# Fixing System Risks The Two Keys to Success!

Written by

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**MBA** 



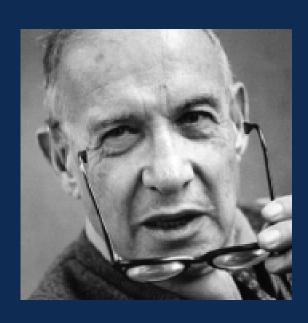


#### **About the Author**



**Don Minges, MBA**, is a fractional CFO based in Charlotte, NC. His expertise is in profitability enhancement, mergers & acquisitions, strategic planning, venture capital, turnarounds and financial analysis. He has experience raising equity for several organizations and has invested equity capital into promising businesses. Don graduated with highest honors from the Fuqua School of Business at Duke University.

## "The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday's logic."

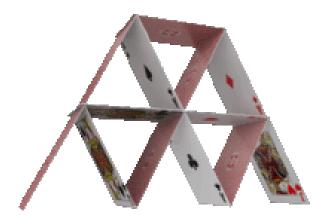


- Peter Drucker (1909 – 2005)



## **Today's Topics**

- ✓ The two mistakes we all make?
- ✓ Why we un**intentionally** make flawed, weak systems?
- ✓ Why we do not build in what is really needed from the start?





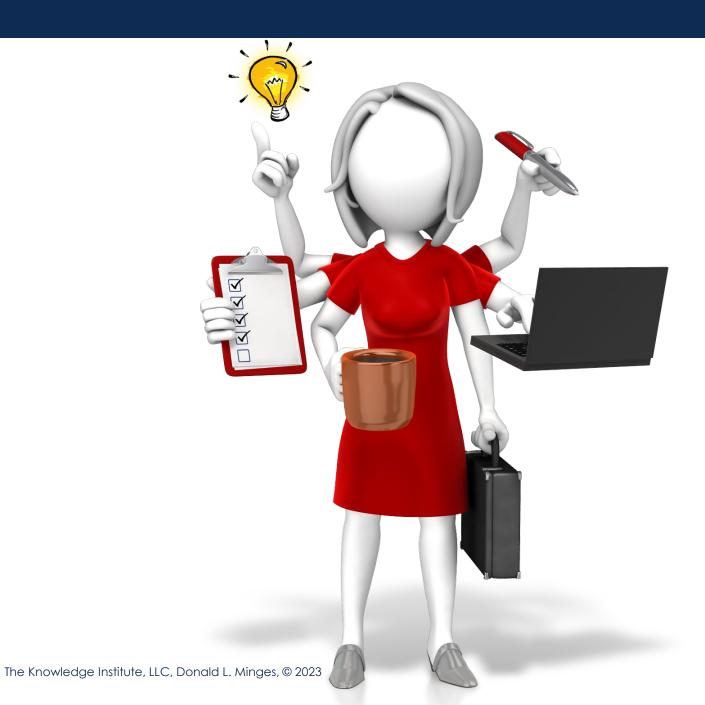
## Case #1 Discussion



Think about some of the professional mistakes, errors, miscalculations or failures you have experienced.

- a) In your opinion, what were the root causes?
- b) What were the commonalities?

















## Some System Failures Are \_\_\_\_\_





## Some System Failures Are \_\_\_\_\_





#### You Decide





## Why are Accounting and Finance Leaders Skilled at Analyzing Broken Systems?

- 1) Want to improve
- 2) Want to learn
- 3) Hate waste
- 4) Don't point fingers











## Two Types of Systems

a) Open loop system; incorporates feedback, learns, evolves, changes and improves.



b) Closed loop system; does not incorporate feedback, "My way or the highway."





## **Open Systems**

Production problem? called in mathematicians, called in several specialist groups, called in biologists who used the scientific method, 449 trials, before success.





#### You Decide

- ✓ Evolution,
- ✓ Natural selection in business,
- ✓ 'Trial and error',
- Crowdfunding and
- ✓ Successful entrepreneurs.
- **→** Experience is an effective teacher.





## **Closed Systems**

## Example:





Other examples?



## Do Not Change?







Polaroid



Oldsmobile.





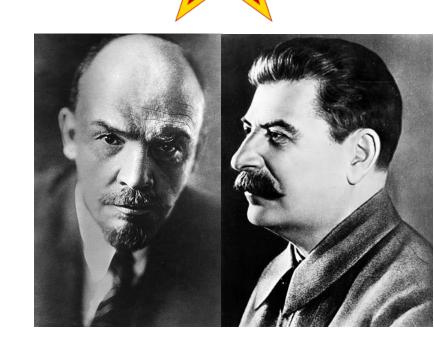


WaMu



Lenin to Stalin, ... to Gorbachev

Why did it fail?



Closed loop systems eventually fail



### Recap

- Open systems
  - + Learn
  - + Grow
  - + Flexibility
  - + Accept change
  - + Adapt
  - Survive
  - + Resilient



#### Case #2

## **Group Discussion**

When we design a system? (For example, selecting a new G/L system.)

- a) Who gives us direction?
- b) What do our customer(s) want?
- c) Do we debate and discuss with our customer(s)? Why, or why not?
- d) Any constraints, limits, rules?
- e) Do we know what is 'success'?



## How Do We Design Systems?

## The four goals;

1)



2)



3)







#### Realistic?

- ? Fast,
- ? Cheap and
- ? Perfect?







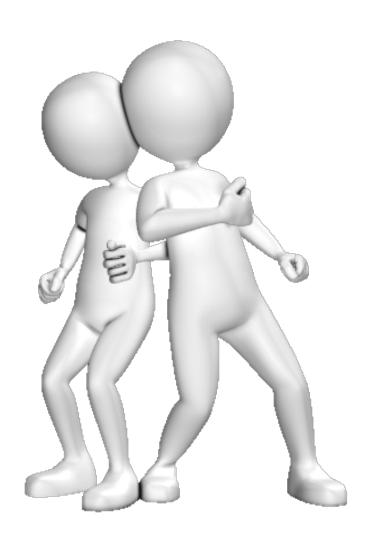
## Recipe for Failure?

- ? Fast,
- ? Cheap and
- ? Perfect!





## **Takeaway**





#### Case #3 (Optional)

#### Our Plan?

- a) Why don't we tell the leader that the plan or expectation(s) is/are unreasonable?
- b) How do we tell the leader, or CEO, that the plan or expectation(s) is/are unreasonable?



## Fast and Cheap?

- SOP
  - Normal and customary
- Meet the specifications
  - Bare minimum
  - "Enough"
- Saves and



Provides safety for us



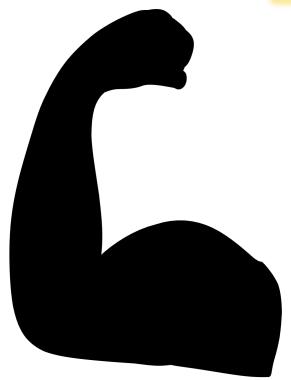




## Mistake #1a - Expectations

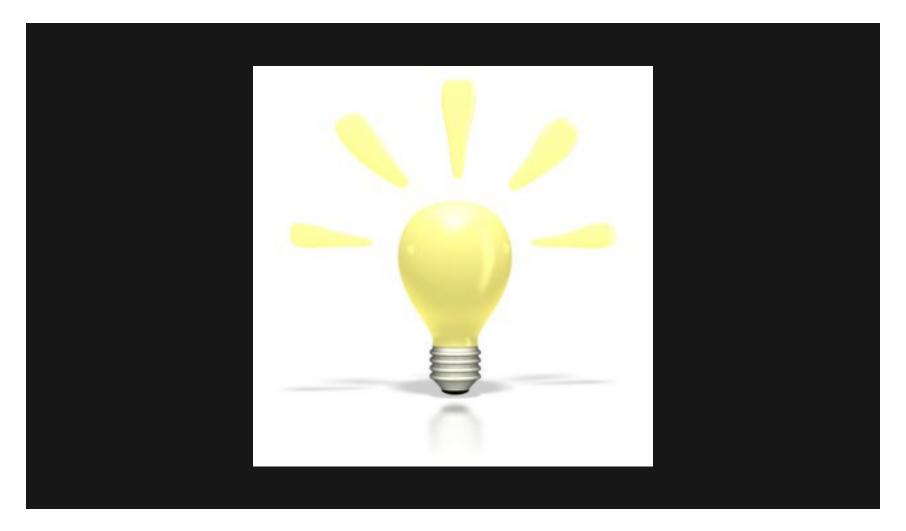
- a) Too optimistic on robustness;
  - Requirements,
  - Assumptions,
  - Reliability,
  - Timing, and
  - Resources.







## Mistake #1a - Examples





## Mistake #1a - Examples







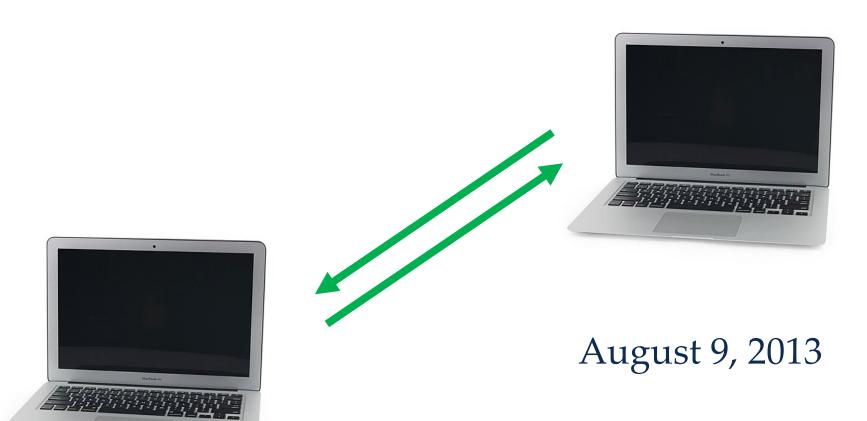




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## Mistake #1a - Example





#### The Fix

#### Consider:

- + The **cost** when the system does not perform as expected?
- + What happens when the system fails?
  - Pecuniary
  - Reputational
  - Emotional
  - Resources
  - Ripple effects?



#### The Fix

- ✓ Do not assume!
- ✓ Search for potential 'issues' now.
- ✓ Longer timeframe.
- ✓ Pre-mortems.





#### The Fix

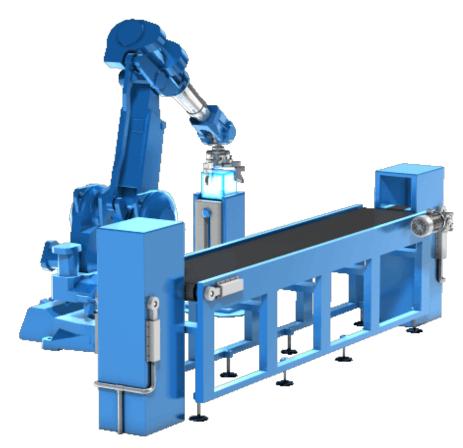
✓ Build in





## The Choice?







#### The Choice?





### The Choice?





## The Choice?





#### The Choice?







## Mistake #1b - Expectations

b) Overly pessimistic on;

- Requirements,
- Assumptions,
- Reliability,
- Timing,
- Resources.





## Mistake #1b - Examples













# Mistake #1b - Examples







### Mistake #1b - Example Outcome

The forecast becomes;

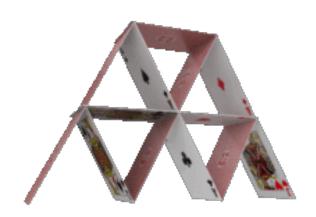
Extraordinarily complicated and elaborate with; 3,041 variables, 134,543 G/L accounts, Three ERP systems, staff of ten (Masters degree required), separate computer systems, etc.



#### The Fix For Mistakes 1a &1b

✓ Better







# The Fix For Mistakes 1a &1b is Better Planning

## Navy SEALs Preparation

- 20% Planning
- 75% "What could go wrong?"
- <u>5%</u> Action 100%



**US Navy SEAL Trident** 

# **Better Planning & Analysis Provides**

Understanding





## 1b Mistakes Are Expensive!

- Over-engineering
  - Medical costs
  - Diminishing returns
    - Cost of 97.5% vs. 99.1%
    - The 'last mile' for fiber
  - Perfection?





#### Mistake #2 - Friction

- n/a
- Where and how?
  - Eliminate or reduce
- Tyranny of the status quo
- Who 'wins' and who 'loses'?
- NIMBY
- Politics











#### Mistake #2 - Friction

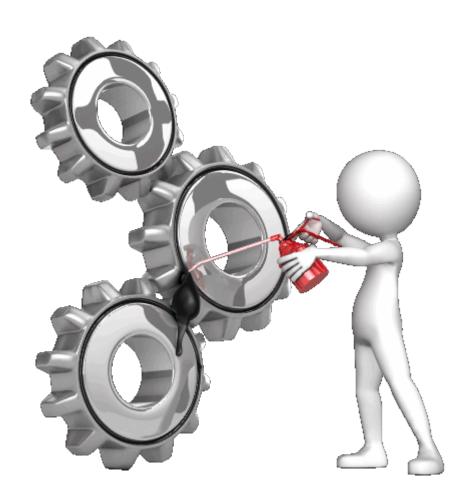
#### Results in

- Over-engineering,
- More complexity,
- Unnecessary costs,
- Additional time,
- Redundant redundancies,
- Seeking perfection.



#### The Fix

✓ Reduce





#### The Fix

- ✓ Proper assessment
- ✓ Proper resources











## Reduce Friction By

- ✓ Make it new
- Incentives
  - Proper and effective
  - Remove disincentives
- Communicate rationale
- ✓ Remove obstacles





## **Another System Risk?**

- "We'll get to that later."
- "We'll fix it next time."
- "Schedule that for the next update."







## Two Keys to Fix System Risk

- 1) Better estimates
  - a) Too optimistic on strengths
  - b) Too pessimistic on weaknesses



- a) Not ignore!
- b) Do not plan for \_\_\_\_
- c) Misunderstand
- d) Underestimate









# **Supply Chain?**







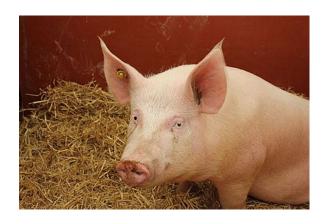






## **Supply Chain**

- 115 days
- Twelve
- Twice
- Six months 2 to 280





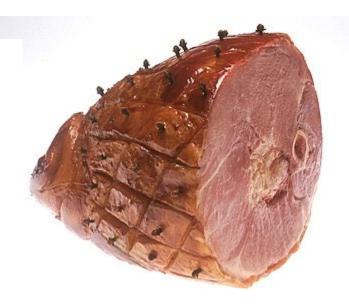


## **Supply Chain**

- 280 lbs. = ready
- Logistics; timing, transportation, etc.
- Production line









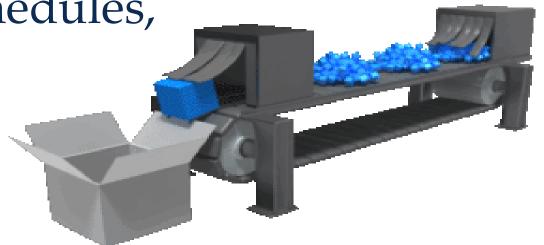
## **Supply Chain**

## Optimized for;

Weight, size, length,

Delivery schedules,

• JIT.





# Supply ChainChasing







# Supply Chain - May 2021





#### The Fix

- ✓ Demand will be 235,524.3454 on \_\_\_\_!
  - Variability?
  - Scenarios?
- ✓ Talk to suppliers and customers
  - Repercussions!
- ✓ Flexibility!
- ✓ Backup systems
  - Plan B, C, D?



# **Supply Chain?**







# Case #4 (Optional) One Supplier?

- a) Why should we have one supplier? Pros?
- b) Why should we have more than one supplier? Pros?



#### The Fix







#### Is There Friction in Our World?





#### **Some Major Stressors (Since 2000)**

- 9/11 (2001)
- SARS (2002-4)
- Iraq War (2003)
- Great Recession (2007-9)
- Swine Flu (2009)
- Arab Spring (2010)
- Japanese Tsunami, Syrian Civil War (2011)
- Shootings in Sandy Hook & Aurora, CO (2012)
- Ebola Epidemic (2013-16)
- Hurricane Harvey (2017)
- Coronavirus (2020)



#### **Practical Solutions**

- ✓ Training
- ✓ Communicate rationale
- ✓ Remove obstacles
- ✓ Planning to gauge the right choice
  - Requires time
- Address friction



1) Proper training







#### Polling Question #5

### **Adequate Training?**

Does your department have all the training that they need?

- a) Yes
- b) Somewhat
- c) No
- d) I don't know



2) Communicate



• Teach, share, train and explain.

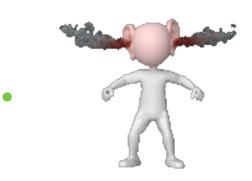




2) Communicate (cont.)



Describe the cost of failure in nonemotional ways







Make a sound business case



- 3) Remove obstacles
  - New, effective incentive plans
    - Positive and negative
    - Financial and psychic
  - Provide proper tools
  - Politics
  - Personalities

Process - not an event







## 4) Plan properly!

- Navy SEALS
  - <mark>20%</mark> Planning
  - 75% "What could go wrong?"
  - 5% Action
- Ready, ready, ready, ..., aim, ...



Ask, "What happened last time?"



### Solutions

- 5) Deal with friction!
  - Understand adversaries
    - Who, where, how?
  - Remove obstacles
    - Physical
    - Provide tools
    - Cleaning
  - Politics
    - Leadership
  - Pre-mortems





### **Inadequate Estimates**





#### The Future?

- ✓ How did we react to the Great Recession?
- ✓ How did we react to the Coronavirus pandemic?
- ✓ Why do we assume the past is an indication of the future?

Why do we refuse to change?



#### The Fix

#### Consider:

- + "What would the **cost** be if the system does not work as expected?"
- + "What happens when the system fails?"
  - Pecuniary
  - Reputational
  - **Emotional**
  - Customers
  - Reliability



Timing, resources and ripple effects?

# 0

#### **Risk Problem?**

Is risk the real problem?

Or is it that we lack the data?





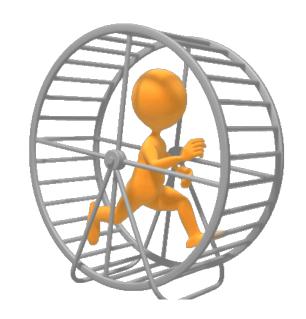
### **Systems**





### Complexity

- Response to change?
- Reduces focus and clarity
  - Devours resources
    - Missed opportunities



Much harder to manage





### Consider

- Repeat the same mistakes?
- Stop doing things that will not be part of the future









### Hope Is NOT a Plan!



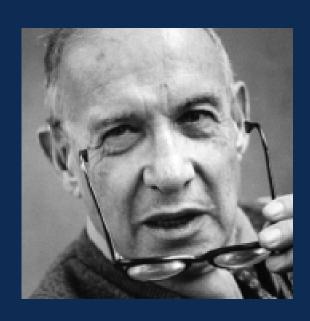


### Summary

- Plan!
- Fully grasp the requirements
- What is the better fitting solution and the best solution?
- Estimates not too pessimistic, not too optimistic

- Plan for changes in scope
  - Adaptable
  - Flexible
- Prepare for friction
- SEALs = 95% planning and 5% action

## "The greatest danger in times of turbulence is not the turbulence; it is to act with yesterday's logic."



- Peter Drucker (1909 – 2005)

#### Thank You!

Please share your thoughts and comments.

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