CHAPTER 3

COMPARISON OF PROBLEM-SOLVING METHODS

We fail more often because we solve the wrong problem than because we get the wrong solution to the right problem.[1]

Russell Ackoff

INTRODUCTION

When you begin working in a healthcare organization, you may learn that they "practice Lean," or they follow principles of "Design Thinking," or they mention some other model of how they approach and solve problems as an organization. This chapter describes how the Problem-Solving Method compares to these two methods. Regardless of the organizational problem-solving method used in the organization, your knowledge of using the Problem-Solving Method as your thought process will be complementary to, and not competing with, these other methods. As described in this chapter, the two aspects of the Problem-Solving Method that will be most useful to you regardless of the problem-solving method used in the organization are how to define the problem and engaging with stakeholders.

This chapter may be more meaningful to you after you have actually practiced applying the steps of the Problem-Solving Method. Thus, you may want to skip to Parts II, III, and IV of the text, and come back to this chapter after you have gained more familiarity in using the Problem-Solving Method.

STRENGTHS OF THE PROBLEM-SOLVING METHOD

There are several problem-solving methodologies widely used in healthcare today. Examples include Lean, the Institute for Healthcare Improvement approach to Quality Improvement (IHI-QI), and Design Thinking. In addition, if you conduct a web search on the term "problem-solving method" or "problem-solving process," an endless number of results are returned—"seven steps for effective problem-solving," "the four basic steps of the problem-solving process," and any number of steps for problem-solving. Regardless of the method proposed, all have the following generic steps in common: define the problem, study the problem, and act on the problem.

The two primary strengths of the Problem-Solving Method presented in this text lie in: (a) how to define the problem, and (b) engaging with and considering

stakeholders. As discussed in Chapter 1, "The Problem Is Not Always What It Seems," organizational problems are rarely unidimensional. They comprise several interrelated issues that all need to be resolved to successfully solve the problem. In defining the problem, you need to identify all of these interrelated issues. Otherwise you risk solving the wrong problem.

The approach to defining the problem in the Problem-Solving Method is elegant in its comprehensiveness and simplicity. It does not require extensive training in statistics or any complicated methodologies. It does take practice and discipline to learn so that it becomes the way you automatically think when solving problems. The core elements of defining the problem are:

1. Actively listen to a multitude of stakeholders with an open mind to document their view of the situation and review available relevant data. As you listen to the stakeholders, you listen for the difficulties—the data, facts, and opinions that indicate there is a difference, or gap, between what the situation is, and what it ought to be. Do not make any assumptions about root causes or alternative solutions in this step. If you are working with a written case for a class or a case competition, you identify the difficulties by highlighting them as you read through the case. Look for the sentences or phrases that indicate there is a gap between what is and what ought to be. Be clear in sorting out facts from opinions. Opinions need to state whose opinion it is to make it a fact and to ensure you collect all opinions. Make a list of the difficulties.

2. Go through the difficulties one by one and group them into buckets based on similarity. Although a difficulty can be placed in more than one bucket, try to keep the buckets of difficulties as mutually exclusive from each other as possible. Review the difficulties in each of the buckets and assign a name to the bucket based on the theme of its difficulties. This is a problem area. You should end up with no more than a handful of problem areas.

3. For each problem area, develop the key question that, if answered, would eliminate or ameliorate its difficulties. The question generally begins with "how can" or "how should," and it articulates the goal to be achieved in that problem area and the constraints that are preventing that goal from being achieved. These questions are called your issue statements.

4. Synthesize the issue statements into an overall problem statement. The problem statement is written in the same question format as the issue statements. It contains all of the interrelated aspects of the problem. You now have a problem definition—your problem statement.

What makes the steps difficult to implement in practice is related primarily to having the "never assume" mindset. This is what takes discipline and hard work. When faced with a problem, we implicitly start making assumptions about the problem, its root causes, and its solutions without realizing it. This is what is hard to change—the discipline of

our thought process to never assume. In his book called *Thinking Fast and Slow*, Daniel Kahneman, the Nobel prize winning economist, describes jumping to solutions while making implicit assumptions, and drawing incorrect inferences because of this, as fast thinking.[2] The advantage of fast thinking is it reduces the cognitive load of solving problems. The drawback is that it will lead to solving the wrong problem, resulting in suboptimal solutions that don't solve the problem.

The "never assume" mindset requires that you stop making assumptions when defining the problem. You need to step outside of yourself as if you are an external, unbiased consultant viewing the situation in a fair, impartial manner. You set aside your biases and your preferences, and you always look in the mirror and ask yourself if you are part of the problem. And as you listen and watch for difficulties, you sort out facts from opinions. This deliberate approach is what Kahneman calls slow thinking. It is hard to accomplish because it increases the cognitive workload required to solve problems as you explicitly engage in information gathering and analysis. But, we posit that by practicing the core elements of problem definition of the Problem-Solving Method, you learn how to think slow and fast simultaneously. The "never assume" thought process becomes automatic. Like any other skill, it takes practice.

The other aspect of this approach to defining the problem that takes practice is writing the issue statements for the problem areas. Crafting issue statements is a higher order cognitive skill, as it requires synthesis and integration. Writing issue statements requires that you review the difficulties to discern the key issue in each problem area that needs resolution. If that key issue written in the form of a question is answered, then the difficulties in the problem area would either disappear or be alleviated. The set of issue statements define the interrelated components that comprise the problem.

With experience, you will rarely write out the issue statements or the problem statement. But, you will have inculcated in your brain the discipline of framing action-oriented "how can we" questions across the problem areas that invite action and do not have solutions embedded in them. When working with a team in an organization to solve a problem, the team should work collaboratively to ensure that all come to the same definition of the problem. Develop the problem areas, and come to an agreement on the key issue for each problem area. The issue statements can then be synthesized and integrated into the overall problem statement.

The other key strength of the Problem-Solving Method—engaging stakeholders—is useful not just for interacting with them to identify the difficulties in the situation. Through doing a thorough stakeholder analysis, you understand the situation from the multitude of points of view that exist in the organization. This understanding helps you develop a strategy for maximizing the probability that your final set of recommendations will be accepted and implemented.

In some cases, acceptance of the recommendations requires a formal vote of a decision-making body in the organization. In other cases, it requires consensus, but not a formal vote. Regardless, you need to develop a deliberate strategy for how you will get the "deciders" to say yes. But, it's more than focusing on just the stakeholders who are the "deciders." You need to ensure that any stakeholders who will be affected by the

recommendations, and any who will be responsible for implementing the recommendations, are also on board. Thus, throughout the entire problem-solving process, you need to continuously keep the stakeholders' views in mind. For some, it means keeping them apprised of your work as you conduct your research and develop findings. For others, it means thinking through how they might react to your recommendations, and working through any opposition that may arise. By the time you are making your final presentation of your work and your recommended course of action, there should be no surprises. Your audience should not be surprised about what they are hearing from you, and you should not be surprised by unanticipated pushback or objections from them. Know your stakeholders.

In the remainder of this chapter, we compare and contrast the Problem-Solving Method in this field manual to Lean and Design Thinking, two of the most widely used methodologies in healthcare organizations.

LEAN

■ OVERVIEW OF LEAN

The Lean problem-solving methodology grew out of the auto manufacturing management philosophies and practices of continuous improvement at Toyota, called the Toyota Production System.[3] The mindset of Lean is to drive waste out of the organization's processes. It requires: (a) defining what is meant by value in a process; (b) engaging in value stream mapping of processes to eliminate non-value added steps; (c) striving for uniform continuous process flow; (d) "pulling" demand through the process; and (e) engaging in continuous improvement to develop and sustain incremental improvements in the process.[4]

Thus, Lean is a methodology designed to study processes in a system with a goal of incremental improvement to make them better. Lean relies on a variety of tools of quality in its repertoire of process improvement; for example, brainstorming, Pareto analysis, cause/effect diagrams (often called fishbone diagrams), 5 Whys root cause analysis, force field analysis, and A3 Problem-Solving Story visualization.[5]

Figure 3.1 shows the typical components of the A3 Problem-Solving Story visualization used in Lean. The A3 has four steps that are in the Plan phase, including: (a) documenting the background and context of the problem; (b) describing the current situation, in which the problem is stated and the process is mapped; (c) setting goals and targets; and (d) engaging in 5 Whys root cause analysis to identify the real problem. An additional three steps are in the Do, Check, Act phase, including: (a) identifying possible solutions; (b) implementing the actions and assigning accountability for implementation; and (c) monitoring results.

The problem-solving as described by the A3 is focused on processes internal to the organization. This impacts the structure of the problem statement. In Lean, the problem statement format is to state a fact that focuses on the symptom of what is wrong in the process under study (e.g., the patient is late to appointments). And, although the

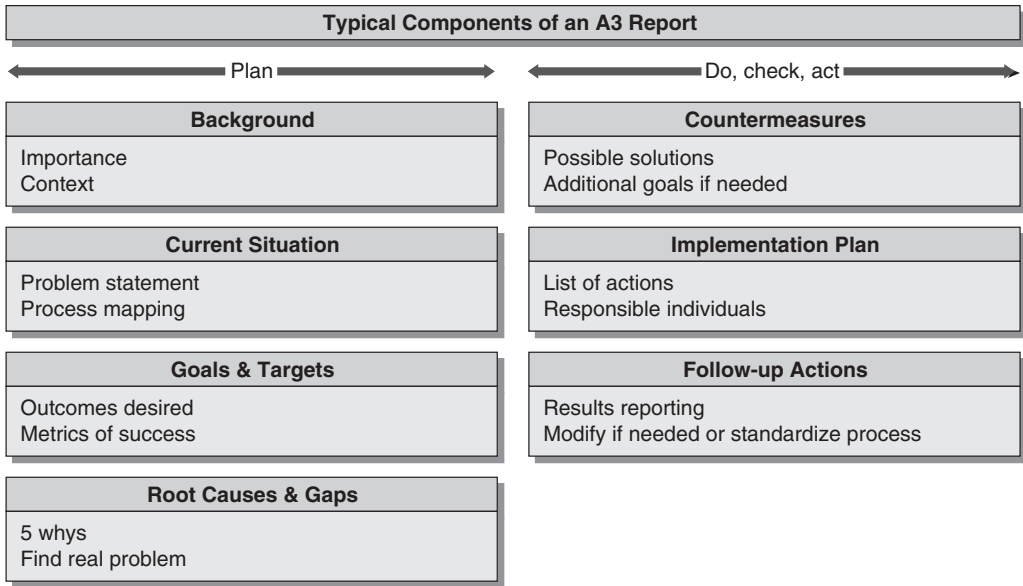| Typical Components of an A3 Report	
◄═══════ Plan ═══════►	◄═══════ Do, check, act ═══════►
Background	**Countermeasures**
Importance Context	Possible solutions Additional goals if needed
Current Situation	**Implementation Plan**
Problem statement Process mapping	List of actions Responsible individuals
Goals & Targets	**Follow-up Actions**
Outcomes desired Metrics of success	Results reporting Modify if needed or standardize process
Root Causes & Gaps	
5 whys Find real problem	

FIGURE 3.1 Typical components of a Lean A3 report.

problem statement should not assign a root cause or blame and should not include a solution, it is to be limited to one problem.[6]

Lean methods require a Lean culture in which staff learn and internalize three key elements of Lean: (a) standard work processes; (b) user-friendly processes; and (c) unobstructed throughput in the process.[7] Staff engagement in Lean often focuses on participation in Kaizen events. During these events, representative staff who work in the process help describe the current process and design an improved process that eliminates non-value–added activities.

In summary, Lean is a problem-solving methodology tailored for incremental change in processes. The value-stream map of the process is used to identify non-value–added steps in the process, from the viewpoint of the customer. The goal is to have continuous process flow or throughput. Staff involvement occurs in dedicated problem-solving events, called Kaizen events, to engage in process mapping and process redesign. Finally, it relies on a variety of analytic tools of quality improvement.

■ COMPARISON OF LEAN AND THE PROBLEM-SOLVING METHOD

As a problem-solving methodology, Lean shares similar terminology and steps with the Problem-Solving Method. This is to be expected, as they are both problem-solving approaches. But there are differences between Lean and the Problem-Solving Method.

First is the purpose of the method. The Lean methodology focuses on internal processes for incremental improvement. However, there are many problems in organizations that are not process problems. The Problem-Solving Method is a more general approach to problem-solving that is agnostic as to problem type. It can be thought of

as a "reasoning processor" for organizational problem-solving. In using the Problem-Solving Method, an organization may identify a problem area that has a goal of process improvement. Then the Lean methodology would be the appropriate approach to apply specifically to that problem area as its focus is to streamline organizational processes.

Second, the mindset of Lean focuses on driving waste out of processes. Thus, the problem statement is narrowly focused on one problem. Because Lean is focused on studying processes for incremental improvement, this requirement for a narrow problem definition makes sense. This means, however, that the problem statement in Lean "makes the problem smaller." The problem statement in Lean would be at the level of a difficulty in the Problem-Solving Method—one of many facts that indicate there is a difference between what is and what ought to be.

This is in contrast to the mindset of the Problem-Solving Method, which is designed to encourage you to listen and watch for difficulties, both internal and external to the organization. Internally, there are many types of problems beyond process problems. Externally, you need to pay attention to the environment to be able to get in front of or respond to changes in your market. The Problem-Solving Method's approach to formulate the problem statement is to recognize that many organizational problems are interrelated "messes" of difficulties. The challenge in solving messy problems is figuring out how to chunk the mess up into manageable pieces—problem areas—that are as independent of each other as possible. Then, the issue statements identify the key goal-oriented questions that invite action, and that need to be answered to solve the problem. Thus, the problem statement in the Problem-Solving Method is designed to "make the problem bigger."

The other major difference between Lean and the Problem-Solving Method is the role of stakeholders in the methodology. In Lean, the customer viewpoint focuses on the value stream map of the process. Staff involvement focuses on mapping and improving processes to eliminate non-value–added activity. Thus, stakeholder involvement focuses on value-stream mapping of processes, not gaining stakeholder perspectives more broadly defined.

The Problem-Solving Method, on the other hand, has as a core principle to understand your stakeholders at a much more expansive level than Lean. The Define phase of the Method requires a stakeholder analysis, the Study phase includes a "hard stop" review step to circle back with key stakeholders, and the Act phase requires a communication strategy that focuses on how to tailor your message to stakeholders to maximize the probability of acceptance.

There are many quality tools used in Lean that are clearly relevant in many of the Problem-Solving Method's steps. For example, in the first step of the Study phase, tools such as brainstorming, fishbone diagrams, and 5 Whys root cause analysis can be helpful to generate root causes and alternative solutions. Analyzing data using Pareto analysis can help identify actual root causes when studying the problem. Force field analysis can be used to identify the forces pro and con for alternative solutions. And an A3 visualization can be used to summarize on one page a project that has been completed using the Problem-Solving Method. Thus, although the underlying philosophy and principles are different between Lean and the Problem-Solving Method, there are many tools of Lean that are complementary and useful to use in a number of steps in the Problem-Solving Method.

In summary, the Problem-Solving Method and Lean are both problem-solving methodologies. And, in fact, many of the steps look similar. However, the purpose and mindset of the methods are different. Lean is focused on processes, while the Problem-Solving Method is focused on broader organizational and management problems. As a result, the problem statement of Lean is narrowly focused on the symptom that indicates there is something wrong in the process. The problem statement of the Problem-Solving Method is the comprehensive set of key issues that must be resolved across the problem areas to correct a messy problem. To resolve the organizational problems, engaging stakeholders across all phases of the problem-solving process is a core component of the Problem-Solving Method, while in Lean, their involvement tends to be focused on mapping current and improved processes. Both methods are valuable, but their intended use is very different.

DESIGN THINKING AND HUMAN CENTERED DESIGN

In contrast to Lean, which focuses on incremental improvements in processes to remove non-value–added steps, Design Thinking and Human-Centered Design are methods that are well suited for service or product design problems that are very hard to define, understand, and/or for which there is not a solution already developed. Design Thinking and Human-Centered Design are applicable when transformational change is needed, as incremental change has not worked. There are more similarities between the Problem-Solving Method and Design Thinking and Human-Centered Design compared to the Problem-Solving Method with Lean.

Before comparing and contrasting the Problem-Solving Method to Design methods, you can see that, similar to Lean, the Design methods focus on process, service, and product design, not broader organizational messy problems. It is interesting to note that in 1964, a seminal book on design, called *Notes on the Synthesis of Form*, was written by an architect called Christopher Alexander.[8] His book focused on more complex design problems, ones that have seemingly insoluble levels of complexity, for example, designing a complete environment for a million people. His design process for trying to make the design requirements problem tractable is conceptually identical to the Problem-Solving Method's approach of identifying difficulties and grouping them into problem areas.

Alexander describes a process in which all design requirements are listed. The list is too comprehensive to design for each of the requirements individually. Therefore, the next step he describes is to identify the subsets of requirements that positively interact with each other and group them. Once all the design requirements are grouped, there should be minimal interaction with the design requirements between groups. This greatly reduces the complexity of the design problem because it enables you to focus on designing for the tightly linked requirements within each group independent of the design requirements for the other groups. His approach reduces an intractable messy design process into a more conceptually compact, solvable design problem. This is exactly the rationale and approach used in the Problem-Solving Method for difficulties and problem area groupings.

■ DESIGN THINKING

Design thinking focuses on approaches for a deep understanding of end-user needs when designing services and products. There are a number of processes or models that are in use today. One model is the Double Diamond process coined by the British Design Council in 2004. Their model articulates four phases: Discover, Define, Develop, Deliver.[9] As shown in Figure 3.2, the key principles in their model of Design Thinking are related to engaging in cycles of divergent and convergent thinking to understand the desirability, viability, and feasibility of solutions that are created to solve a design problem. Each diamond represents a divergent-convergent cycle. The first cycle focuses on divergent thinking when engaging with end users to study the problem, and then converges on a problem definition and design brief. The next wave of divergent thinking focuses on iterative development of prototypes to learn which designs fail and which ones work in order to drive to a deliverable solution.

As described in Chapter 1, "The Problem Is Not Always What It Seems," the Problem-Solving Method has this similar double diamond wave of two cycles of divergent and convergent thinking. As shown in Figure 3.3, the first wave of divergent-convergent thinking focuses on defining the problem, while the second wave addresses arriving at a set of recommendations after studying the problem. Both methods also have as a core principle communicating with affected parties. In Design Thinking, the focus is on the end user who will be using a new product or process. In the Problem-Solving Method, the focus is all stakeholders who are touched by the problem in some way.

■ HUMAN-CENTERED DESIGN

Human-Centered Design in its modern terminology and thought, was coined by Mike Cooley in 1989 in his book *Human-Centered Systems*.[10] This approach is aligned with
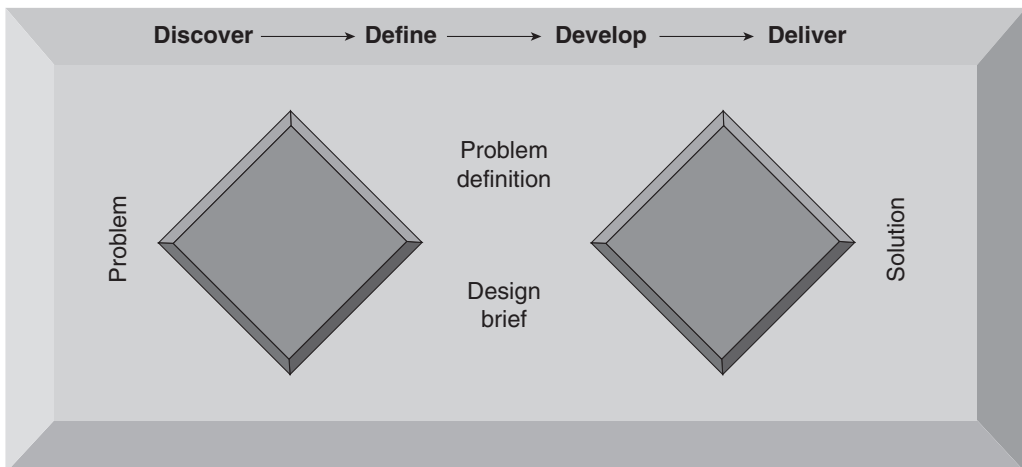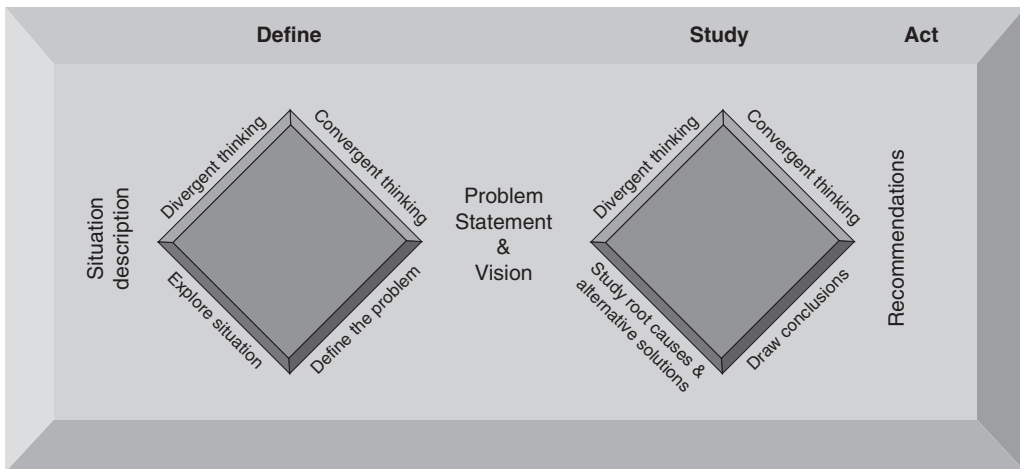

FIGURE 3.2 The "Double Diamond" of Design Thinking.

FIGURE 3.3 The "Double Diamond" of the Problem-Solving Method.

Design Thinking, although it more specifically articulates the steps and tools that are helpful to incorporate the user in solving problems and developing new approaches. In contrast to Design Thinking, the emphasis is more on the desirability equation in the design process. It was initially popular throughout technology and product companies to create new products with the "user" or human in mind throughout the entire process. In fact, the International Organization for Standardization (ISO), adopted elements in some of the standards and recommendations as well as the following definition of Human-Centered Design:

> Human-centred design is an approach to interactive systems development that aims to make systems usable and useful by focusing on the users, their needs and requirements, and by applying human factors/ergonomics, and usability knowledge and techniques. This approach enhances effectiveness and efficiency, improves human well-being, user satisfaction, accessibility and sustainability; and counteracts possible adverse effects of use on human health, safety and performance.[11]

The concept was taken further to products and services by the Founder of IDEO, Stanford Professor David Kelley. This organization and the methods and tools created have become popular throughout various industries. IDEO now serves as a consultancy firm and a teacher of the IDEO Design process. Many innovation centers throughout healthcare have deployed the techniques and tools developed by IDEO.[12]

A key similarity between Human-Centered Design and the Problem-Solving Method is the focus on understanding and involving the affected stakeholders in defining, studying and developing solutions to solve the key issues and problems. Both methods start with visiting with the stakeholders to make the problem "bigger" and engaging in divergent thinking to further understand the layers of the problem and identify difficulties. More information on the Human-Centered Design process as outlined by IDEO and its relationship to the Problem-Solving Method is highlighted in the following.
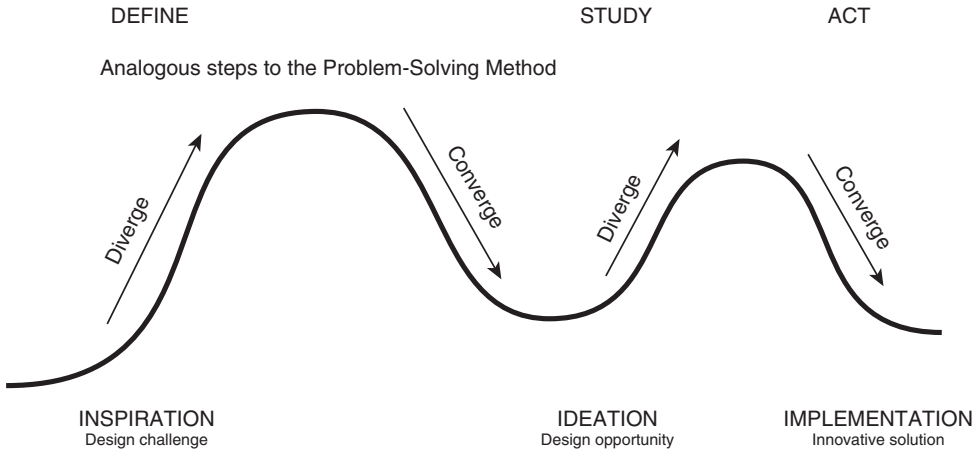
DEFINE   STUDY   ACT

Analogous steps to the Problem-Solving Method

Diverge   Converge   Diverge   Converge

INSPIRATION   IDEATION   IMPLEMENTATION
Design challenge   Design opportunity   Innovative solution

FIGURE 3.4 IDEO Human-Centered Design compared to the Problem-Solving Method.

IDEO Design Kit

In 2009, after almost a decade of increasing popularity of using Design Thinking and Human-Centered Design, IDEO sought to bring the method and tools to a greater audience. They created the IDEO Design Kit,[13] which is widely used throughout service and product design communities and innovation centers. The Design Kit describes Human-Centered Design in divergent and convergent thinking across three phases of Inspiration, Ideation, and Implementation as seen in Figure 3.4. The steps conducted in these phases are very similar to the Problem-Solving Method's three phases of Define, Study, Act.

Inspiration—Define

The inspiration phase in IDEO's Design Kit provides tools and methods to open up the stakeholder to provide information on their current situation. The intent is to acquire empathy for your customer, to see the world from their perspective, and leave behind your own biases. Many design projects purposely stay in this phase for quite some time in order to fully ensure they are uncovering articulated and unarticulated needs, or what we would call in the Problem-Solving Method, the difficulties and possible root causes. The tools used include observations, interviews, immersion, and illustration to name a few. Any problem solver using the Problem-Solving Method, particularly a novice or an expert experiencing a very complex problem could benefit from adopting the tools suggested to better understand stakeholders and the problem.

Ideation—Define and Study

Once the designer has acquired an empathetic understanding of the problem, they analyze and synthesize the information into themes. This is similar to the process of creating the stakeholder analysis and problem areas. Additionally, the designer will create

opportunity statements that often begin with "How might we...." These statements, however, are a bit different than issue statements. This is where the design process and the Problem-Solving Method start to differ. Designers will create questions that will drive to the creation of a concept and then prototype it to acquire additional empathy and understanding of customer needs. In the Problem-Solving Method, the issue statements are more open ended, allowing for multiple alternatives to be listed/explored. The criteria developed will encompass many factors that will include stakeholder acceptability, although they also encompass organizational feasibility and viability alongside stakeholder acceptance. The criteria in the Problem-Solving Method will include more system elements such as efficiencies, quality outcomes, financial viability, and sustainability, for example. At some point in the ideation phase of IDEO, there is a decision to prototype one main idea to learn, iterate, and develop a solution. In the Problem-Solving Method, you typically are not building a prototype. You are exploring all options through multiple angles of research. This is not to say that you couldn't build a prototype to rule in or out one alternative, although this would be one factor to consider in deciding which alternative(s) to select, not the main factor.

Implementation — Act

Once a prototype is designed in the Ideation Phase, the designer and team start the prototype and begin to test for desirability, feasibility, and viability. As this is tested, the team may iterate to create a better design. When the signs are there, the team then moves to pilot and then scale. Stakeholders are involved in the process and feedback throughout the iterations. This is similar to the Problem-Solving Method, in that stakeholders should be brought along and are providing feedback throughout all of its phases to facilitate their understanding of the options and alternatives so they are not surprised at the end.

■ COMPLEMENTS, NOT COMPETITORS

Design Thinking, Human-Centered Design and the Problem-Solving Method have a great deal in common. They all require waves of divergent and convergent thinking, and they all require active stakeholder involvement, with empathy and listening a core part of learning from them to inform what the problem is and what the stakeholders need for its resolution. In addition, Human-Centered Design, particularly the IDEO Design Kit, provides those using the Problem-Solving Method with tools to dive deep into stakeholder needs when defining the problem, testing alternatives, and presenting recommendations for acceptance. In the final analysis, these two problem-solving frameworks are not separate or in competition with each other. Each has its role depending on the problem focus, and the Problem-Solving Method can tap into tools and elements from Design Thinking and Human-Centered Design to better engage with stakeholders.

COMPARISON SUMMARY

Table 3.1 provides a comparison of the three problem-solving methodologies.

TABLE 3.1 Comparison of Problem-Solving Methods

	PROBLEM-SOLVING METHOD	LEAN	DESIGN THINKING/ HUMAN-CENTERED DESIGN
Problem Focus	"Messy"organizational problem	Incremental process improvements	Innovative service, product, or process design
Stakeholder Involvement	Extensive throughout the process	Focus on customer process requirements and staff Kaisen events	Extensive throughout the process, focused on the end-user
Define the Problem	Difficulties and problem areas; issue statements and problem statement	Focus on one "problem," equivalent to the definition of a difficulty	Elicit customer requirements from end users, with many useful tools, design brief
Study the Problem	Generalized method that benefits from specific tools depending on the problem area	Tools of quality, with many useful analytic methods for root cause analysis and problem study	Multiple iterations of prototype solutions in collaboration with stakeholders
Act on the Problem	Develop set of integrated recommendations across all problem areas	Implement process improvements that reduce non-value–added steps	Hone in on and iterate prototype to determine plan to implement to scale

Of the three methods, the Problem-Solving Method has the broadest focus, as it is designed to identify and solve organizational level problems with many interrelated problem areas. This is in contrast to Lean and Design Thinking, which are focused on more specific targets, namely incremental process improvement (Lean) or innovative processes, products, or services design (Design Thinking). When using the Problem-Solving Method, there will be times when a problem area will require process improvement or broader process, product, or service innovation. In these situations, it is clearly useful to apply the specific methods and tools of Lean or Design Thinking to those problem areas.

Of the three methods, the Problem-Solving Method and Design Thinking have the most comprehensive approaches for engaging stakeholders in the process. In addition, the tools used in Design Thinking that engage stakeholders in problem definition can be useful for use in the problem-definition phase of the Problem-Solving Method.

Turning to problem definition, the goal of the Problem-Solving Method is to capture all aspects of the problem through identifying difficulties and grouping them into problem areas, followed by writing issue statements and the problem statement. Lean's approach is to narrow in on one problem definition of an organizational process, which in the Problem-Solving Method would be one difficulty of many that may need resolution. Design Thinking's goal is to elicit the end-user requirements to identify the design challenge.

In problem study, Lean uses many tools of quality, such as fishbone diagrams and 5 Whys, that are particularly useful in the Problem-Solving Method when engaging in root cause analysis and data analysis. Thus, this is an area in which the Problem-Solving Method can draw upon Lean tools. Finally in the act phase, the Problem-Solving Method

requires an integrated set of recommendations across all the areas that solve the problem as defined. Lean results in process improvements that reduce non-value–added steps, and Design Thinking ends with an innovative product, process, or service that can be brought to scale.

Of the three methods, the Problem-Solving Method is agnostic as to the type of problem being faced, and can be thought of as a "logic processor" to apply in any situation when engaging in organizational problem-solving. As it is applied, there are tools from the other two methods that will be useful. And, depending on the problem areas uncovered, there will be situations in which either the entire Lean or Design Thinking approach should be used as a tailored approach in those problem areas, because the identified issue involves either incremental process improvement (Lean) or fundamental process, service, or product redesign (Design Thinking).

In summary, all of the problem-solving methods highlighted in this chapter are useful. You should get to know all of them, and gain experience in recognizing what type of problem you are facing to pull from the appropriate method or tools to solve the problem.

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