How to Build a Quality 4.0 Roadmap

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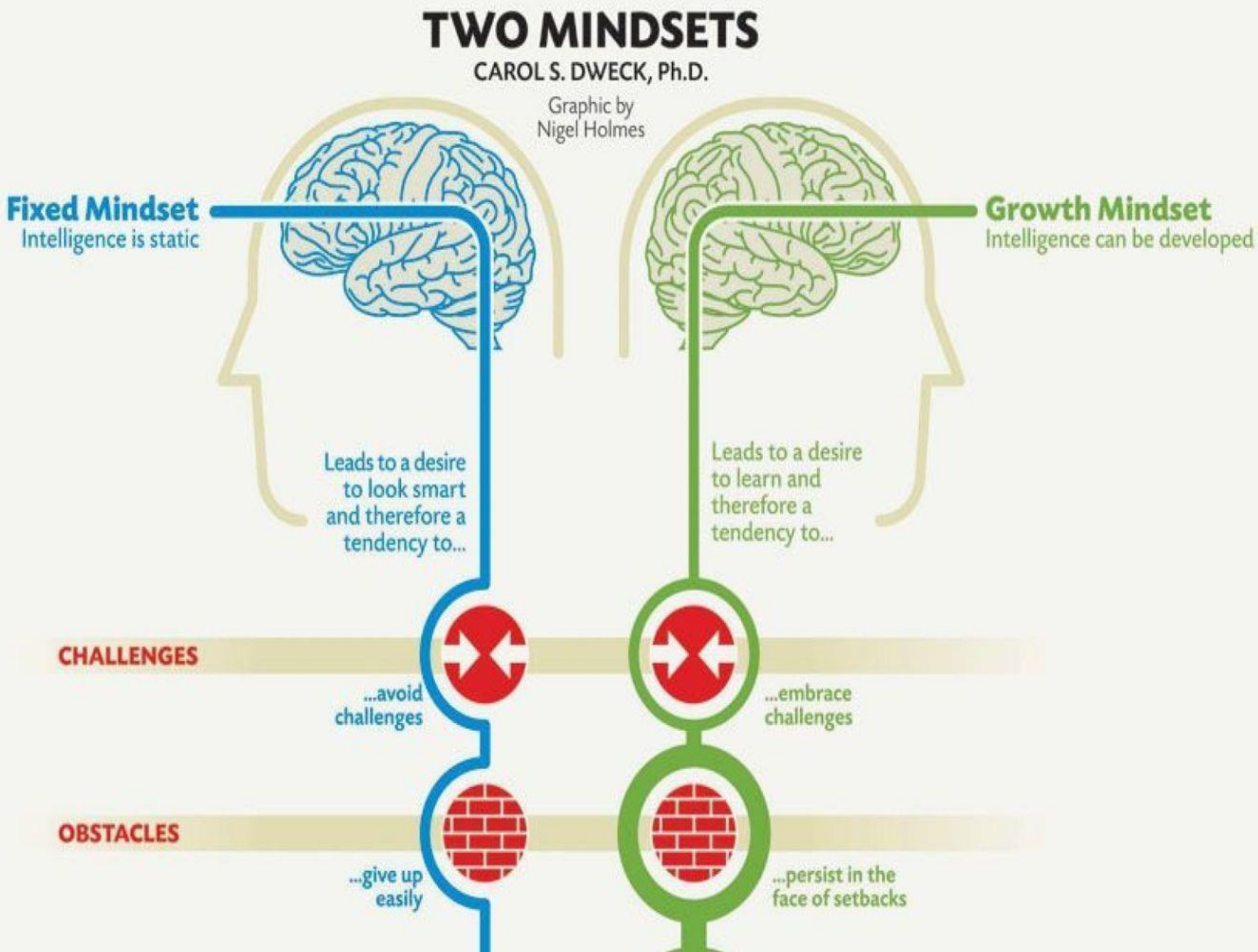
TWO MINDSETS
CAROL S. DWECK, Ph.D.
Graphic by
Nigel Holmes
Fixed Mindset
Intelligence is static
Growth Mindset
Intelligence can be developed
Leads to a desire to look smart and therefore a tendency to...
Leads to a desire to learn and therefore a tendency to...
CHALLENGES
...avoid challenges
...embrace challenges
OBSTACLES
...give up easily
...persist in the face of setbacks

Begin with Benchmarking where we are, so we can Target where we want to be in 3-5 Years!

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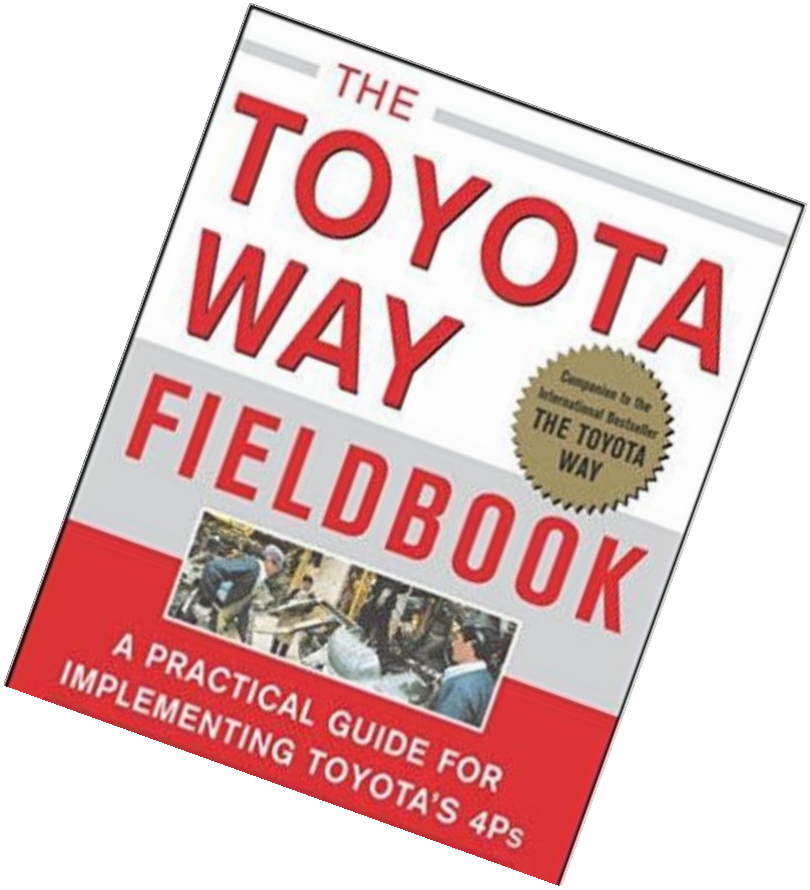
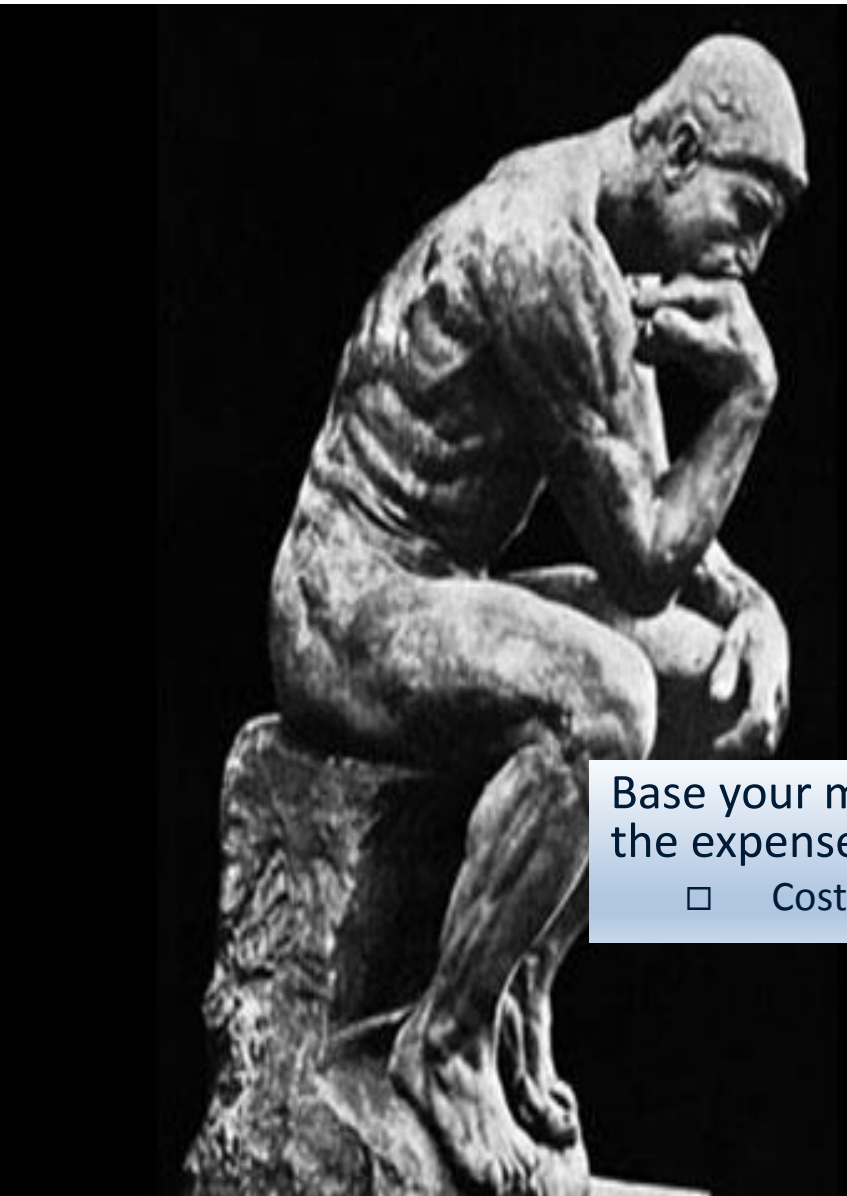


Benchmarking where we are, so we can Target where we want to be in 3-5 Years!

Competition	Strengths	Weaknesses	Opportunities	Threats
1. L3				
2. Aerospace Corp				
3. Northrup				
4. Lockheed				

- What is your Unique Selling Proposition?
- How do we articulate this?
- How do we let the marketplace Know?
- How to we demonstrate it to our patients?

Take a Long-Term Approach & Philosophy



- Immediate Results – Low Fruit:
  - Begin Cultural Transformation
  - Optimize Talent/Develop People*
  - Improve Operational Performance
  - Eliminate Human Motion & other Waste that increases our costs
- Long-term – Most Difficult
  - Organizational Buy-in**
  - Quality Improvement
  - Creating Flow
  - Sustaining a culture of Continuous Improvement (CI)
  - Consensus
  - Employee Involvement

Base your management decisions on long-term philosophy, even at the expense of short-term goals

- Cost reduction DOES NOT drive Toyota… STRATEGY Drives Toyota!!

Process

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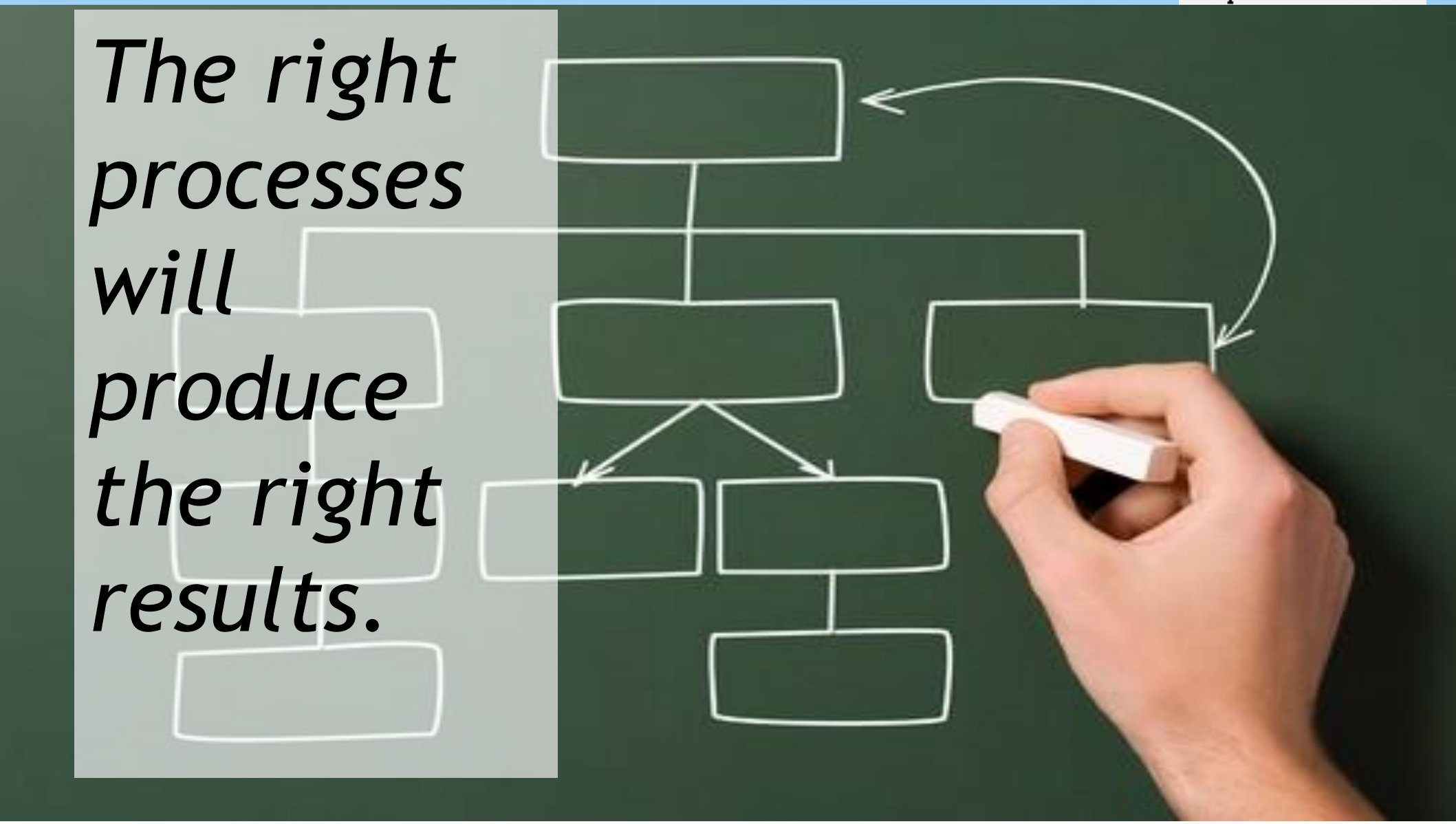
The right processes will produce the right results.



People & Partners

Add value to the organization by developing People & Partners

- Allow Employees to keep asking Questions: U.S. Employees ask ½ question of their employer per year
  - Japanese employees ask an average of 65+ questions per employee/year!
- Respecting each other- originally TPS was called "Respect for Humanity" System

- Continually asks "why?"
- Challenge the Status Quo
  - Create a new challenging environment that forces people to think and grow
  - Thinking, learning and growing are not always fun…
  - Partners, including vendors grow and become better and more confident

People & Partners

Add value to the organization by developing People & Partners

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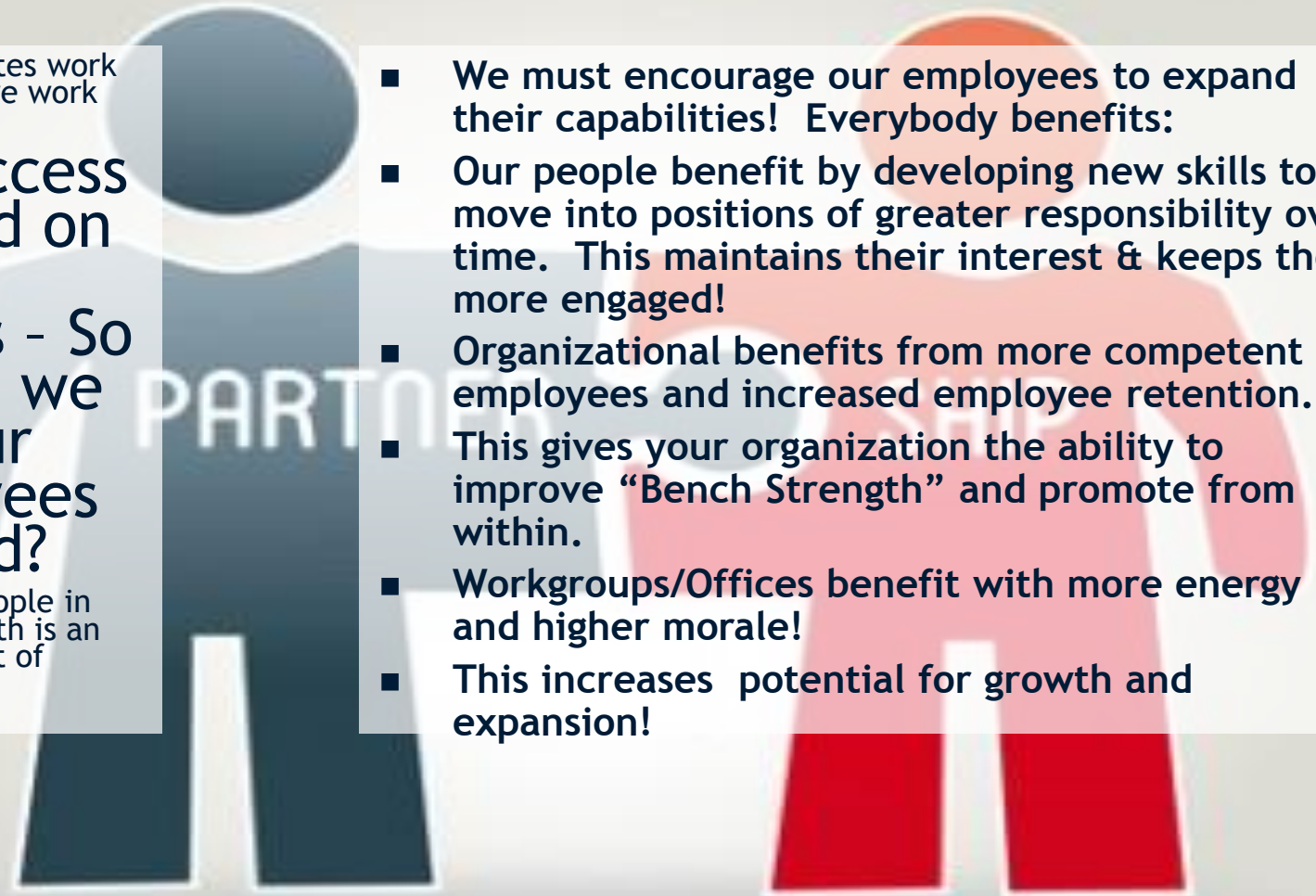
- Our subordinates work for us, BUT…we work for them too.
- Our success is based on their success – So how do we help our employees succeed?
- Supporting people in personal growth is an important part of Leadership!



- We must encourage our employees to expand their capabilities! Everybody benefits:
- Our people benefit by developing new skills to move into positions of greater responsibility over time. This maintains their interest & keeps them more engaged!
- Organizational benefits from more competent employees and increased employee retention.
- This gives your organization the ability to improve “Bench Strength” and promote from within.
- Workgroups/Offices benefit with more energy and higher morale!
- This increases potential for growth and expansion!

Toyota Way Principles

- **Develop exceptional people and teams who follow *your organization's* philosophy**
  - Toyota "Team Associates" have a strong sense of shared purpose and a strong culture of involvement and continuous improvement!
  - *THE OZ PRINCIPLE: How can we enforce it more?*

- **Respect your extended network of partners and suppliers by challenging them and helping them improve**

Problem Solving

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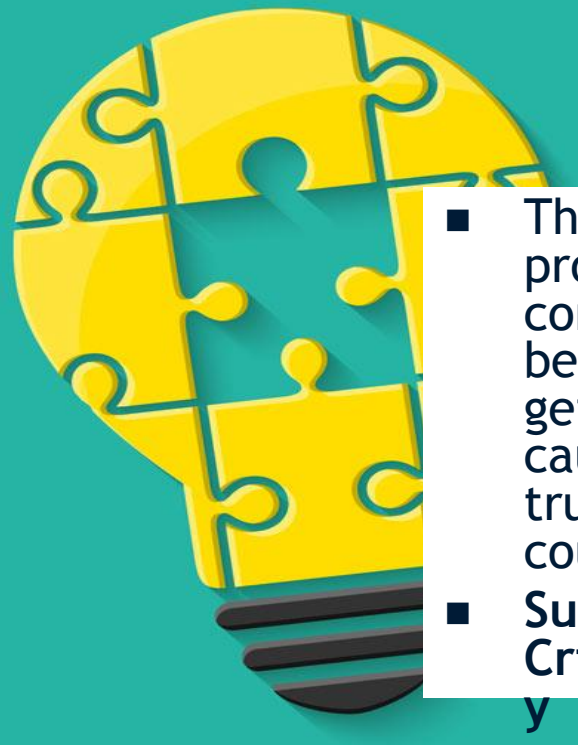
Continually solve root causes to drive organizational learning



- The same problems keep coming back because we do not get to the root causes and put in true countermeasures
- **Success = Crisis/Opportunity**

- At Toyota, even when things look like they have gone flawlessly and achieved all of the right objectives, there were always problems that had to be solved.
- When someone learns an important lesson, they are expected to share it with others so the company can learn!

Toyota Way Principles

Build a culture of stopping to fix problems, to get quality right the first time

- The solution was not so much the power loom, but to build in the human capability to detect a problem and stop the loom
- *Jidoka= Machines with human intelligence*

Standardized processes are the foundation for continuous improvement and employee empowerment

- You cannot predict timing and output of your processes unless you have stable, repeatable processes
- The foundation for flow and “pull” is predictable and repeatable processes
- Standardization IS NOT rigidity or stifled individual expression
- Standardizing “best practices” leads to capturing learning… Otherwise no one will learn…

Golden Triangle

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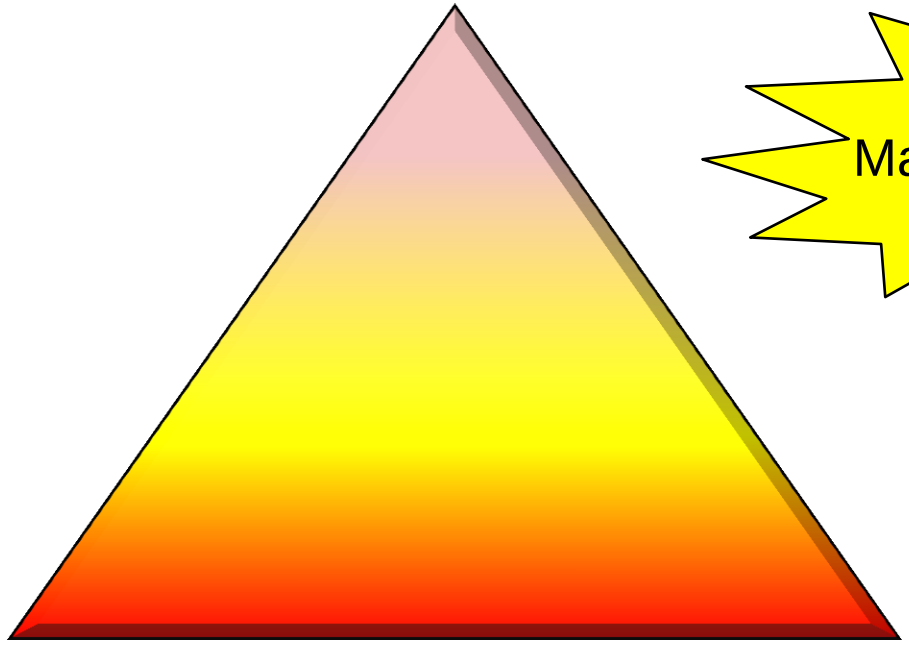
Standardized Work

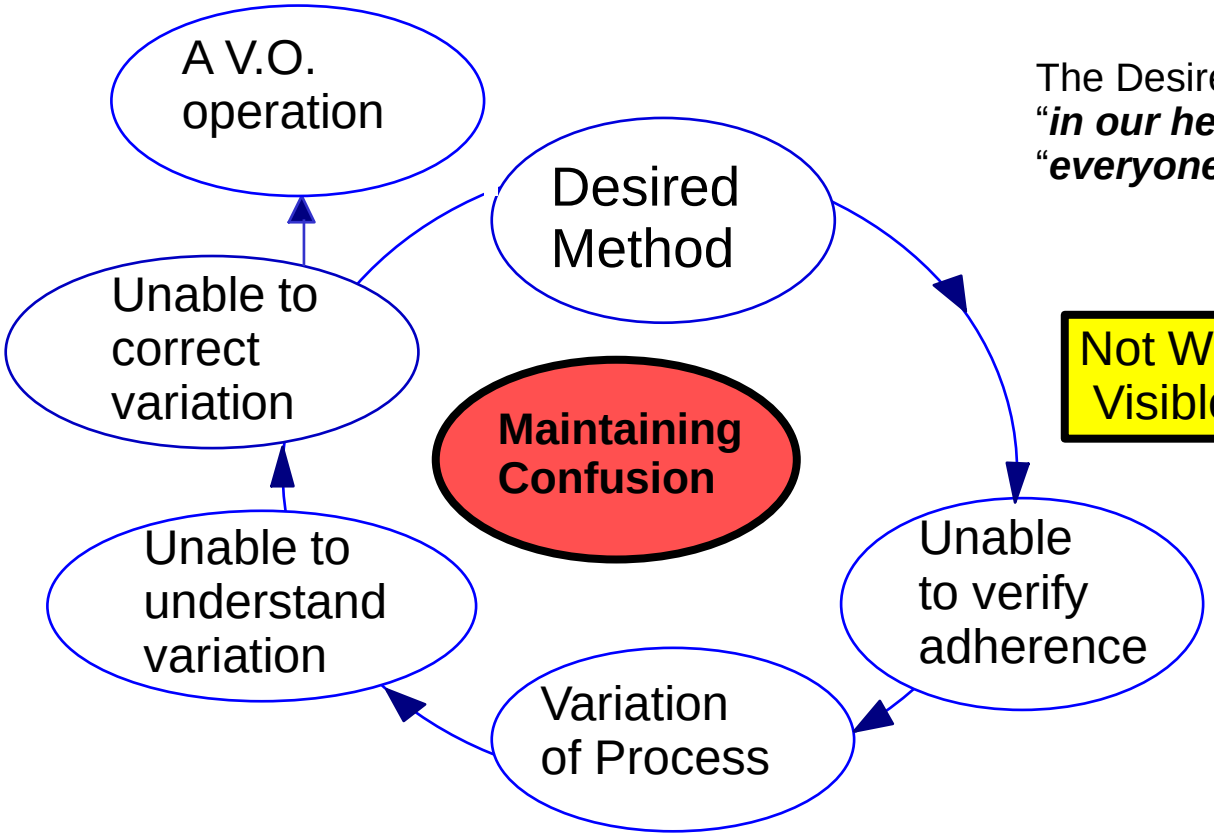


Maintain the Standard

Standardized Management Employee Engagement & Accountability

Visual Management

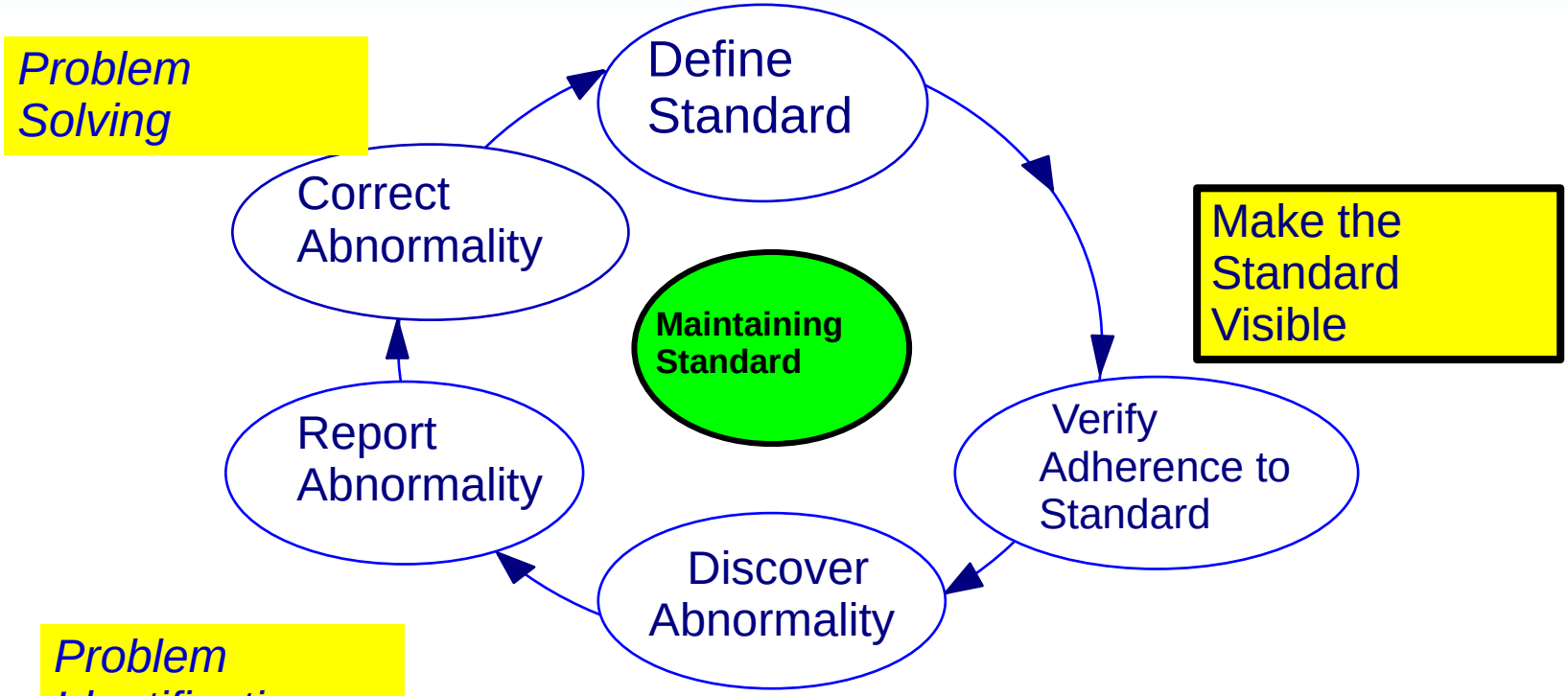
FROM: No clearly defined "Standard"



The Desired Method is "***in our heads***" and "***everyone knows*** *it*"…***WRONG!***

Not Well-Defined or Visible

TO: Clearly Defined Standard



Toyota Way Principles

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8. **Use only reliable, thoroughly tested technology that serves your people and process**
   - Technology allows people doing work according to a standard process
   - People should not be subservient to technology – process always takes precedence over technology!
9. **Grow leaders who thoroughly understand the work, live the philosophy, and teach it to others**
   - Leaders at Toyota are grown, not bought

→ ***What does this mean for*** *your organization**?***

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Excellence

SAMPLE Roadmap Graphic for: Spacetime Journey to Excellence Model

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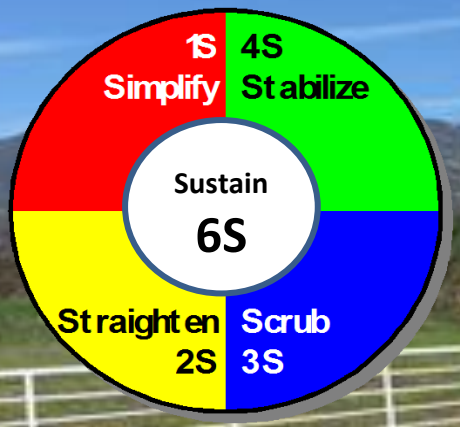
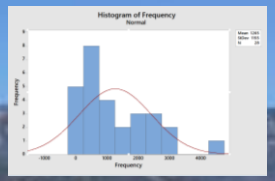
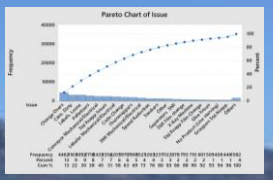
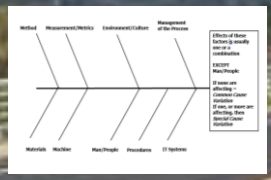
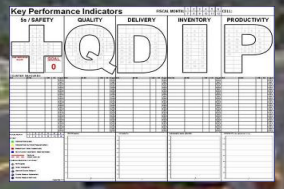
"Lean Adaptation" is critical first step to drive results to where the "action Is" = "Gemba"









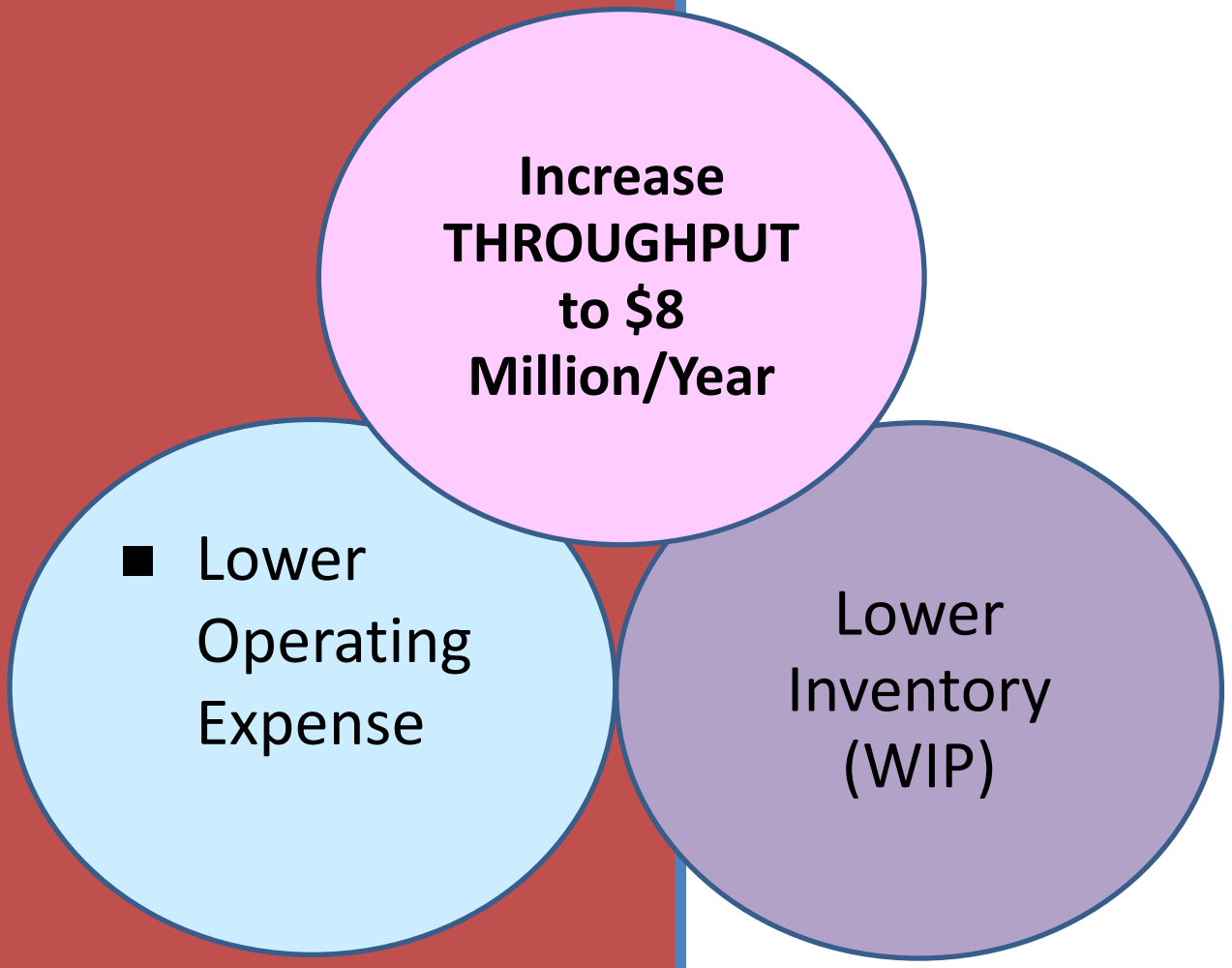


- "SPEAK WITH DATA"

- Remove WASTE
- Reduce Rework
- Improve Predictability
- FLOW"

Drive to Root Cause Analysis, Visual Controls & Daily Gemba Management with Key Performance Outcome Drivers

Insert: Your Organization's Top Strategic Three Initiatives



- What are your "Top Three" Initiatives that will stimulate GROWTH?
- An "initiative" is a:
  - Goal
  - Strategy
  - Objective
  - Measure/Metric
  - Target
  - Threshold

Key Performance Business or Service Drivers

Key Performance Indicators (KPI's)

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Balanced Scorecard Logic

What is the Mission for this Roadmap?

What are the Goals & Objectives for this Roadmap?

What are our "top Three Initiatives? (Same as your Model in previous slide)

What STRATEGIES will we use? (See, following slides)

What is our Theme? AND what under-lying themes do we want to create?

Who are our Target Customers? (Internal/External)

Measures/Targets

1. What are Key Performance Indicators that we will measure? - Dollars
2. What are Key Business Results that will validate our KPI's? - Less Rework, OpEx, Throughput in $$$
3. What Thresholds do we want to get past?

Key Performance Business or Service Drivers

Key Performance Indicators (KPI's)

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Balanced Scorecard Logic

Three Kinds of Visions:

1. Growth
2. Change
3. Recognition

What is the Vision for this Roadmap?

What are Perspectives, current views or existing Paradigms that might be hampering ?

What are your Organization's Core Values:

Why do Organizations fail?

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#1

97%

Lack of a Clear Vision

#2

80%
No Clear WRITTEN & COMMUNICATED Strategic Plan or PLAYBOOK

#3
52%
Some Strategic Success

Only 33% Have Significant Strategic Success

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What strategy must be achieved and what is critical to its success

How will success be measured and tracked

Performance expectation
Key Performance Indicators
KPI's

Key action programs required to achieve objectives

EXAMPLE

	Objective	Measure	Target	Initiatives
Financial	Increase EBIT by X%	Revenue mix	10% Channel A 40% Channel B 50% Channel C	• Culture Shift •Train all employees • Reduce Costs •Improve Quality •Technology
Customer	Increase customer satisfaction	Customer retention	95% Customer Satisfaction Survey	• WIIFM
Internal Process	Process Kaizen Target 50% Improvement	Reduction of mistakes or non-conformance	2018 – 40% 2019 – 30% 2020 - <10%	•Training & Development & Mentor Program • Qualifying Tests • Subject Matter Experts • Ability to Train Others
Learning & Growth	Develop Bench strategic skills	Cross-train	Mid-Management & Clinicians, then ALL Employees, 25%, 50%, 100% of employees	• Custom Training • Knowledge Library • Tool Kit

How to Measure New Skills

(Bench Strength)

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1. Keep track of the number of mistakes
2. Use assessment tools as predictors and indicators of Skill Level (Before and after or Certification Levels) emotional intelligence, communication, critical thinking, and other groups of soft skills. (Predictive Index)
3. Use 360-degree feedback instruments to get input from those who interact most frequently with the subject of the feedback. (Predictive Index)
4. Use employee engagement surveys to gauge how committed employees feel to management and how effective they believe that management is in creating a positive workplace.
5. Establish metrics related to frequency for behaviors that exhibit soft skills
6. Create Models/rubrics to define exceptional, acceptable, and apprentice-level demonstration of soft skills.

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What strategy must be achieved and what is critical to its success

How will success be measured and tracked

Performance expectation
Key Performance Indicators
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EXAM PLE

	Objective	Measure	Target	Initiatives
Financial				
Customer				
Internal				
Learning & Growth				

Checklist for Evaluating Strategies!

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1. What is the probability that the strategy will allow you to reach the Desired State/Goal?
2. What evidence do we have that this strategy has worked for others? Called "Benchmarking"
3. Is this strategy different from our competitors' or simply a "me also"?
4. What are the risks associated with this strategy?
5. Is this strategy going to be politically acceptable -- Will Senior Management or stakeholders buy in?
6. Can you NOT afford the strategy?
7. What is the likelihood that a competitor will copy this strategy and perform better?
8. Are you thinking outside of the box, or are you taking the safe route, as usual?

Balanced Scorecard

A management system that ensures your strategic mission is understood and implemented across the organization...

Focus in on these Areas:

Clarify Communications

Clarify Goals and Objectives

Team-based Outcomes

Clarify Priorities

Balanced Scorecard – Helps us Keep Track.

Are we moving the needle in the right direction, Are we standing still, or are we moving backwards?

Create and amend your strategic Vision

Review current results and cause and effect assumptions

Ishikawa

Implement your Action Plan

Develop and Revise Measures and Targets

Why Use a Balanced Scorecard?

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1. Puts Your Organization in a more Competitive position
2. Takes advantage of New Technological Advances
3. Optimizes Talent & Changing labor markets
4. Considers Employee Shifts and Downsizing
5. Addresses Low morale & Productivity
6. Addresses Government reform, regulations or compliance
7. Focuses in on Poor internal communications
8. Shifts your organization:
   - FROM: Over-emphasis on tactics and operations
   - TO: Strategic Control

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A score of 14 would be compared to closest on scale…13.55. This tells us, this is how far we have progressed compared to pre-set intervals or increments.

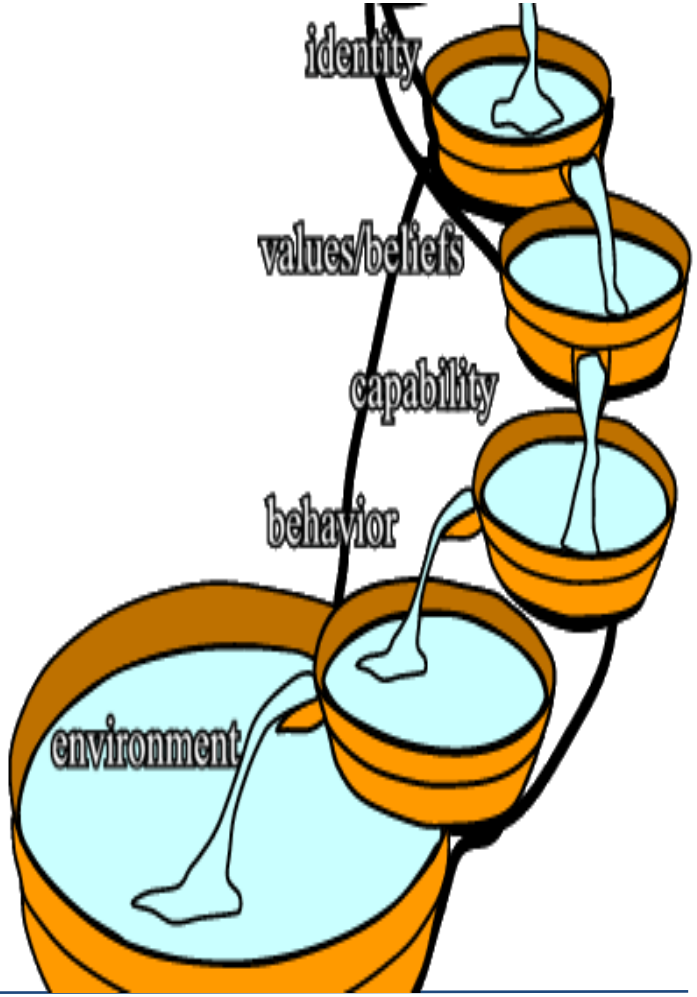
The Roadmap can include Balanced Scorecard t… …at need to be improved or reduced at-a-glance!

Measures	Scale													WT	Score
	-20	-10	0	10	20	30	40	50	60	70	80	90	1…		
Increase Capacity	0	2.15	5%	7.85	10.07	13.55	16.4	19.25	22.1	24.95	27.8	30.65	33.5	40%	14.00
Quality	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.5	4.7	30%	3.60
Customer Survey	76	77	78	79	80	81	82	83	84	85	86		88	20%	70.00
Competitive Pricing	0	.5	-1	-1.5	-2	2.5								10%	
												Target		Total:	

The "weight" priority tells the team, how much time of their day, they need to spend on this initiative. Example, with "Increasing Capacity" 40% of everyone's day needs to focus on improving "Increasing Capacity"

Leading in a High-Performance Environment

- People adapt to a changing environment at a neurological level
- If we can change the language to integrate biological and psychological disciplines, we can have a more realistic rate of change…
- Change needs to be systemic & holistic to be sustained
- Change must be culturally integrated
- Culture beats Strategy any day!



Your Organization
Business Performance System
Desired Behavioral Changes

Example of Workforce Development

- Leadership & Employee engagement
- Leadership at Every Level
- Follow the Lean and/or Six Sigma process
- Less Waste, Higher Quality – What quality "Looks like"
- More Gemba Management
- Best team wins
- Daily Metrics Management
- More Capacity, Better FLOW

- Assess & Measure Current State of Talent.
- Develop Skills Matrix for Current and Future State
- Train & Develop around to the skills strengths and weaknesses
- Develop SME Certification to Mentor Others
- Develop Medium-Term and Long-Term Measurement System/Score card

BUSINESS Performance SYSTEM???

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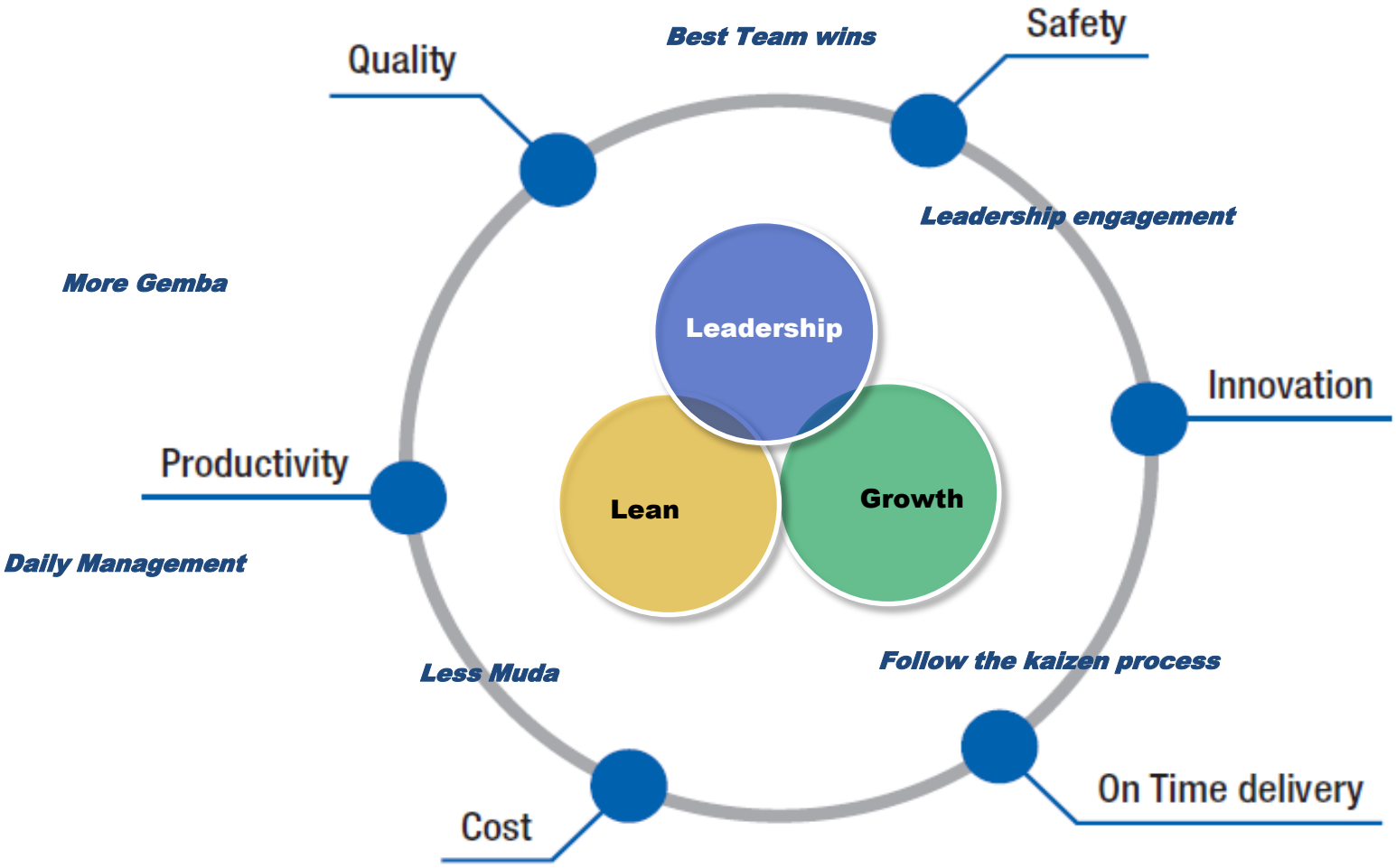


SAMPLE: Workforce Development Plan

Key content / tools:	Training Outcomes
Long-Term Strategy - strategy / challenges / opportunities	- re-enforcement/sharing. Understanding and commitment to high level goals - clarity as to what this means to the; leadership challenge; making American Licorice a great place to work; and to increasing employee engagement
Self Awareness Tools 360 – Predictive Index	- Individual self awareness raised considerably with feedback prior to module 1 - group summary of PI maps - common *Start Stop Continue* themes - Understanding our different types/styles – and how to work together effectively
Organization - roles / responsibilities - aligning goals of teams / individuals - levels of work - effective use of KPIs / prioritising	- providing simple effective tools for getting clarity on roles and responsibilities - I would also suggest looking at hiring the right talent- Behavioural Hiring/Firing as well as switching from traditional job descriptions to task and activity competency-based metrics. Include a balanced scorecard component at each level of the organization that would roll up to the enterprise goals and objectives so that the entire enterprise is fully-integrated and aligned. - understanding how to align team and individual goals to Your Company strategic goals - appreciate concept of different levels of work and how to use to delegate /define roles properly. Include a component of competency-based growth model, situational leadership and effective coaching and mentoring skills, including a formalized mentoring program, job shadowing, job sharing, etc. - understand how to use KPIs to track progress effectively, also include how to reach KPI's including effective project management, critical path, critical success factors, etc.
Performance Management - Your Company Performance Management system - SMART objectives - Start-stop-continue – use success factors	- Re-enforce and increase understanding of current system – company expectations – being clear what good looks like. Establish key behaviours or core values that you want to have people emulate, but can also become part of your "fabric". Benchmark best practices or best in class. - practice setting SMART objectives - have frequent 2 way conversations on 'how is it going?' and 'how can I help?', create facilitative leaders. We have curriculum "Leader within Me" Situational Leadership can accompany this as well. - practice giving and receiving feedback –being more comfortable on the 'how' as well as the 'what'
Motivation -theory / practice	- introduction to the theories of motivation – including intrinsic & extrinsic motivation - utilise tools to understand people's motivations and how to influence behaviours, learning needs and performance/effectiveness. Also understand cultural differences in motivation. High context vs. Low context cultures. Community vs. Competitive Cultures. "Unofficial gatekeepers" and how to get their buy in. Language issues and other barriers to motivation. Maslow, Deming, Jack Welch. Matsushita – change in thinking…

Leadership through Coaching & Mentoring

Key content / tools:	Training Outcomes – After the training program Managers will be able to:
Leadership v Management	- understanding/contrasting the differences (between leadership & management) - What effective leaders actually do – best practice. Harvard Business School videos -Leadership brand – DVD's of SC, AM, RR – each individual to develop own beliefs/points of view on their own approach to leadership. Ideal attributes and profile of effective leaders
Cross Functional Team working & Building Teams	-being able to lead and influence teams and individuals that don't necessarily report to the functional manager. Eliminating silos of excellence, Building effective teams- Harvard Business School video on Effective cross-functional teams. Managing up-down-and across turfs- It's about Working Together, Winning Together. -Great teams – why? Effective team-building skills, simulations, ropes course?
Situational Leadership	- understand the 4 key quadrants of situational leadership and be able to apply this to their teams and to individuals; delegating, coaching, supporting & directing. Understand when to use each specific examples - understand how to move around the matrix according to the situation
Balanced Leadership	- understanding the concepts of how to *trust*, *tend* and *task* and the importance of a balanced leadership approach. Specific effective feedback, Change management, Action Plans.
Influencing Skills	- understanding the different influencing styles that can be used to help/motivate and engage individuals and teams. The power of creating Discovery. - Practice using different approaches – the nine possible ways. Influence, The pen is mightier than the sword, the C.L.I.M.B. method, Five Leadership & Influencing Skills
Managing Conflict / disagreements	- understand/analyse the root causes of disagreement/conflict and be able to determine strategy for resolution – use of different 'lenses' for assessing the problem and possible solutions. Good vs. Bad conflict. Using conflict to manage change, Dealing with personality styles that may cause conflict. Dealing with difficult people
Gaining Buy-in / Commitment	- understand how to increase employee engagement through early inputs from teams/individuals and jointly agreeing targets and actions -Effective use of recognition tools to encourage sustained higher performance

What we do Directly Affects the "Bottom-Line"
Sustainable Margin Development continues into 2043

	EBITDA	CAPEX	Direct Labor	Automation	Digital
2023	17	5,000,000	50%	1,000,000	1,000,000
2024	18	6,000,000	45%	2,000,000	2,000,000
2025	19	7,000,000	40%	3,000,000	3,000,000
2026	20	8,000,000	35%	4,000,000	4,000,000
2027	21	9,000,000	30%	5,000,000	5,000,000
2028	22	10,000,000	25%	6,000,000	6,000,000
2029	23	11,000,000	20%	7,000,000	7,000,000
2030	24	12,000,000	15%	8,000,000	8,000,000
2031	25	13,000,000	10%	9,000,000	9,000,000
2032	26	14,000,000	5%	10,000,000	10,000,000
2033	27	15,000,000	0%	11,000,000	11,000,000
2034	28	16,000,000	-5%	12,000,000	12,000,000
2035	29	17,000,000	-10%	13,000,000	13,000,000
2036	30	18,000,000	-15%	14,000,000	14,000,000
2037	31	19,000,000	-20%	15,000,000	15,000,000
2038	32	20,000,000	-25%	16,000,000	16,000,000
2039	33	21,000,000	-30%	17,000,000	17,000,000
2040	34	22,000,000	-35%	18,000,000	18,000,000
2041	35	23,000,000	-40%	19,000,000	19,000,000
2042	36	24,000,000	-45%	20,000,000	20,000,000
2043	37	25,000,000	-50%	21,000,000	21,000,000

- Invest in people, Technology Development, Creating Sustainable & Robust Supply Chain, New Facilities and Acquisitions

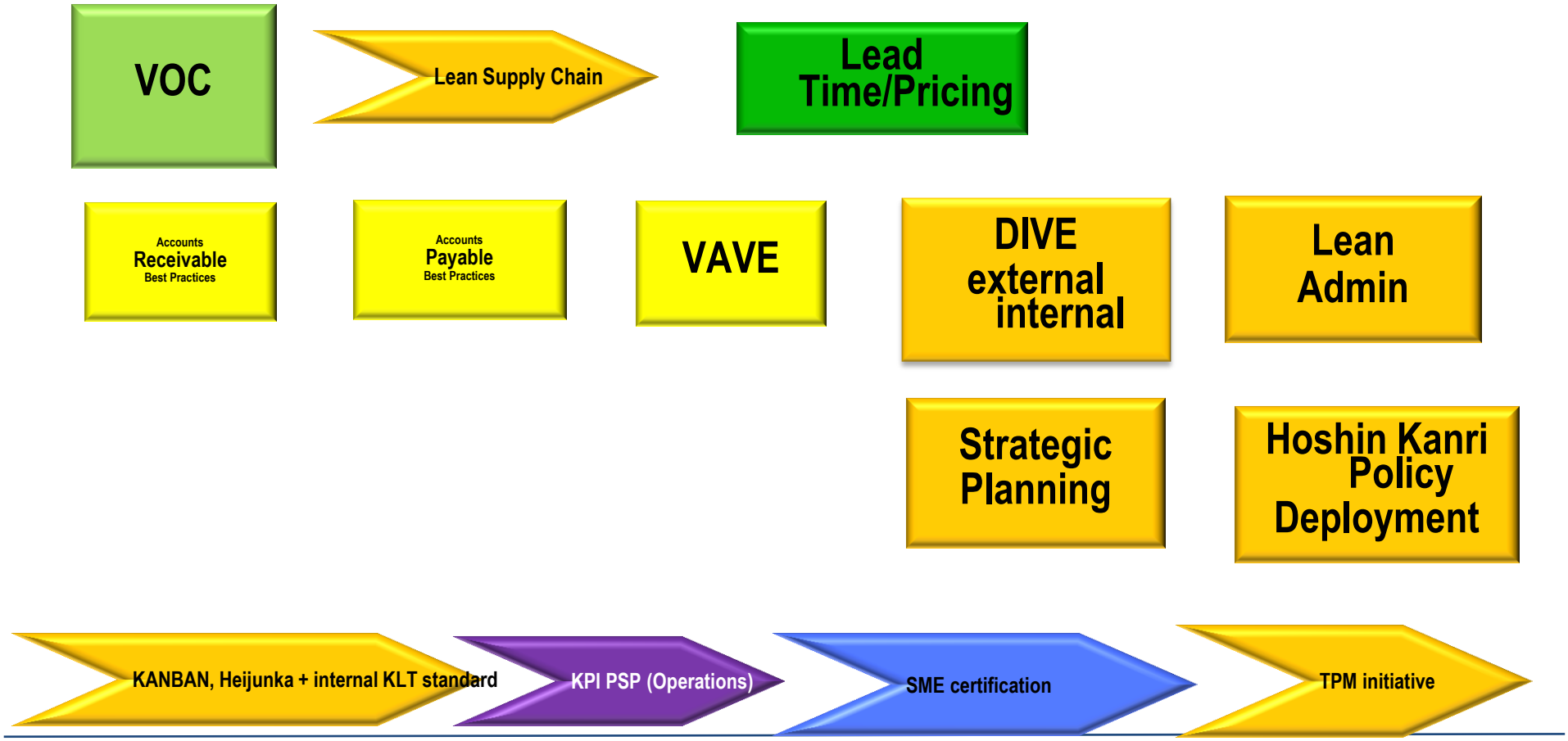
- Guide Shareholders with margins (EBITA) will remain stable, above 17%
- As such, it is important to consider other financial metrics, such as net income, free cash flow, and return on equity, in addition to EBITDA, when evaluating your organization's financial health.

To achieve the above you must :

- *Focus on continuously helping our people grow and*
- *Improving your Delivery & Cost Structure – SQDIP & Reducing Lead Times*

Develop Your OrganizationBusiness Performance System:

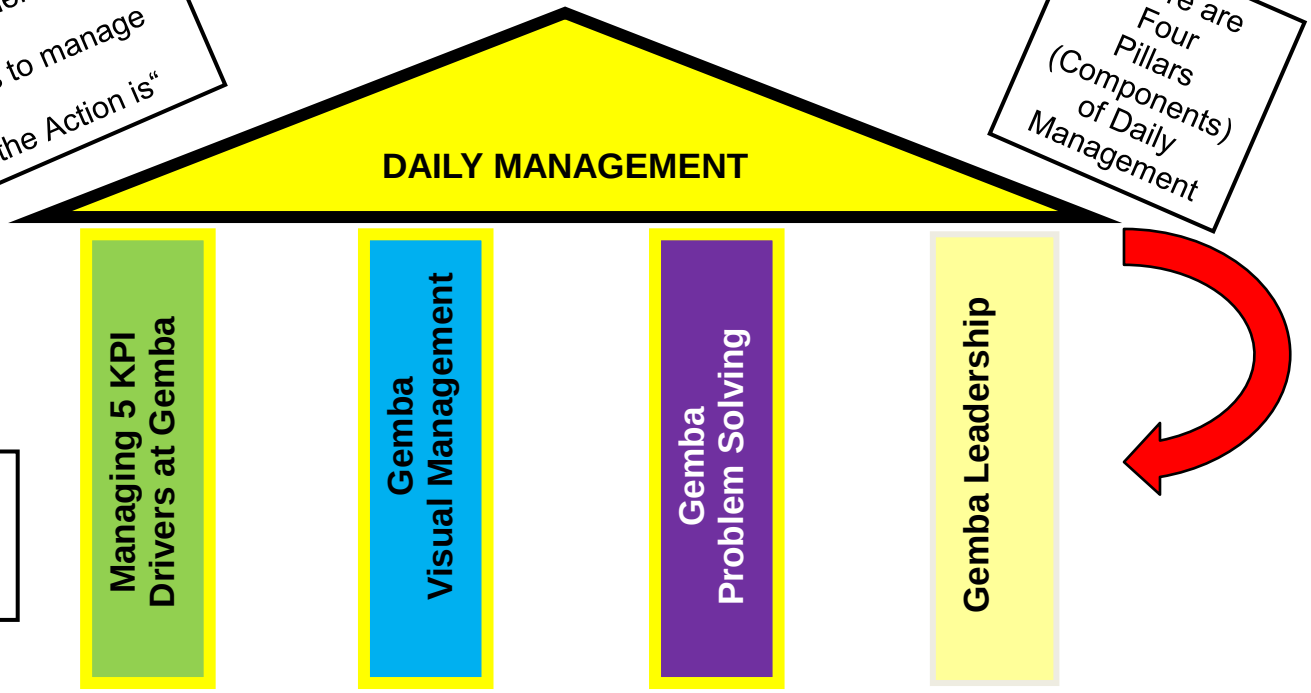
It's not Just about Improving Production... Everything Must be: Up-for-grabs!



Creating a Higher-Performance Environment:

What is Daily Management ?

DEFINITION: Daily Management is the process SpacetimeEngineering uses to manage Operations. „GEMBA Means- Where the Action is“



5S/6S are part of the “High-Performance Conversion” and are the minimum foundation to support DM

Create a Business Continuity & Recovery Plan

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Specialists

Managing Complex Change...

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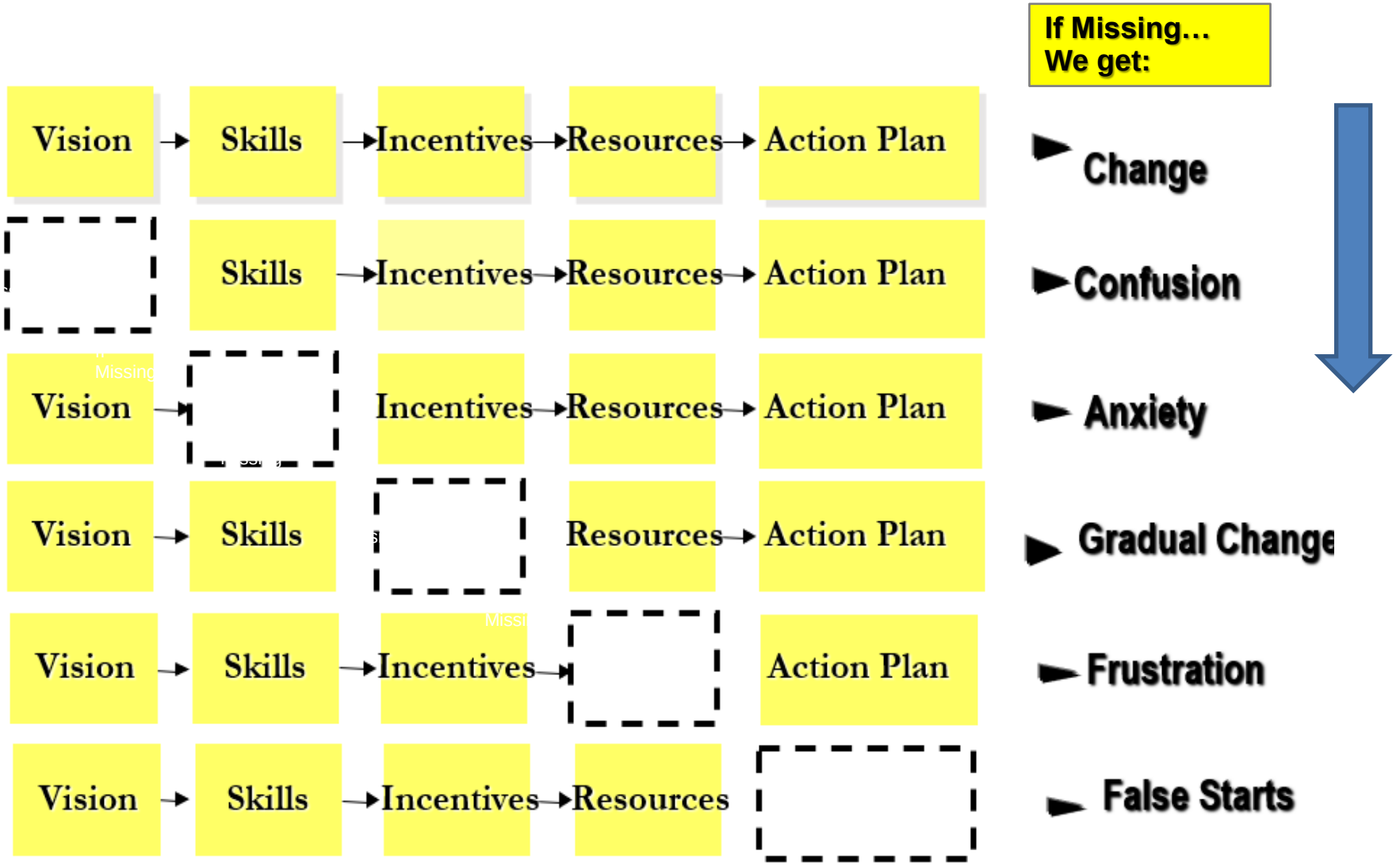
These factors need to be in place in order to affect change.



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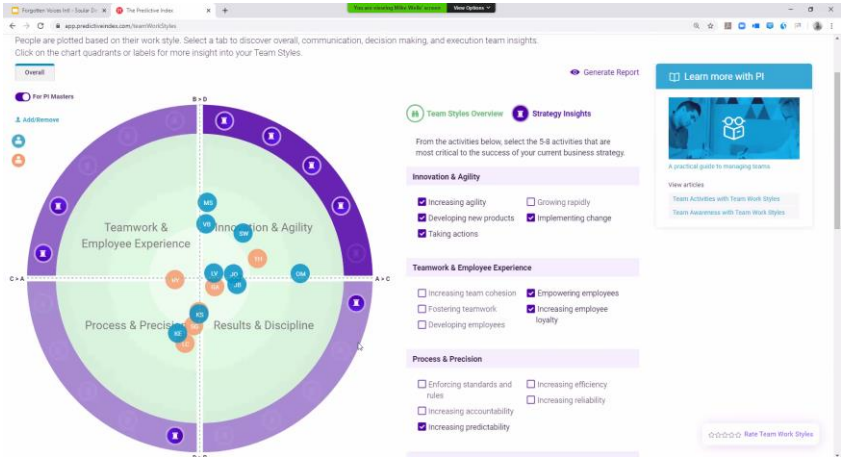
IT STARTS WITH A…

SOLID STEERING COMMITTEE



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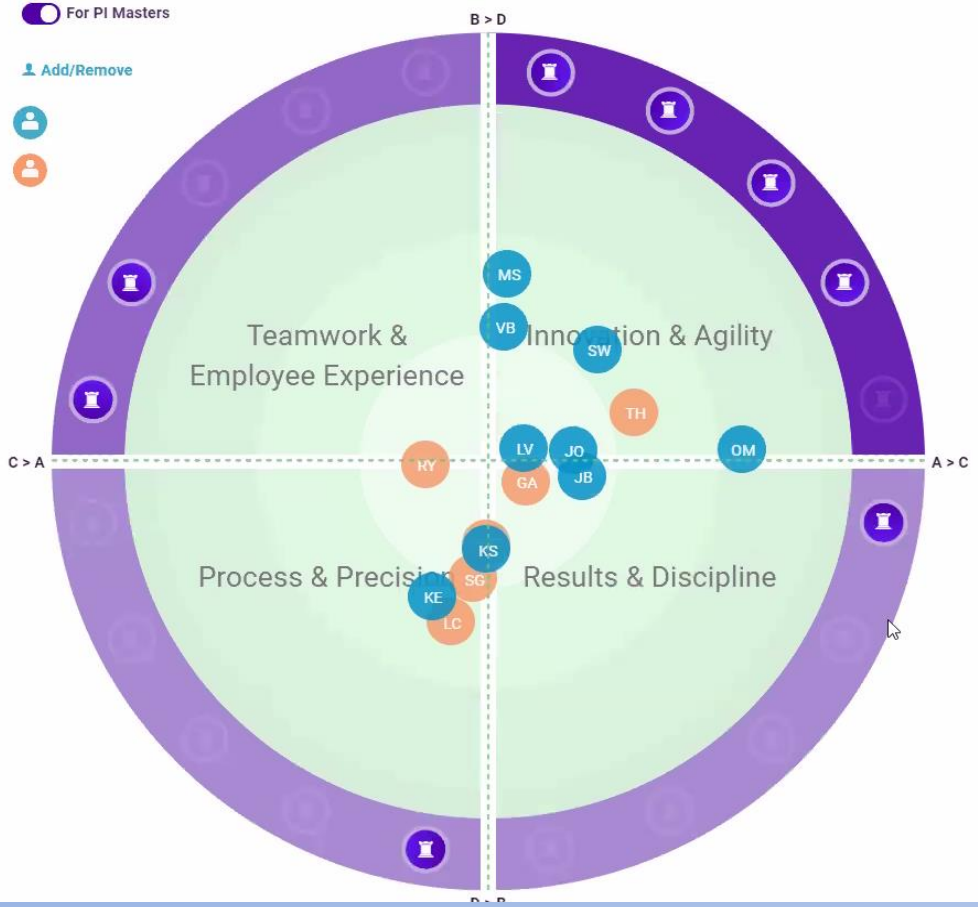
People are plotted based on their work style. Select a tab to discover overall, communication, decision making, and execution team insights.
Click on the chart quadrants or labels for more insight into your Team Styles.

Overall

Generate Report

For PI Masters

Add/Remove



Team Styles Overview | Strategy Insights

From the activities below, select the 5-8 activities that are most critical to the success of your current business strategy.

Innovation & Agility

- [x] Increasing agility
- [ ] Growing rapidly
- [x] Developing new products
- [x] Implementing change
- [x] Taking actions

Teamwork & Employee Experience

- [ ] Increasing team cohesion
- [x] Empowering employees
- [ ] Fostering teamwork
- [x] Increasing employee loyalty
- [ ] Developing employees

Process & Precision

- [ ] Enforcing standards and rules
- [ ] Increasing efficiency
- [ ] Increasing reliability
- [ ] Increasing accountability
- [x] Increasing predictability

Learn more with PI

A practical guide to managing teams

View articles

Team Activities with Team Work Styles

Team Awareness with Team Work Styles

☆☆☆☆☆ Rate Team Work Styles

Using the Predictive Index Software that we use, we can help you design your teams, identify “blind spots” even create job descriptions with appropriate interview questions and coaching guides for managers.

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Break the Chain of MADNESS - Problem Solving Pattern

CURRENT STATE

Problem

React to Problem

Fix Problem

Next Problem

Fail to Document. Don't tell anyone. Same Problem Comes Back, or we have to Reinvent a Solution

T.E.A.M. = Together Everyone Achieves More!

Data Identifies Potential Problem

Address Problem – Find ROOT CAUSE

Fix Problem

FUTURE or DESIRED STATE

Reflect on what just Happened, Learn, Document & PLAN to PREVENT a future Problems...

Ten Commandments of Continuous Improvement - Daily Practice

1. **Open your mind to change**
2. **Think: 'Yes, we can, if…"**
3. **Never attack people**
4. **Seek simple solutions**
5. **Stop and fix problems**
6. **Use creativity instead of capital**
7. **Problems are nothing more than opportunities**
8. **Find the root case by asking "why?"**
9. **The wisdom of many is better than the knowledge of one**
10. **There is no final destination on the improvement journey**

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Questions

- If there are any further questions which we were not able to get to today please feel free to contact me through TrainHR.

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