This course syllabus and schedule are subject to change in the event of extenuating circumstances.

**INSTRUCTOR:** Dr. Rodney Heisterberg

Rodney Heisterberg serves as Professor in the School of Business and Management at Notre Dame de Namur University. He teaches courses on the application of Information Technology (IT) for enabling strategic management decision-making in virtual enterprises for the Master of Business Administration and Master of Science in Systems Management degree programs. He applies the learnings of those principles and practices as Managing Partner of Rod Heisterberg Associates for clients who are IT users and vendors.

Dr. Heisterberg has over 40 years of experience in the field of IT. He holds BS, MS, and Ph.D. degrees from Purdue University studying industrial engineering, computer science, and business administration. He has worked and consulted for numerous Global 500 companies, including British Aerospace, Eli Lilly, Ford, General Motors, Lockheed Martin, Mitsubishi, Procter & Gamble, Sunbeam, South African Breweries, and US Steel, as well as the U.S. Department of Defense at the Pentagon. Career highlights include serving as Program Director for a Personal Computer industry initiative sponsored by the U.S. Department of State to establish a PC manufacturing industrial base for economic development of the Government of Iraq.

He was Director of Information Technology Management Consulting for Gartner in San Jose where he performed technology product forecasting and led engagements for eBusiness transformation strategy and applications architecture development. His responsibilities focused on strategic planning for Collaborative Commerce including formation, implementation, and operation of businesses as virtual enterprises. This role leveraged his decade of experiences as a virtual enterprise architect for Lockheed Martin. This provided the credentials for him to be appointed as U.S. industry advisor to NATO where he continued to work as virtual enterprise architect for a collaborative ecosystem of multinational government-industry programs. He is known as an international thought leader based on his early work in cloud computing serving as the co-chair of the joint government-industry group that authored the first U.S. standard for providing content management applications Software-as-a-Service.

Dr. Heisterberg is active in the travel industry as a destination and event marketing professional. He conducts research and develops products for delivering visitor experience management solutions including social media and mobile technology featuring marketing apps integrated with streaming video. He served the Destination Marketing Association International on the Technology Committee.
where he has led initiatives for integration of cloud computing with social, mobile, and video applications to produce big data analytics solutions for destinalional ecosystem competiveness, as well as past Chair of the Student Educator Advisory Council.

He is distinguished as an entrepreneur with active business and technology endeavors spanning the past four decades serving in the role of Chief Technology Officer. He performed market research and managed advisory programs that focused on Collaborative Commerce applications for building Internet communities using Web 2.0 enabling technologies incorporating cloud computing, social media, and mobile marketing technologies. He continues to be active as the Graduate Student Faculty Advisor at NDNU for mentoring prospective start-ups. In this role, he has also conducted workshops on developing business plans and investor presentations for undergraduate and graduate student entrepreneurs, as well as alumni start-ups.

As an internationally recognized speaker and writer, Dr. Heisterberg authored the Collaborative Commerce chapter of John Wiley & Sons’ award winning The Internet Encyclopedia in 2003. He contributed a chapter featuring interactive travel marketing solutions for The Handbook for Technology Management that was published by Wiley in 2010. His latest book entitled Creating Business Agility: How Convergence of Cloud, Social, Mobile, Video, and Big Data Enables Competitive Advantage, published by Wiley in 2014, provides a business case and game plan for integrating technology to build a smarter, more customer-centric digital business for a successful business ecosystem. The focus is on Business Agility Readiness (BAR) in terms of the five major developments transforming the IT environment. It describes how BAR is achieved by utilizing data-driven platforms enabling reengineered decision-making processes which leverage digital relationships with a social business model to drive innovation and collaboration.

**OFFICE LOCATION:** Notre Dame de Namur University campus in Belmont, location CU 17.

**EMAIL:** rheisterberg@ndnu.edu

**OFFICE HOURS:** one-half hour before and after class meeting or by appointment.

**CLASS LOCATION:** TBD

**CLASS DATES AND TIMES:** from 6:00 p.m. to 10:15 p.m. on Thursday from January 16 through February 27. Any exceptions to this schedule will be noted on the calendar or in case of emergency students will be notified by telephone or email. Activity using asynchronous Moodle discussion environments is also part of the course meeting.
REQUIRED TEXT:


DESCRIPTION: This course focuses on the impact of information technology on the operations of a business and as a support for making managerial and executive decisions that create competitive advantage.

BACKGROUND: This course leverages the current trend in business and management known as Collaborative Commerce (C-Commerce). Traditionally, technology has been utilized within the "four walls" of the enterprise to facilitate improvements in business processes. With the advent of the Internet, enterprises have extended their use of information technologies to include external transactions with trading partners termed as "eCommerce". The emerging electronic business (eBusiness) models provide the enterprise with a collaboration capability across suppliers and customers that facilitate ease of information sharing and improved decision-making. The need to establish a sustainable competitive advantage requires the transition from the current eBusiness model of eCommerce to C-Commerce. This in turn requires the development of virtual enterprise management principles with new business practices for the formation and operation of alliances with collaborative partners having a mutual interest in their shared value chain.

C-Commerce is a strategy for the next stage of eBusiness evolution. C-Commerce business practices enable trading partners to create, manage, and use data in a shared environment to design, build, and support products throughout their lifecycle, working separately to leverage their core competencies together in a value chain that forms a virtual enterprise.

The hallmark of C-Commerce architecture is the Integration Hub which is the eBusiness platform that facilitates the sharing of information between trading partners as either a Private Trading Exchange or public e-marketplace using *Software-as-a-Service*. Integration Hub messaging services, such as inventory visibility, event notification, and performance measurement, provides the fundamental enabling technology for real time decision-making in a virtual enterprise. C-Commerce application software developed using a services-oriented architecture and deployed as web services has provided the technology base for the concept of the next generation Internet --- Web 2.0.

Though Web 2.0 is over-hyped, the blogs, wikis, social networks, RSS feeds, etc. are differentiated from the original Web technology because they replace static
HTML web pages with dynamic JavaScript web services that have interactivity using peer-to-peer communication which facilitate sharing information. The characteristics of Web 2.0 are more clearly understood and appreciated in the context of a shared data environment by looking at collaboration in social networks. The interactions within and between virtual teams, focusing on the roles and responsibilities of the people and related value-added processes, provide a map that organizations can use to adapt communication and collaboration patterns for value chain optimization. This facilitates applying the appropriate collaboration technologies to deploy as online communities with best practices based on shared experiences working with these types of communities as e-marketplaces.

C-Commerce strategies are being built around Collaborative Product Commerce (CPC) and Collaborative Planning, Forecasting and Replenishment (CPFR) business models. While CPC scenarios are most prevalent in the industrial products sector for Build-to-Order solutions, CPFR was created to solve supply chain problems in the consumer packaged goods market space. The eBusiness transformation that is being realized via C-Commerce can be described in terms of management decision-making processes which leverage feedback using real time information throughout the value chain.

The two key adaptive strategic planning processes are: building the virtual enterprise infrastructure using Integration Hubs, and making decisions to optimize value chain business performance. An example is a C-Commerce framework that facilitates the management of an interactive marketing value chain. This is an adaptive strategic planning system for demand chain optimization deployed as a suite of marketing Decision Support System (DSS) applications using Web 2.0 enabling technology to provide the functionality needed to implement C-Commerce business models. As C-Commerce continues to evolve as the mainstream eBusiness strategy for effective value chain management, the reengineering of management decision-making processes becomes the critical success factor for enterprise profitability and growth in the 21st century.

OBJECTIVES:
This course is predicated on the NDNU Hallmarks which cultivate Lifelong Learning (LIL). Lifelong Learning is the continuous pursuit of knowledge for both personal and professional development. So I'll be emphasizing collaboration, critical thinking, and data-driven decision-making processes in our work together.

BUSINESS ADMINISTRATION PROGRAM LEARNING OUTCOMES (PLO). Students will:

1. Acquire and demonstrate analytical and problem solving skills within various disciplines of business—accounting, economics, finance, management and marketing;
2. Learn to describe, discuss and analyze current events in American business with attention to the global, social and ethical dimensions of events;
3. Acquire the **communication, research and technological skills** needed to analyze a business situation, and prepare and present a management report;
4. Develop **critical thinking abilities** and a foundation of **ethical principles** that allows them to work effectively, respectfully, ethically and professionally with people of diverse ethnic, cultural, gender and other backgrounds.

**COURSE LEARNING OUTCOMES:** (with PLO # cross-references)

1. Students will understand the direct impact information has on an organization’s performance. (1, 3)
2. Students will be able to analyze enterprise management decision-making needs in terms of appropriate business applications. (1, 2, 3)
3. Students will assess appropriate methodologies used to develop technical and applications architectures for intranet, extranet, and Internet systems for enterprise business management. (3)
4. Students will use and understand how to develop collaborative enterprise business management practices. (3.4)
5. Students will demonstrate recognizing cutting-edge technology, analyze how it may impact society, and identify potential ramifications of the new technology deployment. (1, 2, 3, 4)

**ASSIGNMENT GUIDELINES:**

As a hybrid course, the course work will be accomplished by conducting research & development of Cloud-based technology to facilitate your LIL experiences. This experiential learning approach leverages a management simulation methodology that includes lectures, classroom and online discussions, textbook, library and Internet readings, as well as writing associated business reports. The group activities and discussions will primarily consist of case analysis and will encompass a large portion of the classroom work. Additionally, students will develop a team project solution delivered with a class presentation. This is a *project-based learning* experience for all students, no matter what their past experience with information technology in decision support and collaborative work.

*Individual Case Study Reports:* There are four weekly case study assignments for each individual. You will use the Internet to support research of specified topics and write the results of your analysis in the following format:

1. Problem Statement --- The problem being addressed.
2. Challenges & Opportunities --- Background information & problem analysis.
4. Lessons Learned/Business Case --- The results from the case that may provide learning points for use by others including economic justifications.
5. Why I Care --- Your reflections for the impact on your LIL goals.
6. References --- Scholarly references preferred in addition to professional trade publications & the course textbooks using APA format.
Reports should be a minimum of six pages not including the Cover page and list of References. You will post these case studies on Moodle, as well as review and comment on your team members’ case studies. During the course you will use these case studies to present/discuss descriptions of business practices/methodologies/tools of your interest and collaborate with other team members using Moodle.

**Term Paper:** Each member of the class is required to produce a Term Paper. The Term Paper will be in the form of a proposal to develop a Smart Ecosystem Hub solution for a company with which you are familiar (i.e., your present employer, a previous employer, or a company where you would like to work).

As a key course deliverable your Operations/Information Technology Systems term paper in intended to demonstrate your learning of how to design and develop a technical business solution for implementation in a virtual enterprise based on a digital business transformation strategy.

The proposed Smart Ecosystem Hub will focus on the need for a *Business Intelligence & Analytics Collaboration* solution deployed by means of a Business Intelligence Competency Center (BICC) via a self-service use case. It is expected that your analysis will be described in terms of a story showcasing a Technical solution in the context of the Business problem with which you are familiar.

By the end of the course, you will develop your term paper as a document that is intended to be an original work, **NOT A COMPILATION OF YOUR CASE STUDIES AND NOT USING THE CASE STUDY FORMAT AS AN OUTLINE.** It will use the four case studies as your basic research for developing a compelling and cohesive technical report/business white paper, with a problem statement, analysis, results, discussion, conclusions, and recommendations. You are expected to incorporate new observations and reflections from LIL, key learning from textbooks/class discussion, as well as feedback from other students.

**Team Project:** Each member of the class is required to participate in an information management team project. For this project, you will design and develop a digital business solution for implementation of an Operations/Information Technology System in a virtual enterprise operating in a well-defined business ecosystem. Your team will make a formal presentation on your project. This is intended to be a professional quality team project presentation to the class.

**Classroom and Online Discussions:** This is a course that depends heavily on your collaboration with your classmates. You must collaborate to understand and demonstrate your ability to use team project processes for reviewing/evaluating software tools and their associated management decision-making processes. Your earnest and informed contributions are expected to be demonstrated.
GRADING:

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<tbody>
<tr>
<td>Four Individual Case Studies - Online Reports</td>
<td>@50 pts each: 200 pts</td>
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<tr>
<td>Team Project (Preparation and Presentation): Team Grade</td>
<td>300 pts</td>
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<tr>
<td>Team Project: Individual Contribution (From Team Members)</td>
<td>100 pts</td>
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<tr>
<td>Participation: Collaboration in Classroom &amp; Online Discussions</td>
<td>100 pts</td>
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<tr>
<td>TOTAL</td>
<td>1000 pts</td>
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BEFORE First Class:

1. READING/WRITING ASSIGNMENT to be done before first class meeting.
   - Introduce yourself online in the Moodle “Student Introductions” workspace for this course.
     
     Note: If you are registered for the class, then you should have access to Moodle for this course.

   - Download from the Moodle WEEK ONE workspace the following Case Study documents as PDF files and review them in preparation for the Team Project kick-off activities during Class 1:
     
     ✓ Destination Marketing Whitepaper (i.e., DMAI Futures Study)
     ✓ SFCVB 2010-11 Strategic Business Plan

2. PRESENTATION ASSIGNMENT to be done before first class meeting:
   - Develop your “elevator pitch”, a 30-60 second explanation of who you are and why you would make an excellent team project member.
   - Prepare for your classroom presentation during the first class session.

COURSE SCHEDULE:

The schedule shows chapters to read BEFORE each class is held. Content assigned will be covered during the class meeting, but your effort to read and apply the material before class meetings will greatly improve your ability to learn the material. Where an assignment is noted for a particular class, it is to be prepared prior to the class and a hardcopy of the document is brought to class.
<table>
<thead>
<tr>
<th>Class 1: January 16</th>
<th>Discuss coursework activities &amp; criteria, team project scenarios &amp; guidelines. Form project team organizations &amp; begin discussion in class to establish team online collaboration processes. Read: CBA - Chapter 1, Baltzan – Chapter 1</th>
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<tbody>
<tr>
<td>Course Introduction &amp; Business Value of IT Overview: Digital Business Transformation: ERP-SCM-CRM in Cloud; SoR→SoE Gap Analysis</td>
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<tr>
<td>Class 2: January 23</td>
<td>Post individual Case Study 1 in Moodle before class. Read: CBA - Chapters 2, &amp; Epilogue Baltzan – Chapters 2, 3, 4, &amp; 5</td>
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<tr>
<td>Disruptive Innovation: Decision Process Reengineering: F-5 Tornado Technologies; Business Intelligence &amp; Analytics with Big Data</td>
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<tr>
<td>Class 3: January 30</td>
<td>Review team members’ Case Study 1 before class. Post individual Case Study 2 before class. Read: CBA - Chapter 3 Baltzan – Chapters 6, 7, &amp; 8</td>
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<tr>
<td>Search for a Sustainable Competitive Advantage: Culture Change Management; Best/Next Practices, Processes, Protocols</td>
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<tr>
<td>Class 4: February 6</td>
<td>Review team members’ Case Study 2 before class. Post individual Case Study 3 before class. Read: Baltzan – Chapters 9, 10, 11, &amp; 12</td>
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<tr>
<td>Create, Manage, Share Digital Data is Core: Collaborative Commerce; Master Data Management; Ecosystem Hubs for Social-Mobile-Video Collaboration</td>
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<tr>
<td>Class 5: February 13</td>
<td>Review team members’ Case Study 3 before class. Post individual Case Study 4 &amp; Team Project draft Presentations online before class. Read: Baltzan – Chapters 13, 14, 15, &amp; 16</td>
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<tr>
<td>Using a Silicon Crystal Ball: Business Agility Readiness; Predictive Analytics to Sense &amp; Respond; Dashboards linking Balanced Scorecards</td>
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<tr>
<td>Class 6: February 20</td>
<td>Review team members’ Case Study 4 before class. Read: CBA – Chapter 10 Baltzan – Chapters 17, 18, &amp; 19</td>
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<tr>
<td>Ecosystemism: Adaptive Enterprise Performance Management; Data-driven Decision Making Culture enabled by Ecosystem Hub networks</td>
<td></td>
</tr>
<tr>
<td>Roadmap for Business Agility Readiness Assessment: Virtual Enterprise Integration</td>
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**SUPPLEMENTAL READINGS:**
Case study reference documents to be determined & downloaded from Moodle.
WORKLOAD:
In addition to class attendance, every Intensive class at NDNU includes assignments estimated to take approximately three (or more) hours per week per unit outside of class (14 hours). The distribution of average weekly hours of instruction/study for this class will follow that norm, equaling a total of 18 hours a week, generally in accordance with the following:

Distribution of Average Weekly Hours of Instruction/Study = Total of 18 per week

Class Contact Hours: 4
Text Readings and Note Taking 4
Research and Writing Assignments 6
Term Projects Research 4

TOTAL NUMBER OF HOURS PER COURSE 126

ONLINE FORUM:
Internet access is required for this class. Participation in the online interactive forum represents a significant portion of your grade. If you are registered for the course then you should have already been registered for the online access. There will also be additional course material and resources found only in this online forum. To use Moodle go to the website http://moodle.ndnu.edu/ and click on this course title to enroll. After clicking on the course link you will be asked to provide your username and password.

PRIVACY and CONFIDENTIALITY:
One of the highlights of the NDNU academic experience is that students often use real-world examples from their organizations in class discussions and in their written work. However, it is imperative that students not share information that is confidential, privileged, or proprietary in nature. Students must be mindful of any contracts they have agreed to with their companies.

SYLLABUS CHANGES:
This course syllabus and schedule are subject to change in the event of extenuating circumstances.

CLASS ATTENDANCE:
Your attendance is very important to your studies at the University. Non-attendance or lack of participation in the class will be considered during the grading process.

ATTENDANCE FOR SEVEN–WEEK OR INTENSIVE COURSE:
Your attendance is very important to your studies at the University. Non-attendance or lack of participation in the class will be considered during the grading process. Two missed classes (or major portions of those classes) will yield an automatic “F” for the course.

WRITTEN ASSIGNMENTS:
The School of Business and Management requires the use of the American Psychological Association (APA) publication guidelines as a standard for all papers.

LATE HOMEWORK:
Assignments are to be completed and submitted by the start of each class meeting. Assignments not turned in on time are considered late. Late assignments will be accepted
only for one week after the due date; after which time the assignment will not be accepted. Late assignments scores will incur a reduction of 20% of point value.

**PARTICIPATION:**
Online and classroom discussion activities are organized to maximize student involvement in the learning process. Because this is a Graduate course, it is through your participation in all these discussions where you are expected to demonstrate your mastery and comprehension of the material.

Spring 2020 Syllabus Statements
Revised October 25, 2019

**Student Success Center 650-508-3696**
The Student Success Center (SSC), located in the Campus Center, is dedicated to supporting students’ academic success at NDNU. The SSC provides writing and subject tutoring, test proctoring for students with accommodations, facilitates the math placement test (MPT), and is open for students from 8:00 a.m. – 10:00 p.m. with business hours from 9:00 a.m. – 5:00 p.m.
For more information, see: [https://www.ndnu.edu/academics/student-success-center/](https://www.ndnu.edu/academics/student-success-center/)

The goal of the Student Success Center is to promote student learning and academic innovation. Professional staff members, peer tutors, academic advisors, and faculty work together to promote a supportive educational environment. Writing and subject tutoring schedules are forwarded directly to students’ NDNU e-mails and are included in the Student Weekly Update circulated by NDNU’s Communications Department.

Writing labs are offered in lower and upper division English courses. Writing tutoring is available on a drop-in basis and virtual writing tutoring is by appointment for our off-campus sites. Basic English language assistance is provided to international students who may need support writing papers or with general English. A writing lab dedicated to both APA and MLA writing styles is also offered. Math, computer science, and the sciences subject tutoring are led by peer tutors and a professional math tutor. Subjects, schedules, and tutor details are available at the Student Success Center.

**Disability Resource Center**
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Students with disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class are encouraged to contact the Disability Resource Center as soon as possible to ensure that such accommodations are implemented in a timely fashion. Please meet with the DRC staff to verify your eligibility for any classroom accommodations and for academic assistance related to your disability. Accommodations are not provided retroactively. The Disability Resource Center is located at St Joseph Hall, 117. Please contact the DRC by email at [DRC@ndnu.edu](mailto:DRC@ndnu.edu) or by phone at 650-508-3670.
The mission of Counseling Services is to promote and enhance the overall wellbeing of students so that they may reach their potential for personal growth and academic success. Counseling Services is open Monday-Friday from 9am to 5pm, and currently enrolled students are welcome to call, email or drop-by to schedule an appointment.

Course Evaluations/Teaching Effectiveness Surveys: Term 1
Spring Term 1 2020 Courses
Teaching Effectiveness Surveys (course evaluations) will be available online through Campus Portal from **February 25 – March 13, 2020.** Your feedback regarding courses and faculty is very important to Notre Dame de Namur University, to your faculty, and to me as the instructor for this course. Your feedback helps us review and improve their teaching, helps departments/programs review and improve program content, and is used by the university in making decisions about tenure, promotion, and hiring decisions for part-time faculty.

**Directions:** To access, please enable pop-ups in your browser (uncheck pop-up blocker), then in Campus Portal look for the "**You have an active survey**" link in the left sidebar. Click that link to open the Course Evaluation Surveys page, which has a link to a survey for each course in which you're enrolled. Your feedback is very important! Please complete your evaluations for all your courses promptly. Remember: Your responses are anonymous.

Course Evaluations/Teaching Effectiveness Surveys: Term 2 and Full-Semester
Spring 2020 Full-semester and Term 2 courses
Teaching Effectiveness Surveys (course evaluations) will be available online through Campus Portal from **April 27 – May 15, 2020.** Your feedback regarding courses and faculty is very important to Notre Dame de Namur University, to your faculty, and to me as the instructor for this course. Your feedback helps us review and improve their teaching, helps departments/programs review and improve program content, and is used by the university in making decisions about tenure, promotion, and hiring decisions for part-time faculty.

**Directions:** To access, please enable pop-ups in your browser (uncheck pop-up blocker), then in Campus Portal look for the "**You have an active survey**" link in the left sidebar. Click that link to open the Course Evaluation Surveys page, which has a link to a survey for each course in which you're enrolled. Your feedback is very important! Please complete your evaluations for all your courses promptly. Remember: Your responses are anonymous.

**Academic Honesty**
NDNU’s core values include learning, integrity, and honesty, values we live out in all areas of our learning community. Academic honesty means you are able to demonstrate your own knowledge and skills and receive feedback on your learning that can help you improve. By taking responsibility for your own work and avoiding actions that could give you an unfair advantage over others, you are contributing to the NDNU learning community and developing professional skills and values that will serve you well into the future. Academic honesty is one of the most important values of a university community, and breaches of this trust have serious consequences. Please see the Student Handbook for a detailed discussion of Academic Conduct expectations.