

2

Collaboration Information Systems

LEARNING OBJECTIVES

- Describe the two key characteristics of collaboration.
- Describe three criteria for successful collaboration.
- Explain the four primary purposes of collaboration.
- Describe the requirements for a collaboration information system.
- Explain how to use collaboration tools to improve team communication.
- Explain how to use collaboration tools to manage shared content.
- Explain how you can use collaboration tools to manage tasks.
- Discuss which collaboration IS is right for your team.
- Discuss your ideas on how we may collaborate in 2026.

CHAPTER OUTLINE

- What are the two key characteristics of collaboration?
 - Importance of effective critical feedback
 - Guidelines for giving and receiving critical feedback
 - Warning!
- What are three criteria for successful collaboration?
 - Successful outcome
 - Growth in team capability
 - Meaningful and satisfying experience
- What are the four primary purposes of collaboration?
 - Becoming informed
 - Making decisions
 - Solving problems
 - Managing projects
- What are the requirements for a collaboration information system?
 - The five components of an IS for collaboration
 - Primary functions: communication and content sharing
- How can you use collaboration tools to improve team communication?
- How can you use collaboration tools to manage shared content?
 - Shared content with no control
 - Shared content with version management on Google Drive
 - Shared content with version control

- How can you use collaboration tools to manage tasks?
 - Sharing a task list on Google Drive
 - Sharing a task list using Microsoft SharePoint
- Which collaboration IS is right for your team?
 - Three sets of collaboration tools
 - Choosing the set for your team
 - Don't forget procedures and people!
- 2026?

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So What?

Augmented Collaboration

1. *This feature provides two examples of possible business uses for the HoloLens. Think about the future impact of this innovation by identifying other industries that may benefit from the development of augmented reality technology.*

Student answers will vary. There are many types of situations where the work of someone could be guided by a remote expert who was able to view the field of view at the local site and provide expert direction. As an example, insurance companies who are dealing with post-disaster claims could use augmented reality technology to replace the highly-trained on-site insurance adjustment team with local agents who could perform immediate inspections and claims processing with the guidance of experts.

2. *What is the difference between the Oculus Rift and the Microsoft HoloLens?*

Oculus Rift is a virtual reality headset geared to 3D gaming and new forms of social media. HoloLens is an augmented reality headset, meaning that the real world is visible but a videoconferencing window is superimposed in the field of view of the user. The remote expert can "see" the local field of view and also can provide visual feedback displayed in the local headset window.

3. *How could this type of technology benefit your collaborations as a student? Think about how you interact with tutors and fellow students on group projects and how you seek and receive help from your instructor.*

Students who are working on homework problems could communicate with an instructor or tutor and enable the remote expert to see the student's solution through the HoloLens. The remote expert could diagram on the headset interface places

where the solution is wrong and make suggestions for corrections. When collaborating with fellow students, joint editing of documents might be feasible.

4. *Privacy concerns are one of the factors that prompted Google to delay a full release of the Google Glass. What are the security and privacy implications of releasing a product like the HoloLens?*

Using the example of the use of HoloLens in the health care industry: health care is a field that has stringent privacy restrictions. Use of HoloLens during a medical procedure would have to be carefully secured so that no one without authorization has a way to obtain any information about the situation.

5. *Virtual reality and augmented reality headsets are currently a novelty, but that will change over the coming years. How might these new innovations affect collaboration and business 10 or 20 years from now?*

As with any new technology, over the next decades the technological issues and societal issues will be dealt with and will evolve. Use of these augmented reality headsets may become standard practice and widely accepted as a part of our collaborative toolkit. Concerns over privacy may be minimized through enhancements to security systems.

USING YOUR KNOWLEDGE

2-4. *This exercise requires you to experiment with OneDrive. You will need two Office IDs to complete this exercise. The easiest way to do it is to work with a classmate. If that is not possible, set up two Office accounts, using two different Outlook.com addresses.*

- a. *Go to www.onedrive.com and sign in with one of your accounts. Create a memo about collaboration tools using the Word Online. Save your memo. Share your document with the email in your second Office account. Sign out of your first account.*

(If you have access to two computers situated close to each other, use both of them for this exercise. If you have two computers, do not sign out of your Office account. Perform step b and all actions for the second account on that second computer. If you are using two computers, ignore the instructions in the following steps to sign out of the Office accounts.)

No answer required; a task to be performed by the student. (LO: 6, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

- b. *Open a new window in your browser. Access www.onedrive.com from that second window and sign in using your second Office account. Open the document that you shared in step a.*

No answer required; a task to be performed by the student. (LO: 6, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,

AACSB: Information Technology)

- c. *Change the memo by adding a brief description of content management. Do not save the document yet. If you are using just one computer, sign out from your second account.*

No answer required; a task to be performed by the student. (LO: 6, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

- d. *Sign in on your first account. Attempt to open the memo and note what occurs. Sign out of your first account and sign back in with your second account. Save the document. Now, sign out of your second account and sign back in with the first account. Now attempt to open the memo. (If you are using two computers, perform these same actions on the two different computers.)*

No answer required; a task to be performed by the student. (LO: 6, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

- e. *Sign in on your second account. Re-open the shared document. From the File menu save the document as a Word Document. Describe how OneDrive processed the changes to your document.*

No answer required; a task to be performed by the student. (LO: 6, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

COLLABORATION EXERCISE 2

2-5. *Build a communication method:*

- Meet with your team and decide how you want to meet in the future. Use Figure 2-8 as a guide.*
- From the discussion in a, list the requirements for your communication system.*
- Select and implement a communication tool. It could be Skype, Google Hangouts, or Skype for Business.*
- Write procedures for the team to use when utilizing your new communication tool.*

No specific answer given – an activity to be performed by the students. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

2-6. *Build a content-sharing method:*

- Meet with your team and decide the types of content that you will be creating.*
- Decide as a team whether you want to process your content using desktop applications or cloud-based applications. Choose the applications you want to use.*
- Decide as a team the server you will use to share your content. You can use Google Drive, Microsoft OneDrive, Microsoft SharePoint, or some other server.*

- d. *Implement your content-sharing server.*
- e. *Write procedures for the team to use when sharing content.*

No specific answer given – an activity to be performed by the students. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

2-7. *Build a task management method:*

- a. *Meet with your team and decide how you want to manage tasks. Determine the task data that you want to store on your task list.*
- b. *Decide, as a team, the tool and server you will use for sharing your tasks. You can use Google Drive, Microsoft OneDrive, Microsoft SharePoint, or some other facility.*
- c. *Implement the tool and server in step a.*
- d. *Write procedures for the team to use when managing tasks.*

No specific answer given – an activity to be performed by the students. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

2-8. *Using your new collaboration information system, answer the following questions:*

- a. *What is collaboration? Reread Q1 in this chapter, but do not confine yourselves to that discussion. Consider your own experience working in collaborative teams, and search the Web to identify other ideas about collaboration. Dave Pollard, one of the authors of the survey on which Figure 2-1 is based, is a font of ideas on collaboration.*

Student answers will vary. Their ideas on collaboration should focus on people working together to achieve a common goal, result, or work product. Feedback and iteration is involved so that the results of the collaborative effort are greater than could be produced by any of the individuals working alone. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking)

- b. *What characteristics make for an effective team member? Review the survey of effective collaboration skills in Figure 2-1 and the guidelines for giving and receiving critical feedback and discuss them as a group. Do you agree with them? What skills or feedback techniques would you add to this list? What conclusions can you, as a team, take from this survey? Would you change the rankings in Figure 2-1?*

Student answers will vary, depending on their team experiences. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking)

- c. *What would you do with an ineffective team member? First, define an ineffective team member. Specify five or so characteristics of an ineffective team member. If your group has such a member, what action do you, as a group, believe should be taken?*

Student answers will vary. The characteristics of an ineffective team member will include lack of interest and commitment, unwillingness to give or take criticism, unwillingness to listen, indifference. Students are typically not too tolerant of ineffective team members, but are not always willing to boot them off the team, preferring instead to just work around them. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking)

- d. *How do you know if you are collaborating well? When working with a group, how do you know whether you are working well or poorly? Specify five or so characteristics that indicate collaborative success. How can you measure those characteristics?*

Student answers will vary. Characteristics of collaborative success center on the output of the group being superior to the output that could have been created by an individual working alone, including such things as being more productive, more creative, and generating more and better ideas. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking)

- e. *Briefly describe the components of your new collaboration IS.*

No specific answer given – student answers will vary depending on the work done in parts 1-3 of this exercise. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Information Technology)

- f. *Describe what your team likes and doesn't like about using your new collaboration system.*

No specific answer given – student answers will vary depending on the work done in parts 1-3 of this exercise. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking)

CASE STUDY 2

Eating Our Own Dog Food

- 2-9. *In your own words, define dogfooding. Do you think dogfooding is likely to predict product success? Why or why not? When would dogfooding not predict product success?*

The term is used to describe an organization that utilizes its own products in its day to day business operations. A company that demonstrates commitment to its own products by using them exclusively should gain useful insight into the products' actual performance in realistic settings. Assuming those insights are used to improve the product, then it seems likely the product has an increased likelihood of success. If the use of the product is mandated but is done only for appearance (e.g., a car dealer that requires its salespeople to drive only the car brands sold by the dealership), then

dogfooding probably does not predict product success.(LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Reflective Thinking)

2-10. *Explain how this team uses the shared whiteboard to generate minutes. What are the advantages of this technique?*

The whiteboard was used by the meeting participants to list the initial agenda, create new task lists, and indicate task completion. Once the whiteboard contents were saved, there was no forgetting of the topics discussed, completed, or planned (a common occurrence in meetings when note taking is absent or spotty). All the accomplishments and plans from the meeting were recorded on the whiteboard and saved as a resource for the team.(LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Information Technology)

2-11. *Explain how this team uses alerts. Summarize the advantages to this team of using alerts.*

Alerts were established so that when a task was added to the task list and assigned to team member, that member received an email notifying him/her of the task. This way the alert brought the new task to the attention of the right person in a timely way.(LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Information Technology)

2-12. *Explain why this team does not use Skype for Business.*

Skype for Business was not used by the team because it was not allowed to be installed by the publisher, Pearson. It is necessary to ensure that a tool that is being contemplated for use does conform to the organization's IT standards. (LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Information Technology)

2-13. *Summarize the advantages to this team of using SharePoint.*

SharePoint is a powerful tool for content sharing. SharePoint enabled this team to keep track of many documents that were evolving through a series of edit/review cycles; keep track of many tasks; and communicate effectively despite being geographically dispersed. As a result, the team was able to complete work on a big project efficiently and effectively without the expense and hassle of traveling.(LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Information Technology)

2-14. *Explain how you think Office 365 Professional contributes to the efficiency of the development team. How might it contribute to the quality of this text?*

The most important contributions of Office 365 Professional to the efficiency of the textbook development team is the improvement in communication amongst the team and the control of the textbook content as it is being created and reviewed in preparation for publishing. Because of these capabilities, we can expect that the textbook is of higher quality. More edit/review cycles can be completed, so the textbook content is more refined. In addition, more current content can be

incorporated into the textbook because the edit/review cycles do not take as much time as in the past.(LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Information Technology)

2-15. *Which aspects of Office 365 Professional described here could have value to you when accomplishing student team projects? Explain why they add value compared to what you are currently doing.*

Student answers will vary. Students will probably find the text chat, audio and videoconferencing, online content sharing, content management and control, discussion forums, wikis, blogs, email, and concurrent document editing to be useful for student projects. Compared to traditional student group processes, there should be more meaningful participation by group members, less confusion about the status of the project, more satisfaction with the group process, higher quality group product, and more satisfaction with the group product.(LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork,AACSB: Reflective Thinking)

For an example illustrating the concepts found in this chapter, view the videos in mymislabs.com.