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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 components and functions of a collaboration information system.
- Explain how to use collaboration tools to improve team communication.
- Explain how to use collaboration tools to share content.
- Discuss which collaboration IS is right for your team.
- Discuss your ideas on how we may collaborate in 2023.

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
 - Problem solving
 - Project Management
- What are the components and functions of a collaboration information system?
 - The five collaboration system components
 - Primary functions: communication and content sharing
- How can you use collaboration tools to improve team communication?
- How can you use collaboration tools to share content?
 - Shared content with no control
 - Shared content with version management
 - Shared content with version control
- 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!
- 2023?

Using MIS InClass 2

What Happened to Google+ ???

1. *Poll the members of your group to determine how many members have Google+ and Facebook accounts. Estimate the time that the members of your group spend on each. Does your data conform to the usage reported in the Temple University study?*

Student answers will vary depending on each student's individual usage of Google + and Facebook. Look for parallels to the study data or examples of different results.

2. *Discuss both the features of Google+ and Facebook among your team.*

- a. *Which features for each do you like the best?*

Student answers will vary depending on each student's individual usage of and experience with Google + and Facebook.

- b. *Which for each do you like the least?*

Student answers will vary depending on each student's individual usage of and experience with Google + and Facebook.

- c. *Which features for each do you use most frequently?*

Student answers will vary depending on each student's individual usage of and experience with Google + and Facebook.

3. *Read the full Temple posting at <http://community.mis.temple.edu/stevenljohnson/2012/04/01/google-v-facebook-tale-of-the-tape-infographic>. Compare your answers to question 2 to data on that infographic. To what do you attribute any differences?*

Student answers will vary depending on each student's individual usage of and experience with Google + and Facebook.

4. *Search the Internet to find what Google says are the goals for Google+. Use both Google and Bing in your search. Summarize your results. State any differences you find between searches using Google and searches using Bing. If you find differences, do what do you attribute them?*

Google's recent announcement of the new Google + feature, Communities, suggests that Google is continuing to refine and enhance Google +, and may have finally found a way to increase Google +'s "stickiness". Stickiness is defined as: "... the amount of time spent on a site over a given period of time, and it usually has to do with relevancy, shareability and a string of factors that keep customers, potential customers, advocates or detractors coming back for more." Source:

<http://www.business2community.com/google-plus/google-communities-the-much-awaited-game-changer-0352580#fiBDsj4ZvXI2OFRE.99>

Usage statistics reported in the above article also suggest increased usage of Google + compared to the infographic reported in question 2. There are now over 500 million users, of which 235 million are monthly active users through one of Google's services, i.e. gmail or +1 button, and 135 million monthly active users directly in Google+.

Searching on Google and Bing for news about Google + did reveal quite a few differences. Bing delivered a number of articles that discuss various aspects of the battle between Google and Facebook, while few of these references were listed using Google's search. Could be that Google wants to downplay the "competition" between the two organizations.

5. *Everyone who buys an Android device obtains a Google account, which also means that they have, at least in the background, a Google+ account. Search the Internet to determine the current number and sales of Android devices. Does this large number of people holding Google accounts mean anything? Of what good is a Google account if Google+ doesn't have features that people want?*

Top Smartphone Platforms			
3 Month Avg. Ending Sep. 2012 vs. 3 Month Avg. Ending Jun. 2012			
Total U.S. Smartphone Subscribers Ages 13+			
Source: comScore MobiLens			
	Share (%) of Smartphone Subscribers		
	Jun-12	Sep-12	Point Change
<i>Total Smartphone Subscribers</i>	100.0%	100.0%	N/A
Google	51.6%	52.5%	0.9
Apple	32.4%	34.3%	1.9
RIM	10.7%	8.4%	-2.3
Microsoft	3.8%	3.6%	-0.2
Symbian	0.9%	0.6%	-0.3

US mobile platform share, September 2012.

Comscore

The graphic above and the answer to Question 4 provide hints about the number of Google account holders. Google has a relationship with these account holders and it will continue to refine and enhance its offerings (e.g., the introduction of Google + Communities). Google wants to “control” every screen on every device its users have because it makes money by delivering advertising.

6. *Consider the possibility that Google wants to use Google+ as an integration mechanism. Explain what this means. In what ways might Google Drive play into this strategy? Is the combination of, say, Google Drive, Gmail, and YouTube enhanced by Google+?*

Google + could serve as an integration mechanism by enabling the easy sharing of files, email, and videos through the easy-to-use interface of the Google + platform.

7. *The Temple infographic was prepared by students. Describe how those students can use that experience in their job search. What does this mean you need to be doing in preparing for your own job search? In your answer, realize that you will be competing with those students for the same jobs.*

The experience the Temple students had in researching these statistics and then finding meaningful ways to convey the results graphically will provide them a great springboard for discussion of their skills in a job interview. They will have a concrete example that illustrates their analytical and creative skills. Other students should seek opportunities to develop their skills in ways that can be concretely demonstrated.

USING YOUR KNOWLEDGE

1. *Reflect on your experience working on teams in previous classes as well as on collaborative teams in other settings, such as a campus committee. To what extent was your team collaborative? Did it involve feedback and iteration? If so, how? How did you use collaborative information systems, if at all? If you did not use collaborative information systems, describe how you think such systems might have improved your work methods and results. If you did use collaborative information systems, explain how you could improve on that use, given the knowledge you have gained from this chapter.*

Student responses will vary depending on their specific prior experiences with collaborative teams and collaborative information systems. In your discussion, emphasize the value of feedback and iteration to teams, but also emphasize that the team members must have the skills to accept critiques, criticism, and revisions of their work. In some student teams, the focus is strictly on fulfilling a requirement and not necessarily producing the highest quality work product possible through the collaborative efforts of the team members. (LO: 1, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking Skills)

2. *Reread 2023 in question Q8. Do you agree with the conclusions? Why or why not? If F2F meetings become rare, what additional impacts do you see on the travel industry? In light of this change, describe travel industry investments that make sense and those that do not. What are promising investments in training? What are promising investments in other industries?*

Because this question is primarily an opinion question, student responses will vary. Some students may agree that technology that supports communication and collaboration will result in very few face-to-face business meetings in 2022 and beyond. Others may believe that there will always be a role for face-to-face meetings in business, and that technology is a poor substitute. For those students who are skeptical, point out that as people become more comfortable and adept at using the technology, and as that technology improves, technology-based collaboration will become more natural and productive.

Further reductions in business travel will hurt the already struggling airline industry. If travel shifts to being primarily recreation-oriented, then recreation-oriented destinations will benefit. Investments that create and/or enhance recreational destinations (theme parks, water parks, casinos, entertainment venues, along with amenities like hotels, restaurants, car rentals, etc.) will make sense.

Training investments that make sense would be (1) training to be an effective user of the collaboration technology, and (2) just about any computer-based training, especially that which includes video. Investing in bricks-and-mortar training centers does not make sense.

Students are likely to think of many different industries that might be promising investments in the future. One thing to think about is when virtual meetings become the natural way of meeting, many people can essentially live anywhere they choose. Communities with desirable locations (near a beach, for example), should invest in a telecomm capability so that residents can easily get connected to their business meetings. In addition, innovative rural communities should consider developing their telecomm capabilities so that people who are attracted to that way of life can still engage in business activities with offices in metropolitan areas. (LO: 8, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Reflective Thinking Skills)

3. *Choose one of the three alternatives described in Q7 for use by your collaborative team. To do so, answer the following questions (if possible, answer these questions with your team):*
- a. *List your team's list of collaboration requirements. Break them into mandatory and nice-to-have categories.*

The list of collaboration requirements will vary among student groups. You

should push your students to discover the benefits of tools beyond the “minimal” set in Figure 2-21, since this set consists of tools student probably already use. (LO: 7, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Use of Information Technology)

- b. *Create a list of criteria for selecting collaboration tools and creating a collaboration IS. Start with the items in the first column of Figure 2-21, but add, modify, or delete items depending on your answer to question 3a.*

The list of criteria for selecting collaboration tools will vary among student groups. You should push your students to discover the benefits of tools beyond the “minimal” set in Figure 2-21, since this set consists of tools student probably already use. (LO: 7, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Use of Information Technology)

- c. *Score the three alternatives in Q7 against your requirements and your criteria. If you wish, change any of the elements of those three alternatives to create a fourth alternative. Score it as well.*

The scoring of the three alternative tool sets in Q7 will vary depending on the students' answers to parts a and b. (LO: 7, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Use of Information Technology)

- d. *Based on your answer to question 3c, select a collaboration toolset. Explain your selection.*

The selection of a specific tool set will vary among the student groups. Look for some recognition that despite the learning curve, there are strong reasons for gaining skills in using tools from the “comprehensive” tool set. If students do not recognize this, push them to explain why they feel this way. (LO: 7, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Use of Information Technology)

- e. *Given your answer to question 3d, how will you construct your collaboration IS? Specifically, what procedures will you need to develop and how will your team members obtain training? Will you need to have any special jobs or roles for your team members? If so, describe them.*

Procedures will be important to the group's success in using their selected collaboration tool set because people are likely to fall back into old familiar patterns (the “minimal” tool set) without some commitment to change. Students should commit to going through training together as a team, possibly using online training resources like Lynda.com. At least initially, the team should appoint someone to monitor the group's use of the tools and help ensure the successful adoption of the new ways of working together collaboratively. (LO: 7, Learning

Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Use of Information Technology)

4. *This exercise requires you to experiment with Google Drive. You will need two Google accounts to complete this exercise. If you have two different email addresses, then set up two Google accounts using those addresses. Otherwise, use your school email address and set up a Google Gmail account. A Gmail account will automatically give you a Google account.*
- a. *Using Microsoft Word, write a memo to yourself. In the memo, explain the nature of the communication collaboration driver. Go to <http://drive.google.com> and sign in with one of your Google accounts. Upload your memo using Google Docs & Spreadsheets. Save your uploaded document and share your document with the email in your second Google account. Sign out of your first Google account.*
(If you have access to two computers situated close to each other, use both of them for this exercise. You will see more of the Google Docs functionality by using two computers. If you have two computers, do not sign out of your Google 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 Google 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: Use of Information Technology)

- b. *Open a new window in your browser. Access <http://drive.google.com> from that second window and sign in using your second Google 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: Use of Information Technology)

- c. *Change the memo by adding a brief description of content management. Save the document from your second account. 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: Use of Information Technology)

- d. *Sign in on your first account. Open the most recent version of the memo and add a description of the workflow control communication driver. Save the document. (If you are using two computers, notice how Google warns you that another user is editing the document at the same time. Click Refresh to see what happens.) If you are using just one computer, sign out from your first 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: Use of 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 Google 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: Use of Information Technology)

5. *This exercise requires you to experiment with Windows Live SkyDrive. You will need two Office Live 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 Live accounts, using two different Hotmail addresses.*
- a. *Go to www.skydrive.com and sign in with one of your accounts. Create a memo about collaboration tools using the Word Web App. Save your memo. Share your document with the email in your second Office Live 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 Live 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 Live 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: Use of Information Technology)

- b. *Open a new window in your browser. Access www.skydrive.com from that second window and sign in using your second Office Live 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: Use of 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: Use of 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: Use of 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 SkyDrive 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: Use of Information Technology)

COLLABORATION EXERCISE 2

With a team of your fellow students, develop an answer to the following four questions. Use Google Docs, Google +, Windows Live SkyDrive, Office 365, or some other collaboration system to conduct your meetings.

- 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 that Figure 2-1 is based on, 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 Skills)

- 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 Skills)

- 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 Skills)

- 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 Skills)

Deliver your answers to these four questions to your instructor in the format required—on paper, as a SharePoint site, or some other innovative format.

CASE STUDY 2

Eating Our Own Dog Food

1. *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 Skills)

2. *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: Use of Information Technology)

3. *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: Use of Information Technology)

4. *Summarize the advantages to this team of using Lync.*

Lync is used to enable the team members to communicate collaboratively. Lync allows team members to use email, instant messaging, and audio/video calls. Color coding is used to indicate team member availability. Team members can also share their desktops, share programs, and see and contribute to a shared whiteboard. Teams can also utilize surveys and polls and conduct webinars with Lync, but this probably was not needed in this context. (LO: 4, Learning Outcome: Explain how IS can enhance systems of collaboration and teamwork, AACSB: Use of Information Technology)

5. *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: Use of Information Technology)

6. *Explain how you think Office 365 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 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: Use of Information Technology)

7. *Which aspects of Office 365 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 Skills)