# BUSI 4607
Management of Technology and Innovation

## Fall 2014

<table>
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<tr>
<th>Instructor</th>
<th>Ahmed Doha</th>
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<tr>
<td>Room</td>
<td>Room 909, Dunton Tower</td>
</tr>
<tr>
<td>Phone</td>
<td>(613) 520-2600 ext. 1909</td>
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<tr>
<td>Email</td>
<td><a href="mailto:ahmed.doha@carleton.ca">ahmed.doha@carleton.ca</a> (only means of online communication. Don’t email to WebCT)</td>
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| Class Times       | Thursday 8:35 am - 11:25 am Room: TBA |

| Office Hours      | By appointment only on Thursdays between 1:00pm and 2:30pm. Email for appointment. |

### Course Objectives:

Innovation is the spark that ignites the development of new products, processes, and services, which directly contribute to efficient operation, prosperity, economic growth, and job creation. Innovation is a process and this course aims at understanding the process and best practices of technology and innovation management at the firm level. This course is delivered in three modules to achieve this goal:

1. **Dynamics of Technological Innovation**, which covers the foundations of technological innovation, gaining an in-depth understanding of how and why innovation occurs in an industry, and why some innovations rise to dominate others.

2. **Strategic Management of Innovation**, which discusses the formulation of firms’ technological innovation strategy. This includes strategic analysis of current position and future direction, competitive vs. collaborative strategies for innovation, and mechanisms for profiting from innovation.

3. **Special Topics in Management of Technological Innovation**, which examines two important domains of innovation that complement technological innovation. Those are service innovation and business model innovation.

### Prerequisites

Third-year standing, and BUSI 2204 or BUSI 2208, and BUSI 3103 (with a grade of C- or higher in each).

The School of Business enforces all prerequisites.

### Course Material

**Textbook**


**Cases**

[http://hbsp.me/casecoach](http://hbsp.me/casecoach) The Case Analysis Coach is a mandatory course material to be self-studied before preparing the first case for the second class. It presents a comprehensive and concise framework for analyzing, discussing, and writing about cases. Delivered entirely online, it shows students how to establish a knowledge base about a case.

- Alibaba.com
- Kodak and the Digital Revolution (A)
- Adobe Systems, Inc.
- Netflix
- Breakthroughs and the "Long Tail" of Innovation
- Google Inc.
- Matching Dell
- From In-house to Joint R&D: The Way forward for Nokia Denmark
- Innovation at Progressive (A): Pay-As-You-Go Insurance
- TopCoder (A): Developing Software through Crowdsourcing

**Articles**
- Electronic marketplaces - A literature review and a call for SCM research.
- Creating Value through Business Model Innovation.

**Class presentation slides:** Slides will be minimally used in this course, and where used I will share them via WebCT.

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<th>Course Evaluation</th>
<th>Grade Distribution</th>
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<td>Class Participation</td>
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<td>Two In-Class Presentations</td>
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**Class Participation**
Case-based teaching requires intensive class participation, which is essential for the individual’s and collective learning experience. This explains the relatively high weight of this activity in the grade distribution (20% of overall grade). You are expected to read the material before class and come prepared for engaged, informed, and well-reasoned discussions. Both the quantity and quality of your contributions will determine your class participation grade. Quality contributions go beyond merely stating the facts and repeating information from the readings to generating intellectually stimulating remarks and questions that help the classroom engage more with the course material. Uninformed contributions that indicate unpreparedness can harm rather than help one’s grade. The instructor’s role in the classroom is generally to facilitate class discussions and drive the concepts and ideas home.

**Industry Context**
The course focuses on a specific industry context, which is the eCommerce and eSupplyChain Technologies. This industry provides a number of eCommerce/eSupplyChain platforms (identified by instructor) which will be subject of study and analysis by student groups (for assignments and term paper) using the theoretical and analytical frameworks in this course. Each student group is expected to be the “in-house expert” in one eCommerce platform. This expertise is expected to be accumulated through the first five weeks. By the sixth week, each student group is expected to have crafted a tutorial (using an appropriate software tutorial maker) on its assigned eCommerce/eSupplyChain platform and to make an in-class live presentation of the tutorial to showcase their expertise (Tutorial and presentation weigh 5% of overall grade).
Thereafter, the students will combine their hands-on expertise on the eCommerce platforms and the readings in working on the two assignments and the term paper.

**Assignments**
There will be two assignments to be done in groups of 3 students to encourage team work. The two assignments prompt the students to apply the theoretical and analytical frameworks in the first two modules to understand the patterns of innovation and competitive strategy of the assigned eCommerce/eSupplyChain platforms. As such, the two assignments enable students to put their theoretical knowledge into practice. The rubrics for the assignment will be made available on WebCT during the term and will represent the benchmark against which evaluation will take place. A group may submit one hard copy of their work in class. Homework assignments will be posted on WebCT. The assignments are due at the beginning of the class on the date specified (see tentative schedule). Late assignments will lose 20% of their weight per day of delay. Clear, well-thought, and well-articulated presentation of the assignments is important and will weigh in grading. Online submissions of the assignments via email or WebCT, for example, will not be accepted. Students should make arrangements to have a hard copy of their assignments submitted on their behalf on time if they are unable to make it to class on the day the assignment is due.

**Term Paper**
In the term paper, student groups will develop a consulting piece that builds on the analysis accomplished in the two assignments. Having understood the patterns of innovation and competitive strategy of the assigned eCommerce/eSupplyChain platform in the two assignments, student groups are expected to propose a set of innovations and strategic changes that could improve the competitive position, market share, and/or profit performance of the assigned eCommerce/eSupplyChain platform. The rubrics for the term paper will be made available on WebCT during the term and will represent the benchmark against which evaluation will take place. Student groups will make in-class presentations of their term papers in last class (weigh 5% of overall grade).

The composition of student groups must not change throughout the course. The term paper should come in no less than five pages of single space report. The term paper is worth 40% of the overall grade. The deadline for submitting the term paper is Dec. 2nd. Late submission will be penalized 20% for each day of delay. The term paper must be submitted by email to ahmed.doha@carleton.ca. Students who do not obtain at least 50% on their term work prior to writing the term paper (i.e. in-class presentation and two assignments) will not be allowed to write a term paper and will thus fail the course.

| General Guidelines | ▪ Class attendance is highly important and is part of the class participation grade.  
▪ Missing more than two classes is highly discouraged and will result in 50% reduction in the overall class participation grade. |
| Tools | ▪ Attendance sheet will be filled out in the beginning of each class including self-evaluation (mark out of 10) of the quantity and quality of contribution in that class. |

**Tentative Schedule**

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<th>Wk</th>
<th>Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Due Dates</th>
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<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Assignment Details</th>
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<tr>
<td>1</td>
<td>4-Sep</td>
<td>Introduction</td>
<td>Chapter 1 (textbook)</td>
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| 2    | 11-Sep | Industry Context: eCommerce / eSupplyChain Technologies                | EJOR Article: Electronic marketplaces - A literature review and a call for SCM research.  
 Case: Alibaba.com  
 Submit student groups |
| 3    | 18-Sep | Types and Patterns of Innovations                                     | Chapter 3 (textbook)  
 Case: Kodak and the Digital Revolution (A) |
| 4    | 25-Sep | Dominant Design                                                        | Chapter 4 (textbook)  
 Case: Adobe Systems, Inc. |
| 5    | 2-Oct  | Timing of Entry                                                        | Chapter 5 (textbook)  
 Case: Netflix |
| 6    | 9-Oct  | Sources of Innovation  
 eCommerce/eSupplyChain Tutorial Presentations                         | Chapter 2 (textbook)  
 Case: Breakthroughs and the "Long Tail" of Innovation. |
| 7    | 16-Oct | Defining the Organization’s Strategic Direction                        | Chapter 6 (textbook)  
 Case: Google Inc.  
 **Assig. 1 Due** |
| 8    | 23-Oct | Competitive Strategies                                                 | HBR Article: Imitation Is More Valuable Than Innovation  
 Case: Matching Dell |
| 9    | 30-Oct | Fall Break: Classes Suspended                                          |                                                                                      |
| 10   | 6-Nov  | Collaborative Strategies                                              | Chapter 8 (textbook)  
 Case: From In-house to Joint R&D: The Way forward for Nokia Denmark |
| 11   | 13-Nov | Service Innovation                                                     | CRM Article: Service Blueprinting: A Practical Technique for Service Innovation  
 Case: Innovation at Progressive (A): Pay-As-You-Go Insurance  
 **Assig. 2 Due** |
| 12   | 20-Nov | Business Model Innovation                                             | HBR Article: Creating Value through Business Model Innovation  
 Case: TopCoder (A): Developing Software through Crowdsourcing |
| 13   | 27-Nov | Summary: putting the pieces together  
 Term Paper Presentations                                                 |                                                                                      |
| 14   | 2-Dec  | Term Paper Due                                                        |                                                                                      |
**Required calculator in BUSI course examinations**
If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

**Group work**
The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

- A+ = 90-100
- A  = 85-89
- A- = 80-84
- B+ = 77-79
- B  = 73-76
- B- = 70-72
- C+ = 67-69
- C  = 63-66
- C- = 60-62
- D+ = 57-59
- D  = 53-56
- D- = 50-52
- F   = Below 50
- WDN = Withdrawn from the course
- ABS = Student absent from final exam
- DEF = Deferred (See above)
- FND = (Failed, no Deferred) = Student could not pass the course even with 100% on final exam

**Academic Regulations, Accommodations, Etc.**
University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university’s website, here: [http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/](http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/)

**Requests for Academic Accommodations**

**Academic Accommodations for Students with Disabilities**
The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).
- The deadlines for contacting the Paul Menton Centre regarding accommodation for final exams for the December 2014 exam period is November 7, 2014 and for the April 2015 exam period is March 6, 2015.

For Religious Obligations:
Students requesting academic accommodation on the basis of religious obligation should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory event.
Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.
Students or instructors who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton's Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for assistance.

For Pregnancy:
Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

Academic Integrity
Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another’s ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include expulsion; suspension from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at http://www2.carleton.ca/sasc/advisingcentre/academic-integrity/.

Assistance for Students:
Student Academic Success Centre (SASC): www.carleton.ca/sasc
Writing Tutorial Services: http://www1.carleton.ca/sasc/writing-tutorial-service/
Peer Assisted Study Sessions (PASS): www.carleton.ca/sasc/peer-assisted-study-sessions

Important Information:
- Students must always retain a hard copy of all work that is submitted.
- All final grades are subject to the Dean’s approval.
- Please note that you will be able to link your CONNECT (MyCarleton) account to other non-CONNECT accounts and receive emails from us. However, for us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CONNECT address. Therefore, it would be easier to respond to your inquiries if you would send all email from your connect account. If you do not have or have yet to activate this account, you may wish to do so by visiting https://portal.carleton.ca/