Executive MBA program
MBA-8417 Operations management

Course outline

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January 2017 (jean.harvey@uqam.ca)

Notice: This course requires extensive pre-course preparation and involve a heavy overall workload. Also, a short (2 pages) pre-course assignment must be turned-in by May 30, end of day. Email to me directly.
1. Objectives and themes

Without flawless execution, the best of strategy can lead to failure. Operational excellence fertilizes strategic excellence. It can only be achieved by designing and continuously improving shared ways of doing things that can reliably create superior value for customers, employees, and shareholders alike. The ability to learn faster than its competitors is the only sustainable source of competitive advantage, and an organization has not learned anything until it has changed and mastered a shared way of doing thing, that is, a process.

The course focuses in particular on the link between strategy and operations in complex (internal and external) services, that create the most value in any organization. This linkage is achieved through processes. Process management is the linchpin between all aspects of the course: service strategy, service quality, the dynamics of operational change management (organisational learning), process improvement methodology and process design methodology.

The very nature of the topic calls for a mix of and a dialectical alternation between conceptual and practical aspects. The challenge here is the maintenance of coherence between strategy and action. Students will be expected to draw on their management experience to scope and work on a practical project throughout the course.

A good understanding of the nature of service and processes lays the foundation for exploring the process improvement and design methodologies and of their implications for process management in the learning organization. The next three pages show conceptual models of the course and the book on which it is based.
Overall structure of the book – chapter by chapter

1 – Toward Value and Strategic Advantage through Rigorous Execution
3 – The nature of process
5 – Professional service delivery processes
6 – Managing a process
12 – Wellness, personal excellence, and the processes of the one-person business.

2 – The nature of value
4 – Think globally, act locally
7 – Scoping a project for improvement or design
8 – The learning cycle
9 – The improvement methodology
10 – The design methodology
11 – The approaches to and practice of continuous improvement
The learning organization – Doing the right thing (picking the right process) right (designing or improving that process) as a key organizational routine

Profit = # of clients X volume/client X margin

**Labour market**

- **Value**
- **Competitors**
- **Employees**
- **Value gap**

**Market**

- **Value**
- **Customers**
- **Value gap**

**Processes (Coherence)**

1.1 Determine customers' needs
2. Bill the customer
3. Provide after-sale service
4-5. Process mission
5-6. Strategy (including operations strategy)
6. Identify and implement training
7. Select and certify suppliers
8. Purchase materials and supply
9. Improve
10. Design
11. Translate need into service spec
12. Accept order from customer

**Generation of problems/opportunities**

**Selection and dispatch**

**Profit = # of clients X volume/client X margin**

**Investment**

**Bold numbers represent the chapters where this topic is discussed**
15 dimensions of the learning organization

- Management style
- Quality and customer focus
- Continuous improvement
- Strategy-processes Linkages
- Measurement and rigor
- Process management
- Information flow
- Integrating changes into daily routines
- Tools
- Methodologies
- Change vehicles
- Coordination
- Fortitude
- Cultural path
- Knowledge base
## Part II  Methodologies and Techniques to Achieve Operational Excellence

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2. Material

Mandatory readings


Videos accessible at: www.complexservicedelivery.com. You can access the “members” section by signing in as name: Winter 2017, password: OpEx

PowerPoint files of slides as well as those that appear in the videos can also be downloaded in Moodle. They constitute back-up material. Sequential reading of the slides would be counter productive.

This is a good time to watch the pre-course video (login required – Member section)
Slide sets C1 to C6

C1 Introduction and overview
  A chain of commitments
  The strategy-execution link: Identifying “the right thing to do”
  The learning pump
  Doing things right: process DNA and process science

C2 Improve
  Tables and figures from Harvey, 2015

C3 Quality, value, processes
  A first illustration: discount airlines
  Value and positioning
  From positioning to processes: the V2P model
  Zoom-in on effect of different service features: the Kano model

C4 Design
  A simplistic example: A good cup of coffee
  DCDV deliverables
  Design – step by step: tables and figures from Harvey, 2011
  Understanding DCDV

C5 Recapitulation – the learning organization

C6 V2P model: illustration
An EMBA course does not happen during the course of three weekends. Face time is only part of the story.

3. Course flow and evaluation

Reading, viewing, and preparing

Intensive class sessions, teamwork, and studying

Follow-through on project fieldwork and report

To pass the course, you need 60% overall AND 50% in the exam.

Pre-course assignment

Team dynamics

Written exam (except for exemptions after oral exam)

Make yourselves available for work on Friday and Saturday night, and most nights in between the two class sessions.

Oral exam

See V006 – pre-course introduction, to better understand the flow of the course

Participation

Team final report

The rules will be explained in class

Please see the videoclip entitled: «Evaluation system» – login required

More information on videoclip: “Pre-course” ( “Member” section)
There will be an oral exam at the end of the course. Students who get 60% will be exempt from the written exam. Others will have to take the written exam. Their exam grade will be their score at the written exam (i.e. the oral will not count for these students). The oral will take place during the last day of class. It will include questions and observations during the last round of presentations and during the roundtable in the afternoon. Before the oral exam, students have the option to be evaluated in a written exam if they so wish.

Aspects of evaluation

Participation: presence (body and mind), punctuality, preparation, pertinence, and permeability (attitude and openness). This includes random observations by the professor, questions asked by the professor during classes, observation and questions during the first two rounds of presentations.

Team auto-evaluation: The team may choose a system to grade each team member’s contribution (see suggested scheme, next page). Failure to do so results in the same team mark being given to all team members. If any student formally asks, at any time before the end of the term for such a system, the team must submit one. If the professor detects a problem, he may also ask the team to submit such a scheme. If the team cannot agree on a scheme, the professor can impose one.
* Team auto-evaluation – a suggested scheme

1. A team meeting will take place no later than after the first week-end to determine the criteria on which they all agree to evaluate each other at the end of the course, together with the weight they want to assign to each criteria.

2. An evaluation meeting is held after the term paper has been turned in, with all members in attendance. Each participant evaluate his or her teammate (not himself) on each criteria, on a 1 to 10 point scale, where a score of 10 reflects outstanding performance, and any score above 6 reflects an acceptable performance.

3. These scores are written on flip chart for everyone to see, and they are compared, explained, and discussion.

4. At the end of this first round, the evaluation is repeated, and again written on a flip chart. This time, however, it is not discussed. Weighted averages are calculated for each students, written on a piece of paper, signed by each student (not meaning agreement but merely process conformity) and turned in (scanned) to the professor.

5. The professor use the resulting relative weights to modulate the team grades (both team dynamics and final report).
## Oral exam: rating and criteria

<table>
<thead>
<tr>
<th>Performance at oral exam</th>
<th>Evaluation outcome</th>
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<tbody>
<tr>
<td>Answers exceed course requirements and demonstrate the student’s proficiency in the subject matter. Can link and integrate the concepts, models, and tools in different business contexts. Able to go beyond the material and use the knowledge as support for thought and action.</td>
<td>90%</td>
</tr>
<tr>
<td>Answers reflect an understanding of all concepts, models, and tools. Displays a good capability of reasoning in various business situations using the notions learned. Fully complies with course requirements. Only minor flaws are detected.</td>
<td>80%</td>
</tr>
<tr>
<td>The student understands most of the basic and advanced notions and can make some linkages between them. Some confusion and some holes still exists, but most of the goals of the course have been achieved.</td>
<td>70%</td>
</tr>
<tr>
<td>The student understands the most important notions but displays limited ability to link and integrate them. Cannot go beyond simple applications and becomes confused when pressed for more detailed explanations on the reasoning and logic that underpins the material.</td>
<td>60%</td>
</tr>
<tr>
<td>Some answers display fundamental flaws. Some basic notions have not been understood or the student is unable to apply them to real-life business situations.</td>
<td>A written exam is required. The score at that exam will be used in the calculation of the final grade for the course.</td>
</tr>
</tbody>
</table>
Round-robin presentations in class

Throughout the session, you will be asked to make regular presentations to your colleagues (three in total). The rules of engagement will be spelled out in class. All support material will have to be on paper (post-it on flip chart), legible from a distance of two meters (at least). At the end of the round-robin, you will take the material back with you (you do not have to turn it in). That’s when a digital camera comes in handy: it allows quick capture and easy sharing of the material, in a less cumbersome format. In these presentations, all team members have to present the material, one small group at at time – a great opportunity to share, in a high bandwidth communication environment. See V006 for a more detailed explanation.
Round robin presentations in class

Round 1:
« Define tools » – two prototypes

Round 2:
DMAIC, improve prototype – all tools

Round 3:
V2P – 3 pages, Design prototype

Round 4 (Oral exam – part 1):
DCDV – prototype, all technique + adjusted V2P

Fixed position (Oral exam – part 2) all other projects, all tools + V2P, also V2P of improve prototype

This will be clarified and further specified in class
4. Preparation

**Before S1**: 

**Essential:**

1. Read and study chapters 1, 2, 3, 6, 7, 8 and 9, viewing the indicated videoclips as you go.

2. Prepare and turn in pre-course assignment, using documents B1, B2, and B3.

**Useful if possible:**

3. First reading of all remaining chapters except chapter 11 (see below), again viewing the videoclips along the way. Doing this before the first class will make your life easier during S2, as the week between S1 and S2 goes by pretty fast.

Deliverable for S2 and S3 will be specified in class.

**For S3**, read chapter 11. Review section 9.6. Surf the web to:

- Understand the philosophy, principles, methodologies, tools, and challenges in the implementation of "lean" operation, "lean" service, "lean" office, and "lean" management.
- Explore further the following notions: lean thinking, seven wastes, just-in-time, pull systems, kanban, setup time reduction, "5S", "6S", Toyota production system, and related topics.
- Explore the world of "poka yoke" and checklist as well as the challenges involved in their implementation.
- Discover the theory of constraints (Goldratt), bottlenecks, and process management based on this theory.

Review class notes from any previous course you may have had on these topics. Organize the result of this research in such a way that it can readily be shared with your teammates.

* S1, S2, and S3 refer to our three week-ends together
Pre-course group study

As previously noted, pre-course preparation is not an option or a “nice-to-have” feature for this course, but an essential component of the learning experience. An emerging best-practice is the group viewing-studying-sharing session. Here’s how it works:

1. Informal study group of 3-6 members are formed on an affinity basis, typically based on successful teamwork in previous courses.
2. Prior to each session, the group agree on prior readings to be done by everyone. For example, for the first session, the group agrees to read the course outline and chapters 1, 6, and 7, and to make a preliminary individual project selection. At the agreed time, the team meets and watches the video clips referenced in these chapters, as well as those suggested in the course outline (in the Member section, accessible after logging in).
3. The clips are interrupted (paused) regularly throughout the viewing session for short informal discussions. Discussions lead to some note-taking, question formulation for class exchange and project selection is regularly brought to the fore, as members question and challenge each other.
4. Planning the next group-study meeting ends the session.

Experience has shown that this approach to pre-course preparation is much more stimulating and effective than working alone. It is well-aligned with the philosophy of the EMBA program: concepts, ideas, theories, and techniques are fertilized by iterative and relatively short and quick reading-interacting-testing cycles.
Read and study the required material (see “pre-course preparation”). Analyze the APQC process model as you do so (see B3). Frame a problem (current and unresolved) in the organization you work for, and scope a process change project (improvement or design – you don’t have to decide right now) using the SMART and SITOC techniques (see B2). Answer the questions in B1 (see next page). Make sure you respect the space limitations indicated. Paste the slides into the Word file so that you turn in a single file. File name must start with G1 or G2 followed by your last name.

Criteria for project selection:
• The project is not started.
• It is a significant issue and it matters to you.
• It is not so confidential that you cannot share it with your classmates.
• You are in a position to effect some changes.
• You have enough leeway to manage this project differently.
• The project can be reduced to a manageable size, so that you can effect actual changes within the time frame of the course.

Be smart. Pick something that you have to do anyway as part of your job. Then you’ll have plenty of time to dedicate to it, and you will learn something useful. You will learn a different way to effect operational change. If you keep doing the same thing, you’ll keep getting the same result. If you decided to get an MBA, you are intent on improving your effectiveness. Change something!

Must be turned-in by May 30 to jean.harvey@uqam.ca
B1 – Pre-course assignment questions

Name:
Organization:
Function:
Area of professional expertise:
Project tile:

1. General context of the organization (5 lines)
2. Specific context that gives rise to the problem (5 lines)
3. What is the specific problem or opportunity? (5 lines)
4. What are the objectives of the project? (5 lines)
5. Why is this project relevant and important to you?
6. Decompose the project into its resource requirements, and durations. Indicate current status or degree of advancement of the project. (10 lines)
7. What are the major challenges you anticipate? (5 lines)
8. Refering to your pre-course preparation (readings and videos), what important concepts, models, and techniques do you see as relevant to your project? (10 lines)
9. Are there any specific constraints (of any nature) that limit your leeway in the conduct of this project? (5 lines)

You have to turn in your answers (B1 – 2 pages is a strict maximum) together with the two slides (B2), nothing else. Paste the slides in the Word document, and turn in a single file.
The report consists first of each individual projects, complete with all elements shown on “deliverables for each project”. The team’s projects MUST be spread 50/50 (or the nearest value) between the two methodologies. There is a limit of 11 pages per project. This restriction does not apply if more space is required to maintain legibility (to be clarified in class). The first page consists of the following five elements:
1. Summarize the context of your project.
2. Summary narrative of what you did, who was involved, problems encountered, etc.
3. What changes were made as a result of your project and what was the effect?
4. What is the current status of your project and how does it look going forward?
5. If you were to realize another project, what you do differently?

Pages 2, 3, and 4 contain the V2P model.

You also have 10 pages to present the following elements:
1. What did each project teach you about operational change in organizations?
2. What are your conclusions on:
   • The links between strategy, execution, and operations?
   • The role and limits of rigor in management?
   • The challenges involved in the introduction of more rigor in management, and the role played by culture and strategy?
3. Use the 15 criteria grid presented in Chapter 11 to perform a comparative evaluation of all the organizations in the projects were realized.
4. What recommendations would you formulate to each organization? Why?

Make sure that all your conclusions are solidly anchored in and illustrated by the projects realized by the team and in the analysis of these organizations you were able to conduct during the course of the session.

Only the PowerPoint format will be accepted. The professor reserves the right to show you’re the projects to future students.
## Deliverables for each project

### “Improve” – deliverables

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<td>SMART statement</td>
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<td>Process mission statement</td>
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<tr>
<td>Influence diagram</td>
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<td>Process mapping</td>
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<td>DATA</td>
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<td>CAPs identification form</td>
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<td>VAA histogram</td>
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<td>ICUKU (or ICICI or ICP)</td>
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<td>5 Why</td>
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<td>Global diagnostic worksheet</td>
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<td>Prescription</td>
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### “Design” – deliverables

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<td>Influence diagram</td>
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<td>Customer corridor</td>
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<td>House 1 and 2</td>
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<td>Pugh matrix</td>
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<td>Process blueprint</td>
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<td>Process design elements</td>
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This course outline is a contract. As such, it spells out the deliverables and the rules of engagement.

As a professor, I am committed to ESG-UQAM, its graduates, and society in general, to maintain high quality standards. This is in your interest as EMBA students and futur graduates. Thus, I will be rigorous in respecting these standards. Clear rules up front are an essential requirement to avoid misunderstandings and insure fairplay.

With this out of the way, you can now focus on the learning and prepare yourselves adequately to exploit to the fullest the rich learningscape of the EMBA class.

Looking forward to meeting you soon!

Jean