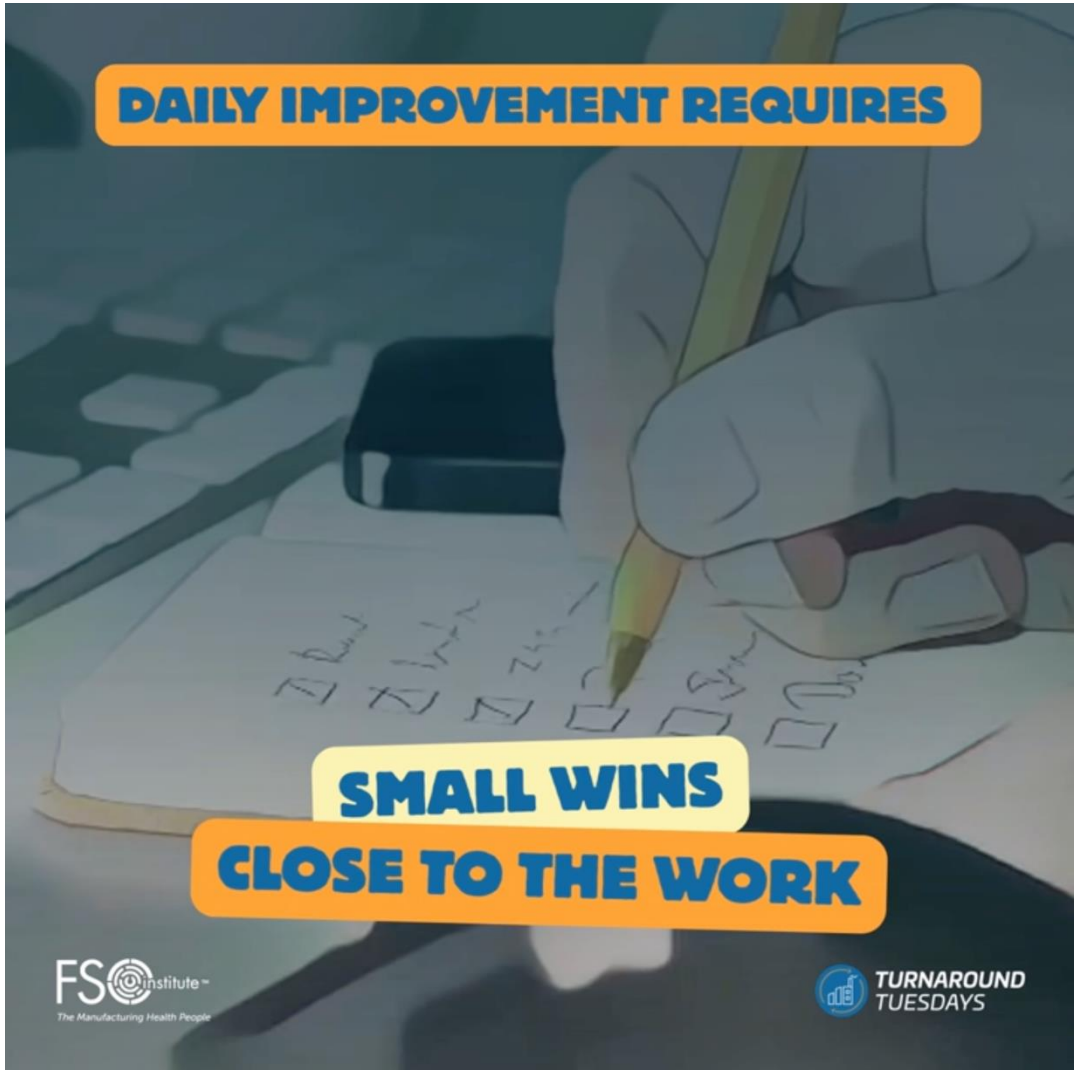
The floor learns to live with problems.
Operators stop raising issues.
Supervisors manage workarounds instead of removing friction.
And the organization starts renting performance—until the next project shows up.

The best plants I've seen follow a different playbook—one you'll hear echoed by strong ops leaders and high-performing teams:
Build a habit of daily improvement.

- Fix what frustrates operators today
- Clarify standards so work is repeatable
- Remove small barriers that slow flow
- Lock the win into the process so it sticks

Big projects still have a place.
But daily improvement is what builds trust, stability, and real performance over time.

It feels less impressive.
But it compounds faster—and it brings people back into ownership.



“Why can’t my people just do it right?”

That question shows up in every plant under pressure.
But most performance problems aren’t people problems—they’re system problems.

When operators struggle, look first at the process:
• Confusing or shifting standards
• Poor scheduling that creates chaos
• Broken handoffs between departments
• Missing materials, late information, unclear priorities
• Work that depends on heroics instead of design

Those conditions practically guarantee variation.
And when leaders respond with more pressure, more reminders, or more “accountability,” the system stays broken—so results don’t stick.

Strong leaders do something different:
They manage the system—so good performance becomes the default.

Because fixing the system is the fastest way to improve performance… and the most respectful way to lead.



One insight that continues to surface inside turnaround discussions: Telling people what to do creates compliance. Coaching teaches them how to think.

Turnaround leaders don't win by issuing more directives, they win by asking better questions:
- What's getting in your way?
- What do you need to succeed today?
- What would "good" look like by end of shift?

Because the goal isn't short-term obedience. It's building capability—so decisions improve at the point of work, every day.

These challenges aren't isolated. Leaders across industries, plant sizes, and ownership models describe the same friction points.

That's why these conversations matter—not as one-off events, but as an ongoing way operational leaders learn faster together.

If this leadership shift feels familiar, you're in good company.



If performance isn't visible, it isn't managed.

The strongest sites don't rely on dashboards no one checks or reports that show up weeks late. They use simple, visual accountability—right where work happens.

A clear board and a short daily huddle create rhythm:
Safety. Quality. Delivery. Cost.
Every shift. Every day.

When results are visible, teams don't guess—they know. Gaps show up early, issues get named, and leaders can support instead of react.

And the power isn't the board itself—it's the consistency. The same questions, the same focus, the same follow-through. That's how accountability becomes normal instead of optional.

If you want better performance, make it visible, make it daily, and make it part of the shift—not an afterthought.

