

MIS 7120 (G01) (1.5 CH)
MANAGING INFORMATION SYSTEMS
SUMMER 2021

INSTRUCTOR

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|--------|-----------------------|------------------|--|
| Name: | Wenxi Pu | Office Location: | Drake 404 |
| Phone: | 204-474-6464 | Office Hours: | By appointment (virtual meetings) |
| Email: | Wenxi.Pu@umanitoba.ca | Class Room: | Online via Zoom |
| | | Class Time: | June 5 th 10:00 AM – 3:15 PM |
| | | | June 6 th 10:00 AM – 3:15 PM |
| | | | June 19 th 10:00 AM – 3:15 PM |
| | | | June 20 th 10:00 AM – 3:15 PM |

COURSE DESCRIPTION

This course explores the inter-relationship between IT, strategic management, and competitiveness. Organizations that strategically select, manage, and deploy digital business models prosper in the global economy, thus it is critical for managers to create and analyze strategies for technology-enabled organizational and industry transformation.

This is a discussion/case-based course with a managerial perspective on information technology (IT) and competitive strategies. Given the rapid advances in IT in recent decades and the transformative nature of IT in any functional area from accounting to marketing, IT is becoming an indispensable resource for not only improving organizational performance but also creating sustainable competitive advantages in virtually every industry.

COURSE OBJECTIVES

On course completion, you should be able to:

- Have a toolkit of conceptual frameworks to systematically make IT related decisions.
- Have a clear understanding of the critical importance of IT for competitive advantages.
- Discuss how IT enables firms to create business opportunities and to formulate sustainable competitive strategies.
- Explain how to deal with risks borne out by IT resources and to secure organizations from them.
- Discuss how data analytics improves business decision making and supports competitive strategies.
- Understand the critical importance of Artificial Intelligence on the transformation of businesses.
- Discuss how to prepare for future career in the digital age.

AACSB Assurance of Learning Goals and Objectives.

The Asper School of Business is proudly accredited by AACSB. Accreditation requires a process of continuous improvement for the School and our students. Part of “student improvement” is ensuring that students graduate with the knowledge and skills they need to succeed in their careers. To do so, the Asper School has set the **learning goals and objectives** listed below for the **MBA Program**. The checked goal(s) and objective(s) will be addressed in this course and done so by means of the items listed next to the checkmark.

| | Goals and Objectives in the MBA Program | Goals and Objectives Addressed in this Course | Course Item(s) Relevant to these Goals and Objectives |
|---|--|--|--|
| 1 | Strategic Thinking Students will think critically and creatively about solutions to organizational problems, considering short-term and long-term goals, resources, risks, and opportunities. | Yes | Entire Course |
| | A. Students are able to identify situations where strategic thinking is necessary. | Yes | Entire Course |
| | B. Students are able to identify different strategies. | Yes | Entire Course |
| | C. Students are able to perform a basic strategic analysis. | Yes | Entire Course |
| | D. Students are able to recommend strategic alternatives and their implementations. | Yes | Entire Course |
| 2 | Global Perspective Students will adopt a global mindset in considering organizational decisions. | Yes | Entire Course |
| | A. Students have an awareness of global diversity, and multicultural awareness. | Yes | Entire Course |
| | B. Students have an awareness of different global perspectives. | Yes | Entire Course |
| | C. Students have been exposed to global business environments through course materials | Yes | Entire Course |
| 3 | Ethical Mindset Students will consider ethical and moral issues when analyzing and recommending solutions to organizational problems. | Yes | Entire Course |
| | A. Students demonstrate an understanding of the responsibility of business in society. | Yes | Entire Course |
| | B. Students demonstrate an understanding of ethical decision making. | Yes | Entire Course |
| | C. Students demonstrate moral development in ethical decision making. | Yes | Entire Course |
| | D. Students demonstrate an understanding of the responsibilities of a leader's role as it relates to ethics. | Yes | Entire Course |
| 4 | Quantitative and Financial Proficiency Students will demonstrate the ability to approach organizational issues using quantitative and financial analysis. | Yes | Entire Course |
| | A. Students are able to identify that a problem containing a quantitative aspect exists. | Yes | Entire Course |
| | B. Students are able to apply financial methodologies in the answering of business questions. | Yes | Entire Course |
| | C. Students are able to demonstrate a basic financial proficiency in understanding the role and flow of money in an organization. | Yes | Entire Course |
| | D. Students are able to interpret the results of a financial analysis. | Yes | Entire Course |

COURSE FORMAT

This course will be conducted "live" via Zoom. Zoom link will be posted on UM Learn. No in-person instruction will be involved. Classes will be during the scheduled class time. For recording attendance and class participation, you will be expected to have your camera and microphone on during class time. The instructor may tell you to leave your camera/mic on for the duration of the class or may require you to mute yourself and unmute yourself only at certain times.

COURSE MATERIALS

As classes will be delivered **synchronously via Zoom**, a device enabled with a camera and microphone is required. Further, you are expected to be in a location with a reliable Internet connection that is strong enough for streaming video. You may also want to consider using earphones/headset with a mic, unless you have a computer/tablet with good speakers/mic.

Harvard Business Coursepack for MIS7120 will be required. Link to purchase:

<https://hbsp.harvard.edu/import/817491>

If you need additional material to further facilitate your understanding of the course materials. The following textbook is recommended.

Bidgoli, Hossein, MIS, 10th Edition, Cengage Learning. Both **print (ISBN 9780357418697)** and **digital (ISBN 9780357419205)** versions of this book are available.

Note that the textbook is **NOT** mandatory for the course.

COURSE ASSESSMENT

Student progress will be assessed through:

| Item | Group or Individual? | Weight |
|---|----------------------|-------------|
| Zoom Participation | Individual | 15% |
| UM Learn Discussion Board Participation | Individual | 15% |
| Post-Session Reflection Notes | Individual | 10% |
| Group Projects | Group | 30% |
| Executive Reports | Individual | 30% |
| Total | | 100% |

Descriptions:

Zoom Participations (15%):

- Students are expected to actively participate in class discussions, activities, and debates during synchronous Zoom sessions.

- Both frequency and quality are considered in participation grading.
- In order to speak up during synchronous sessions, please use a hand-up function at Zoom and wait for the instructor's go-ahead.

UM Learn Discussion Board Participations (15%):

- In addition to four synchronous sessions, class discussions will take place over UM Learn discussion boards between June 7th and June 20th.
- 6 discussion boards (one per two days) will be made available in UM Learn as an extension of the synchronous Zoom sessions.
- To participate in discussion boards, students will have to read the required reading assignments.
- Both frequency and quality are considered in participation grading. The students are strongly encouraged to respond to classmates' posts.
- Grading Rubrics – Inclusion of Course Concepts and Materials, Peer-to-Peer Communication, Application of Experiences, Additional Supporting Resources, and Professional Communication.

Post-Session Reflection Notes (10%):

- After each synchronous Zoom session, a student is required to write a brief reflection note that summarizes what is learned from Zoom sessions.
- A reflection note should be at least 250-word long and no longer than 400 words.
- It is due by 11:59 PM after each Zoom session.
- A note should be as comprehensive as possible by covering the whole class, rather than focusing on a few topics.
- It is encouraged to relate what is learned to current work.

Group Projects (30%) – Two Projects, 15% each:

- There will be two group projects (15% each) that students will complete and present in the synchronous sessions.
- Groups will be created during the first Zoom session.
- Group Project 1 – Conceptual Technology Design (guidelines to be released on UM Learn). (for presentation on June 19th)
- Group Project 2 – What is your data monetization strategy? (for presentation on June 20th)
- It is strongly encouraged to have group meetings regularly between the two weekends designated our synchronous sessions.
- Grading Rubrics: Value, Revenue Potentials, Feasibility, Sustainability, and Presentation

Executive Reports (30%) – Two Reports, 15% each:

- This is an individual assignment to write two consulting reports for senior executives.
- A report should be no more than 2-page long including figures and tables. The instructor will not read beyond the 2nd page.
- It has to be formatted with 11-point font, Calibri (Microsoft Words default font), single spacing or more, and 1- inch margin in all four sides. Any report that does not conform to this formatting requirement will not be graded.
- Six or more topics will be provided. A student can choose any two topics for the reports.

- Please refer to the course schedule for when Executive Reports are due. These deadlines are firm, and the instructor does not take any extraneous circumstance into consideration such as a PC malfunction or network outages.
- Late submission is allowed, but there will be 10% penalty per each 12 hours. For example, if the first Executive Report is submitted on the morning of Feb 8 and graded at 90, a 30% penalty is imposed, and the grade is to be $90 \times (100-30)/100 = 63$.
- Grading Rubrics: Organization, Originality of Ideas, Addressing the issue, Strategic Recommendations, Grammar & Mechanics
- (Optional): The instructor will provide a feedback to a draft report that is submitted one week before a deadline.

Final grades are based on the sum of the marks for all the assessment components. will be assigned as follows (subject to curve).

| Cumulative Marks | Grade | GPA | Performance |
|------------------|-------|-----|----------------|
| 93-100 | A+ | 4.5 | Excellent |
| 90-92.99 | A | 4.0 | Very Good |
| 85-89.99 | B+ | 3.5 | Good |
| 80-84.99 | B | 3.0 | Satisfactory |
| 75-79.99 | C+ | 2.5 | Marginal |
| 70-74.99 | C | 2.0 | Unsatisfactory |
| 50-69.99 | D | 1.0 | Unsatisfactory |
| 49.99 and below | F | 0.0 | Unsatisfactory |

NOTE: Class attendance is required. Missing more than 20% of this course due to absences may result in a failing grade. It is your responsibility to inform your professor in advance of your absence and the reason for it (medical documentation or employer note if away for a work commitment) is required. The professor decides how to deal with the impact of missed classes on your final grade.

COURSE SCHEDULE

*subject to change at the discretion of the professor

| Session | Topics | Assignments | Due |
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| | | Read: <ul style="list-style-type: none"> • Bloomberg Businessweek – This Is What Peak Car Looks Like • IT doesn't Matter – with the letters • HBR – Investing in IT That Makes a Competitive Difference • HBR - Digital Ubiquity: How Connections, Sensors, and Data Are Revolutionizing Business | |

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| Session 1 | Introduction and Overview of MIS | <ul style="list-style-type: none"> HBR – How Smart, Connected Products Are Transforming Companies <p>Recommended Readings:</p> <ul style="list-style-type: none"> Ivey School Case- Apple Inc.: Managing a Global Supply Chain <p>Download and install: Zoom</p> | Due: Saturday, 5/6 by 10:00 AM |
| | | <p>Attend: Class Session 1</p> <p>Class Discussion Questions (include but not limited to):</p> <ul style="list-style-type: none"> How will COVID-19 change how we do business? Why is IT critical for business success? Why does IT make competition more dynamic and turbulent? Why is Amazon.com so powerful? Group discussion – How does technology affect industry competition? | On: Saturday, 5/6 from 10:00 AM – 3:15 PM |
| | | Submit: Post-session reflection notes 1 | Due: Saturday, 5/6 by 11:59 PM |
| | | <p>Read:</p> <ul style="list-style-type: none"> MIT CISR Case – Schneider Electric HBS Case – Aetna and the Transformation of Health Care HBS Case – Care.com HBR – Why Some Platforms Thrive HBR – Break Your Industry’s Bottleneck <p>Recommended Readings:</p> <ul style="list-style-type: none"> HBR – Designing Better Online Review Systems HBR – Thriving in an Increasingly Digital Ecosystem HBS Case – The Wealthfront Generation | Due: Sunday, 6/6 by 10:00 AM |

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| <p>Session 2</p> | <p>IT, Digital Platforms and Competitive Strategies</p> | <p>Attend: Class Session 2</p> <p>Class Discussion Questions (include but not limited to):</p> <ul style="list-style-type: none"> • What is the rationale behind Schneider’s move from manufacturing to service? • How does its IoT platform support this move? • What challenges should Schneider expect in implementing a digital services platform? • How can Schneider achieve sustainable competitive advantages with its IoT platform? • What constitutes as a bottleneck in an industry? • Why are Amazon.com and Uber so disruptive? • Why are two-sided network effects so powerful? • How to manage the health of digital platform? • What make your industry inefficient? • Group discussion – How can Schneider capture greater value from the IoT platform? • Group discussion – Bottlenecks and IT-driven disrupted strategies in the real estate industry | <p>On: Sunday, 6/6 from 10:00 AM – 3:15 PM</p> |
| | | <p>Submit: Post-session reflection notes 2</p> | <p>Due: Sunday, 6/6 by 11:59 PM</p> |
| | | <p>Participate: UM Learn discussion board – discussion 1</p> | <p>Due: Tuesday, 8/6 by 11:59 PM</p> |
| | | <p>Participate: UM Learn discussion board – discussion 2</p> | <p>Due: Thursday, 10/6 by 11:59 PM</p> |
| | | <p>Submit: Executive Report #1</p> | <p>Due: Friday, 11/6 by 11:59 PM</p> |
| | | <p>Participate: UM Learn discussion board – discussion 3</p> | <p>Due: Saturday, 12/6 by 11:59 PM</p> |
| | | <p>Participate: UM Learn discussion board – discussion 4</p> | <p>Due: Monday, 14/6 by 11:59 PM</p> |

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| | | <p>Participate: UM Learn discussion board – discussion 5</p> <p>Participate: UM Learn discussion board – discussion 6</p> <p>Submit: Executive Report #2</p> | <p>Due: Wednesday, 16/6 by 11:59 PM</p> <p>Due: Friday, 18/6 by 11:59 PM</p> <p>Due: Friday, 18/6 by 11:59PM</p> |
| Session 3 | IT Risk Management | <p>Read:</p> <ul style="list-style-type: none"> Ivy School Case – Cyberattack: The Maersk Global Supply-Chain Meltdown HBS Case – iPremier HBR – The End of Cybersecurity HBR – Sizing up Your Cyberrisks <p>Recommended reading:</p> <ul style="list-style-type: none"> Phishing Tests Are Necessary. But They Don't Need to Be Evil. <p>Submit: Group Project 1</p> | <p>Due: Saturday, 19/6 by 10:00AM</p> |
| | | <p>Attend: Class Session 3</p> <p>Class Discussion Questions (include but not limited to):</p> <ul style="list-style-type: none"> What happened to Maersk? What are the managerial failures in this incident? What are the lessons learned from both Maersk case and iPremier case? What should your organization do to prevent ransomware attack? What helped Maersk recover from the incident? Group discussion – IT bureaucracy in your organization <p>Group Presentations:</p> <ul style="list-style-type: none"> Group presentations for group project 1. | <p>On: Saturday, 19/6 from 10:00 AM – 3:15 PM</p> |
| Session 4 | Artificial Intelligence Future of Work | <p>Read:</p> <ul style="list-style-type: none"> MIT CISR Case – Pepsico PEPWORK HBR – Should an Algorithm Tell You Who to Promote | |

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| | | <ul style="list-style-type: none"> • HBR – When Data Creates Competitive Advantage • HBR – Collaborative Intelligence: Humans and AI Are Joining Forces • HBR – Building the AI-Powered Organization <p>Recommended Readings:</p> <ul style="list-style-type: none"> • MIT Technology Review – AI Reinventing the Way We Invent • The Washington Post – HireVue AI Face-Scanning • HBR – Competing in the Age of AI <p>Submit: Group Project 2</p> | <p>Due: Sunday, 20/6 by 10:00AM</p> |
| | | <p>Attend: Class Session 4</p> <p>Class Discussion Questions:</p> <ul style="list-style-type: none"> • How is Pepsico's PEPWORK aligned with its competitive strategies? • Why is data important for decision making? • How can data create competitive advantages? • What is machine learning? • How is machine learning different from traditional algorithm? • What can machine learning do for business? • Group discussion - How can machine learning be utilized in <i>your</i> business? • How does AI destroy jobs? • What jobs or skills will survive in the future? • What skills will be more valuable in the future? • How should we work with AI? • How should we deal with risks and bias in AI? • How will the nature of jobs (lawyers, journalists, Wall Street bankers) change in the age of AI? • How can predictive analytics be used in your work? | <p>On: Sunday, 20/6 from 10:00 AM – 3:15 PM</p> |

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| | | <p>Presentation:</p> <ul style="list-style-type: none"> • Group presentations for group project 2. | |
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ACADEMIC REGULATIONS AND STUDENT SERVICES

HUMAN ETHICS APPROVAL FOR DATA COLLECTION

As part of coursework, if you will be collecting data from people who are not students in this class, you must obtain Human Ethics approval from the UofM's Research Ethics Board (REB) prior to data collection. This applies to data collection such as surveys, interviews, focus groups, experiments, video recording, etc., where a respondent is solicited for participation.

If the entire class will be working on the same project, your instructor will apply for human ethics approval from the REB. If individuals or small groups of students will be working on different projects, it is the responsibility of the students to obtain approval (only one group member needs to apply). Your instructor will tell you whether s/he will be or you need to. When in doubt, please talk to your instructor.

Instructions and forms to apply for human ethics approval can be found at:
<http://umanitoba.ca/research/orec/ethics/guidelines.html>

In most cases, you will be using the "Protocol Submission Form" which is under the "REB Forms - Fort Garry Campus" heading.

It can take up to six weeks to process human ethics applications and obtain approval. Therefore, plan early. Note that approval must be obtained prior to data collection and cannot be obtained during the data collection phase or retroactively. Violation can get you, your instructor, and the Asper School in serious trouble with the REB.

If you will be collecting data only from other students in the class, you do not need REB approval. If you have any questions, please contact humanethics@umanitoba.ca or your instructor.

UNCLAIMED ASSIGNMENT POLICY

Pursuant to the FIPPA Review Committee's approved recommendations of August 15, 2007, all unclaimed student assignments will become the property of the faculty and will be subject to destruction six months after the completion of any given academic term.

STUDENT SERVICES AND SUPPORTS

The University of Manitoba provides many different services that can enhance learning and provide support for a variety of academic and personal concerns. You are encouraged to visit the below websites to learn more about these services and supports. If you have any questions or concerns, please do not hesitate to contact your instructor or the Graduate Program Office.

| For Information on... | ...follow this link |
|---|--|
| Course Outlines, Year-at-a-Glance, Concentrations, Textbooks, VW Dates and Final Exams | MBA Course Information |
| Exam Rescheduling Policy - <i>Please refer to Missing a Test/Exam on page 18 of the MBA Student Handbook</i> | MBA Student Handbook |
| Help with research needs such as books, journals, sources of data, how to cite, and writing | Library Resources |
| Tutors, workshops, and resources to help you improve your learning, writing, time management, and test-taking skills | Writing and Learning Support |
| Support and advocacy for students with disabilities to help them in their academic work and progress | Student Accessibility Services |
| Copyright-related questions and resources to help you avoid plagiarism or intellectual property violations | Copyright Office |
| Student discipline bylaws, policies and procedures on academic integrity and misconduct, appeal procedures | Academic Integrity |
| Policies & procedures with respect to student discipline or misconduct, including academic integrity violations | Student Discipline |
| Students' rights & responsibilities, policies & procedures, and support services for academic or discipline concerns | Student Advocacy |
| Your rights and responsibilities as a student, in both academic and non-academic contexts | Your rights and responsibilities |
| Full range of medical services for any physical or mental health issues | University Health Service |
| Information on health topics, including physical/mental health, alcohol/substance use harms, and sexual assault | Health and Wellness |
| Any aspect of mental health, including anxiety, stress, depression, help with relationships or other life concerns, crisis services, and counselling. | Student Counselling Centre |
| Support services available for help regarding any aspect of student and campus life, especially safety issues | Student Support Case Management |
| Resources available on campus, for environmental, mental, physical, socio-cultural, and spiritual well-being | Live Well @ UofM |
| Help with any concerns of harassment, discrimination, or sexual assault | Respectful Work and Learning Environment |
| Concerns involving violence or threats, protocols for reporting, and how the university addresses them | Violent or Threatening Behaviour |

ACADEMIC INTEGRITY

I. H. Asper School of Business, The University of Manitoba

It is critical to the reputation of the I. H. Asper School of Business and of our degrees that everyone associated with our faculty behaves with the highest academic integrity. As the faculty that helps create business and government leaders, we have a special obligation to ensure that our ethical standards are beyond reproach. Any dishonesty in our academic transactions violates this trust. The University of Manitoba Graduate Calendar addresses the issue of academic dishonesty under the heading "Plagiarism and Cheating." Specifically, acts of academic dishonesty include, but are not limited to:

- using the exact words of a published or unpublished author without quotation marks and without referencing the source of these words
- duplicating a table, graph or diagram, in whole or in part, without referencing the source
- paraphrasing the conceptual framework, research design, interpretation, or any other ideas of another person, whether written or verbal (e.g., personal communications, ideas from a verbal presentation) without referencing the source
- copying the answers of another student in any test, examination, or take-home assignment
- providing answers to another student in any test, examination, or take-home assignment
- taking any unauthorized materials into an examination or term test (crib notes)
- impersonating another student or allowing another person to impersonate oneself for the purpose of submitting academic work or writing any test or examination
- stealing or mutilating library materials
- accessing tests prior to the time and date of the sitting
- changing name or answer(s) on a test after that test has been graded and returned
- submitting the same paper or portions thereof for more than one assignment, without discussions with the instructors involved.

Many courses in the I. H. Asper School of Business require group projects. Students should be aware that group projects are subject to the same rules regarding academic dishonesty. Because of the unique nature of group projects, all group members must exercise extraordinary care to insure that the group project does not violate the policy on Academic Integrity. Should a violation occur on a group project, all group members will be held jointly accountable, no matter what their individual level of involvement in the specific violation.

Some courses, while not requiring group projects, encourage students to work together in groups (or at least do not prohibit it) before submitting individual assignments. Students are encouraged to discuss this issue as it relates to academic integrity with their instructor to avoid violating this policy.

In the I. H. Asper School of Business, all suspected cases of academic dishonesty involving a graduate student (i.e. MBA, MSc or PhD student) will be reported directly by the instructor to the Dean of the Faculty of Graduate Studies.

FACULTY BIOGRAPHY

I.H. Asper School of Business, The University of Manitoba

Wenxi Pu

Department of Accounting and Finance
I.H. Asper School of Business

Wenxi Pu is an Assistant Professor of Management Information Systems at the Department of Accounting and Finance at Asper School of Business. He earned his Ph.D. degree from Clemson University. He has taught Business Statistics and Management Information Systems at Clemson University, where he won multiple teaching awards for his teaching performance. Besides teaching, Wenxi is also doing research to investigate how Information Technologies (IT) facilitate the way individuals reinforce their sense of self and identities, both actively and passively, as well as how the self and identities (especially stigmatized ones) presented on social media (such as Facebook, Twitter, and LinkedIn) impact organizational personnel selection outcomes. His work has been published on Communications of the Association for Information Systems. Wenxi is a husband to an artist specialized in traditional Chinese painting and a father to a lovely daughter. He loves to go to museums with his family in his spare time (before COVID-19 pandemic of course).