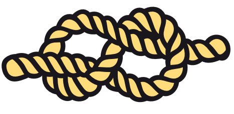
The Tried & True Series: Trusted Models
that Stand the Test of Time

What's your problem?

Match your change techniques to the type of problem you're trying to solve

The World of Cause & Effect

Simple Problems

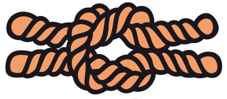


Complicated Problems

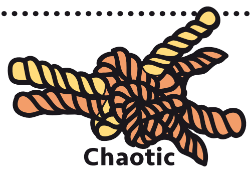
Kinds of problems

Every change is designed to solve a problem. Knowing what kind of problem you need to solve can help you choose the right techniques for your change initiative.

The World of Experimentation & Learning



Complex Problems

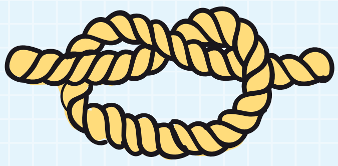


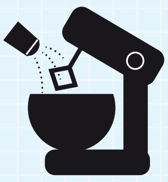
Chaotic Problems

Simple Problems

The World of Cause & Effect

Simple problems have easily seen cause and effect relationships.





Cause

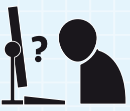
Baker adds too much salt.

Effect

Cake tastes salty.

Cause

Sender didn't cc boss on email.



Effect

Boss doesn't receive email.

What Is Success?

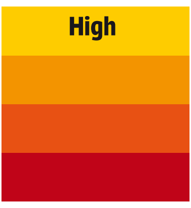
Change is successful when the undesirable effect no longer occurs. To be successful:

- ☑ **Publicize best practices.**
- ☑ **Follow best practices**
- ☑ **Complete action items.**
- ☑ **Make incremental improvements.**

How To Change:

- **Assess Facts**
  The printer is jammed.
- **Categorize Facts**
  When the printer is jammed, it's generally due to a paper feed problem.
- **Apply the Appropriate, Established Best Practice**
  When there's a paper feed problem, clear and reload the paper.

Certainty of success

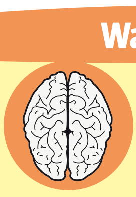


Helpful Questions:

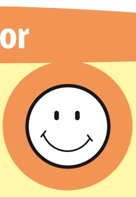
- What's the correct procedure?
- Are we doing things right?
- Can we do more of the same?
- How can we make it a little better?

Watch for

Categorization Errors
Is a paper feed problem causing the jam? Is a part malfunctioning? Or something else?



Rigid Thinking
Paper jams only happen when users make mistakes.



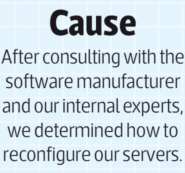
Complacency
Our printer usually works, so why worry about the paper jams?

Making Simple Problems Complicated
The printer jam was caused by the interaction between paper weight and ink.

Complicated Problems

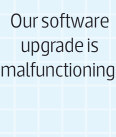
The World of Cause & Effect

Complicated problems have cause and effect relationships that are harder to discern than the relationships in simple problems.



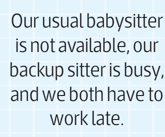
Cause

After consulting with the software manufacturer and our internal experts, we determined how to reconfigure our servers.



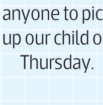
Effect

Our software upgrade is malfunctioning.



Cause

Our usual babysitter is not available, our backup sitter is busy, and we both have to work late.



Effect

We don't have anyone to pick up our child on Thursday.

What Is Success?

Change is successful when habitual undesirable behaviors are replaced with desirable behaviors. To be successful:

☑ Increase the number of people who can diagnose problems by building expertise.

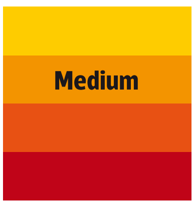
☑ Let the experts recommend a course of action.

☑ Improve processes.

How To Change:

- **Assess Facts** Operators set product specs and the molding machine executes them.
- **Analyze** Operators set parameters correctly, but the machine produces products that aren't to spec.
- **Develop a Solution that Addresses the Root Cause** Upgrade the molding machine.

Certainty of success



Helpful Questions:

- What's the best way to gather and analyze data?
- Who has the necessary expertise?
- What tools will help us?
- What guidelines shall we create?

Watch for

Rigid Thinking by Experts
A lowly operator can't possibly solve the defect problem.

Analysis Paralysis
Let's research for a few more months before we act.

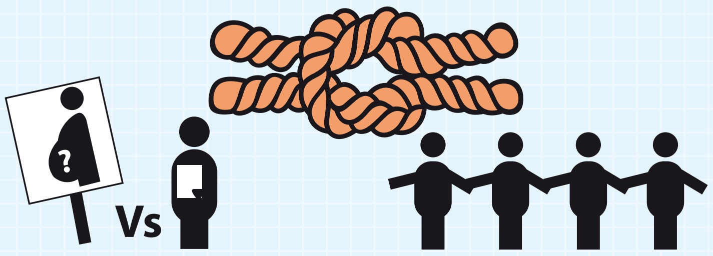
Declaring Success Prematurely
We completed our action plan so we're all done.

Not Invented Here Syndrome
How could the Oslo office know what would be helpful in Beijing?

Complex Problems

The World of Experimentation & Learning

Complex problems don't have easy answers.



Problem

We want to increase use of birth control. We could embark on a public awareness campaign, distribute free birth control, and/or recruit people to endorse birth control, and/or recruit trusted community members to endorse birth control. What will have the greatest impact?

Problem

We need agreement among ten government agencies, seven companies, fourteen tribal nations, and eight environmental groups about how to use the Cuyahoga River. How can we create guidelines that all parties can endorse?

What Is Success?

Change is successful when habitual undesirable behaviors are replaced with desirable behaviors. To achieve desirable behaviors:

☑ Build relationships.

☑ Align people around the goal.

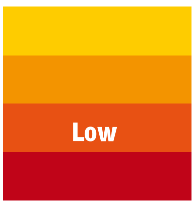
☑ Experiment with different solutions.

☑ Learn from experience and adjust future plans.

How To Change:

- **Probe for Patterns** What conditions allow people to innovate?
- **Sense** People think creatively when encouraged by their manager and when failure isn't punished.
- **Respond** Coach managers to encourage experimentation.

Certainty of success



Helpful Questions:

- How can we make sense of this?
- What is our purpose?
- What is important to us?
- How do we know what is right?

Watch for

Command and Control
Be creative now!

Intolerance for Failure
How could you screw that up?

Declaring Success Prematurely / Over-Controlling
We'll be creative every day between 4 and 5pm.

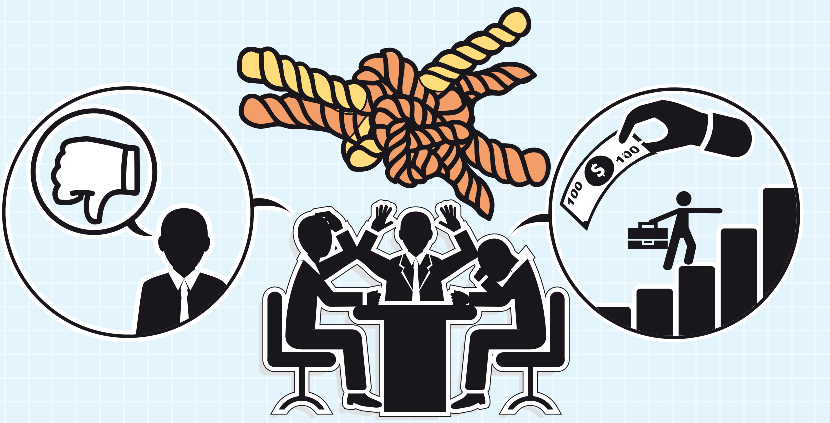
Over-Simplifying
The problem is Accounting since they complain most often. Let's transfer them.

Incorrect Boundaries
Our team is solving the financial problem, so there's no need to involve Accounting.

Chaotic Problems

The World of Experimentation & Learning

Chaotic problems change so rapidly that they exhibit no stable patterns that can be managed.



Situation

We're entering an emerging market. We had one competitor, but six more have appeared. The public loves us, but an analyst report called our concept junk. Acme Inc is about to release technology that could make us obsolete, but we just won $5M in venture capital funding. How can we survive?

What Is Success?

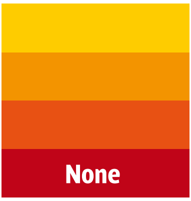
Make a difference. To make a difference:

- ☑ **Respond in the moment.**
- ☑ **Seek guidance from experts.**
- ☑ **Spot patterns and seize opportunities.**
- ☑ **Help others share observations, learn, and take action.**

How To Change:

- **Discern where stability is present and where it is absent** Some people are running towards shelter (stability). Others are lying on the ground where people can step on them (chaos).
- **Work to bring order to chaos** Direct emergency response workers to move injured people to shelter.
- **Seize new opportunities as they arise** Create an ad hoc emergency shelter in a flatbed truck

Certainty of success



Helpful Questions:

- What is happening?
- What seems to work?
- What values are important to me?

Watch for

Ego Trips
I successfully launched an internet business during the dot com boom, so I can lead any kind of startup brilliantly.

Addiction to Chaos
I love the rush of working in chaos, so I'll invent chaos on the job.

Too Many Cooks in the Kitchen
Our founder told us to focus on one area, and our CEO told us to focus on another. What do we do?

Solution Becomes a Problem
I created an online forum, but so many people signed up that the system keeps crashing.

Adapted from:

"A Leader's Framework for Decision Making," Snowden & Boone, 2007. http://bit.ly/1Fmur7K
"Complex Change: An Emerging Field," Waddell, 2014. http://bit.ly/1S8AEep
"Complex Systems, Theory of Constraints, and the Search for Inherent Simplicity," Holt, 2010. http://bit.ly/1Fp9vKd
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Getting to Maybe: How the World is Changed, Westley, Zimmerman, & Patton, 2006.
"Lean Startup in the Enterprise, BigVisible Solutions, 2012. http://bit.ly/1EhS7X6
"Reading Situational Responses," Haskins, 2009. http://bit.ly/1HsKO6z
"Three Types of Change for Change Networks," Waddell, 2010. http://bit.ly/1HsLad7

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