

Acronyms:

- **ADAS** Advanced Driver Assistance System
- **ASQ** American Society of Quality
- **CMQ/OE** Certified Manager of Quality/Organizational Excellence
- **CQE** Certified Quality Engineer
- **CSSBB** Certified Six Sigma Blackbelt
- **IEOM** Industrial Engineering Operations Management
- **MBB** Master Blackbelt
- **WIIA** Woman in Industry and Academia Award
- **ZF Group** Zahnradfabrik (German owned business)

Affiliated Societies for this SPDD

Content:

- ASQ QMD CMC on SPDD
- ASQ QMD CMC on Q4.0
- IMA on SPDD
- WiM
- IEOM Strategic Relevance



Driving Plant Relevance Through Strategic Planning, Quality Leadership, and Disciplined Execution

Jd Marhevko, VP Quality, ZF Group, ADAS & Electronics
ASQ Fellow, Shainin Medalist, CMQ/OE, CSSBB, CQE
USA Women in Manufacturing Hall of Fame
IEOM WIIA, MBB

American Manufacturing Summit MR26

Why MUST **WE** DO Strategic Planning? To Demonstrate The Value **WE** Can Bring...

Most of us are in overhead “white collar” positions. Not “value-adding” roles where other team members create the physical products which generate the cash and margin. Many call these “blue collar” roles.

As overhead, and a perceived business burden to our financial teams, it is our responsibility to approach our roles with **TWO** clear objectives

1. Design and develop our functional processes as **effectively** as possible...Do what we’re supposed to do **correctly**...every time. With the remoteness of COVID, this more critical than ever
2. Design and develop our functional processes as **efficiently** as possible...Do what we’re supposed to do **quickly** and inexpensively

In short, overtly convert ourselves into “**blue**” white collars so that we can add value to our businesses and are invited to do so repeatedly



1 Image on MicroSoft Bing: Filtered as Free to Share and Use

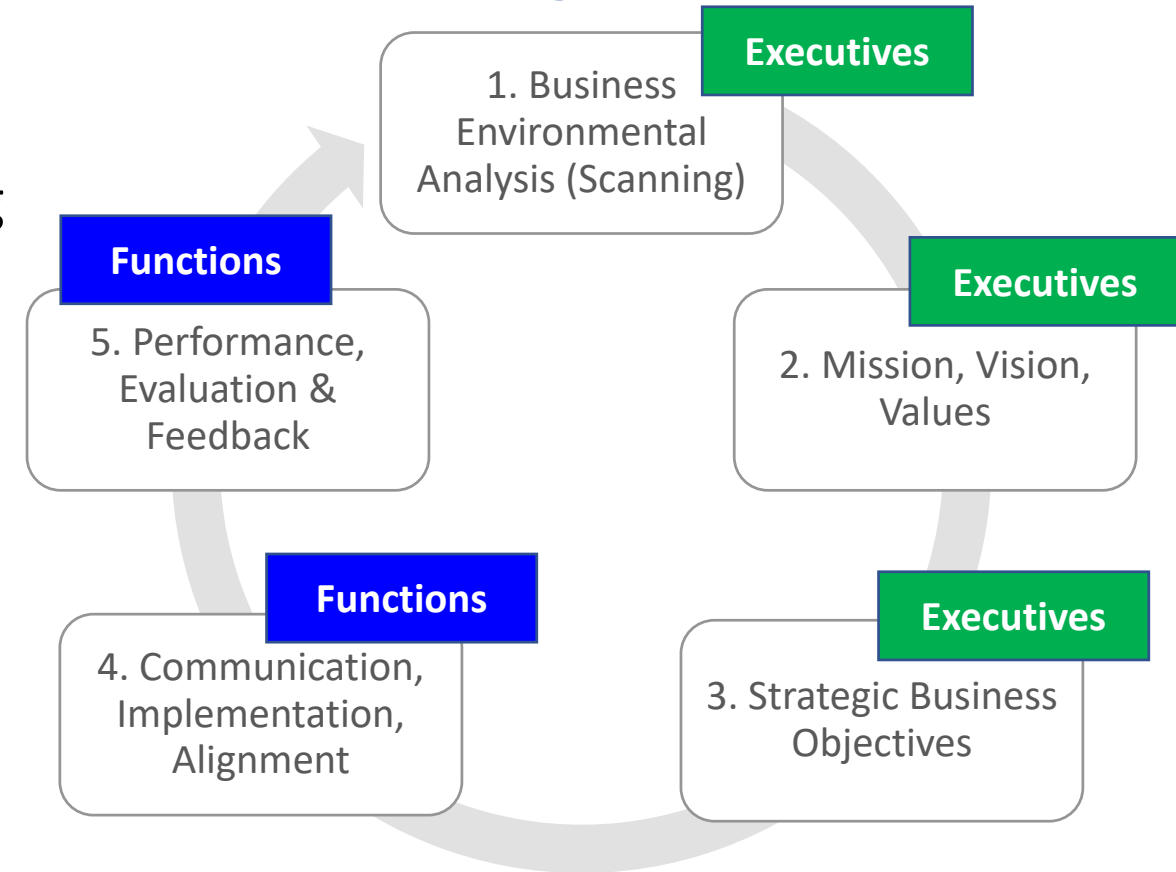
2 Image on MicroSoft Bing: Filtered as Free to Share and Use

3 Image on MicroSoft Bing. Link for White Collar Image. [58d3d0ce-8d86-4ccd-bd0c-104551448432](https://www.bing.com/images/search?view=detailv2&thid=OIP-58d3d0ce-8d86-4ccd-bd0c-104551448432) (400x600) (hulu.com)

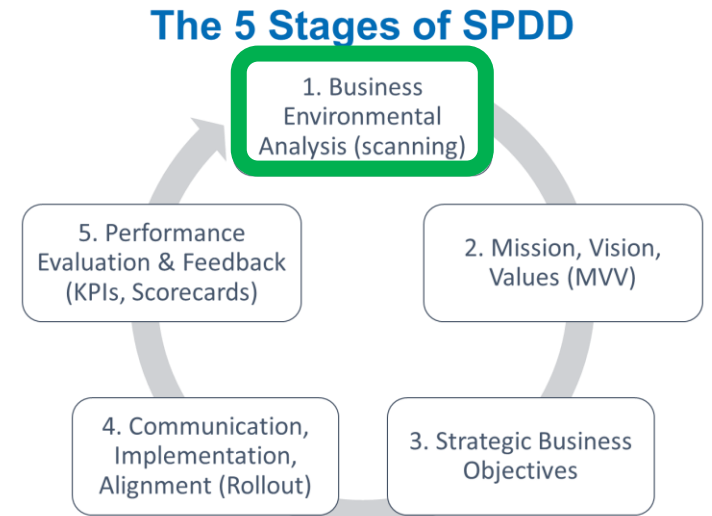
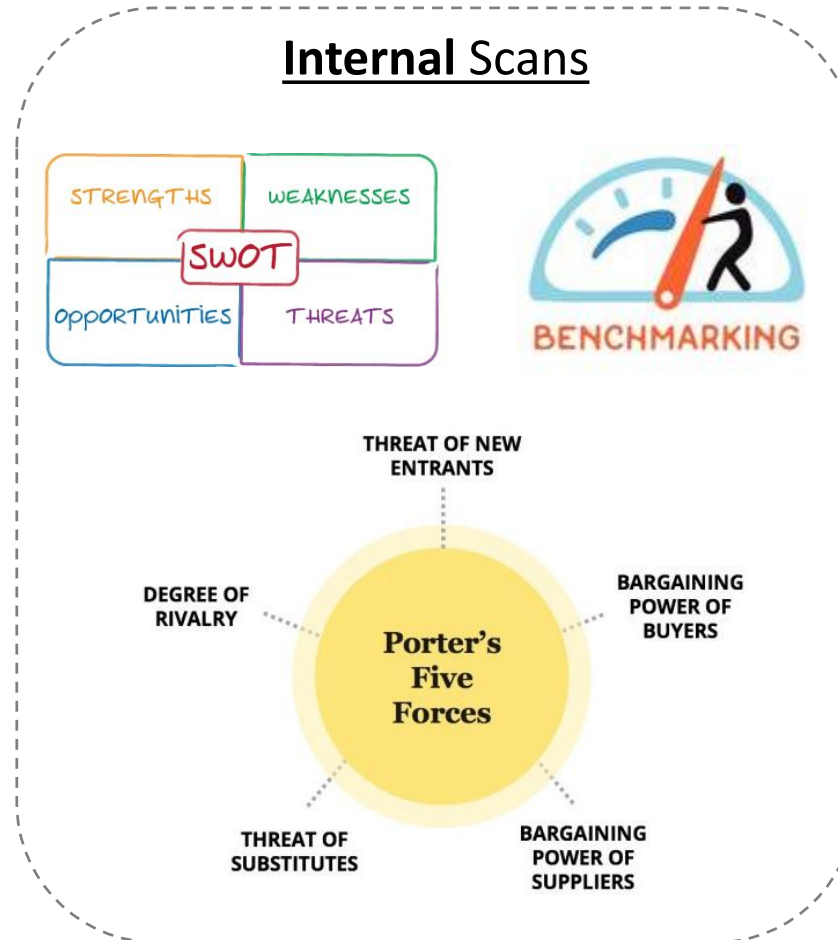
What we'll do:

- Review the 5 key stages of Strategic Planning Development and Deployment (SPDD); Ensure plant relevance by aligning initiatives with operational needs
- Embed quality leadership as a core driver
- Strengthen cross-functional alignment
- Build leadership behaviors and accountability models to sustain plant performance

The 5 Stages of SPDD



Environmental analysis can have two aspects: **External** and **Internal**



“ The essence of strategy is choosing what not to do.
 -Michael Porter



MVVs are usually done in parallel with the PESTLE scans. Scans can often result in a significant shift of the Vision



MISSION

A formal summary of the aims and values of a company, organization, or individual



VISION

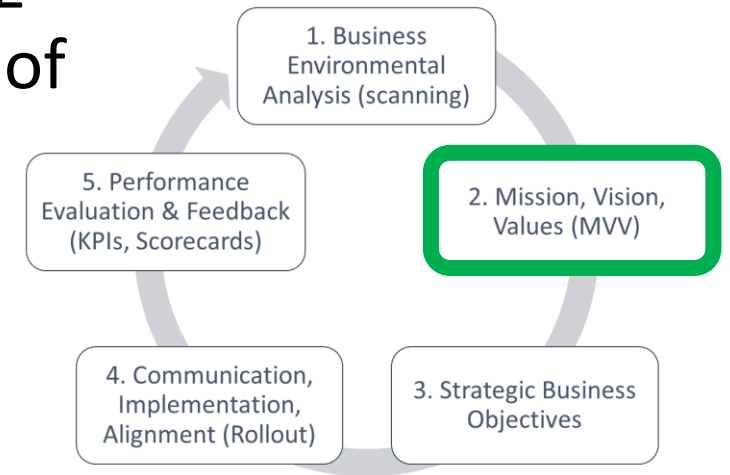
A statement of what an organization would like to achieve in the future



VALUES

The principles that help you to decide what is right and wrong, and how to act in various situations

The 5 Stages of SPDD



“ There are many tools available to help write a mission or vision statement. but I think it's often best to keep it simple - one or two sentences - and describe why the business exists. What is the core value or the daily purpose? Write it down and share it with everyone!

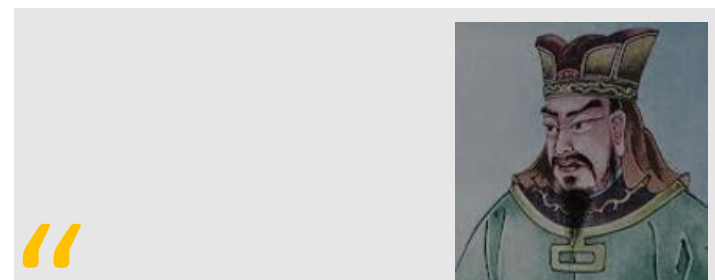
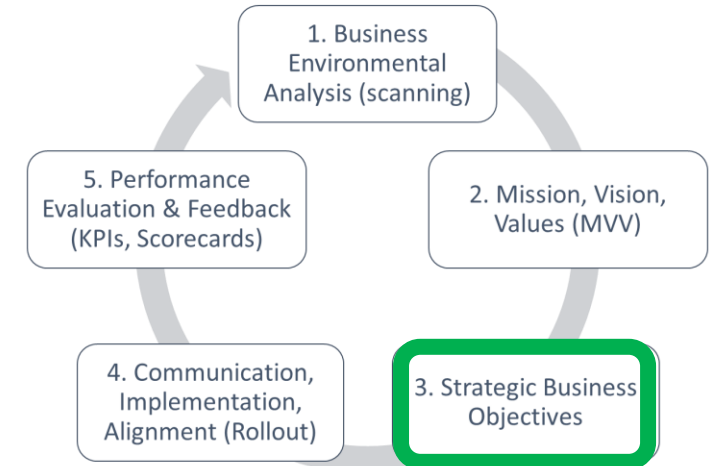
Joanna Meiseles.



- After scanning is completed, MVV are updated
- Then the actual strategies and tactics are defined
- Strategic themes are generally sorted into **four categories**:



The 5 Stages of SPDD

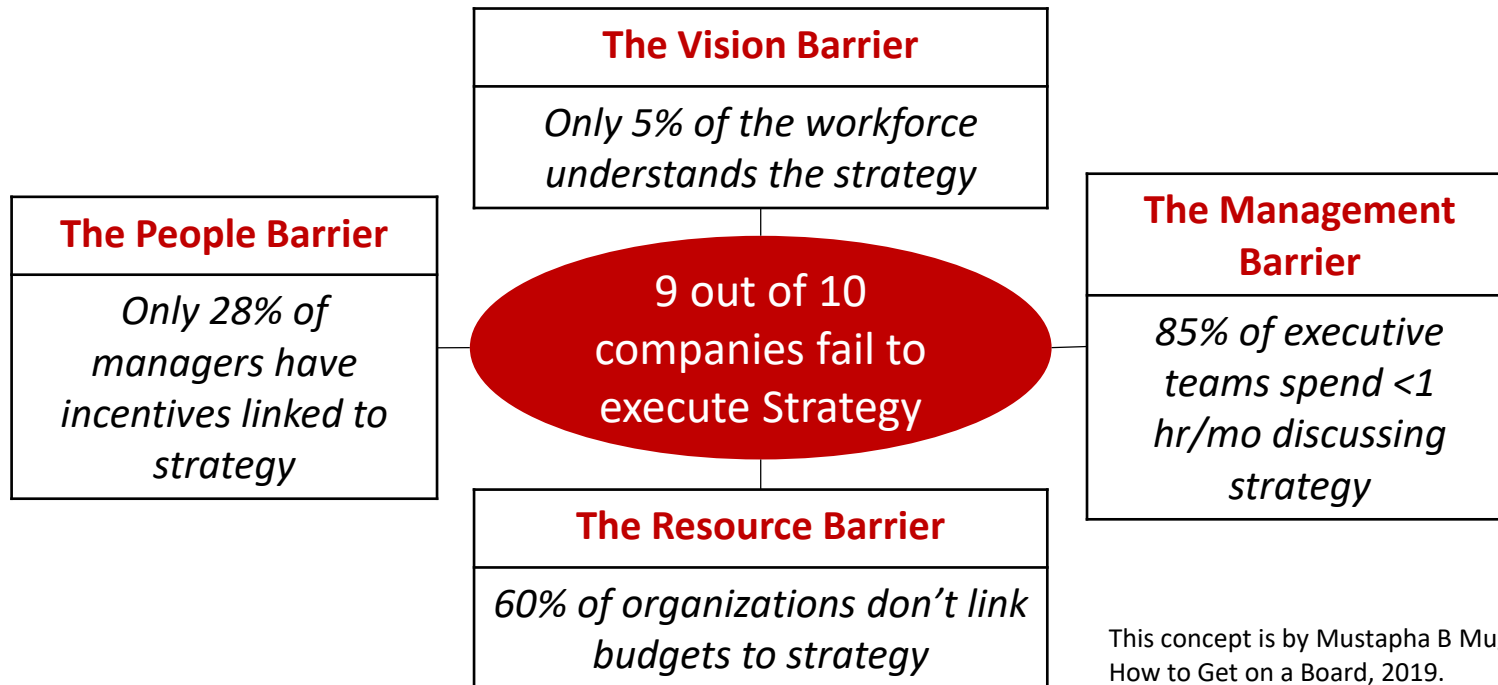


“
Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat.

Sun Tsu

- Scanning, MVV and the Strategies are completed
- The executives deliver the strategies to for implementation. This needs to be done well or the execution will fail 90% of the time (Mugisa)

The 5 Stages of SPDD



This concept is by Mustapha B Mugisa, How to Get on a Board, 2019.



“

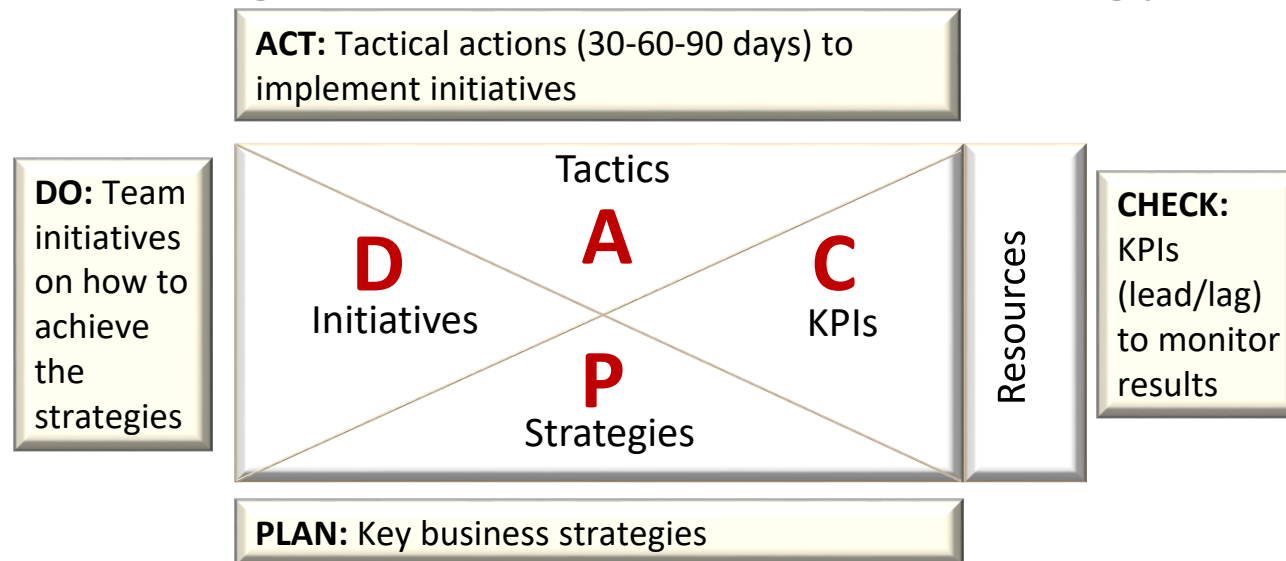
The result of **bad communication is a disconnection between strategy and execution**

Chuck Martin. Past VP of IBM.

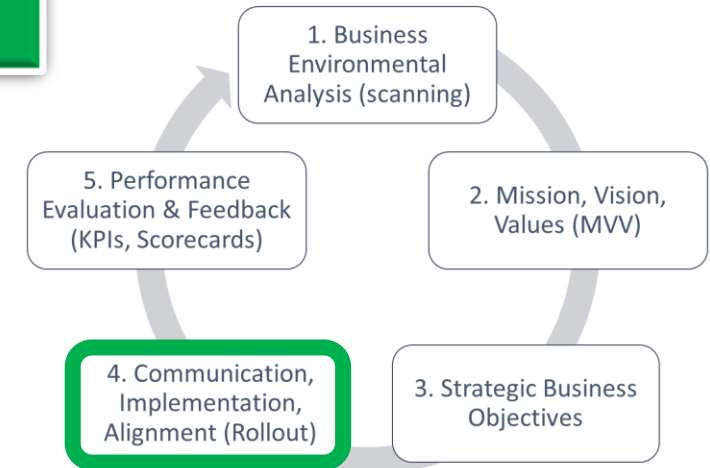
One tool kills these barriers:
Created by Yoji Akao

Hoshin = *Direction*
Kanri = *Management*

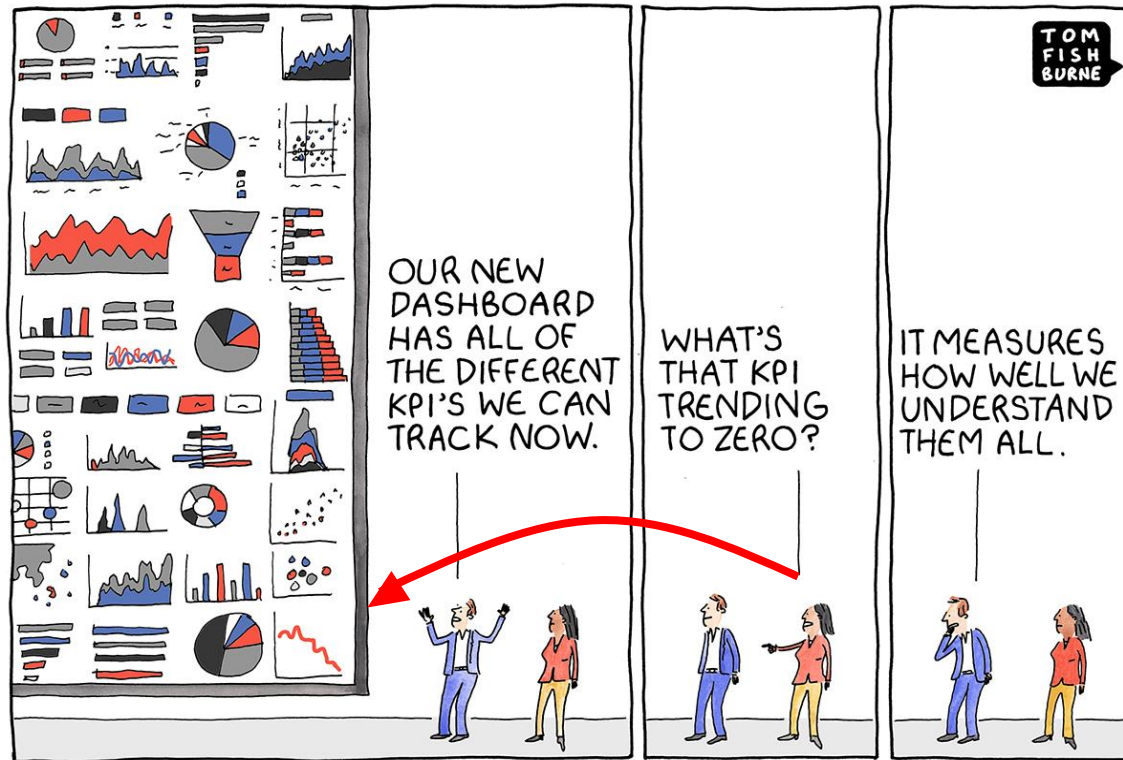
This PDCA process ensures that strategies are used to drive progress and action at every level in the organization. It converts strategy to reality



The 5 Stages of SPDD

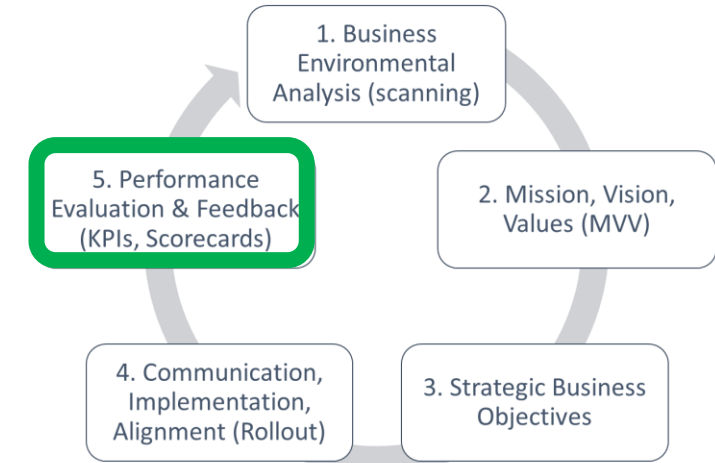


Always try to avoid being limited by means of communication.
Keith Grafman. *The Art of Instant Message.*



© marketoonist.com

The 5 Stages of SPDD



“ Buffet found it ‘extraordinary’ that academics studied such things. They studied what was measurable, rather than what was meaningful. Roger Lowenstein. *Buffett: The Making of an American Capitalist.*



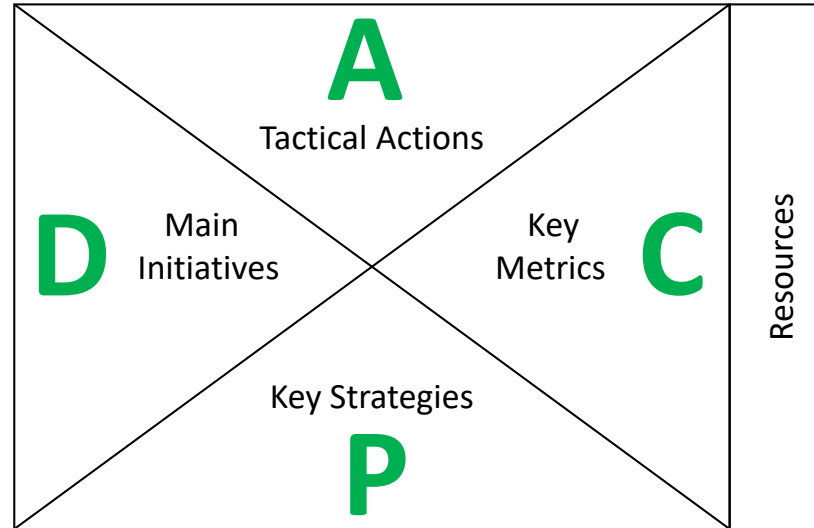
- Create **only necessary** KPIs with **intent** (~3-8)
- Manage both **effectiveness** (is it right) and **efficiency** (speed/cost)

Overview of Strategic Planning Development & Deployment (SPDD) Cycle

There is a 5 stage SPDD cycle across which many tools and techniques can be used. Below is a small sample of 10 tools. Each has its own strengths:

Tools		Strategic Planning and Management Steps				
Tool #	Tool Name	Business Environment Analysis	Mission, Vision & Core Values	Strategy & Business Objectives	Communication, Implementation & Alignment	Performance Evaluation & Feedback
1	Balanced ScoreCard (BSC)		X	X	X	X
2	Strategy Map			X	X	
3	SWOT Analysis	X		X		
4	PEST/PESTEL/STEEPLE/STEER	X				
5	Porter's Forces			X		
6	Baldrige Performance Excellence (PEX) Framework	X	X	X	X	X
7	Hoshin Kanri			X	X	X
8	Business Strategy Canvas	X				
9	Enterprise Risk Management		X	X	X	X
10	Objectives & Key Results (OKR)			X	X	X

Sample Hoshin Kanri (X-Matrix) Format for **Functional** Teams



Plan: Key business strategies using a “SMART” format

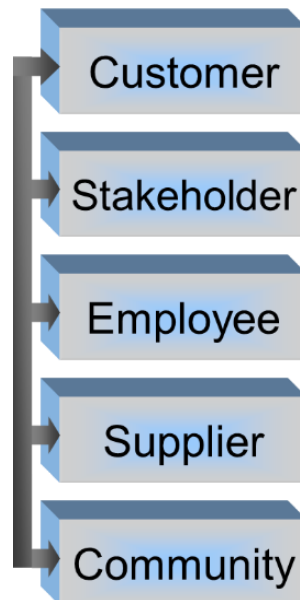
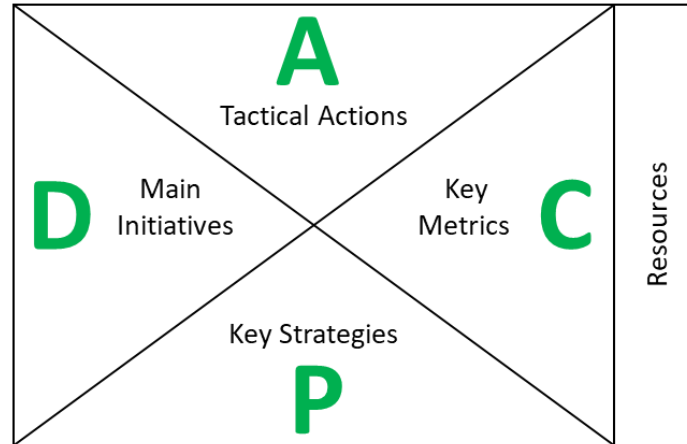
Do: Initiatives on HOW to achieve the strategies

Check: Key METRICS used to monitor results

Act: TACTICAL actions to execute the initiatives

Far Right: WHO has tactical line-item responsibility

Sample Strategic *Themes* for Benchmark Businesses



QCD: **Q**uality (PPM), **C**ost (CI), **D**elivery (OTD)

Margin, Revenue, Cash Conversion

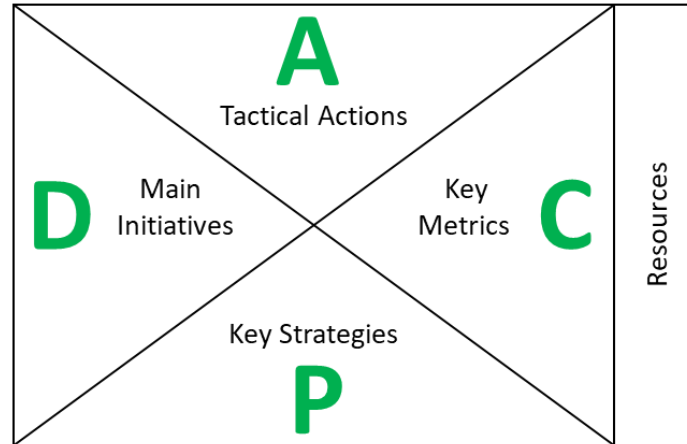


The Trifecta

Engagement/Satisfaction, Turnover, Health & Safety

QCD, Growth/Sustainability

Social Responsibility, Compliance, Health & Safety



~6-8 Key Strategies

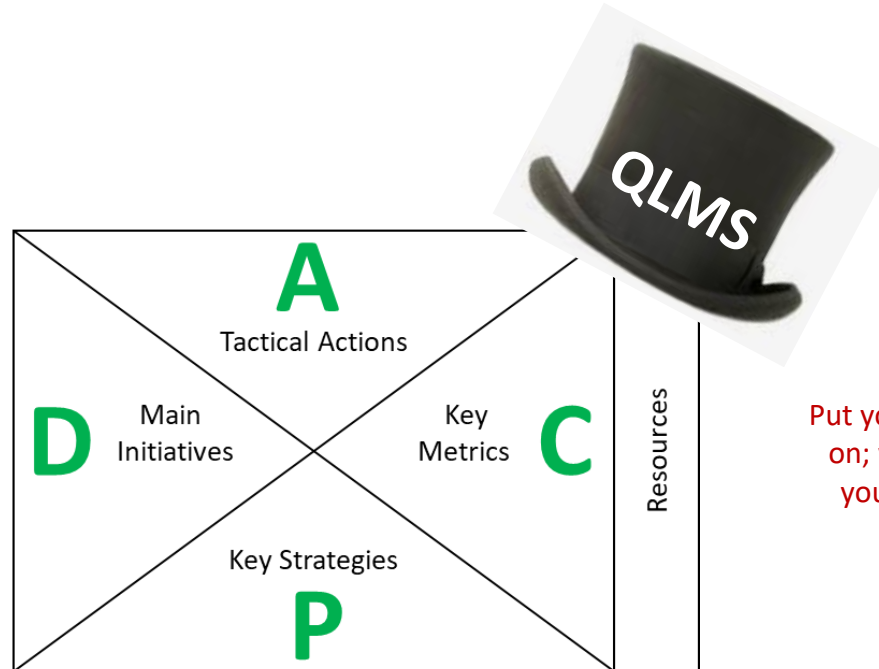
**Improve Margin by 5% points by 4Q
Increase of \$250K**

How might WE, in our **functions**, demonstrate AND impart value?

- Tie what WE do in OUR functions to that of the business
- Focus on BOTH effectiveness and efficiency

~1-3 Main Initiatives per Strategy

1. Reduce Warranty losses by \$150K
2. Reorganize Product Portfolios \$100K



Do: Initiative:
Put your “functional hat” on; what initiative can you do to help meet margin?

Key Strategy:
Improve Margin by 5% Points

Improve Margin by 5% points by 4Q. Increase of \$250K

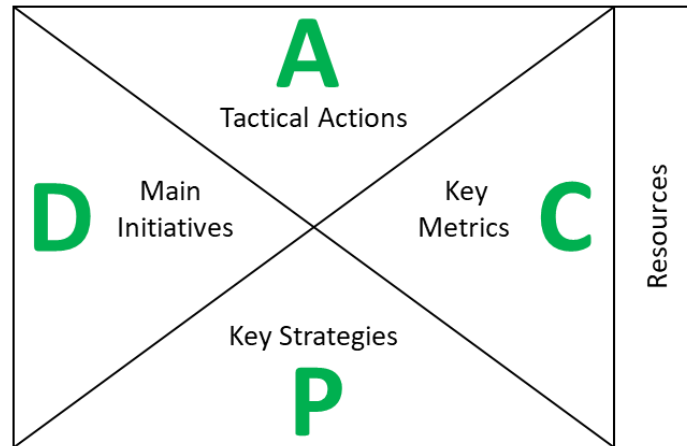


- Yours is NOT the only **function** in the business
- If you layer in 10-20-30 initiatives, the teams will be set up to fail
- Share/Collaborate with your **functional** peers to align and optimize the few critical initiatives that are needed now

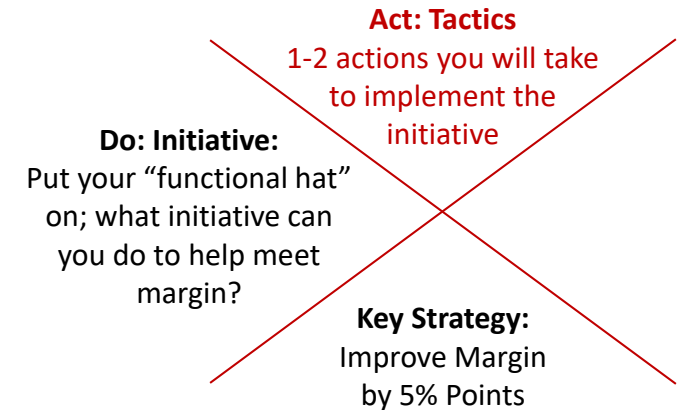
~1-3 Tactical Plans per Initiative

- **Implement Warranty Team. Conduct CA/PA.**
- **Conduct FMEA/CP Reviews on loss leaders**
- **Conduct VSM on Portfolio. Rationalize**

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Improve Margin by 5% points by 4Q. Increase of \$250K

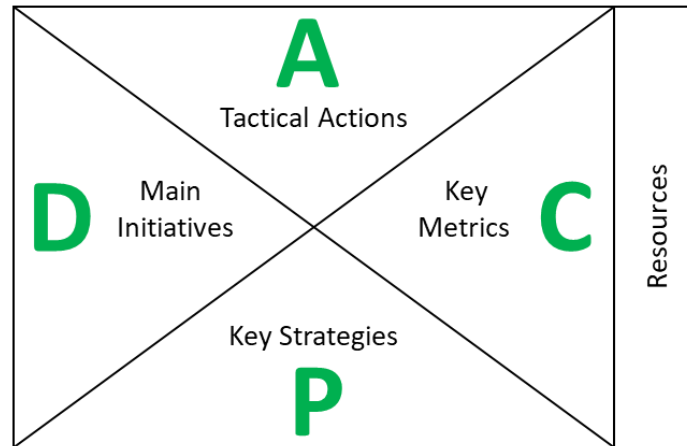


 Note many tactics can also have cross-functional support in execution

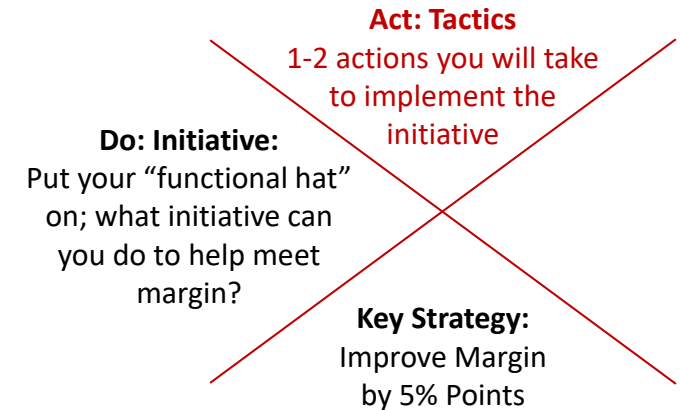
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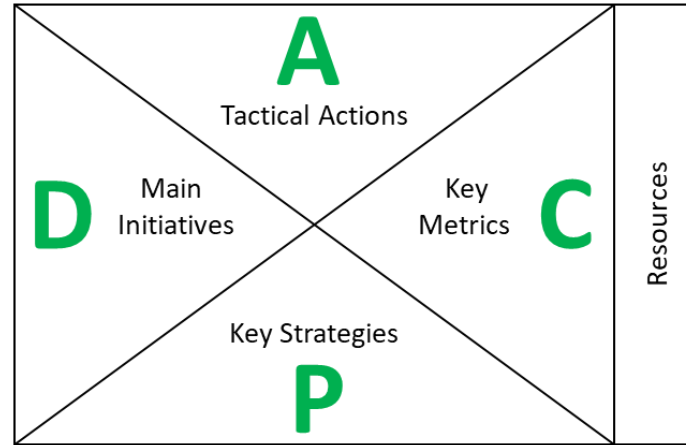
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Develop Leading/Lagging Key Process Indicators (KPIs).

Assess **Functional** Effectiveness & Efficiency

- Implement Warranty Team. Conduct CA/PA.
- Conduct FMEA/CP Reviews on loss leaders
- Conduct VSM on Portfolio. Rationalize

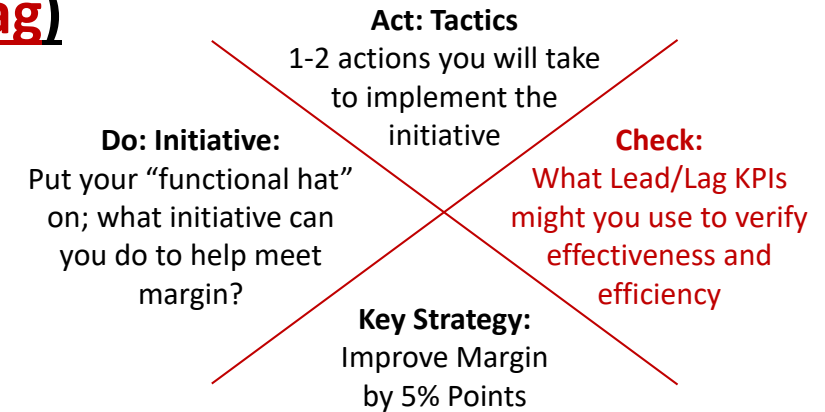
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Improve Margin by 5% points by 4Q. Increase of \$250K

KPIs (Lead/Lag)

- Warranty
- Family Portfolio Margins
- Margin



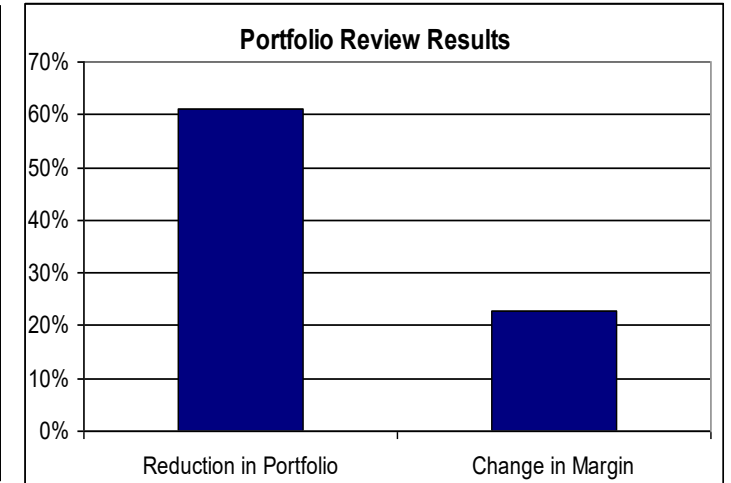
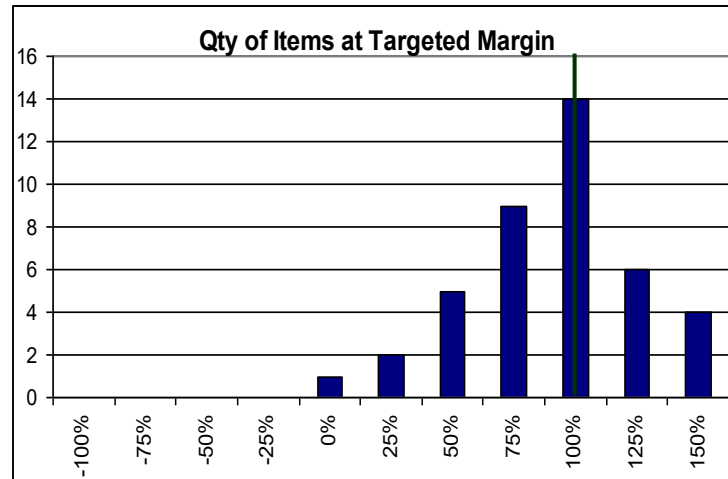
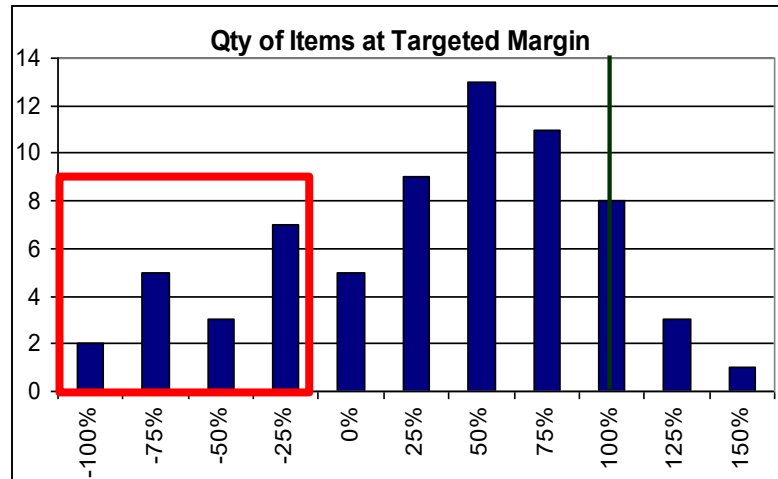
- Keep KPIs to a bare minimum...make the data work for you...not you for it
- Consider a 2:1 ratio of Leads to Lags
- Keep KPIs as low as close to the source of information as possible

A Functional Level Hoshin Kanri (X-Matrix)...How It Looks...

X-Matrix: Organization, Year

	●		1.2a Conduct Portfolion Analysis. Rationalize		●		●			●
		●	1.1b Conduct FMEA/CP Reviews on loss leaders		●	●	●		●	
		●	1.1a Implement Warranty Team. Conduct CA/PA		●	●	●	●		
	1.2 Reorganize Product Portfolios. \$100K	1.1 Reduce Warranty Losses. \$150K	<div style="text-align: center;"> <p>Key Tactics "HOW 2"</p> <p>Main Initiatives "HOW 1"</p> <p>Key Metrics</p> <p>Key Objectives "WHAT"</p> </div>		Margin	Warranty	Portfolio Margin	Joe	Tom	Sue
	●	●	1 Improve Margin by 5% Points by 4Q		●	●	●	Resources		
	←		2 xxx					●	Primary	
								○	Support	

What Happened? Product Portfolio. **Functional** Teams: Lean, QA, Sales, Eng, SCM



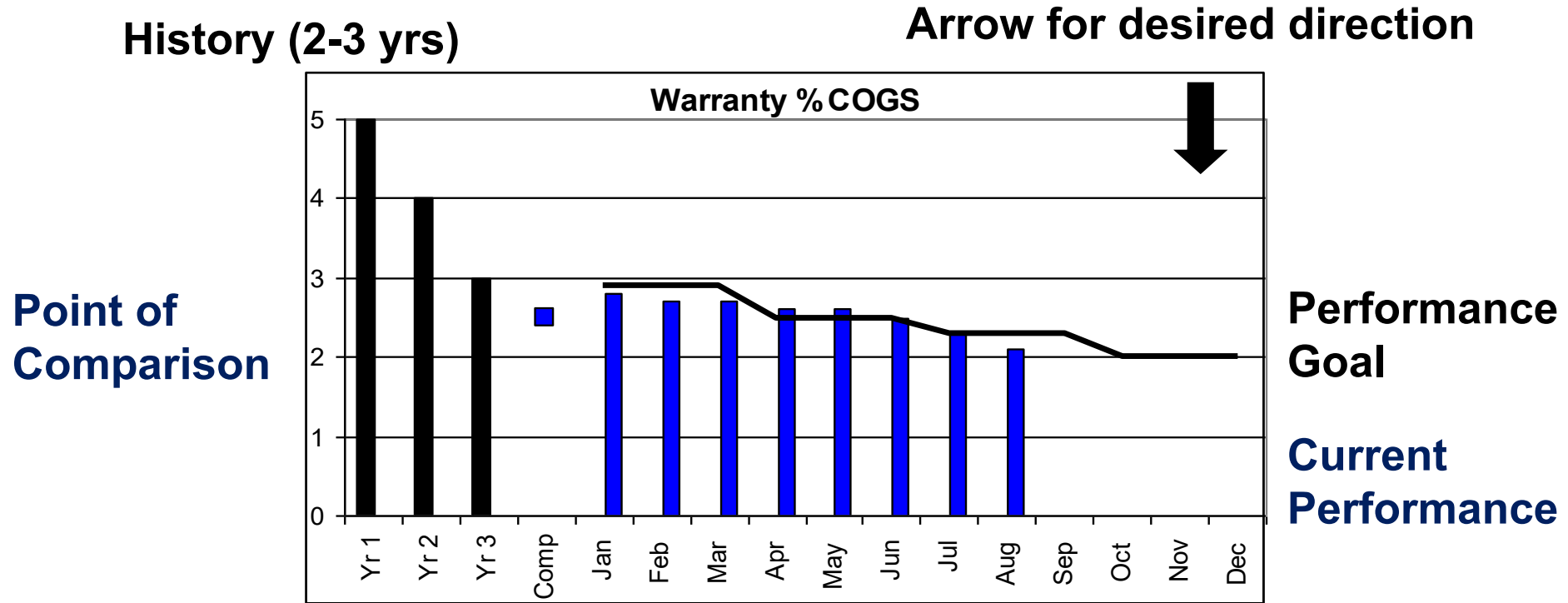
Ex: If the margin was supposed to be 10%, then 8 PN's are meeting that target. Afterwards, 14 were meeting the target

Initiative: (S) Improve margin by 5%; (I) Reorganize Product Portfolio

Action: Conduct error-proofing VSM review on portfolio mix. Rationalize products. Continue to reduce costs, adjust price or eliminate from portfolio

Results: 22% Improvement in margin base, 62% SKU reduction

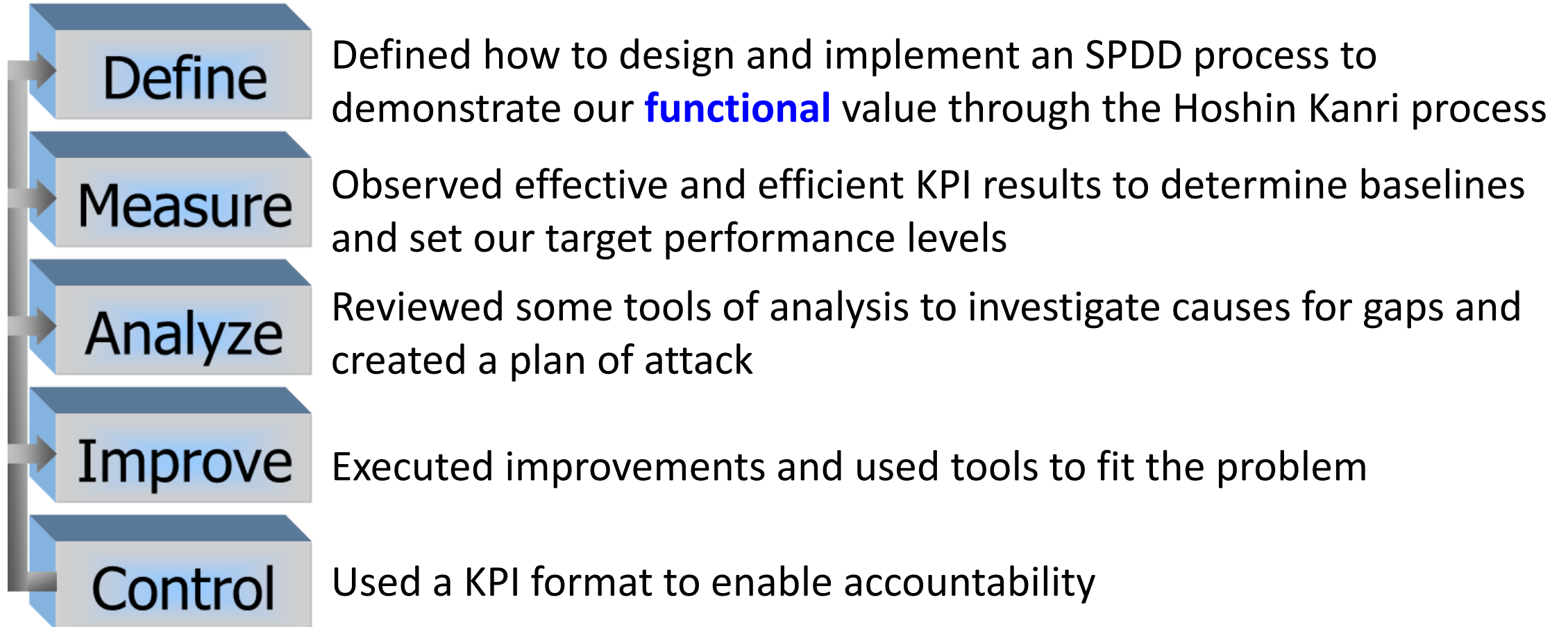
What Happened? Warranty Reduction. **Functional Teams: QA, Sales, Eng**

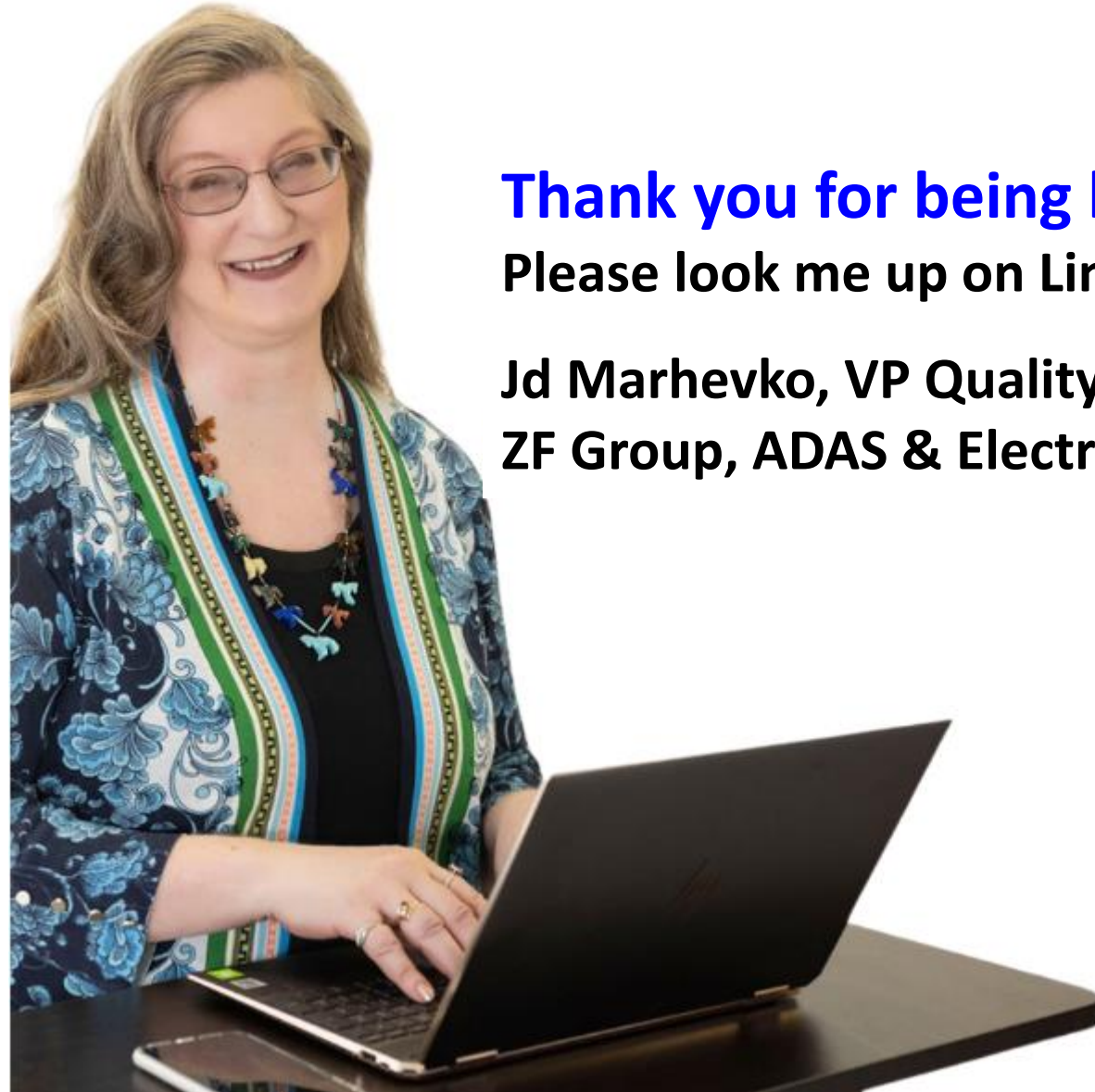


Initiative: (S) Improve margin by 5%; (I) Reduce warranty expense by \$150K

Action: Implement CA/PA and FMEA/CP teams to address process/product performance issues. Continue to improve process, conduct Lessons Learned

Results: Yr 1: 20%. Yr 2: 25%. Yr 3: 33%. >\$2M COQ Expenses





Thank you for being here!
Please look me up on Linked In
Jd Marhevko, VP Quality,
ZF Group, ADAS & Electronics Division

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