

Farmer Discussion Groups

January 2022

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- Capital Area Agriculture and Horticulture Program (CAAHP)
- Farm Business Management Educator



The Current Situation Hyper Inflation

- Labor cost increases total 15 percent 2019 and 2020 and possibly another 10 percent in 2022
- Fertilizer costs are expected to double in 2022
- Fuel prices up over 30 percent
- Capital purchases at all time highs



Money Supply

- M1
- physical currency and coin, demand deposits, travelers' checks, other checkable deposits, and negotiable order of withdrawal (NOW) accounts. M1 includes the most liquid portions of the money supply because it contains currency and assets that either are or can be quickly converted to cash.



Money Supply



- M2
- M2 is a calculation of the money supply that includes all elements of M1 as well as "near money." M1 includes cash and checking deposits, while [near money](#) refers to savings deposits, money market securities, mutual funds, and other [time deposits](#). These assets are less liquid than M1 and not as suitable as exchange mediums, but they can be quickly converted into cash or checking deposits.

This series will no longer be updated. More information is available in the notes below the graph. This series is the suggested substitute: M1SL <https://fred.stlouisfed.org/series/M1SL>

☆ M1 Money Stock (DISCONTINUED) (M1)

DOWNLOAD

Observation:
2021-02-01: **18,136.0** (+ more)
Updated: Mar 23, 2021

Units:
Billions of Dollars,
Seasonally Adjusted

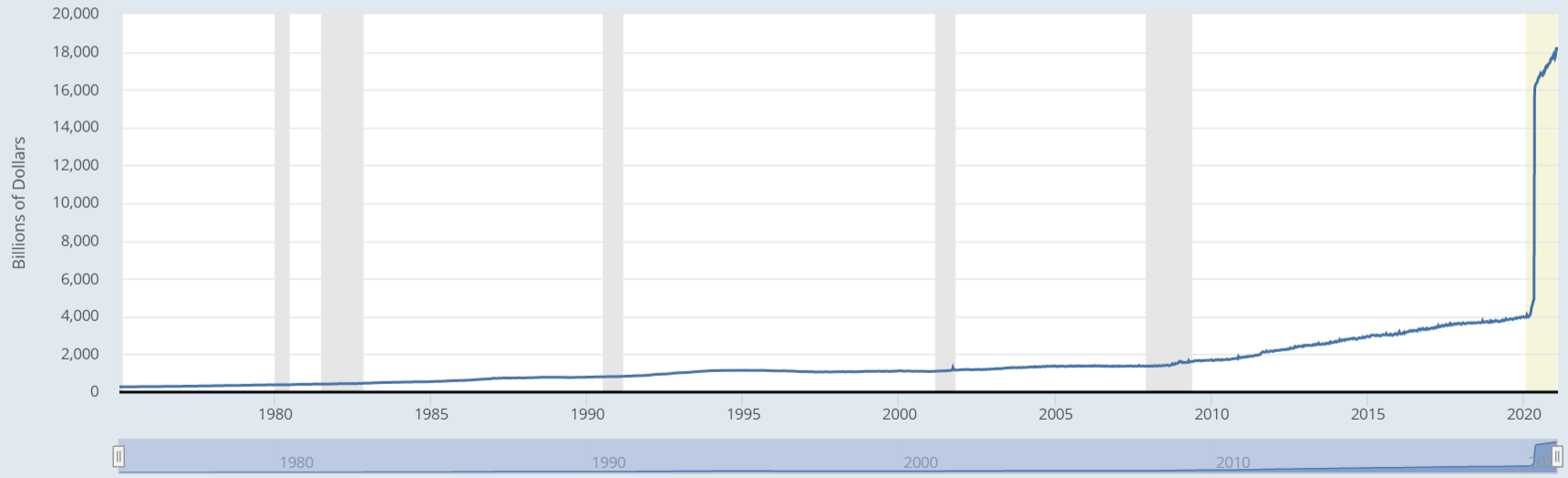
Frequency:
Weekly,
Ending Monday

1Y | 5Y | 10Y | Max

1975-01-06 to 2021-02-01

EDIT GRAPH

FRED M1 Money Stock (DISCONTINUED)



U.S. recessions are shaded; the most recent end date is undecided. Source: Board of Governors of the Federal Reserve System (US)

fred.stlouisfed.org

This series will no longer be updated. More information is available in the notes below the graph. This series is the suggested substitute: M2SL <https://fred.stlouisfed.org/series/M2SL>

☆ M2 Money Stock (DISCONTINUED) (M2)

DOWNLOAD

Observation:
2021-02-01: **19,417.7** (+ more)
Updated: Mar 25, 2021

Units:
Billions of Dollars,
Seasonally Adjusted

Frequency:
Weekly,
Ending Monday

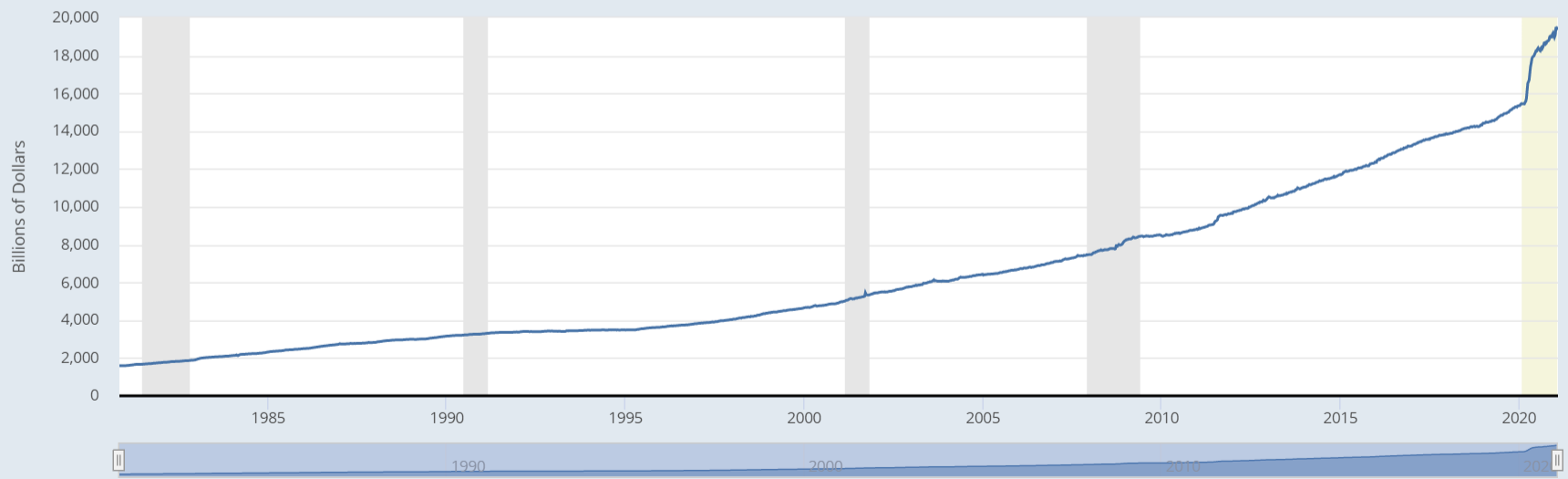
1Y | 5Y | 10Y | Max

1980-11-03 to 2021-02-01

EDIT GRAPH



M2 Money Stock (DISCONTINUED)

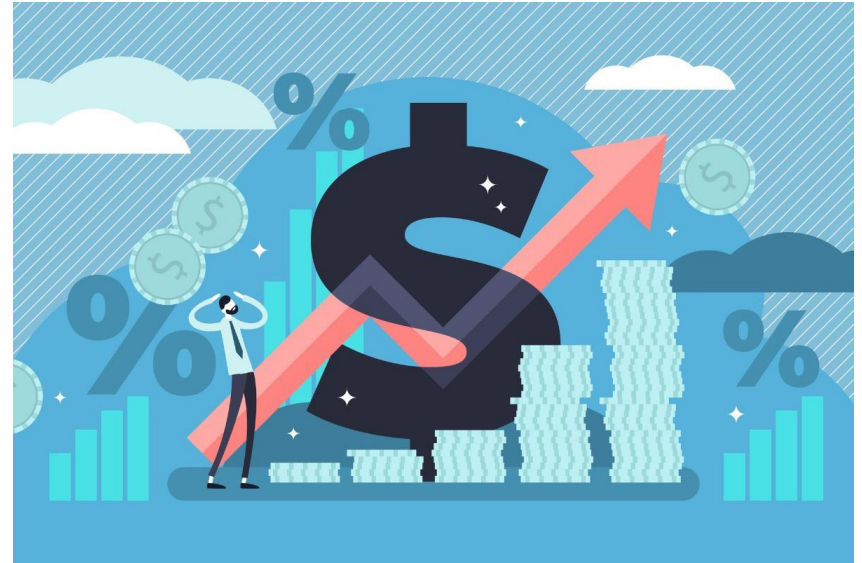


U.S. recessions are shaded; the most recent end date is undecided. Source: Board of Governors of the Federal Reserve System (US)

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The Current Situation Hyper Inflation

- How to operate in an environment of hyperinflation?
- Ideally, increase gross sales at the rate of inflation
- Focus on the cost side of the business



Lean Manufacturing

- Originated with Toyota manufacturing
- Kaizen means change is good
- Continuous improvement in quality as defined by the customer
- A way to work on the expense side



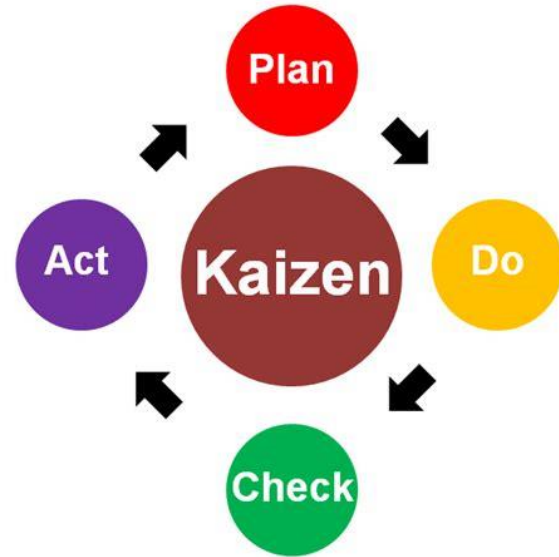
Lean Manufacturing

- Focused on eliminating waste in the manufacturing process
- Farming is manufacturing!



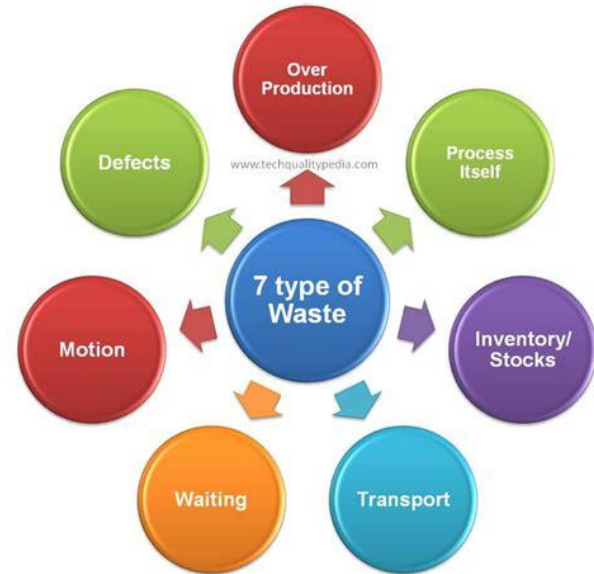
Lean Manufacturing

- A production method aimed primarily at reducing times within the production system as well as response times from suppliers to customers



Improve System Flow

- Right things
- Right place
- Right time
- Right quantity
- Proactive not reactive



Improve System Flow

- Eliminate waste
- Improve productivity
- Reduce time
- Improve quality
- Reduce cost
- Improve customer satisfaction



Five Lean Principals

- Improve value as defined by the customer
- Map the value system and remove waste
- Create flow
- From push to pull
- Continuous improvement



The Customer

- Within my company?
 - Milking cows
 - Milking herd
 - Cow calf pair
 - Feeder calves
 - Ewe
- What does the customer value?
 - Good feed
 - Replacement heifers
 - Adequate pasture
 - Proper and timely nutrition
 - Regular health checks



The Supplier

- What does the customer value?
 - Quality feed
 - Replacement heifers
 - Adequate pasture
 - Proper and timely nutrition
 - Regular health checks
- Who supplies value?
 - The feeding center and process
 - Heifer raising enterprise
 - Available land
 - The feeding center and process
 - Herd manager and veterinarian



Value Stream Mapping The Supply Chain

- Map the existing value stream to identify waste
- Between supplier and customer
- Employees map the value stream



Waste Defined

- Defects
- Overproduction or underproduction
- Waiting
- Non utilized talent
- Transportation
- Inventory, too much or too little
- Motion
- Extra processing



Waste Defined

- Defects – poor communication, unclear routines, bad forage
- Overproduction or underproduction - heifers, milk, feed
- Waiting – for a machine, waiting for a colleague, water running
- Non utilization of talent – not asking talented employees, wrong person, wrong job, not explaining why we're doing this



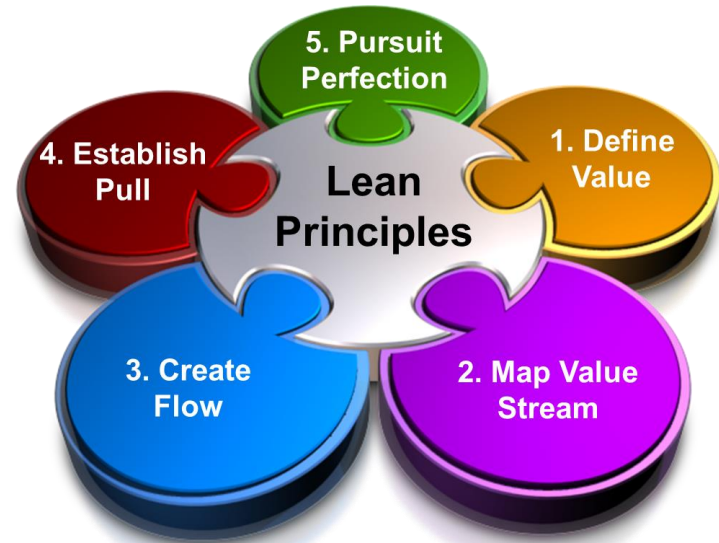
Waste Defined

- Inventory – too many parts or too much feed, just in case
- Motion – searching, wrong height, wrong posture, wrong procedure
- Extra processing – lack of cleanliness or too much cleaning, over mixing, or over drying
- Transportation – machines too large or too small, empty tractor or truck, animal locations



Lean Pulls Products Through The System

- Change from a push system to a pull system:
 - Push - produce as many cheese burgers as possible
 - Pull - produce a cheese burger only when its ordered by the customer



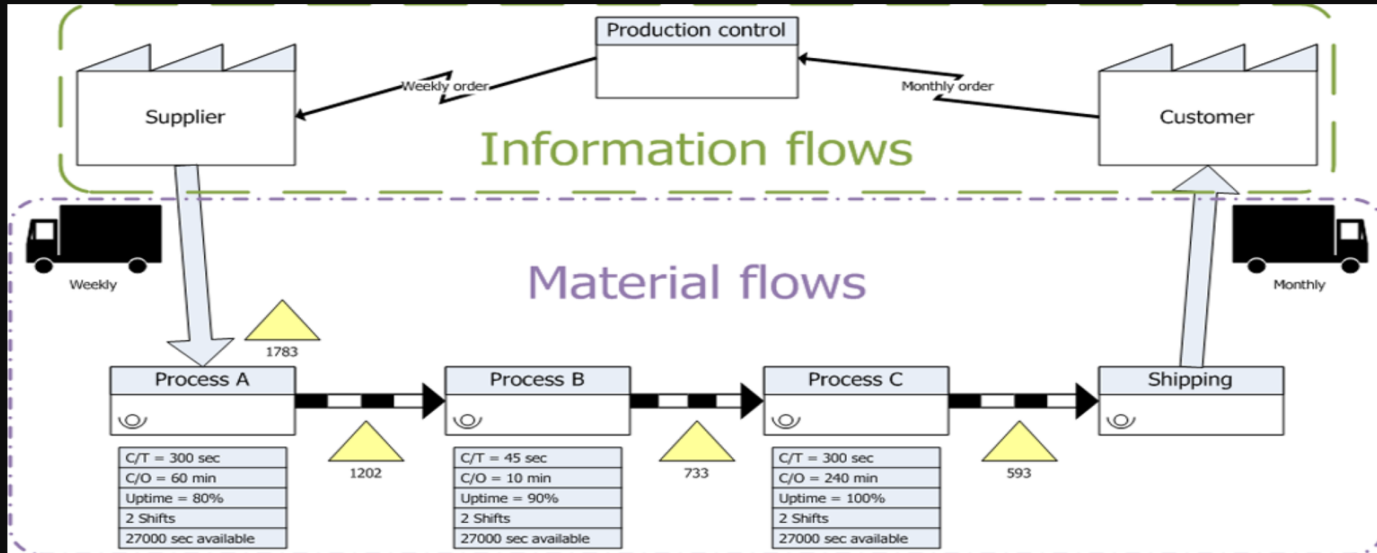
Mapping and Spaghetti

- Map the value stream to identify locations where value is added
- Use a spaghetti diagram for each value added location to examine people movement

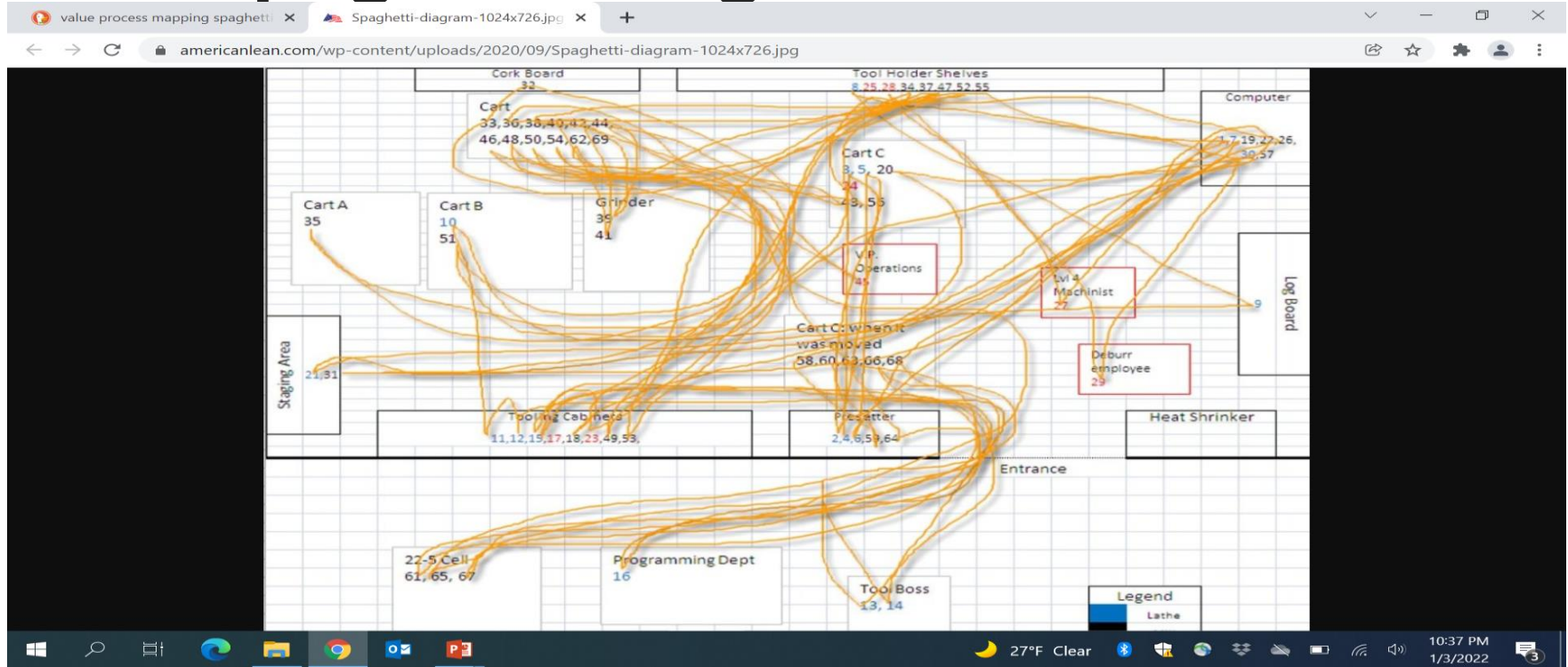


Value Stream Mapping To Identify Value

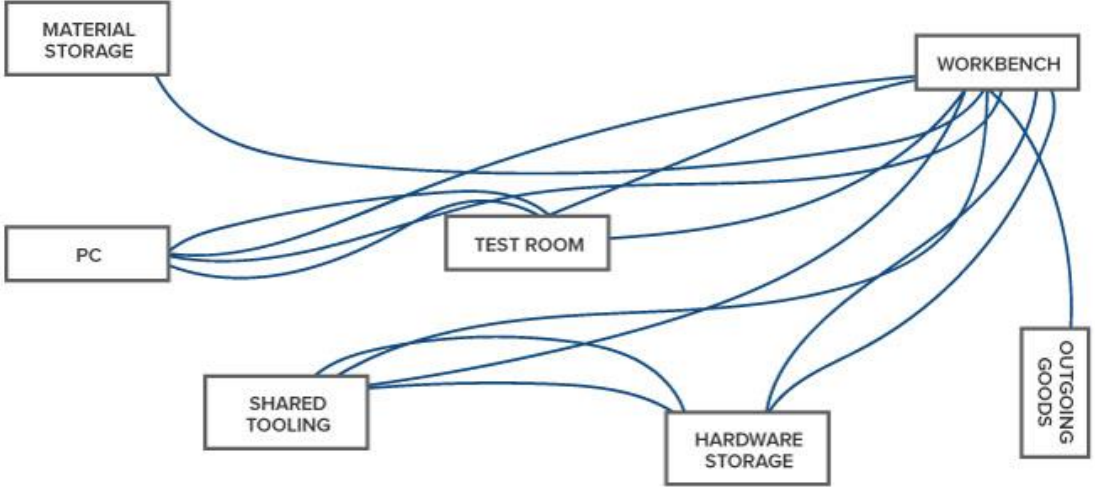
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Spaghetti Diagram Before Lean



Spaghetti Diagram After Lean



Lean Commentary

- Physically watch the work, go to where value is created and create spaghetti diagrams, to see where people movement occurs
- Record time in each step of the process and identify each step as value added or not value added
- What is optimal delivery from the customer's point of view
- Do all of this with employees on a white board



Prioritize Value Added Areas

- Use visual standard operating procedures and identifiers - SOPs
- Identify and measure key performance indicators – KPIs
- Review progress toward KPI's regularly at white board meetings
- Make lean systems part of culture



Celebrate
SUCCESS



Six Sigma



Success Stories

- Middle manager and weekly meetings
- Gates
- Machine shop
- Calves



The Last Slide! Questions?

