

Worker Empowerment and Why it Works

- *Tools for Lab Staff

- *Nurturing Staff to Feel Empowered and

- *Build a Culture of Confidence



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Lab Quality Confab 2019
Atlanta, GA

Definitions

- **Lean-** A systematic method for waste elimination or waste minimization
- **Toyota Production System (TPS):** The production system developed by Toyota Motor Corp. to provide best quality, lowest cost and shortest lead time through eliminating waste
- **Empowerment-** Employees have the authority to make decisions and take action in their work areas, within stated bounds, without prior approval

Is this Worker Empowerment?



“A team: a group of people with a high degree of interdependence geared toward the achievement of a goal or the completion of a task. They agree on a goal and agree that the only way to achieve the goal is to work together” (Parker, 1990, p. 16).

There are many groups with a common goal that are not teams

There are many teams that are not empowered

- Authority to make decisions- without prior approval

What is Worker Empowerment

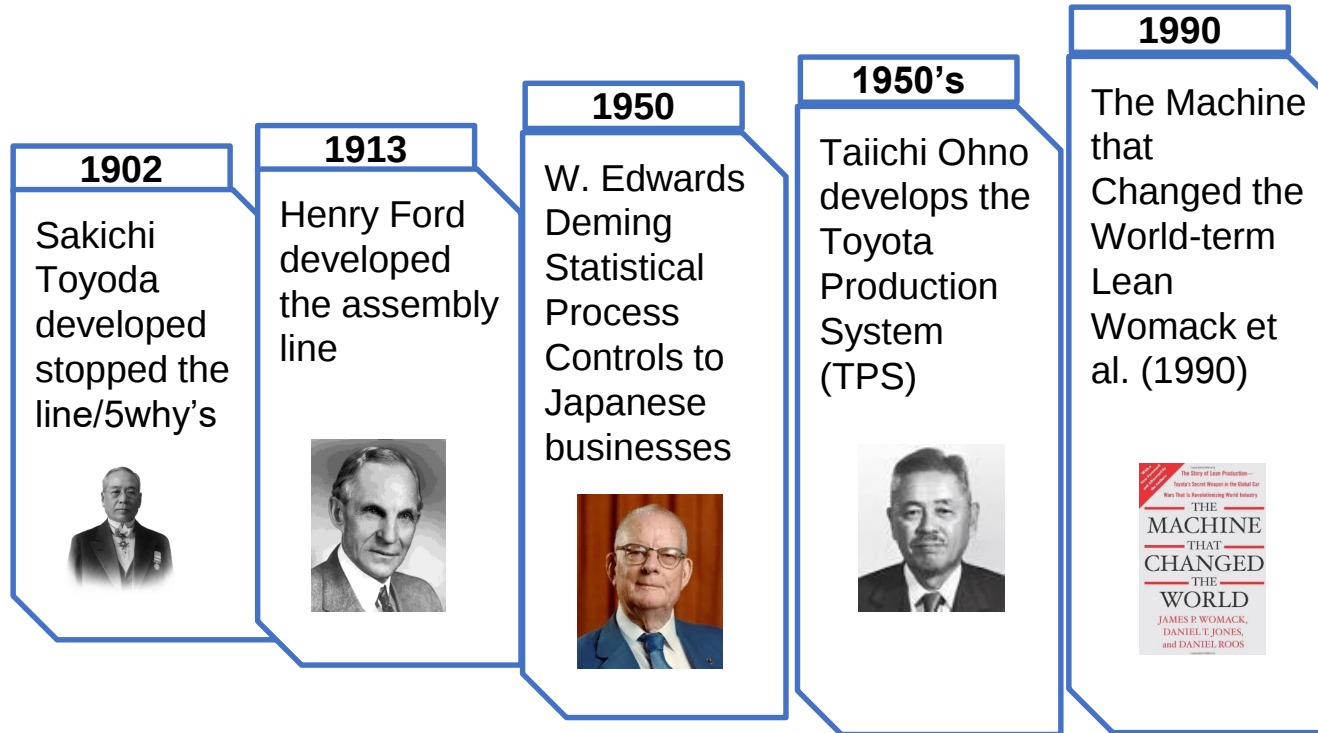
Giving **employees** a certain degree of autonomy and responsibility for decision-making regarding their specific organizational tasks.



<https://study.com/academy/lesson/employee-empowerment-definition-advantages-disadvantages.html>

The History of Worker Empowerment

History of Continuous Improvement Methods



1902

Sakichi Toyoda
developed

- Stop the line
- 5 Why's
- Root cause analysis



1950

W. Edwards
Deming
Statistical
Process
Controls to
Japanese
businesses

1950's

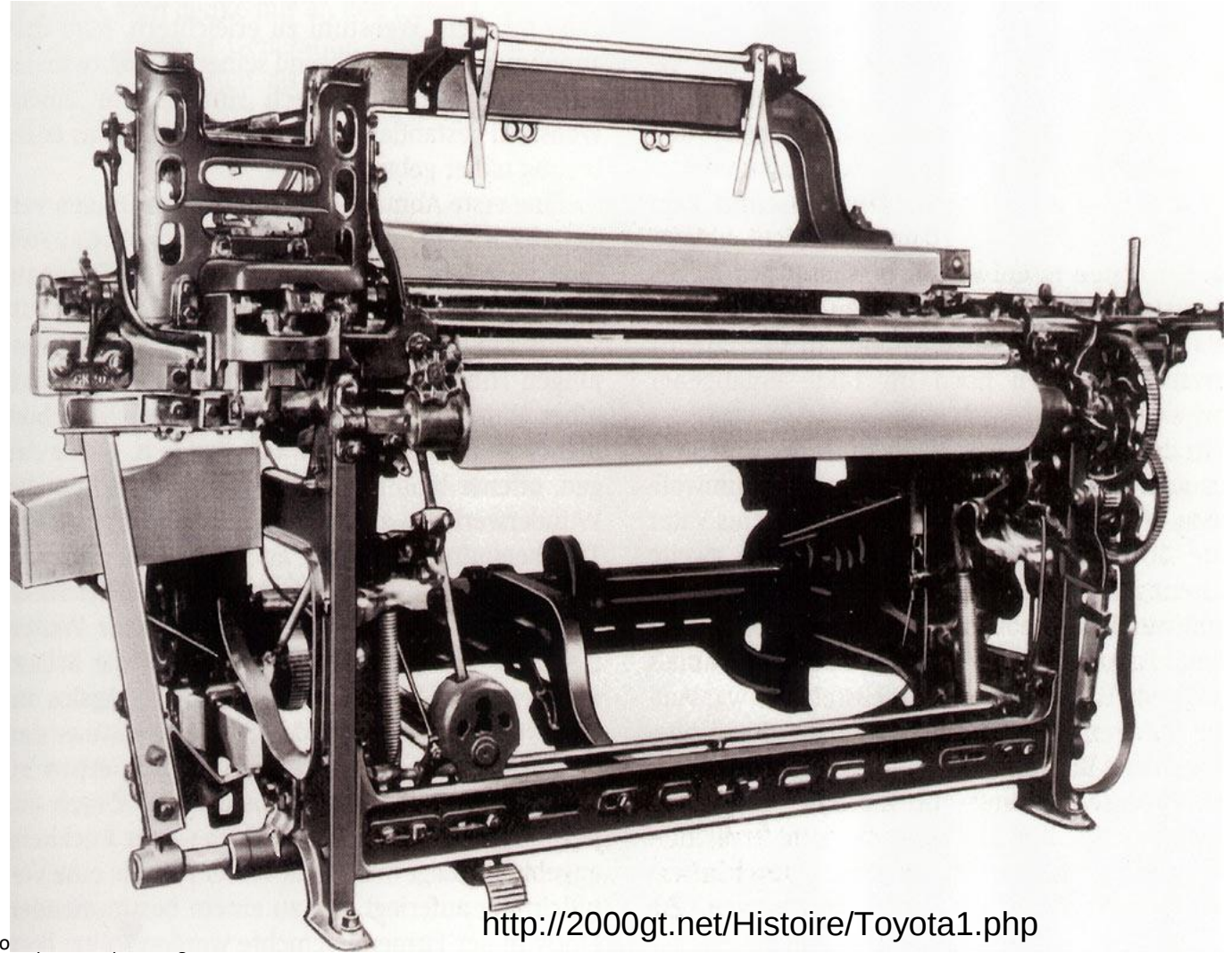
Taiichi Ohno
develops the
Toyota
Production
System
(TPS)

1990

The Machine
that
Changed the
World-term
Lean
Womack et
al. (1990)

Beginnings of Worker Empowerment

- 1902-Sakichi Toyoda- Stopped the line on the loom and invented a specific way to detect a broken loom



Taiichi Ohno's (1988) book Toyota Productio

<http://2000gt.net/Histoire/Toyota1.php>

The Worker



Stop to fix the problem

Taiichi Ohno's (1988) book Toyota Production System: Beyond Large-Scale Production

1. Autonomation began: Contribution, empowerment, self responsibility
2. 5 Why's - Root cause analysis: The worker is closest to the work
3. Visual controls to assist workers solve problems

<http://2000gt.net/Histoire/Toyota1.php>

Go to the Gemba

Employees Brainstorming – autonomy decisions

Autonomation

Just-in-time

Continuous improvement

Respect for people

Stopping the line

Teamwork

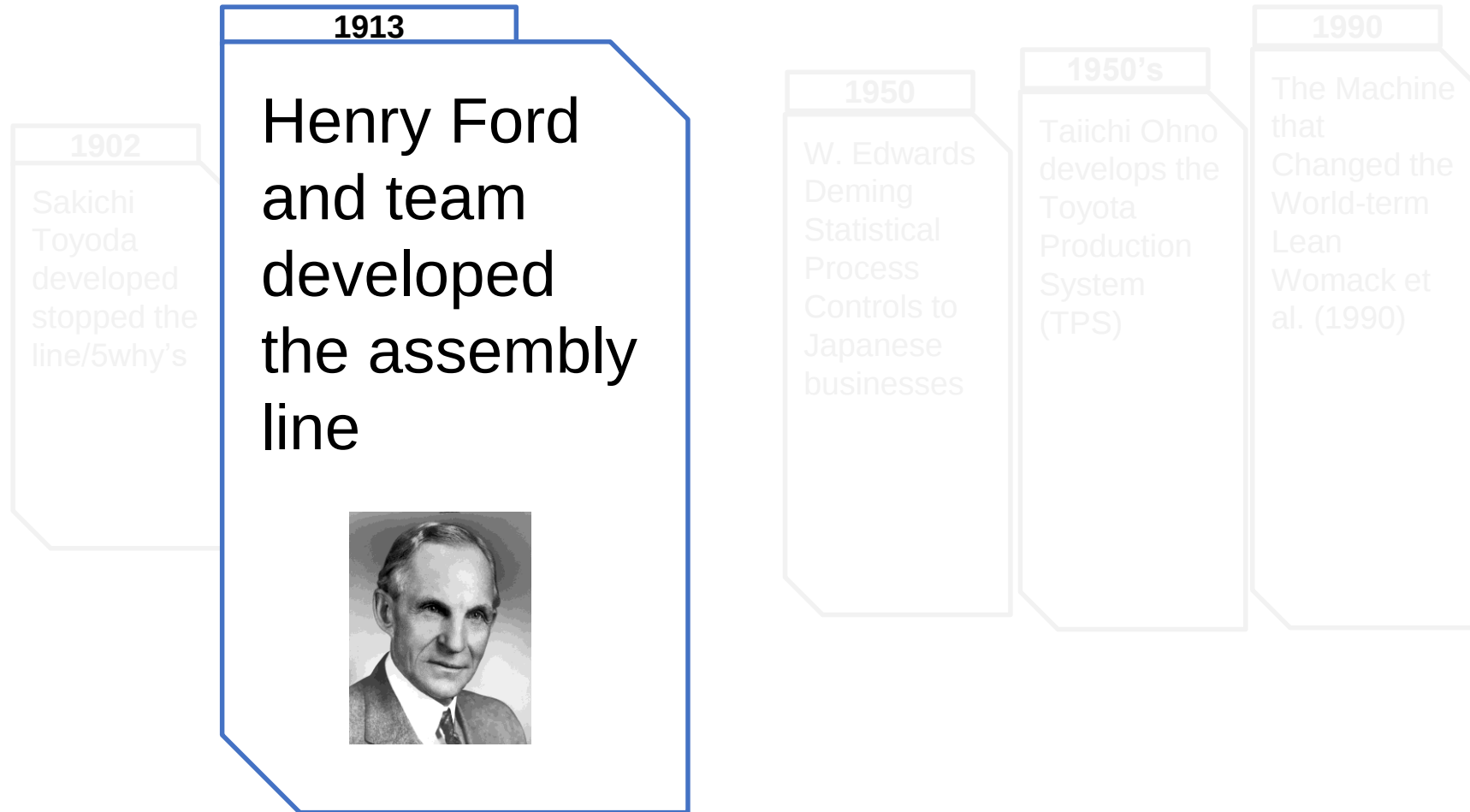
Five Whys

Takt-time/flow

Kanban



History of Continuous Improvement Methods



Mean While in America.....

“Historical fact: People stopped being people in 1913. That was the year Henry Ford put his cars on rollers and made his workers adopt the speed of the assembly line. At first, workers rebelled. They quit in droves, unable to accustom their bodies to the new pace of the age. Since then, however, the adaptation has been passed down: we've all inherited it to some degree, so that we plug right into joy-sticks and remotes, to repetitive motions of a hundred kinds.”

— Jeffrey Eugenides, [Middlesex](#)

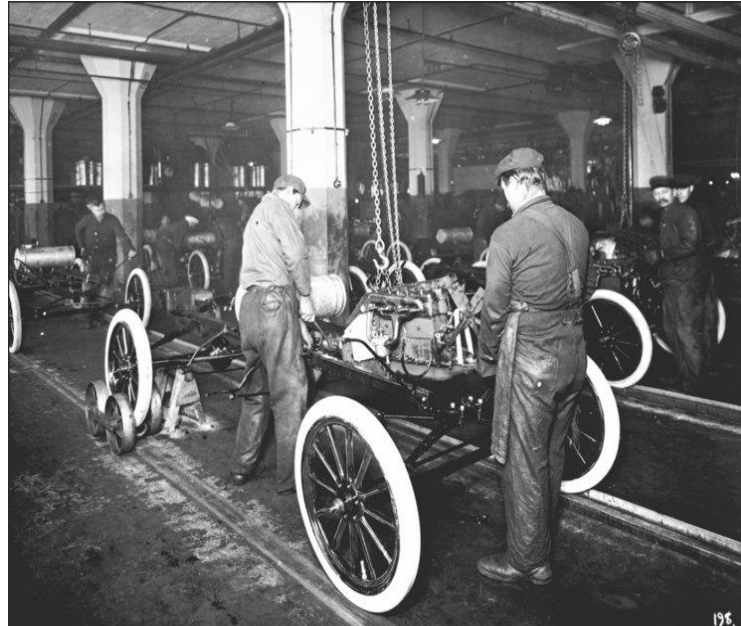


Why the speed of the Assembly Line?

- Fierce competition with General Motors in the 1920'S
 - Provide better cars for the general public
 - Increase stores of inventory

Ohno, (1978)

Speed of six feet per minute



The Beginnings of Worker Empowerment

1950

W. Edwards Deming Statistical Process Controls to Japanese businesses



1902

Sakichi
Toyoda
developed
stopped the
line/5why's

1913

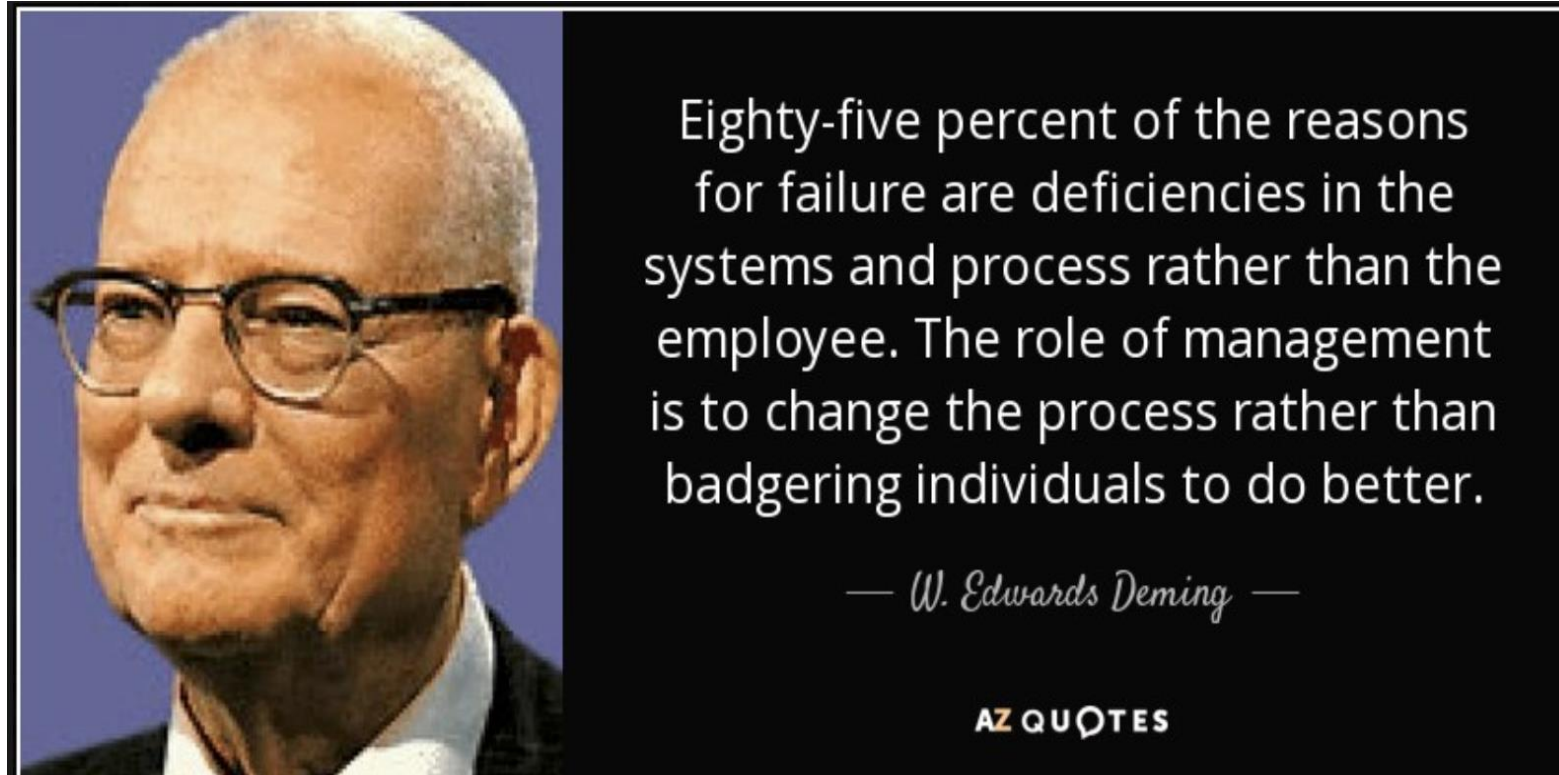
Henry F
develop
the asse
line

1990

The Machine
that
Changed the
World-term
Lean
Womack et
al. (1990)

1950's

Ordinary people doing extraordinary things in a historic outdated laboratory



Worker Empowerment

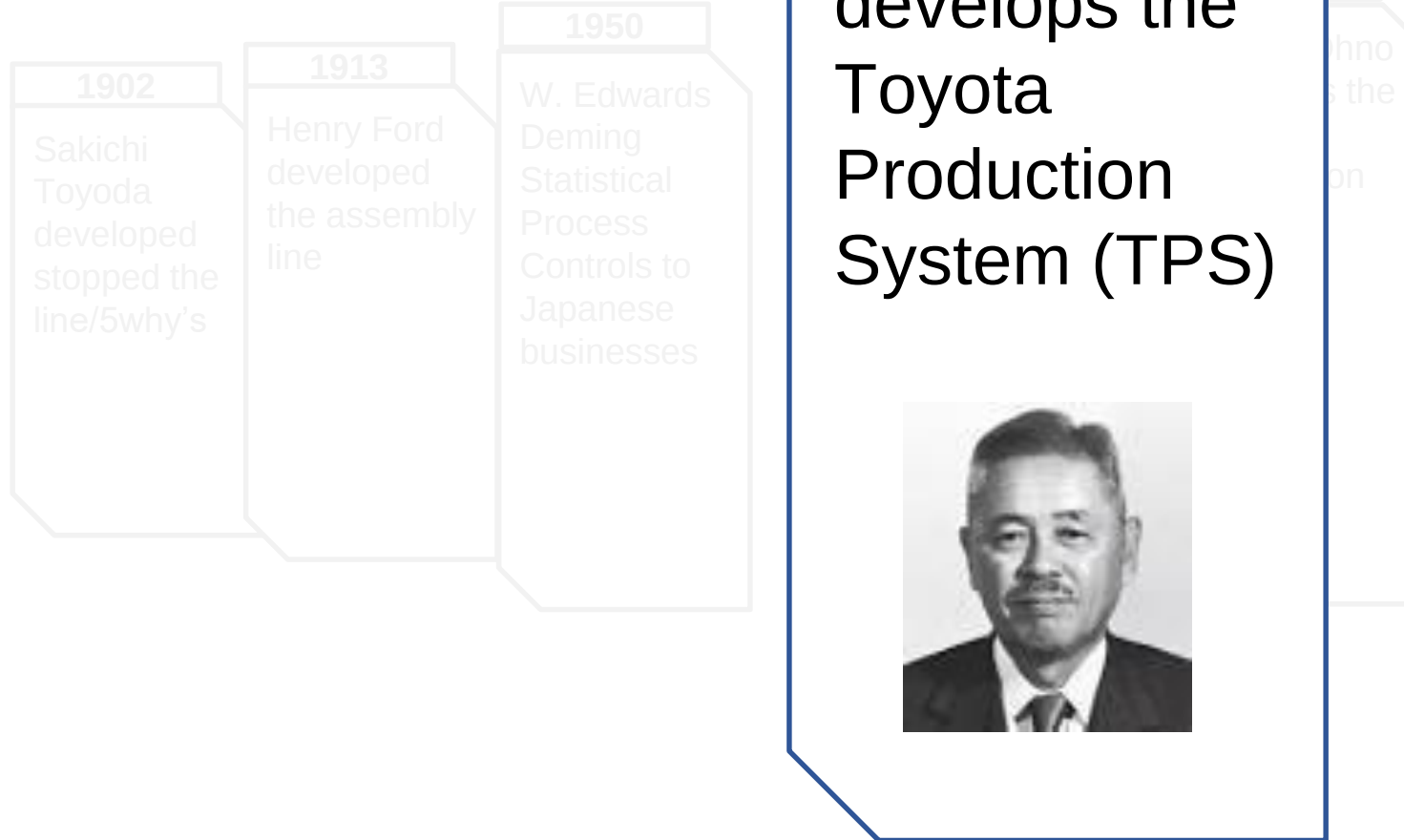
- 1) Front line decision making
- 2) Continuous training and empowerment
- 3) Trust between employees and managers
- 5) **Boundaries are clearly defined**
- 6) Employees have mentors
- 7) Provide Lean tools

<https://thethrivingsmallbusiness.com/employee-empowerment/>



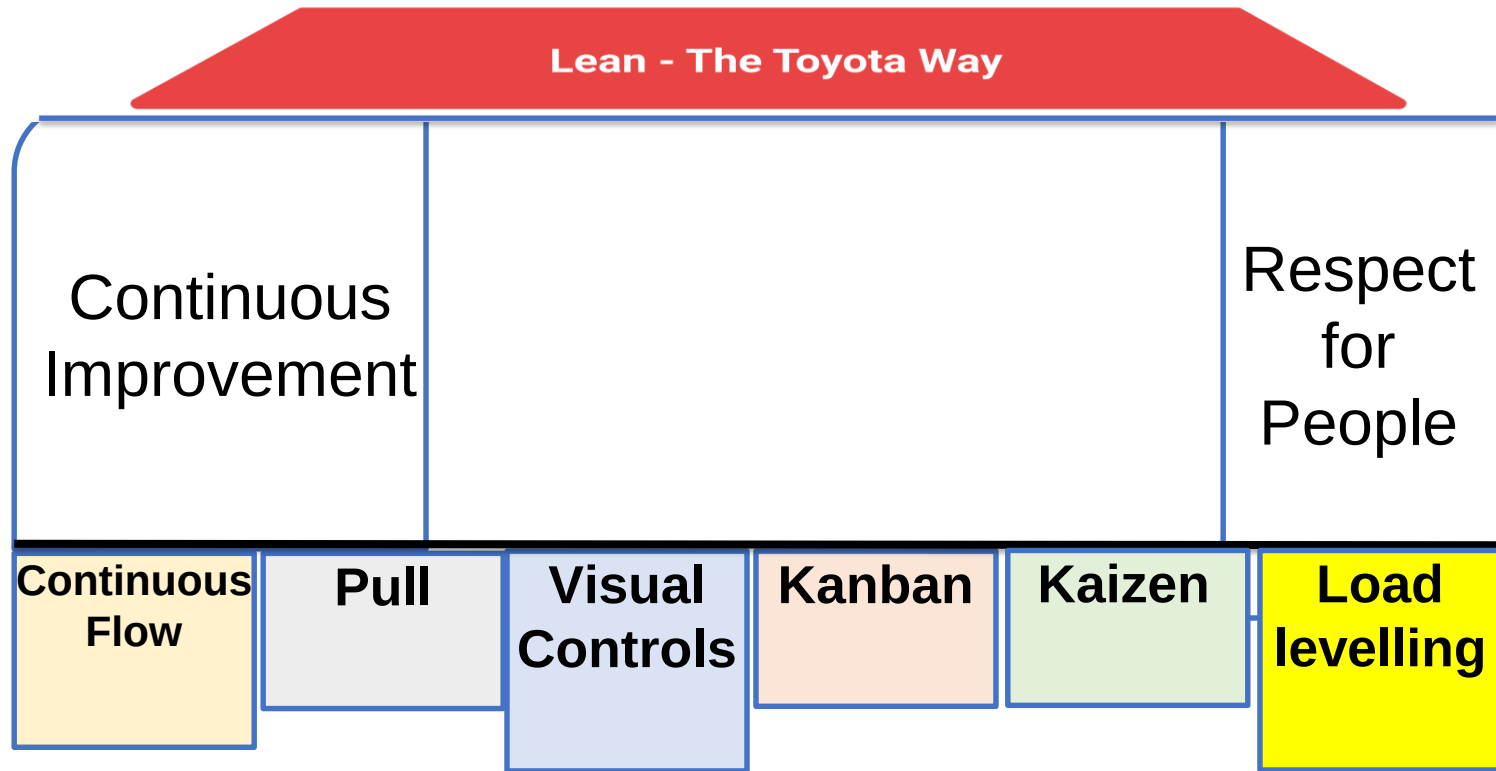
<https://www.naturalnews.com/technology.html>

History of Lean



Lean? What is it?

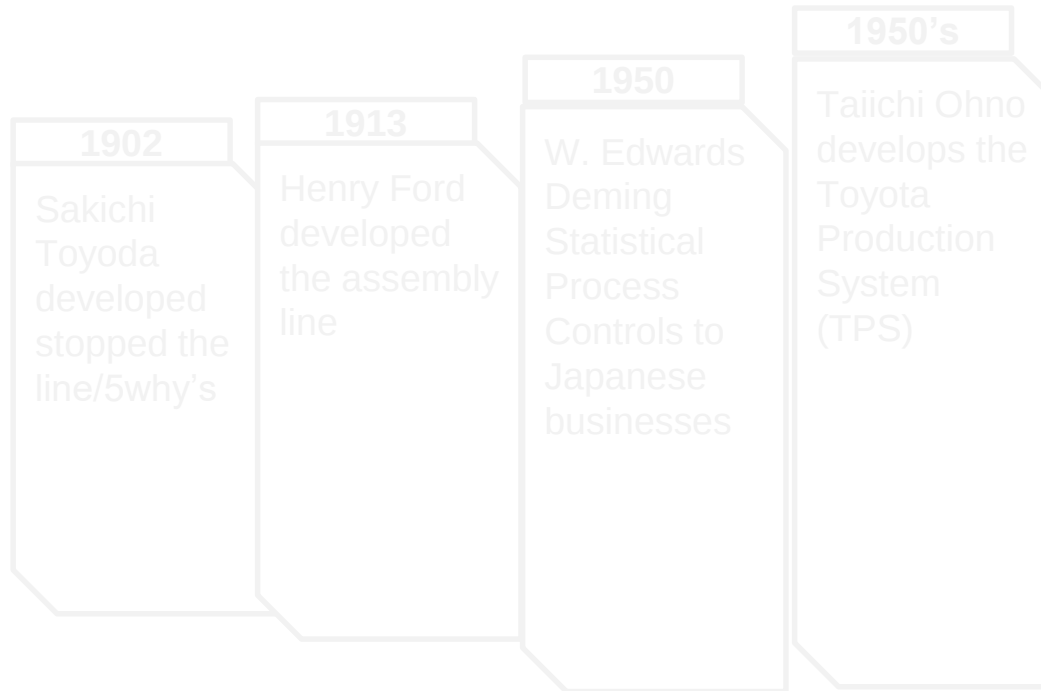
- Principles, tools and concepts to eliminate waste



- Anything that does not add value is waste =



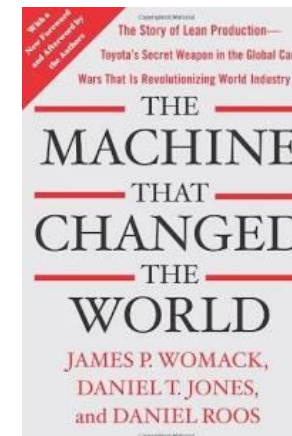
History of Lean



1990

The Machine that Changed the World-term Lean

Womack et al. (1990)



What Does it Take to Implement Lean Management?

1. Leadership willing to take a risk and focus on the priority
2. Managers willing to lead the effort
3. Support group to educate and guide the effort
4. Employees willing to participate
5. Leadership willing to reward

1. Leadership Support

Leadership Willing to Take A Risk





- Encourage team work
- Commit to the success of the project
- Create a vision for the team and help personalize it
- Focus on relationships
- Be available
- Offer Support

<https://blog.kevineikenberry.com/leadership-supervisory-skills/six-ways-leaders-can-support-team-success/>

Transactional Leadership

- Belief: “Empowerment occurs when higher levels within a hierarchy share power with lower levels within the same hierarchy”



Matthews, et al, (2003)

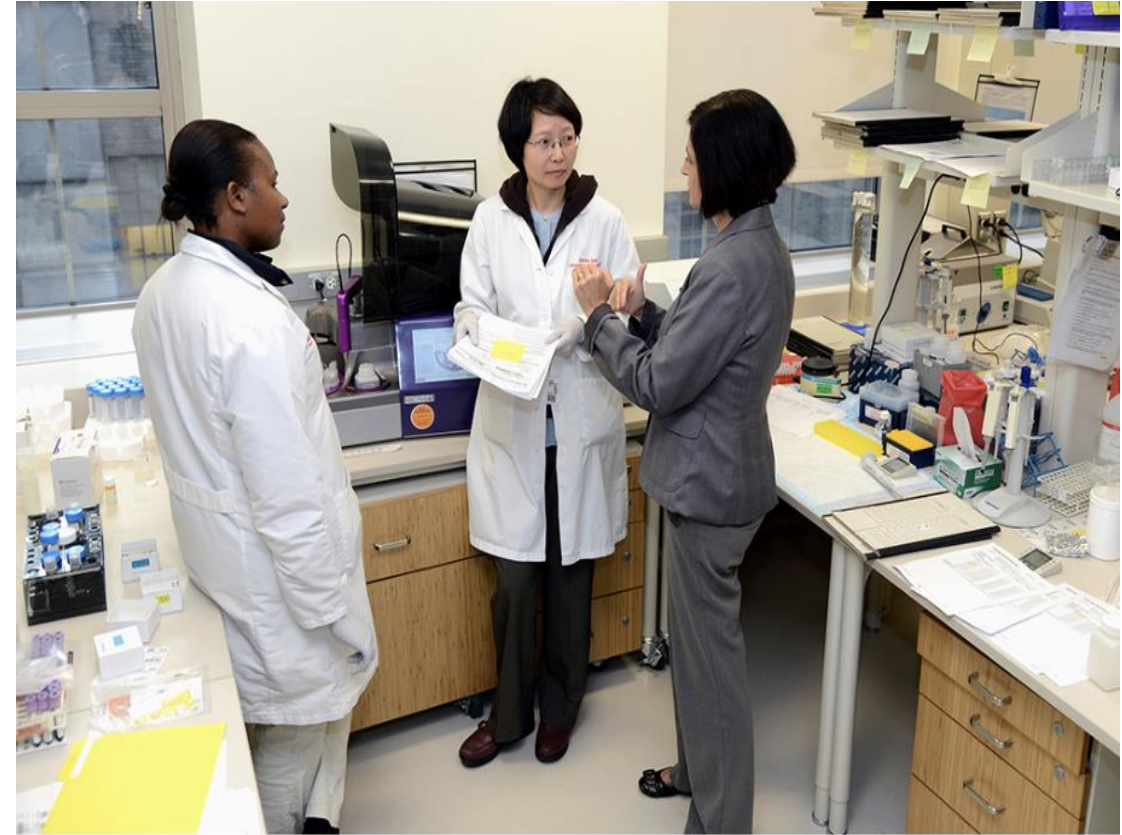
<https://www.isixsigma.com/methodology/lean-methodology/lean-taking-root-it-depends-culture-and-leadership/>

Define the what, why, benefits of the change and what the dangers if it doesn't happen



Leadership Training

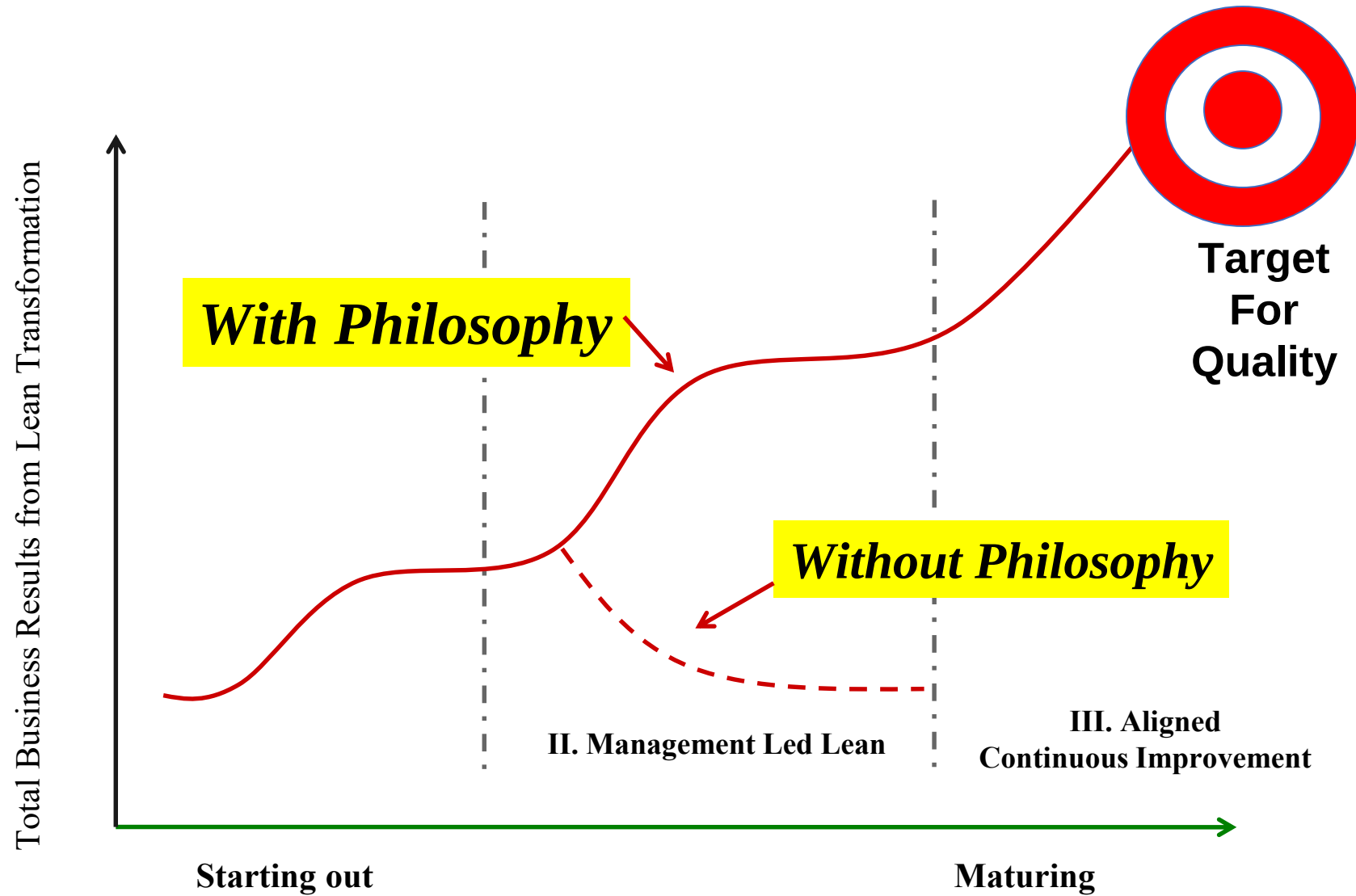
- Upgrade executives and leaders skills in change leadership?



<https://www.forbes.com/sites/ellevate/2015/01/27/9-things-leaders-must-do-to-create-a-transformation/#5bb6a9361e98>

<https://pathology.weill.cornell.edu/clinical-services/molecular-and-genomic-pathology/molecular-pathology-laboratory>

2. Managers to Buy in and Lead the Effort

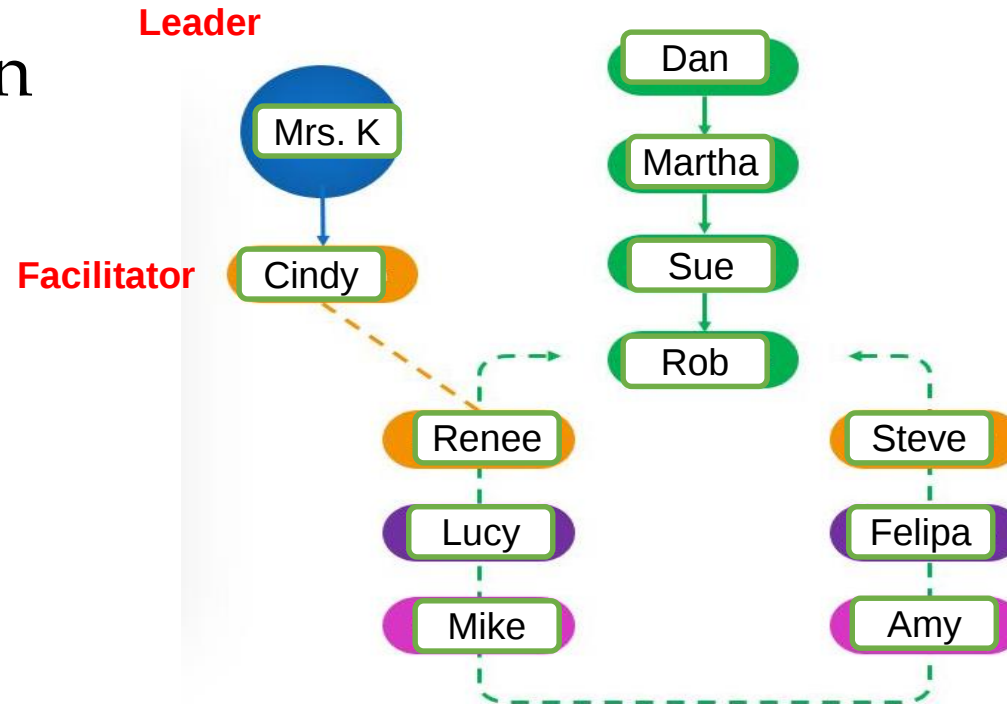


Maturity in Integrating Lean and Business Strategy

From The Toyota Way to Continuous Improvement by Liker & Franz

Agile Organizational Structure

1. Leader and Team Formation
2. Meeting and schedules
3. Responsibility?



Performance Goals



Number of Specific Goals?

Data for measure?

What are the expected outcomes?

How close is the goal?

Potential due date?



X 100 employees. = 100 per quarter

1 Process improvement

<https://www.businessmanagementdaily.com/45995/how-to-set-and-measure-performance-goals/>

3. Support Group: Educate and Guide



1. Leader: provides rationale- Why are we doing this?
2. Educate in the concepts, tools and principles of Lean
3. Serve as a mentor

4. Employees: Willing to Contribute

- Not afraid to participate
- Willing to assist the leadership
- Creativity and innovation

Frustration Free!



Continuous Improvement: Tools

- **Organizational structure**
- **Performance Goals: Staff goals aligned to strategic goals**
- **Data Collection Tools**
- **Graphs**
- **Presentation**

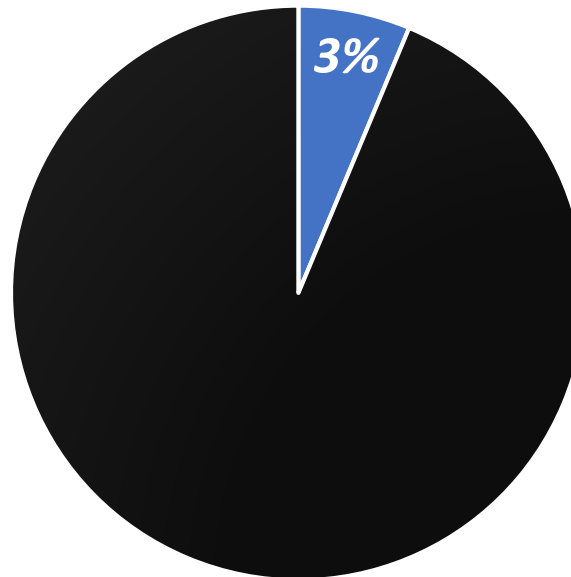


5. Leadership: Provide the Vision

Provide Vision

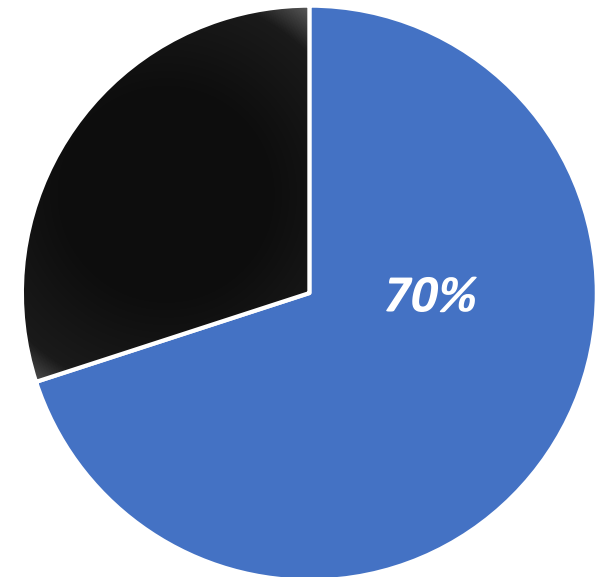
The Lab World

■ Lab Testing ■ Non-Lab Testing



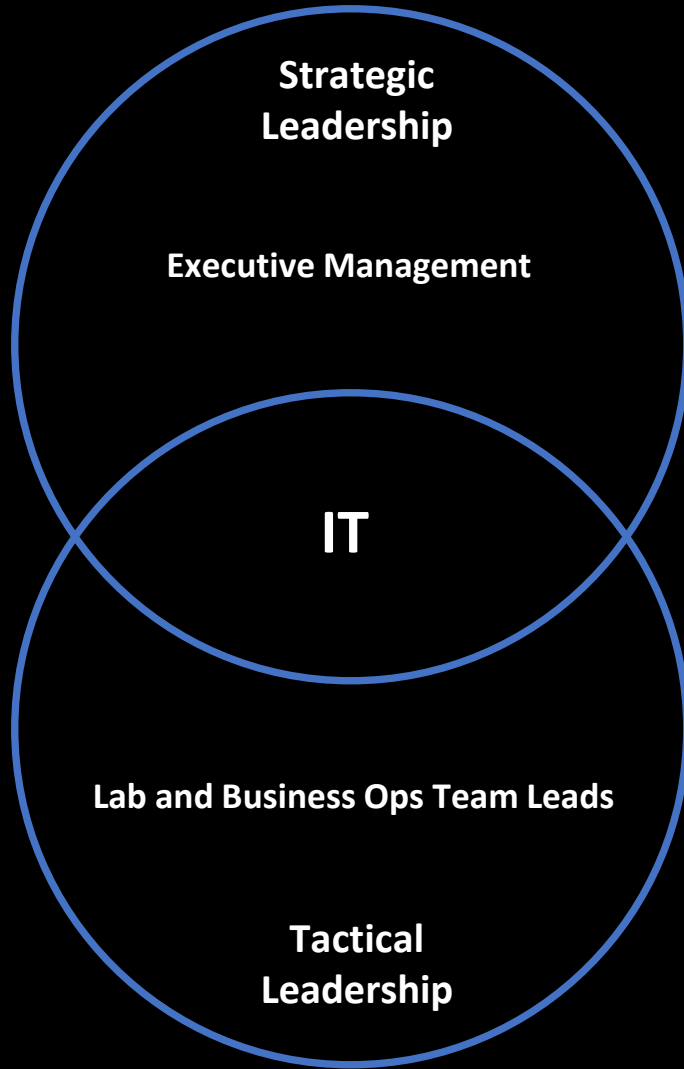
Lab Testing as % of Total
National Health Expenditures

■ Lab testing ■ Other



% Influence on Patient
Treatment Outcomes

Leverage Data



- Establish database consistency
- What would you like to measure?
- Measurement helps determine data sets to use
 - Using measurements to improve decision-making
 - Monitor performance and continuously improve outcomes
 - Establish a regular schedule of data extraction and interpretation

Present Outcomes

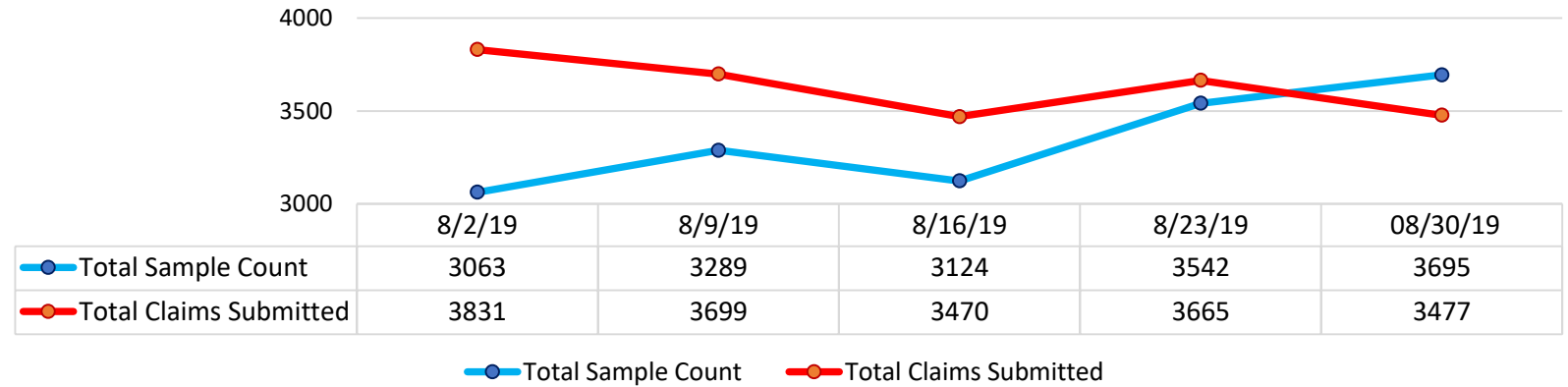
- Graphic presentation of successes and challenges
 - Capture key metrics per department
 - Trend over time to compare changes
-
- Summarize department metrics in to one dashboard
 - Regularly present dashboard on a monthly or quarterly basis
 - Use dashboard to inspire and motivate employees

"In God we trust. All others must bring data."

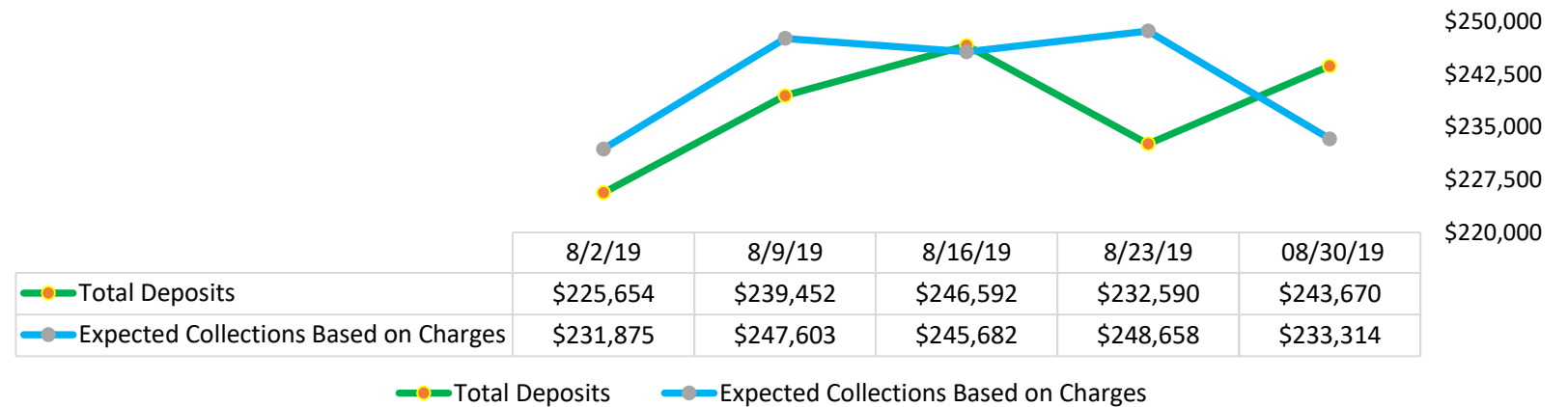
-W. Edwards Deming

Department Dashboards

Sample Count vs Claims Submitted



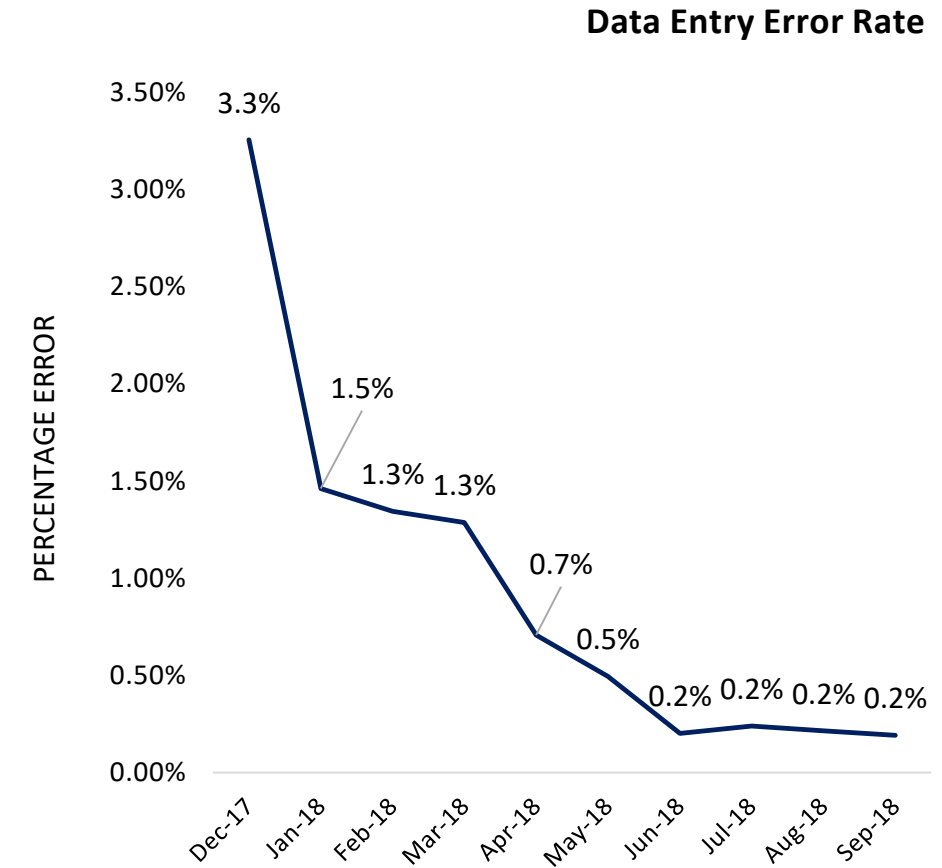
Actual Collections vs Expected Collections



Each department should have their own dashboard

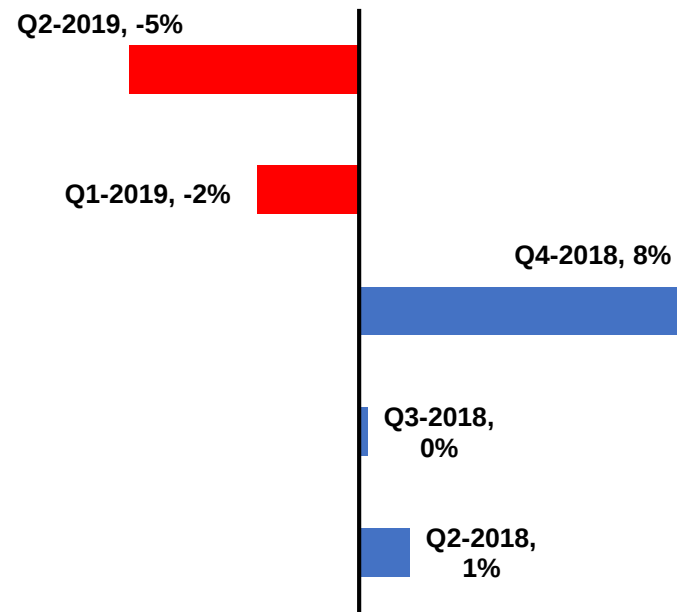
Managing Performance

AM SHIFT			
8/10/18			
Accession #	Error	Data Entry	Corrections
-0083	Client #	NM	AJ
8/11/18			
-0219	Test code	NM	HN
8/14/18			
-0332	Test code	NM	AJ

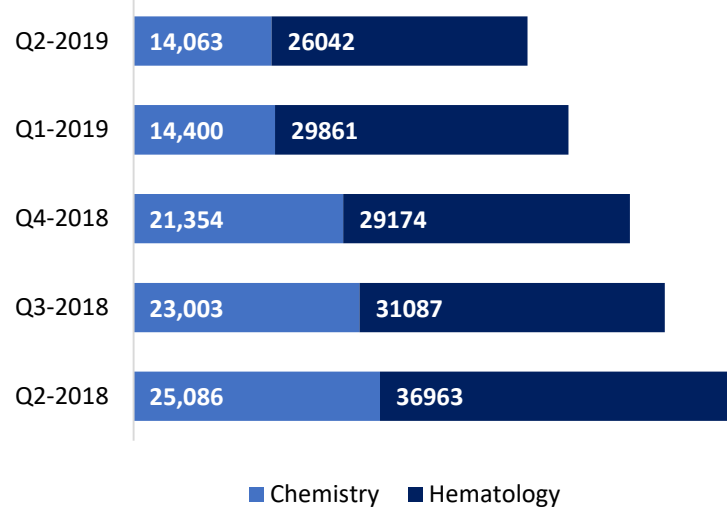


KPIs should set expectations and manage performance

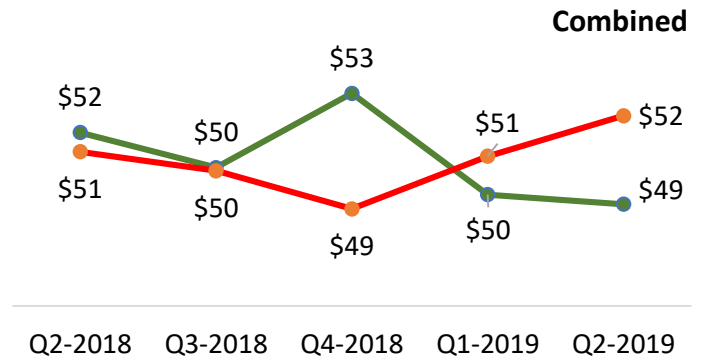
Net Margin



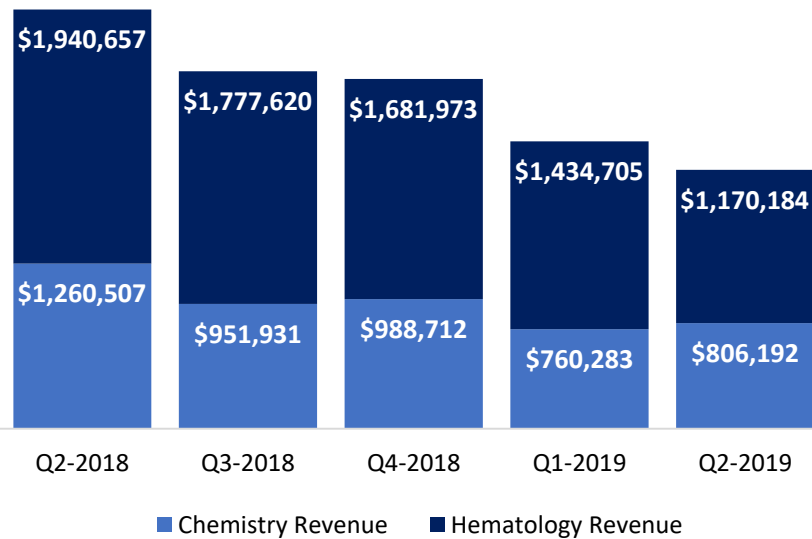
Requisition Volume



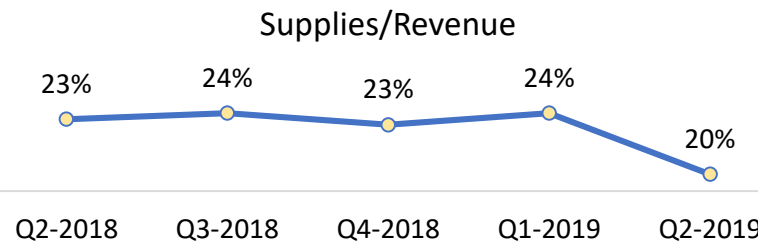
Unit Profitability



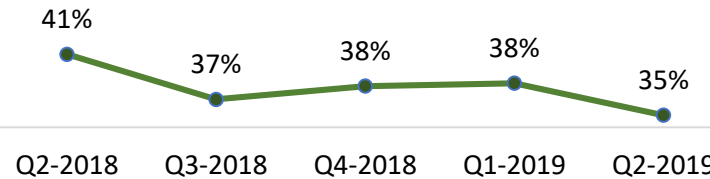
Revenue Collections



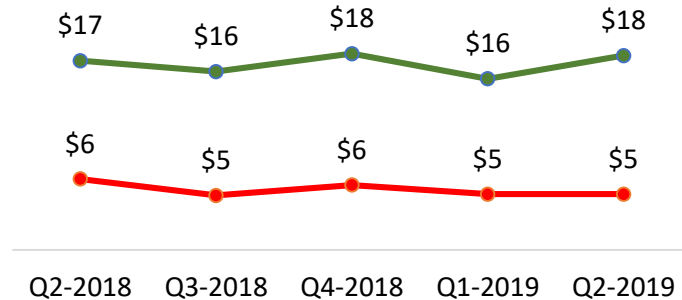
Revenue Collections



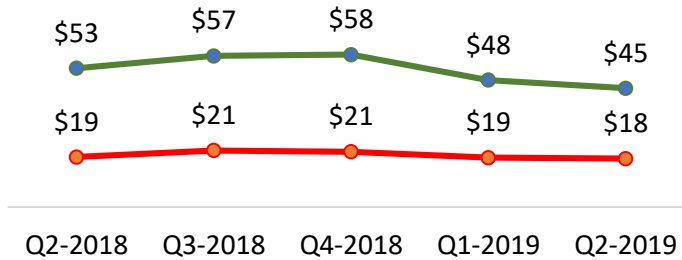
Payroll/Revenue



Hematology



Chemistry

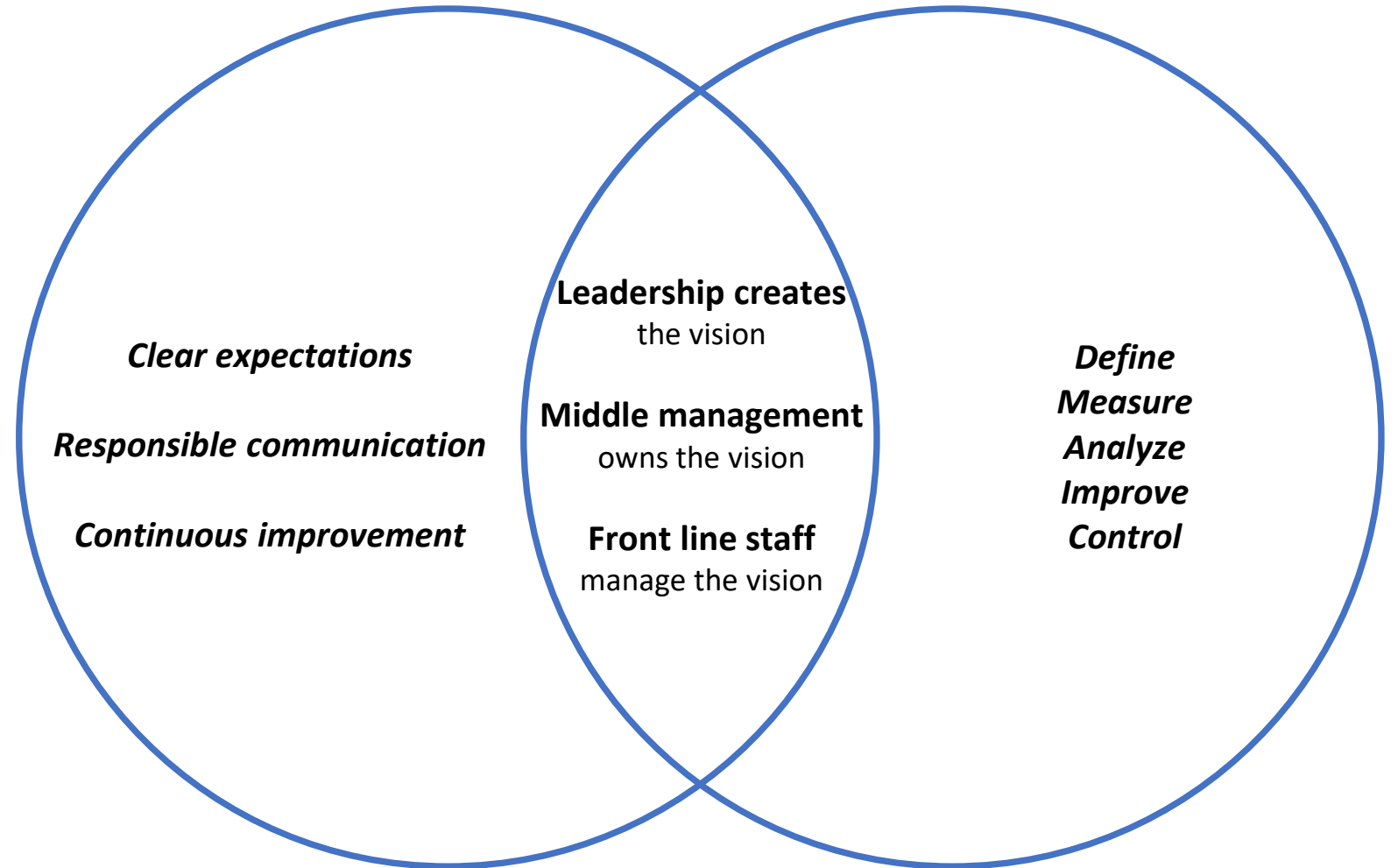


Sample Dashboard

Culture of Confidence

"When you have confidence, you can have a lot of fun. And when you have fun, you can do amazing things."

-Joe Namath



Any Questions?



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References

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