Chapter 5
Innovative EC Systems: From E-Government to E-Learning, Collaborative Commerce, and C2C Commerce

Learning Objectives

Upon completion of this chapter, you will be able to:
1. Describe various e-government initiatives.
2. Describe e-government activities and implementation issues including e-government 2.0 and m-government.
3. Describe e-learning, virtual universities, and e-training.
4. Describe e-books and their readers.
5. Describe knowledge management and dissemination as an e-business.
6. Describe and discuss online advisory systems.
7. Describe collaborative e-commerce.
8. Describe collaboration 2.0.

Content

Opening Case: Knowledge Sharing as a Strategic Asset at Caterpillar Inc.
5.1 E-Government: An Overview
5.2 E-Learning, E-Training, and E-Books
5.3 Knowledge Management, Advisory Systems, and Electronic Commerce
5.4 Collaborative Commerce
5.5 Consumer-to-Consumer Electronic Commerce
Managerial Issues
Closing Case: Social Networking Initiatives by the New Zealand Government
Answers to Pause/Break Section Review Questions

Section 5.1 Review Questions

1. **Define e-government.**

E-government is the use of IT and e-commerce to provide access to government information and delivery of public services to citizens and business partners.

2. **What are the four major categories of e-government services?**

The four categories are: government-to-citizens, government-to-business, government-to-government, and government-to-employees.

3. **Describe G2C.**

The government-to-citizens model includes all interactions between a government and its citizens. This model is meant to increase efficiencies and create greater transparency to citizens.

4. **Describe how e-voting works.**

E-voting uses computers to input and tally votes in elections. There is significant controversy concerning the use of e-voting.

5. **Describe the two main areas of G2B activities.**

The two main areas of government-to-business activities include electronic procurement where the government purchases goods from the private sector, and electronic auctions where the government electronically auctions surplus goods to businesses.

6. **How does government use EC internally and when dealing with other governments?**

These activities are meant to increase operation efficiencies though the use of IT systems and processes. Governments can pass information more easily back and forth using digital content.

7. **Describe e-government social networking activities. What are some potential benefits?**

Governments could use social networking tools such as blogs, wikis and e-learning to assist in meeting its population’s needs. Specific benefits are listed on pages 204 and 205.

8. **Describe m-government and its implementation issues.**
M-government uses mobile technologies to provide services to citizens. Implementation issues are similar to issues with m-commerce in general.

Section 5.2 Review Questions

1. Define e-learning and describe its drivers and benefits.

E-learning is the online delivery of information for purposes of education, training and knowledge management. It can provide learning at a lower cost with greater flexibility.

2. List some of the major drawbacks of e-learning and describe how they can be prevented.

Drawbacks and challenges to e-learning are listed on pages 209 and 210.

3. Describe virtual universities and distance learning.

Virtual universities are universities where students can take online classes from any location. Distance learning is the online delivery of information for purposes of education, training, or knowledge management.

4. Define e-training and describe how it is done.

E-training is the use of e-learning technologies to train employees and others. It benefits from the advantages of e-learning over traditional training and learning methods.

5. Describe the connection between learning and social networking.

Many believe that students learn through interaction with each other. By increasing the social aspects of training, better learning outcomes can be achieved.

6. Describe learning in virtual worlds.

E-learning in virtual worlds allows for the use of applications like Second Life to make the interaction more dynamic and compelling.

7. List some e-learning tools and describe Blackboard and visual interactive simulation.

Student answers will vary. There are a variety of applications used that enable communication, knowledge management, testing and authentication. Blackboard is a learning management systems (LMS) that integrates many of these applications together. Interactive simulations can be created and displayed through a number of systems, including Adobe Flash.

8. Describe e-books.
An e-book is a book in digital form that can be read on a computer screen.

9. What is an e-reader? What are its major capabilities?

An e-reader is a piece of computer hardware designed to read e-books.

10. List the major advantages and limitations of e-books.

Some advantages of this technology include portability, convenience, frequent updates, current information, and ease of searching. Limitations can include readability, copyright, and formatting issues.

Section 5.3 Review Questions

1. Define Knowledge Management.

KM is the process of capturing or creating knowledge, storing it, updating it constantly, interpreting it and using it whenever necessary.

2. Discuss the relationship between KM and EC.

EC can be better performed based on what can be learned from effective KM.

3. Describe online advisory services.

These are services that use stored information to help provide individuals with the information and advice they request.

4. Describe expert location systems and their benefits

These systems allow individuals to identify and locate individuals who have expertise in a particular needed area.

5. Relate social networks to providing advice.

Social networks can be used to quickly find or request reviews or opinions on a variety of topics.

Section 5.4 Review Questions

1. Define c-commerce.
The use of digital technologies that enable companies to collaboratively plan, design, develop, manage, and research products, services, and innovative EC applications.

2. **List the major types and characteristics of e-commerce.**

These include joint design and forecasting.

3. **Describe some examples of e-commerce.**

Some examples include communication/collaboration at RE/MAX, information sharing at Marriot and supply chain visibility at Nygard.

4. **Describe the elements and process of e-commerce.**

These factors are detailed in Exhibit 5.7.

5. **List some major barriers to e-commerce.**

These include technical limitations, security concerns, internal resistance, and lack of internal skills.

**Section 5.5 Review Questions**

1. **Define C2C e-commerce.**

E-commerce model in which consumers sell directly to other consumers.

2. **Describe the benefits of C2C.**

C2C provides customers with a larger number of choices and allows sellers to gain from customer demand.

3. **Describe the major e-commerce applications.**

The major applications include classified ads, personal services, and exchanges.

4. **Define file sharing.**

P2P networks enable users to search other members’ hard drives for a particular file, including data files created by users or copied from elsewhere.

5. **How is C2C practiced in social networking?**

C2C activities in social networks include the sharing of photos, videos, music, and other files.
Answers to EC Application Case Questions

EC Application Case 5.1: Knowledge Management at Infosys Technologies
Questions

1. Why are consulting organizations interested in KM?

These systems are seen as a competitive advantage, and allow the firm to access and leverage existing knowledge.

2. Identify the benefits of the system to the company.

The company was able to retain its knowledge, allowing it to be successful.

3. Identify the KM cycle in this case.

The cycle included the collection of information, then its categorization/rating and publishing.

4. Why is a reward system beneficial? Compare the old and new reward systems.

The system encouraged submissions. The new incentive system based rewards on the importance and usefulness of the information to the users.

EC Application Case 5.2: How the U.S. Department of Commerce Uses an Expert Location System
Questions

1. What are the benefits of the expertise location system to the DOC and similar organizations?

The system allows the DOC to quickly and accurately find answers/information for U.S. firms.

2. Review Exhibit 5.6 and relate it to this case.

The exhibit is an example of an information system that provides potential sources of information and allows them to be contacted. Work is saved because locating individuals and communicating with them is simplified.

3. What, in your opinion, are the limitations of this system? Can they be overcome? How?
The program was created to increase efficiency and customer satisfaction. The major issue lies in the system’s ability to catalog and search such a large dataset efficiently and quickly. This may be addressed through the use of more intelligent searches, or greater hardware capacity.

**Answers to Discussion Questions**

1. Discuss the advantages and disadvantages of e-government using social networking versus the traditional e-government portal.

Using social networking tools in e-government has the advantage of utilizing an existing infrastructure and user base. The disadvantage is the lack of control and customization of the tools used.

2. Discuss the advantages and shortcomings of e-voting.

Student opinions will vary. Advantages may center around increased access and convenience, while disadvantages may focus on security and privacy.

3. Discuss the advantages and disadvantages of e-books.

Some advantages of this technology include portability, convenience, frequent updates, current information and ease of searching. Some disadvantages of this technology include the costs of the hardware needed to view e-books, difficulty in transporting some types of hardware (PCs), and difficulty reading computer screens.

4. Discuss the advantages of e-learning in the corporate training environment.

There are many potential advantages to e-learning in a corporate training environment including reduced travel costs, increased volume of training—leading to greater employee knowledge, elimination of time and distance barriers, as well as cost savings.

5. In what ways does KM support e-commerce?

Knowledge management can be used as a means to provide customers with additional information on products before or after a purchase is made. This additional information can help customers in their purchasing decisions and can help them support products that they have purchased after the sale.


Business-to-business involves the relationships and commerce between different firms. Because many of the same activities are similar to those performed by the government, it is possible to consider the government as another business.
7. Compare and contrast B2E with G2E.

Many of the services that are provided by businesses to their employees are very similar to the services that governments provide their employees. The only difference is the role the government plays in society overall. Because government employees are also citizens, the numbers and types of services provided by their employer (i.e. the government) may be different than those services provided by a business (i.e. a private entity).

8. Which e-government EC activities are intrabusiness activities? Explain why they are intrabusiness.

The two e-government activities that could be classified as intrabusiness are government-to-government and government-to-employee. These activities could be considered intrabusiness because the government is dealing with internal constituencies and not with the general citizenry or businesses. These activities are very similar to those that might be performed by a private sector business.

9. Identify the benefits of G2C to citizens and to governments.

Some of the many possible benefits to citizens include easier access to information, lower transaction costs, greater flexibility, and greater efficiencies. The benefits to governments can include greater public access, better participation in government activities by citizens, and lower transaction costs.

10. Relate IBM’s Innovation Jam to KM and social networks.

Student perceptions will vary based on the state of development when the report is created.

11. Relate KM to learning, to e-publishing, and to C2C.

KM can be an important part of e-learning, e-publishing, and C2C, since each is reliant on information as an important part of the offering. KM strategies can be employed in slightly different ways to support each.

12. It is said that e-commerce signifies a move from a transaction focus to a relationship focus among supply chain members. Discuss.

This is possible because transactions may move both ways, requiring better understanding between the parties.
**Topics for Class Discussion and Debates**

1. *Discuss the advantages of e-learning for an undergraduate student and for an MBA student.*

Advantages may include easier scheduling, flexibility and location-independence. The focus of the discussion will be influenced by the student’s perception of the needs of each group.

2. *Discuss the advantages of expert location systems over corporate databases that contain experts’ information and knowledge. What are the disadvantages? Can they be combined? How?*

The discussion will focus on the reliability of outside data versus the scope of knowledge of internal experts. It may be able to combine the systems to ensure that there is a good scope of ideas and that the information is accurate, but it will be twice as time-consuming.

3. *Discuss the benefits of using virtual worlds to facilitate learning. What are the limitations? The disadvantages?*

The debate will focus on the advantages of interaction and virtualization versus the cost and complexity involved.

4. *Discuss possible strategies to facilitate e-commerce.*

Many possibilities exist, and student opinions will largely be based on industry specifics. Some options would include using systems that easily allow information sharing and collaboration.

5. *Will e-universities replace universities?*

Student opinions will vary. The debate will focus on the needs and preferences of future students and employers.


Student opinions will vary. The debate will focus on student preferences related to the features and costs.

7. *Debate: Why aren’t all firms embracing KM?*

Student opinions will vary. The discussion will focus on the costs and benefits, and if it leads to better productivity.

Student opinions will vary. The debate will focus on convenience and speed versus accuracy and security.

**Internet Exercises**
(Note: URLs may change over time; please check the Internet Exercises on the Turban Web site for possible updates: www.pearsonhighered.com/turban.)

1. Enter tamago.us and nextag.com and learn how they operate. What do they offer? Write a report.

Student reports will vary. Both sites provide several features that can be compared and reviewed. Tamago.us is a social commerce site, based on providing royalties to content creators, with reviews spread socially. Nextag.com seeks product reviews from users, and positive reviews can drive sales.

2. Enter e-learningcentre.co.uk, elearnmag.org, and elearningpost.com. Identify current issues and find articles related to the effectiveness of e-training. Write a report. Also prepare a list of the resources available on these sites.

These sites provide a variety of electronic courses and resources. Most courses appear to be in the information technology area, related to specific skill sets and industry certifications. Additionally, the firms provide information about electronic learning and have discussion groups for learners.

3. Enter adobe.com and find the tools they offer for e-learning, knowledge management, and online publishing.

Sites provide a variety of information about initiatives. These include systems for designing interactive content (Flash) and providing synchronous communications (Captivate). Student reports will vary.

4. Identify a difficult business problem. Post the problem on elance.com, linkedin.com, and on answers.com. Summarize the offers to solve the problem.

Student reports will vary based on the problem selected.

5. Enter blackboard.com and en.wikipedia.org/wiki/Blackboard and find all the services provided by the company, including its community system. Write a report.

Student reports will vary. The company provides an LMS and related products, including products for educational communities.
6. Enter oecd.org and identify the studies conducted by the Organization for Economic Cooperation and Development (OECD) on the topic of e-government. What are the organization’s major concerns?

Reports on electronic government are found under public governance. A wide variety of reports are published about the potential uses of e-government. Specific student answers will vary based on the time of the search. Many of these reports deal with the potential of this application, but are concerned with the public's ability to access the application in addition to its best possible uses.

7. Enter fcw.com and read the latest news on e-government. Identify initiatives not covered in this chapter. Check the B2G corner. Then enter gcn.com. Finally, enter estrategy.gov. Compare the information presented on the three Web sites.

This site provides information for government IT officials. There are a wide variety of technologies and issues identified in each site, student responses and examples will vary greatly.

8. Enter procurement.com and govexec.com. Identify recent e-procurement initiatives and summarize their unique aspects.

These are online magazines for government executives and cover a wide variety of topics in government including e-commerce initiatives. Student reports and examples will vary widely.

9. Enter insight24.com and livelive.com and find the most recent and most popular videos about knowledge management. Prepare a list of five and view one in each category. Prepare a report.

Student reports will vary based on what content is selected.

10. Enter infozone.clomedia.com/gotomeeting and find the Webinar titled “How to Build an On-Demand Training Program” sponsored by Citrix Online. View it (45 minutes) and write a report on what it is and what the benefits are.

Student reports will vary based on their perceptions of the service.

11. Enter amazon.com, bn.com, and sony.com and find the latest information about their e-readers. Compare their capabilities and write a report. (Consult ebookreader.com.)

Student reports will vary. Content changes frequently.

12. Enter wi5connect.com and find what product they have for learning in social networking. Prepare a list of capabilities of each product.

This company no longer appears to be in business with this URL.
13. Enter kolabora.com or mindjet.com. Find out how collaboration is done. Summarize the benefits of the site to the participants.

Student reports will vary. Each site provides a number of features that can be compared.

14. Enter vignette.com or share360.com and read the company vision for collaborative commerce. Then view the demo. Explain in a report how the company facilitates c-commerce.

Student reports will vary. Each company has a slightly different take on what the future holds.

15. Enter guru.com and elance.com and compare their offerings. Which one would you prefer to post your skills on and why?

Student reports will vary based on their perceptions and services they might offer.

16. Find two companies that enable C2C (or P2P) e-commerce. (Try tamango.us, egrovesys.com/application-development/c2c-ecommerce-solution.html, etc.) Comment on their capabilities.

Student reports will vary based on the companies selected.

17. Enter collaborate.com and read about recent issues related to collaboration. Prepare a report.

Student reports will vary. Content changes frequently.

18. Enter vignette.com or cybozu.com and read the company vision for collaborative commerce. Then view the demo. Explain in a report how the company facilitates c-commerce.

Student reports will vary. Each company has a slightly different take on what the future holds.

Team Assignments and Role Playing

1. Assignment for the Opening Case
Read the opening case and answer the following questions.
   a. Explain why knowledge sharing is considered a strategic asset for the company.

   It is key to business success, but was in danger due to many possible retirements.
b. Explain how thousands of “communities of practice” operate and how they relate to CAT’s Knowledge Network.

These groups work together to define and capture operational knowledge.

c. How does CAT provide e-learning? Why is it needed?

CAT U was created to help train employees in a variety of areas using information from the KM system.

d. Identify the enterprise social network(s) at CAT. Find material about their operation.

Student research will vary based on the time of the report.

e. Relate this case to the topic of finding expertise discussed in this chapter.

This case is a good example of how and why knowledge should be identified and captured.

2. Each team is assigned a different country. Explore the e-government offerings of that country. Each team will make a presentation to convince the class that its country’s offerings are the most comprehensive. (Exclude Hong Kong and New Zealand.)

Student reports will vary based on country.

3. Create four teams, each representing one of the following: G2C, G2B, G2E, and G2G. Each team will prepare a plan of its major activities in a small country such as Denmark, Finland, or Singapore. A fifth team will deal with the coordination and collaboration of all e-government activities in each country. Prepare a report.

Student reports will vary based on team experiences.

4. View the video: “Panel Discussion on Collaborative Commerce” (Pt. 1) @ Ariba LIVE 2011 (12:37 minutes) at youtube.com/watch?v=bucxXpDvWDI. Answer the following questions: (For Part 1; Optional–Part 2)
   a. What benefits do the buyers see? Relate these benefits to collaborative commerce.
   b. How is EC used to support c-commerce?
   c. How can buyer/supplier relationships be fostered with c-commerce?
   d. Run a similar panel discussion in class. If possible ask large buyers to attend and take part.
   e. How is bringing business partners online accomplished?
   f. What role does Ariba play? (Check their Web site.)
   g. What did you learned in this video about the benefits of c-commerce and e-commerce?
Student reports will vary. This is an interesting video and students will respond differently to the content presented.

5. View the video: “E-learning Debate 2010—Highlights” (4.5 minutes) at youtube.com/watch?v=Q42flb1Fnck. Debate the pros and cons regarding the value of e-learning.
   a. List all of the pro and all the con statements from the video.
   b. For each statement have two teams (or individuals) explain why each agrees or disagrees with the statement.
   c. Add several pro and con statements from what you learned in class or discovered on the Web.
   d. Repeat assignment “b” for item “c.”
   e. Jointly prepare a summary. The use of a wiki is advisable.

Student reports will vary. This is an interesting video and students will respond differently to the content presented.

6. Have each team represent one of the following sites: netlibrary.com, ebooks.com, and cyberread.com. Each team will examine the technology, legal issues, prices, and business alliances associated with its site. Each team will then prepare a report answering the question, “Will e-books succeed?”

Student reports will vary. Each site has a different suite of tools, and this will reflect in the analysis provided.

7. Have teams explore KM videos and other resources at right24.com and kmworld.com. Also search YouTube and Google’s video search. Relate them to the topics of this chapter. Prepare a report.

Student reports will vary based on the content selected.

8. Each team is assigned a question-and-answer company (e.g., answers.com, ask.com). Check the company’s offerings including social networking/games. Compare it to moontoast.com. Make a presentation.

Student responses will vary based on the company assigned.

**Closing Case: SOCIAL NETWORKING INITIATIVES BY THE NEW ZEALAND GOVERNMENT**

1. Given the richness of New Zealand’s offerings, do you believe that the portal style of e-government will disappear?

Student opinions will vary. The issue revolves around if there will be the need for a centralized location as other networks continue to expand.
2. **What are the benefits of the internal initiatives?**

There are a number of benefits that aim to facilitate easier access to information.

3. **Comment on the connections to YouTube, Flickr, and Facebook.**

These connections allow citizens to access the benefits features of these existing and popular services.

4. **Why do wikis and blogs play an important role in many of these initiatives?**

They allow for the quick and easy dissemination of information.

5. **Which initiatives are related to e-learning? To c-commerce? In what ways?**

Several of these alternatives are related to e-learning directly and indirectly. An example is the national library, which provides information used in a variety of formats.

6. **Enter e.govt.nz and identify new initiatives in EC as of January 2010.**

Reports will vary based on the time of visit.