CIS 8010: Process Innovation

COURSE INFORMATION

Spring 2024 (CRN 21597) MM-1 Course Website: icollege.gsu.edu

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Instructor LinkedIn Profile: https://www.linkedin.com/in/growthstrategist

Location: Buckhead Campus, RM 610 (Main) Time: 5:30-9:45pm (Mon); 1pm-5:15pm (Sat)

Office Hours: By appointment via Zoom.

NOTE: This course is delivered in a hybrid format which means every student will have an opportunity to attend two classes via Zoom (max). The Zoom link is different for each class and is obtained by emailing a request to the TA for this course → Ragini Jakkam (rjakkam1@student.gsu.edu).

COURSE SCHEDULE OVERVIEW:

Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
Monday	**Saturday**	Monday	**Saturday**	Monday	Monday	Monday	Monday
Jan 8	Jan 20	Jan 22	Jan 27	Jan 29	Feb 5	Feb 12	Feb 19

REQUIRED ITEMS FOR THIS COURSE

REQUIRED RESOURCES:

- ***Real-Life BPMN***, Freund and Rucker, 4th edition, September 2019 (Kindle version recommended; the cost is $7.90). *This is a reference text.* The PC/Mac Kindle reader app is free and can be found at https://www.amazon.com/kindle-dbs/fd/kcp

  You can also download the Kindle reader from the Apple app store and from Google Play.

- ***Jobs to be Done Primer,*** M. Jordan (embedded app provided on the iCollege course space)

REQUIRED APPLICATION:

Signavio Process Manager (*until recently called the Process Editor*) is a cloud application for creating BPMN 2.0 process models. Go to https://academic.signavio.com/p/register and sign-up for a free student account. Make sure to use your GSU email address.

OTHER COURSE CONTENT

- Aside from the required resources, additional course content will be posted on the course iCollege site located at icollege.gsu.edu

CATALOG DESCRIPTION

This course examines the design of an organization's structure and business processes. The course primarily focuses on the application of information technologies to transform organization and improve their performance. Methods of introducing and implementing information technologies to enable organizational change are examined.

COURSE DESCRIPTION

To prosper in today's hyper competitive and dynamic business environment, established organizations must continually improve the value of their *existing services* if they wish to retain current customers and to attract new customers. This can be challenging throughout the lifecycle of a service because competitors are always on the move and customer priorities can shift frequently due to changing circumstances. *Process innovation focuses on identifying and exploiting opportunities to help customers obtain the desired benefits of an existing service while also increasing the profitability of the service for the provider*. A primary means of accomplishing this is through the strategic application of information technology (digital innovation).

STUDENT LEARNING OUTCOMES

The pedagogic design for this course is intended to drive three student learning outcomes (SLOs):

Articulation → Demonstration → Application

- *Articulate* the concepts, methods, tools, and techniques of process innovation (evidenced via class discussions, team presentations, and quiz performance)
- *Demonstrate* the use of specific process innovation methods, tools, and techniques (evidenced via the successful completion of class exercises)
- *Apply* process innovation concepts, methods, tools, and techniques to enhance a service (evidence via the successful completion of a process innovation project).

Each of these SLOs represents a progression in student skills/abilities that supports the achievement of two economic outcomes desired by students in this class – *starting and/or accelerating a career with an established organization*. Each SLO builds on the previous SLO. A student must first articulate (internally and externally) before they can demonstrate. A student must be competent in the use of methods, tools, and techniques to effectively accomplish process innovation.

Depending on a student's learning potential and engagement in this course, a student will achieve, to some extent or another, one or all three SLO's. Specific competencies in process innovation concepts, methods, tools, and techniques are the basis of the SLOs. *Thus, students get out of the course what they put into the course*. That is, although the course is designed to deliver

all three SLOs, a student must apply sufficient effort if he/she wishes to obtain the learning benefits that the course offers.

Upon successful completion of **CIS 8010**, a student will develop specific competencies necessary to achieve the aforementioned student learning outcomes. They will be able to:

- Understand and apply contemporary concepts, theories, methods, and tools of process innovation.
- Apply methodology to target opportunities for process innovation.
- Apply Business Model Thinking in the context of process innovation.
- Apply Jobs-to-be-Done Theory to guide process innovation efforts.
- Apply BPMN2 process modeling in the context of process innovation.
- Apply Lean and Six Sigma in the context of process innovation.
- Structure and pitch a process innovation project that improves the value of an *existing* service for customers and increases profitability for the provider.

PREREQUISITES

The following courses, skills and requisite GPA are required as preparation to take this course:

COURSE PREREQUISITES

None.

COMPUTER SKILLS PREREQUISITES

You are responsible for having the following computing prerequisite skills. They will not be taught in class. Detailed descriptions of the computer skills can be found on the course Desire2Learn site.

CSP 1: Basic Microcomputing Skills

CSP 2: Basic Microcomputing Spreadsheet Skills

CSP 6. Word Processing and Presentation Skills

CSP 7: Basic Internet Usage

HYBRID COURSE STRUCTURE

All class sessions are face-to-face (F2F) in a classroom (Buckhead campus). A student may participate via Zoom for two class sessions (max). Please note that this is a hybrid format, not a 100% online class.

Instructor presentations/lectures and other course content are available on the iCollege course space in the form of videos, podcasts, papers, articles, etc. *Student are required to attend all sessions during the entire course time slot.*

Students engage with the assigned weekly content as if they were investigative reporters, applying critical thinking skills to synthesize this content. By way of class discussion and team-

based activities, this content is synthesized into more holistic knowledge necessary to drive the aforementioned student learning outcomes.

CLASS SCHEDULE AND ASSIGNMENTS, READINGS AND ACTIVITIES

Class	Course Topics
Class 1 Monday Jan 8	**Jobs-to-be-Done Theory, Value LIFT, Contemporary Process Innovation, Digital Innovation** • **Class Preparation – Jobs to Be Done Primer S1 – S13 (app), Jobs To Be Done (9 videos), Value Lift Methodology (video), Demand Creation: Theory & Practice pages 7-14 up to "The Genesis of Jobs Theory (PDF).** • Welcome, course syllabus overview, expectations (instructor and students) • What is process innovation? History and contemporary practice • Jobs-to-be-done theory: origins and development, JTBD framework, the nature of progress, customer's success outcomes, job action, high-level and prime jobs, job economy, customer value metrics, customer job priorities, job solutions, product lifecycle jobs, switch dynamics, jobs-based segmentation • The Value LIFT methodology as modified for process innovation team project • **Team Exercise 1 (due the following Thursday by 11pm)**
Class 2 **Saturday** Jan 20	**Service Provision and the Service-Process Engine** **BPMN2 Process Modeling** • **Class Preparation – 8 Videos (BPMN Introduction & Syntax). Read "The Ultimate Guide to BPMN2")** • Service-Process Engine: service capabilities, the role of processes, process logic and process-resource integration, service touch points and customer experience • Capturing process logic using the BPMN 2.0 modeling specification • BPMN elements overview: pools/swim lanes, activities, sequence/message flows, start/end events, gateways, artifacts, and data objects • Introduction and demonstration of the Signavio BPMN Process Editor (SaaS) • **Quiz 1 (taken the first 15 minutes of class in iCollege)** • **Team Exercise 2 (due the following Tuesday by 11pm)** • **Team Project Milestone 1: Complete Step 0 AND Step 1 of Value Lift (due before class)**

Class 3 Monday Jan 22	**BPMN2 Special Behaviors** **Service Provision Process Model and Job Service Model** • **Class Preparation – 5 Videos; BPMN Gateways and Events** • BPMN2 special behavior: throw/catch message and signal, timer, error, loop and multi-instance, boundary events, interrupting/non-interrupting events • Causes of work, failure demand, slack rope, value improvement strategies • 3E strategies for improving customer experience and reducing the cost structure • Switch Dynamics • **Quiz 2 (taken the first 15 minutes of class in iCollege)** • **Team Exercise 3 (due the following Thursday by 11pm)**
Class 4 **Saturday** Jan 27	**Pulling Time Out of the S-P Engine with Lean (Slack Rope Strategy)** • **Class Preparation – "The Business Case for Lean" (M. Jordan)** • Lean improvement system: increase service capability by reducing process waste • Work batching, process flow/velocity and the Value Stream • Root causes of process waste, unnecessary activities and the Five Whys • Time measures of process performance: cycle time and lead time • Relationship between flow, time, waste, and service effectiveness/productivity • Lean methods for removing process waste and facilitating process flow • Value Stream mapping (VSM): a tool for identifying time traps • **Quiz 3 (taken the first 15 minutes of class in iCollege)** • **Team Exercise 4 and Team Exercise 4-2 (due the following Tuesday by 11pm)**
Class 5 Monday **Jan 29**	**Pulling Variance Out of the S-P Engine via Six Sigma (Slack Rope Strategy)** • **Class Preparation – Rationale for Lean Six Sigma (M. Jordan)** • Relationship between service variances and service effectiveness & productivity • Variation and the normal distribution; causes of process variation; use process behavior chart to differentiate routine variation from exceptional variation; • Customer Value Metrics (CVMs) as acceptable ranges or hard targets • Informed action: two strategies for removing the effect of variation on a process; the Pareto principle, critical factors, X's and Y's, and the hunt for Red X's; the DMAIC methodology; the cause and effect diagram as a starting point • **Quiz 4 (taken the first 15 minutes of class in iCollege)** • **Team Exercise 5 and Team Exercise 6 (due the following Thursday by 11pm)**

	• **Team Project Milestone 2: Complete Step 2 AND Step 3 of Value Lift (due before class)**
Class 6 Monday **Feb 5**	**Technology-Enabled VLIFT Strategies** • **Class Preparation – The Role of a Business Analyst** • Address service gaps: IT options/strategies for addressing service gaps • Tailor service to segment: provide service features that are valuable to the customer group and eliminate those that have little value and add costs. • Shift customer-side complexity: IT options/strategies for reducing customer work by shifting customer-side complexity. • Remove slack rope: IT options/strategies for decreasing time and variation in the service-process engine. • **Quiz 5 (taken the first 15 minutes of class in iCollege)** • **Team Exercise 7 (due the following Thursday by 11pm)** • **Team Project Milestone 3: Complete Step 4 of Value Lift (due before class)**
Class 7 Monday **Feb 12**	**Business Model Extension and Process Innovation** • **Class Preparation – 6 Videos; Business Modeling** • Augment service capabilities by extending a current business model • Ways to revise a business model to elevate customer value for an existing micro segment(s); micro strategy considerations; revenue models • Extend a business model to a non-customer segment(s): remove contextual constraints preventing non-customers from buying/using an offering • Extend a business model to enable an offering to be used in a different context for an existing customer segment(s) or a new customer segment • **Quiz 6 (taken the first 15 minutes of class in iCollege)** • **Team Exercise 8 (due the following Thursday by 11pm)** • **Team Project Milestone 4: Complete Step 5 of Value Lift (due before class)**
Class 8 Monday **Feb 19**	**Team Project Pitch Presentations (submit PDF version of presentation deck to drop box for grading)** **Final exam opens on 2/19 at 6pm (after class). Must be completed no later than 2/24 by 11:30pm (otherwise auto submitted).**

NOTE: Course content (videos, papers, etc.) are located on the course iCollege site.

COURSE GRADING AND GRADED ITEMS

The graded items (indicated in Red above) and their percentage contribution to the final grade is as follows:

Graded Items	***% Contribution to Final Grade***
Team Exercises (9)	*10 %*
Quizzes (6)	*10 %*
Team Project (4 Project Milestones & Pitch)	*50 %*
Final Exam	*20 %*
Class Attendance	*10%*
Total	***100 %***

The following grading scale will be used to calculate final grades: A+ (97-100%), A (93- 96.99%), A- (90-92.99%), B+ (87-89.99%), B (83-86.99%), B- (80-82.99%), C+ (77-79.99%), C (73-76.99%), C- (70-72.99%), D (60-69.99%), F (less than 60%).

The final grade is determined by computing your total weighted score out of 100, rounding off to the nearest integer value. The final grade will be determined by computing your total weighted score out of 100, rounding off to the nearest integer value. *The percentage grade will be converted to a letter per the Georgia State grading system (published on iCollege).*

SESSION ATTENDANCE, PREPARATION AND PARTICIPATION

Students are required to attend all classroom and online sessions. Students who are not present for team exercises and team project presentations will not receive credit for these deliverables.

It is paramount that students be prepared to fully engage in the weekly team exercises as these build the skills required to successfully complete the process innovation project. To effectively accomplish this, students must investigate the weekly content prior to class (*indicated in blue above*); making thoughtful notes on this content much like an investigative reporter makes notes from different sources in order to write a news story. These notes can then be used to inform thoughtful comments during class discussions. To be clear, students should not merely scan or review the content in a cursory manner. Rather, each student is expected to apply critical thinking to do their own synthesis of the assigned weekly content prior to each class.

PROCESS INNOVATION TEAM PROJECT

Student teams will structure and pitch a process innovation project that focuses on an existing service offered by an established service provider. Ideally, the selected service is plagued with customer complaints and the profitability of the service is sub-par. The aim for the project is to increase the perceived customer value of the service while also increasing the profitability of the service *via the strategic use of information technology*.

Since this is a minimester course format, students may not have the time to work directly with a service provider (as would be expected if this were a full-semester course). Rather, students can select any service that fits the aforementioned criteria. Information can be gathered externally about the service from various sources – your personal experience as a customer of the service, the provider's Website, customer reviews, financial reports, third-party information, etc. Refer to the *Team Project Guideline* document for the project methodology.

TEAM PROJECT GRADING CRITERIA

- **Relevance** – How well does the presentation incorporate the concepts, theories, methods, and tools discussed in this course?
- **Originality** – To what extent does the presentation reflect critical thinking; not merely re-stated/summarized from other documents or Websites (AKA: a book report)?
- **Informative** – How thorough and substantive is the investigation (quality of evidence, evaluations, and conclusions)?
- **Articulation** – How well is the presentation communicated?

TEAM EXERCISES

There will be a team breakout exercise(s) during each class sessions. Team exercises will involve the application of a specific method/tool. The team will be graded on the quality of their deliverable. However, a team member that is absent for the class will not receive credit for the team exercise. One person from the team must upload the completed exercise to the provided team drop box. Each team member will receive the same grade.

QUIZZES

There are six online quizzes during the course (to be at the beginning of class). Quizzes will consist of multiple choice and true/false questions (enforced 12-minute time limit). The quiz in a given week is always on the material from the previous class session. Quizzes can be accessed on the iCollege course site. Quizzes are to be taken individually. **Collaboration with other students on quizzes is prohibited.**

FINAL EXAM

The final exam will contain a mix of multiple-choice, short/long answer questions pertaining to cumulative assigned course content. The final exam is "open book" meaning that you can access any materials (presentations, articles, etc.) you like during the quiz (the problem is time).

COURSE CONDUCT, POLICIES AND PROCEDURES

DISABILITIES OR SPECIAL NEEDS STUDENTS

Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought. Please let me know if you have a disability or special need that requires accommodation.

Rules of Conduct for the Course

Any and all email from me to you will be sent to the student's @student.gsu.edu account. It is the student's responsibility to ensure that he/she is able to regularly read and use this account.

All correspondence to course instructor is to be sent to the instructor's GSU email address provided at the beginning of this syllabus.

Computer tablets and notebook computers may be used during selected class sessions. This provides a strong temptation to check email, update Facebook, keep current with fantasy football, etc. That is also a distraction to others seated around you. Please be professional and refrain from doing this.

All students are expected to conduct themselves in a professional manner befitting a University environment. This means being respectful to fellow students and the instructor. If a student should have a grievance with a fellow student or the instructor, there are established procedures for resolving this grievance in a fair and proper manner. Among other things students will not send inappropriate emails to fellow students and/or the instructor. For more detail on this, see section IV - A ("Disruptive Student Conduct in the Classroom or Other Learning Environment") in the GSU Student Code of Conduct and Administrative Policies located at http://codeofconduct.gsu.edu/

Late Work Policy

Late work is strongly discouraged and may or may not be accepted for grading.

Academic Honesty

(Abstracted from GSU's *Student Handbook* Student Code of Conduct "Policy on Academic Honesty and Procedures for Resolving Matters of Academic Honesty")

As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The University assumes as a basic and minimum standard of conduct in academic matters that students be honest and that they submit for credit only the products of their own efforts. Both the ideals of scholarship and the need for fairness require that all dishonest work be rejected as a basis for academic credit. They also require that students refrain from any and all forms of dishonorable or unethical conduct related to their academic work.

Students are expected to discuss with faculty the expectations regarding course assignments and standards of conduct. Here are some examples and definitions that clarify the standards by which academic honesty and academically honorable conduct are judged at GSU.

Plagiarism. Plagiarism is presenting another person's work as one's own. Plagiarism includes any paraphrasing or summarizing of the works of another person without acknowledgment, including the submitting of another student's work as one's own. Plagiarism frequently involves a failure to acknowledge in the text, notes, or footnotes the quotation of the paragraphs, sentences, or even a few phrases written or spoken by someone else. The submission of research or completed papers or projects by someone else is plagiarism, as is the unacknowledged use of research sources gathered by someone else when that use is specifically forbidden by the faculty member. Failure to indicate the extent and nature of one's reliance on other sources is also a form of plagiarism. Failure to indicate the extent and nature of one's reliance on other sources is also a form of plagiarism. Any work, in whole or part, taken from the Internet or other computer based resource without properly referencing the source (for example, the URL) is considered plagiarism. A complete reference is required in order that all

parties may locate and view the original source. Finally, there may be forms of plagiarism that are unique to an individual discipline or course, examples of which should be provided in advance by the faculty member. The student is responsible for understanding the legitimate use of sources, the appropriate ways of acknowledging academic, scholarly or creative indebtedness, and the consequences of violating this responsibility.

Cheating on Examinations. Cheating on examinations involves giving or receiving unauthorized help before, during, or after an examination. Examples of unauthorized help include the use of notes, texts, or "crib sheets" during an examination (unless specifically approved by the faculty member), or sharing information with another student during an examination (unless specifically approved by the faculty member). Other examples include intentionally allowing another student to view one's own examination and collaboration before or after an examination if the faculty member specifically forbids such collaboration.

Unauthorized Collaboration. Submission for academic credit of a work product, or a part thereof, represented as it's being one's own effort, which has been developed in substantial collaboration with assistance from another person or source, or computer honesty. It is also a violation of academic honesty knowingly to provide such assistance. Collaborative work specifically authorized by a faculty member is allowed.

For more detail, please refer to the student Code of Conduct (http://codeofconduct.gsu.edu/)