



GUIDE TO Innovation in Public Health Practice

*The tools you need to undertake and
succeed at your innovation journey*

Public Health Accreditation Board

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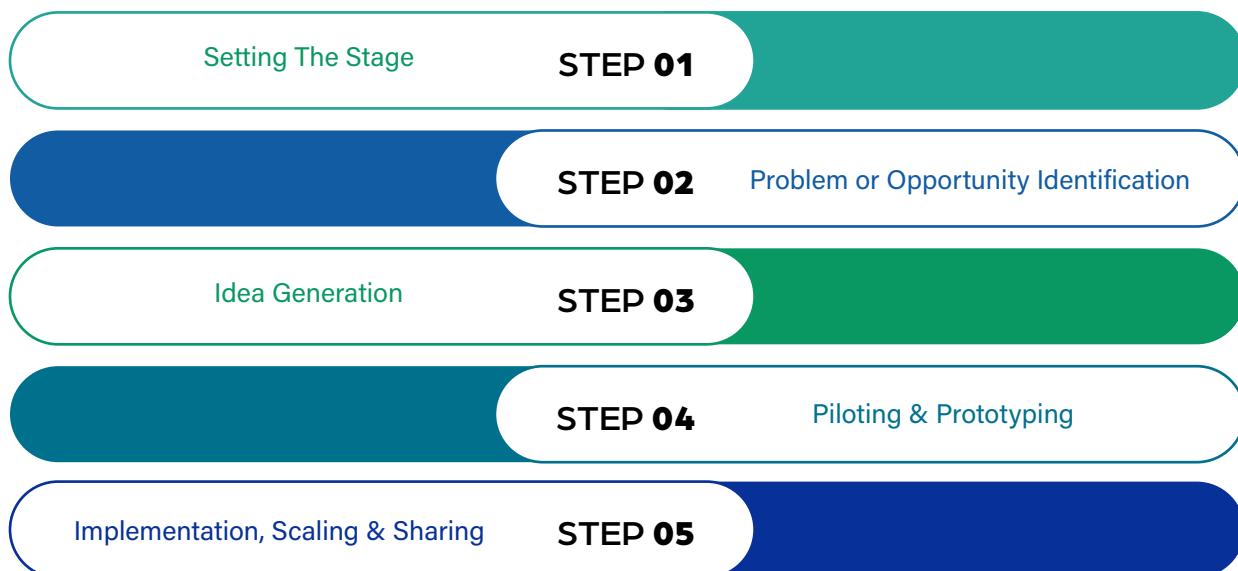
**"There are no dreams too large,
no innovation unimaginable, and
no frontiers beyond our reach."**

- John S. Herrington

Introduction

Innovation, at its core, is about making things better in ways that are useful and valuable to people. It is about changing our services, processes, tools, or products to add value that matters to the people who use them. It is about discovering challenges or opportunities, designing possible enhancements, evaluating and selecting the best solutions, and then using ideas, skills, talents, data, and relationships to serve even better. It is "the creative idea become realized" (Frans Johansson, The Medici Effect).

Whether an innovation is big, small, incremental, or disruptive, it is about something new. It demands that we take risks and leave behind some big or small part of what WAS, in favor of what MIGHT BE.



Our communities have complex public health and related issues that are difficult to solve or do not have easy-to-implement solutions. Health departments need to adapt to changing workplace and community dynamics. We should always be responding to our customers' needs and expectations. There is continued advocacy for additional investment in resources for public health. Innovation can give health departments an edge with a mindset that looks to the future, quickly addresses new issues, and fosters the creation of ideas.

This guide is designed to help teams and individuals undertake and succeed at their innovation journey. It is intended to be a companion resource to support an organization's innovation journey and to maximize the success of innovation projects.

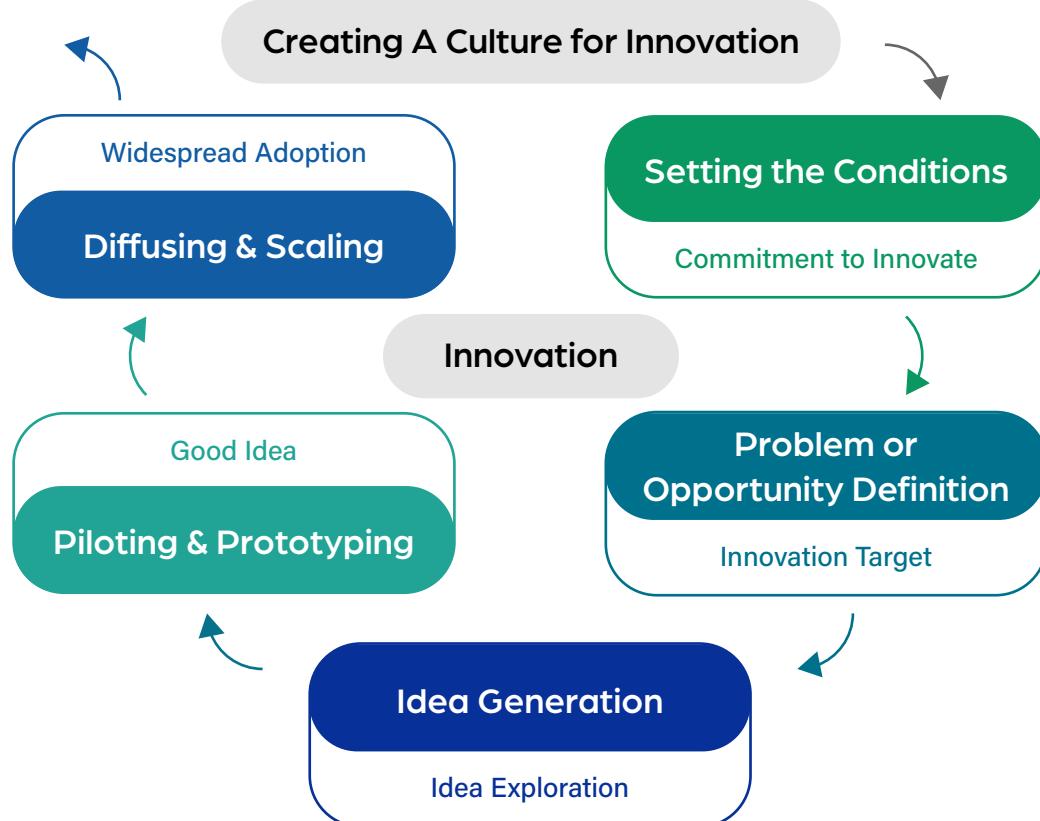
This guide is divided into sections reflecting the five critical elements of the Innovation Framework as outlined by the W.K. Kellogg Foundation: www.socialinnovationexchange.org/intentional-innovation-how-getting-more-systematic-about-innovation-could-improve-philanthropy-and-increase-social-impact/

Each section provides tools and exercises for use.

We hope you will find the information, tools, and exercises provided in this guide useful, fun, and informative. We welcome your feedback and would be excited to learn about your use of the guide to implement your own innovation projects — those that are successful AND those that have not worked as planned. Learning from what doesn't work can often be more powerful than learning from what does. Please share your experiences with us at info@phaboard.org.

Please use this guide to diffuse learning about innovation and accelerate the advancement and implementation of innovative practices worldwide.

We wish you the best on YOUR innovation journey!



From Intentional Innovation: How Getting More Systematic about Innovation Could Improve Philanthropy and Increase Social Impact by the W.K. Kellogg Foundation



1.0 Setting the Stage

1.1 What is Innovation?

The trajectory of progress may be fueled by innovation, but what exactly is innovation?

The Public Health Accreditation Board (PHAB) Center for Innovation defines public health innovation as **the creation and implementation of a novel process, policy, product, program, or system leading to improvements that impact health and equity**. Tenets of public health innovation include the following:

- It is an ongoing, systematic process that can generate incremental or radical change.
- It requires both collaboration with diverse team members and partners and co-production with people with lived experience who will be affected by the results of the innovation.
- It is an open process lending itself to adaptation or replication.

The term innovation at its most fundamental can be described as follows from Nathan Marston:

INNOVATION = CREATIVITY + DELIVERY

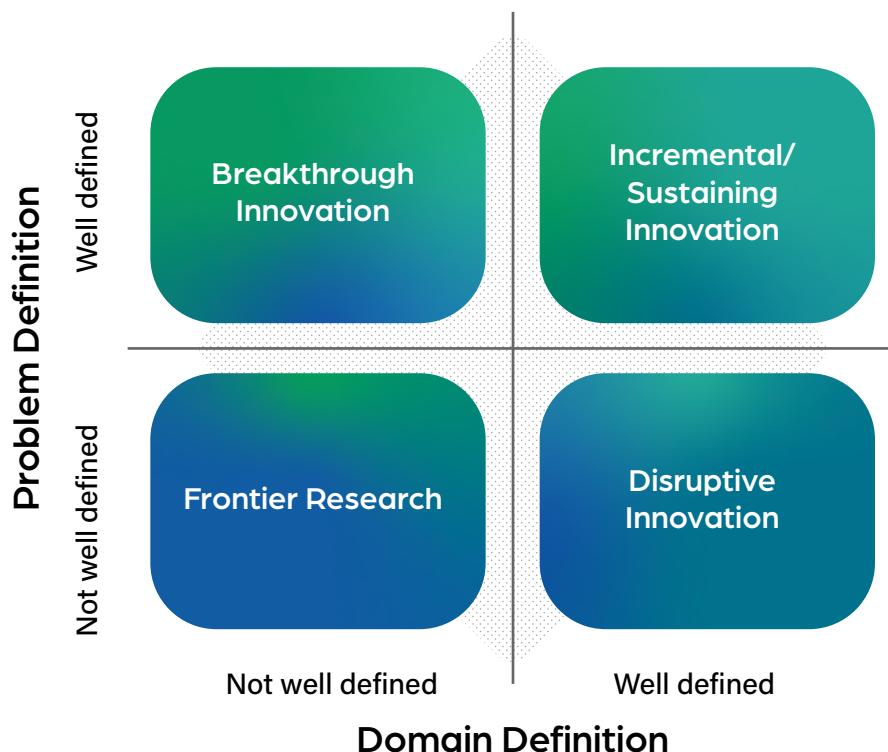
In other words, it is not simply having an idea, but implementing it as well. It advances something **new to your organization** — a changed process, approach, product, or service — that **produces better results in ways that are valued by the customers** or users of that idea.

In recent years, health departments have been working to build cultures of quality improvement (QI) by using tools once reserved for other sectors to make improvements as they move toward accreditation and transformation. Whereas QI is used to improve existing processes, products, programs, or policies through technical solutions, innovation and design thinking is used to solve complex problems for which there is not a known solution while incorporating the emotions, feelings, and thoughts of the end user as part of the process. Yet many of the same tools that are used during QI processes can be used in innovation processes, whether to assist in data collection and analysis or in understanding root causes.

Innovating is not new to public health practitioners and there are many examples of departments implementing new processes, policies, products, programs, and systems to respond to the unique needs of their communities. For example, during the COVID-19 pandemic, the [Barry Eaton District Health Department](#) in Michigan, in partnership with local disability service providers and schools, offered several Sensory-Friendly COVID-19 Vaccination Clinics. To develop Sensory-Friendly Clinics, they engaged in an innovation process to develop a solution to meet their community's needs.

Innovation is vital to public health practice and is included in the [PHAB Standards & Measures](#) used for PHAB accreditation. Measure 9.2.4 A assesses the health department's efforts to promote and support innovations in public health practice, and as part of the Annual Report process, accredited health departments select one Reflection and Learning option from a menu of offerings, which includes the option to submit a narrative or example that demonstrates efforts to foster innovative skills. Detailing the innovation process ensures health departments are fostering a culture of innovation that will help them transform; using an innovation process provides structure, shared language, and guidance on how to think about things differently.

Innovations can be incremental, building on the ideas of others, or fundamentally disruptive , creating an entirely new framework and platform for interacting with the world. An example of an incremental innovation would be an improved orientation program for new employees that adds a field tour of government facilities and operations to classroom narrative content. The innovative, experiential approaches to employee orientation engage employees more quickly and result in employees that are more likely to be retained. An example of a disruptive innovation is artificial intelligence that offers tremendous opportunities for public health, including being used as public-facing chatbot, connecting customers to available services, and health education.





"Imagination is more important than knowledge."

-Albert Einstein

Exercise

Describe at least three innovations that your organization has implemented in the past two years. Were they incremental or disruptive fundamental innovations? What makes you define the innovations that way?

**"Do you know what my favorite renewable fuel is?
An ecosystem for innovation."**

- Thomas Friedman

1.2 The Importance of Organization Culture, Vision, and Values

Every organization, including its leaders and employees, expresses values, norms, and practices through its actions. We know what matters in the organization by how we see people treating each other, customers, stakeholders, and all those the organization serves. We also know that organizations whose leaders support a healthy climate of collaboration, change, and renewal, guided by equity principles, data-driven decision making, and a reasonable tolerance for risk, will be most likely to succeed at meeting their strategic goals, being an effective and desirable place to work, and thriving over the long term.

In particular, certain values and behaviors will have a dramatic effect on the organization's willingness to seek out and embrace innovation and continuous improvement: openness to new ideas, integration of innovation into the strategic plans and management initiatives, willingness to listen to the voice of the customer and communities on what changes might be needed and valued, support for teamwork and creative problem-solving, systems and metrics to identify problems and opportunities and to evaluate the success of various solutions, and an appropriate tolerance for risk, combined with an understanding of how to methodically mitigate risk and to reward both failure and success. An organization will show evidence of its commitment to innovation and continuous improvement in many ways.

Six Qualities of Innovation

Definitions of Six Qualities cited from Alliance for Innovation article in Public Management Magazine (July 2012). Health departments should consider how best to incorporate equity into these six qualities to identify where and why inequities exist in order to develop strategies to eliminate them. PHAB's [Moving into Equity for Public Health](#) is resource for health departments as they continue their journey to become an equity-focused organization, both in awareness and practice. This resource is meant to augment the variety of existing resources in the field, not replace them.



Leadership

Innovation and leadership are closely related. Leaders in innovative organizations are visionary, inclusive, proactive, and organization centered, rather than leader-centered. Although all six qualities of innovation are important, perhaps the most critical is leadership as it sustains the effort, appropriately manages risk, and propels the morale of the group at all levels to achieve greater and ongoing success.

Leadership Example: Prince George's County in Maryland promoted the strength of leadership in their Community Transformation and Small Communities program by their inclusive, visionary approach. This program encompassed six different strategies and areas of need within three different communities. The six innovative strategies being organized through this team were in the following areas: advancing equity through food policy; increasing access to healthy produce at local farmer's markets; modified community-supported agriculture; capacity building among community clinics through community health workers; improving walkability and connectivity; and mini-grants addressing chronic disease and disparities. One aspect of the program sought to increase access to healthy produce at farmer's market began with training local farming vendors to take SNAP coupons.

www.institutephi.org/wp-content/uploads/2014/03/CTG-Highlights-Brochure_LoRes_112414.pdf

Creativity

In organizations where creativity is encouraged, more staff members develop an appetite for trying new ways of undertaking everyday activities. These organizations are always looking for new internal leaders, new ideas, new solutions, and ultimately better practices. Innovative organizations are never satisfied with a single success; they are constantly looking for improvements, revisiting what has already been done, and examining new methods to address a problem. By examining a series of issues simultaneously, it fosters a holistic approach and often times can identify that problems are connected by common internal or external related factors.

Creativity Example: Marin County in California, gives us a strong example of creativity in public health innovation. To reduce the sale and consumption of alcohol at the local county fair and encourage healthy eating with physical exercise, Play Fair Marin and Marin County teamed up with local organizations, including the Marin County Department of Health and Human Services. The initiative included healthy foods taste competition, smoke-free areas, breastfeeding tents, and health ambassadors who circulated around the fair promoting their activities, such as pedometer competitions. Their efforts effectively created an environment that promoted healthy behavior. www.marincounty.org/depts/cu/play-fair-guide/play-fair-guide

Internal Collaboration

A diverse team of stakeholders can provide the right recipe to collectively review, ask probing questions, suggest, and implement change. Collaborative communities, according to Paul Adler, Charles Heckscher, and Laurence Prusak in an article in the July-August 2011 issue of Harvard Business Review, are organizations "that encourage people to continually apply their unique talents to group projects and to become motivated by a collective mission, not just personal gain or the intrinsic pleasures of autonomous creativity."

Internal Collaboration Example: To recognize broad changes that are occurring within public health especially regarding accreditation efforts, Denver created a workforce development program that will expand their public health workforce and implement trainings on new public health topics. A detriment to workforce development programs is the lack of motivation by staff to participate in continuing education and to apply new knowledge to the organization's mission. As a piece of the Denver program, staff can apply yearly for training dollars that are intentional in that it aligns with their professional development. Through the creation of core competencies for their program, the idea is to implement new, standardized skills throughout the entire department, and by doing this improve public health program implementation and outcomes within the community. www.phf.org/resources/tools/Documents/WFD_Plan_Denver_Public_Health_2014.pdf

External Partnerships

Successful external partnerships look for a variety of commonalities:

- Do they further one another's goals?
- How do they expand beyond the simple economic-benefit criteria?

- Can they develop common missions, visions, and values for the project?
- Do they focus on common interests rather than focus on differences?
- Do they address ground rules, evaluation, and how to manage conflict?

Organizations that use these criteria are frequently able to craft partnerships with one or more external partners that benefit each other and the community as a whole. Such organizations are also able to tackle much more complex problems than a single entity would be able to address.

External Partnerships Example: The Forensic Assessment Services Triage Team (FASTT) initiative from the local sheriff's department in Carson City, Nevada, focuses on bridging a gap in care for inmates with mental health diagnoses and involves other partners, such as the state and local health department who provide ancillary services, mental health providers, family members, and community advocates. The multifaceted program hybridizes ideas from Pre-Booking and Post-Booking Jail Diversion interventions and involves the creation of a team that could intervene directly when a person with a mental health diagnosis is encountered by a police officer. The FASTT program allows for the team to provide appropriate medications for the individual while they are in the system and send the individual home with medication until they can obtain services in the community to allow for the continuation of treatment.

www.leg.state.nv.us/App/InterimCommittee/REL/Document/5826

Community Connections

Innovative organizations studied have shown community-wide and organization-wide successes when stakeholders are authentically welcomed into the deliberations on priorities or improvements. Employees of organizations, as well as customers and other stakeholders, need to connect with each other to further innovative solutions and collaborative interest and buy in.

Community Connections Example: External partnerships that look beyond how programs were implemented in the past and connect with non-traditional partners can further more than one organization's goals. Several programs in Grand Forks, North Dakota, give strong examples of innovative initiatives using community connections. One such program is the Forks Mobile Food and Education Trolley, an innovative program of the local health department. Through this program, emphasis is placed on the importance of supporting local farmers and eating fresh fruits and vegetables in addition to providing education in gardening, safe preparation of produce, and how to reduce food waste. This trolley travels to high poverty areas within the community and provides fresh fruits and vegetables at an affordable price in addition to the education it provides.

www.tsfarmersmarket.com

Results Focused

Results-based leadership by authors Dave Ulrich, Jack Zenger, and Norm Smallwood advances that effective leaders do more than master the attributes of leadership. They know how to connect their attributes with results. Effective leaders focus on outcomes; they care much less about whose fault it is when things go wrong. It has been said that innovation is only play unless you measure

the results of your efforts. Leaders who focus on results concentrate on innovations that will make a difference, that are sustainable, and that are constantly being reviewed, changed, and updated.

Results Focused Example: Sometimes, focusing on the reality of a situation and how best to achieve results can produce unexpected, yet very fruitful outcomes. This idea of the end result was the focus of North Carolina's Catawba County Public Health's decision to relinquish their home health program to a private entity. This sale was brought on by the reality that limited and precious public health resources and funds were being put towards a program that was no longer needed as additional programs and entities had filled the gap in the community over time. Being able to focus on the results allowed Catawba County Public Health to free up funding for new priority areas.

www.catawbacountync.gov/commish/detailedagendas/2015November2.pdf

www.catawbacountync.gov/site/assets/files/2212/2015-2016-complete-budget.pdf



Exercise

Please respond to the following exercise questions individually to reflect on the six qualities of innovation within your organization. You also might consider sharing and discussing these responses with your Innovation Team.

Are innovation and creativity referenced in your organization's vision, mission, and/or values statement? If yes, describe how. If no, where do you recommend they be integrated?

How are innovation and/or continuous improvement reflected in your organization's strategic plan?

How has your department integrated innovative processes for recruiting, selecting, training, evaluating, recognizing, and rewarding employees?

Is there an office or group in your organization identified as being the central coordination point for innovation and suggestions for improvement? If no, what could this look like within your organization?

How does the organization solicit and manage new ideas for improving services and processes?

How do employees find out about how to use the suggestion program to advance their ideas?

How has the organization's leaders publicly recognized and celebrated new ideas, innovations, and failing forward lessons?



How are ideas, criticisms, and suggestions from citizens and other stakeholders welcomed?

Does the organization have a strong network of partnerships and external collaborations? If no, how could those relationships be built?

How are new ideas and proposed changes communicated throughout the organization?

How is teamwork and collaborative problem-solving encouraged and supported in your organization?

Does the organization regularly establish criteria or measures to define success and are results tracked and shared with stakeholders? If no, what could this look like within your organization?

Does the organization routinely debrief what worked and what didn't, and share learning about these observations? If no, what could this look like within your organization?

Answers to these questions will help guide the organization in building and enhancing a culture of innovation going forward. Don't be discouraged if, from where you sit, the organization is not a beacon of innovation yet! The focus is on continuous improvement.

1.3 Understanding Key Roles

While it is everyone's job in the organization to move the innovative spirit and culture forward, there are several key responsibilities that need to be identified and assigned for innovation efforts to succeed. These roles contribute to the Innovation Team (I Team).

Elected Governing Body (e.g., Board of Health)

A governing body should be elected to help guide an organization's innovation work and is responsible for:

- Establishing an overall climate of support for continuous improvement and innovation that is responsive to what citizens/customers value.
- Soliciting, promoting, and encouraging the voice of the customer to be heard in the organization.
- Adopting innovation and creative problem-solving as key elements of the organization's vision, values, and strategic plans.
- Providing oversight and accountability to ensure that the organization supports innovation.
- Approving the investment of resources to support innovation.
- Recognizing and celebrating innovative accomplishments.

Health Official, Health Officer, or Administrator

This leadership role is responsible for:

- Establishing innovation as an organizational priority in vision, values, strategic plans, and organizations systems.
- Promoting innovation and connecting the Innovation Team (I Team) with the governing body and other key stakeholders.
- Actively demonstrating top leadership commitment to innovation, the I Team, and the I Team Project.
- Authorizing and supporting I Team release time to participate in the innovation effort and the I Team Project.
- Approving resource allocations as appropriate to support the I Team and Project.
- Empowering the I Team and Executive Sponsor (outlined below) to make appropriate decisions for the Team and the Project.
- Assisting the I Team and Executive Sponsor as needed in resolving conflicts and obstacles.
- Is responsive to the I Team's updates and communications.
- Supporting the I Team in taking risks.
- Celebrating achievements.

Executive Sponsor

The Executive Sponsor is a senior leader that provides funding, connections, accountability, and guidance to the I Team and is responsible for:

- Demonstrating on-going, day-to-day commitment from senior leadership.
- Providing oversight for Innovation Project management.
- Assisting I Team in navigating change management and conflict resolution.
- Acting as a liaison with the Health Official/Health Officer/Administrator, Leadership Team, and governing body as needed; providing updates to these groups.
- Holding I Team Leader and I Team accountable and supports them as needed.
- Responding to requests for information and assistance from the I Team Leader and I Team.
- Maintaining current knowledge of I Team status.
- Celebrating achievements.

Innovation Team Leader

The Innovation Team Leader is responsible for:

- Providing a central point of contact for team members and the organization regarding the I Team Project.
- Actively facilitating all stages of the I Team's participation and the execution of assignments and the project.
- Keeping I Team members informed, organized, involved, and focused.
- Providing helpful recommendations to the I Team.
- Ensuring that all I Team members are participating and accountable.
- Reporting regularly and keeping stakeholders, Executive Sponsor, and the larger organization informed of progress.
- Helping celebrate achievements.

Innovation Team Member

Innovation Team Members include organizational members that are most involved in day-to-day innovation work. Innovation Team Members are responsible for:

- Demonstrating commitment to the I Team's goals and purpose above any personal agendas.
- Coming prepared and participating fully; taking personal responsibility for the effectiveness of the I Team.
- Sharing suggestions constructively and working for the betterment of the I Team.
- Managing conflicts professionally and productively.
- Actively supporting teamwork and collaboration.
- Following through on all assignments.
- Keeping colleagues informed.

- Celebrating achievements of the I Team.

Project Stakeholders

Project stakeholders may include additional members of the organization's team as well as individuals from partner organizations. Project stakeholders are responsible for:

- Participating as appropriate and as requested.
- Staying informed on the project progress.
- Serving as a champion for innovation and for the I Team Project.

Chief Innovation Officer (As Appropriate)

Depending on the role in the organization, the Chief Innovation Officer may serve as Executive Sponsor and is responsible for:

- Helping the I Team to identify potential I Team Projects.
- Assisting the I Team in data gathering, data analysis, idea development, prototyping and project design, project communication, and project evaluation.

INNOVATION EXAMPLE:

Marshall County Health Department - Kentucky Employee Recognition Program

Improving employee morale and enhancing the work environment is a key factor for internal culture in all organizations, including public health. It is challenging, however, to narrow down what is causing unhappiness in the workplace as it is often multifaceted. There are several theories about how to increase employee morale which focus on emotional coping, relationships, directly addressing known problems or stressors in the work environment, and lifestyle. Knowing the theories may help to elicit ideas, but putting those ideas into action requires innovation through creativity and leadership.

Marshall County Health Department in Kentucky designed a **multi-layered program** to improve employee morale and effectively alter the internal culture of their organization to make the workplace a happier and more comfortable environment.

The program, which began in 2015 and has since expanded, was developed through the joint effort of the department's Leadership and Accreditation Team and utilizes **several aspects of innovation** in its design: creativity, leadership, internal collaboration, and results-focused. By utilizing known strategies, the health department was able to adapt those strategies to their own work environment. The idea itself of developing an employee recognition system isn't necessarily where the novel ideas are found, but rather in the

smaller components of the program and in the way they took general concepts and actively shaped them to fit their organization.

The project began with the creation of Staff Comment Cards. The comment cards are a way for staff to praise fellow co-workers, provide suggestions on how to improve the agency as a whole or to suggest potential Quality Improvement projects. All cards are distributed to the appropriate Leadership Team member and addressed within five working days with a Staff Response Card. This card is placed on the Staff Information Board located in an area where all staff are able to see the response. Any comment cards praising a fellow co-worker are also placed into a monthly prize drawing with the winner receiving the rights to the Employee Pursuing Excellence parking spot.

In addition to the comment cards, the program also implemented quarterly staff recognition days to acknowledge those who received comment cards and provide them with a pin for their employee corkboard. Employees can also receive pins for serving on various teams and committees. The program is continually evaluated and updated as needed, and outcomes have included a boost in employee morale within the department.

See page 83 (Appendix) for the standard operating procedure regarding staff comment cards.

<https://fliphtml5.com/jzaf/qcyw/basic> (page 21)



Exercise

Key Players

Please list the individuals whose participation and support will be critical to the success of your I Team Project, and note what plans you have for engaging key individuals in fulfilling their role (Meetings? Presentations? Progress reports in what form and with what frequency? Etc.):

Elected governing body:

How will they be engaged?

Health Official/Health Officer or Administrator:

How will the Health Official/Health Officer be engaged?

Executive Sponsor:

How will the Executive Sponsor be engaged?

Project Team Leader:



Innovation Team Members (I Team):

Project Stakeholders:

What is the desired contribution of each Stakeholder to the I Team Project, and how will these Stakeholders be engaged?

**"Enlightened trial and error (by a team)
succeeds over planning of the lone genius."**

- ABC Nightline on IDEO

1.4 Selecting and Building Your Innovation Team

Innovation is stimulated best by the convergence of diverse perspectives, so collaboration and teamwork are among the critical elements of successful innovation. Members of a diverse team bring different lived experiences to their work and provide a multitude of insights that cannot be gained by working individually. Diverse teams simply produce more ideas – more ideas mean having more options from which to choose and maximizes the probability of having better ideas to implement. Homogeneous teams (groups who share similar functions, responsibilities, skills, and experiences) may get started faster and find solutions more quickly, but diverse teams (those from different departments, functions, organizational levels, seniority, cultures, skills, and responsibilities) will typically generate more ideas and develop more creative solutions.

A team is defined as a small number of people with complementary skills who are committed to:

- A common purpose.
- A shared set of performance goals.
- A shared approach.
- A method to hold themselves mutually accountable.

From: *The Discipline of Teams* By: Jon R. Katzenbach and Douglass K. Smith 2005



Exercise

What would you say are your organization's strengths and areas for improvement in encouraging and supporting teams?

What are some examples of effective teamwork in your organization? What makes them successful?

Who are some outstanding team players in your organization? How can you make them a part of your innovation effort?

1.5 Critical Team Competencies

In addition to seeking Innovation Team members who reflect a diversity of departments, organizational levels, job responsibilities, and skills, consider the following characteristics in selecting Innovation Team members:

- Understanding and ownership of the Team's goals.
- Willingness to put the Team's goals ahead of one's own.
- Both "task" and "team" focused; the Team should have a mix of individuals who are skilled at managing a group project and those who are skilled at facilitating healthy collaboration among team members.
- The ability to consider constructive conflict as useful and necessary.
- Willingness to openly admit one's mistakes or weaknesses.
- Trust for members of the team.
- Willingness and skill to practice open and honest communication.
- Respectful of differences and diversity of thought.
- Willingness to work for consensus.
- Willingness to appropriately utilize the talents and resources of others.
- Select the team members for skills and not for personality.
- May be an existing team.
- May include external stakeholders that are critical to the success of the Project.
- Must have support of supervisor and organizational leadership to participate.



Building Team Performance

Many outstanding contributors in our organizations have had little experience and training in how to work successfully in a team. Our organizations have a multitude of systems and practices in place, in fact, to encourage individual excellence, and while individual success is extremely important, we also know that innovation and sustainable organizational excellence will be highly correlated to the effectiveness of teams within the organization.

In supporting and promoting team learning and the development of effective teamwork, Innovation Team leaders are encouraged to consider the following strategies that contribute to long-term team effectiveness:

- **Start with WHY**
 - Establish a sense of urgency and importance; decide on a meaningful purpose that the team shares.
 - Use the Team Charter Template to articulate the Team's purpose, timeline, values, behaviors, expectations and responsibilities, and intended outcomes.
- **Structure the first 1 Team Meeting; pay special attention to setting the tone for positive, productive team performance**
 - Use the Sample Meeting Agenda (page 24).
 - Develop Team Ground Rules, write them down, and gain agreement on them.
- **Set and pursue a few immediate tasks – accomplish something early to build enthusiasm.**
- **Challenge the group routinely with new information.**
- **Spend time together and schedule opportunities for having fun together.**
- **Use positive feedback, recognition, and reward to sustain enthusiasm (From The Discipline of Teams Katzenbach and Smith, 2005).**
- **Avoid the Five Dysfunctions of a Team (Patrick Lencioni, 2002):**
 - Absence of trust
 - Fear of conflict
 - Lack of commitment
 - Avoidance of accountability
 - Inattention to results

Below are some questions to consider as you develop your team:

- What is our purpose?
- How often will we meet? For how long? Where?
- How should we establish agendas?
- Who will chair the meetings? Take minutes?
- How will we measure our performance?
- How will we make decisions? Majority vote? Consensus?

- How will we resolve conflicts and problems? Address unproductive behavior?
- What is unproductive behavior?
- How will we make sure everyone is heard?
- How will we prioritize our work?
- What skills do team members have, and what do they want to learn?
- How will we communicate updates and share our progress?
- How often will we report to our Executive Sponsor and stakeholders?
- What other guidelines do we need?

TEAM CHARTER TEMPLATE

Purpose:

Team Task: Identify the Main Purposes for the Team's Existence

Timeline for Participation:

Anticipated Timeline

Team Values:

Identify 3-10 values that guide team actions

Team Behaviors, Expectations, and Responsibilities:

Identify how you will engage with one another

Barriers and Obstacles:

Identify any specific obstacles and how you will address them

Outcomes Anticipated:

What are the outcomes you are hoping to achieve

Credited to Cheryl Hilvert, ICMA Center for Management Strategies

SAMPLE FIRST MEETING AGENDA

Project Team:

Meeting Date:

TIMES	ITEMS
	Review this agenda (5 mins.) <ul style="list-style-type: none">▪ Add items, delete items, estimate time▪ Rank the item: must do/should do
	Brief self-introductions by team members (10 mins.)
	Review the mission statement from the management team (15 mins.)
	Explain the goals of this meeting (10 mins.)
	Get acquainted with each other (35 mins. Total) <ul style="list-style-type: none">▪ An icebreaker in pairs followed by a group activity (20 mins.)▪ A more detailed discussion of the process assigned for study▪ A description by all members of their roles in that process (15 mins.)
	Define the roles of team leader and team members (10mins.)
	Set ground rules and housekeeping rules (10 mins.)
	Develop Team Charter (60 to 90 mins.)
	BREAK
	An assignment for the next meeting: date, time (10 min.) <ul style="list-style-type: none">▪ Discuss possible readings or activities that team members can undertake before the next meeting
	Meeting evaluations; questions and discussion (15 mins.)

"A noble purpose inspires sacrifice, stimulates innovation and encourages perseverance."

2.0 Problem (or Opportunity) Identification

2.1 Human-Centered Design Thinking

Human-centered design is a research and design methodology that formulates solutions by focusing on the needs, desires, and ideas of the people who use products and services in developing solutions to real-world problems and opportunities. Because of the emphasis on the experiences of users, the solutions developed are generally considered innovative.

The Stanford University School and IDEO are significant leaders in the teaching and application of human-centered design.

Many local government organizations are now incorporating human-centered design into their innovation efforts. The key is starting by empathizing with the user, starting with WHY people feel there is a problem or an opportunity to be addressed, and what meaning or needs or desires people experience about a given issue.

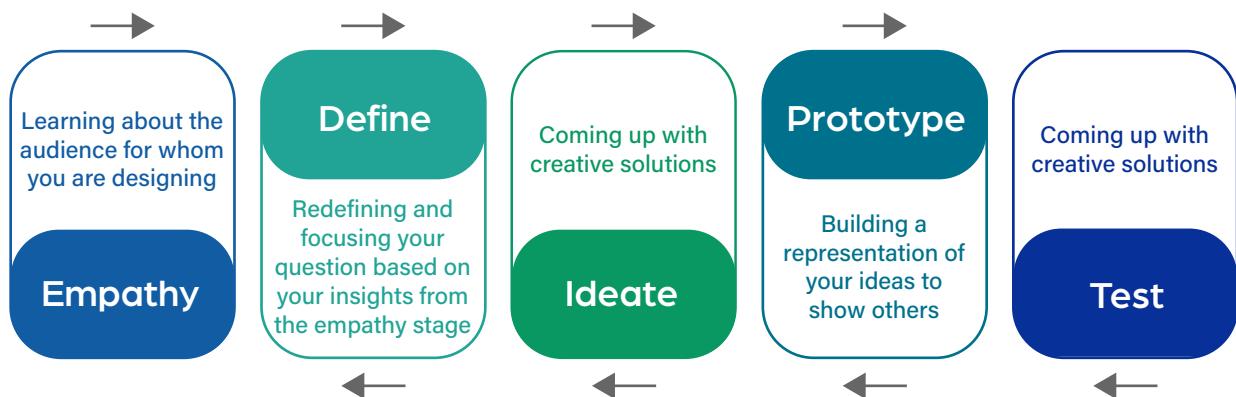


Chart by Jennifer Potratz, MS



Exercise

Use of Design Thinking in Arlington County, VA: <https://youtu.be/RDMF72WLZZQ>

What groups or individuals are the primary users of your services, products or processes? Whom do you serve?

What methods or systems does your work group, department, or organization have in place to understand the needs, desires, and ideas of the people you serve?

How will you evaluate how well you are meeting those needs, desires, and ideas? How is success with customers measured? How is that success communicated to your team?

What changes do you think might be needed in how your work group, department, or organization gathers and interprets information about the needs, desires, and ideas of customers?

"I think frugality drives innovation. One of the only ways to get out of a tight box is to invent your way out."

-Jeff Bezos

"Innovation distinguishes between a leader and a follower."

-Steve Jobs

2.2 How to Look for Opportunities

Before embarking on an innovation process, teams must identify challenges or areas that could be improved. The objective is to understand and define **what matters**. We want to uncover what would make our work **better** for the people we do it for. There are several good techniques for uncovering what would be better. Here are a few:

Interviews. Formal interviews with citizens, organizational leaders, staff members, colleagues, staff in other agencies or other industries, experts, and other stakeholders (business leaders, healthcare leaders, social service providers, etc.) can provide excellent sources of information about where "pain points" and opportunities exist in services and processes and can often suggest potential ideas for solutions. Interviews can be done in person or via email or phone; however, care must be given to creating the conditions for empathizing with the customer, not merely gathering formatted data.

Focus groups. Focus groups are similar to interviews, except that they are conducted with a group of individuals who are all users or customers of the same process or service.

Direct observation. This activity requires us to immerse ourselves in what the user experiences. What does it look like to the customer when they come in the front door of the office? How is an EMS call handled from start to finish? What happens when a caller gets the wrong office? What are we saying to people about how important they are if wait times are extensive, or services are difficult/inconvenient for them to access? What happens when we are wrong?

Process mapping. In this approach, staff members develop a journey map or flow chart of how a person, piece of information, piece of paper, or piece of equipment travels through our processes. Whether that's applying for a permit, responding to a request for information to the Finance Department, applying for social services, asking for traffic calming solutions for a safe route to school, applying for a job, conducting or receiving an employee performance evaluation, or trying to get a neighbor's trash-filled property cleaned up. Mapping helps to identify who does what, when, where, and how; who the responsible individuals are and what decisions or actions are needed by them; and what needs exist for various players in the process along the way.

Surveys. Organizations can either undertake comprehensive customer or employee surveys, or they can develop targeted research questions for customers to respond to either as counter surveys, follow-up surveys online, or open surveys that are structured to solicit responses via the organizations' website. Useful information will often include understanding how important various functions are to people and how well we are providing those functions.

World Café. In these offerings, customers/residents/users are encouraged to move from one station to the next to have dialogue with different people about a series of topics.

INNOVATION EXAMPLE:

Ohio Fast VAX Facts Mobile App

The emerging anti-vaccination movement has prompted the need for innovative measures addressing childhood immunizations and ways to build upon current immunization platforms.

The Ohio Department of Health, Bureau of Infectious Diseases, Immunization Program, and the Ohio Chapter of the American Academy of Pediatrics (Ohio AAP) came together to develop a mobile application addressing the need for reliable information for parents and healthcare providers pertaining to immunizations, their safety, and importance. The information on the app is reviewed by the Ohio AAP monthly for accuracy and updated as necessary so all information is up-to-date and valid.

The app is tailored for both patients/family members and healthcare providers with each portal containing tools and information most applicable to each user. The app also includes a video series by a pediatrician addressing common concerns, an interactive immunization schedule based on a child's age, trusted answers to frequently asked questions, links and resources, ability to share facts and breaking news alerts regarding outbreaks, new research, and other important information related to immunizations. For healthcare providers, the app is also designed as a tool to help address the patient's and/or family's concerns and provide them with conversation tactics that help to combat vaccination refusal.

<http://fvf.ohioaap.org/>

2.3 Where to Look for Opportunities

Innovation often happens in the space between existing ideas, or at the convergence of disparate ideas and perspectives. We can't emphasize enough how important it is to include diverse individuals in the Innovation Team – a diversity of backgrounds, lived experiences, ages, positions, functions and specialties, cultures, and organizational levels gives us a "target-rich" environment for identifying innovations that will enhance the status quo. In general, there are several categories of innovations that provide a wealth of opportunities.

Business model innovations. Changing the way your organization creates value is one way to innovate. An example of a business model is service and resource sharing arrangements, where public health agencies collaborate across organizational and jurisdictional boundaries to deliver essential public health services and solve problems that cannot be easily solved by a single entity. PHAB's Center for Innovation has identified [Approaches to Service & Resource Sharing](#), which depicts a range of approaches to sharing that are established at the state, regional/district, and local levels..

Process innovations. A process innovation changes the steps or flow of a given process. The process result itself doesn't change, or the purpose, but value is added by making changes to the way the process is performed.

Program or service innovations. This category of innovation includes not only those innovations that improve existing programs or services, but also those innovations that add new programs or services. Examples of innovations that improve existing programs or services include connecting police/fire, ambulance, and emergency room personnel via computer to alert the hospital to the specifics of an arriving patient's status. Examples of a new program innovation is offering computer training at a Senior Services Center, offering a downtown bike loan program to encourage physical exercise and reduce vehicle traffic, or adding home visits by nurses to at-risk new parents to reduce child neglect or abuse incidents. Other examples include bringing vaccines to people by offering immunization clinics in multiple venues where people naturally are, such as school-located vaccination clinics where children are immunized at school allowing parents to not have to take time off of work to bring them to a provider. Another example is flu vaccines being offered with mobile dental vans or mobile mamm-o-vans that often target low income, rural, or otherwise hard to reach populations.

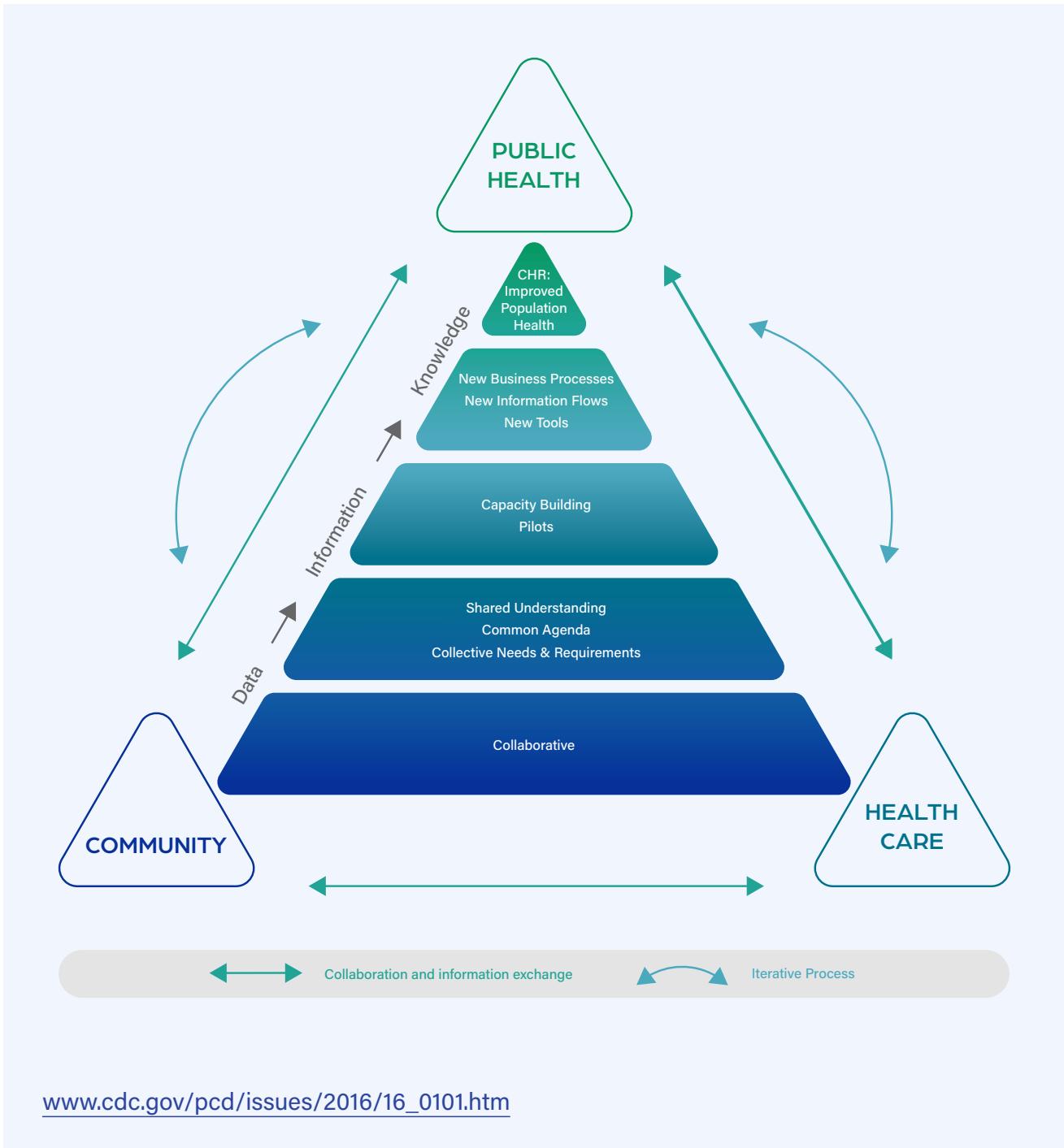
INNOVATION EXAMPLE:

A Community Health Record: Improving Health Through Multisector Collaboration, Information Sharing, and Technology – Shelby County, TN.

As electronic medical and health records expand, their importance and advantages continue to be emphasized.

A pilot project in Shelby County, Tennessee, is working to expand this capability into the public health realm through collaboration with the Shelby County Health Department, Methodist Le Bonheur Healthcare, the Common Table Health Alliance, Tennessee Department of Health, state of Tennessee, and the Centers for Disease Control and Prevention (CDC). The goal of the project itself is to develop a community health record for heart disease and stroke, with the ultimate goal being further expansion into other health areas and developing a shared information system for all community health information.

There are **four main aims** of the pilot project: 1) Collaboration; 2) Shared Approach; 3) Workforce and Infrastructure Capacity; and 4) A New Business Model. The pilot project team recognizes and addresses the importance of small steps to achieve their goal and emphasizes the importance of their third aim on workforce and infrastructure capacity. The development of a community health record will change the culture of the department in that it will require new skills, technical expertise, and resources. To begin this process, Shelby County Health Department and Methodist Le Bonheur Healthcare piloted the CDC Informatics Training in Place Program and remarked on the importance of the training environment itself to facilitate a smooth and productive exchange of information.





"Innovation is taking two things that already exist, and putting them together in a new way."

-*Tom Freiston.*

Exercise

What changes do you think might be needed in how your work group, department, or organization gathers and interprets information about the needs, desires, and ideas of customers?

What changes do you think might be needed in how your work group, department, or organization gathers and interprets information about the needs, desires, and ideas of customers?

Process:

Program or service:

Types of Innovation. We also want to consider that innovation can be incremental (building on existing knowledge, as in an improved purchasing process), fundamental (changing the fundamental approach, as in a change to a multi-year budgeting plan), or radical/revolutionary (redesigning neighborhoods to encourage walking and biking).

Sources of Innovation. As practitioners, we can utilize several sources of innovation:

- **Adoption** – in which we take an innovation that someone else has implemented and implement it in our organization.
- **Adaptation** – in which we begin with someone else's innovation, but we adapt it for our specific purposes and context.
- **Invention** – this is when we create something entirely new, such as the development of a new vaccine for Ebola or a new screening test to detect breast cancer like the rapid breast MRI.
- **Hybrid** - combining more than one of the above strategies in a single innovation can add significant value and lower costs of implementation.

2.4 Gathering and Using Data

Once we have begun to ask good questions about where the opportunities or constraints are for the customers/users of our services and processes, we need to organize our information and findings. These findings can become an important source of performance measures or success metrics later in the process. Analyzing available data can show us whether trends are changing over time, whether the problem happens under specific conditions or is a general concern, whether there are seasonal changes, whether the issue is specific to our community or shared by others, and what efforts others have tried, and with what success, among other important patterns.

Interview summary. Prepare a summary of common themes you heard during interviews, focus groups, or direct observation. For example, a health department, while holding a public meeting for their community health assessment, discovered that there was a lot of confusion among the residents as to why the health department was involved with the built environment, as well as general confusion on the role of the department. Through this process, the team realized the need for better communication with the community and contacted the local newspaper to request space for a weekly column on the influence of physical activity and better health outcomes, as well as other pertinent population health topics.

Check or tally sheets. A check or tally sheet can quickly identify how big or small a problem is, to whom it happens, with what frequency, and when. For example, during a disaster when a temporary shelter has been established, a tally of supplies, such as water, food, diapers, and adequate waste disposal, helps to quickly identify what needs replenishment or to tally age groups in the shelter.

CHECK OR TALLY SHEETS

What:

The check/tally sheet is a way to collect data for later analysis of a problem or process. The check sheet allows the user to record specific, observable data about one or more variables. A tally is usually used to record each occurrence of the variable being observed.

How:

1. Plan what question you are trying to answer with data and determine what data you will need to answer the question.
2. Collect a small sample of the data. Test to see if the data provides information necessary to answer your questions. If so, conduct a thorough data collection effort.
3. Present the data in a way that clearly communicates the answer to the question.

Check Sheet

Information Errors on Intake Sheets

Time Period: 8/15-8/18/2017

Incorrect Zip Code		7
Misspelled Name		5
Incorrect Employer		4
Incorrect Employer Code		10
No Reason for Injury		14

Data sheet. The Recycling Unit of a Solid Waste Management Office used data reports to identify how much and what type of recycled materials were being discarded in various neighborhoods, and used the data to create a community competition to encourage increased rates of recycling.

DATA SHEET

What:

The data sheet is another simple form for collecting data. On data sheets, specific data are recorded in spaces on the sheet rather than the tally method used in check sheets. A data sheet is commonly used to record variables with a wide range of values when listing each possible is not practical.

How:

1. Plan what question you are trying to answer with the data.
2. Identify the variable you need to collect data about. Does the data already exist, or will you have to collect new data? Define where in the process you will collect it.
3. Select unbiased data collectors. The data collector is often the same person who will analyze the data, so care must be taken not to bias the data.
4. Design the data collection forms with input from the data collectors. Keep it simple.
5. Provide instructions in the use of the forms.
6. Test the forms and instructions.
7. Collect the data.
8. Audit the data and the collection process.

DATA SHEET EXAMPLE

Per Average Annual Sick Leave Usage by Department

	2016	2017
Community Development	82.1	84.1
Finance	45.3	44.7
Fire	84.2	80.3
Information Technology	78.6	75.2
Manager's Office/ Admin.	47.4	53.2
Parks	31.7	41.6
Police	83.9	87.4
Public Works	28.5	32.8
Health Department	36.2	40.0

Cause and effect analysis. By asking “**Why?**” several times, a team can often drill down to find a root cause. At a public forum for food service regulation changes, a health department was receiving fiery comments for its proposed change to no bare hand contact on ready to eat foods, and undertook a cause and effect series of “**Why?**” questions, as follows:

Why are people upset with this change?

Because they feel frustrated that more regulations will hinder their food preparation process

Why?

Because more regulations are unnecessary and slow the workers down.

Why?

Because there are changes all the time that put more stress on the restaurant owner.

Why?

Because we are told about these proposed changes late in the process and our input is not accounted for earlier.

Why?

Because we haven't made that a priority yet. **SO, LET'S MAKE IT A PRIORITY NOW!!**

CAUSE AND EFFECT DIAGRAMS (FISHBONE OR ISHIKAWA DIAGRAMS)

What:

This is a key improvement tool, which is used to identify and organize possible causes of a specific effect and then isolate root causes. In all cases, you must test whether your hypothesized causes are real and whether enhancing them or reducing them will create the desired outcome.

How:

1. Form a team of 3-8 people who understand the problem/effect being investigated. Failure to include the right people can mean failure to clarify the problem and effect, and you may completely misidentify the causes.
2. On an easel or board in full view of the participants, write a brief description of the problem. Now ask the participants to briefly (in 1-2 minutes) write on Post-it notes how they see the problem being manifested in the workplace.

For example:

Problem:

Customer complaints about claims increasing How the problem is being manifested in the workplace:

- › 17 incorrect claims notices received weekly.
 - › 32% of calls from physician offices involve incorrect claims information.
 - › Employee Assistance Program visits for claims personnel are up 43% over the same time last year.
3. Have the group reach consensus on the most important manifestation of the problem to start on first, using Multivoting/Nominal Group Technique (NGT)
 4. or the Interrelationship Diagram.
 5. Place the selected effect at the top center of an easel sheet and ask them to generate a list of possible causes by using the brainstorming process. Test for completeness by using either of the following methods:
 - › Using brainstorming and the affinity diagram, use the column heads of the affinity diagram as your major rib descriptors (Appendix page 91).
 6. Now use a simple questioning process to dig beneath the causes initially captured above. Write one cause at the top-left of an easel sheet. Ask "Why" it causes the effect being investigated. Write your answer below and slightly to the right of the previous answer. Repeat this process 4 or 5 times until you arrive at a root cause (you can often tell by the fact that your answer has become repetitious). If at any point you don't know an answer, write down a question mark (?). This indicates an area where you need to

7. collect data, research the answer with a subject matter expert, or take some other action before answering. After you have completed this process for one cause, continue with the other brainstormed causes.
8. After you have done the 5 "Why's" for all the causes you initially brainstormed, analyze the results, looking for patterns or similar causes.
9. Now that you have completed the hypothesized root causes of your specific problem/effect, develop some potential solutions and test them to see if they eliminate the problem.
10. The test is critical.
11. Document your process after the group has finished so that others can replicate successful innovations. Do so by writing your causes on the Fishbone as bones and sub-bones of the fish.

CAUSE AND EFFECT DIAGRAM



Gap analysis or spider diagram. In a Gap Analysis, we use the information we may have gleaned from interviews or surveys to determine what's important to people and graphically show that as points on a wheel, then we identify how well we are performing on those elements that are most important to people and plot that on an axis that represents each element to show where our biggest gaps are. For example, an Administrator used a questionnaire to identify the issues that were most important to user departments in Foodborne Illness information collection – location, duration, number of affected individuals, vendor history, suppliers, etc. – and then used a focus group to develop a gap analysis of how they were performing on rigorous data collection on each of the elements in order to focus improvement and prevention efforts.

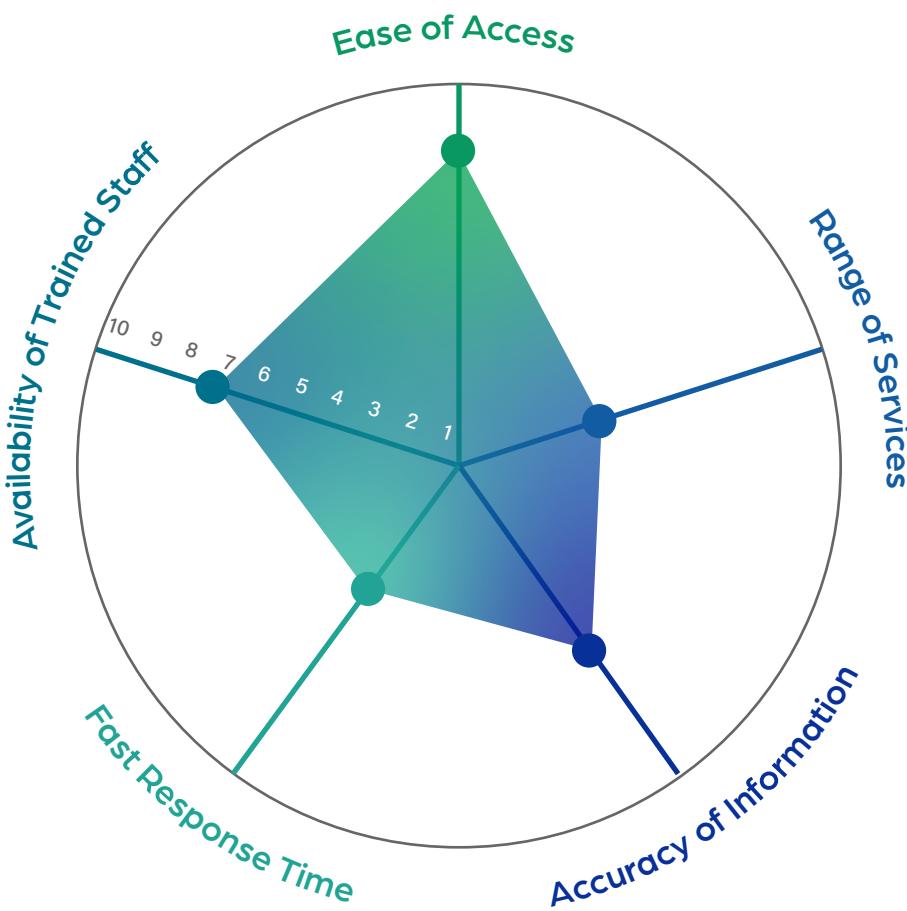
SPIDER DIAGRAMS (OR GAPS ANALYSIS)

What:

The Spider Diagram is like a radar map that graphically displays gaps in an organization's priorities.

How:

1. Form a team with the knowledge, skills, and motivation to address the issue.
2. Create headers that may have been derived from affinity diagramming, multivoting/NGT, [Method 6-3-5](#), [Is-Is Not](#), or any other process.
3. Draw a circle and place the headers evenly around it. For example, if the team were addressing how to provide high quality service to our customers, the headers might look as follows:



4. Locate the center and mark it with a dot. Then draw a line from each header to the center dot.
5. Rate current performance in each area compared to the ideal. Use a scale from 0 (non-performance at center of circle) to 10 (ideal performance at edge of circle). Where possible, use objective, quantitative data as the basis for your ratings. If quantitative data are unavailable, have the team discuss qualitative data based on members' perception. Indicate your rating by drawing a dot along the line associated with the header being evaluated.
6. Connect the dots to complete the web of the Spider Diagram. Darken the area of the web to graphically illustrate the gap between performance and the ideal.
7. Review the gaps between current performance and ideal. Should the ratings be changed? Why?

8. Review the goals between current performance and goals or business objectives. Note the goals by placing a dot on the line for each header relative to the goal. Draw dotted lines between the dots for the goals.
9. Discuss and save for future action planning.

Scatter diagram. A Clinical Services group found that there was a high degree of supply waste due to expired pharmaceuticals from a certain supplier, and the group was able to convince Purchasing to go with a higher cost supplier who actually saved the organization money by increasing the shelf life of Clinical supplies.

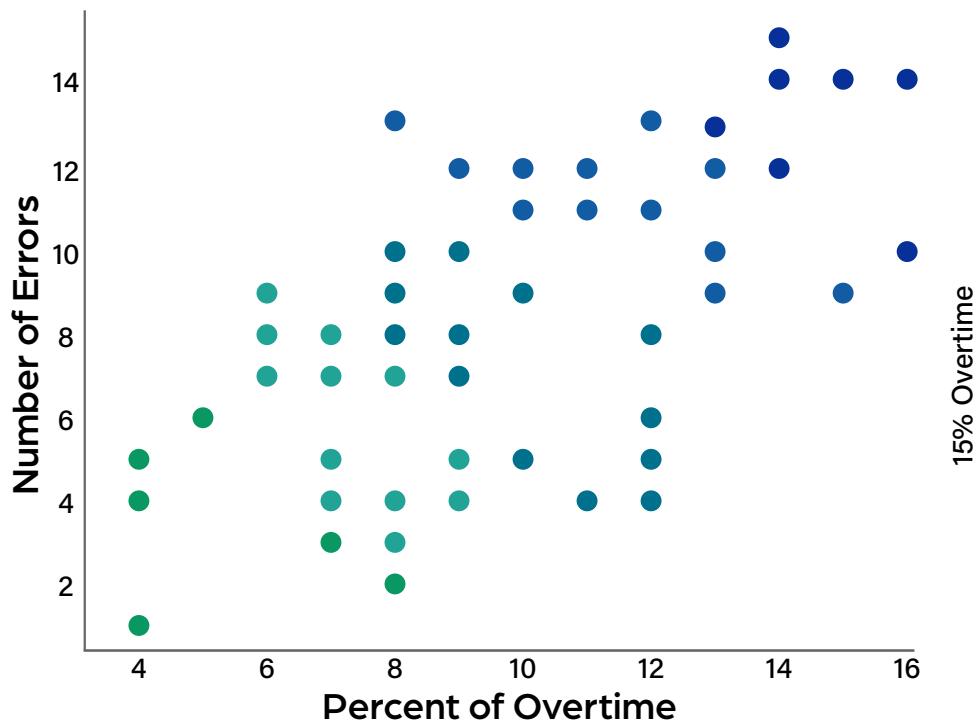
SCATTER DIAGRAM

What:

At some time in the innovation or quality improvement process you may need to explore the relationship between two variables. The Scatter Diagram is a useful tool to determine whether a relationship exists, and if so, whether it is positive or negative.

How:

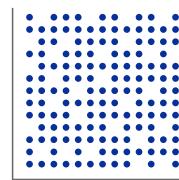
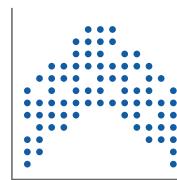
1. Collect the data on the two variables under the study. Accurate and rigorous data collection is critical and cannot be over emphasized. Determine the high and low value for each variable.
2. Draw the horizontal axis (X axis) and vertical axis (Y axis) of the scatter diagram. As a general rule, the variable suspect as the causes should be plotted on the X axis. The effect is plotted on the Y axis. The axis should be approximately the same length, creating a square plotting grid.
3. Label the X and Y axes using incremental values that fit the range of data being plotted. The values for the X axis start at the left and go right. The values for the Y axis start at the bottom and go up.
4. Plot the data at the points on the graph where the values of each pair of variables intersect. If values are repeated in your data, circle the points to indicate duplicate point in the data.
5. Title and date the scatter diagram.
6. Analyze the scatter diagram as follows:



Strong, Positive Relationship
▪ As X increases, so does Y

Strong, Negative Relationship
▪ As X increases, Y decreases

Weak, Positive Relationship
▪ Low confidence in the relationship between X and Y



Weak, Negative Relationship
▪ Low confidence in the relationship between X and Y

Complex Relationship
▪ Needs further analysis

No Relationship
▪ between X and Y

INNOVATION EXAMPLE:

Libraries, Naloxone, and Health Departments

With the continued rise in opioid-related overdoses and deaths, there has been a large push for the distribution of the antidote, Naloxone. Many states have pushed for first responders and emergency medical personnel to carry Naloxone with them as a first-line defense in an overdose-related situation. Research is showing that these programs have been influential and are helping to save lives in the field. The effectiveness is leading to the distribution of Naloxone to high priority locations, though it is often difficult to establish the most effective places.

A public library, typically thought of as a place for books, learning and knowledge, may not seem like the first place to turn to for overdose death prevention; however, the public aspect of libraries combined with their well-known access to quiet, secluded corners, and little human interaction turn them into popular locations for drug use. Many jurisdictions focus on additional police presence in the community to counteract the opioid abuse problem, but the real front runners have demonstrated an innovative approach to addressing narcotic use in libraries that requires less resources yet provides the quickest response – training the staff to use Naloxone and stocking it at the library. Salt Lake County Library Services is one program that is demonstrating this innovation. Through a partnership with the Salt Lake County Health Department, Naloxone kits have been distributed to all county library branches and the librarians at each branch have been trained in how to administer the medication if needed. Librarians will also receive continued education on drug overdoses and prevention. Another location utilizing this idea is McPherson Square Library in Philadelphia, Pennsylvania.

After a large increase in heroin-related overdoses at the library (which led to establishing bathroom monitors, logging all patrons using the restroom after they were required to show ID, and instituting time limits for using the facilities), a city official provided the library with Naloxone and the librarians are now being trained to use the life-saving drug.

<https://slco.org/news/libraries-ready-to-respond-to-drug-overdose/> www.cnn.com/2017/06/23/health/opioid-overdose-library-narcan/index.html <https://americanlibrariesmagazine.org/2017/06/21/saving-lives-in-the-stacks/>



Exercise

What approaches will you test to look for problems or opportunities for your team?

Why have you selected those approaches?

How will you organize your findings? With whom will you share your findings, when, and how?

2.5 Whom to Engage

There is no one answer to the question of whom you should engage in identifying the problem or opportunity your team wants to pursue, but the exercise early in the change process of considering all those that might have valuable input and/or feel they should be part of the project is critically important to planning and delivering a desirable innovation.

Internal customers - other employees who use the service or process you provide or are otherwise affected by your work.

External customers/end users – community members, businesses, visitors, etc., who rely on you for direct services or information.

External intermediate customers - vendors, healthcare providers, suppliers, or staff from other agencies on whom you rely to produce what you provide.

“Economic Buyers” - those who have the “yes or no” authority over your efforts.

Stakeholders - those who have information or resources to commit to your project, and those who will feel that their input should be important, or your outcomes will affect them.



Exercise

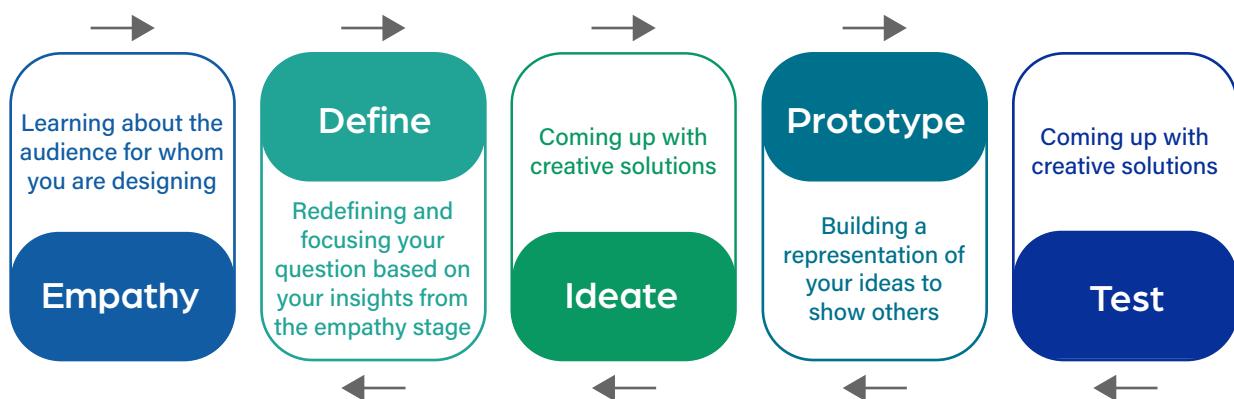
Can you think of individuals or groups in each of these categories that you must engage?

What other groups or individuals do you need to consider?

2.6 Problem Definition

A key task early in the team's work is to clearly define the problem or opportunity. How many times have you been working in a task group, only to find that not all members of the group have the same understanding of the problem statement, or that, over time, the problem definition has begun to evolve based on new information?

It is critical for everyone on the Innovation Team to have the same problem or opportunity definition, and for this definition to be reviewed and approved by the Executive Sponsor and the Department Head, Administrator, or Health Official. The team will need to be focused to work efficiently and the organization needs to know and endorse the work as defined. Use the question "How might we...?" to articulate a problem definition.



A clear problem definition will be described as a root problem to be solved, not as the solution. For example, if the issue is low resident satisfaction with the Health Department, the problem definition might be, "How might we improve clinic visitors' perceptions of our communication with them?" We can then open the universe of idea generation (the next section of this guide) on how best to address their frustration. The problem definition or problem statement would not be "In order to improve public engagement, our project will be to pilot an online public engagement forum for the Immunizations Division." This may well be where we end up, and it might be a great idea, but we might also find that simply improving our locational signs about proposed projects and providing easy-to-use status reports available on the website would better address the problem we are experiencing.

Or if the issue is an increasing incidence of sexually-transmitted diseases in a particular neighborhood or population, the problem definition might be "How might we produce a sustainable reduction in sexually-transmitted diseases among the X population?" vs. "Our problem definition is how best to encourage condom use in the X population." The former question opens many possibilities, while the latter question assumes only one solution.

In addition, we want to consider:

- Conditions. What conditions or factors are impacting this problem? When does the problem occur? How much? How do we know?
- History. What else has been tried? What happened?
- Relational Map. Who else cares about this problem? What is their interest in it?



Exercise

What is the problem definition or statement for the initiative you are working on?

What data or conditions led the Innovation Team to identify this as the problem to address?

What is the history of this problem? What else has been tested? What were the results and learnings?

Who else cares about this problem? What is their interest in it? How will this work impact them?

2.7 Communications and Planning

There is always more we can be doing to communicate the work we are engaged in or considering and how it will affect people – we cannot over-communicate when we are making change. Those projects that are most effective will include developing a communications plan for their various audiences early on and will continuously monitor and refine its effectiveness. The best communication plans will always focus on WHY.

INNOVATION EXAMPLE:

Hawaii State Department of Health Public Health Preparedness

Sometimes, innovative ideas may encompass just one part of a program rather than creating an entirely new program. A good example of this comes from the Hawaii State Health Department and their Prepare NOW Channel, which is a part of their disaster preparedness program. The idea of the program is to get information to the public about how to be prepared in case of a disaster and to ensure that the information delivered is understandable and fun.

The Prepare NOW Channel is a website that contains disaster preparedness information pertinent to people living in Hawaii. While the concept itself doesn't seem innovative, the innovation shows up in how Prepare NOW used creativity in developing a fresh approach to the traditional information delivery. The developers have taken preparedness concepts and simplified them into three simple categories: necessities, organization, and wellness. Most importantly, through a partnership with local icons and organizations, the health department utilized a technology driven approach, and by using both animals and local artists, they developed fun and memorable videos and content that is directly tailored to their audience, is easy to understand, and relatable to all ages. The videos are detailed in that they have very specific information about preparedness, yet are light-hearted and quick to watch. There is truly a video for anyone.

www.preparenowhawaii.org

**"Creativity requires the courage
to let go of certainties."**

-Tom Freston



Exercise

What will you tell people about WHY you are proposing a change? When will you start telling them this?

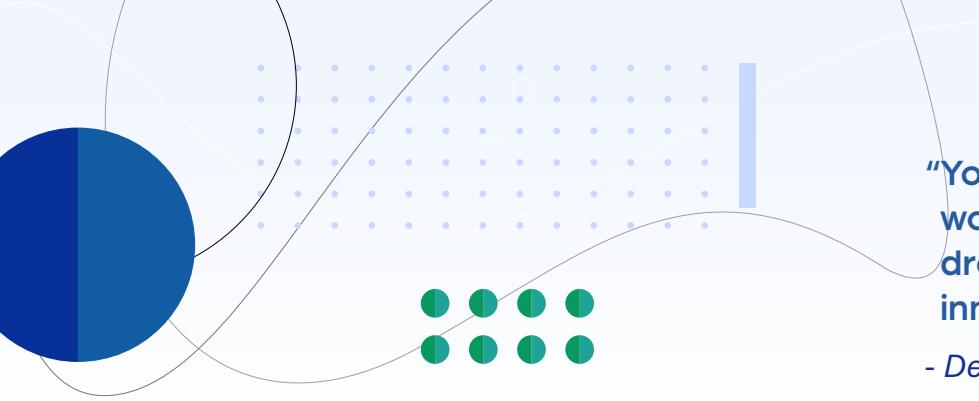
How will you describe the innovation project's purpose?

What data will you share that supports your understanding of the problem or opportunity?

Who are the primary audiences for your communication? Who needs to know? Who WANTS to know?

What messages are needed for which audiences? What formats are needed for which audiences? What is the timeline for information and communication be shared and updated?

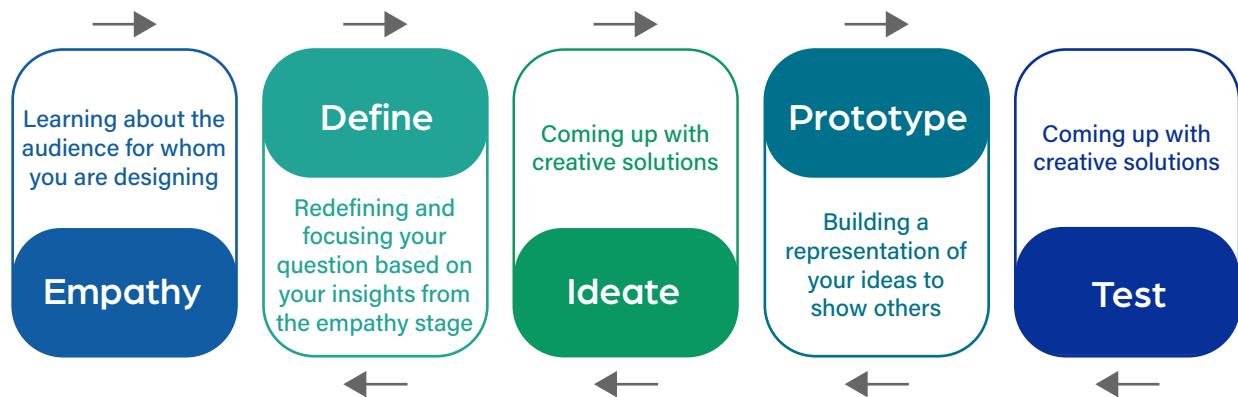
Who needs to review your communications before they go out? What impact will that have on the project's timeline?



"You have all the reason in the world to achieve your grandest dreams. Imagination plus innovation equals realization."
- Denis Waitley

3.0 Idea Generation

Once the team has identified and clearly defined the problem or opportunity to be addressed and secured the approval of the Executive Sponsor and the department head, administrator, or health official to develop innovative solutions to solve it, the next step is idea generation, or ideation.



The goal is to create a broad universe of ideas that might address your problem or opportunity. Eventually you will evaluate all the ideas, but at this point, you should generate ideas freely and without boundaries. The more ideas you have, the higher the likelihood that you will find one or more high quality ideas.

3.1 The Conditions for Creativity

Kevin Eikenberry writes that research with highly creative people showed that the circumstance which coincided with producing the greatest frequency of best ideas was being in the shower (<https://kevineikenberry.com/blog/>, September 2015). Why? People need several things to be creative:

- Time to consider and explore ideas and issues.
- Information that informs our consideration of possibilities, either through observation and immersion in the customer's world, or through research.

- Opportunity to reflect and incubate ideas.
- Diverse perspectives that stimulate new thoughts.

Roger von Oech, author of *A Whack on the Side of the Head*, describes the four roles of the creative process:

- Explorer – searching for new information and perspectives.
- Artist – turning those resources into new ideas, asking the “What if?” or “How might we?” questions.
- Judge – evaluating the merits of an idea and deciding what to do with it.
- Warrior – being a champion and a fighter for the idea, and seeing it through to implementation.

At this stage in our innovation journey, we are moving from Explorers to Artists and beginning to answer the “What if?” and “How might we?” questions.

3.2 Enhancing Your Individual Creativity

Tina Seelig, author of InGenius and a faculty member at the Stanford School, gives us five methods for enhancing our creativity:

Ask more creative questions. What are all the ways people can connect with services? vs. What's the best software program for scheduling clinic visits?

Reframe the problem. What if the solution to hunger isn't more food?

Connect and Combine. What can you create of value from the contents of your trash can?

Challenge Assumptions. How might we make homeless individuals feel safer?

Pay Attention. What is the other person seeing that is different from what I'm seeing?

As we've discovered, diverse teams will often come up with more and better ideas than individuals alone. You can look to internal or external team members who are willing and able to help us generate a universe of ideas and can use some of the following tools to help guide teams in ideation.

INNOVATION EXAMPLE:

23andMe - Northern Nevada

In Northern Nevada, Renown Health Foundation and the Desert Research Institute are breaking ground with a first of its kind population health study that involves collaboration with the genetics company 23andMe. Through their cooperative effort, they developed a community-based study that provided free genetic testing to 10,000 volunteers, which included information regarding the individual's ancestry and health profile. This study is attempting to detect the convergence of environmental and genetic factors in morbidity and mortality of the community to determine who is at greatest risk for disease and to provide

quicker diagnoses and to tailor treatments. The goal is to effectively obtain a large and varied sample population that will be reflective of the entire population of Nevada. In doing so, researchers hope that morbidity variances across genetic, demographic, societal and environmental variables can be mapped effectively enough to build predictive models that will be applicable to the entire state. This is generally regarded as the first research of its kind in the world and has many potential applications for future health recommendations and preventions.

www.prnewswire.com/news-releases/nevada-population-health-study-to-offer-free-23and-me-genetic-tests-to-community-300328634.html

Questions to consider for discussion:

- If you discovered a project such as this in your area, what steps would you take to reach out to those involved?
- What could your health department offer the project as a collaborative effort?
- Think of your area or state, is there a unique or different company that your department could partner with?

INNOVATION EXAMPLE

Tooele County Health Department – Utah

One of the aspects of increasing creativity is to think about the problem, and, therefore, the solution in new ways. Results from the Tooele County Health Department Community Health Assessment showed high rates of adult and childhood obesity, lack of physical activity and high rates of diabetes. Making this a part of their Community Health Improvement Plan, they established partnerships within the county and the Live Fit Tooele County community coalition program was formed. Live Fit Tooele County involves many aspects ranging from increasing access to fresh produce, establishing walking trails and sidewalks, and creating children-focused physical activity programs. It has also been witness to the county obesity rates dropping from the highest in the state to the second highest. Live Fit Tooele County demonstrates many aspects of individual creativity within their program, which may be one of the leading factors to its success. Tooele County put a heavy focus on increasing connections with the county residents and involving them in multiple aspects of the program. Additionally, they looked for new ways to increase access to physical activity and fresh produce. Some of the innovative ideas include an online contest where contestants submit activity goals for the week then earn an entry into a prize drawing for each goal they complete; collaboration with local organizations, such as the library, trampoline gymnasium, and

a bounce house business to offer free opportunities for young children to engage in physical activity (e.g. free admission, active story time); and a backyard garden share program.

The Backyard Garden Share is a great example of creativity and shows an innovative way to feed needy families, while also increasing access to fresh produce. Their mission states, "We help you and your neighbors organize a simple backyard gleaning program, which collects and distributes homegrown garden surplus to local families in need."

The program works by collecting surplus produce from residents' gardens and distributes it to others in the community. There are several collection sites where produce is gathered and transported to distribution sites, such as churches, food banks, pantries, and schools. The overall outcome is increased access to food and fresh produce for those who have a difficult time attaining access.

www.livefittc.org/



3.3 Tools for Idea Generation

Brainstorming

What:

A way to stimulate new thinking creatively generate new ideas and logically combine ideas or break them into components.

Rules:

- Defer judgment
- Encourage wild ideas
- Build on the ideas of others
- Stay focused on the topic
- One conversation at a time
- Be visual
- Go for quantity



How:

1. Form a team of 3-8 people with the knowledge, skills, and motivation to address the issue(s).
Review the four ground rules of brainstorming.
 - No criticism of an idea is allowed.
 - Strive for the longest list of ideas possible and go for quantity.
 - Strive for creativity and “wild and crazy” ideas are encouraged.
 - Build on ideas of the others to create synergy.
2. Describe the issue in full view of the team (e.g., whiteboard, Jamboard). Express the issues as a question about something that you can impact. Make sure all team members understand the stated issue the same way. It might be necessary to break an issue into components parts: “Why are there so many corrections needed on claims reports?” breaks down into defining what a correction is and which claims reports we are referring to.
3. Have participants write down their ideas individually first for 2-3 minutes. Participants may write on index cards (for later organizing) or Post-it notes.
4. Have participants state their ideas to the group. Generate as many ideas before evaluating any of them. Have participants build on one another’s ideas. Allow about 15 minutes for this activity.
5. Following the initial brainstorming, return to the issue statement and the responses for understanding and relevance to the issue.
6. Combine all responses that were relevant to the issue.

Crowdsourcing. Many organizations are discovering excellent ideas by opening up the topic to employees or the public via technology. Crowdsourcing software, such as IdeaScale and others, enable multiple participants to see one another's ideas and build on them.

Idea contests, competitions, and idea fairs. Ideas are often collected through designing a competitive process or hackathon-like environment. For example, the University of Michigan School of Public Health put on a competition called Innovation in Action where trans-disciplinary teams compete for five months and a chance at up to \$10,000 in cash prizes to come up with innovative solutions that address public health and education problems. One of the Public Health teams discovered a program in Europe for older adults with dementia called Green Care Farming, wondered why this was not being done in the United States, and took this on as a competitive team project.

Scanning. Literature searches, web searches, or professional conferences can often yield new perspectives and new ideas by understanding how others have addressed the same or similar challenges.

Job exchanges. By encouraging employees to work in other departments or organizations, new ways of looking at old problems can be discovered.

Gallery walks. Teams create visual representations of the problem or opportunity definition, and these are posted in a central location which participants walk through to stimulate creative ideas. Each presentation space has an adjacent place on which to post additional ideas.

Alternate approach. In addition, a "Four-Perspective Approach" (from NYU Wagner Innovation Labs "Getting to Innovation," October, 2012) is extremely useful. Look in four directions:

- Outward at the national (or even international) landscape, scanning for ideas.
- Inward at the issue or problem as it is manifested within the organization and at what the organization is doing, or can do, about it.
- Backward by speaking with stakeholders about how things have been.
- Forward by collaborating with stakeholders, agency staff, and those who will use or benefit from the services to generate and examine ideas, and hone them into a plan of action.

3.4 Tools for Evaluating Ideas

In this part of our innovation journey, you move from being Artists to Judges. You have worked to understand the needs and wants of the people we are innovating for, you've defined what you want to innovate about, you've gathered and analyzed data, and you have generated a universe of ideas. How do we select which idea to pursue?

Solution Matrix. In this tool, you list the needs and wants or criteria of the people you are innovating for on one axis, and list the various ideas on the other axis, noting which ideas meet which needs with a mark. In this way, you can evaluate which of the ideas meets the most needs and wants of our audience. The decision matrix can also be modified to weigh the various criteria, and the solutions can be evaluated by determining which ones best meet the highest weighted criteria.

Some of the criteria that might be useful to consider in evaluating ideas include the following:

- Impact on solving the problem.
- Cost-effectiveness.
- Ease of implementation.
- Time needed to implement.
- Key sponsor support.
- Risk (financial, regulatory/legal, liability, public opinion, etc.)
- User preference.

SOLUTION MATRIX

What:

This will be useful once the team has defined a problem, looked for root causes, gathered data to confirm the hypothesis, and is ready to begin solving the problem.

How:

1. Form a group of 3-8 people with the knowledge, skills, and motivation to identify and rate possible solutions.
2. Write the defined problems on the board in view of all group members.
3. Begin by developing criteria for evaluating effective solutions by brainstorming. Get all ideas listed before critiquing them.
4. Discuss the ideas:
 - › Is this criterion clear and unmistakable in its meaning?
 - › Will this criterion be observable?
5. Using Multivoting/NGT, weigh each of the 3-6 selected criteria to show how important each one is relative to each other (this can be done by using a percent scale totaling 100% for all criteria together).
6. Using brainstorming or the output of other analysis (Cause-Effect Diagram, Flow Chart,
7. Pareto Chart (80-20 Rule), etc.), generate a list of possible solutions to the defined problem.
8. Using your list of criteria and weights, rate each solution against the criteria. This can be done by giving a score on a 1-10 scale (1=meets criterion very little, to 10= meets criterion very much) to each solution for each criterion.
9. After a score has been assigned, multiply the score by the weighing.
10. Add up the weighted score for each solution to get totals.
11. Discuss the results and finalize a course of action.

SOLUTION RATING MATRIX

Criteria	Solution #1	Solution #2	Solution #3
Cost-effectiveness (25%)	2 (.3)	9 (1.35)	6 (.9)
Ease of implementation (10%)	3 (.3)	8 (.8)	4 (.4)
Impact on future actions (15%)	6 (.6)	5 (.5)	6 (.6)
Probability of success (10%)	8 (.8)	7 (.7)	5 (.5)
Management support (10%)	8 (.8)	7 (.7)	5 (.5)
Solve problem (40%)	8 (3.2)	8 (3.2)	8 (3.2)
Totals	(6.55)	(6.85)	(6.2)

PRIORITIZATION MATRIX

Prioritization matrix. In this tool, number all solutions and list the numbers along an X and Y matrix. Through team discussion based on agreed-upon criteria, we compare every solution to every other solution in a forced choice. This gives us the ability to vet all concerns and measure each solution against all other solutions.

What:

Use the Prioritization Matrix to prioritize goals, tasks, or issues based on weighted criteria that you agree upon in advance. This tool is useful when building on the interrelationship diagram and spider diagrams.

How:

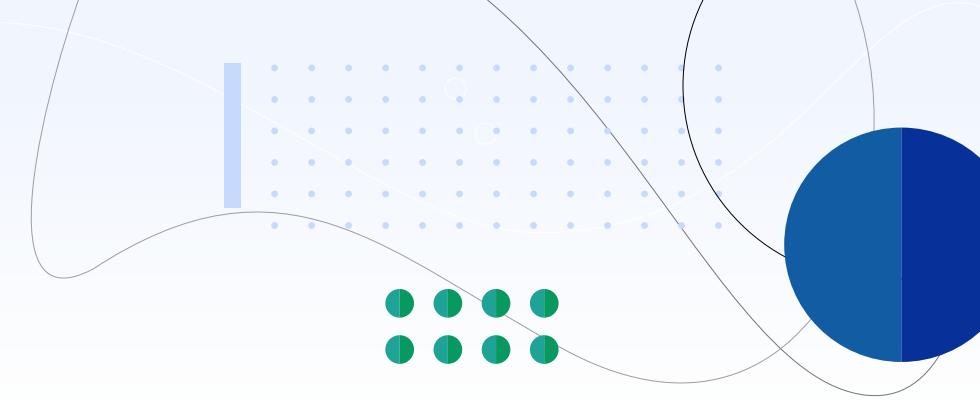
1. Form a team of 3-8 people with the knowledge, skills, and motivation to address the issue.
2. Create a blank prioritization matrix. Then list all options as statements down the left side at the numbered lines. Then place the same numbers across the top of the matrix, from left to right.
3. Compare all options/actions to each other to determine causal direction and add a weighted scale to the strength of the influence of one action on the other (i.e., 9 = strong influence, 3 = medium influence, 1= little influence). Draw an arrow in the direction of influence and list the weight of the influence in the box.
4. Along each horizontal row, add up the number of in-arrows (the ones pointing left), placing the result below the slash in the "In" column. Then add up the weights assigned to the in-arrows, placing the result above the slash in the "In" column. Now follow the same procedure for the out-arrows.

"There is no innovation and creation without failure."

- Brene Brown

Analyze the data you now have to identify and prioritize the key driving factors.

Prioritization Matrix							
	1	2	3	4	5	In	Out
1							
2							
3							
4							
5							



"Few ideas work on the first try. Iteration is key to innovation."

- Sebastian Thrun

4.0 Piloting and Prototyping

4.1 Planning Your Pilot

The best way to maximize the success of a new concept is to test it before implementing it broadly. Individuals who are reluctant to embrace change are often more willing to try something that is not pitched as a permanent change, but rather as a pilot, in which their feedback as to the merit of the idea is encouraged and actively used to improve the idea.

As Steven Covey says, "Begin with the end in mind." Start with the assumption of your idea already in place, and work backwards, identifying, and planning for the following:

- What is the ideal scale on which to pilot? Should we start with one or a few departments? One workgroup? One supplier? One or more customer groups?
- Which groups are most likely to embrace the pilot supportively and/or give us the best feedback on how it's working?
- How long will the pilot last? When will we start? When will we end the pilot? We want the time to be long enough to allow it to work and let us capture good information, but not so long that we miss the opportunity to implement more broadly, or, conversely, not so long that people are disadvantaged by participating in our pilot.
- What permissions do we need? Who needs to be fully informed of what we are planning?
- What resources do we need for the pilot? Where will resources come from?
- What tasks will be needed? Who will do them? When?
- How will we capture the feedback on how our pilot is working?
- By what processes will we apply our learning?
- How will we keep executive sponsors, employees and other affected stakeholders informed before, during, and after the pilot?

Development of a Gantt Chart is recommended so that the team and executive sponsors are aware of what tasks will be needed, when they will be conducted, by whom, for how long, and with what overlap.

GANTT CHART

What:

The Gantt chart is a matrix for identifying key actions steps and times frames.

How:

1. Establish the critical action steps to achieve the goal. List these down the left side of the matrix in chronological order.
2. Establish appropriate time intervals based on the action steps listed (days, weeks, months, pay periods, etc.). List these across the top of the matrix.
3. Chart the time interval for each action step by shading the appropriate area along that row as follows: the left end of the bar will be under the beginning time for that action step. The right end of the bar will be under the time interval when that action step is expected to be completed.

Gantt Chart Customer Survey Project																		
ID	Task	Scheduled Start	Scheduled Finish	July														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	A	6/23/17	6/23/17															
2	B	6/23/17	7/9/17															
3	C	6/23/17	7/9/17															
4	D	6/23/17	7/29/17															
5	E	6/23/17	6/23/17															
6	F	6/23/17	7/22/17															
7	G	6/23/17	8/17/17															
8	H	6/23/17	8/17/17															
9	I	7/13/17	7/13/17															
10	J	7/18/17	8/10/17															
11	K	7/11/17	8/10/17															
12	L	7/11/17	8/17/17															
13	M	8/1/17	8/17/17															
14	N	8/1/17	8/24/17															
15	O	8/24/17	8/31/17															

"You miss 100% of the shots you never take."

- Wayne Gretzky

4.2 Mitigating Risk

The purpose of the pilot is to mitigate risk. The success of our risk management depends upon our evaluating the risk reasonably and appropriately, while not allowing it to jeopardize the spirit of innovation that will bring our creative ideas to reality.

There are several types of risk that we want to address as we design our pilot. These may be positive or negative risks — we don't want to just focus on threats. Several key actions will help us to anticipate and manage for risks.

Seek clarification of the goal or problem statement and any boundaries or limitations at the front end. Make sure that you and the Innovation Team all have a shared understanding of the problem statement, the proposed innovation, and any restrictions on what you can try, and make sure that this understanding is shared by the executive sponsor and key leaders.

Assess risks:

- Financial
- Time or efficiency
- Image or reputation
- Customer Satisfaction
- Safety
- Relationships
- Retribution

Mitigate risks:

- Course correction (change scope, approach, timeline, target group, etc.)
- Negotiate modifications

Make your reasoning visible to others. We often neglect to make our underlying reasoning known to others, and if we did, we could gain their support.

Check in frequently; over-communicate. Communication is the single most valuable strategy for mitigating risk. Make sure that those who need to know, and those who believe they should know, are fully informed of what you are doing.

Consciously work to strengthen relationships. Interpersonal trust increases with your demonstrated commitment to respect the risk others are taking. Show others that they matter by addressing their concerns where possible. Negotiate solutions by determining what you can offer to the other person in exchange for their support. Do you have data that they need? More time for review of a process? Is there a community meeting that you could take for them? Is there a contact of yours that it would be helpful for them to have an introduction to? Think broadly of how you can benefit the person whose support you need.

INNOVATION EXAMPLE

Bee Branch Restoration Project - Floating Islands

The City of Dubuque, Iowa, gives a good example of utilizing advancements in research to create an innovative project that can benefit multiple sectors, one of those being public health. By transferring research into practical application, they developed carefully engineered floating islands made of recycled plastic bottles that work to promote and enhance the environment and population health of the city. The initiative, which is part of a larger program to restore both the Lower and Upper portions of Bee Branch Creek, took over 67,000 plastic bottles away from landfills and moved them into a capacity that will allow them to clean the environment rather than pollute it. The design of the islands is crucial to the project being successful and each characteristic of the islands serves a purpose. The recycled bottles, which are BPA free and nontoxic, were formed into a multi-layer platform that can be used to grow plants in addition to housing a variety of microbes that will promote a thriving ecosystem and will help to clean the water of pollutants in addition to promoting aquatic and terrestrial life. The microbes are crucial to the success of the islands as they work to break down and remove chemicals, such as phosphorous and nitrogen. The islands are also anchored to the bottom of the creek, but the anchors have been designed to allow the islands to rise and fall with the water level to ensure long-term sustainability of the project.

www.cityofdubuque.org/1545/Lower-Bee-Branch-Creek-Restoration



"99% of success is built on failure."

- Charles Kettering

**"A dream will not become innovation
if there is no realization."**

- Ciputra

4.3 Defining Success Metrics

A pilot is only as successful as the learning that it produces, and that learning is dependent upon crafting relevant measures by which to determine whether the pilot is working, and which elements may or may not be serving the greater purpose of the pilot.

Metrics will help to tell the story of WHY you are innovating and whether you are solving what you set out to. They can be used to keep team members, leadership, and other stakeholders well informed, and should be viewed as constructive and helpful.

You will want to focus on several "SMART" characteristics to develop good metrics: **Simple**. Is the measure clear and understandable?

Measurable. Is the performance quantifiable, and is the data available and accessible? **Actionable**. Will the data give us information that will help us improve?

Relevant. Is the metric directly relevant to the issue we are trying to address? **Time-limited**. Have we identified deadlines and other timing issues?

Further, you may want to consider measures that reflect the following:

- Volume of activity
- Cost
- Cycle time
- Staffing per unit of activity
- Quality
- Effectiveness

For example, if our pilot is to launch an Amazon Alexa (or other digital assistant), voice-activated technology for the seniors in our communities to reduce rates of medication errors, decrease incidence of self-reported loneliness, and decrease 911 calls, we might measure several specific parameters before and after the pilot study: 1) number of missed medications/ day/senior; 2) self-reported rates of loneliness; and 3) monthly number of 911 calls from seniors.



Exercise

What key metrics will you monitor to determine the success of your pilot?

Volume

Cost

Cycle Time

Quality

Other

Once you have defined your success metrics, you will need to identify targets. By how much do we intend to improve? Make sure your targets are ambitious but achievable.

In our digital assistant application example, we may be satisfied with a 10% improvement during our pilot but hope to achieve a 20% improvement over the next three years.

Identifying these goals at the front end will help us to course correct sooner, by having and monitoring clear targets for achievement.

"Success doesn't necessarily come from breakthrough innovation but from flawless execution. A great strategy alone won't win a game or a battle; the win comes from basic blocking and tackling."

- Naveen Jain

"Learning and innovation go hand in hand. The arrogance of success is to think what you did yesterday will be sufficient for tomorrow."

- *William Pollard*

4.4 Capturing the Learning

Learning from our pilot will not happen accidentally as we will want to design opportunities for learning into our pilot and into our project. Some of the topics on which we will want to capture learning include:

Communication – Which formats (emails, newsletter, web postings, face-to-face updates, etc.) worked with which audiences, and which didn't? Was our schedule of communication adequate? Too seldom? Too often? Was the amount of information provided appropriate for the various audiences? Was the way in which our results were communicated useful, and did it engage people to learn more?

Metrics – Did we measure the right things? Did we achieve our targets, or not? If not, why not? Did we find some measures hard to get data to track? Did we find new and better sources of information for our metrics?

Timing – What did we learn about the timing of our project or specific elements or tasks in our project? Did it require more time than we anticipated? What will we do about that in future iterations?

Solving the Problem – What did we learn about the degree to which our users felt our project solved the identified problem or opportunity? Did the solution generate new problems? What can we do to address those in future iterations?

Roles – Did our identified roles work as planned? What would we change, if anything, about who does what in the next iteration? Did we leave anyone out that should have been included? How will we engage them in future iterations?

Resources – Did our project use resources wisely? Do we need more/other resources? How will we acquire them?



Exercise

List three major learnings you have had as a result of the pilot:

What, if anything, will you change in the next iteration of the project as a result of what you learned in the pilot?

How will you communicate your learnings to the rest of the team, the stakeholders, and the organization?

INNOVATION EXAMPLE

One Health

In 2008 at the International Ministerial Conference on Avian and Pandemic Influenza in Sharm el-Sheikh, Egypt, representatives from over 120 countries and 26 international organizations came together and released a joint strategic framework which made One Health a cooperative international focus. The framework outlined six main objectives: surveillance, response, prevention, partnerships, research, and disease control. The University of Washington's Department of Global Health is home to the Center for One Health Research (COHR), which focuses on zoonotic diseases and the animal interface, animals as "sentinels," surveillance of emerging diseases, and One Health communication and collaboration.

In 2016, the Washington Department of Health (DOH) formed a steering committee to implement One Health initiatives more effectively in the state. The entities involved in this program were the University of Washington, WSU College of Veterinary Medicine, the Washington State Department of Fish and Wildlife, the Washington State Department of Agriculture, the Washington State Veterinary Medical Association, the Office of the Governor, and Kulshan Veterinary Hospital. Primary targets for their plans are antimicrobial stewardship and surveillance. While it is common for surveillance to occur, most programs monitor changes in disease within just the human population. By incorporating the idea of One Health into their surveillance program, DOH is looking to integrate all pathogen and disease information from humans, animals, and the environment to create a more complete picture, expand prevention, and identify emerging pathogens or outbreaks sooner.

2016 Supplemental Budget Decision Package for One Health Initiative WA:

www.doh.wa.gov/Portals/1/Documents/9220/PL-R6_OneHealthInitiative.pdf

<https://doh.wa.gov/community-and-environment/one-health>

<http://deohs.washington.edu/cohr/>

INNOVATION EXAMPLE

Zika and Mosquito Control

The outbreak of the Zika virus in the Americas has identified the need for novel protocols in mosquito population control. Traditional methods rely heavily on placing larvicides in standing water or spraying insecticides near standing bodies of water within communities.

Additionally, mosquitoes are now showing resistance to these insecticides, leading to a decline in effectiveness. While the development of vaccines and treatments for Zika continue to be researched, several techniques have been proposed to reduce mosquito populations. These techniques are still in trial phases but are quickly providing potential opportunities for local health departments in charge of mosquito control in their areas.

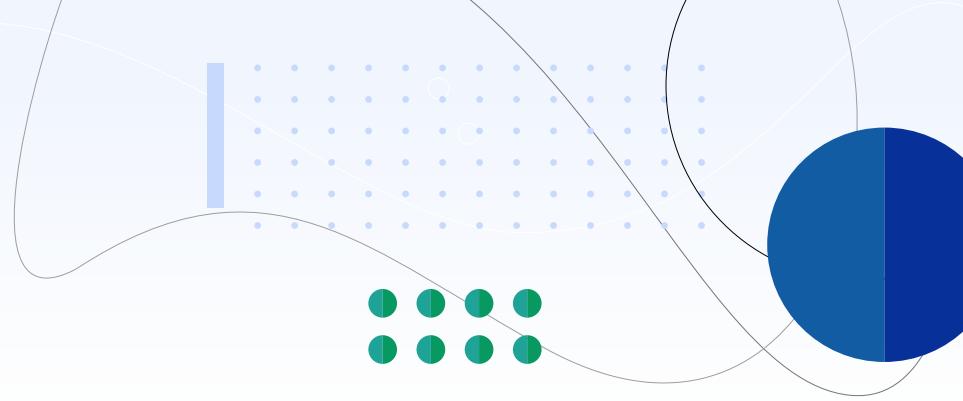
Most of the novel techniques rely on finding ways to reduce mosquito populations, but one idea shows further innovation in that it changes the way we are looking at the problem.

Rather than eliminating populations, researchers in the Eliminate Dengue project are instead looking at ways to make mosquitoes unable to transmit disease. The mosquitoes of interest are the *Aedes aegypti* (*A. Aegypti*), which carry the viruses for dengue fever, chikungunya, yellow fever, and Zika. The researchers in this project have been successful in their preliminary studies, which involve genetically modifying mosquito populations. These modified mosquito strains compete with wildtype populations and create offspring that are unable to transmit the viruses. This approach sustains mosquito populations yet is expected to reduce disease transmission by approximately 70%. Eliminate Dengue is currently operating in 10 countries throughout Asia, Latin America, the Western Pacific, and one pilot program in Australia, but has not yet been picked up by any programs within the United States.

<http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002219#pmed.1002219.ref007>

[www.thelancet.com/journals/langlo/article/PIIS2214-109X\(16\)00048-6/fulltext](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(16)00048-6/fulltext)

www.worldmosquitoprogram.org/



"It always seems impossible until it is done."

- Nelson Mandela

5.0 Implementing, Sharing, and Scaling

5.1 Project Management for Successful Implementation

It is key to the success of our projects that we have a clear sense of how we will manage the project to completion of the desired outcome. So what exactly is a project? One good working definition is that a project is **"...a temporary effort that has a beginning and an outcome...not routine...not repetitive."** - Laura Schmidt

Good project management requires many skills and capabilities: **active listening**, to understand the needs not only of the project team, but also the stakeholders, participants, "super users" who will continue to implement the changed product, process, or service, and end users who will benefit from it; **observation skills**, to monitor what is happening at all levels; **application**, to bring concepts to life in the real world; **adaptation**, to anticipate what will unfold next and be ready to react thoughtfully and effectively; and **inspiration**, to inspire those working on the effort and to keep all the players uplifted and working, despite the challenges because they are moved by the greater purpose of the project.

There are generally five phases of Project Management:

1. **Initiate** - this is when we clarify the project after having done our data analysis and problem identification. In this phase, **we focus on the project objective or outcome to be achieved**, and not simply on the method by which we will achieve it. When a Project Manager identified as her project the improvement and implementation of an enhanced educational curriculum on HIV, she missed the point, which was to reduce the rate of transmission of HIV among illiterate populations, reduce stigma and barriers to receiving medical services, and promoting healthy behaviors to reduce disease risk.

As a result, she spent more time than was warranted on curricular details and course development that did not correlate with the desired educational outcome and wasted time and resources without achieving the overall desired project goal. This led to stakeholder frustration and a delay in timeline milestones. Had she started with a results-focused approach instead, she would have realized sooner that the curriculum was not appropriate and made changes sooner, allowing the project to stay on track.

2. **Plan** - The purpose of a well-thought-out plan is not only to **write down and map** out the tasks that are needed, but to communicate strategically with sponsors, stakeholders, team members, and, ultimately, users. A good plan will consider who (what individuals will have what roles and responsibilities, what needs, and what benefits), will consider how and when (will the project be implemented in a "Big Bang" with all users involved at once, or will it be phased with smaller, discreet groups, departments, or functions? At what costs, and with what resources?), and will assess risks, prepare mitigations, and identify which risks present mission-critical challenges that must be addressed immediately if they arise in order for the project to succeed.
3. **Execute and Deliver** – This is perhaps the most obvious phase of project management, but it relies on the two preceding phases to provide the level of excellence we desire. In the execution, it's important to **keep our eyes on the business outcome but be prepared to adapt and shift strategies** when needed to reach that objective.
4. **Support** - Once we have undertaken the execution of the project, it is critical to **consider what support the users will need** to maintain the success of the project. Who will need to be supported in an ongoing effort? What training will they need? What communication? What status reporting will stakeholders require, and for how long? What resources will be required for the long term, and how will we secure them? How will we celebrate milestones and accomplishments? We have to plan our support in advance in order for the project to be sustained and grow.
5. **Continuous Improvement** - Healthy organizations will not only be successful in encouraging, supporting, identifying, selecting, and implementing new ideas, but they will also have stated values and processes in place to continuously improve by circling back to evaluate effectiveness at appropriate intervals. How are we doing? Did we accomplish what we set out to? Can we do better?

INNOVATION EXAMPLE:

GroupGAP - Pilot Scaling Up

As the popularity of small farms, locally-sourced food, and specialty crops continues to grow, the United States Department of Agriculture (USDA) is rising to the challenge of addressing food safety in the new markets without stifling growth. The USDA developed an auditing program that will allow all sized farms and produce growers to receive a USDA Good Agricultural Practices (GAP) certification and meet national standards outlined in the Food Safety Modernization Act. Previously, it was extremely costly and difficult for small farms to meet the food safety requirements to receive USDA certification. Through this program, the USDA's goal is to ensure that all produce growers can continue to harvest and sell their produce at local markets while ensuring food safety. The program is known as GroupGAP and is designed to allow small and mid-sized produce farmers to band together and form groups. These groups can then be certified as one entity, effectively sharing the costs of the certification process, in addition to creating standardization within communities that will allow them to meet the demands of the law. The program was initially piloted on a small

scale to determine feasibility and is now entering the expansion phase. The piloting program identified the following three primary benefits:

GroupGAP creates and reinforces a network-wide culture of food safety with a built-in community for learning and support.

The network results in higher initial audit pass rates and closer working relationships with state auditors.

GroupGAP helped growers develop robust and transparent internal management systems.

One group to take advantage of this innovative program and the benefits it offers is Good Natured Family Farms, a cooperative of 18 Amish farmers in Missouri. This group was the first to receive an official GAP certificate from the USDA in August 2016. By combining their efforts and resources, the co-op has been able to increase their market while ensuring the delivery of high-quality, safe foods to their local communities.

GroupGap is a strong example of a high-quality project that was successfully managed and met the needs of the user. By identifying the hardships of the farmers, this pilot was able to utilize innovation and adaptation to take theories and develop a new plan that better fit the participants. Evaluation of the pilot phase allowed changes in the project's scope that aligned with the intended outcome before using resources to roll the program out on a larger scale.

The focused approach allowed the pilot team to adeptly maneuver through each phase of project management and develop a successful program without losing inspiration despite any challenges that arose along the way. Their strategy has also set them up for continuous support and improvement to ensure long-term viability.

www.usda.gov/media/blog/2016/12/15/family-farm-co-op-missouri-shows-commitment-food-safety

www.usda.gov/media/blog/2015/09/30/groupgap-food-safety-assurance-growers-and-buyers-big-and-small

www.ams.usda.gov/sites/default/files/media/GroupGAP_Users_Guide.pdf

"There is no good idea that cannot be improved upon."

- *Michael Eisner*

Project Management Tools

There are four simple key project management tools that will empower your team and your project.

Project Charter

The Project Charter should be completed at the Initiation phase. It will be clear and high- level enough that an uninformed lay person could pick it up and quickly understand all the key points of the project:

- Mission (What is our purpose? Why are we doing this project?)
- Processes that will be changed
- Objectives that will be accomplished
- Deliverables
- Stakeholders
- Team members with their respective roles and responsibilities
- Resources needed and resources in place
- Assumptions
- Risks
- Boundaries
- Communications (audiences, timing, formats, etc.)
- Decision-making processes
- Schedule



Exercise

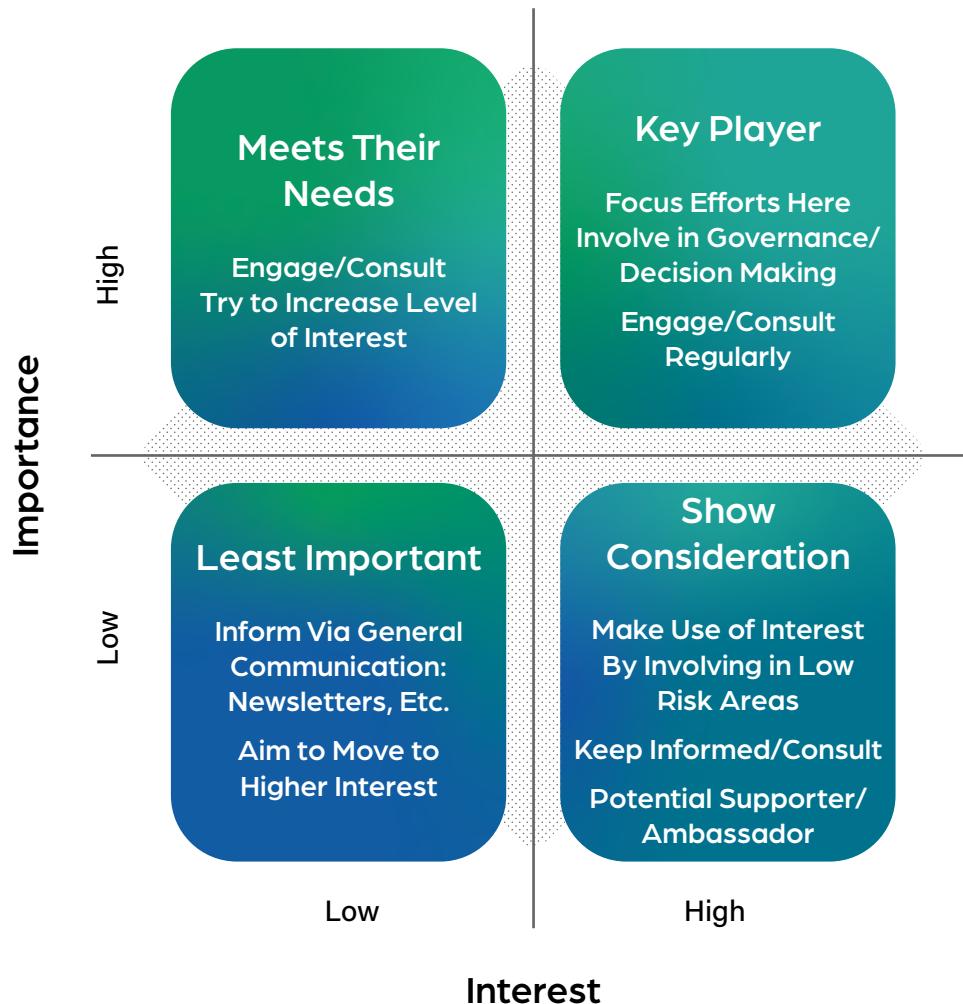
Complete the following Project Charter and share it with Executive Sponsors for review and improvement before proceeding with execution of your project.

Project Template

Project:	Project Name:		
Created By:	Your Name:	Date:	Creation Date:
Executive Sponsor:	Sponsor Name:	Project Champion:	Project Name:
Mission: "Practical problem to solve and/or opportunity to gain" Clear problem statement is crucial for gaining and maintaining project support.	General Instructions: <ul style="list-style-type: none">▪ Not all the sections listed here may be needed on a particular project. There may also be items you need to include that are not included here.▪ Many of these items listed will be visited in more detail when you start planning. The objective of the charter is to document the information as it is known at the beginning of the project – not to get into the planning itself. <p>Delete the blue instruction text as you move through the form.</p> <p>Articulate the problem or opportunity and associated goal statement(s). What is the project's purpose(s)?</p>		
Process	What process is impacted by this project?		
Objectives	What improvement is targeted and what will be the impact? If there are key performance measures or metrics that will be impacted by this project, what are they and what are the targeted impacts?		
Deliverables	What will the project actually produce? These should be measurable items.		
Stake- Holders	Who has "skin in the game"? Other than the executive sponsor, what other people are impacted by this project? Who needs to be on board for this project to be successful?		
Team Members with Roles and Responsibilities	Are there some roles/responsibilities that need to be clarified now before the detailed planning begins? Who needs to be doing what in order for this project to succeed? Are you clear on your responsibilities as the project manager?		
Resources	Are there known resource needs that should be articulated? Items such as travel and training, hardware, software, etc.		
Assumptions	What high-level assumptions have already been made about the project?		
Risks	What are main high-level risks that have already been identified?		
Boundaries	Are there specific items that are NOT within the scope of the project?		
Communications and Change Management	What will be the main channels of communications? Do you anticipate any communication problems that should be clarified here? How often will the team meet? How will the organization be impacted? What are key concerns for employees and the organization? How will they be addressed?		
Decision Making Process	What is the decision-making process for the project? Escalation paths?		
Schedule	<ul style="list-style-type: none">▪ Start Date: MM/DD/YY▪ End Date: MM/DD/YY▪ Major Milestones:▪ MM/DD/YY: Description...▪ MM/DD/YY: Description...▪ MM/DD/YY: Description...		

Stakeholder Mapping

One of the most often overlooked elements of project management is the analysis of stakeholders. We can assess the importance of various stakeholders on two axes – level of interest (X axis) and level of power or influence over our outcomes (Y axis) as follows:

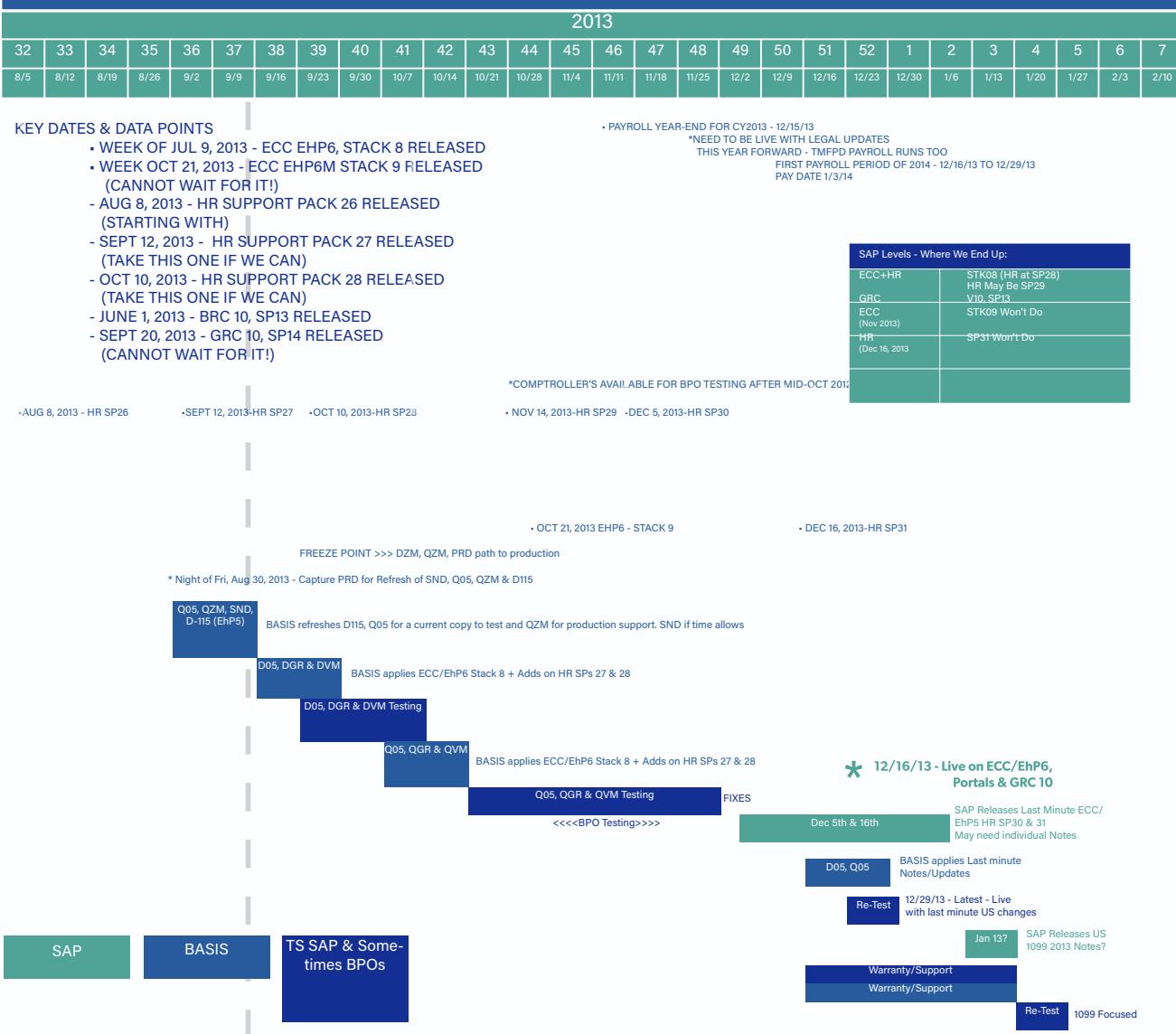


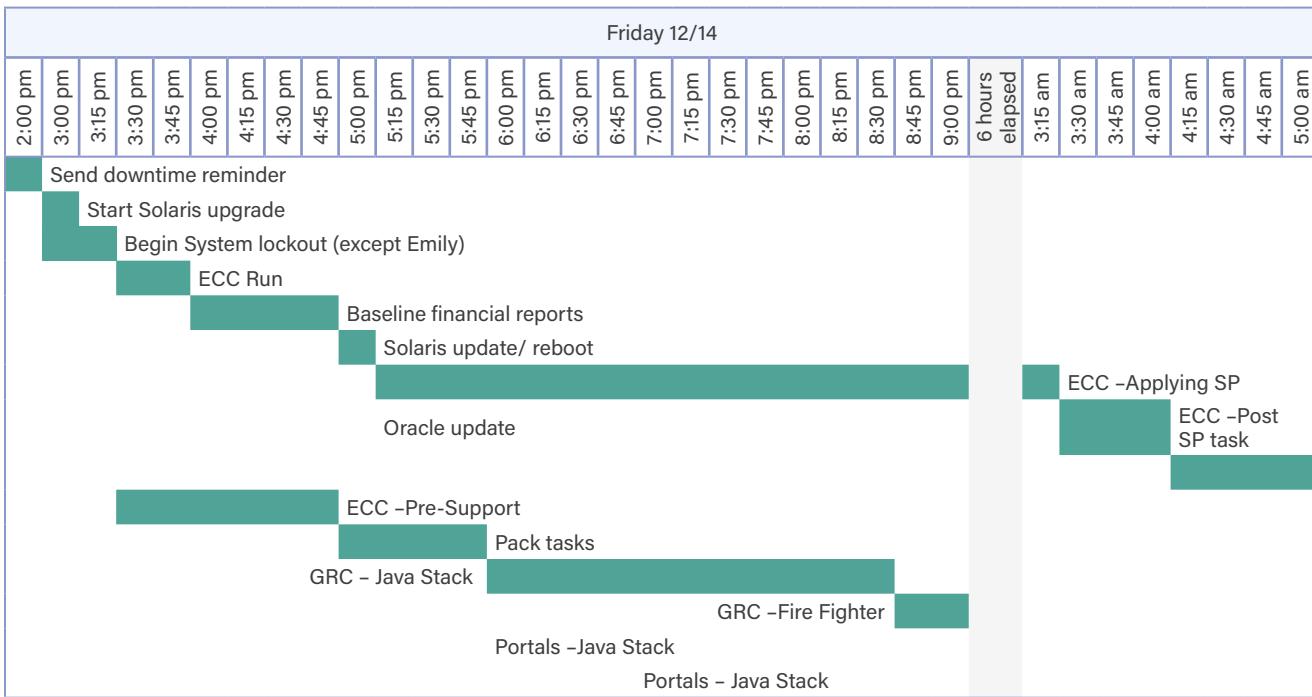
Project Plan

The Project Plan should be visual, easily understandable, and should show major tasks and responsibilities. The Project Plan can be developed using applications, such as Excel spreadsheets or Gantt charts in Microsoft Office, and should be the basis for project status reporting.

GANTT Chart

TECHNOLOGY SERVICES - SAP TEAM - KEY DATES FOR SAP CALENDAR YEAR END 2013





Status Reports

Your Status Reports are the key communication tool that will keep your Executive Sponsors, the stakeholders in your project, your project team, and other interested groups and individuals apprised of what they need to know to identify and celebrate achievements, mitigate risks, problem-solve obstacles, and generally help support your success. You may have different versions of status reports for various audiences depending on their level of interest and influence on your project.

In addition to mapping out where you are on specific tasks, a good Status Report will also identify:

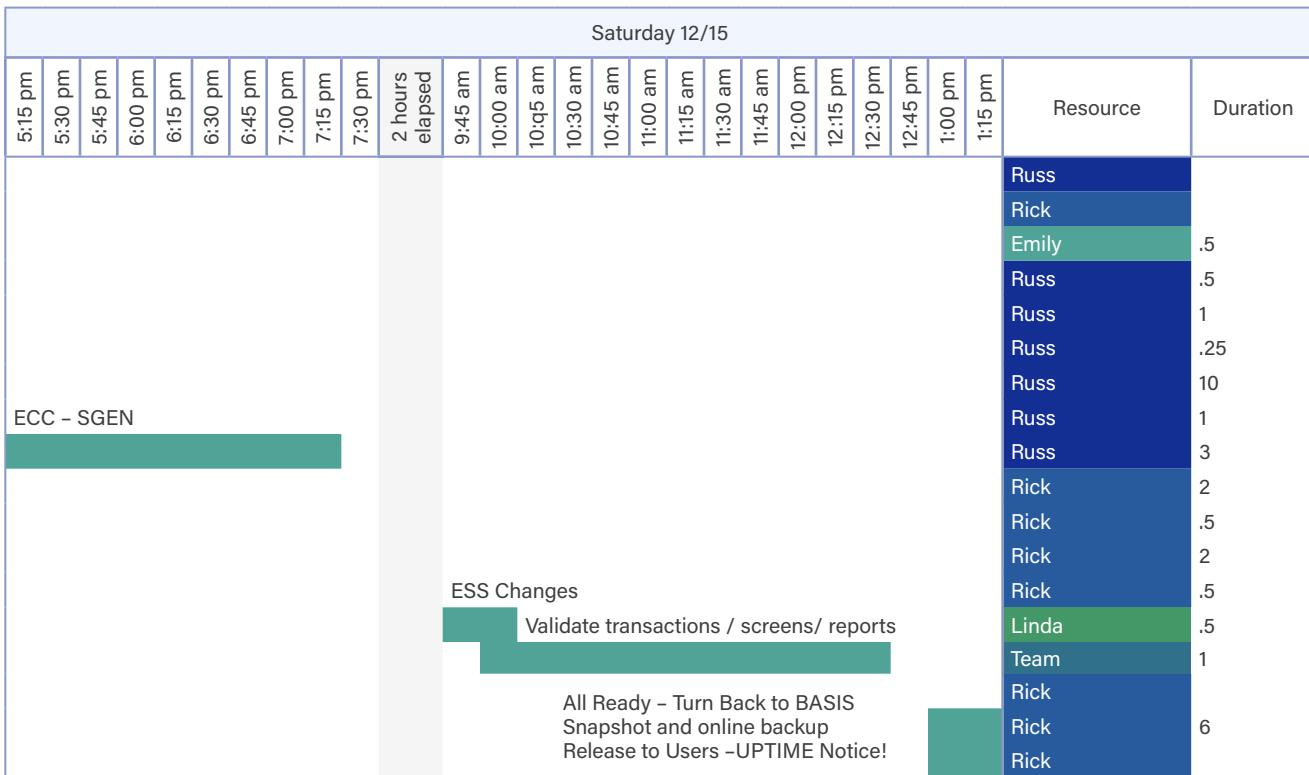
Issues – what issues or concerns are looming that you may need help on?

Decisions – what key decisions have you made that stakeholders need to know about?

Upcoming tasks – what will you be working on during the next reporting period so that stakeholders are prepared and can reach out to you if they have needs or concerns?

Trends – provide a graphic (red/yellow/green dots or equivalent) to quickly alert the reader as to how it's going on each key task (are we on schedule – green, at risk of falling behind – yellow, or behind schedule – red?)

Finally, you may wish to include a “percent complete” report that shows how far along you are for each task identified on your GANTT chart.



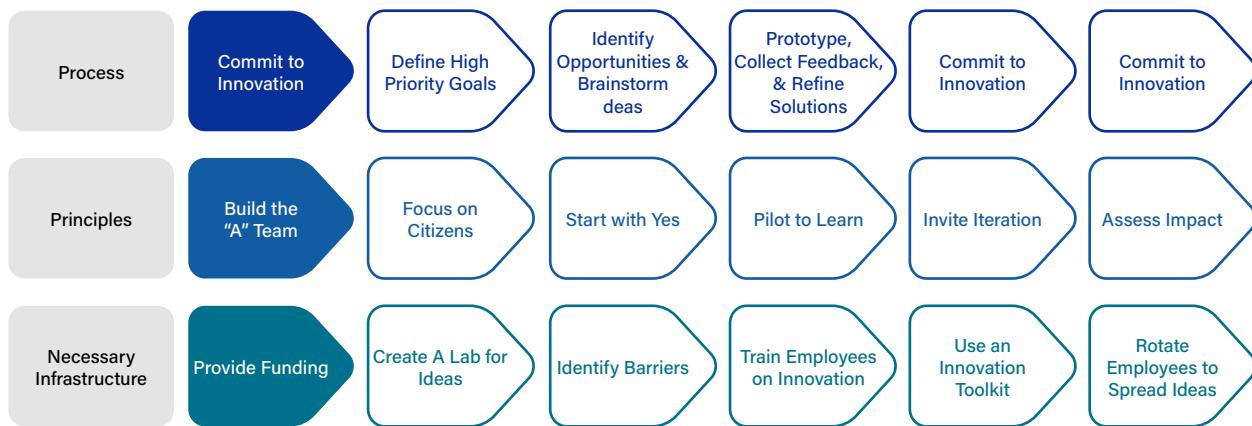
Project Status Report

ID	Description	Comments
Achievements		
1.		
2.		
3.		
4.		
Issues, Questions, Emergencies, and Interruptions		
5.		
6.		
7.		
Key Decisions Made / Critical "You Should Knows"		
8.		
9.		
10.		
11.		
12.		
Upcoming Tasks, Milestones, and Checkpoints		
13.		
14.		
15.		
16.		
17.		
18.		

**"Whatever you can do, or dream you can, begin it.
Boldness has genius, power, and magic in it."**

- Goethe

5.2 Celebrating Accomplishments



This graphic, adapted from "Innovation in Government," published by IDEO and The Partnership for Public Service in 2011, shows that the final, crucial step in the Innovation Process is to "Celebrate Success". Keys to impactful celebrations of success will include the following:

- **Be timely** – celebrate success as soon as reasonably possible; letting it go too long before celebrating takes away from the momentum and enthusiasm that will be needed to sustain your successful project; celebrating too soon may cause you to backtrack if any part of your accomplishment fails badly.
- All those who have had a role should be acknowledged – be inclusive!
- Consider developing and giving an ongoing recognition/award for contributors that can be standardized, such as a specially printed coin, mug, certificate, etc.
- The celebration should be **public and celebrated at the highest possible level**; where possible, have recognition in a public meeting before the elected governing body.
- Ongoing recognition of small achievements is encouraged, **but save the big public recognition** for the major accomplishment of the intended outcome.
- **Publicize the recognition** widely through various media — emails, website, print media, television, social media, etc.; nothing succeeds or wins friends like success.
- **Acknowledge what didn't work as planned** and identify what steps you will take to address whatever didn't work.
- **THANK KEY SUPPORTERS** without whose assistance your success would not have been possible.



"I will act as if I will make a difference."

- *William James*

Exercise

What achievements and milestones do you plan to celebrate? When?

Who will be acknowledged?

In what forum will the achievements be acknowledged?

How will you acknowledge the successes? (Award, monetary bonus, certificate, etc.)

How will you publicize the success?

"I am looking for a lot of people who have an infinite capacity to know what cannot be done."

- Henry Ford

5.3 Understanding Readiness, Receptivity, Resources, Return, and Risk to Scale Your Project*

*Dees, Greg and Anderson, Beth Battle, *Scaling Social Impact*, Stanford Social Innovation Review, Spring, 2004.

In the eagerness to expand a successful project, it is important to consider how to support successful implementation elsewhere in the organization. Failure to consider how best to scale the innovation can not only jeopardize the project elsewhere, but it can jeopardize the sustainability of the original success.

In their article "Scaling Social Impact" in Stanford Social Innovation Review, Greg Dees and Beth Battle Anderson identify the "Five R's" of spreading social innovation that are key factors to consider in sustaining and expanding effective innovations:

- Readiness (Is the innovation ready to be spread? Is it working well and are issues mitigated?)
- Receptivity (Have the key players been satisfied with the project's achievements, and are new users prepared to be receptive to the change?)
- Resources (What resources are required to implement the innovation in new conditions, and how will those resources be secured?)
- Return (What is the relative advantage of adopting the innovation?)
- Risk (What is the potential negative impact for the adopter if the innovation fails?)

Innovators are encouraged to address these "Five R's" of their project before applying efforts to scale the project, but in considering these factors, recognize that ideas may have their own trajectory, and they can't be held back if their time has come.

5.4 Disseminating Your Innovations

Nowhere is this **truer** than in a local health department. We are all made stronger by the strength, imagination, and progress of each of us working in public health, whatever the level.

There are several ways to disseminate your innovation:

Awards programs – Submitting your innovation to awards programs like that of National Network of Public Health Institutes (NNPHI) Awards Program can be an excellent way to share the gift of your achievement and can improve your "brand" as an innovative organization with your electing governing body, your community, and prospective employees. Public Health Innovation Award

applications are opened each fall for showcase at the NNPHI Annual Conference ([information and details can be found at \[www.nnphi.org/annualconference/\]\(http://www.nnphi.org/annualconference/\)](http://www.nnphi.org/annualconference/)).

Seminar or webinar presentations – There are a variety of state and national conferences through which you may promote your innovations. Examples include the **Community of Practice for Public Health Improvement and Innovation**, the National Association of County and City Health Officials **Annual conference**, state public health associations and more. Contact **PHAB's Center for Innovation** (info@phaboard.org) for more information on how to develop, market, and present your work, through these, or other venues.

Articles – Introduce your innovation to a broader audience by writing an article about it for publication professional publication or newsletter. Consider submitting a guest blog post to PHAB ([email info@phaboard.org for information](mailto:info@phaboard.org)).

Email blast – Identify change agents, opinion leaders, early adopters, educators, or others who might benefit from knowing about your innovation via an online direct email campaign.

Technical assistance – Offer a formal technical assistance program through your professional network or through established agencies at the local, state, or federal level.

Affiliation – sometimes the most effective way to disperse a successful innovation is to partner with another organization to work together as a network to implement the innovation. Examples of this include inter-local agreements to implement innovations in homeless services, public health preparedness, or mosquito control.

Entrepreneurship - Public health presents a unique opportunity for entrepreneurial models. An overlooked area of public health innovations is developing a new business and/or a start-up company. One example was a mobile fruit delivery program to business offices, which was designed to increase fruit consumption, decrease the use of unhealthy snacks, and make money! A successful business model such as this shows self-reliance and aids the public health effort of reducing obesity and chronic disease.

Licensing – In some circumstances, a successful idea has entrepreneurial opportunity. If you have developed an internal clinical data management system that might be useful to other organizations, you may consider creating agreements to license it to other agencies.

Public policy advocacy – if your innovation has the capacity to change important public policy outcomes, consider getting your health department administrator and elected governing body's approval to advocate for needed changes in the laws, regulations, or policies of your jurisdiction or your State Legislature.

Social Media – Working with your team, develop key messages that can be disseminated via social media outlets, including Facebook, LinkedIn, YouTube, and other avenues.

"There is only one thing stronger than all the armies of the world: and that is an idea whose time has come."

- *Victor Hugo*

Additional Resources

Video Links

- ABC Nightline – IDEO Shopping Cart (2009) www.youtube.com/watch?v=M66ZU2PClcm
- Creative Solution: What if you lived three miles from the nearest source of water? www.youtube.com/watch?v=-U-mvfjyiao
- How to Be Creative www.youtube.com/watch?v=weIQlthC3Ks
- How to Build Your Creative Confidence with David Kelley www.youtube.com/watch?v=16p9YRF0I-g
- Think Like an Innovator www.youtube.com/v/FSxSinVVRLw
- Time to Be Creative Video www.youtube.com/watch?v=VPbjSnZnWP0

Suggested Reading List

- *A Whack on the Side of the Head* by Roger von Oech
- *Creative Confidence: Unleashing the Creative Potential Within Us All* by Tom Kelley and David Kelley
- *Creative Problem Solving Techniques to Change your Life* by Colin G. Smith
- *InGenius: A Crash Course on Creativity* by Tina Seelig
- *Kick-Start Creative Thinking: Instant Techniques to Innovative Ideas and Ingenious Problem-Solving* by Daniel Forsett
- *Lean Startup* by Eric Ries
- *Out of Our Minds: Learning to be Creative* by Ken Robinson
- *The Advantage: Why Organizational Health Trumps Everything Else in Business* by Patrick Lencioni
- *The Five Dysfunctions of a Team* by Patrick Lencioni
- *The Medici Effect* by Frans Johansson
- *The Progress Principle: Using Small Wins to Ignite Joy, Engagement, and Creativity at Work* by Teresa Amabile and Steven Kramer
- *Tinkertoys: A Handbook of Creative-Thinking Techniques* by Michael Michalko
- *Where Good Ideas Come From* by Steven Johnson
- *Zig Zag the Surprising Path to Greater Creativity* by Keith Sawyer

"Today, power is gained by sharing knowledge, not hoarding it."

- Dharmesh Shah



Appendix

Agenda	X
Standard Operating Procedure: Marshall County Health Dept. Example	X
Denver Public Health Professional Development Funding Example	X
Journal of Human Biology & Health Education Article	X
The Public Health Innovation Model Article	X
Characteristics of Adult Learners	X
Continuous Improvement Toolkit	X
Effective Discussion Skills.....	X
Sample First Meeting Agenda.....	X
Making Meetings Count	X
Meeting Record.....	X
Project Selection Checklist.....	X
Project Team Groundwork.....	X
Project Template.....	X
Situational Leadership Model	X
Skills of Successful Facilitators	X
Stages of Team Growth	X
Team Charter Template	X
Team Effectiveness Model.....	X
Team Meeting Evaluation.....	X
Team Progress Checklist	X
Team Questions to Consider.....	X
Team Relations Needs	X
Team Task Needs	X

Standard Team Agenda

Project Team:				
Meeting Date:				
Goals for Improvement:				
Times		Item type (decision, action discussion)	Must do/should do?	Time estimate
	1. Icebreaker			
	2. Review agenda <ul style="list-style-type: none"> ▪ Add items, delete items. ▪ Estimate the time needed for each item. ▪ Rank the item: must do/should do. 			
	3. Status reports on individual assignments <ul style="list-style-type: none"> ▪ List these on the agenda form before copying it. 			
	4. Other reports, presentations, activities or discussions. <ul style="list-style-type: none"> ▪ List these on the agenda form before copying it. 			
	5. Review project status <ul style="list-style-type: none"> ▪ Where are you relative to the plan? 			
	6. Assignments for follow-up activities <ul style="list-style-type: none"> ▪ What? By whom? When? 			
	7. Upcoming events, presentations, special meetings, etc			
	8. Review of items on the "Action List"			
	9. Review of items on the "Futures List"			
	10. Summarize agenda items for next regular meeting			
	11. Special activity scheduled for this meeting			
	12. Meeting evaluation <ul style="list-style-type: none"> ▪ What was OK? What could have been better? 			
Total Time				

Standard Operating Procedure (SOP)

SOP:

Staff Comment Cards



Purpose:

The Staff Comment Cards are for Marshall County Health Department (MCHD) Staff members to suggest topics for potential Quality Improvement (QI) projects, make general comments or suggestions for the betterment of the agency and/or to publicly recognize staff members who have done something worthy of praise. Staff Comment Cards are to be used in a professional and constructive manner. When appropriate, the staff member submitting the comment may be asked to offer suggestions when the comment for improvement is not accompanied by suggestions for achieving the improvement.

Procedure: Staff will place any general comments/suggestions, ideas for potential QI projects and/or staff praise on the Staff Comment Card and place cards in the Staff Comment Box located in the upstairs kitchen area.

The Administrative Assistant will check the box weekly and route cards to the appropriate leadership Team Member. The Administrative Assistant will give each supervisor a blank Staff Response Card to address the Staff Comment Card.

Responses will be addressed by the appropriate person within 5 working days and returned to the Administrative Assistant to be placed on the Staff Information Board located in the upstairs kitchen area. Signed, Comment Cards that praise staff members will be entered into a monthly prize drawing. The winner of the drawing will be able to park in the "Employee Pursuing Excellence" parking space for one month. The Comment Cards are meant to be used in a positive way to recognize teammates. The quantity of praise/comment cards will not affect an employee's evaluation in a positive or negative way. If the Staff Response Card is not returned to the Administrative Assistant within 5 working days, the Administrative Assistant will follow up with the appropriate staff member and allow one additional working day for a response. If a response is not returned by the end of the extra day, the Public Health Director will be notified.

The Staff Comment and Staff Response cards will be on display for two weeks, or as long as space permits. Only signed cards will be addressed, posted, and/or considered for inclusion in the monthly drawing.

If any portion or provision of this SOP is in conflict with Kentucky Administrative Regulations (KAR), Kentucky Revised Statues (KRS) and/or the Administrative Reference (AR) applicable to County and District Health Departments of Kentucky, the applicable KAR, KRS and/or AR will prevail.

This SOP was adopted by the Marshall County Health Department on December 15, 2016.

A handwritten signature in black ink, appearing to read "Laura Hammour".
Public Health Director

Characteristics of Adult Learners

- Significant past experience on which to draw--may have fixed viewpoints
- Have significant ability to serve as knowledgeable resources to the facilitator and other members
- Focus on problems vs. content
- Expect high participation
- Decide for themselves what is important to be covered in the group
- Need to validate the information based on their beliefs and experiences
- Expect what they are doing to be immediately useful
- Function best in a collaborative environment
- Share planning with the group members and facilitator

Evaluating yourself as a facilitator or team leader

Do I...

- Encourage them to determine their goals and plan the agenda?
- Relate the group activities to their goals?
- Help them to focus on "real world" problems?
- Draw upon their past experiences?
- Encourage full participation?
- Allow debate and challenge of ideas?
- Listen to and respect the opinions of group members?
- Encourage members to share resources with each other?
- Emphasize how they can apply what happens in the group?

Adapted from sources including Malcolm Knowles (1980, 1989), Merriam and Caffarella (1999), Lieb (1997), and Cercone (2008)

Continuous Improvement Toolkit

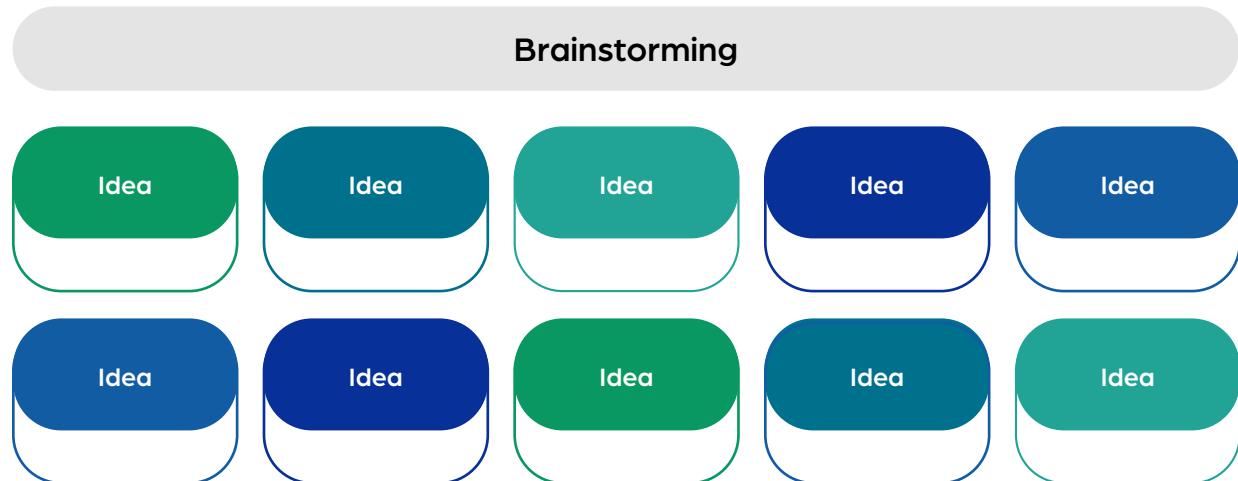
Brainstorming

What:

A way to stimulate new thinking creatively generate new ideas and logically combine ideas or break them into components.

How:

1. Form a team of 3-8 people with the knowledge, skills and motivation to address to the issue(s). Review the four ground rules of brainstorming.
 - › No criticism of an idea is allowed.
 - › Strive for the longest list of ideas possible- go for quantity.
 - › Strive for creativity- “wild and crazy” ideas are encouraged.
 - › Build on ideas of the others- creates synergy.
2. Describe the issue on an easel or board in full view of the team. Express the issues as a question about something that you can impact. Make sure all team members understand the stated issue the same way. It might be necessary to break an issue into components parts: “Why are there so many corrections needed on claims reports?” breaks down into defining what a correction is, and which claims reports we are referring to.
3. Have participants write down their ideas individually first for 2 to 3 minutes. Participants may write on index cards (for later organizing) or Post-it notes.
4. Have participants state their ideas to the group. Generate as many ideas before evaluating any of them. Have participants build on one another’s ideas. Allow about 15 minutes for this activity.
5. Following the initial brainstorming, return to the issue statement and the responses for understanding and relevance to the issue.
6. Combine all responses that were relevant to the issue.



Affinity Diagrams

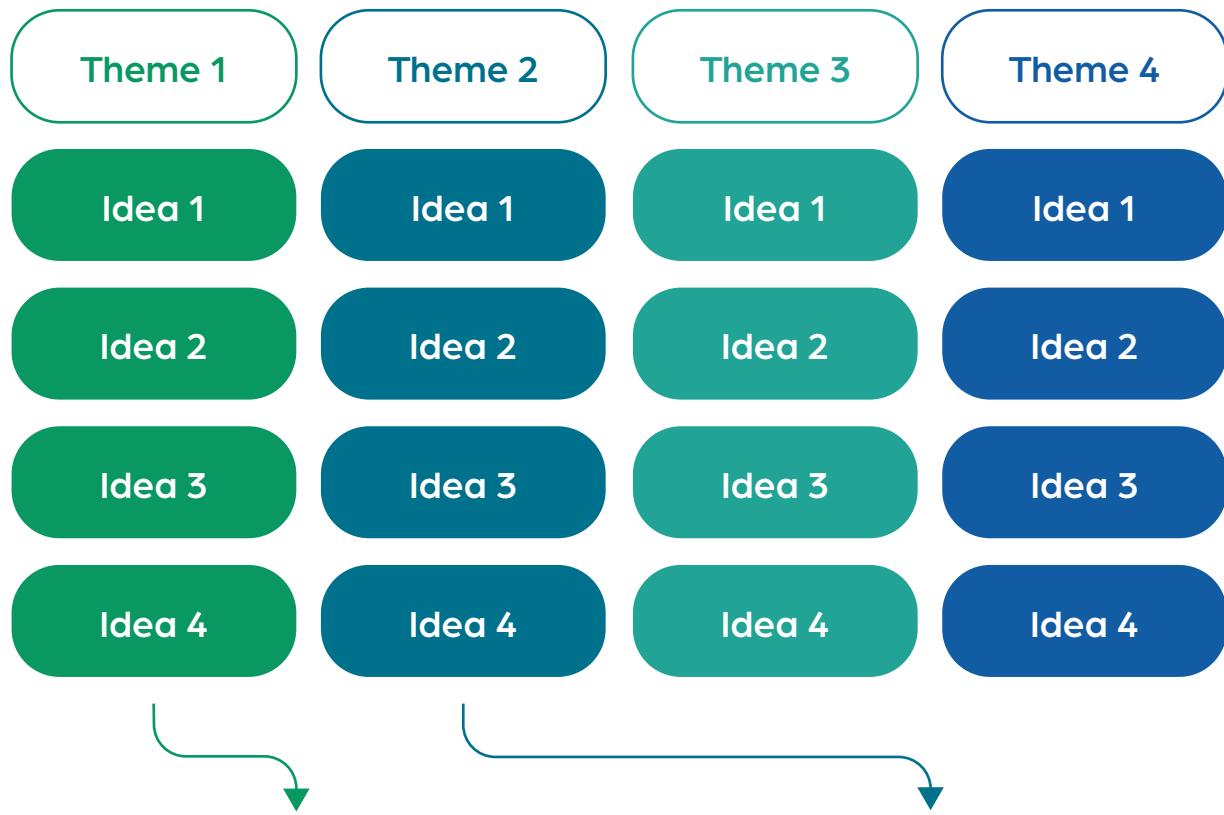
What:

The Affinity Diagram is similar to the Brainstorming and Mind-mapping as a way to generate and organize ideas. It is useful to use "Post-it Notes" for this exercise.

How:

1. Form a team of 3-8 people with varied views who have the knowledge, skills and motivation necessary to address the issues.
2. Describe the issue in writing on board or easel in full view of the team.
3. Brainstorming ideas for addressing the issue by having participants individually write responses on Post-it Notes. For example, if the issue us "What can we do to provide high-quality service to our customers?", response might include the following:
 - › Listen to customers complaints
 - › Answer the phone within three rings
 - › Respond to all calls within 24 hours
 - › Listen to employees concerns
 - › Survey customers about their opinions
4. After 2-3 minutes of individual, silent brainstorming, have team members place their notes randomly on the wall. Ask each team member to read one of his/her ideas while posting it until all of the brainstorming responses to the issue are posted. If anonymity is critical, have a recorder to scribe post all notes, reading each one as it is posted.
5. For 5-10 minutes have team members continue brainstorming while considering what others have already posted.
6. Ask team members to silently group related items by picking Post-it Notes and attaching them, one at a time, to a related note. If particular grouping begins to exceed 8-12 notes, have participants look for ways to form another group or subgroup. If a note is moved back and forth between groupings, copy it and put it in both places.
7. Have team members create headings that express the common thread running through items in a column. **See example on next page.**
8. Discuss and reach consensus on the groupings.
9. Type up the Affinity Diagram

Affinity Diagram



We Listen to Customers

- Listen to customer complaints
- Answer the phone with three rings
- Survey customers about their opinions

We Communicate with Others

- Listen to customer complaints
- Respond to all calls within 24 hours
- Listen to employees' concerns

Flow Charts

What

This tool is a critical first step in process improvement because it defines the process that might be improvement opportunities. A flow chart is simply a picture of the process:

Flow Charts Guidelines:

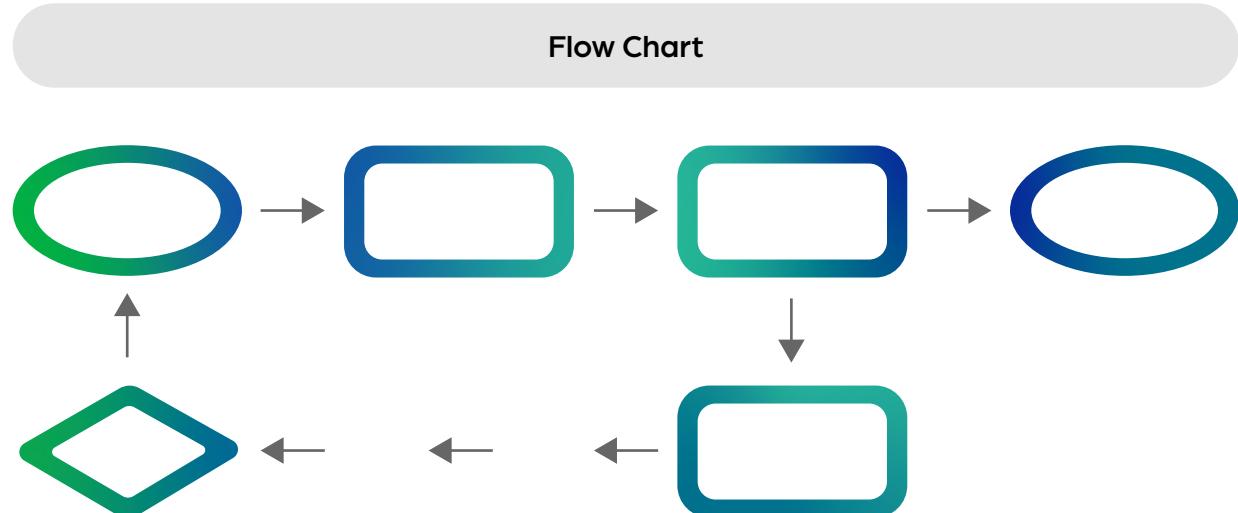
- Be sure the team includes members who have detailed knowledge of the process activities. All members must be willing to participate in the meeting. Have a facilitator to keep the team focused and on track during the charting process can greatly improve the effectiveness and efficiency of the team.
- Allocate enough time in the meeting to allow a thorough job. It may be necessary or desirable to schedule more than one meeting to enable members to research the details of certain activities.
- Chart the "as is" view of the process, not the desired or "should be" view. Potential problems and opportunities for improvement may be overlooked if the team does not chart the process the way it is actually followed.
- Making a flow chart is a creative, interactive process. The team leader or facilitator should ensure a meeting environment that encourages participation and questions from all members.

How:

1. Form a team of 3-8 people who have detailed knowledge of the process to be charted. Failure to include knowledgeable people on the team can lead to the development of inaccurate and misleading flow charts that will be rejected by those who are expected to use them.
2. Date and title the flow chart and discuss the level of detail and the desired outcome of the flow charting meeting.
3. Determine the beginning and ending points of the process. Establishing the boundaries of the process under study helps the team stay focus on the task.
4. Identify all the activities associated with the process. Brainstorming is a useful tool for identifying the activities. Writing them on Post-it notes enable you to sequence them later.
5. Place the activities in the order in which they occur in the process. Leave sufficient space between activities to allow for changes. Wait to draw the flow lines until the group is satisfied that the initial process flow is complete.
6. Use the symbols on the following pages to work through the process until it is entirely charted.
7. Obtain the group's consensus on the accuracy and completeness of the flow charts. It is helpful to have one group member take responsibility for redrawing the flow chart and making copies for other members. Remember, the flow chart will become an important reference point for the team throughout the improvement process. Each change to the flow chart needs to be clearly identified and dated to ensure that team members are using the same version.

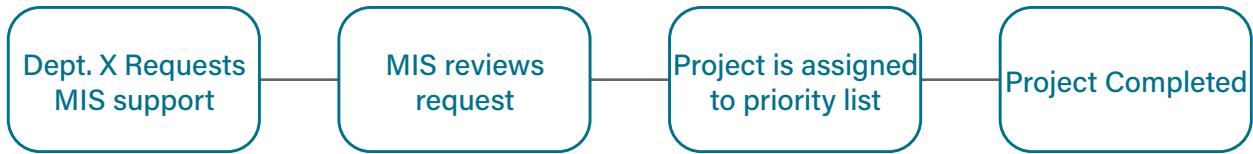
Use the flowchart to:

- Define a process.
- Identify potential problem areas.
- Document improvements to a process.
- Document and standardize a process.

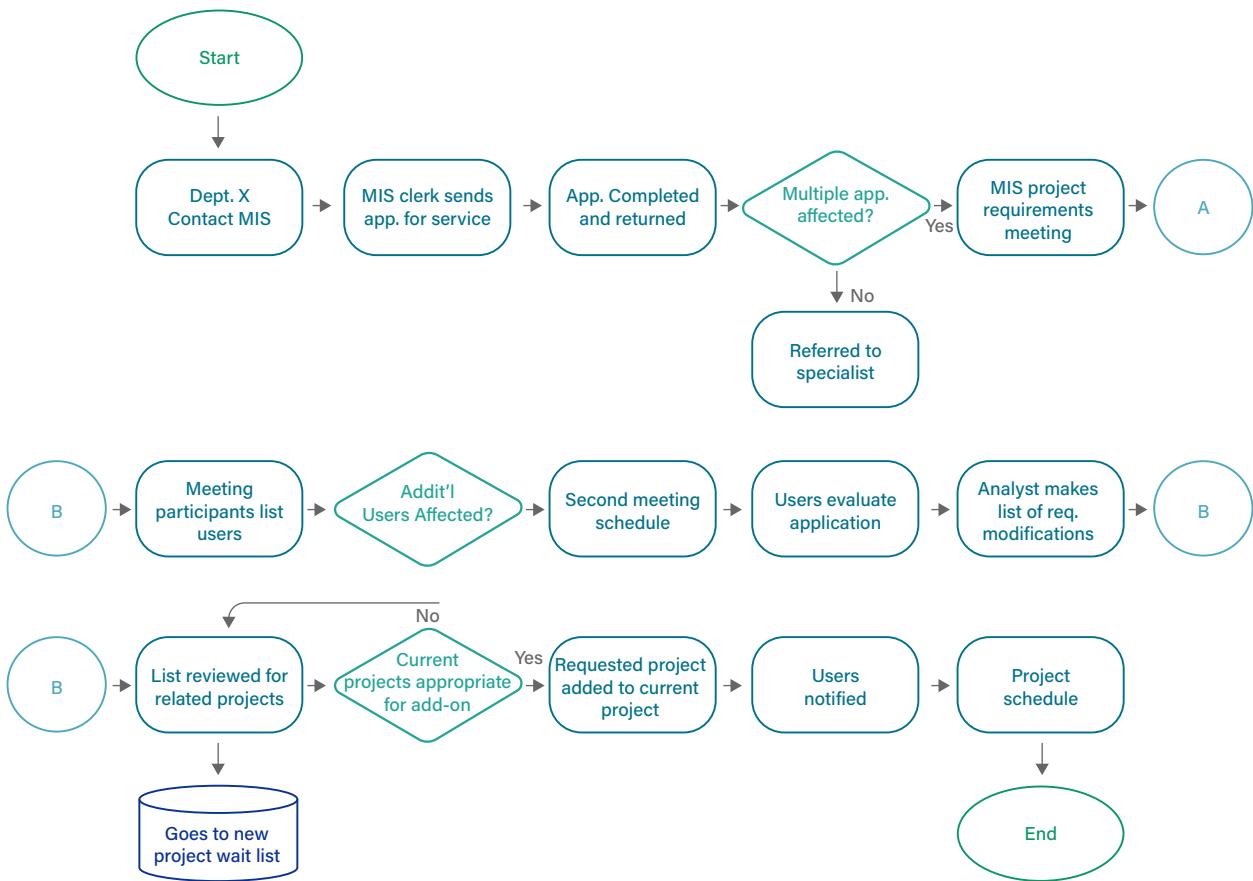


	Terminal Symbol	Identifies the beginning or end of the chart
	Activity Symbol	Identifies a process activity
	Decision Symbol	Typically a "yes" or "no" decision with a corresponding flow path
	Document Symbol	Written information regarding the process
	Flow Line	The arrow indicates the direction of flow
	Data Store	Typical indicates an electronic data bade
	Connector Symbol	Indicates where process flow continues from one line to another or from one page to another

High-Level Flow Chart



Detail-Level Flow Chart



Cause and Effect Diagrams

(Fishbone or Ishikawa Diagrams)

What:

This is a key improvement tool, which is used to identify and organize possible cause of a specific effect and then isolate root causes. In all cases, you must test whether your hypothesized causes are real, and whether enhancing them or reducing them will create the outcome you want.

How:

1. Form a team of 3-8 people who understand the problem/effect being investigated. Failure to include the right people can mean failure both to clarify the problem. Effect and completely identify the causes.
2. Place an easel or board in full view of the participants, write a brief description of the problem. Now ask the participants to briefly (in 1-2 minutes) describe on Post-it notes how they see the problem being manifested in the workplace.

Problem: Customer complaints about claims increasing

How the problem is being manifested in the workplace:

- › 17 incorrect claims notices received weekly
- › 32% of calls from physician offices involve incorrect claims information
- › Employee Assistance Program visits for claims personnel are up 43% over the same time last year

3. Have the group reach consensus on the most important manifestation of the problem to start on first, using Multivoting/NGT or the Interrelationship Diagram.
4. Place the selected effect at the top center of an easel sheet and ask them to generate a list of possible causes by using the brainstorming process. Test for completeness by using either of the following methods:

Method 1: - Use the 4 P's: People, Procedures, Policies, and Plant - Use the 4M's + 1 E: Manpower, Methods, Materials, Machines and the Environment

Method 2: - Using brainstorming and the affinity diagram, use the column heads of the affinity diagram as your major rib descriptors.

5. Now use a simple questioning process to dig beneath the causes initially captured above. Write one cause at the top-left of an easel sheet. Ask WHY it causes the effect being investigated.
6. Write your answer below and slightly to the right of the previous answer. Repeat this process 4 or 5 times until you arrive at root cause (you can often tell by the fact that your answers have become repetitive). If at any point you don't know an answer, write down a question mark (?). This indicates an area where you need to collect data, research the answer with a subject matter expert, or take some other action before answering.

7. After you have completed this process for one cause, continue with the other brain-stormed causes.
8. After you have done the 5 WHY's for all the causes you initially brainstormed, analyze the results, looking for patterns or similar causes.
9. Now that you done the hypothesized root causes of your specific problem/effect, develop some solutions and test them to see if they eliminate the problem. The test is critical.
10. Document your process, after the group has finished, so that other can replicate your work. Do so writing your causes on the Fishbone as bones and sub-bones of the fish.



Check or Tally Sheets

What:

The check sheet is a way to collect data for later analysis of a problem or process. The check sheet allows the user to record specific, observable data about one or more variables. A tally is usually used to record each occurrence of the variable being observed.

How:

1. Plan what question you are trying to answer with data, and determine what data you will need to answer the question.
2. Collect a small sample of the data. Test to see if the data provide information necessary to answer your questions. If so, conduct a thorough data collection effort.
3. Present the data in a way that clearly communicates the answer to the question.

Check Sheet

Information Errors on Intake Sheets

Time Period: 8/15-8/18/2017

Incorrect Zip Code		7
Misspelled Name		5
Incorrect Employer		4
Incorrect Employer Code		10
No Reason for Injury		14

Data Report Example

What:

The data sheet is another simple form for collecting data. On data sheets, specific data are recorded in spaces on the sheet rather than the tally method used in check sheets. A data sheet is commonly used to records variables with a wide range of values when listing each possible is not practical.

How:

1. Plan what question you are trying to answer with the data.
2. Identify the variable you need to collect data about. Do the data already exist, or will you have to collect new data? Define where in the process you will collect it.
3. Select unbiased data collectors. The data collector is often the same person who will analyze the data, so care must be taken not to bias the data.
4. Design the data collection forms with input from the data collectors. Keep it simple.
5. Provide instructions in the use of the forms.
6. Test the forms and instructions.
7. Collect the data.
8. Audit the data and the collection process.

Per Average Annual Sick Leave Usage by Department

	2016	2017
Community Development	82.1	84.1
Finance	45.3	44.7
Fire	84.2	80.3
Information Technology	78.6	75.2
Manager's Office/ Admin.	47.4	53.2
Parks	31.7	41.6
Police	83.9	87.4
Public Works	28.5	32.8
Health Department	36.2	40.0

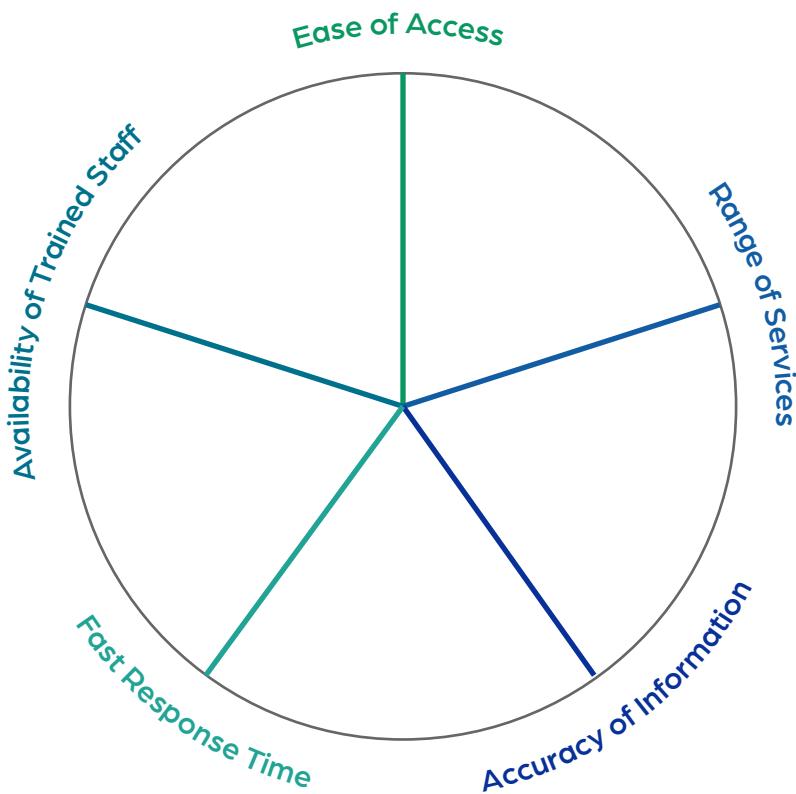
Spider Diagrams (or Gaps Analysis)

What:

The Spider Diagram is like a radar map that graphically displays gaps in an organization's priorities.

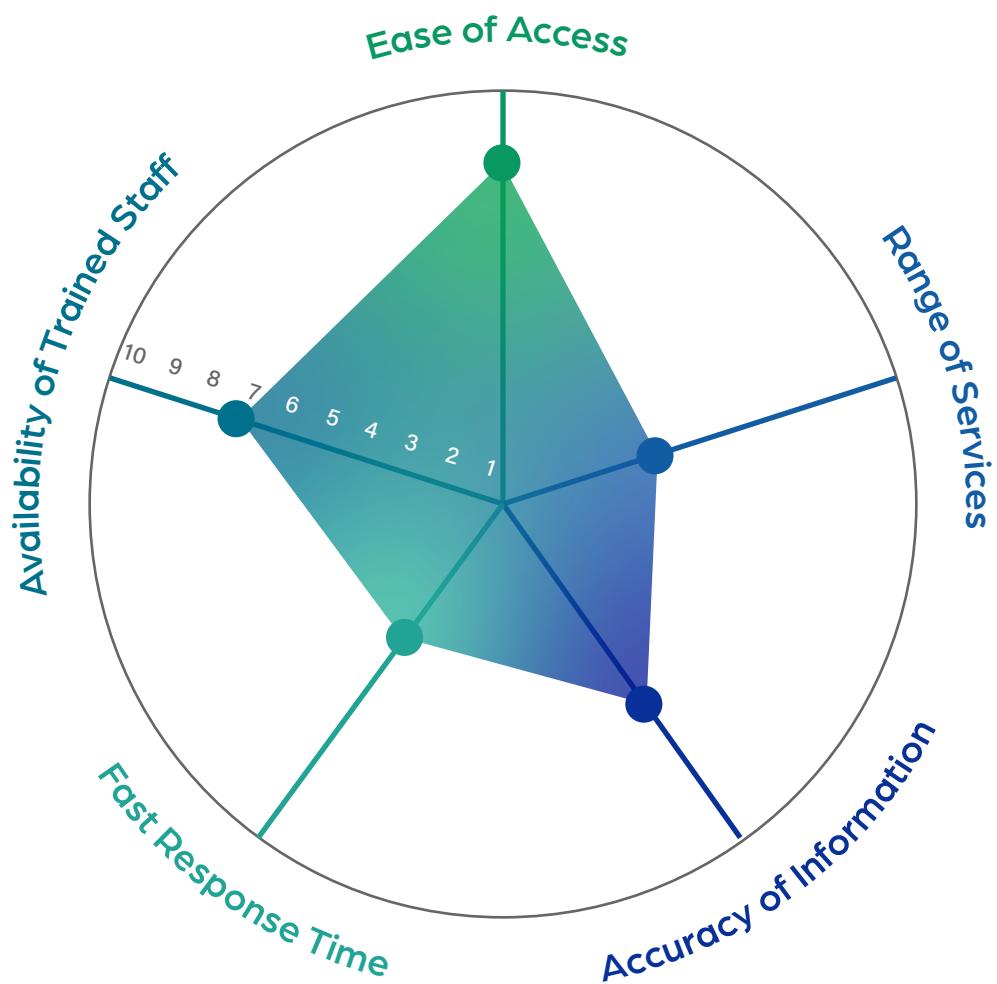
How:

1. Form a team with the knowledge, skills, and motivation to address the issue.
2. Create headers that may have been derived from affinity diagramming, multivoting/NGT, Method 6-3-5, Is-Is Not, or any other process.
3. Draw a circle and place the headers evenly around it. For example, if the team were addressing how to provide high quality service to our customers, the headers might look as follows:



4. Locate the center and mark it with a dot. Then draw a line from each header to the center dot.
5. Rate current performance in each area compared to the ideal. Use a scale from 0 (non-performance at center of circle) to 10 (ideal performance at edge of circle). Where possible, use objective, quantitative data as the basis for your ratings. If quantitative data are unavailable, have the team discuss qualitative data based on members' perception. Indicate your rating by drawing a dot along the line associated with the header being evaluated.

6. Connect the dots to complete the web of the Spider Diagram. Darken the area of the web to graphically illustrate the gap between performance and the ideal.
7. Review the gaps between current performance and ideal. Should the ratings be changed? Why?
8. Review the goals between current performance and goals or business objectives. Note the goals by placing a dot on the line for each header relative to the goal. Draw dotted lines between the dots for the goals.
9. Discuss and save for future action planning.



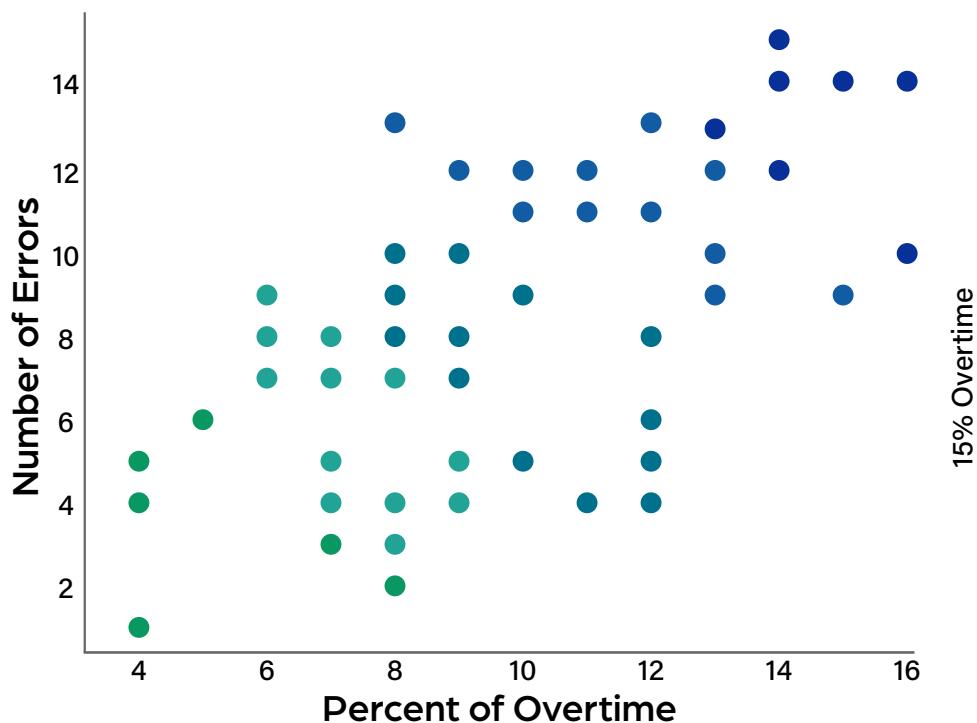
Scatter Diagrams

What:

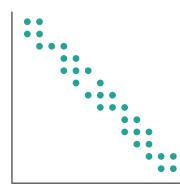
At some time in the quality improvement process you may need to explore the relationship between two variables. The Scatter Diagram is a useful tool determine whether a relationship exist and if so, whether it is positive or negative.

How:

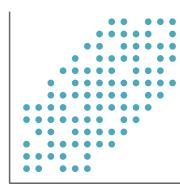
1. Collect the data on the two variables under the study. Accurate and rigorous data collection is critical and cannot be over emphasized. Determine the high and low value for each variable.
2. Draw the horizontal axis (X axis) and vertical axis (Y axis) of the scatter diagram. As a general rule, the variable suspect as the causes should be plotted on the X axis. The effect is plotted on the Y axis. The axis should be approximately the same length, creating a square plotting grid.
3. Label the X and Y axes using incremental values that fit the range of data being plotted. The values for the X axis start at the left and go right. The values for the Y axis start at the bottom and go up.
4. Plot the data at the points on the graph where the values of each pair of variables intersect. If values are repeated in your data, circle the points to indicate duplicate point in the data.
5. Title and date the scatter diagram.
6. Analyze the scatter diagram as follows:



Strong, Positive Relationship
▪ As X increases, so does Y



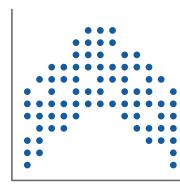
Strong, Negative Relationship
▪ As X increases, Y decreases



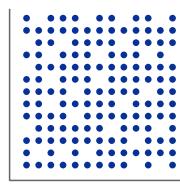
Weak, Positive Relationship
▪ Low confidence in the relationship between X and Y



Weak, Negative Relationship
▪ Low confidence in the relationship between X and Y



Complex Relationship
▪ Needs further analysis



No Relationship
▪ between X and Y

Solution Matrix

What:

This will be useful once the team has defined a problem, looked for root causes, gathered data to confirm the hypothesis, and is ready to begin solving the problem.

How:

1. Form a group 3-8 people with the knowledge, skills and motivation to identify and rate possible solutions.
2. Write the defined problems on the board in view of all group members.
3. Begin by developing criteria for evaluating effective solutions by using brainstorming. Get all ideas listed before critiquing them.
4. Discuss the ideas:
 - › Is this criterion clear and unmistakable in its meaning?
 - › Will this criterion be observable?
5. Using Multivoting/NGT, weight each of the 3-6 selected criteria to show how important each one is relative to each other (this can be done by using a percent scale totaling 100% for all criteria together).
6. Using Multivoting/NGT, weight each of the 3-6 selected criteria to show how important each one is relative to each other (this can be done by using a percent scale totaling 100% for all criteria together).
7. Using brainstorming or the output of other analysis (Cause-Effect Diagram, Flow Chart, Pareto Chart, etc.) generate a list of possible solutions to the defined problem.
8. Using your list of criteria and weights, rate each solution against the criteria. This can be done
9. by giving a score on a 1-10 scale (1=meets criterion very little, to 10= meets criterion very much) to each solution for each criterion.
10. After a score has been assigned, multiply the score by the weighing.
11. Add up the weighted score for each solution to get totals.
12. Discuss the results and finalize a course of action.

Solution Rating Matrix

Criteria	Solution #1	Solution #2	Solution #3
Cost-effectiveness (25%)	2 (.3)	9 (1.35)	6 (.9)
Ease of implementation (10%)	3 (.3)	8 (.8)	4 (.4)
Impact on future actions (15%)	6 (.6)	5 (.5)	6 (.6)
Probability of success (10%)	8 (.8)	7 (.7)	5 (.5)
Management support (10%)	8 (.8)	7 (.7)	5 (.5)
Solve problem (40%)	8 (3.2)	8 (3.2)	8 (3.2)
Totals	(6.55)	(6.85)	(6.2)

Prioritization Matrix

Prioritization Matrix							
	1	2	3	4	5	In	Out
1							
2							
3							
4							
5							

Tree Diagram

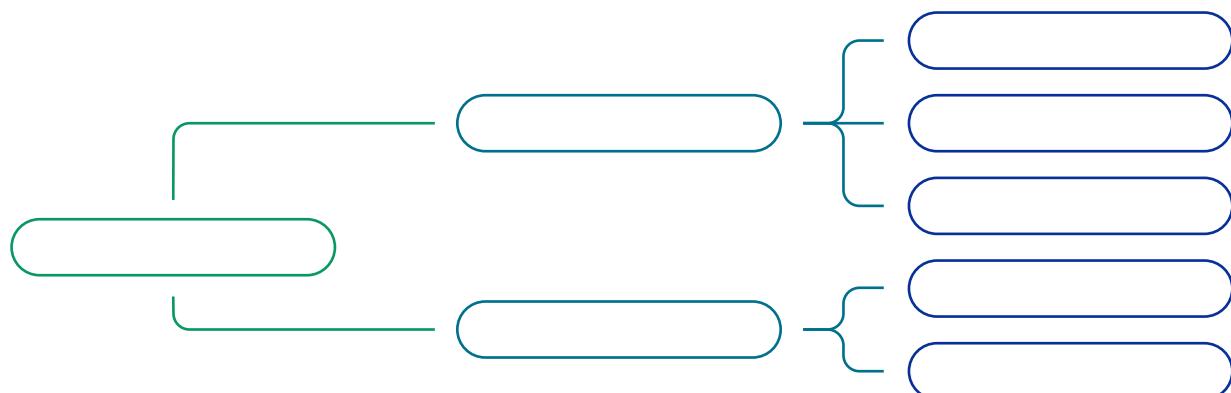
What:

The tree diagram systematically maps out with increasing detail the actions necessary to accomplish a desired goal or resolve an issue. It provides a visual map that can be read in two directions: from the left to right, you can view the goal and the sequence of actions necessary to achieve it. Reading it from right to left, you can test the validity of the sequence by asking yourself, "If these sub-actions are done, will the action defined to the left of them occur?"

How:

1. Form a team of 3-8 people with the knowledge, skills and motivation to address the issue.
2. Establish the goal or issue to be addressed.
3. Begin the build he Tree Diagram by paling the goal/issue to the far left on the easel or board. Use Post-it notes, since they allow for the free movement. Continue to ask, "What team activities are required to make this goal/issue (and sub-elements) a reality?"
 - › Test for completeness. "If we do all these activities, will the goal be completed? If no, what other activities are necessary?"
 - › Test for necessity. "Are all these activities essential to completing the goal?" Eliminate those that are not.
4. Stop only when you arrive at actions which are observable. For example, if an item is "Determine which employers to call weekly," ask yourself how an observer could tell that you have made such a determination. Even when you have arrived at an observable activity, analyze further if that activity
5. can be improved.
6. Draw the completed Tree Diagram, and have the tram and other important stakeholder review it for completeness.

Tree Diagram



Gantt Chart

What:

The Gantt chart is a matrix for identifying key actions steps and times frames.

How:

1. Establish the critical action steps to achieve the goal from the Tree Diagram above. List these down the left side of the matrix in chronological order.
2. Establish appropriate time intervals based on the actions steps listed (days, weeks, months, pay periods, etc.) List these across the top of the matrix.
3. Chart the time interval for each action step by shading the appropriate area along that row as follows: the left end of the bar will be under the beginning time for that action step. The right end of the bar will be under the time interval when that action step is expected to be completed.

Gantt Chart Customer Survey Project																
ID	Task	Scheduled Start	Scheduled Finish	July												
				1	2	3	4	5	6	7	8	9	10	11	12	13
1	A	6/23/17	6/23/17													
2	B	6/23/17	7/9/17													
3	C	6/23/17	7/9/17													
4	D	6/23/17	7/29/17													
5	E	6/23/17	6/23/17													
6	F	6/23/17	7/22/17													
7	G	6/23/17	8/17/17													
8	H	6/23/17	8/17/17													
9	I	7/13/17	7/13/17													
10	J	7/18/17	8/10/17													
11	K	7/11/17	8/10/17													
12	L	7/11/17	8/17/17													
13	M	8/1/17	8/17/17													
14	N	8/1/17	8/24/17													
15	O	8/24/17	8/31/17													

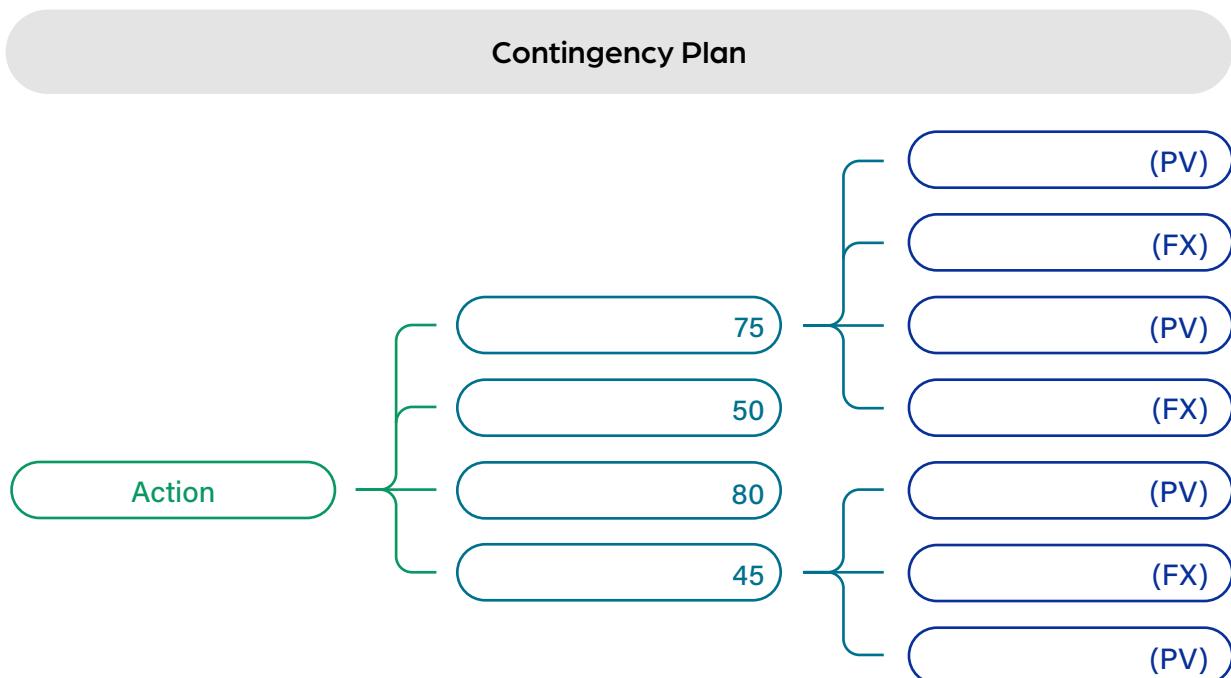
Contingency Planning

What:

The Contingency Planning chart helps to map out the unknown contingencies that might obstruct the implementation of your plan. It also enables you to fix or prevent them from happening or to put in place contingency plans to deal with these problems should they occur.

How:

1. Form a team of 3-8 people that include your best troubleshooters.
2. Identify the broad flow, not the detail of the process.
3. Using the Tree Diagram identify potential problems or restraints that might occur for each action by asking "What can go wrong?"
4. Discuss the probability and impact of each problem or restraint. Focus on these with the highest probability of happening that also would have a significant impact if they occurred.
5. Identify what you can do to fix or prevent each priority contingency.



Effective Discussion Skills

Ask for clarification

- Define the topic, logic, purpose, focus
- Ask for examples, pictures, diagrams, data

Act as a gate-keeper

- Encourage equal participation
- Make openings
- Ask for input

Listen

- Explore ideas rather than debate or defend

Summarize

- Compile what's been said
- Restate as summary
- Check for agreement

Contain digression

- No long example or irrelevant discussion

Manage time

- Remind team of deadlines and time limits
- Accelerate, postpone, or re-budget time

End the discussion

- Help the team close and decide the issue

Test for consensus

- Summarize group's position on issue
- State the decision
- Check team agreement of summary

Evaluate meeting process

- Are we getting what we want?
- Should we use the remaining time differently?

Making Meetings Count

- If you hold a meeting, identifying one or more specific for that meeting which justify the cost of holding it
- Ensure that all participants have everything they need to be fully productive well ahead of time: objectives for the meeting, agenda and time required, request for information/ data/decisions/ resources need for action, meeting materials and/or equipment, etc.
- Start and end on time.
- Clarify and gain consensus on the purpose of the meeting as your first item of business.
- Specify a facilitator, recorder and time-keeper
- Clarify key ground rules:
- One speaker at a time

- Contributions should be relevant to the meeting purpose
- Unrelated information/opinions may be table for a future meeting
- Support a participative environment
- Everyone present shares full responsibility and ownership of the meeting outcomes
- Select and utilize an appropriate decision-making process (Robert's Rules, Nominal Group Technique, etc.)
- Summarize and provide for a written statement of outcome, agreements, and next steps
- Establish a time, agenda, and desired outcomes for the next meeting, if needed
- Set aside time at the end to evaluate the effectiveness of the meeting

Meetings Record

Date:		
Team:		
Team Purpose:		
Meeting Participants:		
Topic	Key Points of Discussion	Decisions or next steps

Project Selection Checklist

What:

This tool is used to test the relevance and value of a project.

How:

Discuss the following criteria for project selection with your team members. Circle the number of statements that are true. If you are unable to mark a statement as true, discuss with your team members the impact that could have on your project. If necessary, re-evaluate the project and negotiate for more clarity or support with management.

- The project is related to a key business issue.
- The project targeted for improvement has direct impact on the organization's internal or external customers.
- The project or issue has good visibility in the organization.
- All the managers concerned with the project — at all organizational levels — agree that it is important to study and improve the identified issues.
- Enough managers, supervisors, and operators in this area will cooperate to make this project a success.
- This problem or opportunity is not currently being addressed by any other group.
- The project can be clearly defined and has an identified scope.
- The team can obtain the resources needed (time, staff, equipment, etc.) to be successful.
- Successful outcomes can be clearly defined.

Additional factors to consider (from Harry Kenworthy, Getting Started with Lean Government Projects, Government Finance Review, June 2013):

- Projects that have most potential to improve the customer experience.
- Projects with clear financial returns.
- Projects that can address areas of greatest customer pain or are the focus of media attention.
- Projects that address areas with low employee morale.
- What's keeping leadership up at night? What are greatest worries?

Project Team Groundwork

Step 1: Nature of the project

- 1.1 What process or system will the team study? What parts of this process or system should the team NOT study?
- 1.2 What perceived need led to selection of this project? What data supported this choice?
- 1.3 What are the goals or desired outcome of this project?
- 1.4 How will value to users or customers be improved by this project?

Step 2: Team membership and logistics

- 2.1 Who is on the guidance team/ and or executive sponsor team?
- 2.2 Who will be the team leader?
- 2.3 Who else should be on the team? What work areas or technical specialties must be represented for success?
- 2.4 When, where, how often, and for how long will the team meet?
- 2.5 How often will the team meet with the executive sponsor(s)?

Step 3: Boundaries and team support

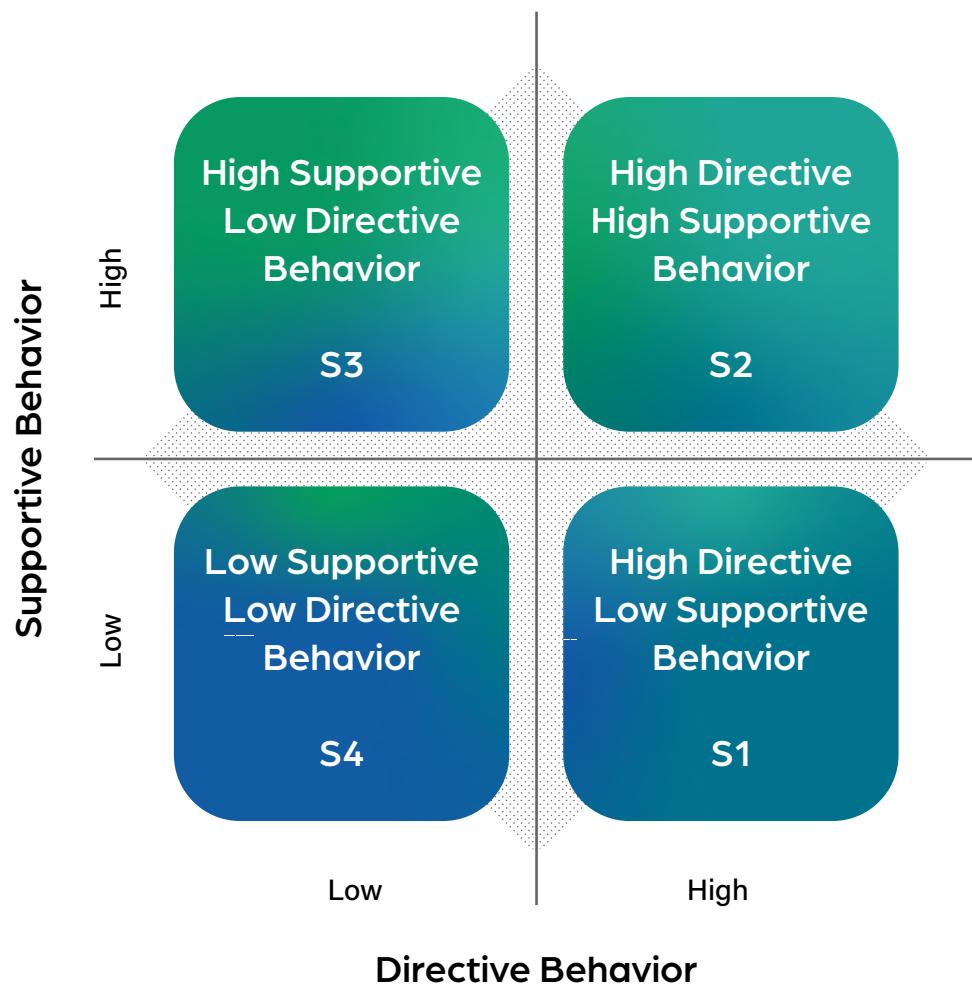
- 3.1 When will the project begin? End?
- 3.2 Will the team need financial resources?
- 3.3 What decision-making authority will the team have?
- 3.4 What training will team members need?
- 3.5 What specialists may be needed for technical help?
- 3.6 How will team members' normal get done while they are involved in the project?
- 3.7 Are there other resources that this team will need?

Project Template

Insert Project Name

Project:	Project Name:		
Created By:	Your Name:	Date:	Creation Date:
Executive Sponsor:	Sponsor Name:	Project Champion:	Project Name:
Mission: "Practical problem to solve and/or opportunity to gain" Clear problem statement is crucial for gaining and maintaining project support.	General Instructions: <ul style="list-style-type: none">▪ Not all the sections listed here may be needed on a particular project. There may also be items you need to include that are not included here.▪ Many of these items listed will be visited in more detail when you start planning. The objective of the charter is to document the information as it is known at the beginning of the project – not to get into the planning itself. <p>Delete the blue instruction text as you move through the form.</p> <p>Articulate the problem or opportunity and associated goal statement(s). What is the project's purpose(s)?</p>		
Process	What process is impacted by this project?		
Objectives	What improvement is targeted and what will be the impact? If there are key performance measures or metrics that will be impacted by this project, what are they and what are the targeted impacts?		
Deliverables	What will the project actually produce? These should be measurable items.		
Stake- Holders	Who has "skin in the game"? Other than the executive sponsor, what other people are impacted by this project? Who needs to be on board for this project to be successful?		
Team Members with Roles and Responsibilities	Are there some roles/responsibilities that need to be clarified now before the detailed planning begins? Who needs to be doing what in order for this project to succeed? Are you clear on your responsibilities as the project manager?		
Resources	Are there known resource needs that should be articulated? Items such as travel and training, hardware, software, etc.		
Assumptions	What high-level assumptions have already been made about the project?		
Risks	What are main high-level risks that have already been identified?		
Boundaries	Are there specific items that are NOT within the scope of the project?		
Communications and Change Management	What will be the main channels of communications? Do you anticipate any communication problems that should be clarified here? How often will the team meet? How will the organization be impacted? What are key concerns for employees and the organization? How will they be addressed?		
Decision Making Process	What is the decision-making process for the project? Escalation paths?		
Schedule	<ul style="list-style-type: none">▪ Start Date: MM/DD/YY▪ End Date: MM/DD/YY▪ Major Milestones:▪ MM/DD/YY: Description...▪ MM/DD/YY: Description...▪ MM/DD/YY: Description...		

Situational Leadership Model



Directive leader behavior is defined as:

The extent to which the leader engages in one-way communication; spells out the follower's role and tells the follower what to do, where to do it, how to do it, when and how much to do it, and then closely supervises performance.

Supportive leader behavior is defined as:

The extent to which a leader engages in two-way communication, listens, provides support and encouragement, facilitates interaction, and involves the followers in decision-making.

In S1, a leader is high on direction, low on support.

He or she defines roles and goals, provides specific instruction to the follower, and closely supervises task accomplishment. This style is appropriate in situations in which the follower has low

competence and needs clear, specific direction and close supervision. Otherwise competent people may be incompetent with a new or unfamiliar task or responsibility.

In S2, the leader is high on both direction and support.

He or she explains decisions and solicits suggestions from the followers, but continues to direct task accomplishments. The leader still provides a great deal of direction and leads with his/her ideas because the followers are not yet competent to make all the decisions, but the leader is also attempting to hear the followers' feelings about decisions as well as their ideas and suggestions in order to build confidence and enthusiasm. This style is appropriate in situations in which the followers have some competence but lack commitment to take responsibility. This style encourages two-way communication and builds confidence and motivation, while keeping responsibility for and control over decision-making with the leader.

In S3, the leader is high on supporting behavior and low on directing behavior.

The focus of control for day-to-day decision-making and problem-solving shifts from leader to follower. The leader's role is to provide recognition and to actively listen and facilitate problem-solving/decision-making on the part of the follower. This style is appropriate when the followers are competent but have variable commitment toward the task. They may lack confidence, and if directing behavior were provided, it would only reinforce their feelings of incompetence.

In S4, the leader provides low directing behavior and low supporting behavior.

In this case, followers are competent and motivated, and may only need the leader to discuss problems with the followers. Even though the leader may still identify the problem, the responsibility for carrying out plans is given to these experienced followers. They are permitted to run the show and decide on how, when, and where the task is to be accomplished. Since they are motivated, they do not need above-average amounts of supporting behavior.

Research in the past few decades has clearly supported the view that there is no one best leadership style: successful leaders are able to adapt their style to fit the requirements of the situation, specifically the needs of their followers.

Paul Hersey and Ken Blanchard from 1972, further developed by them and others since

Skills of Successful Facilitators

- Insure all team members feel welcome
- Promote ownership and encourage group responsibility
- Insure that everyone's ideas are heard
- Appropriately select tools for group activities
- Listen to, clarify, and integrate information
- Develop and ask the right questions
- Keep the group focused on outcome/task
- Create and reinforce an open, positive and participative environment
- Actively build trust and relationships
- Share information with the group
- Demonstrate flexibility
- Plan and design the meeting process
- Manage conflict and negative emotions constructively
- Encourage and support multiple perspectives
- Manage the meeting
- Insure follow-up assignments and expectations are clear

Stages of Team Growth

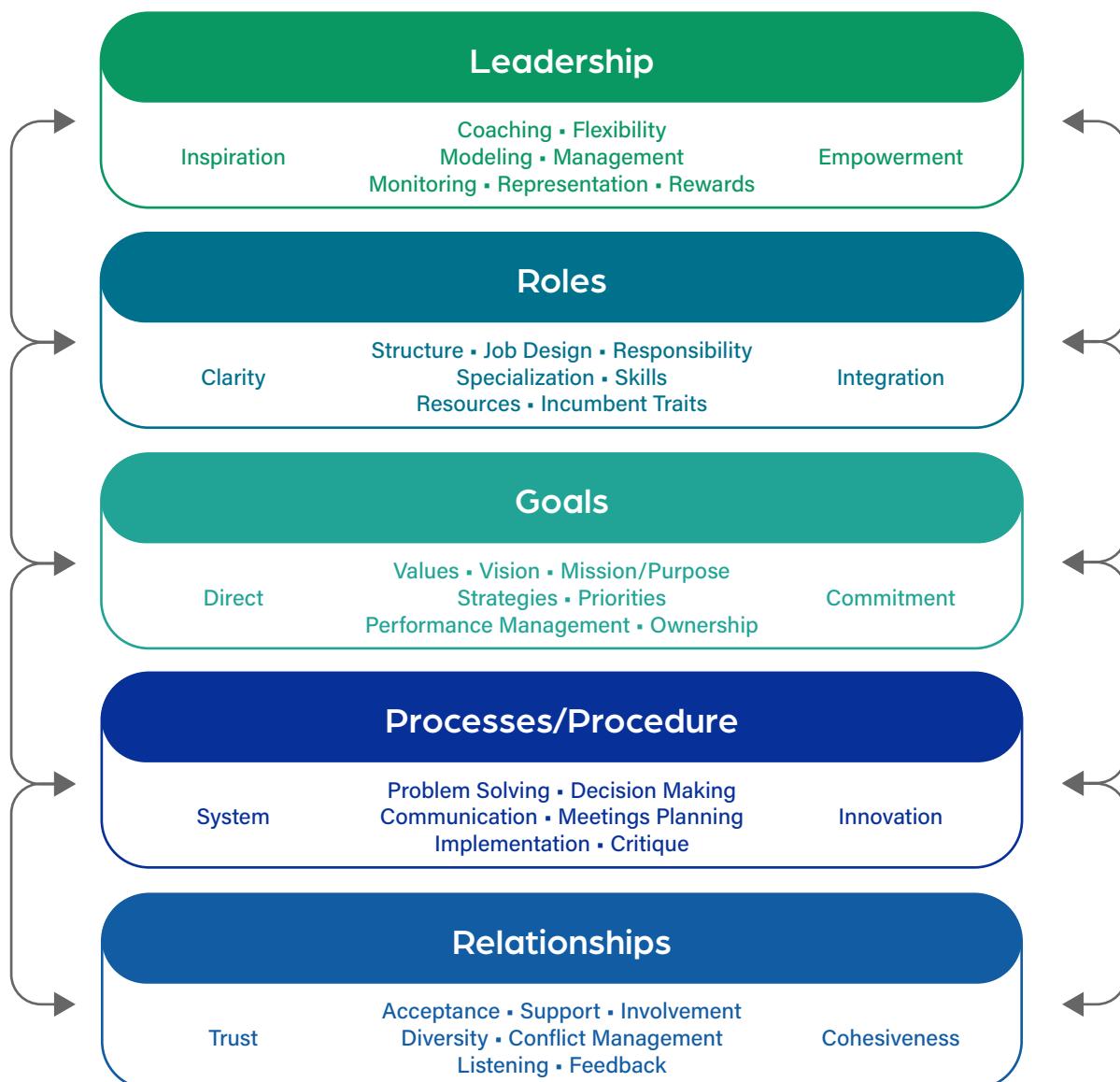
Stage 1: Forming Feelings <ul style="list-style-type: none">▪ Excitement, anticipation, optimism▪ Pride in being chosen▪ Tentative attachment to the team▪ Suspicion, fear, and anxiety Behaviors <ul style="list-style-type: none">▪ Attempts to define needed tasks and methods▪ Attempts to determine acceptable group behavior and how to deal with group problems▪ Decisions on what information needs to be gathered▪ Lofty, abstract discussions of concepts and issues▪ Discussions of symptoms or problems not relevant to the task▪ Complaints about the organization and barriers to the task	Stage 2: Storming Feelings <ul style="list-style-type: none">▪ Resistance to the task and quality improvement approaches▪ Sharp fluctuations in attitudes Behaviors <ul style="list-style-type: none">▪ Arguing among members even when they agree on the real issue▪ Defensiveness and competition; factions and "choosing sides"▪ Questioning the wisdom of those who selected the problem and appointed the other team members▪ Establishing unrealistic goals; concern about excessive work▪ A perceived "pecking order"; disunity, increased tension and jealousy
Stage 3: Norming Feelings <ul style="list-style-type: none">▪ A new ability to express criticism constructively▪ Acceptance of membership in the team▪ Belief that it seems everything is going to work out Behaviors <ul style="list-style-type: none">▪ An attempt to achieve harmony by avoiding conflict▪ More friendliness, confiding in each other, sharing of personal problems▪ Sense of team cohesion; common spirit and goals▪ Establishing and maintaining "norms"	Stage 4: Performing Feelings <ul style="list-style-type: none">▪ Members have insights into personal and group processes, and better understand each other's strengths and weaknesses▪ Satisfaction at the team's progress Behaviors <ul style="list-style-type: none">▪ Constructive self-change▪ Ability to prevent or work through group problems▪ Close attachment to t

Bruce Tuckman, 1965, many adaptations to the original over time

Team Effectiveness Model

- Team goals – the team's sense of purpose and direction.
- Team roles – an understanding of the ways in which work is to be allocated;
- Team process and procedures, including the process elements of the way in which a team conducts its business.
- Team relationships – how the team members get along with one another; and
- Team leaderships – the capacity of the team to monitor and align both the elements in each

Adapted from Matt Startchevich and Steven Stonell, 1990, Teamwork: We Have Met the Enemy and They are us, Bartlesville, OK: The Center for Management and Organizational Effectiveness. Used with permission.



Team Meeting Evaluation

Structure any evaluation around two points:

- Effectiveness: Are we doing the right things? Asking the right questions? Tackling the right problems? Working on issues related to the project?
- Efficiency: are we doing things right? Are we taking unnecessary steps? Repeating ourselves? Spinning our wheels? Are we looking for process?

We specifically applied to a meeting, a team should do both a general evaluation and a focus evaluation on how well the group discussed specific topics.

General evaluation

- How did this meeting go? What didn't we like?
- How was the pace, flow, and tone of the meeting? Did we handle items in a reasonable sequence? Did we get stuck?
- What might we do differently? What should we do so that we didn't do? Do more of? Do less of? Not do at all? What was just right and should continue as is?
- Any other comments, observations, recommendations?

Focused evaluation

- How well did we stay on this (any specified) subject?
- Did we look for problems in the system rather than blame individuals?
- How well did we discuss the information? How clearly? How accurately?
- How well did we respond to each other's questions? How satisfied are we with answers to our questions?

Our meeting today was:						
Wonderful	1	2	3	4	5	Lousy
Very Focused	1	2	3	4	5	Rambling
Energetic	1	2	3	4	5	Lethargic
I would characterize our methods as:						
The Scientific Approach	1	2	3	4	5	Shooting from The Hip
Cooperative	1	2	3	4	5	Divisive

Meeting evaluated:

Meeting purpose:

Time and date:

Participants:

Rate the following statements as to what extent the team demonstrated the identified behavior:

- 0 - not at all
- 1 - to a very small degree
- 2 - to a small degree
- 3 - to an average degree
- 4 - to a great degree
- 5 - to a very great degree

In our meeting we...

were guided by a written agenda	
shared the leadership function	
considered the feelings of all team members	
made decisions collaboratively	
provided for breaks if the meeting was longer than 2 hours	
arranged ourselves so that all participants had eye contact with one another	
focused on important issues	
fostered a climate that was supportive of learning and change	
tested for consensus before reaching a decision	
involved the appropriate people	
kept our work environment free from distractions	
felt free to ask, "What is this meeting supposed to accomplish?"	
avoided interrupting each other even when we were impatient with the discussion	
generated a variety of options before reaching a decision	
provided appropriate written materials to each participant	
stayed focused on our task	
allowed ideas to be fully expressed	
encouraged experimentation with ideas	

were guided by a written agenda	
followed up on assignments from previous meetings	
had appropriate flip charts to audio-visual aids available for use during discussion	
had a clear and agreed upon understanding of our purpose and goals for the meeting	
insisted on complete participation	
valued diversity of opinion and perspective	
evaluated our effectiveness	
came prepared with appropriate background material	
maintained openness to new ideas and information	
prioritized agenda items and discussion	
helped the team manage disruptive or destructive behavior	
took risks to increase our creativity	
prevented interruptions, except for emergencies	
managed time effectively	
all shared responsibility for keeping discussion on track	
accepted conflict as a problem to be solved by the team	
trusted each other	
put meeting decisions in writing	
provided an agenda that was sufficiently detailed so that participants could come prepared	
worked to have open communication with each other	
agreed upon criteria by which we would make decisions	
provided time for opposing viewpoints to be heard and clarified without attack or ridicule	
were guided by a written mission statement	
went out of our way to help new participants learn to function effectively	
avoided having more than one conversation at a time	
evaluated the quality of the results we achieved in the meeting	
clearly identified next steps and follow-up responsibilities	

Team Progress Checklist

Mission Statement

- Create or receive from management
- Clarify; modify if necessary
- Get management approval for mission revisions
- Define goals and objectives related to mission

Planning

- Select team members
- Develop logistical system for team meetings
- Create an improvement plan
- Development a top-down flowchart of project stages

Education/Team-Building Activities

- Introduce team members
- Explain roles and expectations
- Orient to group's process
- Introduce basics of quality: 14 points, key concepts, etc.
- Provide training in scientific tools
- Develop ownership in project; link individual goals with team's

Study the Process

- Construct top-down flowchart of process
- Interview customers to identify needs
- Design data gathering procedures
- Gather data on process
- Analyze data to see if process is stable
- Identify problems with process

Localize Problems

- Identify possible causes of problems
- Select likely causes

- Gather data to establish root causes
- Analyze data
- Rank causes
- Develop appropriate, permanent solutions

Make Changes/Document Improvement

- Develop a strategic plan to test changes
- Implement test
- Gather data on new process
- Analyze data, critique changes in light of data
- Redesign improvements in process and repeat this step if necessary
- Implement further changes, or refer to appropriate person or group
- Monitor results of changes
- Establish a system to monitor future

Closure

- Prepare presentation on project
- Deliver presentation
- Evaluate team's progress
- Evaluate team's product
- Document

Team Questions to Continue

- How often shall we hold team meetings?
How long should they be? When? Where?
How should we establish the agenda?
- Who is going to chair the meetings?
Take minutes?
- How are we going to get feedback and measure our performance? What is our goal/purpose as a team?
- How can we best accomplish our mission?
What ground rules would help us? What kind of climate do we want in our team?
How can we build that?
- What are our expectations for the team? Our worries? Hopes? Past experiences? How will we make decisions?
- How will we resolve problems? Handle conflicts? Address unproductive behavior? How do we make sure everyone is listened to and everyone has a say?
- How will we handle time constraints? How will we prioritize our work?
- How will we measure our productivity? Quality? How will we self-correct?
- What can we do to ensure that we constantly improve?
- What skills do team members have, and what do they want to learn? What other guidelines do we need?

Team Relation Needs

Encouraging

Is friendly, warm and responsive; uses eye contact and “uh-huhs.”

Approval/Acceptance

Non-verbal or verbal approval of another member’s participation

Group Sensitivity

Senses and expresses group feelings and moods. Aware of significant shifts in tone.

Harmonizing/Compromising

Reduces tension, works out disagreements, admits error, changes proposals to help the group, looks for middle ground

Gate-Keeping

Keeps communication channels open, helps others to participate, throttles dominating speakers, encourages non-contributors

Sharing Feelings

Sharing personal feelings with the team, getting others to express their feelings

Team Task Needs

Initiating

Gets a conversation going, keeps it going by defining problems, suggesting procedures, proposing tasks, stimulating ideas.

Information or Opinion Seeking

Drawing out relevant information, opinions, ideas, suggestions, or concerns from the group.

Information or Opinion Giving

Shares relevant information, opinions, beliefs, information, suggestions, and concerns.

Clarifying and Elaborating

Clears up confusion, gives examples, points out issues and alternatives, shares interpretations of what's been said.

Summarizing

Pulls together what's been said, organizes related ideas, restates suggestions, offers conclusions for the group to accept or reject.

Terminating

Moves the group towards decision or action (checking consensus, agreement, or disagreement).

Use of Data

Presents data to back up statements, suggests what data to collect to verify opinions.



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