

Learn the Basics of Collaborative Work Systems



Key Question of This Chapter

What are the different types of collaborative work systems?



Quick Look Overview

A *collaborative work system (CWS)* is an organizational unit that occurs any time that collaboration takes place, whether it is formal or informal or occurs intentionally or unintentionally. Intentional focus on CWSs requires the conscious and deliberate arrangement of organizational systems aimed at enabling collaboration and limiting impediments to collaborative work. Types of CWSs range from group to organization level and beyond. This chapter presents a typology of the organization level of CWS as both formal and informal collaborative practices. Outcomes of the chapter include an understanding of the different types of collaboration, identification of the type that closest fits the current organization, and a preliminary understanding of the CWS target that can be used to communicate with others.

Chapter Plan

Topic				
What Is a Collaborative Work System?	✓			
Types of Collaborative Work Systems	✓			✓
Understand the Current Organization	✓		✓	
Select the Collaborative Work System Target	✓			✓

Principles of Collaborative Work Systems Series

Focus collaboration on achieving business results



Treat collaboration as a disciplined process



Design and promote flexible organizations that foster needed collaboration



What Is a Collaborative Work System?

What Is Collaboration?

Collaboration is the collective work of two or more individuals where the work is undertaken with a sense of shared purpose and direction that is attentive, responsive, and adaptive to the environment. In collaborative work relationships, the awareness of the environment develops through access to information and knowledge about how work done by a group influences individuals at every layer of context, a process that is often described in terms of effects on stakeholders and customers. Because of this awareness, people who collaborate are able to guide their work so that it meets the needs of those surrounding the work and optimally coordinate their efforts so that their capacity for creating positive change becomes a primary force for generating meaning and commitment.

What Is a Collaborative Work System?

A *collaborative work system (CWS)* is an organizational unit that occurs any time that collaboration takes place, whether it is formal or informal, or occurs intentionally or unintentionally. Intentional focus on CWS requires the conscious and deliberate arrangement of organizational systems aimed at enabling collaboration and limiting impediments to collaborative work. All work groups have elements of collaboration, but intentional focus on CWSs increases and improves collaborative capability.

CWSs come in many shapes and sizes. Some forms of CWSs are listed below; look in the “Types of Collaborative Work Systems” section for a full typology.

Group Level

- *Team.* A group of people who have interdependent tasks and a shared purpose and who are held mutually accountable for shared goals
- *Community of practice.* An informal group or network of people who have shared interests, stories, and a common language, but are not necessarily held mutually accountable (for example, a group of engineers sharing learnings informally)

Organization Level

- *Team-based organization.* Teams are the unit of work, managers are in teams, and the organization is designed to support teams.

- *Collaborative organization.* Both formal and informal collaboration is supported, teams are used where needed, and the organization is designed to support collaboration.

Collaboration occurs naturally, but organizations tend to create barriers. For example, in traditional functional organizations, often a decision has to be escalated from worker to supervisor to manager in one function, then across to a manager in another function and down to a supervisor to a worker, and so on, before a final decision is made and communicated. The result is a loss of decision-making quality and time. Knocking down functional barriers and allowing workers to talk directly to relevant parties and make their own decisions (when possible) enhances natural collaborative processes and results in better and faster decisions. The goal of intentional focus on CWSs is individuals and groups effectively working together to achieve strategic goals.

Why Focus on Improving Collaborative Work Systems?

Some reasons for focusing on CWSs are listed below:

- *To create a competitive advantage.* Organizations have to work collaboratively, and do it well, to succeed in today's environment.
- *To create a context for team success.* Teams and other collaborative structures have a much better chance of success if the organization is designed to support collaboration.
- *To promote lateral integration and alignment.* Focusing on CWSs means improving not only collaboration within groups, but between groups. This lateral integration promotes significant performance payoffs between teams and decreased failure of isolated teams.
- *To better connect to your environment.* Continual links to the environment create awareness of the need to change to survive and thrive.
- *To increase flexibility.* The ability to collaborate provides flexibility to meet the needs of the environment (including customers), which improves the success and longevity of the organization.

Improve Collaborative Work Systems Through Intentional Effort

The optimal collaborative work system occurs when group members are provided access to information, knowledge, and resources that allow them to participate in the design of unit-level methods for accomplishing the work and the construction of environmental support systems and enabling arrangements. The quality of the participation depends on the ability of group members to establish relationships with other individuals and groups so that decision making (formal authorization, empowerment) and accountability (structure) are clearly communicated and mutually understood within the context of support systems and enabling structures.

Individuals who are experienced in establishing collaborative work groups often have the ability to organize quickly and create rules and norms that support their work

with minimal effort. Those without experience benefit from education, training, and procedures for incremental acceptance of authority and accountability and examples of activities or steps that have been associated with successful creation of collaborative work systems. Everyone benefits by having a shared approach for the expansion of collaborative work systems throughout an organization. All individuals and groups that experience the process of developing collaborative practices and who are supported by collaborative work systems share in personal and organizational learning that leads to higher levels of personal and organizational maturity.

There is no universal template for creating collaborative work groups and systems, but research into the experiences of other organizations (information about practices that have been successful as well as strategies that have failed to produce satisfactory results), knowledge about human behavior, and logical and creative problem solving contribute to minimizing pitfalls as well as increasing the probability and benefits of success. The purpose of this workbook is to bring together information and examples of steps that lead to higher levels of collaboration at any and every level of an organization. It is not a set of recipes, but a set of principles and suggestions intended to help navigate through the uncertainties of organizational change.

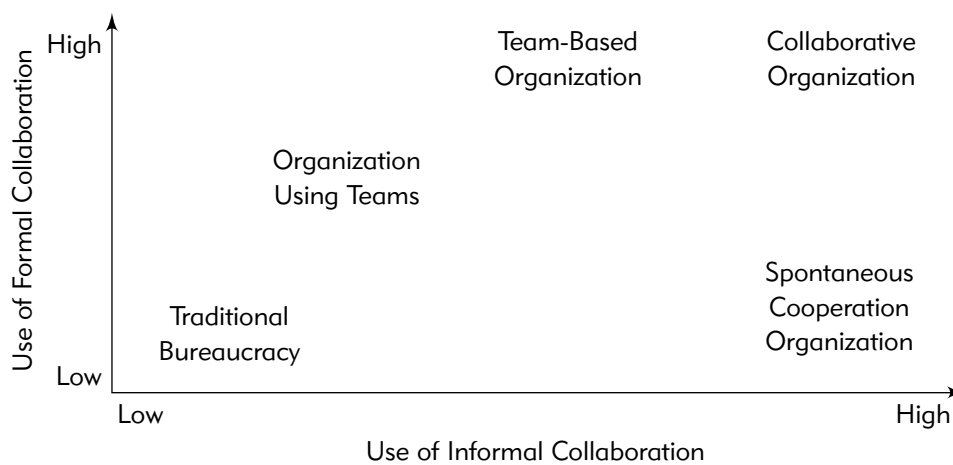


Types of Collaborative Work Systems

In this section, we will share our definitions of types of CWSs at the organization or site level. Please note that this is only one way to define organization types; many others have created alternate definitions.

Figure 2.1 depicts organization types as a function of use of formal and informal collaboration practices. Formal forms include temporary or permanent teams, single or multifunction teams, co-located or distributed teams, and cross-functional or function-specific teams. Informal forms include communities of practice, learning communities, and the “water cooler.” Both formal and informal forms depend on structural support and cultural changes, but perhaps to different extents. Ideally, an

Figure 2.1. Formal and Informal Organization Types

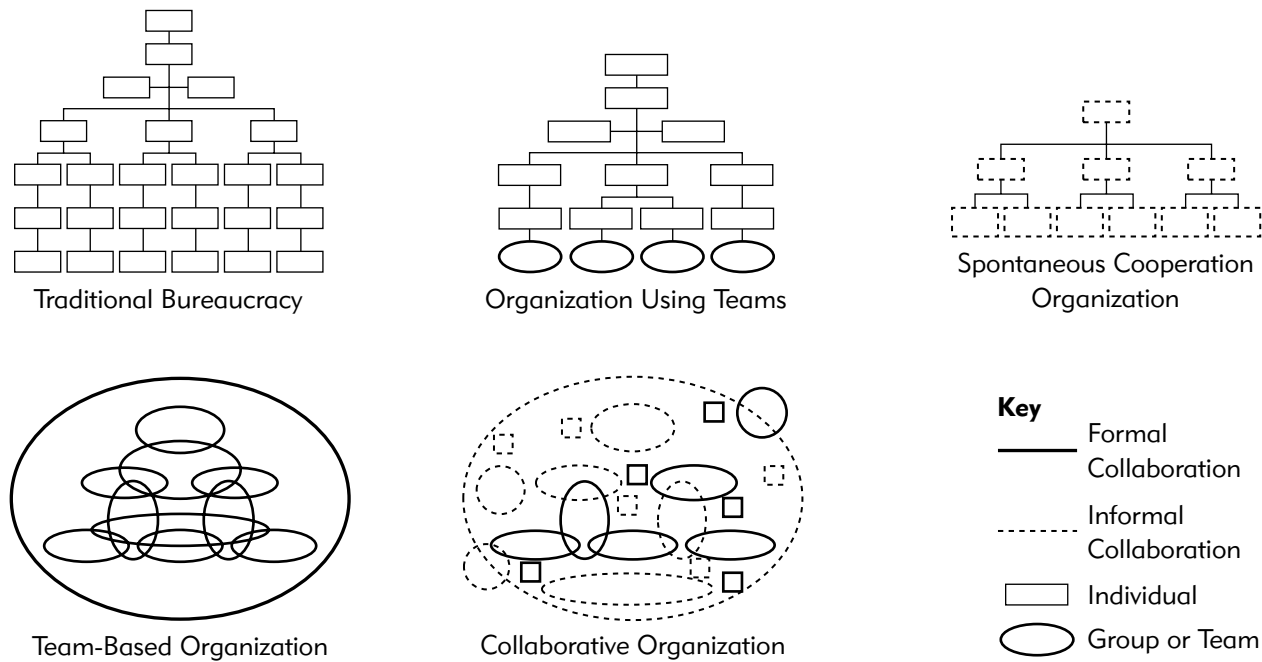


organization promotes both formal and informal forms (see Chapter 13 for more on types of collaborative structures), becoming what we call a collaborative organization.

Each of the organization types in the framework is described briefly in Table 2.1. See Figure 2.2 for visual representations.

Table 2.1. Brief Descriptions of Organization Types

Type	Description
Traditional Bureaucracy	<ul style="list-style-type: none"> • No teams at any level • Norms, rules, and procedures inhibit informal collaboration (for example, discussing problems over the water cooler is seen as wasting time and is punishable by the rules) • Focus of systems (for example, rewards and compensation, performance management) is on the individual • Individuals are usually organized in functions (for example, engineering, production) • High level of hierarchy in reporting structure
Organization Using Teams	<ul style="list-style-type: none"> • Some teams used, but only at the worker level • Norms, rules, and procedures inhibit informal collaboration • Focus of systems is on the individual • Individuals are usually organized in functions • Medium to high level of hierarchy in reporting structure
Spontaneous Cooperation Organization	<ul style="list-style-type: none"> • Few to no teams used at any level • Norms, rules, and procedures support informal collaboration (for example, a norm that individuals consult with each other when they need help) • Focus of systems is on the individual • Individuals are usually organized in functions • Medium to low level of hierarchy in reporting structure
Team-Based Organization	<ul style="list-style-type: none"> • A variety of team types are used as the basic units of accountability and work; workers and managers are organized in teams • Norms, rules, and procedures do not actively support informal collaboration • Focus of systems is on individual, team, and organization • Teams are usually organized around processes, products, services, or customers • Low level of hierarchy in reporting structure
Collaborative Organization	<ul style="list-style-type: none"> • A variety of team types are used as the basic units of accountability and work; workers are organized in teams; managers may or may not be organized in teams • Norms, rules, and procedures actively support informal collaboration (for example, common spaces like lounges are created and employees are encouraged to meet there to discuss issues) • Focus of systems is on individual, team, and organization • Teams and individuals are usually organized around processes, products, services, or customers • Low level of hierarchy in reporting structure

Figure 2.2. Visual Representations of Organization Types

Please note that there are other organization types that fall in the white spaces of Figure 2.1. For the sake of simplicity, the types with the most contrasts are shown. Your organization may fall somewhere between these types.



Activity: Understand Different Types of Collaboration

Time Requirement: Approximately 1 hour

Supplies: String, sewing needle, sharpened pencil, sewing thread, dime, roll of masking tape

Overview: This simulation is designed to create understanding about different types of collaboration—no collaboration, informal collaboration, and formal collaboration. Understanding different types of collaboration will help provide insight into the different organization types.

Instructions

1. Prepare for the activity. Designate a facilitator (a CLT member or an outside facilitator) to lead the exercise. Cut string into lengths of 8 feet, one for each participant. Tie knots at each end to prevent fraying. Insert the sewing needle straight down into the top of the sharpened pencil. Cut the sewing thread into one length of about 6 to 8 inches. Thread one end of the sewing thread through the eye of the needle. Tie each end of the sewing thread to the roll of masking tape so the pencil is suspended like a plumb line.
2. Getting started. Give each participant a length of string. Have participants loop their string through the roll of masking tape (the “ring”) and hold it at full length, one end in each hand.

3. With the group surrounding the ring, have individuals try different actions and movements. For example, have one participant pull hard on both ends or on one of the ends; have a participant let his or her string go slack. Try having them close their eyes and move the strings, feeling the forces at play.
4. Now have them swap one of their strings with the person on their left, so they have one hand on their own string and one on another's. Repeat various movements and actions to feel the interdependence.
5. Create a simulation where the group has to work together to achieve a goal. For each of the rounds listed below, the task remains the same. Place a dime on the floor somewhere near the group. Placing the pencil point directly on the dime becomes the goal of the group. As the rounds progress, you may want to make the goal more challenging by moving the dime to a corner of the room.
 - Round 1: No collaboration. Ask for a volunteer. Tell the volunteer that he or she is now the leader of the group. The leader is responsible for getting the group to accomplish the goal of placing the pencil point directly on the dime. Other participants are not allowed to talk or communicate in any way.
 - Round 2: Informal collaboration. No leader is appointed. The group is allowed to communicate in any way they desire. The goal remains the same.
 - Round 3: Formal collaboration. Before the activity, ask the group to take 10 minutes to develop a plan for best accomplishing their goal. Encourage them to discuss what they have learned through the previous round, brainstorm methods to accomplish the goal, then finally agree on a solution. Conduct the activity with the same goal as before.
6. Explain that round 1 was intended to simulate a "no collaboration" situation, round 2 was "informal collaboration," and round 3 was "formal collaboration." Then use the following questions to debrief the exercise.
 - What are some of your observations about round 1? What was it like for the participants? What was it like for the leader? What parallels can you draw between this round and your organization?
 - What are some of your observations about round 2? What was it like not having a leader? Was round 2 easier or more difficult than round 1? Why? What parallels can you draw between this round and your organization?
 - What are some of your observations about round 3? What happened during the planning session? What happened during the activity? Did the planning session help or hinder goal achievement? What parallels can you draw between this round and your organization?
 - Which of the rounds was most like your organization now?
 - Which of the rounds was most like your ideal organization?
 - What learnings did you gain that relate to how your group works together?
 - What learnings did you gain that relate to how your organization works?
7. Capture the learnings and keep them in mind as you work on planning the CWS initiative.



Understand the Current Organization

There are a variety of design criteria that can be used to distinguish among organization types. Table 2.2 shows how the organization design criteria relate to the organization types.

As you begin or refresh your CWS initiative, it is important to determine where the organization is now and to start from that point. That can take some frank and honest self-appraisal. What are the strengths and weaknesses? Where are the opportunities and hurdles? What is a realistic time frame for achieving the vision, given these circumstances? (For more on this, see the Guiding Assessment in Chapter 3.) The next assessment helps determine the organization type that most closely resembles your current organization.



Assessment: Identify Current Organization Type

Time Requirement: Approximately 1 hour

Supplies: Assessment 2.1, flip chart, markers, transparency of Table 2.2 and projector or reproduction of Table 2.2 on flip chart, and colored dot stickers (all in one color)

Overview: Using the organization design criteria in Table 2.2 as your guide, determine which organization type most accurately represents your current organization.

Instructions

1. As a group, complete Assessment 2.1 using your current organization as the reference. If possible, try to circle only one answer, but if more than one answer truly applies, it is acceptable to circle more than one. List examples that support your answers. Please note, there are no “right” answers; this is simply meant as a discussion tool. Modify your answers from the current categories if necessary.
2. Transfer your answers from Assessment 2.1 to your reproduction of Table 2.2. For the flip chart option, place a colored dot in the cell or cells that best represent your answer. For the overhead transparency, indicate the cell or cell with a transparency pen.
3. Look at how the colored dots or marks cluster in Table 2.2. Which organization type has the most dots?
4. Given your answers, which organization type most closely represents your current organization?



Select the Collaborative Work System Target

Now that you have identified the CWS type closest to your current organization, it is time to think about the CWS target. Major change initiatives are major challenges. It is tempting to minimize awareness of the scope, challenge, and risk, so the anxiety of being overwhelmed doesn't emerge, but it is important to achieve and maintain a realistic view.

Identify the Next Step of the Evolution

There is no one right answer to the question of most effective organization design. Not every organization should strive to be a collaborative organization. Instead, it depends on the circumstances of the organization. Different designs fit different situations. Find the point that fits for your organization. Use the planning tool in the next section to start identifying that desired point in the evolution.

Ask, “Are the resources, skills, knowledge, and support available or developable for the organization to create and sustain the desired CWS target?” If the answer is no, attention should be redirected to what is appropriate for now. That may be readiness work—assessing the state of readiness of the organization for allocating attention and resources to the CWS initiative.

Work Closely with Key Decision Makers

Selecting the CWS target sets the high-level scope of the CWS initiative. Work closely with key decision makers for approval to start defining that scope.



Planning: Determine Collaborative Work System Target

Time Requirement: Approximately 1 hour

Supplies: Transparency or flip chart page used in “identify current organization type” assessment, overhead and transparency pens or flip chart and markers, colored dot stickers (in a different color than was used for the previous activity)

Overview: Use this planning activity to begin to identify your collaborative work system target and to start defining design goals for your CWS initiative.

Instructions

1. Look back at the transparency or flip chart page used in the “identify current organization type” assessment. Now use a different color dot or transparency pen to indicate your preferences for each criteria for your *ideal* level of collaboration.
2. Look at how the colored dots or marks representing the ideal level of collaboration cluster in Table 2.2. Which organization type has the most dots?
3. Given your answers, which organization type most closely represents your ideal organization?
4. Review your results with key decision makers in the organization to determine the scope of the CWS initiative.



Conclusion

The key question for this chapter is, “What are the different types of collaborative work systems?” A collaborative work system occurs any time collaboration takes place, but intentional focus on CWS results in more effective collaboration. This

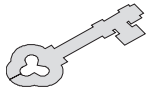
Table 2.2. Design Criteria for Organizational Types

Design Criteria	Type of Organization				
	Traditional Bureaucracy	Organization Using Teams	Spontaneous Cooperation Organization	Team-Based Organization	Collaborative Organization
Type of work supported	Simple, routine	Moderately complex, moderately non-routine	Moderately complex, moderately non-routine	Complex, non-routine	Complex, non-routine
Appropriate environment	Slow change, local, certain	Medium change, moderate global, moderate uncertainty	Medium change, moderate global, moderate uncertainty	Fast change, global and local, uncertain	Fast change, global and local, uncertain
Levels of hierarchy	High	Medium	Medium	Low	Low
Use of formal collaborative structures	Low	High	Low	High	High
Use of informal collaborative structures	None	None	High	Medium	High
Unit of accountability	Individual	Individual and team	Individual	Team, individual, and organization	Team, individual, and organization
How managers are organized	Individuals	Individuals	Individuals	Teams	Individuals or teams
Organization design supports	Individual	Individual	Informal collaboration	Both formal and informal collaboration, leaning more toward formal	Both formal and informal collaboration
Integration costs*	Low	Medium	Medium	High	Very high
Potential collaborative results*	Low	Medium	Medium	High	Very high

*Integration costs refer to the time, money, and other resources needed to effectively integrate for collaboration. Integration does not just magically occur; it takes a lot of effort. However, the more that is spent on integration, the greater are the potential collaborative results.

Assessment 2.1. Description of Current Organization			
Design Criteria	Current Organization		Example
Type of work	Simple	Complex	
	Routine	Non-Routine	
Environment	Slow	<i>Change</i> Medium	Fast
	Local		Global
	Certain		Uncertain
Levels of hierarchy	Low	Medium	High
Use of formal collaborative structures	Low	Medium	High
Use of informal collaborative structures	Low	Medium	High
Unit of accountability	Individual	Team	Organization
How managers are organized	Individual		Team
Organization design supports	Individual	Informal Collaboration Formal Collaboration	

chapter focuses on types of CWS at the organization level as a function of formal and informal collaboration, including traditional bureaucracy, organization using teams, spontaneous cooperation organization, team-based organization, and collaborative organization. Discussing the current type and ideal type with key decision makers until approval is gained garners their support for the CWS initiative.



Keys to the Chapter

- Collaboration is the collective work of two or more individuals where the work is undertaken with a sense of shared purpose and direction that is attentive, responsive, and adaptive to the environment.
- Intentional focus on CWS helps bring down the barriers to natural collaboration that organizations tend to create unintentionally.
- The goal of CWS is individuals and groups effectively working together to achieve strategic goals.
- Identifying your current organization type sets a baseline for the CWS initiative.
- The appropriate CWS type target depends on the situation of the organization. Find the point that fits for your organization.
- Work closely with key decision makers for approval to start defining the scope of change required in the CWS initiative.



Chapter Wrap-Up

- What ideas did this chapter trigger for you and your group? List them in the action planning worksheet at the end of this chapter.
- Review the ideas list. Which of these do you want to implement? List the action item, person or group responsible, and target due dates in the action planning worksheet.
- Were any significant decisions made? Include them at the bottom of the action planning worksheet.
- How can you communicate the pertinent material generated by your work on this chapter to different audiences? Discuss and consider adding action items based on your discussion.
- How can you use the resources list for additional help?
- What can you do tomorrow or within the next week based on what you learned in this chapter? Have each person share what he or she will do, and be sure to follow up.
- What is your biggest learning from this chapter? Ask each person to share. This is a nice way to end the session. Include any resulting ideas or action items in the action planning worksheet.



Resources

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Action Planning and Summary Sheet

Ideas Generated from This Chapter

1	
2	
3	
4	
5	

#	Action Item	Target Date	Person/Group Responsible
1			
2			
3			
4			
5			
6			

Significant Decisions Made

1	
2	
3	
4	