

12-14-2001

## Taking the Technology Out: Using A Strategic E-Commerce Focus in the CIS Classroom

Diana Burley Gant

Indiana University, [dbgant@indiana.edu](mailto:dbgant@indiana.edu)

Follow this and additional works at: <https://aisel.aisnet.org/cais>

---

### Recommended Citation

Gant, Diana Burley (2001) "Taking the Technology Out: Using A Strategic E-Commerce Focus in the CIS Classroom," *Communications of the Association for Information Systems*: Vol. 7 , Article 22.

DOI: 10.17705/1CAIS.00722

Available at: <https://aisel.aisnet.org/cais/vol7/iss1/22>

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in Communications of the Association for Information Systems by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).



---

**TAKING THE TECHNOLOGY OUT: USING A STRATEGIC  
E-COMMERCE FOCUS IN THE CIS CLASSROOM**

---

Diana Burley Gant  
Kelley School of Business  
Indiana University

[dbgant@indiana.edu](mailto:dbgant@indiana.edu)

**TEACHING IS**

---

# TAKING THE TECHNOLOGY OUT: USING A STRATEGIC E-COMMERCE FOCUS IN THE CIS CLASSROOM

---

Diana Burley Gant  
Kelley School of Business  
Indiana University

[dbgant@indiana.edu](mailto:dbgant@indiana.edu)

## ABSTRACT

This article describes the content and delivery of a course on E-commerce strategy to senior computer information systems (CIS) majors in the Kelley School of Business at Indiana University. The course is designed to provide technically oriented CIS students with an appreciation for the organizational and strategic issues facing managers in a digital world. To that end, we emphasize the strategic rather than the technical concerns of electronic commerce.

We find that both students and employers react favorably to the course content. Students are pleased with the positive reaction of employers to their knowledge of strategic issues. Employers remark that the course content mirrors real-world concerns and underscores the importance of analytical skills. As we complete the third iteration of the course, we attribute our success to three factors. First, we demonstrate the role of strategy and decision-making in E-commerce from the beginning of the course. Second, we illustrate that companies within the same industry make very different strategic decisions with respect to E-commerce, and that these decisions often lead to very different outcomes. Third, we keep the content current by using a combination of existing cases and current events to illustrate key concepts.

**Keywords:** electronic commerce, strategy, teaching electronic commerce

## I. INTRODUCTION

As Information Systems educators we are faced with the dual task of enhancing the technical skill set of our students while also ensuring that students understand the implications of technology implementation and use for individuals and organizations. This task is not easy. Students get instant gratification from technical skills. On the surface, more technically skilled students often gain internships and permanent positions faster than their lesser skilled colleagues. Employers pay higher salaries to students who can program, design, implement, or maintain complex networks, databases, and systems. It is not surprising then, that our CIS students demand more hands-on skills (something they can include on their resume), and often reject non-technical experiences.

However, it is precisely these non-technical experiences that attract employers to our students. In fact, employers, though they encourage students to gain as much technical experience as possible, truly value those students who also can think beyond the technology. They want skilled students who think strategically about technology implementations and who recognize that change must be managed. And anecdotal evidence from our recruiters suggests that students who combine technical skill with strategic and managerial knowledge are likely to advance faster, survive layoffs, and can ultimately make the greater impact on their organizations.

The balance between technical skills and managerial knowledge has long been a tension in the CIS undergraduate curriculum at Indiana University. We struggle with the number of required programming courses, careful not to make our program resemble that of the computer science department. We debate the content of our analysis and design courses. And we expend great effort constantly reviewing the topics presented in our introduction to MIS courses; trying to gauge the correct mix of hands-on technical skills and management concepts. Now, as we develop courses in E-commerce, we must again make

decisions about the balance between technical skills and managerial and strategic concerns.

This article describes the content and delivery of a course on E-commerce strategy in which we chose to emphasize strategic concerns as they relate to the technology and models of E-commerce. The course was first offered to senior CIS majors in the Kelley School of Business at Indiana University in the Fall 2000 semester. We discuss the course, the challenges we faced in course delivery, and the outcome of the course from student, employer, and instructor perspectives.

## **II. COURSE MOTIVATION**

Electronic commerce can be defined as “technology-mediated exchanges between parties (individuals, organizations, or both) as well as the electronically based intra- or interorganizational activities that facilitate such exchanges” (Rayport and Jaworski 2001 pp. 3). Organizations use electronic commerce to provide customer service, to interact with internal and external stakeholders, to advertise, and to distribute products and services. Business-to-business (B2B) e-commerce accounts for the largest portion of e-commerce revenues. The value of goods and services exchanged between businesses in U.S. B2B e-commerce is expected to rise from \$282 billion in 2000 to \$4.3 trillion by 2005 [CyberAtlas, 2001]. B2B trends include participation in vertical portals, business exchanges and marketplaces, and the use of application service providers. On the consumer side, a recent UCLA study reports that 72.3% of Americans are online [Cole et al., 2001]. In the third quarter of 2001, these consumers accounted for \$7.5 billion in retail sales, an increase of 8.3% from the second quarter of 2001 [US Census, 2001].

Competition for these dollars on both the business and consumer side of e-commerce is fierce. And with websites going on- and off-line daily, it is not sufficient for a company to create a website and sit back and wait for the

consumers to come. If they build it, customers may or may not come. Consequently, an effective E-commerce strategy is vital for success.

It is no wonder then that companies search for E-commerce employees who not only understand the technology but who also have the analytical capability to manage the strategic challenges of the volatile business and consumer E-commerce environments. Clearly, these business trends indicate a great need for professionals who understand both the value of using electronic commerce as a comprehensive business strategy and the technology needed to develop such electronic commerce applications. Thus, this course is designed to provide technically oriented CIS students with an appreciation for the organizational and strategic issues facing managers in a digital world. In this course we focus on electronic commerce strategy.

### **III. COURSE DESCRIPTION**

This course investigates how a variety of organizations (private, public, and non-profit) are using electronic commerce applications to reach their organizational goals. These applications illustrate consumer to business, business to business, and intra-organizational electronic commerce in physical as well as digital products and services. We highlight the different business models underlying these electronic commerce applications, and discuss them from both an operational and strategic perspective. We use several key questions to focus our inquiry into the world of electronic commerce:

- Who are the customers?
- What is the industry environment?
- How can e-commerce be used to deliver a particular good or service?
- What model of e-commerce should the organization use?

To answer these questions, we examine a wide variety of examples to see what strategies were successful in the past and what strategies are likely to

succeed in the future. In addition, we discuss basic infrastructure, security, and privacy issues.

Discussions of technology are complemented by demonstrations and/or laboratory sessions as appropriate. However, this course is not about technology. The objective is to provide students with a sound understanding of electronic commerce applications and to foster their ability to define strategies for implementing such applications in organizations. Students do not write code, design websites, or develop databases in this course. This course is not designed to further student working knowledge of internet development tools. Rather it is designed to advance student understanding of the strategic issues managers face in digital world.

Appendix A shows the course syllabus.

#### **IV. COURSE OBJECTIVES**

The overall objective of the course is to provide students with a sound understanding of electronic commerce applications and to foster their ability to define strategies for implementing such technologies in organizations. Upon successful completion of the course, students should be able to:

- Assess the current state of electronic commerce and explain how electronic commerce can be used to create a strategic competitive advantage for an organization.
- Assist in the development of a comprehensive electronic commerce strategy that incorporates an organization's goals and objectives including issues of technology, security, privacy, social, and ethical concerns.

- Describe some of the electronic commerce best practices and recognize ways of using electronic commerce to improve intra- and inter-organizational processes.
- Analyze the impact that electronic commerce is having and will likely have on key sectors of the economy and assess the strategic implications this analysis holds for an organization.

## V. COURSE CONDUCT

### TOPICS

In this 14-week course, we cover five summary topics (modules) related to different aspects of electronic commerce strategy. The topics,

- E-commerce and strategy basics,
- Understanding the customer,
- EC classifications,
- Implementation issues, and
- Ethics and privacy,

are presented in sequence and are designed to build on one another. We use a text, “Electronic Commerce: A Managerial Perspective” by Turban et al., [2000] together with supplemental readings to provide the basic content for the modules.

*E-commerce and Strategy Basics.* We begin the semester by discussing a well-known retail website (usually Amazon.com). Using this website, we introduce students to a variety of general E-commerce terms and applications. But, rather than discussing the technology behind the applications, we ask the students questions about the decision to include such applications. For example,



why did Amazon.com decide to include a personalized shopping list on their website? Why did Amazon.com expand their product selection beyond books? Or, why did Amazon.com create a partnership with ToysRUs? To begin to answer to these questions, we introduce basic strategic analysis tools such as the SWOT analysis method where strategies are formed in order to take advantage of internal strengths and opportunities in the environment and minimize weaknesses and threats to survival. The early introduction of these strategic analysis methods reinforces the focus of the course, illustrates the need for the strategic focus, and provides a basis on which we can build.

*Understanding the Customer.* In this module we discuss targeting customers and Internet demographics. To begin, we present two retail sites within the same sector that are clearly targeting different types of consumers. For example, in the online grocery industry Netgrocer.com and Peapod.com, target different customers and have very different strategic directions. Using the strategic analysis tools, we dissect these strategies with respect to customers.

We discuss how organizations can increase customer loyalty through personalization, CRM, and data mining applications. Students read industry white papers on CRM applications and their role in increasing customer loyalty. We discuss personalization technologies and the justification for their use. For example, we examine why different types of products and different types of customers require different levels of personalization. And we discuss how these differences lead to varying results from personalization implementations.

*E-commerce Classification.* In module three, we discuss the major classifications of E-commerce: B2C, B2B, B2G, etc... Within each classification, we identify the major strategic decisions a company must make in order to compete. For example, should the company have a local, regional, national, or international focus? Students are often surprised to see that, although E-commerce can give local companies an international presence, sometimes it does not make good business sense to do so. Though the tendency when

discussing E-commerce models is to focus primarily on business-to-consumer (B2C) retailing examples, we spend a comparable amount of time discussing E-commerce in the service sector, business-to-government (B2G), government-to-consumer (G2C), B2B and intra-organizational processes. Further, we discuss supply-chain management, online exchanges, B2B auctions, and the role of intranets in streamlining information transfer within single organizations.

*Implementation Issues.* The major implementation issues include security and electronic payment options. Building on the lessons learned earlier in the semester, we pose questions relating implementation issues to demographic and strategic concerns. For example, retail companies targeting the youth market need to consider, and perhaps invest in, alternative forms of payment. What do you do when your target consumer has special needs (be they credit card alternatives, heightened security concerns, or some other need)? Again, rather than focusing on the technical side of implementation, we focus on the strategic decisions that must be made regarding the various implementation options.

*Ethics and Privacy.* Finally, we discuss a variety of E-commerce topics including ethical and privacy issues. Here we pull the semester together and revisit that initial website presented at the beginning of the semester. We discuss the impact of these strategic E-commerce decisions on the consumer, the organization, and the society as a whole.

## **FORMAT**

The course meets Tuesdays and Thursdays for an hour and a quarter. Each major course topic is covered over a two- to three-week module. Generally, the first week focuses on topic concepts and the second week focuses on a student-led case discussions. Periodically, we have guest speakers to add to our discussion of various topics. Guests are typically scheduled to present during the second week of a module. The pattern is as follows:

Week 1 Tuesday: We introduce the topic through a brief (20 minute) discussion of a mini-case. Typically this mini-case will come from the text and will focus our attention on key concepts. During the remainder of this session, the instructor will present the basic concepts associated with the topic.

Week 1 Thursday: We discuss current events on the topic. Students should prepare for the current events discussion by finding at least one article on the topic from the news. We also cover any remaining concepts not covered during the Tuesday session.

Week 2 Tuesday: We discuss the assigned case. A group of students is designated as discussion leaders for each case. The leaders prepare for the case discussion by creating a case summary, incorporating current events, and critically thinking about how the organizations actions affected their electronic commerce strategy.

Week 2 Thursday: We continue with the case discussion and discuss current events. I also discuss issues related to the preparation of the strategic plan.

## **TEXT AND READINGS**

Student readings from the course textbook and assigned cases are required for our in-class discussions of course topics. The course textbook is: *Electronic Commerce: A Managerial Perspective*, by Turban et al., [2000]. Cases and other readings are provided in class and on the course website as they are assigned. Table 1 lists examples of and brief comments on some of the readings used in the course.

Table 1. Examples of Course Readings

Topic	Reading
Customers	<p>“Making Every Customer Relationship Count: Exploring the Business Drivers and Technology Enablers of CRM” by Sequent Computer Systems</p> <p>This white paper discusses the role of customer relationship management in e-commerce. However, the most valuable part of the white paper for our students is the discussion of personalization and the Peppers and Rogers marketing model, which is used to show that when it comes to personalization, not all customers or all products are created equal.</p> <p>Available at: <a href="http://www.dmreview.com/whitepaper/crme.pdf">http://www.dmreview.com/whitepaper/crme.pdf</a></p> <p>The DM Review (<a href="http://www.dmreview.com">http://www.dmreview.com</a>) contains a library of white papers on data mining and customer relationship management. We used several papers from this website for classroom discussions.</p>
B2C	<p>“Attention Online Shoppers” by Susannah Patton for CIO Magazine</p> <p>This article discusses the many strategic decisions faced by Kmart as they developed Bluelight.com, their online retail arm. A good bit of the article focuses on Kmart’s decision to spin off Bluelight.com as a stand-alone company rather than an internal division. Interestingly, in August 2001 they reversed this decision and pulled Bluelight.com operations in-house. The article also highlights customer targeting and demographics, competition, and click and mortar strategies. Because this is a ‘living’ case chronicling a company with which most students have had some interaction, students find it particularly interesting.</p> <p>Available at: <a href="http://www.cio.com/archive/100100/blue.html">http://www.cio.com/archive/100100/blue.html</a></p>
G2C	<p>“Her Majesty’s Flying I.T. Circus” by Malcolm Wheatley for CIO Magazine</p> <p>Business students are often uninterested in government-related examples. However, electronic government applications, interacting with both citizens and businesses, are a growing area of e-commerce. Unfortunately, it is difficult to find rich examples of e-government cases rich enough for classroom discussion. This case received mixed reviews. Students found the content of the case to be interesting, were surprised to see how much more advanced electronic government applications are in Europe than in the U.S.</p> <p>Available at: <a href="http://www.cio.com/archive/080100/circus.html">http://www.cio.com/archive/080100/circus.html</a></p>
B2B	<p>“Competition in the Dutch Flower Markets” by Arijt Kambil and Eric van Heck</p> <p>Though somewhat long for undergraduate students, this case is rich in content and provides an excellent foundation for discussions on business-to-business e-commerce, electronic markets, auctions, international issues, and a host of other secondary topics. The time period (mid-nineties) provides an opportunity for students both to analyze the case and to discuss how the results might be different given today’s e-commerce environment. The website provides the case, discussion questions, and links to other resources. The wealth of supporting resources for this case, such as the live flower auction cam and the auction clock simulation, make it particularly engaging for students.</p>

	Available at: <a href="http://www.stern.nyu.edu/~akambil/teaching/cases/auction/flowers.html">http://www.stern.nyu.edu/~akambil/teaching/cases/auction/flowers.html</a>
Ethics/Privacy	<p>“ebusiness and Privacy for All” by Mindy Blodgett for CIO.com Magazine</p> <p>Obviously, the ethical and privacy issues relating to e-commerce are numerous. As a result, the goal of these readings is to inform students about key issues and current thinking on them. This CIO.com article discusses the role of the Clinton Administration EC czar, Elizabeth Echols, and the issues being addressed in her working group. In more recent sections of the course, we use this article as a starting point to benchmark the current status of EC laws, taxation, international and other legislative issues.</p> <p>Available at: <a href="http://www.cio.com/archive/041500/forall.html">http://www.cio.com/archive/041500/forall.html</a></p>

In addition to the assigned readings, students are expected to monitor electronic-commerce-related websites at least once per week. Appendix B lists the websites monitored.

## STUDENT EVALUATION

During the semester, student performance is evaluated along four dimensions – examinations, individual homework assignments, group project, and participation.

Students take one comprehensive examination during the semester. The topic examination, given after the completion of module four, is structured as both an in-class and a take-home examination. It is designed to test both student knowledge of particular concepts and student ability to integrate the concepts to form strategic decisions.

Individual homework assignments are designed to reinforce the concepts presented in modules. Students are required to complete three homework assignments during the course of the semester.

The course project is a major part of the class and serves as the final exercise for the students. The overall student goal of the course is to develop a comprehensive strategic plan for a company revising its EC strategy. To

complete this plan, students work as member of a five-person consulting project team.

Class participation is essential to the overall success of the course and is a major portion of the course grade. We expect students to take part of the responsibility for learning in this course. The text provides a strong foundation in the concepts, but in order to stay current in the topic students must closely monitor current events. To that end, students are required come to class prepared to discuss topics covered in the textbook as well as current events covered in the general and trade press (e.g. *Internet Week, Computer World, InfoWeek, CIO, Wall Street Journal*). Many of these media are available online. Class participation is evaluated based on classroom comments, team activities, discussion assignments, and participation in the online discussion forum. Periodically, students are asked to complete short discussion assignments.

## **VI. COURSE OUTCOME**

Student response to the course is very positive. To date, three sections of the course have been completed – one in the Fall 2000 semester and two in the Spring 2001 semester. Two sections of the course are underway in Fall 2001. The same instructor taught all sections of the course. The course sections are capped at forty students and each semester the course waitlist contains enough students to fill another section. Demand for the course is high and the student course ratings indicate student satisfaction with the course. Indiana University conducts anonymous course evaluations at the end of each semester. Courses and instructors are evaluated using a 7-point Likert-type scale where 7 is strongly agree and 1 is strongly disagree. Since its inception, the mean student evaluation of the course are consistently higher than the Kelley School of Business average (Table 2).

Table 2. Course Evaluation

Semester	Mean Evaluation	School Average
Fall 2000	6.35	5.79
Spring 2001 (section 1)	5.86	5.83
Spring 2001 (section 2)	6.27	5.83

Student comments suggest that much of their satisfaction with course content is directly related the reaction of employers when they demonstrate their knowledge. One student remarked that her insightful comments on the importance of understanding the demographics of website customers, so impressed her interviewer that she received a job offer within the week. On a CIS club trip to Silicon Valley, several students noted that the many of the issues discussed in class were key topics of the presentations given at Sun, Intel, and Accenture. This unsolicited reinforcement of the importance of the strategic focus helps to validate the course.

Employer response is equally favorable. Since the course inception, we have worked with several companies to help guide the course content development. Employers indicate that not only is the course content directly related to what students will face in the real world, but also that the course reinforces the importance of analytical skills.

## VII. CONCLUSIONS

We are now in the third iteration of the course. With each semester we adjust the schedule, the number of assignments, and the timing of the modules. However, we have found that the basic structure of the course works well for our undergraduate students. Two to three weeks per module is simultaneously long

enough to cover key concepts, present examples, and discuss current events, and short enough to maintain student focus.

Teaching E-commerce with a strategic focus continues to be a challenge. However, we attribute our success to several factors. First, we demonstrate the role of strategy and decision-making in E-commerce from day one. Second, we illustrate

- that companies within the same industry make very different strategic decisions with respect to E-commerce, and
- that these decisions often lead to very different outcomes.

Finally, we keep the content current. Although we use existing cases and examples to form the basis of our discussions, we turn to current event cases to illustrate how companies are playing out these concepts.

EDITOR'S NOTE: This article was received on November 15, 2001 and was published on December 28, 2001

## REFERENCES AND BIBLIOGRAPHY

EDITOR'S NOTE: The following reference list contains the address of World Wide Web pages. Readers who have the ability to access the Web directly from their word processor or are reading the paper on the Web, can gain direct access to these references. Readers are warned, however, that

1. these links existed as of the date of publication but are not guaranteed to be working thereafter.
2. the contents of Web pages may change over time. Where version information is provided in the References, different versions may not contain the information or the conclusions referenced.
3. the authors of the Web pages, not CAIS, are responsible for the accuracy of their content.
4. the author of this article, not CAIS, is responsible for the accuracy of the URL and version information.

Blodgett, M. (2000), "ebusiness and Privacy for All", *CIO.com Magazine* <http://www.cio.com/archive/041500/forall.html> (current Dec. 5, 2001).

Boyett, J. H. and J. T. Boyett. (1995), *Beyond Workplace 2000: Essential Strategies for the New American Corporation*, New York, NY: Dutton.



Census Bureau Staff. (2001), "Retail E-Commerce Sales in third Quarter 2001 were \$7.5 Billion, up 8.3% from Third Quarter 2000, Census Bureau Reports" *United States Department of Commerce News*. Washington, DC: Department of Economics and Statistics, U.S. Census Bureau.

<http://www.census.gov/mrts/www/current.html> (current Dec. 5, 2001).

Cole, J. I. et al. (2001), *The UCLA Internet Report 2001: Surveying the Digital Future – Year 2*, Los Angeles, CA: UCLA Center for Communication Policy. <http://www.ccp.ucla.edu> (current Dec. 5, 2001).

CyberAtlas staff. (2001), "B2B e-Commerce Will Survive Growing Pains", *Markets b-to-b*,

[http://cyberatlas.internet.com/markets/b2b/article/0,,10091\\_930251,00.html](http://cyberatlas.internet.com/markets/b2b/article/0,,10091_930251,00.html)

(current Dec. 5, 2001).

Kambil, A. and E. van Heck (1996), "Competition in the Dutch Flower Markets", New York University

<http://www.stern.nyu.edu/~akambil/teaching/cases/auction/flowers.html> (current Dec. 5, 2001)

McCubbrey, D. (1999), "Designing an electronic Commerce Curriculum", *Communications of the AIS*, January (1)2, pp. 1-29.

Patton, S. (2000), "Attention Online Shoppers" *CIO.com Magazine*, <http://www.cio.com/archive/100100/blue.html> (current Dec. 5, 2001)

Rayport, J. F. and B. J. Jaworski. (2001), *e-Commerce*, New York, NY: McGraw-Hill/Irwin.

Sequent Computer Systems. (2000), "Making Every Customer Relationship Count: Exploring the Business Drivers and Technology Enablers of CRM" *DM Review*, <http://www.dmreview.com/whitepaper/crme.pdf> (current Dec. 6 2001).

Turban E., et al., (2000), *Electronic Commerce: A Managerial Perspective*, Upper Saddle River, NJ: Prentice Hall.

Wheatley, M. (2000) "Her Majesty's Flying I.T. Circus" *CIO.com Magazine*, <http://www.cio.com/archive/080100/circus.html> (current Dec. 5, 2001)

## APPENDIX A

### S430 - ELECTRONIC COMMERCE STRATEGIC ANALYSIS

#### COURSE SYLLABUS

Spring 2001 – Second Semester 2000-2001  
Sections 4429, 4430

Class session: Tuesday, Thursday  
11:15-12:30 p.m. (section 4429)  
1:00 p.m. – 2:15 p.m. (section 4430)

Instructor: Dr. Diana Burley Gant  
E-mail address: [dbgant@indiana.edu](mailto:dbgant@indiana.edu)  
Course Website: We use Oncourse  
Office: Business 560 D  
Office phone: 855-2607  
Office hours: By appointment

#### MOTIVATION

Generally speaking, electronic commerce refers the online exchange of goods and services within a business, between businesses, and between businesses and consumers. Organizations are using electronic commerce to provide customer service, to interact with internal and external stakeholders, to advertise, to develop products, and to distribute products and services. Forrester Research reports that business to business sales over the Internet equaled \$43 billion in 1998, and they estimate that sales will reach \$1.3 trillion by 2003. Business Week estimates that by 2003 e-business sales will total \$67.4 billion in the travel industry, \$80 billion in the financial services industry, and \$108 billion in retail sales. Clearly, these business trends indicate a great need for professionals who understand both the value of using electronic commerce as a comprehensive business strategy and the technology needed to develop such electronic commerce applications. In this course we focus on electronic commerce strategy.

#### COURSE DESCRIPTION

This course will investigate how a variety of organizations (private, public, and non-profit) are using electronic commerce applications to reach their organizational goals. These applications will illustrate consumer to business, business-to-business, and intra-organizational electronic commerce in physical

as well as digital products and services. We highlight the different business models underlying these electronic commerce applications, and will discuss them from both an operational and strategic perspective. We use several key questions to focus our inquiry into the world of electronic commerce: Who are the customers? What is the industry environment? How can e-commerce be used to deliver a particular good or service? What model of e-commerce should the organization use? To answer these questions, we examine a wide variety of examples to see what strategies have been successful in the past and what strategies will likely succeed in the future. In addition, we discuss basic infrastructure, security, and privacy issues. Discussions will be complemented by demos as appropriate. **However...**

***THIS IS NOT A TECHNOLOGY COURSE.*** The objective of the course is to provide students with a sound understanding of electronic commerce applications and to foster their ability to define strategies for implementing such technologies in organizations. You will not write code, design websites or develop databases in this course. This course will not further your working knowledge of internet development tools, but it will advance your understanding of the strategic issues managers face in digital world.

## **PRE-REQUISITES**

Pre-requisites: x201, s205, s302, ICORE

## **TEXT AND READINGS**

Textbook: Turban/Lee/King/Chung. *Electronic Commerce: A Managerial Perspective*, Prentice-Hall, Inc. 2000. ISBN: 0-13-975285-4

Cases: Available in class and on the course website

Websites: In addition to the text and cases, students will be expected to monitor electronic commerce related websites at least once per week.

## **COURSE OBJECTIVES**

The overall objective of the course is to provide students with a sound understanding of electronic commerce applications and to foster their ability to define strategies for implementing such technologies in organizations.

Upon successful completion of the course, students will be able to:

- ◆ Assess the current state of electronic commerce and explain how electronic commerce can be used to create a strategic competitive advantage for an organization.
- ◆ Assist in the development of a comprehensive electronic commerce strategy that incorporates an organization's goals and objectives including issues of technology, security, privacy, social and ethical concerns.
- ◆ Describe some of the electronic commerce best practices and recognize ways of using electronic commerce to improve intra- and inter-organizational processes.
- ◆ Analyze the impact that electronic commerce is having and will likely have on key sectors of the economy and assess the strategic implications this analysis holds for an organization.

## **EXPECTATIONS OF STUDENTS**

**Professionalism.** Professionalism is an expected and required part of every assignment. Prepare your assignments as if you were giving them to an employer. Papers should be neatly typewritten, and stapled. Your answers should be clearly marked. You will not receive full credit for assignments presented in an unprofessional manner. We discuss specific criteria for each individual assignment.

**Entrepreneurship.** A high level of individual student motivation and initiative is expected. Be creative. Use the vast amount of online resources and be prepared to discuss issues in class. Both individual and group learning assignments require a certain amount of self-guided research, experimentation, and most of all an entrepreneurial attitude.

**Flexibility.** This is the first time we are offering a course of this nature to undergraduate students. In fact, you are among a select few undergraduate students across the country that are able to take such a course. Few models for courses of this type exist. Add to this, the ever-changing nature of the world of electronic commerce and we have an exciting course that will evolve over the course of the semester. Your flexibility and cooperation as the course develops through the semester are critical to our success.

**Attendance.** Class attendance is expected and is a necessary component of class participation. Class sessions are important. Topics in the text will be supplemented with in-class discussions. If you miss a class session, you are still responsible for the material covered and you should make arrangements with

fellow classmates to get class information and materials. The instructor will not spend time reviewing missed material with students.

**Class Participation.** Class participation is essential to the overall success of the course and is a major portion of your course grade. You are expected to take part of the responsibility for your own learning in this course. The world of electronic commerce changes fast and changes frequently. The text will give you a strong foundation in the concepts, but in order to stay current in the topic you must closely monitor current events. To that end, you should come to class prepared to discuss topics covered in the textbook as well as current events covered in the general and trade press (e.g. Internet Week, Computer World, InfoWeek, CIO, Wall Street Journal). Many of these media are available online.

Your class participation will be evaluated on several dimensions.

1. **Classroom comments.** You will be called upon during class sessions, student speaker presentations, and guest speakers. Be prepared. Ask yourself the following: Do your peers value your comments? Do your comments reflect that you are paying attention?, and Are your comments supported by the readings?.
2. **Team activities.** We work on various team activities during some class sessions. For these activities, your presence and participation will be recorded.
3. **Discussion assignments.** Various assignments (including cases) will be given during the semester. These assignments will count toward your participation grade. Most of these assignments will be background work for class discussions. You will be expected to prepare written comments and to participate actively in the discussions. Again, your presence and participation will be recorded.
4. **Online discussions.** We use an online forum to support general classroom discussions. Each student is expected to contribute at least 6 articles (1 per topic) to the forum to help build a repository of information for the class. Each article must be an original posting (meaning you must check to make sure no one has already posted the article). Post the article no later than Tuesday of week 2. Provide a brief (1 paragraph) summary for the article. Posting title should follow this guideline: TOPIC: Article title. You are encouraged to post additional resources and comment on the resources posted. Insightful comments on others posting will be highly regarded.

Your participation in the forum will be logged and recorded.

## **COURSE CONDUCT**

### **◆ Format**

We cover six comprehensive topics related to electronic commerce. Each major course topic will be covered over a two-week period. Generally, the first week will focus on topic concepts and the second week will focus on a student lead case discussion.

**WEEK 1 TUESDAY:** During this session we introduce the topic through a brief (20 minute) discussion of a mini-case. Typically this mini-case will come from the text and will focus our attention on key concepts. During the remainder of this session, the instructor will present the basic concepts associated with the topic.

**WEEK 1 THURSDAY:** During this session we discuss current events on the topic. Students should prepare for the current events discussion by finding at least one article on the topic from the news. We also cover any remaining concepts not covered during the Tuesday session.

**WEEK 2 TUESDAY:** During this session we discuss the assigned case. A designated group of students will be designated as discussion leaders for each case. Discussion leaders should prepare for the case discussion by preparing a case summary, incorporating current events, and critically thinking about how the organizations actions affected their electronic commerce strategy.

**WEEK 2 THURSDAY:** During this session we continue with the case discussion and will discuss current events. I will also discuss issues related to the preparation of the strategic plan.

Periodically, we have guest speakers to add to our discussion of various topics. These guests will be announced as soon as the dates of their visits are confirmed.

*Class session will begin promptly. It is a distraction to both the instructor and your classmates to walk in during the middle of the class sessions. Excessive lateness will not be tolerated.*

### **◆ Communication**

The instructor will use the course website to notify students of any changes in the course syllabus or other pertinent information. Please check the course website

frequently (at least every day). Grades will be posted on the Web using the Post 'em grade reporting system.

## **GRADING AND ASSIGNMENTS**

During the semester, your performance will be evaluated along several dimensions. The relative weights of the various assignments on the course grade are as follows:

Midterm Exam	25%
Individual Homework Assignments	30%
Team Project: Strategic Plan and presentation	30%
Class Participation	15%
<b>TOTAL</b>	<b>100%</b>

## **TEAM PROJECTS**

The overall goal of the course is for you to develop a comprehensive strategic plan for a company creating its EC strategy. To complete this plan, you will work as member of a consulting project team. You will be assigned to a team during the second week of the semester. Each team will have 5-6 members. Team members should feel free to utilize each other's skills and talents on the assignments. In order to facilitate team interaction we have periodic team building exercises during classroom discussions. However, inter-team communication regarding these projects is expressly prohibited. All questions regarding the projects should be directed to the instructor.

If your team encounters problems with "free-riders", notify the instructor immediately. I will encourage the project member to become more involved with the team. Any member of a team who has been identified as not contributing toward the completion of the project is subject to receiving a grade of zero on the project. Also, as a last resort, a team member can be fired for the lack of critical effort and involvement with the team. Fired team members will then be required to finish the project on their own. Each member of the team will be asked to provide a peer evaluation of the proportion of work done by each team member. The number of points earned will be adjusted accordingly. Also, the instructor will monitor on-line team project discussions to gain first-hand knowledge of team member contributions.

## **INDIVIDUAL ASSIGNMENTS**

Several individual assignments will be given in this course. Although each student is responsible for his or her own work, questions on the mechanics of these projects may be addressed to anyone, including other S435 students. Questions on the substance of the assignments should be addressed to the instructor.

## **ASSIGNMENT POLICY**

Assignments are due at the beginning of class on the specified date unless a change is announced. Any assignment not submitted within at the beginning of the class session is late. Late assignments will not be accepted. "NO LATE ASSIGNMENTS."

Exam dates are firm unless a change is announced in class. No make-up exams.

## **CASE WRITE-UPS**

We discuss six major cases during the course of the semester (one for each topic). To prepare for the case discussions, each student will be required to prepare and submit two case write-ups. Case assignments will be posted on the course website. In general, the case write-ups should summarize the major facts of the case, incorporate current events, and demonstrate a level of critical thinking about the organization's electronic commerce strategy.

## **STRATEGIC PLAN – TEAM PROJECT**

Early in the semester, your team will be given a brief (1-2 page) description of a company who wants to begin or enhance their electronic commerce activities. Your job is to develop a comprehensive strategic plan for the company. In other words, you will give the company a direction in which to proceed. The resulting plan must be comprehensive enough that the company could use your plan to move directly to implementation. In addition to the 20-30 page plan, each team must prepare a formal 20-25 minute presentation to outline their proposed course of action. The course instructor and a panel of experts will evaluate your strategic plans and presentations. They will be ranked and graded relative to the other projects in the course.



## TENTATIVE SCHEDULE - SUBJECT TO CHANGE

Module	Week		Date	Text	Assignment Handout	Due Date
Module 1: Course Intro: EC Foundations	1	T	9-Jan			
EC Foundations/Strategy Basics		R	11-Jan	T ch. 1	Assessment	
Module 2: Understanding the Customer	2	T	16-Jan	T ch. 3	Customer Case	
		R	18-Jan			Assessment
	3	T	23-Jan			Customer Case
		R	25-Jan			
Module 3: B2B, B2C, B2G, etc..	4	T	30-Jan	T ch. 2, 4, 5	B2C Case	
		R	1-Feb			
	5	T	6-Feb			B2C Case
		R	8-Feb			
	6	T	13-Feb	T ch. 6, 7	B2B Case	
		R	15-Feb			
	7	T	20-Feb			B2B Case
		R	22-Feb			
	8	T	27-Feb			Review
		R	1-Mar			Course Exam
Module 4: EC Implementation / Electronic Payment Systems	9	T	6-Mar	T ch. 8	EPS Mini-case	
		R	8-Mar			EPS Mini-case
Module 5: EC Ethics and Privacy	10	T	13-Mar		SPRING RECESS	
		R	15-Mar			
	11	T	20-Mar	T ch. 9, 11	Implementation Case	Implementation Case
		R	22-Mar			
	12	T	27-Mar	T ch. 10	Ethics Case	
		R	29-Mar			
	13	T	3-Apr			Ethics Case
		R	5-Apr			
Strategic Plan Project Presentations:	14	T	10-Apr			
		R	12-Apr			

	15	T	17-Apr			Strategic Plans (Due Apr. 17)
		R	19-Apr		PRESENTATIONS	
		T	24-Apr			
Strategic Plan Project Presentations:	15				PRESENTATIONS	
		R	26-Apr			

---

Syllabus Disclaimer: The outlined syllabus and day to day activities is meant to serve as a general guide for the class. The instructor reserves the right to make changes and announce those changes in class giving the class adequate time frames for planning purposes.

## APPENDIX B

### E-COMMERCE WEBSITES

Resource	URL	Content
Business 2.0	<a href="http://www.business20.com">http://www.business20.com</a>	General IT-related stories
Business Week	<a href="http://www.businessweek.com/ebiz">http://www.businessweek.com/ebiz</a>	E-commerce business news
CIO magazine	<a href="http://www.cio.com">http://www.cio.com</a>	IT-related issues for managers
Computerworld	<a href="http://www.computerworld.com">http://www.computerworld.com</a>	General IT-related stories
Ebiz 101	<a href="http://www.ebiz101.com/">http://www.ebiz101.com/</a>	Resources for small businesses selling online
E-business world	<a href="http://www.e-businessworld.com/">http://www.e-businessworld.com/</a>	Global E-commerce news
Ecommerce Times	<a href="http://www.ecommercetimes.com/">http://www.ecommercetimes.com/</a>	E-commerce business news
ERP Central	<a href="http://www.erpcentral.com/">http://www.erpcentral.com/</a>	ERP and B2B-related stories, information on CRM, SCM
Internet Week	<a href="http://www.internetweek.com">http://www.internetweek.com</a>	Internet news
Internet.com	<a href="http://ecommerce.internet.com/">http://ecommerce.internet.com/</a>	E-commerce news
Nielsen/Net Ratings	<a href="http://nielsen-netratings.com/">http://nielsen-netratings.com/</a>	Internet statistics, demographics, market research
Nua Internet Surveys	<a href="http://www.nua.com/surveys/">http://www.nua.com/surveys/</a>	Internet statistics, demographics, market research
Red Herring	<a href="http://www.herring.com/">http://www.herring.com/</a>	General IT-related news
The Industry Standard	<a href="http://www.thestandard.com">http://www.thestandard.com</a>	General IT-related stories

## GLOSSARY

Term	Meaning
B2C	Business-to-consumer
B2B	Business-to-business
B2G	Business-to-government
CIO	Chief Information Officer
CIS	Computer Information Systems
CRM	Customer relationship management
ERP	Enterprise Resource Planning
G2C	Government-to-consumer
SCM	Supply-chain management

## ABOUT THE AUTHOR

**Diana Burley Gant** is Assistant Professor of Information Systems in the Kelley School of Business, Indiana University. She holds a Ph.D. and two master's degrees from Carnegie Mellon University. Her research examines the changes in individual behavior and organizational action occurring as a result of technical implementations.

Copyright © 2001 by the Association for Information Systems. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than the Association for Information Systems must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: AIS Administrative Office, P.O. Box 2712 Atlanta, GA, 30301-2712 Attn: Reprints or via e-mail from [ais@gsu.edu](mailto:ais@gsu.edu).



**EDITOR**

Paul Gray  
Claremont Graduate University

**CAIS SENIOR EDITORIAL BOARD**

Henry C. Lucas, Jr. Editor-in-Chief University of Maryland	Paul Gray Editor, CAIS Claremont Graduate University	Phillip Ein-Dor Editor, JAIS Tel-Aviv University
Edward A. Stohr Editor-at-Large Stevens Inst. of Technology	Blake Ives Editor, Electronic Publications University of Houston	Reagan Ramsower Editor, ISWorld Net Baylor University

**CAIS ADVISORY BOARD**

Gordon Davis University of Minnesota	Ken Kraemer University of California at Irvine	Richard Mason Southern Methodist University
Jay Nunamaker University of Arizona	Henk Sol Delft University	Ralph Sprague University of Hawaii

**CAIS EDITORIAL BOARD**

Steve Alter University of San Francisco	Tung Bui University of Hawaii	H. Michael Chung California State University	Donna Dufner University of Nebraska - Omaha
Omar El Sawy University of Southern California	Ali Farhoomand The University of Hong Kong, China	Jane Fedorowicz Bentley College	Brent Gallupe Queens University, Canada
Robert L. Glass Computing Trends	Sy Goodman Georgia Institute of Technology	Joze Gricar University of Maribor Slovenia	Ruth Guthrie California State University
Chris Holland Manchester Business School, UK	Juhani Iivari University of Oulu Finland	Jaak Jurison Fordham University	Jerry Luftman Stevens Institute of Technology
Munir Mandviwalla Temple University	M.Lynne Markus City University of Hong Kong, China	Don McCubbrey University of Denver	Michael Myers University of Auckland, New Zealand
Seev Neumann Tel Aviv University, Israel	Hung Kook Park Sangmyung University, Korea	Dan Power University of Northern Iowa	Maung Sein Agder University College, Norway
Peter Seddon University of Melbourne Australia	Doug Vogel City University of Hong Kong, China	Hugh Watson University of Georgia	Rolf Wigand Syracuse University

**ADMINISTRATIVE PERSONNEL**

Eph McLean AIS, Executive Director Georgia State University	Samantha Spears Subscriptions Manager Georgia State University	Reagan Ramsower Publisher, CAIS Baylor University
---	--	---