

# **Managing Facilities to Deliver Strategic Value**

**(managing your time to achieve more with less)**

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# Introductions



## Daina Pitzenberger, RN

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Daina is responsible for overseeing TW's Project Management & Construction team nationally. Daina has over 30 years in healthcare beginning her career as a Registered Nurse and the past 10 years as a nurse planner and in business development for the A/E/C industry.

With extensive Healthcare experience, she brings healthcare operational, compliance and capital project experience for every type of a healthcare project – from capital planning to ground up facilities.

# Today we want to share:

- Tips for being more efficient
- Some fun facts
- Tips for more effective project planning
- Lean and Six Sigma – Definition / Tools
- 7 ideas to make your day run more smoothly
- Learn why helping your team develop a Kata Mindset will result in being more efficient - getting more done “with less resources”

# What's Farming Got to Do With Efficiency?



Farming has changed quite a bit since the year 1900. But as you drive down the roads in Iowa, you will see that two crops still grown today – corn and soybeans.

Iowa has at least **11,000** different soils. Iowa has some of the richest and most productive soil in the world. **30 miles wide** – black gold across northern Iowa

Iowa ranks **1st in the U.S.** in corn and soybean production. 19.2 million hogs (almost 27% of the nation's hogs), 4 million cattle, 260,000 sheep and 66.9 million chickens in Iowa. Iowa chickens laid 13.9 billion eggs in 2007.

Number of Farms: 92,60

State Bird: Eastern Goldfinch

Average Farm Size: 331 acres

State Flower: Wild Rose

# Facts about Iowa Corn Production

- In 2016/2017, Iowa corn growers grew an average of 203 bushels per acre. Nationally, the average is 175 bushels per acre. Our farm produced 225 bushels per acre.
- Corn ingredients can be found in almost 4,000 everyday products – like lipstick, paper, plastic water bottles, tires, crayons and beer.
- A typical corn plant can be anywhere from five feet to 12 feet tall. That's over a story high!
- Planting starts in April after the frost leaves the dirt; harvest starts in mid-September, though October sometimes until Thanksgiving.
- Officially, one acre is 4,840 square yards or 43,560 square feet. That's about the size of a standard football field. You can live off of 80 acres!
- One bushel of corn converts to about eight pounds of beef so when you eat a bacon cheeseburger, you should be thankful for corn.

(Source: PRX, Jan. 2018)



# Soybean Farming Facts

Planting early in April increases yield by at least three to four bushels per acre by planting early.  
Risky business!

Soybean can easily germinate at soil temperatures around 50°F at 2 inches - but germination is slow.

Average farmer yields 40.4 bushels per acre. My dad 45!

Walking beans – removing defects from the soybeans - Manual Controls  
½ mile rounds – 600 acres from June through August

“In early August we hired some kids to help walk a soybean seed field. We had to get rid of the volunteer corn and some weed escapes. It was a long day that ended with a trip to Dairy Queen as an added bonus.”

Source: Otto Farms Inc.



# Hot Issues for healthcare facilities in 2019

How to better leverage technology

How to become more Patient Centered

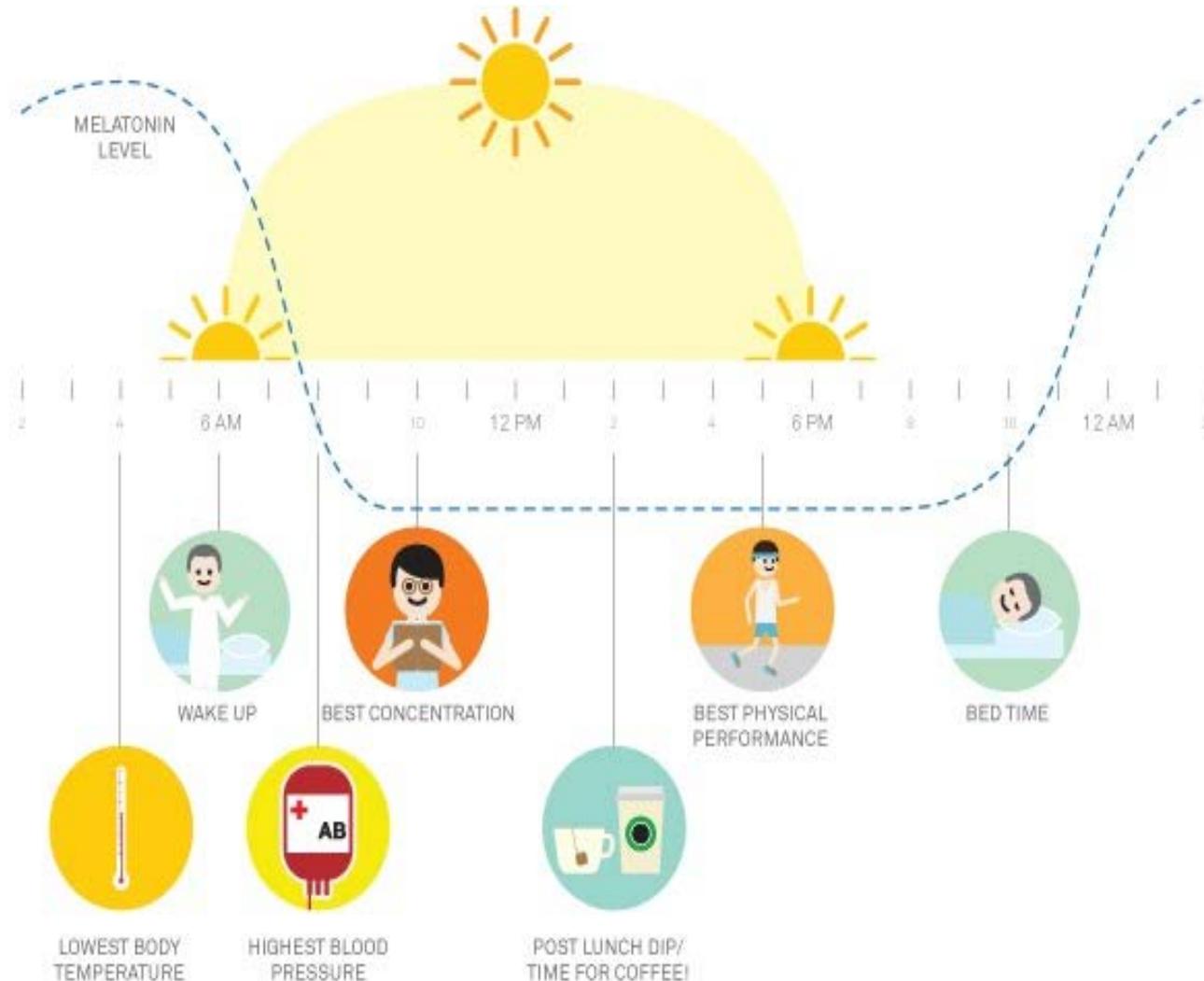
Increase ability to be Nimble and Transparent

Understand the Value Based Model is here to stay

Understand impact of Personalized Medicine

Move to outpatient care and Home Health

# Work with your body's natural energy cycle



Energy levels have a natural ebb and flow throughout the day. These are called Circadian rhythms.

Try as you might, fighting against them is about as productive as watching cat videos.

# The reason we are all busy

It's all this information that keeps coming at us. The bad news is that it is not going away. By 2020, we will have **20.8 Billion** connected devices.



In the past year, we have already generated **2 Exabytes of Data.**

**Just what does that amount to?**



# Design & Construction Waste by Project Management Institute

<b>Wastes</b>	<b>Description</b>
<b>Transportation</b>	Communication failure in between processes, multiple & complex sources
<b>Inventory</b>	Excessive information, inadequate configuration management, complex retrieval system, work in progress
<b>Over Processing</b>	Scope creep, overtime unplanned, excessive approvals, resources overloaded, excessive reviews, hand-offs, producing intermediate deliverables, too many iterations, unnecessary data conversions, excessive verification
<b>Defects</b>	Rework, poor estimation, conversion errors, inaccurate information, inappropriate design verification, unclear acceptance criteria
<b>Motion</b>	Searching for information, required manual intervention, lack of direct access, no collocation
<b>Waiting</b>	Information pushed too early, information unavailable, no work being done, stop & go activities
<b>Over Production</b>	Signoffs, Too many details, unnecessary information, redundant activities, over-dissemination, pushing rather than pulling information

# 8 Deadly Sins of Waste

**ANIMAL  
STYLE!**

Inventory par  
levels increased

Michelle has to take the cats to get fixed



**2** Over-Processing

Nurses don't check  
the supplies and  
order double

Stray cats get together and make more cats



**1** Over-Production

Doctors waiting for  
the right supplies

Michelle's donkeys are waiting for her



**7** Waiting Time

Donkeys can do so much more than wait!!



**8** Unused Employee  
Genius

Now there are dozens of cats to feed



**3** Excess Inventory

Stockpiles

Raccoons found the food & water



**4** Defects

The wrong  
stockpile

Contaminated  
supplies

The filthy bowls must be cleaned every day



**6** Wasted Motion

Michelle travels to fill the food bowl every day



**5** Transportation

Running to find  
the right supplies

# Effective Project Planning Tips

Early on in your planning for the project, make sure you consider the following:

- Ensure you have the right team members
- Ensure you have the right “team” culture
- Establish processes that are “agreed upon/bought into”
- Have metrics in place – must measure for success

# Lean – definition

Lean is a methodology that focuses on how to:

- Identify value
- Map value stream
- Create flow
- Establish pull – not push
- Pursuing perfection

# Typical Short-term Improvements When Implementing LEAN

90% Inventory reduction

90% Lead-time reduction

35% Productivity/Capacity increase

15% Quality improvement

60% Floor space reduction

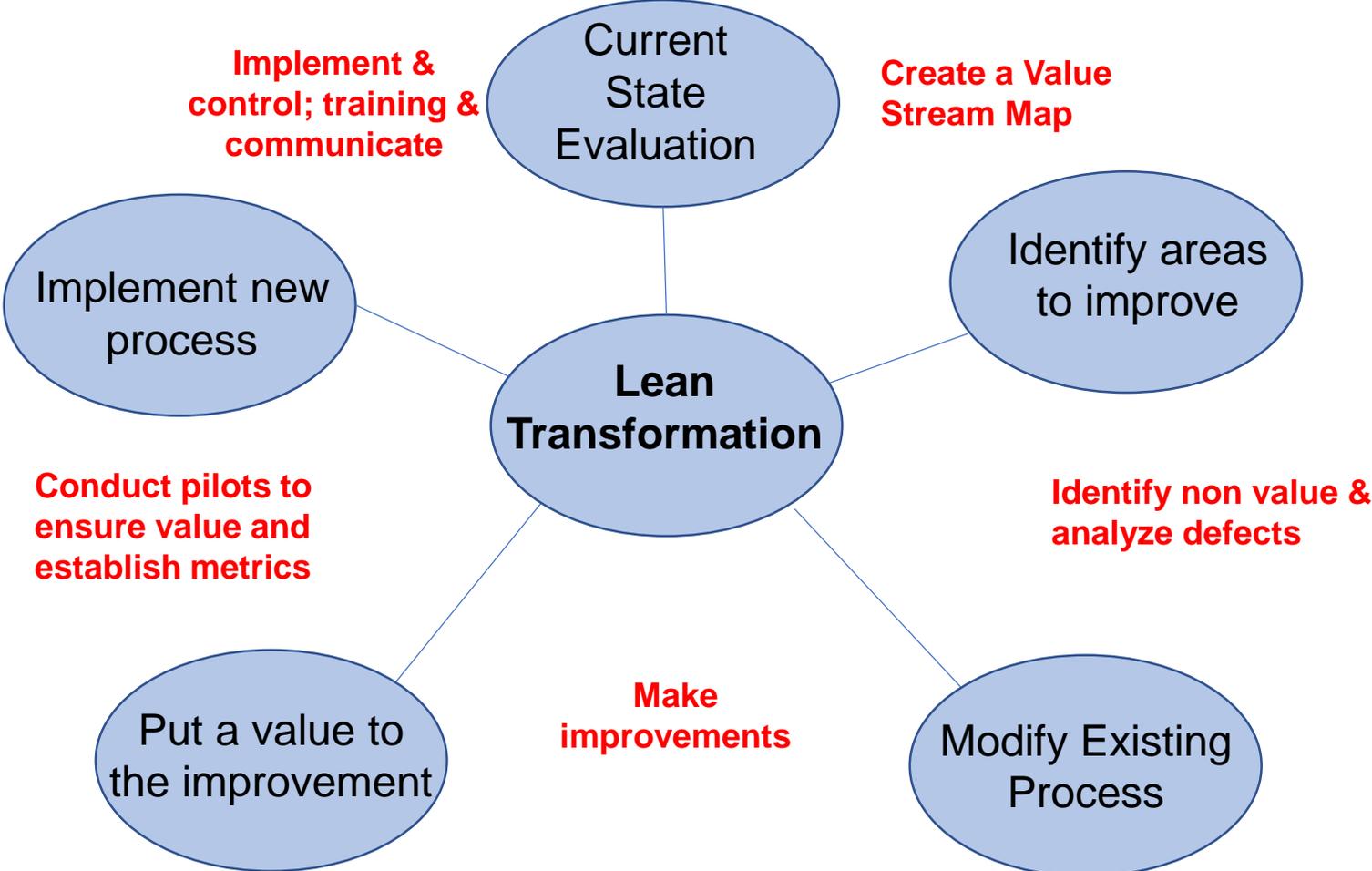
20% Cost reduction

10% Value added/person

25% Improved profit margins

5% Overall effective efficiency

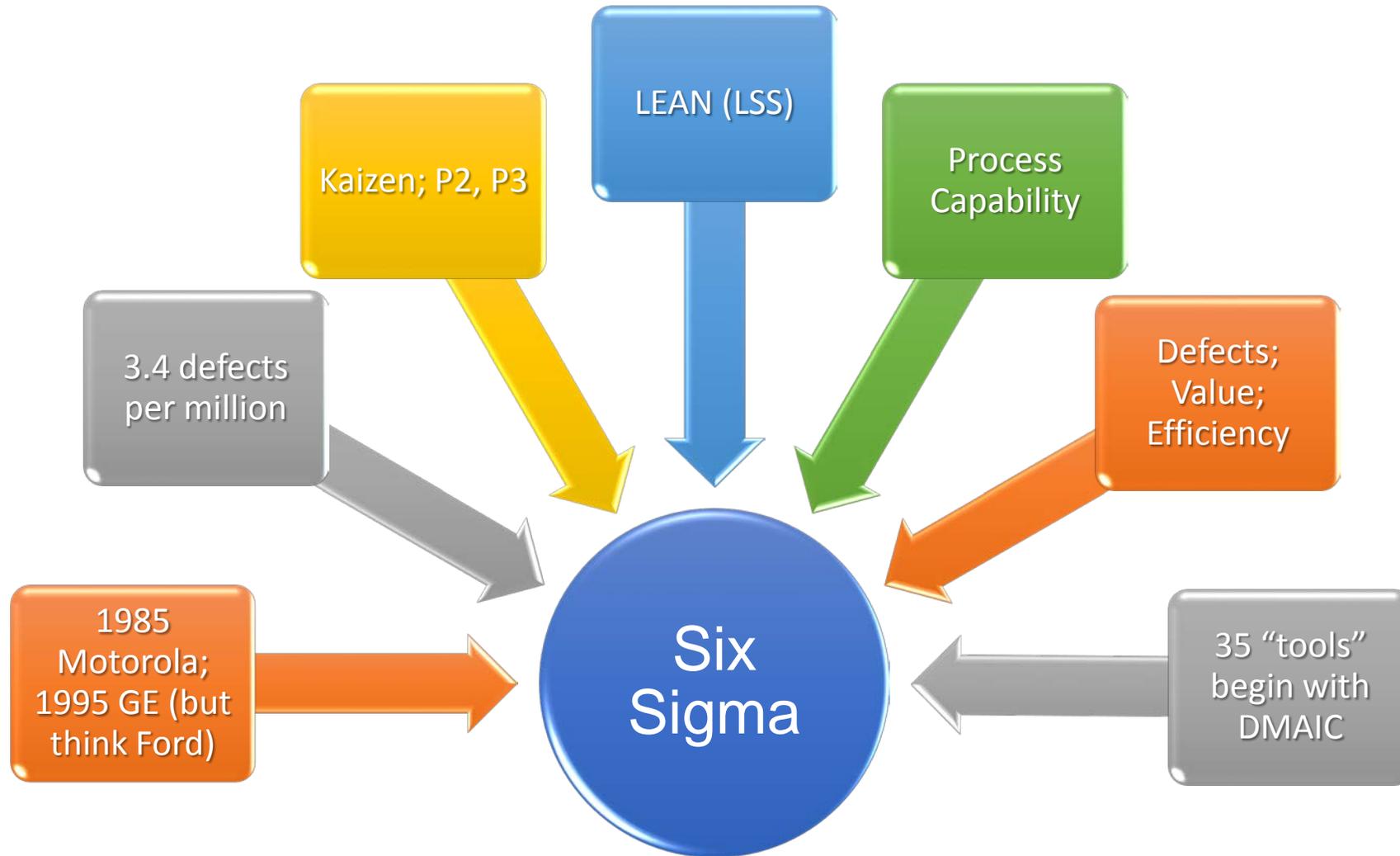
# 5 Step Method for Implementing Lean



# Six Sigma definition

- It is the application of “science and math” to the design and operation of processes that improves the customer experience and lowers cost. (it’s about measuring!)
- The results of implementing Six Sigma delivers value to end users / patients (through increased efficiencies) and adds value to hospitals through reduction of costs.
- Process defects/errors must not exceed 3.4 errors per every million opportunities. Process improvement is implemented through DMAIC process.

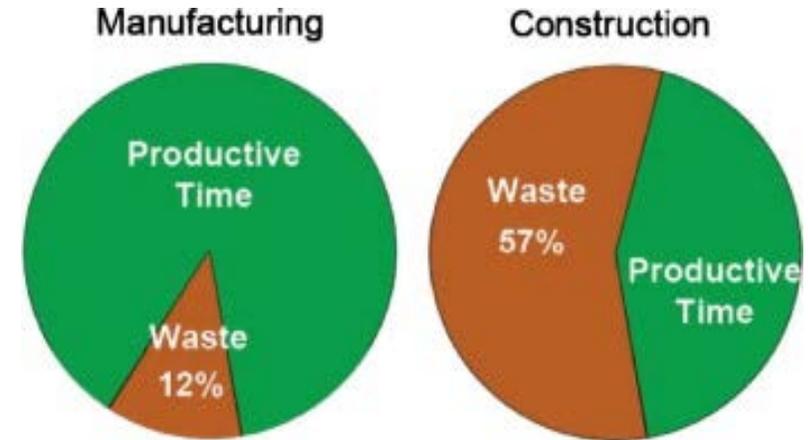
# Six Sigma Overview



# Top 7 Reasons Projects Fail

A survey conducted by Price Waterhouse Coopers (PwC) in 2016 explored the reasons behind the UK's poor delivery record on capital projects. They discovered that some 45% of these projects are delayed by 6 months or more and that 92% of these delays are due to poor management.

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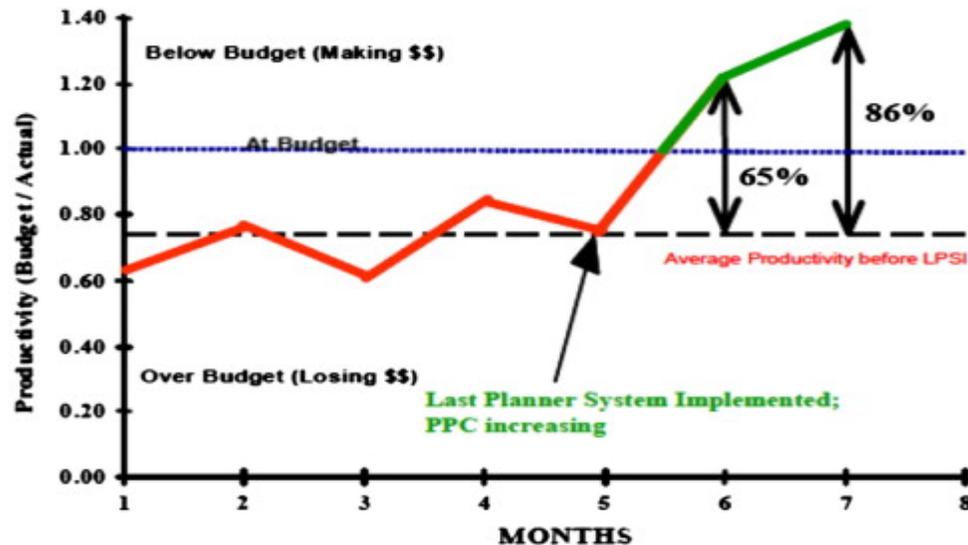
PMI Institute

## Have consistent processes for managing unambiguous checkpoints

Software measurement programs capture productivity and quality historical data used to compare it against similar projects schedules, costs, quality, and other project related factors.

## Have a consistent methodology for planning and executing projects

Develop a **detailed schedule** before any release date of a project. Inadequate planning is one of the major reasons why projects spin out of control.



Include the customer at the beginning of the project and continually involve the customer as things change so that the required adjustments can be made together.

Projects are less likely to fail if there are **informed customers** giving meaningful **input during every phase** of requirements elicitation, product description and implementation.



## Manage and motivate people so that project efforts will experience a zone of optimal performance throughout its life

Retaining the most **highly skilled and productive people**. Knowledge is money. A project team made up of higher paid people with the right specialized skills is worth more per dollar than a group of lower cost people who need weeks or months of training before they can start to be productive.

## Provide the project team members the tools and techniques the need to produce consistently successful projects

The project team must be skilled and experienced with **clear defined roles and responsibilities**. Have access to expertise which can benefit those fulfilling the requisite roles.

Focus on business value, not technical detail.

Establishing a clear link between the project and the organizations key strategic practices is critical.

- Set Goals and Objectives for the Project
- Define “True North” -- keeps your project on the tracks
- Develop KPI’s

## Key performance indicators (KPIs) can be used to:

- Monitor costs.
- Track progress.
- Assess client satisfaction.
- Identify strengths and weaknesses.
- Compare performance across and between projects.
- Assess specific areas of a project such as sustainability, safety, waste management

## Example of KPI’s

- [Project](#) progress relative to [milestones](#).
- Number of incidents/accidents.
- The use of [materials](#).
- The number of [defects](#).

Number of complaints.

The number of working hours spent on different aspects of the [works](#).

The number of [variations](#).

The amount of [waste](#) generated and the amount of [recycling](#).

# Common way to use Lean / Six Sigma in Hospital Facilities

Changing filters seems to be a common task, right?

Using Six Sigma, Facilities Managers can refine the process of when filters should be changed and how it is done.

Gathering data and leveraging such information can be used to create a better process for replacing filters by scheduling replacement at set intervals. The continued tracking of HVAC system performance allows Facilities team members to revisit processes and refine schedules. Six Sigma enables the continuous improvement of all processes and decreases costs.

# Example in Project Implementation

- Take a look at each process that goes into planning a project. Are there steps that are unnecessary?
- Who is involved in the project? When are they involved?
- Are the right individuals involved in your meetings at the right time? Are you getting the outcomes you need?
- If there is any repeating or rework that you can point to, if so, the process can be improved.

NOTE: In order to improve the process, start with a current state map and a future state map. Use a value stream map to find “non value added processes.”

## 5 Why Method

WHY?

↳ WHY?

↳ WHY?

↳ WHY?

↳ WHY?  
Real solution is found here

Asking 5 Why's is a great way to start to find the real problem.

# Kanban Method

Kanban is a pull system that increases transparencies and improves processes. It is used to track work items and tasks. It facilitates workflow management.

Have you ever felt like you had a lot of moving parts going on at once and you aren't sure where to even begin? Try a Kanban Board



The idea behind Kanban is that it “pulls” work through the process when capacity allows from each individual instead of having work pushed through the process

# Pulling Vs. Pushing Work

## Pulling

- Prevents Bottlenecks
- Less Delays
- Less Anxiety
- More gets done
- Check off the boxes

## Pushing

- More overtime
- Inefficiencies occur
- More Anxiety
- Feels rushed
- Shoveling snow during a snowstorm

# Developing a Kata Mindset

**What is Kata?** A Japanese term given to define a scientific way of improving business processes very methodically.



Define the challenge  
Grasp current condition  
Establish target condition  
Create solution

Think of how Daniel was taught in Karate Kid – washing car, painting fence, etc. – to what end?

# 7 ideas to make your day run smoothly

Create process maps for any repeat work

Create a scorecard for you

Create a scorecard with your team - so everyone knows what is important

Get in a Routine – it makes you more efficient

Choose and stick to where you track what you have to do and what has been done

Use Technology – think Google folders and Google forms

Take your time to build the foundation right (group culture and mindset)

## Recap – Bottom Line

Getting everyone on the team to buy in:

Lean is a journey

Perfection is the ultimate goal (Good enough – Just ISN'T)

Patients and End Users should be the focus

The best processes are SIMPLER than we think

Communicate MORE than you think you need to

Measure, Measure and Measure again (Six Sigma)

# Use the Ivy Lee Method to end your day properly

One of the greatest productivity and time management tips out there is to simply know what to work on. That's where the [Ivy Lee Method](#) comes in:

- At the end of each work day, write down the **six most important things** you need to accomplish tomorrow. No more. No less.
- Take a few minutes to **prioritize those six items** in order of their importance.
- When you arrive **tomorrow, concentrate only on the first task**. Work until the first task is finished before moving to the next one.
- Work through the rest of your list in the same fashion. At the end of the day, any unfinished items move to a new list of six for the following day.
- Repeat.
- **Inspiring: Change the World by Making Your Bed - by Admiral William McRaven**  
<https://www.youtube.com/watch?v=U6OoCaGsz94>

## Before we end - Riddle

**What does 4 minutes  
every 24 hours equal?**

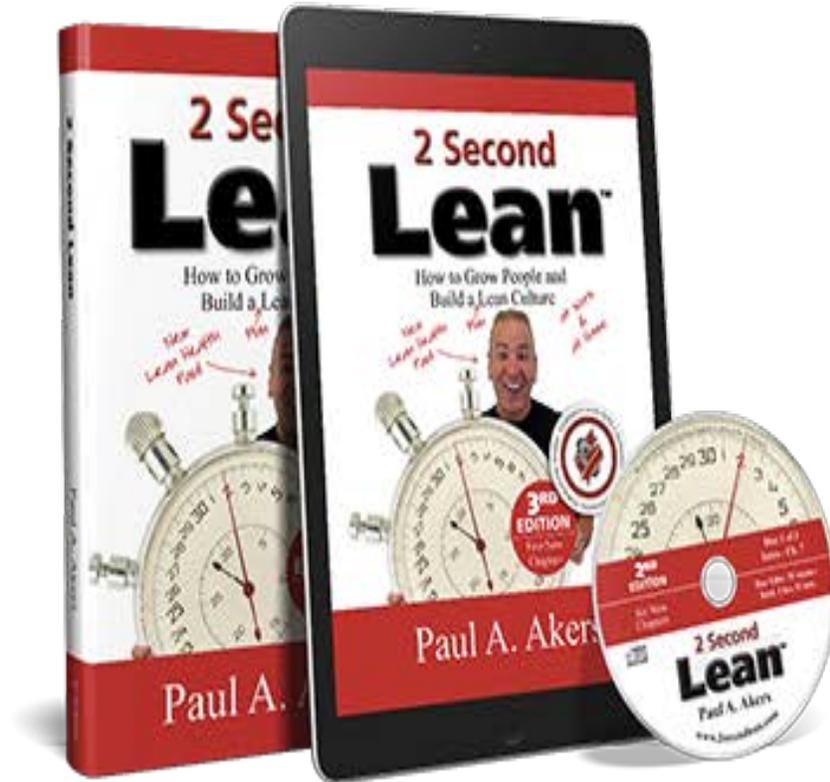
**Answer**

**1 Full Day a Year**

## **We propose ....**

**That each of us spend just 4 minutes every day thinking about process improvements that our teams can make that would bring more value to our team and hospital – it's just 1 day a year!**

**IBM CEO “Every employee should be learning at the exponential pace the market is now demanding to stay relevant.”**



**Think** all the talk about Lean is a bit boring and all about charts and graphs? Read this lean book and be inspired by how easy and fun it can be. No flow charts or graphs, just the real life journey of one company and the astounding results Lean thinking can produce. Take a few hours, read 2 Second Lean and change your life!

*-Paul Akers*

<https://www.youtube.com/watch?v=6qhE4WicKoi>

# Thank you for joining us

<https://paulakers.net/2018/lean-videos/lean-egg-cracking>

If you would like a copy of our upcoming healthcare whitepaper,  
just share your card with us or email  
Daina Pitzenberger at [daina.Pitzenberger@Transwestern.com](mailto:daina.Pitzenberger@Transwestern.com)