Thinking
through
Problem Solving

by Valarie A. Washington

Introduction

Change hits hard, fast, and often. It shifts our focus, changes our direction and alters our plans. Change leaves us stumped by questions we're not prepared to answer and searching for questions that we never thought to ask. Left on the road, between what we were once sure of and the indecision of which way to go; a problem waits to be solved.

PROBLEMS BEGIN WITH ONE UNANSWERED QUESTION

Hearing the word problem, we automatically think of some catastrophic event requiring kick–off meetings, project teams, and an all–out hunt for the illustrious root cause. Usually, however, problems are much more subtle than that. They move in quietly, riding the coat–tails of change or they drag change along, bringing it to our doorsteps. Problems both follow and precede change. Most problems don't need a grand introduction. All we need to do is to look for them, wait for them, and prepare for them. They are always there, just beneath the surface. And before they ever took a life of their own, even those problems with the deepest roots started simply enough as an unanswered question.

What issues currently have your organization tied up in knots? What was the last problem that you attempted to solve? What was the last problem that you ignored?

This manifesto is intended to dispel the myth that problems need official–sounding names and formally outfitted team leaders wearing colored belts. Problems are not only exposed through formal processes but are revealed in a moment of curiosity. Just around the corner of expectation and at the intersection of *"why; why not; and if not me, who*?" is a chance for every employee to positively influence the course of events.

The following is a problem in the making:

> Friday morning a shipment of boxes was delivered to a distribution warehouse in a small North Carolina town. As had happened on many Friday mornings before, Jason Checkins received the shipment and pointed to the area where the pallets should be placed. As the boxes were stacked, Jason noticed that the boxes all had yellow stickers. He thought that it was odd and wondered to himself, "Why don't these boxes have the blue labels that they normally do?" He thought about it for a moment and moved on. He never mentioned the yellow labels to anyone in the facility until the following Friday, a week later.

PART 1:

What Happens to a Problem Deferred?

Problems often come first in unseen whispers. They are more than headaches to avoid; they are signals of things to come—flashes of lights drawing us to attention and calling us to action. Before we can resolve them, we have to increase our ability to predict them, sense them, see them, and examine them.

When I think of organizational problem solving, it brings to mind a poem written by Langston Hughes, "What Happens to a Dream Deferred?". We sense that something may be wrong, but we stand back. We watch and we wait to see what is going to happen. We watch the market; we see the effects on our competitors and our suppliers. We watch what's happening around us, to our employees, and to our co-workers. We read the headlines and hear the news of

industry fallout and thousands of jobs being lost. Still we fail to consider what those signs might mean for us. Only rarely do we look for opportunities to make a difference.

Pointing his pen at the corporation, today Mr. Hughes might ask:

> What happens to a **problem deferred**?
> Does it dry up
> like a raisin in the sun?
> Or fester like a sore—
> And then run?
> Does it stink like rotten meat?
> Or crust and sugar over—
> like a syrupy sweet?
>
> Maybe it just sags
> like a heavy load.
>
> Or does it explode?

Problems Don't Just Go Away. You don't have six months to form an assessment commit-tee or three months to train all your people. You can't afford to lose time pretending that the problem does not exist, or even one day wondering why someone else has not taken action. It is the job of every person in the company to do what he can, when he can—and hopefully before it is too late.

The problem unfolds:

> Tuesday at about 4:35 p.m., Trisha Calbak received ten calls in a row from customers. They complained that the gumball machines that they ordered had arrived but that the machines were empty. Trisha explained that she would check in with the shipping department to see if she could find out what happened. She thought to herself, "I've never had this many of the same complaints. What's going on?" But, it was five o'clock. The matter would have to wait until tomorrow.

Problems Can Create a Stink. Problems that get pushed aside have a devilish streak. They are demanding and determined—they want to be noticed. Those simple problems that are pushed aside join forces and take root wherever they can. Deferred, they suck the life out of people, drain resources, anger customers, and delight competitors.

Here's what can happen:

> Wednesday morning, five of Trisha's co-workers received a similar succession of com-plaints. They each informed the customers to simply return the items and that they would have a new product shipped out immediately. By Wednesday afternoon, the customer service switchboard lit up like Times Square on New Year's Eve. The overflow of calls and the long hold times angered so many customers that they began to call the front office. Gayle Planfore, the customer service manager, thought to herself, "Why have the hold times spiked so high?" Tomorrow, she thought, "I'll have to get a team together to find out what's going on."

Problems Don't Just Dry Up. Minor annoyances may not be causing great pain today. But, they will not shrivel up while you move on to work on things that are more comfortable or more familiar. As the days go by, a situation that may have offered many workable solutions may harden considerably.

Note the result of not addressing the problem:

> Late on Wednesday, the television network department began receiving customer complaints. Their shipping department was overwhelmed by the number of returned packages. Packages were coming in faster than they new packages could be sent out. Lyndie Uttohh, president of national sales department, was pulled right out of the sales team's celebration. It was an urgent call from the network; they were advised that they were now in gross breach of their contract to fulfill customer orders.

Problems Fester and Then They Run. Jumping to solutions and symptom–chasing creates a lot of busy work, and usually delivers little in return. Ever–changing conditions and poor response time create more deviation; create more questions that people have no answer for and no means for finding. Everyone's running, but they are all headed in different directions.

Look at what happened next:

> By early Thursday morning, the company was all a buzz. The number of customer complaints had reached 5,000. So, the customer service manager set up a special project team to identify a more efficient way to handle the calls. The shipping depart-ment called in more employees to work the receiving side of the house. The accounts payable department received an unexpected invoice from the network shopping chan-nel that they promptly escalated to the CFO for review.

Problems Don't Get Lighter the More You Pass Them Around. Problems gather a follow-ing. They keep growing in size, intensity, and complexity until everyone is stretched to his limits, chaos ensues, customers leave, employees quit, or the system breaks down.

This is the result:

> By the end of the day, phones were ringing off the hook. Shipping, distribution, customer service, operations, sales, and the shopping network were all pointing fingers at each other. Someone had to be at fault and everyone was looking for someone to blame. The customers were waiting to be served.

Problems Don't Go Down Easier With a Sugar Coating. Hurrying through a problem by coming up with clever, convenient answers can be more dangerous than deferring it. Finding creative ways to craft a story about the situation rather than spending the energy to develop straightforward ways to deal with the truth cheats you of the benefits that can be gained by learning your way through the process.

Some problems just cannot be sugar-coated:

> Late Thursday morning, John Fixits, national director of sales and promotions, was called in to an emergency meeting. He was told that the company needed to prepare an immediate response concerning more than $225,000 in chargebacks from the shopping channel.

Problems Don't Just Explode! Companies don't just suddenly go out of business. And employees don't lose their jobs because something just popped up overnight. When you defer a problem, you are simply postponing the inevitable and at the same time relinquishing the very control that you will need to stop it.

The best way to escape from a problem is to solve it. — Brendan Francis

Every day, every person in an organization has at least one problem that he cannot solve— a problem that he sets aside, a problem that he ignores, a problem that he watches unfold. Imagine that every problem left unchecked costs your company only $1.00. What's the cost of one unresolved problem in an organization? In a 5,000 person organization ($1 x 5,000/day = $5,000), in one year, those unresolved problems result in a **$1.3 million dollar loss** for the company.

I just can't seem to think of *any* problem that cost only $1.00?

PART 2

The Problem of the Missing Gumballs

Last year I was sitting in the Raleigh/Durham airport where I met John Fixit. He was the district sales manager for an emerging company that sold novelty gumball machines with gourmet flavored gumballs. As business travelers often do, he began telling me about the great success his company had selling 80,000 units of their newest product on one of the home shopping channels. Just when I was about to congratulate him on 80,000 units sold and the $2 million dollars in sales they made in two hours, he stopped me in mid-sentence. His sales team's success had been short lived. He told me that when he returned to the office he was greeted by startling news. 5,000 of the new customers received gumball machines, but the gumballs were missing.

John was in North Carolina meeting with the distributor to find out what went wrong. As I came to understand it, the gum ball machines come into the facility empty, with yellow-tagged boxes. The distribution center was to fill the machines and repackage them affixing

blue labels, designating that they were ready to be shipped to customers or in this case to the shopping network. Rather than going to production to be filled, at least 10,000 had been shipped out empty! The shopping channel charged the company for every returned product, and then there was the additional cost of resending the gumball machines to customers.

He continued but apologized for boring me with the details. I wasn't bored at all. I was fascinated. I explained that I work as a performance consultant. My job is to help companies better prepare people in organizations to identify and respond to problems. John's story was fairly typical of those that I hear from clients.

He continued. John was overwhelmed by the fact that no one took action sooner. He couldn't believe that it took 5,000 phone calls to the customer service department before the manager became alarmed. Then he said to me with a smile, "Hold on to your seat for this one. I met with the distribution management team. They took me for a walk through of the facility and introduced me to a young guy by the name of Jason who explained how boxes come into the facility. In mid-sentence Jason told me that a funny thing happened the Friday before. He didn't understand why the empty boxes had been placed on the outgoing side of the warehouse." Jason actually said to John, "I couldn't imagine that anyone wanted to purchase empty machines with the balls missing, but I figured if it was a mistake someone would have corrected it before they sent the trucks out."

Ironically, I'd been in North Carolina speaking to a group about the challenges of organizational problem solving. I explained that there were ten reasons that people fail to take action.

10 REASONS WHY PROBLEMS GO DEFERRED

1 People deny that the problem is significant.

2 People believe that the problem is someone else's to solve.

3 People spend more time working on the symptoms, creating unnecessary tasks, or fixing the wrong problem.

4 People don't recognize that problem solving is the critical function of every job.

5 No one truly understands the link between people, problems, performance, profits, and paychecks.

6 People lack the confidence in their ability to solve problems.

7 People do not feel vested in the process or the outcomes. They don't know how to measure their impact.

8 People lack the skills, tools, and access to resources that are needed.

9 People jump to solutions that have worked in the past and misuse time and resources.

10 Organizations put their confidence in expensive processes for problem solving and invest less in the people who must learn to use them.

John told me that many of the departments had recently been trained in a brand-named problem-solving process. He said, "It looks like you can add the price of training to this fiasco. It certainly didn't seem to help."

Like other companies the focus of problem solving is on the process and forms. That is only one side of the problem-solving equation. I explained that my focus was on the people who

solve problems and helping them to change how they think about problems. That is were the real opportunity lies for organizations.

PART 3

The Two Sides of Problem Solving

Problem solving is both an operational and cognitive process: the limitations of one leads to more problems in the other. The failure of organizational problem solving can be attributed to the heavy emphasis on the operational side of the process and little on the reasoning or cognitive process needed to drive it. Organizations follow the "*how to*" guide for problem solving. However, there needs to be more focus on how people thought their way into the problems that now need to be solved. Without knowing how people think, learn, and con-struct the knowledge they use to identify problems, pick out the solutions, or evaluate suc-cess, you can never rely on the outcome.

Following prescribed steps from problem identification to resolution without improving the quality and accuracy of the information that supports it will leave you unsatisfied and the results unsatisfactory. Choosing teams, assigning roles, and checking tasks off of a "*to do"* list means nothing if in turn they set off a chain reaction of unintended consequences.

THE OPERATIONAL SIDE OF PROBLEM SOLVING

Linear problem-solving models are those 5- to 8-step processes used to resolve problems that have grown too large to ignore. In some cases, companies buy into and shell out a lot of money for the most popular problem-solving process with a silver bullet name. BPR, Lean,

BPI, Six Sigma are all programmed instructions for moving from one undesirable state to a more preferred state—from identification to implementation and evaluation. They all begin with the defect, after your best thinking has allowed the problem to take root.

There are two factors that limit the effectiveness of operational problem solving:

Unclear Goals make it difficult for anyone to know what actions will produce the best results. In the absence of goals, people improvise. In the face of the unexpected, people find safety in the rules of the past. Routines and rote responses replace critical thinking, judgment, real problem solving, and good decision making. With no goals, the process is just a series of steps with no measurable end. Too often, managing the process becomes more important and replaces the organizational goals it was designed to achieve.

The Life Cycle of Problems follows the speed of change. Change is a phenomenon of time: the rate at which something new appears and the time elapsed before it is realized. Problems don't stand still while you try to solve them. Valuable time is lost in the backward search for the one right answer thought to be tangled up in the root cause. The problem continues to grow forward, gathering speed in inverse proportion to the ability to solve it. The nature and complexity of problems may change, but they all follow a predictable pattern from origination to disposition.

THE THINKING SIDE OF PROBLEM SOLVING

No problem can stand the assault of sustained thinking. —Voltaire

The cognitive process requires critical thinking or the ability to analyze, interpret, and evaluate information in a purposefully-efficient way. It includes the ability to respond to situations by distinguishing fact from opinion, feelings from judgments, objective from subjective, and inference from reasoning. It is a systematic approach to uncover issues, discover new relationships, and transfer learning to new situations as they arise.

There are two challenges on the thinking side of problem solving:

> **Einstellung Effect** is the mechanized, biased approach to problem solving that blocks one's ability to see alternative solutions (Luchins 1959). Over time, familiarity with a given task (e.g., processing a claim, managing a project) causes the thinking process to become habitual. Then, people become reluctant to investigate and more likely to reject alternatives. They rely on memory and recall that which can be applied to specific situations. But it severely limits the ability to transfer the skills when new occasions demand it.

> **Dispositional Effect** refers to the sensitivity that people have to an occasion, their inclination and ability to address it (Tishman 1993). There is a gap between what people have the ability to do and their willingness to do it. There is a gap between the awareness of opportunities and the opportunities that we choose to act on. Before any gains of any kind can be made, whether by operation or thinking, there must first be an acknowledgement that something needs attention.

PART 4

The Ladder of Problem Solving

We cannot solve our problems with the same level of thinking that we used when we created them.

—Albert Einstein

The Ladder of Problem Solving makes evident the dynamic nature of problems and the pro–gressive thinking needed to plan ahead of them. Like the challenges we face on a daily basis, this model does not prescribe a linear process to follow. It bridges the gap between thought, skill, behavior, and process. This model neatly weaves together several mini–processes that more closely mirror our real–time experience with them. If you are looking for a way out of a situation or way in to capture an opportunity, you'll find many entry and exit points and the instructions to move between them. Each feeds on the other and in turn provides new learn–ing to improve both processes and the results that follow.

The Ladder of Problem Solving outlines five stages that, once mastered, help to develop personal accountability, collaborative problem solving, and growth. (See **Appendix**.)

1. THE DETECTION STAGE.

The goal is to detect more problems at the point of origin.

This is the first point of engagement in the problem–solving process. Detecting problems can begin in one moment of wonder, with a flash of doubt, or at any point of indecision. It is the level of sensitivity one has for noticing slight shifts in occurrences, changes in routines, unusual or unexplainable events. It is intuition.

Jason Checkins noticed the mislabeled boxes. 10,000 orders were shipped out incorrectly.

Describe an issue or problem that you've recognized in your department.

2. THE INCLINATION STAGE.

The goal is to reduce barriers and increase the desire and willingness to act as problems emerge.

In everyone there is an innate desire to make a difference, to move past acceptance, and to affect change. While some jump in for fear of reprisal, others for the sake of honor, still others only step up to be noticed. At a minimum, there must be a willingness to try. Whatever it is that hooks you from the start is difficult to release until the stirring has been satisfied. But because of mixed signals, unclear goals, or unnecessary barriers, people are less likely to take action.

Trisha Calbak decided the problem could wait another day. 5,000 more customers called to complain.

What were your first thoughts when you noticed that there was a problem?

3. THE CAPABILITY STAGE.

The goal is to increase the ability of everyone in the organizations to solve more problems before they grow out of control.

The ability to search for new answers, opportunities, and options expands the span of control. It is the confidence to act on new problems as they arise. When facing new situations, there is a tendency to screen out, reject, and rely only on previous learning. That selective filtering diminishes the ability to detect shifts soon enough and the variations between them to be effective.

The customer service manager, Gayle Planfore, created an inter-departmental team to reduce call hold-times. She never asked why the customers were calling.

What actions did you take?

4. THE INQUIRY STAGE.

The goal is to encourage skilled, purposeful questioning.

Questions are used to learn more, uncover hidden paths, and reveal the best options. Inquiry is needed to isolate the most important issues, separate opinion from fact, and connect previous experiences to new ones. Too often there is a tendency to ask low level questions of confirmation and not enough high level questions for exploration. Too often questions are asked to prove what is rather than finding out what is not and why.

Not one person in the company dug beneath the surface. Well, not until it was too late.

What questions did you ask yourself? What did you ask others?

5. THE SKILLED-RESPONSE STAGE.

The goal is to turn right thinking into goal-directed actions that speed the effective disposition of problems.

It refers to situation recognition, focus, and accurate performance without prompting or hesitation. The focus is on goal formation and devising a manner for tracking and measuring output. To get there requires sorting, analyzing, and synthesis of all information received. Resist the tendency to select the most obvious but incorrect solution to the problem. The failure to consider probabilities and consequences before taking action produces alternative pathways with no consideration for costs or trade-offs, to jump to solutions without thought of how they will impact the goals. Often people get trapped in the tasks and take their eye off the goal.

The goals of the sales team were to gain exposure, new customers, and sell 75,000 products. They beat that goal and raised $2 million dollars in the process. The proceeding actions of every other department eroded that gain. They were not focused on the same goals; they were focused on simply completing tasks one at a time.

Is everyone in your organization clear about the goals? What goal did you set before approaching the problem? Were your actions in line with the overall goals?

6. THE DIRECTED RESPONSE STAGE.

The goal is to solve problems in a way that produces the fewest unintended consequences and creates the highest rate of return.

It is important that all resources, time, and effort are use to produce value-added results. Directed results are the evidence of sound judgment and reasoned decision making. They

require collaboration and effective communication to influence outcomes and negotiate obstacles in real time. Directed results include selecting the paths, the options, and the alternates with the highest probability of success. It means weighing the possible gains against the projected costs.

It's not what you make, it is what you keep that matters.

What will the result of your efforts be? What will the organization gain? How much can you afford to lose?

PART 5

In the End

Everything that we do in life is problem solving, but we can't solve problems that we can't see. There is no level of problem-solving skill that can unravel the mysteries that the mind can't first conceive. When we learn, we have the ability to create options where few seem apparent. When consequences block the way, we can create new paths. We can choose more wisely and reason more effectively. We can perform on demand and shift gears at will. We can make better decisions faster. We can see around obstacles and head off disasters. It is important that we think our way through the most challenging situations, if we expect to turn bad situations on their heads. Continuous learning is the only way that we can beat change at its game.

Ah, mastery … what a profoundly satisfying feeling when one finally gets on top of a new set of skills … and then sees the light under the new door those skills can open, even as another door is closing.

— Gail Sheehy

Thinking and learning through problem solving is the only way to become better at sensing problems, predicting them, and examining them. That is the first step. It is that higher–order thinking that gives power to the operational processes we use for isolating, naming, and disposing of them.

The link between the two cannot be undone.

Appendix

The Ladder of Problem Solving outlines five stages that, once mastered, help to develop personal accountability, collaborative problem solving, and growth.
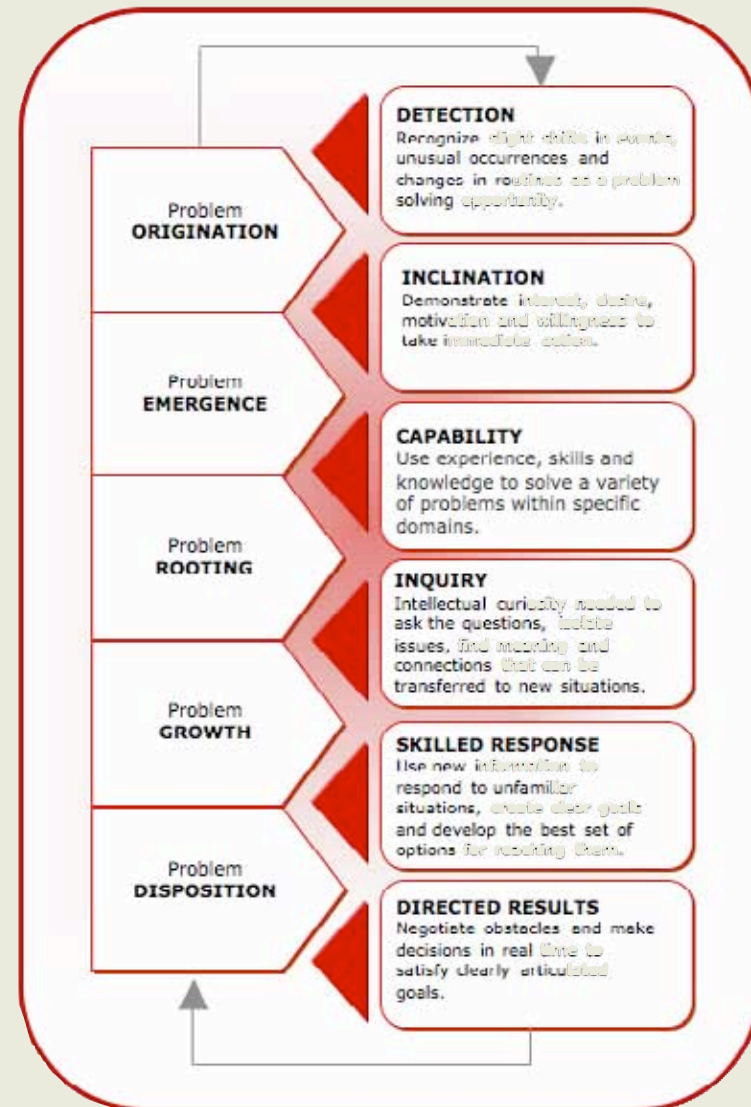
info

ABOUT THE AUTHOR

Valarie A. Washington is a sought-after knowledge broker; passionate about learning and improving performance in organizations. She has nearly 15 years of experience managing and driving corporate, professional, and personal change. As CEO of Think 6 Results, Valarie has worked with organizations in a variety of industries, producing more than 75 custom courses to coach managers, executives, and over 50,000 employees. She has conducted management training and personal development courses in the U.S. and abroad. This writer, presenter, and executive coach is on a mission to get every em-ployee and organization focused on and thinking about the SIX business driving goals that she calls The Business 6™.

Website URL: http://think6results.com

DOWNLOAD THIS

This manifesto is available from http://changethis.com/21.ThinkingThrough

SEND THIS

Click here to pass along a copy of this manifesto to others.
http://changethis.com/21.ThinkingThrough/email

SUBSCRIBE

Learn about our latest manifestos as soon as they are available. Sign up for our free newsletter and be notified by email. http://changethis.com/subscribe

info

WHAT YOU CAN DO

You are given the unlimited right to print this manifesto and to distribute it electronically (via email, your website, or any other means). You can print out pages and put them in your favorite coffee shop's windows or your doctor's waiting room. You can transcribe the author's words onto the sidewalk, or you can hand out copies to everyone you meet. You may not alter this manifesto in any way, though, and you may not charge for it.

NAVIGATION & USER TIPS

Move around this manifesto by using your keyboard arrow keys or click on the right arrow (→) for the next page and the left arrow (←). To send this by email, just click on   .

HAVING PROBLEMS SAVING TO DISK?

First, make sure you have the latest version of Acrobat Reader 6 which you can download from http://www.adobe.com/products/acrobat/readstep2.html. If problems persist, it may be due to your Acrobat Reader settings. To correct the problem (for Windows), a reader, J. Hansen, suggests going to your Acrobat Reader Preferences > Options > Web browser Options. Check the "Display PDF in Browser" option. Then click on Save to Disk   .

KEYBOARD SHORTCUTS	PC	MAC
Zoom in (Larger view)	[CTL] [+]	[⌘] [+]
Zoom out	[CTL] [−]	[⌘] [−]
Full screen/Normal screen view	[CTL] [L]	[⌘] [L]

info

BORN ON DATE

This document was created on 24 February 2006 and is based on the best information available at that time. To check for updates, please click here to visit http://changethis.com/21.ThinkingThrough

COPYRIGHT INFO

Cover image from http://sxc.hu

ABOUT CHANGETHIS

ChangeThis is a vehicle, not a publisher. We make it easy for big ideas to spread. While the authors we work with are responsible for their own work, they don't necessarily agree with everything available in ChangeThis format. But you knew that already.

ChangeThis is supported by the love and tender care of 800-CEO-READ. Visit us at main site www.800ceoread.com or at our daily blog blog.800ceoread.com.